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NATIONAL AGRICULTURE DEVELOPMENT PROGRAMME (NADP)



STATE AGRICULTURE PLAN (SAP)

TAMIL NADU

Volume-I

Centre for Agricultural and Rural Development Studies (CARDS)

Tamil Nadu Agricultural University

Coimbatore – 641 003

2009

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TAMIL NADU AGRICULTURAL UNIVERSITY

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FOREWORD

Date. 3.3.2010

During the past five decades of planned development, India has achieved a spectacular increase in food grain production. Green revolution enabled India to enter into a new era in input use. The use of High Yield Varieties of seeds, plant protection chemicals and fertilizers have increased manifold. However, the farming community could not share the overall gains equitably. Besides, there has been a consistent decline in the rate of growth in agriculture particularly in 1990s. The growth rate was 3.2 per cent during 1990s and declined further to 2 per cent in the last five years as against 4 per cent growth rate in 1980's.

Tamil Nadu State has achieved significant progress in agriculture sector. However, marginalization of land holdings, high variability in rainfall distribution, inadequate capital formation, declining investment in agriculture, declining net area sown, over exploitation of ground water and inadequate storage and post harvest facilities affected the agriculture performance in the State.

At this juncture, the National Development Council resolved that a special Additional Central Assistance Scheme named National Agriculture Development Programme (NADP) be launched to evolve a strategy to rejuvenate agriculture.

To implement the various development schemes under NADP, preparation of District Agriculture Plan and State Agriculture Plan became a pre-requisite. The task of preparing the District Agriculture Plan and State Agriculture Plan is given to Tamil Nadu Agricultural University by Government of Tamil Nadu. Thus, 29 District level Plans, excluding Chennai and the Nilgris, were prepared by the Centre for Agricultural and Rural Development Studies (CARDS), Tamil Nadu Agricultural University.

The State Agriculture Plan was prepared by integrating all the 29 District level plans in a systematic manner. The document provides a detailed outline of current natural resources, strengths, weaknesses, opportunities and challenges of agriculture and allied sectors of the State, issues of different sectors, interventions recommended to overcome the issues, the action plans contemplated and the budget outlay -District-wise and Sector-wise.

I appreciate the team work by TNAU scientists, 'officials of the line departments, local bodies and farmer-representative for bringing out the State Agriculture Plan. I am sure that the report would pave way for achieving the desired growth rate.

I solicit the co-operation of the line department officials in implementing the action plans indicated in State Agriculture Plan effectively and commit to achieve a better growth in agriculture and allied sectors.

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PREFACE

With a view to achieve a minimum of four per cent growth in agriculture, the Government of India launched the National Agricultural Development Programme (NADP) during 2007-2008. Under this project, the Government of India has planned to incentivise the State Governments to push up agricultural production. One important mandatory of the NADP is to identify the Technical Support Institute (TSI) and under its guidance the District Agriculture Plans (DAPs) and State Agriculture Plan (SAP) are to be prepared. In this context, Centre for Agriculture and Rural Development Studies, Tamil Nadu Agricultural University has been identified as TSI by the Government of Tamil Nadu. Accordingly, District Agriculture Plans (DAPs) for 29 districts with the exception of the Nilgiris and Chennai districts have been prepared with the help of concerned district administration and submitted to Government of Tamil Nadu. Further, by consolidating the DAPs, the State Agriculture Plan (SAP) has been prepared.

The State Agriculture Plan (SAP) is brought out in two volumes by integrating all the 29 District Agriculture Plans. In total, there are eight chapters. The first five chapters are accommodated in Volume I and the remaining three chapters are discussed in Volume II. Volume I starts with the Executive Summary. The Introduction chapter highlights the present scenario of agriculture development and focuses its attention on the need for four percent growth in agriculture. The methodology followed has also been briefly outlined.

Chapter II takes stock of the present available resource-base in the State, assesses its potentials for growth in the years to come. Chapter III analyses the strengths, weaknesses, opportunities and the challenges faced by the State, from development perspective. The development issues, on-going projects/schemes, crop development constraints and the interventions recommended for development of crophusbandry are outlined in chapter IV, while the issues, constraints, on-going schemes and interventions needed for allied sectors have been covered in chapter V.

In Volume II, Chapter VI presents sector-wise State Plan in project mode with action plans and budget outlays required during the 11th Five year plan period. Chapter VII deals with the performance indicators and monitoring and evaluation mechanisms proposed. Appendices I to IX with budget details are listed in Volume II.

The continued support and encouragement extended by the Agricultural

Production Commissioner, Government of Tamil Nadu, is whole-heartedly

acknowledged with sincere thanks. The co-operation extended by the Heads of all

related line-departments in the State is also acknowledged with thanks.

We express our gratitude and sincere thanks to the Vice-Chancellor and

Registrar, Tamil Nadu Agricultural University, Coimbatore-3 for their continued

encouragement and administrative support extended through out the period. Our

thanks are also due to Dr.K.Palanisami, Former Director, CARDS and

Dr.M.Chandrasekaran, Professor and Head, Department of Agricultural Economics,

CARDS for their meticulous support for the smooth conduct of the project and for

taking steps on the anticipated lines in the preparation of SAP.

But for the continued support and encouragement extended by the

Government of India, the SAP might not have been prepared in the holistic form and

hence we place on record our sincere thanks to Government of India.

Finally, we will be failing in our duty, if we do not acknowledge the massive

works turned out by the consultants Dr.R.Sundaresan and Dr.N.Srinivasan, Professors

of Agrl. Economics (Retired), Th.R.Parimalarangan, Mrs. S. Ushanandhini and

Selvi. K.Malarvizhi, Senior Research Fellows and J.Selvi and V.Yasodha, Data Entry

Operators of the Project in bringing out the SAP in the present form.

Coimbatore - 3

Dated: 29.03.2010

Dr.N.Ajjan &

Dr.R.Venkatram

STATE AGRICULTURE PLAN

EXECUTIVE SUMMARY

Considering the slower growth in agriculture and allied sectors, the National Development Council (NDC) has launched the National Agriculture Development Programme (NADP) with a Special Additional Assistance Scheme, since the beginning of Eleventh Five Year Plan, so as to rejuvenate agriculture and allied sectors and accelerate the growth process at-least to a minimum of four per cent per annum. Accordingly, each State Government has to formulate different strategies for the development of agriculture and allied sectors through the preparation of District Agriculture Plans (DAP) and State Agriculture Plan (SAP). While the DAP is prepared for a district taking into account the resource potentials available, the SAP aims at integrating the multiple programmes that are in operation in the districts and state, the resources and activities indicated in the District Agriculture Plans and combining all the resources available from other programmes. The State Agriculture Plan for Tamil Nadu is summarised below.

1. Location

Tamil Nadu is located in the Northern hemisphere in the hot zone between 8° and 13° N latitude and between 78° and 80° E longitude. Tamil Nadu is the eleventh largest state in India by area (about the size of Greece) and the sixth most populous state. It is one of the 28 states of India and it lies on the east coast of the southern Indian peninsula bordered by Puducherry, Kerala, Karnataka and Andhra Pradesh. Tamil Nadu is bound by the Eastern Ghats in the North, the Nilgiris, the Anamalai Hills and Palakkad in the West, Bay of Bengal in the East, Gulf of Mannar and Palk Strait in the South east and Indian Ocean in the South. The eastern most tips are formed by the point calimer and the Mudumalai wildlife sanctuary in the Western most tips. The Pulicat Lake is situated in the northern extreme. The southern most tip of Tamil Nadu is the Cape Comorin or Kanyakumari. West and north of the State has lofty hills, while the East and South are Coastal plains.

2. Development Issues:

The development issues of agriculture sector and other allied sectors are listed as under:

2.1. Agriculture Sector

- Erratic and inadequate monsoon rain
- Declining trend of net area sown
- Diversion of fertile agricultural lands to non-agricultural purposes
- Low cropping intensity hovering around 115-119 per cent in the last five decades
- Depletion of ground water
- Increase of fallow lands
- Deterioration of soil health
- Unfavorable pattern of land ownership
- Yield gaps in majority of the crops
- Slowdown in growth rates of crop yields
- Inadequate seed availability and low seed replacement rates for most of the crops and
- Over use of certain chemical fertilizers and leaching away of organic matter of the soil

2.2. Horticulture Sector

- Raising orchards and vegetables is a high investment proposition and many farmers with poor resource-base are unable to take up cultivation of horticultural crops
- Immediate post-harvest glut leads to sharp decline in the unit prices and erodes the profit of the farmers
- Highly perishable nature of horticultural products and lack of adequate cold storage facilities at affordable cost
- Raising horticultural crops are high-tech oriented and many farmers lack knowledge on the same
- Long gestation period up to economic bearing of fruit trees
- Seasonal aberrations due to erratic monsoon behavior
- Lack of appropriate transport and remoteness of production centres resulting in huge transportation costs and transit losses
- Declining availability of farm labourers especially during harvest seasons and
- Absence of adequate cold chain system resulting in huge spoilage of raw fruits and vegetables

2.3. Agricultural Engineering Sector

- The development of agricultural engineering in the State is still in its infancy and is yet to gain momentum
- Peak seasonal operations and scarcity of labor promote ample opportunities for hastening the process of farm mechanization.
- Water and soil conservation works are to be intensified especially in Dryland tracts
- There exists vast scope for the development of water harvesting structures and
- Farmers need training in the up-keep of the machinery and implements.

2.4. Agricultural Marketing and Agri-Business Sector

- Dominance of non-formal channels
- Need for institutional innovation for efficient alterative system responsive to market signals including stakeholders interactions and linkages among growers – traders – processors - exporters
- Developing wholesale markets by providing necessary infrastructure facilities
- Prevention of post-harvest losses
- Construction of roads linking villages with nearby assembling and wholesale markets (similar to sugarcane rural roads)
- Greater private investment in revamping agricultural marketing
- Developing commodity exchanges
- Capacity building training on post-harvest management, value addition and processing, quality and food safety among the farmers and market intermediaries and
- Strengthening of Market Intelligence and Information System

2.5. Animal Husbandry Sector

- The demand supply gap of green fodder is rather wide and requires bridging or narrowing down.
- Diminishing pasture / grazing lands and their poor quality
- Lack of knowledge on balanced feeding of animals especially cross-breed cows and on supplementary micro-nutrients

- Infertility problem among cross-bred cows and low/delayed conceivement among buffaloes
- Heifer rearing on scientific lines
- Scientific calf rearing to avoid calf mortality
- Lack of adequate genetically superior male breeds of cattle
- Non-availability of superior Rams and bucks
- Popularization of rabbit farming and Japanese quail farming
- Strengthening of Veterinary Institutions
- Insufficient processing and marketing facilities in most of the Milk Producers
 Unions
- Production of milk products like butter, ghee, ice cream, palpeda etc., on large scale and
- Improving infrastructure for collection, transportation, handling processing, packing and marketing of milk and milk products

2.6. Fisheries Sector

- Sustainable fish production
- Strengthening infrastructure facilities for fish landing
- Reduction of post-harvest losses
- Encouragement of integrated fish farming and cage farming and
- Production of sea ranching and artificial reefs

2.7. Water Resource Utilization / Public Works Department

- Efficient management of available water resources
- Conservation of rainwater and efficiency of water use
- Watershed management through extensive soil conservation and construction of check dams
- Restoration and maintenance of existing water bodies
- Identification of deficiencies and carrying out the improvements in the canals and other control and measuring structures
- Creation of public awareness and training activities on water management and
- Desilting, widening and strengthening of water bodies

3. SWOC Analysis:

The strengths, weaknesses, opportunities and challenges of agriculture and allied sectors are summarized as under:

3.1. Agriculture Sector

3.1.1. Strengths

- The day-time round the year sun-shine and the visititudes of both south-west and north-east monsoons are the boons to the living of human race and the animal kingdom on this part of the planet earth.
- The State possesses varied types of agro-climatic conditions ranging from hot tropical through sub-tropical to temperate climate.
- The major types of soils like red, black, alluvial, loamy and sandy loam found in the State are highly suitable for growing a variety of crops.
- The State is fairly well endowed with water and land resources. Ground water potential is also fair in many parts of the State.
- A wide range of crops such as cereals, pulses, oilseeds, fruits, vegetables and other crops are cultivated under varied agro-climatic conditions and elevations in the State.
- People in the State are always industrious and hard-working and hence a sciencebased technological back-up can go a long way in improving agricultural production.
- Well-developed agri-based cotton and sugar-industries are the added strengths for the rapid growth of the economy.
- The rail as well as road transport systems, which are essential for agricultural development, are well knitted in the State.
- Both urban and rural electrification is close to 100 percent in the State that acts as a catalyst for the growth of the State economy.
- The long coastal length of 1,076 kms. and the widely spotted inland water bodies indicate the high growth potential of fishery sector in the State and
- The livestock population is sizable in the State. There exists very good potential for boosting production of milk and sheep / goat / poultry meat in the State through scientific feeding, breeding and health management.

3.1.2. Weaknesses

- The success of agriculture yet depends on the successful monsoons. Frequent
 monsoon failures, low and uncertain rainfall and its skewed distribution affect the
 tempo of agricultural growth.
- Uneconomic size of a very large number of marginal and small farms, low
 economic status of the farmers and the low literacy level among farmers affect the
 full adoption of scientific farming and hence the agricultural production and
- Many of the irrigation systems and structures are in dilapidated conditions for want of funds. The tanks and water ways are highly silted and filled with the growth of bushes. Heavy seepage losses and hindrance to the free flow of water are found in conveying water through the irrigation canals from dams, reservoirs and big tanks. Moreover, unauthorized encroachment of catchment and water spread areas of the irrigation tanks is a common phenomenon throughout the State. Improper up-keep of canal and river bunds results in recurring breaches and consequent damages to the standing crops, livestock and human lives in the villages especially during rainy seasons and flash flooding.

3.1.3. Opportunities

- The rainfall pattern and its distribution provide scope for raising almost all field and horticultural crops round the year in most pockets of the State.
- As the urbanization and industrialization is on the ascent in the recent years, the market demand for quality agricultural products and protective foods like milk, fruits and vegetables is getting increased. This indicates the need for incentives for increasing the yield per acre in field crops and in vegetables and fruits production etc., besides milk and meat production in the years to come. The demand for ready-to-cook as well as ready-to-eat foods is also increasing. Thus, there is ample opportunity for the agri-processing units to flourish, in the years to come in the State.
- The red, black, alluvial and loamy soils found in the State are highly productive
 and their capabilities can be sustained through proper and planned soil fertility
 management practices.

- As the labour availability is becoming scarce, especially during peak agricultural
 operations like transplanting, harvesting etc., the farm mechanization is on the
 increase. However, the high investment requirement and non-affordability by the
 individual farmer, especially the marginal and small, give way for custom services
 and evolution of small agri-business entrepreneurs in the State
- Large extent of land (about 24 lakh hectares) is considered as waste land in the State. This provides opportunities for land reclamation and development of horticulture and plantation crops in the State and
- Acceptable adoption of Hi-Tech like precision farming

3.1.4. Challenges

- Low and skewed distribution of rainfall and heavy down-pour in a few days
 especially during north east monsoon and consequent flash floods occurring
 often and inadequate infrastructure to control and store the flood water, damages
 the standing crops heavily and affects the production.
- Price volatility with high fluctuations and non-remunerative prices of farm products and consequent non-profitability of the farm business. This could lead to farmers quitting the agricultural profession itself, once for all.
- The out breaks of pests and diseases are often recurring in certain endemic areas
 of the State. These pose the threat to the crops leading to complete loss to many
 farmers.
- In the recent years, due to heavy pumping of ground-water especially in summer and early kharif seasons, the reversal of ground water flow results in sea-water intrusion in the inlands along the coastal belt and consequently making the bore well as well as the open well-water, unfit for crop production and drinking. Many farmers in fact, abandoned the cultivation of especially the kharif crop, due to sea-water intrusion along the coastal belt.
- The inter-state disputes on the major irrigation systems like Cauvery, Mullai Periyar, Palar, etc. affect the agricultural growth of the State to a great degree and
- Fast urbanization and industrialization and indiscriminate conversion of agricultural land to non-agricultural purposes, pose a great threat of contraction of land put to agricultural uses and consequent reduction in production.

3.2. Horticulture Sector

3.2.1. Strengths

- Horticulture crops in general are high value crops in the State
- Soil and climatic conditions are highly favourable for raising many horticultural crops.
- The Department of Horticulture and Plantation Crops in the State has got the
 entire needed technical where-withal, supported by a separate Horticulture
 College and Research Institute and Horticulture Research Stations in the State.
- Increasing industrialization and urbanization and consequent per capita income increase create an effective internal and external demand for horticultural products, which are supposed to be the protective foods in human nutrition.
- The hill stations spotted in the Western ghats and in the middle of the state grow
 the vegetables like carrot, cabbage, cauliflower, potato etc., and temperate and
 sub-tropical fruits like plums, peaches, straw berries and plantation crops like tea,
 coffee, cardamom etc., and
- The state support for horticulture development in the form of National Horticulture Mission is an added strength to grow a variety of horticultural crops.

3.2.2. Weaknesses

- The major weakness is the high-cost of cultivation of high-tech horticultural crops.
- Most of the fruit crops are highly season-bound and hence the year-round production is not possible.
- Lack of adequate demand for processed fruit and vegetable products and infrastructure for processing value-added products.
- Inadequate network of horticultural extension machinery in the State.
- Highly perishable nature of horticulture products and
- Lack of effective demand from low income and lower-middle income families towards fruits and vegetables.

3.2.3. Opportunities

- As the urbanization, industrialization and the family income have shown an
 increasing trend in the recent years, the effective demand for protective foods is
 growing. Hence there exist ample opportunities to increase the fruit and vegetable
 production in the State.
- The tempo of liberalization of the economies in the world and the functioning of WTO give impetus to the export of horticultural products.
- Season-bound production, highly perishable nature of products and the year round demand provide excellent opportunity for the agro-processing entrepreneurs.
- Recent policy of reclaiming waste land and its allotment to landless labourers
 provide good opportunities to raise deciduous fruit trees like wood-apple,
 pomegranate, zizubus, jambulana, vegetables and bio-fuel plants like Jatropha,
 medicinal plants, etc., and
- Crop diversification from low-return field crops to high value horticultural crops is another possible opportunity.

3.2.4. Challenges

- High-cost of high-tech cultivation of horticulture crops and low financial capability of majority of farmers
- Presence of rocky sub-soils and lack of awareness among the farmers pose severe threat to many orchard farmers.
- High perishability and inadequate post-harvest care also pose threat to grow horticultural crops and
- Post-harvest glut of season-bound fruits and highly fluctuating prices are the other threats confronted by horticultural farmers.

3.3. Agricultural Engineering Sector

3.3.1. Strengths

 Propensity of farmers to utilize the farm machineries like irrigation motorpumpsets, tractors, tillers, harvesters, thrashers, winnowers etc. is a positive strength gained in the recent years in farm mechanization front.

- Young enterprising farmers / rural youths are coming forward to provide custom services to all sections of the farmers, by taking the risk of heavy investment.
- Big farmers also own the machineries
- Effective water harvesting techniques and
- Proven soil and water conservation techniques are also available.

3.3.2. Weaknesses

- Large number of marginal and small farms
- Majority of the farmers are resource poor
- Lack of effective machineries for carrying out the farm operations like transplanting, weeding, etc.
- Inadequate number of water harvesting structures often leads to flash floods and surface run-off waste water.
- Farmers are yet to practice the scientific soil and moisture conservation activities especially in dry land areas and
- Heavy seasonal use and keeping idle without use in the rest of the year.

3.3.3. Opportunities

- Scarcity and high cost of labor and availability of machineries and their uses at low cost are providing opportunities for intensifying farm mechanization.
- Financial institutions are coming up in a big way to help the rural youths and young entrepreneurs in owning the high cost machineries and render custom services to the farmers.
- There exists scope for organizing more number of entrepreneurial development programmes to the rural youths and to the innovative large farmers.
- There exists vast scope for soil and water conservation machinery for contourbunding, basin-listing, etc.,
- There are ample opportunities for the popularization and adoption of water harvesting techniques like farm ponds, percolation ponds, etc., and
- Researchers have innumerable opportunities for product / machinery development to meet the existing latent demand for effective farm equipments.

3.3.3. Challenges

- High priced products and heavy investment requirements and lack of effective repairing workshops in the easy reach of the farmers
- Farmers are exploited by charging very high rates of hiring charges by owners of the machineries and
- Political support and trade-unionism impede the mechanization process in agriculture.

3.4. Agricultural Marketing Sector

3.4.1. Strengths

- Network of periodic markets are functioning in the State.
- Well-knit regulated marketing system has been developed in the State.
- Cooperative marketing societies in certain pockets of the State render yeoman service to farming community
- A large number of commission mandies, wholesalers and retailers are eking out their livelihood through rendering marketing services to farmers and consumers.
- A large number of export agencies have become active in the recent years in exporting agricultural products, particularly in the context of trade liberalization.
- The functioning of TANFED, NAFED and CCI is an added strength to the marketing system, especially the export marketing system.
- Well established warehousing system by the CWC, SWC and co-operatives with three-tier approaches adds strength to the marketing system in the State and
- Changing life style and food habits of the people especially in the context of urbanization, industrialization and Information Technology revolution.

3.4.2. Weaknesses

- Presence of innumerable intermediaries between farmers and consumers increase the cost of marketing and reduce farmers share in the consumer's rupee.
- Perishable nature of the farm products and the information asymmetry about market and price trend favour the intermediaries and weaken the bargaining power of the farmers.

- Inadequate functioning of majority of the organized marketing institutions also adds to the weakness of the marketing system.
- Post-harvest glut and consequent low prices of agricultural commodities
- Ineffective storage structures at the farm level and consequent losses of agricultural produce due to storage pests, including rats and dampness.
- The post-harvest losses have been estimated at 30 per cent for fruits and vegetables and 10 percent for food grains
- Agri-processing system is yet to develop in a big way and
- Absence of cold chain development.

3.4.3. Opportunities

- Strengthening the existing marketing organizations
- Deregulation of marketing activities
- Construction of more rural godown at village level
- Giving fillip to the growth of agro-processing industry
- Developing effective communication network
- Capacity building among farmers through training and exposure visits.
- Development of cold chains for perishables
- Strengthening storage system at farm level and
- Tapping the export markets.

3.4.4. Challenges

- Volatile prices / wide price fluctuations are the major threats that make the
 agricultural proposition non-profitable and perforce the farmers to exit agricultural
 profession, once for all and
- Increasing quality parameters and food safety standards in domestic and export markets

3.5. Animal Husbandry Sector

3.5.1. Strengths

- Sizeable cattle population in the State
- Increasing cross-bred cows population

- Eagerness of SHGs on dairying
- Readily available bank credit
- Ready market for fluid milk and its by-products
- Involvement of private dairy is also on the increase in milk procurement and distribution
- Very high export potential for hides and skins
- The availability of fairly large number of veterinary institutions along with infrastructure facilities
- Propensity of dairy farmers to market the surplus milk through co-operatives and excellent network of dairy co-operatives
- Availability of superior germ plasm with high exotic blood levels and
- Availability of fairly a large number of Artificial Insemination Centres in the State.

3.5.2. Weaknesses

- Shortage of green fodder to the tune of above 80 per cent of the requirement.
- Lack of adequate knowledge on enriching the available dry fodder with nutrient supplements.
- Lack of knowledge among the farmers on hygienic milk production, scientific rearing of calves and management of cross bred cows during advanced pregnancy period.
- Insufficient cold chain management of vaccines
- Poor quality control system
- Problems in controlling the disease out-breaks
- Improper housing and frequent incidence of diseases
- Poor slaughter facilities
- Non-availability of veterinary services within the easy reach of the farmers due to insufficient technical manpower.
- Delayed conceivement, shy bearing in buffaloes and limited percentage of artificial insemination success and
- Decreasing buffalo population

3.5.3. Opportunities

- Constantly increasing demand for milk and milk products from both domestic and export markets.
- The performance of genetically up-graded non-descript local breeds are quite promising in terms of increased milk productivity
- Financial institutions, especially the commercial banks, are liberal in extending credit facilities for starting mini-dairy farms
- Technology empowerment on scientific dairy farming among farmers / rural women to boost milk production.
- Presence of well knit SHGs all over the State and
- Availability of well-knit co-operative milk marketing system and the growth of private procurement and distribution business units.

3.5.4. Challenges

- Diminishing grazing land area in the recent times
- High incidence of mastitis and loss of milk productivity
- Increasing cost of feeds
- Non-availability of labour and high labour cost and
- Sudden outbreaks of diseases like Anthrax, black quarter, foot and mouth disease etc.

3.6 Fishery Sector

3.6.1. Strengths

- Tamil Nadu State is endowed with a coastal line of 1,076 kms, accounting for 13.3 per cent of the Nation's Coastal line of 8118 kms.
- State possesses 0.19 millions sq.kms of Exclusive Economic Zone (EEZ) accounting for 9.7 per cent of the country's EEZ of 2.02 m.sq.kms and a continental shelf of about 41,412 sq.kms.
- Diversified flora and fauna estimated at more than 3,509 species to support marine fisheries.
- The inland fishery sprawls over 3.71 lakh hectares of water spread area comprising reservoirs, major irrigation and long seasonal tanks, short seasonal tanks and ponds, estuaries and backwaters.

- Many fishermen cooperatives and fisher women cooperatives are functioning in the State.
- Sizable numbers of mechanized boats, motorized FRP boats, traditional crafts are available in the State.
- Sizable fishermen / fisher women population in the State and
- Existence of a Fisheries College and Research Institute and a Fisheries Department is an added strength to accelerate fisheries development in the State.

3.6.2. Weaknesses

- Many water bodies received water only during north-east monsoon
- Non-availability of adequate infrastructure facilities for seed production, rearing, fish landing and marketing
- Fish culture in natural and small water systems is being practiced by stock and harvest method and not by scientific culture method
- Lack of post-harvest facility like cold storage and fish processing unit at the shore.
- Largely inadequate fish seed production
- Low fish productivity of tanks
- Non-availability of stock size quality fish seeds throughout the year
- Lack of efficient fishing gears for operation in deep waters
- Inadequate training packages on fish culture, breeding and seed rearing, feed formulation and fish diseases diagnosis etc.
- Paucity of funds to fish seed rearing centres
- Insufficient area for fish seed production
- Lack of hygienic handling of fish in marketing
- Low infrastructure support for artisanal fisherman impede the growth in fish production
- Poor technology adoption in the mechanized crafts and low hygiene are the major bottle necks in promoting export oriented fishing and product development
- Under-utilization of short seasonal tanks and
- Absence of dead storage level in the reservoirs affects the natural fish stock.

3.6.3. Opportunities

- Vast expansion of marine resources with diverse fishes in the off-shore area provides good opportunity for increasing marine fish catching
- Large scale coastal aquaculture is possible
- Mariculture, including pearl culture, spat production, lobster fattening and multiple newer fishing product preparations possible.
- Rehabilitating the affected and unutilized shrimp farms for mari-culture activities.
- Ample opportunities for developing coastal / back water shrimp farming on large scale with greater rigor.
- Effective utilization of short seasonal tanks and ponds in the network of inland water ways for fish production and
- Establishment of large scale seed production and supply centres.

3.6.4. Challenges

- Frequent monsoon failures, visititutes of cyclones and occurrence of tsunami are the natural hazards that pose major threats to the growth of the fishery industry as a whole
- Inadequate infrastructure for seed production discourages the farmers in taking up inland fish culture
- Improper waste disposal and environmental pollution by coastal / brackish water shrimp farming act as the threat for their own survival and growth and
- High siltation of tanks and water ways and lack of periodic desilting activities.

3.7. Irrigation Systems (Public Works Department)

3.7.1. Strengths

- The presence of major and medium irrigation systems like Mettur dam, PAP, Sathanoor dam, Aliyar dam, Papanasam dam, Periyar – vaigai, Lower Bhavani resources and irrigation projects indicates the fairly developed the irrigation system in the State.
- The ground water potential in some parts of the State still remains under- exploited and
- The State is endowed with a network of well developed irrigation tanks and canals.

3.7.2. Weaknesses

- Many of the water bodies including feeder channels and distribution channels are highly silted reducing the water holding capacity and the flow of water
- Many of the irrigation structures are in dilapidated conditions resulting in wastage of stored water through seepage etc.,
- Paucity of funds to manage and modernize most of the irrigation systems and structures
- Lack of awareness on the importance of good maintenance of irrigation structures among the farmers due to government interventions and
- No organized flood control measures in the areas chronically affected by frequent flash floods.

3.7.3. Opportunities

- Modernization of irrigation systems
- Taking up repairing works of dilapidated water structures
- Desilting of reservoirs, tanks and canals
- Strengthening the bunds of tanks, rivers, canals etc.
- Modernizing the approach roads along and around the water bodies
- Construction of check dams
- Construction of barrages just before the confluence of river into the sea and irrigation shafts to prevent sea water intrusion in the coastal belt of the State and
- Taking up flood control measures with long-term perspective, in chronically affected areas.

3.7.4. Challenges

- Heavy seasonal / monsoon down-pour in a short spell of time and the consequent flash floods and breaches on the river bunds and consequent crop, livestock and human losses
- Social threat of encroachment of catchment areas, water spread areas and meddling with irrigation structures and devices and wantonly spoiling them
- Sea water intrusion in coastal belt and
- Inter-state disputes on river water sharing with neighbouring States of Karnataka,
 Kerala and Andhra Pradesh.

4. Growth trends in Crops

The growth rates (1970-2006) for area, production and yield were estimated for major crops in Tamil Nadu and were found to be positive with reference to area, productivity as well as production in four crops viz., maize, total pulses, sugarcane and banana. On the other hand, the crops like cholam, cotton and chillies witnessed negative growth rates in area, productivity as well as in production. In paddy and groundnut, while area alone had shown negative growth rates, the productivity and production had been on the positive growth.

The above growth trends implied that the declining trend in area under paddy and groundnut warrant continued focus on research on variety and management technologies to continue not only for enhancing yield potentials but also for harnessing the potential created through distribution of quality seeds and large scale adoption of the management technologies. The negative trends in cotton are highly disturbing. The cotton textile industry is the largest manufacturing industry in the country and to feed this industry with the raw material viz., cotton, it becomes necessary to reverse the negative trends in area, productivity and production and hence the strategy must be at-least to increase the area under cotton and cotton production will increase through adoption of Bt-cotton.

Maize and sugarcane have shown excellent growth trends as they are the basic raw material for poultry / animal feed and sugar industries. Therefore, this trend may be encouraged to support these industries' growth in the state. These two crops are also quite impressive in increasing the income of the farmers through crop diversification.

The positive growths of area, productivity and production of total pulses are quite encouraging as they form the important sources of protein to human well – being. However, the productivity growth is rather marginal and hence needs strategy to increase the pulses productivity through sizable investment on research and also extension activities to promote adoption of pulses production technologies.

Groundnut is yet another important food/oilseeds crop, whose production performance had shown negative growth in majority of the districts. A positive trend in growth of area, production and productivity in groundnut was

observed only in three, four and five districts respectively. Therefore, before reaching an alarming situation of down trends, strategy planning must aim at increasing growth trend, especially in area and production.

With reference to horticultural crops like chilly and banana, the chilies crop experienced negative growth trends in area, productivity as well as in production and these trends must be at-least arrested and productivity should be given a fillip. As regards banana, the trends may be kept up, as the demand for protective foods like banana is on the increase due to per capita income growth.

As regards paddy crop, special attention is required in the districts of Perambalur, Theni, Villupuram and Nagappatinam. To increase maize production, districts like Thiruvannamalai, Nagappatinam and Thiruvarur require immediate attention. To increase productivity and production of cholam crop, special thrust needs to be given in the traditionally cholam growing areas of Salem, Coimbatore, Erode, Karur, Perambalur and Virudhunagar districts. As regards pulses, emphasis should be given for transferring technologies in the rice fallow districts as well as in other districts. Cotton productivity and also production need adequate attention in the traditionally cotton growing tracts of Salem, Coimbatore, Erode, Theni, Virudhunagar, Thoothukudi and Tirunelveli districts.

The growth rate in area is rather negative in 23 groundnut growing districts and this needs special attention to arrest the disturbing trend. Moreover, the districts of Salem, Karur, Coimbatore and Virudhunagar need prompt attention to increase productivity and production of groundnut. As regards the horticulture crops, Chillies cultivation requires special attention in almost in all the chillies growing areas in the state. Though, area, production and productivity of banana are quite convincing in the state, districts of Karur and Villupuram deserve special attention.

Shift in Area

Markov Chain Analysis was employed to trace out the shifts in land use pattern and area under various crops. The results have shown that the net sown area retained its major area (78 per cent), while it lost nine per cent to forest land, four per cent to land put to non-agricultural uses, six per cent to current and other fallows and one per cent to permanent pastures. Cultivable waste had given way to barren and uncultivable lands.

As regards shifts in cropping pattern, the shift in area under crops was more pronounced in cotton and groundnut and to a considerable extent in paddy.

5. Recommended Interventions

The interventions of agriculture and allied sectors could be grouped as under:

5.1. Agriculture Sector

- Hybrid Seed Distribution Rice, Sunflower, Maize, other Millets, Cotton
- Supply of Quality Seeds
- Integrated Nutrient / soil health management
- Problem soil management by adopting cost effective reclamation methods.
- Dry farming techniques
- Precision farming techniques
- Market led extension
- Integrated pest management
- Use of improved / modern implements / machineries
- Provision of community thrashing floors
- Production and Distribution of micronutrient mixture, green manure seeds, biofertilizers, bio-control agents, etc.,
- Organizing Grower Associations such as Rice Growers, Maize Growers, Mango Growers, and others.
- Establishment of Market Information Center in regulated markets
- Establishing more inputs testing / quality control laboratories
- Training farmers on Precision Farming practices
- Distribution of Tarpaulin

5.2. Horticulture Sector

- Protected cultivation
- Provision of Net house structures
- Nursery/ vegetable production
- Popularising Pandal technique
- · Package for plant protection including IPM
- INM and Irrigation Management for resource conservation

- Distribution of Plastic crates (Banana, Vegetables)
- · Sinking Bore well with casing pipe
- Banana bunch cover
- Banana sucker treatment kit
- Humic acid / Effective E.M.
- Support System for crops Banana
- Sales outlet-cum-information centre
- District level farmers workshop
- Inter state exposure visits
- 10 Ha Mega demo plot for the districts
- Formation of Farmers Associations (EFA) / Growers associations
- Support for Betel vine growers
- Model fertigation plot for vegetables and
- Precision farming techniques

5.3. Agricultural Engineering Sector

- Popularization of Agricultural mechanization through conventional / modern machinery / Equipments
- Soil Conservation works
- Water Management works
- Introduction of newly developed Agricultural machineries / Implements
- Innovative water harvesting structures
- Promoting the concept of mechanized village
- Control of sea water intrusion
- Special scheme for the beneficiaries of land reforms Innovative Scheme for OFD with special focus in SC land holdings
- Western Ghats Development Programme and
- Farmers Training

5.4. Agricultural Marketing and Agri. Business Sector

- Establishment/ organization of commodity groups for marketing in the State
- Facilitation of Contract Farming between farmers and bulk buyers in the State

- Dissemination of Market intelligence
- Arrangement of Buyers Sellers Meets
- Organizing the exposure visits to important markets within the State and out side the State for commodity groups / farmers and extension functionaries
- Strengthening of market extension centre at each district/ block level for capacity building and dissemination of marketing information and
- Co-ordinating through State Agricultural Marketing Boards to promote inter-state marketing for better market integration, better price realization by farmers and price stabilization.

5.5. Animal Husbandry Sector

- Feed and Fodder development
- Genetic Up-gradation
- Improvement of Livestock health
- Institutional Development and Extension Services
- Capacity Building / Farmers and Technical Staff
- Germplasm Production Centre for Small Ruminants
- Popularising Small Ruminants Farming System
- Processing and Marketing Facility
- Establishment of Piggery Unit
- Extension facilities

5.6 Fisheries Sector

- Development of Farm Ponds for Fish culture
- Setting up of fish culture
- Renovation of nurseries and
- Farmers training

5.7. Irrigation Sector (PWD)

- Desilting of tanks, canals and other waterways
- Strengthening the bunds of the canals and tanks
- Repairing the dilapidated irrigation works/devices/ structures
- Stabilizing the existing irrigation ayacut areas

- Bringing new areas under irrigation
- Exploring new irrigation possibilities and
- Strengthening the approach roads to water bodies

6. The State Agriculture Plan

For carrying out the developmental activities as contemplated in the form of interventions specified above, the State Agriculture Plan requires a sum of Rs. 3931.92 crores, as detailed in the table below. Thus, nearly 25 per cent of the total outlay is required for the Agricultural Sector followed by Irrigation systems (Public Works Department) (22 per cent), Agricultural Engineering Sector (19 per cent), Animal Husbandry and Fisheries Sector (13 per cent) and Horticulture Sector (12 per cent) in that order.

Sector-wise Funds Requirement

(Rs. in lakhs)

Sl.	Name of the Sector	Year									
No.	Name of the Sector	2008-09	2009-10	2010-11	2011-12	Total	%				
1	Agriculture	25101.89	24658.56	24354.41	24325.75	98440.61	25.04				
2	Horticulture	11917.43	12068.57	11421.14	11921.56	47328.70	12.04				
3	Agricultural Engineering	17972.80	18570.11	18801.37	19469.72	74814.00	19.03				
4.a	Agricultural Marketing	1448.39	1277.70	1352.69	1481.96	5560.74	1.41				
4.b	Additional Agriculture Marketing	-	7756.78	6334.16	5468.18	19559.13	4.97				
5.a	Animal Husbandry	21932.76	7239.35	5401.28	4863.11	39436.50	10.03				
5.b	Fisheries	5559.33	4000.76	2388.54	1576.29	13524.92	3.44				
6	Public Works Department	31547.45	21952.13	16940.67	16795.86	87236.11	22.19				
7	Sericulture	908.96	915.53	1014.08	1036.41	3874.98	0.99				
8	Forestry	496.54	496.25	500.80	505.99	1999.58	0.51				
9	Agricultural Research	89.00	122.00	22.00	24.00	257.00	0.07				
10	Special Projects	305.26	188.76	302.22	363.64	1159.88	0.29				
	Total	117279.81	99246.50	88833.36	87832.47	393192.15	100.00				

CHAPTER - I

INTRODUCTION

Agriculture continues to be the mainstay of livelihood for more than 50 per cent of the population in Tamil Nadu. It contributes 12 per cent of Net State Domestic Product. It is the single largest private sector providing job opportunities for rural people besides being the source of supply of food grains and other dietary staples and serving as the prime source of raw materials for industries. Agricultural development is essential not only to achieve self reliance in foodgrains at the state level, but also for ensuring household food security and to bring equity in distribution of income and wealth resulting in ultimate reduction of the poverty level. In fact, high economic growth will have no meaning for the masses of people living in rural areas unless agriculture is revitalized.

Agriculture in Tamil Nadu is beset with a number of adverse characteristics such as declining total cultivable area vis a vis scarcity of cultivable land, low productivity per unit of labour in most of the regions, predominance of small and marginal farmer households, risk aversion due to production by tenants and agricultural labourers under insecure conditions, vast seasonal variations and presence of a large percentage of tradition loving farmers. Besides, agriculture development need to achieve self reliance in food grains and the estimated food requirement of various food crops by 2020 based on the projected population is furnished in Table. 1.1.

Table. 1.1 Projected Food requirement and Area needed by 2020 in Tamil Nadu

Sl. No.	Items	Requirement in 2020 (lakh tons)	Average Productivity (5 years) (Kg/ha)	Area required in 2020 (lakh ha.)	
1	Rice	91.68	3370.00	27.20	
2	Cholam	9.16	995.33	9.21	
3	Cumbu	5.46	1372.33	3.93	
4	Maize	1.17	1588.67	0.75	
5	Ragi	4.52	2015.00	2.24	
6	Other cereals	2.10	878.00	2.39	
	Total cereals	114.09	1703.22	66.99	
7	Pulses	23.39	436.67	53.65	
8	Oilseeds	11.38	1690.33	6.73	
9	Sugarcane	10.91	10923.67	9.98	
10	Vegetables	79.52	25426.67	3.12	
11	Fruits	10.13	23283.33	0.44	
12	Fodder	819.00	20000.00	40.96	
13	Forest	-	-	15.59	
	Total	-	-	197.46	

Source: Draft Land Use Policy for Tamil Nadu by the Task Force under Dr.R.K.Sivanappan

It could be seen from the table above that the area required in 2020 (197.46 lakh ha) for the producing required food including area under forest exceeds the existing geographical area of the State (130.15 lakh ha). Hence, enhancing the productivity of the crops is the only way to meet the food requirement in 2020. Moreover, the existing gap between the Target set for the 11th Plan and achievement so far made in Area, Production and Productivity of select crops at the end of the 10th Five Year Plan (2005-2006) are furnished in Table. 1.2.

Table. 1.2. Gaps between Target and achievement in Area, Production and Productivity of Select Crops in Tamil Nadu

A - Area: (lakh. ha.)

P - Production: (lakh. MT) Y - Productivity: (Kg/ha)

Crop	Crop 11 th Plan target			Achieved till 2005-2006			Gaps			Gaps in Percentage Terms		
	A	P	Y	A	P	Y	A	P	Y	A	P	Y
Paddy	22.0	85.8	3900	20.50	52.09	2541	1.5	33.71	1359	7.32	64.71	53.48
Millets	10.5	21.00	2000	7.41	7.30	985	3.09	13.7	1015	41.70	187.67	103.05
Pulses	10	7.0	700	5.25	1.77	337	4.75	5.23	363	90.48	295.48	107.72
Total Food Grains	42.5	113.8	2678	33.16	61.16	1844	9.34	52.64	834	28.17	86.07	45.23
Cotton	2.0	6.0#	510	1.10	1.68	260	0.9	4.32	250	81.82	257.14	96.15
Sugarcane	3.8	47.52	12505**	3.35	35.11	10500**	0.45	12.41	2005**	13.43	35.35	19.10
Oilseeds	11.6	20.40	1759	7.09	11.52	1625	4.51	8.88	134	63.61	77.08	8.25
Fruits	4.15	92.35	22.24*	2.58	57.79	22.40*	1.57	34.56	@	60.85	59.80	-
Vegetables	3.74	104.38	27.93*	2.34	65.47	28.12*	1.4	38.91	@	59.83	59.43	-
Spices	2.30	12.78	5.56*	1.30	7.84	6.02*	1	4.94	@	76.92	63.01	-
Plantation Crops	3.80	15.47	4.08*	2.37	8.07	3.04*	1.43	7.4	1.04	60.34	91.70	34.21
Flowers	0.40	3.20	8*	0.25	2.02	8.16*	0.15	1.18	@	60.00	58.42	-
Medicinal and Aromatic Plants	0.09	0.18	1.98*	0.06	0.08	1.42*	0.03	0.1	0.56	50.00	125.00	39.44

^{@ (}Already the required productivity has achieved)

12505**

^{# (}Cotton in lakh bales)

^{*(}in MT/ha)

^{** (}Sugarcane in terms of gur)

From the table, it could be seen that an additional area of 1.5, 3.09 and 4.75 lakh hectares is required in the case of Paddy, Millets and Pulses respectively to bridge the gap between the year 2005-2006 and the target set for the 11th Plan period. In case of the total food grains, an additional area of 9.34 lakh hectares has to be brought under plough to meet the gap. Similarly, in the case of total horticulture crops, an additional area of 5.58 lakh hectares is absoultly essiential for meeting the target set to be achieved at the end of 11th Plan.

Since, the scope for bringing additional area under crops is rather limited, emphasis should be on increasing the productivity levels. For example, in the case of Paddy, the productivity has to be increased to the tune of 53.48 per cent as compared to that of productivity of Paddy in 2005-06. Likewise, in the case of Millets and Pulses, the productivity has to be augumented to the extent of 103.05 and 107.72 per cent respectively.

In the case of Cotton, the productivity level has to be increased from 260Kg/Ha achieved in 2005-06 to 510Kg per hectare during 11th Five Year Plan. Though the productivity level of Sugarcane in Tamil Nadu is higher as compared to the other States, the productivity level still have to be increased to the tune of 96.15 per cent.

Nevertheless, in case of Fruits, Vegetables, Spices and Flowers, the requirement for the 11th Plan had already been achieved. Despite, the required increase in area under fruits and vegetables, which is again a major constraint, the gaps have to be necessarily filled only with the increase in productivity. Similarly, in the case of Plantation crops and Medicinal and Aromatic Plants the productivity level need to be increased to the extent of 34.21 and 39.44 per cent respectively.

In sum, it is evident from the table that an upsurge in productivity is absolutely warranted since a decline in the growth rate of yield of most of the important crops is observed particulary in Paddy, Millets, Pulses, Cotton and Sugarcane during the last three decades. Further, the seed availability and seed replacement rates for most of the crops remained inadequate. Hence, this calls for expanding the extension technology to a considerable extent so as to reach the vulnerable sections of the farming

community. Besides, focus should be on second green revolution in the case of rainfed crops.

Moroever, the trends and stages of development in the various resources like land, water would also reveal certain facts. In the State, the gross cropped area had declined from 73.8 lakh hectares in 1970-71 to 67.29 lakh hectares in 1990s and further to 60.33 lakh hectares in 2005-06. Similarly, the net area sown had also declined from 43.34 per cent of the geographical area in 1990-91 to 40.30 percent of the geographical area in 2005-06. The availability of land for agricultural purpose has been shrinking regularly putting increased pressure on the limited land resources. Land put to non agricultural uses had increased from 11.4 per cent in 1970-71 to 14.73 per cent in the 90s and further to 16.4 per cent in 2005-06 due to urbanization and industrialization which in turn led to the transfer of water and labour from agriculture to non agricultural purposes. The other fallow lands had also increased from 5.73 lakh hectares in 1970-71 to 15.18 lakh hectares in 2005-06.

Similarly, the culturable waste had exhibited wide fluctuation over years and it decreased from 5.06 lakh hectares in 1970-71 to 3.69 lakh hectares in 2005-06. In sum, the cultivable waste, current fallows and other fallows put together had increased from 21.36 lakhs hectares in 1969-70 to 26.45 lakhs hectares in 2005-06. The increased fallow lands (cultivable waste, current fallows and other fallows) was due to conversion of cultivable land to other purposes to meet the requirement of urbanization, inadequate water availability for cultivation arising out of failure of monsoon rains, uncertainty in release of water in Cauvery from major reservoirs and depletion of ground water. The cropping intensity has been hovering around 115-119 per cent in the last five decades in the state as compared to the all India figure of 133 per cent.

Large investments have been made since independence to harness the available water resources in the State. Area under canal irrigation in the state was 7.92 lakh hectares in 1950-51 and 8.00 lakh hectares in 2005-2006 with wider fluctuations obviously due to variations in the flow of water in Cauvery River particularly during North East Monsoon period.

Tank irrigation which was the major source of irrigation during fifties and sixties also lost its due share thereafter inspite of increase in numerical strength mainly because of encroachments and silting in the feeding channels. The net area irrigated by tanks which stood at 9.12 lakh hectares during the sixties (36.8 per cent of net area irrigated) dropped to 5.78 lakh hectares during 2005-2006.

Wells accounted for 52.64 per cent of net area irrigated during 2005-2006. Net area irrigated by wells received a three fold increase during the last five decades. As a result, there is over exploitation of ground water in the State leading to a fall in supply, saline water encroachment, drying of springs and shallow aquifers. Hence, various water saving technologies including the development of varieties with less water requirement need to be developed to economize water use and increase productivity of per unit of water applied to crops.

Growth in size of farm, a prime factor of input use efficiency would also throw some light on the development at village level. The average size of holdings in Tamil Nadu had declined from 1.45 hectares in 1970-71 to 0.89 hectare in 2000-01 (Table 1.3). Likewise, the available cultivable land per rural resident had also declined from 0.22 hectare per capita to 0.19 hectare per capita between 1970-71 and 2000-01. The growth in number and extent of small and marginal farmers (from 42 per cent to 55.50 per cent) acts as a major hurdle in promoting capital investment and modernizing the agricultural sector.

Table 1.3 Average size of holdings in Tamil Nadu

(in ha.)

Sl. No.	Classification	70- 71	76- 77	80-81	85- 86	90- 91	95- 96	2000- 2001
1.	Marginal (< 1 ha)	0.42	0.41	0.38	0.37	0.36	0.38	0.37
2.	Small (1 to 2 ha)	1.42	1.41	1.41	1.41	1.41	1.40	1.39
3.	Semi-medium	2.75	2.75	2.77	2.74	2.73	2.73	2.72
	(2 to 4 ha)							
4.	Medium (4 to 10 ha)	5.83	5.77	5.78	5.78	5.72	5.60	5.68
5.	Large (≥ 10 ha)	16.94	17.28	17.97	18.78	18.44	21.68	19.48
	Total	1.45	1.25	1.07	1.01	0.93	0.95	0.89

Source: Compiled from Agricultural Census reports of T.N.

The yield gap is yet another issue contributing to agricultural stagnation in the state. Studies carried out by Tamil Nadu Agricultural University on the yield gap indicated considerable difference between on farm trials and yield realized so far by the farmers (Table. 1.4)

Table 1.4 Yield gap in major crops

Sl. No.	Стор	Potential Yield (Kg/ha)	Average Yield (Kg/ha)	Yield Gap (Kg/ha)
1.	Paddy (I)	6000	5275	(-) 725
2.	Cholam (I)	6000	3008	(-) 2992
3.	Ragi (I)	4750	2527	(-) 2223
4.	Red gram	1500	667	(-) 883
5.	Black gram	1270	389	(-) 881
6.	Groundnut (I)	2850	2481	(-) 369
7.	Sugarcane (I)	146000	109000	(-) 37000
8.	Cotton (I)	730	426	(-) 304

Source: Dept. of Economics, TNAU, 2006; Coimbatore-641003. 'I' stands for irrigated

From the above table, it is evident that the yield gap is found to be high in Sugarcane, Cholam (irrigated) and Ragi (irrigated) as compared to other crops. This indicates the need for reinforced extension methods for delivering the technologies. Though the yield gap in Paddy, Red gram and Black gram are compared to be low, the productivity level has to be increased since there is limited scope for bringing more area under these crops.

Policies, so far, have been diverted towards irrigated agriculture to increase agricultural production. Now the concern is that the gains from the green revolution areas have been plateauing out due to many factors and evidences suggest that the productivity returns to investment have substantial trickle down benefits for poor not only in irrigated areas but also those residing in less favoured areas. Hence, it is inevitable that rainfed area should also be promoted through application of technology, inputs and investment in order to convert these grey areas into green.

Realising the urgency of similar problems in many of the states in India, National Development Council (NDC) resolved that a special Additional Central Assistance Scheme, named National Agriculture Development Programme (NADP/RKVY) be launched. The NDC also felt that Agriculture Development strategies must be reoriented to meet the needs of farmers and called upon the Central and State governments to evolve a strategy to rejuvenate agriculture with a commitment to achieve atleast four per cent growth in the agricultural sector during the 11th Five Year plan period. To achieve this, formulation of action plans by means of developing District Agriculture Plans (DAP) is recommended. It is of the view that such plans would also reflect the various felt needs of the farmers and other stakeholders. Such District Agriculture Plans aim at moving towards projecting the requirements for development of Agriculture and allied sectors of the district including animal husbandry and fishery, minor irrigation projects, rural development works, agricultural marketing schemes, schemes for water harvesting and conservation, etc. keeping in view of the natural resources and technological These plans thus, would present the vision for possibilities in each district. Agriculture and allied sectors within the overall development perspective of the district apart from the financial requirement and the sources of financing the agriculture development plans in a comprehensive way.

Preparation of District Agriculture Plan for individual district inturn follows the formulation of State Agriculture Plan (SAP). The State Agriculture Plan integrates multiple programmes that are in operation in the district and State, include the resources and activities indicated by the State and combines the resources available from the other programmes also.

Major Areas of Focus

The NADP guidelines indicate the following major areas of focus. Based on these focussed areas, interventions and detailed action plans along with the budget are prepared. Few innovative schemes as per the felt needs of the stakeholders are also proposed.

- Integrated development of major food crops like paddy, coarse cereals, minor millets, pulses and oilseeds;
- (b) Agriculture mechanization;
- (c) Activities related to the enhancement of soil health;
- (d) Development of rainfed farming systems in and outside watershed areas, as also Integrated development of watershed areas, wastelands and river valleys;
- (e) Integrated Pest Management schemes;
- (f) Strengthening of Market Infrastructure and marketing development;
- (g) Strengthening of Infrastructure to promote Extension Services;
- (h) Activities relating to enhancement of horticultural production and popularization of micro irrigation systems;
- (i) Animal husbandry and fisheries development activities;
- (j) Study tours of farmers;
- (k) Organic and bio-fertilizers; and
- (l) Innovative schemes.

Methodology followed for the Preparation of District and State Agriculture Plan

The task of preparing such District Agriculture Plans and State Agricultural Plan is assigned to Tamil Nadu Agricultural University, Coimbatore. In cooperation with scientists from Tamil Nadu Veterinary and Animal Sciences University (TANUVAS) and officials from Department of Agriculture, Horticulture, Agricultural Engineering, Marketing, Animal Husbandry and Fisheries, Seed certification, PWD etc. the major interventions and action plans for each intervention is suggested. In what follows, the procedure adopted in preparing the plans is discussed.

Collection of Data

The preparation of district level plan involved basically collection of base line and bench mark details at block and district levels. A template is developed to collect these particulars from the different districts (29 districts with the exception of Chennai and the Nilgiris) of Tamil Nadu. In order to dovetail the ongoing schemes, with the action plans, the current ongoing agriculture programs were listed and finally converged into the action plans and detailed project report for each type of intervention has been developed.

Sensitization Workshop

A series of Sensitization Workshops were also conducted at village/block level and district level. At first, many block level interaction meetings with farmers, local representatives, and other stakeholders of the block were conducted. In these meetings, the local needs and needed interventions for development of agriculture and allied sectors were enumerated. In the next level, discussion meetings were conducted with the line department officials. The objectives of National Agriculture Development Programme, preparation of District Agriculture Plans, State Agriculture Plan and formulation of specific project proposals were discussed in such meetings. The major interventions, local initiatives and priorities were discussed with the officials and other stakeholders. The action plans and proposals were finally developed.

Preparation of Draft Action Plan and presentation in District Collectors Meeting

Subsequently, based on the baseline information and proposals, a draft action plan was prepared for each district and this was presented in the District Collectors Meetings held in the respective district under the Chairmanship of District Collector. This meeting was attended by the scientists from TNAU, officials from line departments and the representatives of local bodies. A wide coverage was given in the media also to ensure better participation. The feedback received in the District Collectors Meeting was also incorporated before finalization of the District Agriculture Plan. The recommendations and relevant details based on Strategic Research Extension Plan and Agriculture Technology Management Agency have also been considered before finalizing the plan report.

This State Agriculture Plan document thus integrates all these district level action plans and organized in different chapters namely a brief current status of the economy of the State, Strengths, Weaknesses, Opportunities and Challenges of the State, interventions recommended by the Line Department Officials and the district-wise, sector-wise and year-wise budget required for the developmental activities to be carried out by the different sectors. Further to enhance the growth in agriculture and allied sectors, emphasis is also given in this report to dovetailing/convergence of resources by integration at ground level.

CHAPTER - II

RESOURCE BASE AND CURRENT STATUS OF THE ECONOMY

Tamil Nadu is located in the Northern hemisphere in the hot zone between 8° and 13° N latitude and between 78° and 80° E longitude. Tamil Nadu is the eleventh largest State in India by area (about the size of Greece) and the seventh most populous state. It is one of the 28 states of India and lies on the eastern coast of the southern Indian peninsula bordered by Puducherry, Kerala, Karnataka and Andhra Pradesh States. Tamil Nadu is bound by the Eastern Ghats in the North, the Nilgiris, the Anamalai Hills and Palakkad in the West, Bay of Bengal in the East, Gulf of Mannar and Palk Strait in the South east and Indian Ocean in the South. The eastern most point is formed by the Point Calimer and the Mudumalai wildlife sanctuary in the Western most point. The Pulicat Lake is situated in the northern extreme. The southern most tip of Tamil Nadu is the Cape Comorin or Kanyakumari. West and north of the state has lofty hills while the East and South are Coastal plains.

Tamil Nadu is the fifth largest contributor to India's GDP and the most urbanized state in India. The state has the highest number (10.56 per cent) of business enterprises in India, compared to the population share of about 6 per cent. Tamil Nadu has a coastline of about 1,076 kilometres which is the country's third longest coatline. Tamil Nadu has a wide variety of minerals with the most lignite (almost 90 per cent of India's reserves), magnesite (45 per cent) and garnet (over 40 per cent) reserves in India, among others. Tamil Nadu contributes 15 per cent of the total salt production in the country. Forests cover over 17 per cent of the state's geographical area with several protected areas of Tamil Nadu including wildlife and bird sanctuaries.

2.1. Zonal Classifications

Tamil Nadu can be divided into three types of zonal classifications namely Geomorphologic zones, Agro-climatic zones and Agro-ecological zones.

2.1.1. Geomorphologic Zones

Tamil Nadu is divided into four geomorphologic zones *viz.*, Coastal, Eastern Ghats, Central Plateau and Western Ghats. The coastal plain stretches from Pulicat Lake in the North to Cape Comorin (Kanyakumari) in the South. A broken line of

hills *viz.*, the Javadus, Shervaroys, Kalrayans, Pachamalais and Kolli hills is known as the Eastern Ghats. On the Western border occurs a group of high hills between the Eastern and Western Ghats lays the Central plateau with elevation ranging from 152 to 610 metres above mean sea level. The general topography is undulating with an overall sloping from West to East.

The state can be divided broadly into two natural divisions (a) the coastal plains and (b) the hilly western areas. It can further be divided into coramandal plains comprising of the districts of Kancheepuram, Cuddalore, Vellore, Thiruvannamalai and alluvial plains of Cauvery delta extending over Thanjavur, Thiruvarur, Nagapattinam and part of Trichirappalli districts and dry southern plains in Madurai, Ramanathapuram, Sivagangai, Virudhunagar, Tuticorin and Tirunelveli districts. It also extends a little in Western Ghats in Kanyakumari district. The Western Ghats averaging 3,000 to 8,000 feet height runs along the Western part with the hill groups of Nilgiris and Anamalai on either side of it. Palani hills, Varshanad and Andipatti ranges are the major off shoots of ghats. The other prominent hill comprise of Javadu, Shervarayan, Kalrayan and Pachamalais. These ranges continue even beyond south of river Cauvery. A plateau is found between these hills and Western Ghats with an average elevation of 1,000 feet rising westward. The highest peak of Doddabettah in the Nilgiris is 8,650 feet above the mean sea level.

Western Ghats form a complete watershed and no river passes through them. The main streams i.e., Paraliyar, Vattasery, Phazhayar etc. are of limited length and join the Arabian Sea. All other rivers are east flowing rivers. The Eastern Ghats are not a complete watershed and as a result the rivers pass through at various places, notable among them is the river Cauvery.

2.1.2. Agro – Climatic Zones

Based on the rainfall pattern, altitude and irrigation sources, Tamil Nadu is divided into seven agro-climatic zones.

- 1. North eastern zone
- 2. North western zone
- 3. Western zone
- 4. Cauvery delta zone
- 5. Southern zone
- 6. High rainfall zone and
- 7. Hilly zone

The distribution of Agro climatic zones in Tamil Nadu is exhibited in Fig 1.



ARABIAN SEA

INDIAN OCEAN

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Cauvery Delta Zone

North Eastern Zone

High Altitude and Hilly Zone High Rainfall Zone

North Western Zone

Southern Zone Western Zone

2.1.2.1. North Eastern Zone

The north eastern zone comprising the revenue districts of Chengalpet, Thiruvallur, Kancheepuram, Vellore, Thirivannamalai, Villupuram, Cuddalore and Perambalur is located in between 8°5' and 13°2' north latitude and 76°15' and 80°22' east longitude, covering an area of 31,065 Sq. km equivalent to 23.9 per cent of the State area.

The zone can be broadly divided into six geographical tracts. Coastal plain comprises of the northern plain (Kancheepuram district and part of Vellore, Cuddalore and Tiruchirapalli districts) with 77 M above MSL; a considerable portion of hilly and mountainous area undulating with hillocks; the eastern ghats comprising of hills; and the Central plateau undulating between eastern and western ghats, 150 to 160 m in elevation. Western Ghats comprises the highest mountains of the Peninsula. There are some backwater, lagoons adjoining the coast, around Cuddalore, Marakkanam and Pichavaram.

2.1.2.2. North Western Zone

The north western zone comprising the revenue districts of Dharmapuri (excluding hilly areas), Salem and Namakkal is located in between 11° and 12°55′ North latitude and 77°28′ and 78°50′ East longitude covering an area of 16,150 Sq. km equivalent to 12.4 per cent of the State area. Part of the tableland, an undulating plateau with hillocks is rising from 600 to 1000 m above MSL. Tracts below 350 m MSL comprise the watershed between the Cauvery and Vellur river systems. Besides, the zone has Shervaray hills, Kalrayan hills and Kolli hills.

The climate in the zone ranges from semi-arid to sub-humid with frequent occurrence of drought. The hottest months are March, April and May. Excepting the hills, the annual rainfall ranges from 560 to 1080 mm and the hilly regions enjoy the rainfall of above 1300 mm.

Southwest monsoon, northeast monsoon, winter showers and summer rains contribute to the annual rainfall. The monthly distribution of rainfall shows a pronounced maximum in September-October with a secondary peak during May. The maximum

temperature ranges from 23° to 42°C and the minimum from 10° to 14°C and being an interior region, the diurnal range of temperature is large particularly in summer.

2.1.2.3. Western Zone

The western zone comprises of Erode and Coimbatore districts, Thiruchengodu Taluk of Namakkal district, Karur Taluk of Karur district and northern part of Dindigul and Madurai districts. The zone is located in between 9°10' and 12° North latitude and 70°30' to 78° East longitude. The altitude of the zone ranges from 160 to 450 m above MSL.

The zone has undulating topography sloping towards east. Western and northern parts of the zone are bound by the Western Ghats bordering Kerala and Karnataka states with peaks ranging from 1000 to 2750 m above MSL. On the east, the zone is bordered by Salem, Tiruchirapalli and Dindigul districts. The southern part of the zone lies in Madurai district having contours of varying altitudes.

The climate in the zone ranges from semi-arid to sub-humid with frequent occurrence of drought. Four distinct seasons are south-west monsoon (June-September), north-east monsoon (October-December), winter (January-February) and summer (March-May). The cool months of the year are November to January and the hot months are March, April and May. The annual rainfall of the zone varies from 524 to 1428 mm with an average of 780 mm. Of the total rainfall, 48.4 per cent is received during north-east monsoon and 32.2, 18.6 and 2.8 per cent during south west, summer and winter seasons respectively. The maximum temperature of the zone ranges from 26.9 to 42.1°C and the minimum from 16.2 to 24.5°C. The maximum temperature is experienced during the months of March, April and May, gets reduced gradually and reaches the minimum during the months of December and January. Being an interior region, the diurnal variation in temperature is large particularly in the dry and hot seasons.

2.1.2.4. Cauvery Delta Zone

Cauvery Delta Zone lies in the eastern part of Tamil Nadu between 10°00′ and 11°30′ North latitude and 78°15′ and 79°45′ East longitude. It is bound by the Bay of

Bengal on the east, the Palk Straight on the south, Tiruchirapalli and Perambalur districts on the west and north-west, Cuddalore district on the north and Pudukkottai district on the south-west. This zone comprises the entire revenue taluks of Thanjavur, Thiruvarur and Nagapattinam districts, Musiri, Kulithalai, Lalgudi and Tiruchi taluk of Tiruchirapalli district, Chidambaram and Kattumannarkovil taluks of Cuddalore district and Aranthangi taluk of Pudukkottai district.

It is a deltaic zone. Cauvery is the river traversing the delta. A fair width of sandy beach occurs including the sand bars on the sea surface of the river delta, stiff clay seashores and marshy tidal swamps with mangroves. The terrain is an open plain sloping gently towards east and devoid of any hills or hillocks. The altitude ranges from 6 to 250 m above MSL.

The Cauvery delta zone has diverse climatic conditions as the zone includes coastal belt as well as inland area. Cyclonic storms and high humidity occur in coastal belts. The coastal belt is favoured by high rainfall and when it proceeds to the interior, the rainfall intensity decreases. The mean annual rainfall is 1,192 mm. North-east monsoon alone contributes about 52.5 per cent of the total followed by south-west monsoon with 30.5 percent. Hot weather season accounts for 11.4 per cent while, the winter season has only 5.6 per cent. The mean maximum temperature reaches 38.6°C in the month of May and the minimum of 21.0°C in December. April to August is the hot months and November to February is the cool months.

2.1.2.5. Southern Zone

The southern zone is located between 8 and 10°.55' North latitude and 79° 50 East longitudes. It is bound on the north by Tiruchirapalli and Thanjavur districts of Cauvery delta zone, on the south by Kanyakumari district of heavy rainfall zone and the Indian Ocean, on the east by Bay of Bengal and on the west by Kerala and part of Madurai district of the western zone. The southern zone consists of Tiruneveli, Tuticorin, Virudunagar, Ramanathpuram and Sivagangai districts, Thirumangalam, Madurai south, Madurai north and Melur taluks of Madurai district, Dindigul and northern taluks of Dindigul district and Pudukottai district (except Aranthangi taluk).

This zone comprises of flat plains and intermittent hills at varying altitudes ranging upto 700 m high. The topography is undulating with the gradient sloping towards the east. The major river systems are Vaigai, Manimuthar, Sarguni, Gundar and Arjuna nadhi.

The climate of the southern zone is generally semi-arid and only a small portion comes under – sub-humid. Thus, frequent drought occurs. Summer is very hot. The zone comes under rain shadow area. The rainfall ranges from 700 to 1277 mm with a mean of 876.4 mm. North-east monsoon accounts for 54.9 per cent of total rainfall and forms the main cropping season. South-west monsoon accounts for 23.9 per cent of total rainfall of this zone. Winter rainfall is negligible and summer rainfall forms 13.0 per cent. The maximum temperature ranges between 30.0° and 37.5°C, while the minimum temperature is from 20.0° to 27.0°C. The temperature is more or less similar in most parts of this zone. However, along the Western Ghats, the minimum temperature tends to be low.

2.1.2.6. High Rainfall Zone

The High rainfall zone of Tamil Nadu consists of Kanyakumari district, located between 77°50′ and 77°36′ East longitude and 8°03′ and 8°35′ North latitude. It is bordered by Tirunelveli district in north-east, the Kerala State in the North West and Arabian Sea in the west and Indian Ocean in the south.

Kanyakumari district extends from the Arabian Sea to the Western Ghats upto an elevation of 600 m above MSL. Two distinct physiographyic regions *viz.*, the hill and 'else' region and the plains are identifiable in this district. The climate is subhumid influenced by both the south-west and north-east monsoons, because of the proximity of sea and the Western Ghats. There is not much variation in the mean monthly temperature, which varies from 23.9°C (minimum) to 36.7°C (maximum).

2.1.2.7. Hilly Zone

This zone comprises the Nilgiris, the Shervarays, the Yelgiris, the Anamalais and the Palani hills. The rainfall varies from 1000 mm at the foot of the hills to 5000 mm at the peaks. The maximum temperature varies from 15°C to 24°C and that of

minimum ranges from 7° to 13°C. The soil is mainly lateritic. The major crops are vegetables, potato and tropical and temperate fruit crops. At the foot of the hills, hill tribes raise minor millets. At higher altitudes wheat cultivation is common during winter season.

2.1.3. Agro-Ecological Systems

Besides, Tamil Nadu can also be classified under four Agro-ecological systems. There are 16 zones showing distinct soil characteristics under Hill Ecosystem, Upland ecosystem, Plain Ecosystem and Coastal ecosystem.

Soils of Agro-Ecological Systems

i) Hill Ecosystem

- Deep to very deep, clayey and gravelly clay soils of the Nilgiris, hot humid to per humid (rainfall 1500- 2500 mm) ecosystem with Length of Growing Period (LGP) more than 210 days.
- Shallow to medium deep (with rocky phases), loamy to gravelly clay soils of south Sahayadris, hot humid / per humid transitional to moist semi-arid (rainfall 900 – 1700 mm) ecosystem with Length of Growing Period (LGP) of 210 days.
- Shallow to moderately deep (with rock phases) red soils of Eastern Ghats, loamy to clayey with gravels, hot moist semi-arid to dry semi-arid transition (rainfall 750 1000 mm) with Length of Growing Period (LGP) between 150 180 days.

ii) Upland Eco-system

- Moderately deep to deep gravelly loam to gravelly clay soils of upland, hot semi-arid dry ecosystem (rainfall 750 – 1000 mm) with Length of Growing Period (LGP) between 150 – 180 days.
- Moderately deep to deep, gravelly loam to gravelly clay soils, semi-arid to arid transitional ecosystem (rainfall 750 mm) with Length of Growing Period (LGP) between 90 – 120 days.
- Deep to moderately deep, clayey black soils in association with gravelly clay red hill soils of upland, hot semi-arid dry to arid transitional ecosystem (rainfall<750mm) with Length of Growing Period (LGP) between 90-120 days.

iii) Plain Eco-system

- Moderately deep to deep gravelly loam and gravelly clay red lateritic soils of plains, moist semi-arid eco systems (rainfall 1000 – 1500 mm) with Length of Growing Period (LGP) between 180 – 210 days.
- Deep to very deep clayey black soils of plains (riverine plain), hot moist to dry semi arid transitional ecosystem (rainfall 750 – 1500 mm) with Length of Growing Period (LGP) of 210 days.
- Deep to very deep clayey black soils of Cauvery Delta, hot semi arid to moist eco system (rainfall 1000 – 1500 mm) with Length of Growing Period (LGP) of 210 days.
- Moderately deep to very deep red and lateritic soils with gravelly texture, hot
 dry semi arid eco system (rainfall 750 1000 mm) with Length of Growing
 Period (LGP) between 150-180 days.
- Deep to moderately deep clayey black soils (inland plain, hot semi arid dry to arid transitional ecosystem (rainfall less than, 750 – 1000 mm) with Length of Growing Period (LGP) beween 100 - 120 days.
- Deep to moderately deep gravelly clay to gravelly loam red soils, of plains, hot semi arid to moist transitional ecosystem (rainfall less than 750 1000 mm) with Length of Growing Period (LGP) between 120 150 days.
- Deep to moderately deep mixed red and black soils, clay and gravelly loam and gravelly clay of plain (inland plain, hot semi arid dry to moist transitional ecosystem (rainfall 750 – 1200 mm) with Length of Growing Period (LGP) between 120 - 150 days.

iv) Coastal Eco-system

- Deep to moderately deep, sandy soils of narrow coastal plains, gravelly clay and gravelly loam soils of inland plain, hot moist semi arid to dry sub humid transitional eco system (Rainfall – 1000 – 1500 mm).
- Deep sandy soils of coastal plain, sandy to sandy loam, hot moist to dry semi arid transitional eco system (rainfall <1000 mm) with Length of Growing Period (LGP) between 150 – 180 days.

 Deep, sandy soils of coastal plain, sandy to sandy loam, hot semi arid to arid transitional eco system (rainfall <750 mm) with Length of Growing Period (LGP) between 90 – 120 days.

2.2. Administrative Divisions

Currently, Tamil Nadu is divided into 32 districts including the recently formed Tirupur district. For reasons of administration, the districts of the State have been bi and tri-furcated over years giving rise to as many as 32 districts. For instance, Erode (1976) was carved out of Coimbatore, Dharmapuri (1965) and Namakkal districts (1997) were originated from Salem district and Pudukkottai (1974), Karur (1996), Nagapattinam (1991), Thiruvarur (1997) and Perambalur (1996) districts were delineated from the erstwhile Thanjavur and Thiruchirappalli districts. Sivagangai and Virudhunagar districts (1994) were carved out of Ramanathapuram, while Dindigul (1985) and Theni (1997) districts were originated from Madurai district. Tirunelveli district was bifurcated into Tirunelveli and Thoothukudi districts (1986), while North Arcot district was bifurcated into Thiruvannamalai district (1989) and Vellore district (1989) and South Arcot district into Cuddalore district and Villupuram district (1993). Chengalpattu district was bifurcated into Kancheepuram and Thiruvallur (1996) districts. Krishnagiri district (2003) came into existence from Dharmapuri district along with certain parts of Salem district.

The details of administrative division in Tamil Nadu state are furnished in Table 2.1. The State comprises of 32 districts, 208 taluks, 385 blocks, 561 town Panchayats, 150 municipalities and ten municipal corporations for smooth functioning of the State.

Number Number Number of Number Sl. **District** Municipal of of **Town** of Name **Corporations** No **Taluks Blocks Panchayats Municipalities** Ariyalur 1 3 6 2 2 5 Nil Chennai Chennai 2 (Urban (TN State HQ) District) Coimbatore and 3 Coimbatore* 9 19 52 10 Tirupur 5 Cuddalore 6 13 16

Table 2.1 Details of Administrative Divisions in Tamil Nadu State

Table 2.1 Contd.,

Sl. No	District Name	Number of Taluks	Number of Blocks	Number of Town Panchayats	Number of Municipalities	Municipal Corporations
5	Dharmapuri	5	8	10	1	-
6	Dindigul	8	14	24	3	-
7	Erode	7	20	53	10	Erode
8	Kancheepuram	8	13	24	10	-
9	Kanniyakumari (HQ at Nagercoil)	4	9	56	4	-
10	Karur	4	8	11	4	-
11	Krishnagiri	5	10	7	2	-
12	Madurai	7	13	12	6	Madurai
13	Nagapattinam	7	11	8	4	-
14	Namakkal	4	15	19	5	-
15	Perambalur	3	4	4	1	-
16	Pudukkottai	9	13	8	2	-
17	Ramanathapuram	7	11	7	4	-
18	Salem	9	20	33	4	Salem
19	Sivagangai	6	12	12	3	-
20	Thanjavur	8	14	22	3	
21	The Nilgiris (HQ at Udaga- mandalam)	6	4	11	4	-
22	Theni	5	8	22	6	-
23	Thiruvallur	8	14	13	12	-
24	Thiruvarur	7	10	7	4	-
25	Thoothukudi	8	12	19	3	Thoothukudi
26	Tiruchirappalli	8	14	17	3	Tiruchirappalli
27	Tirunelveli	11	19	36	7	Tirunelveli
28	Tiruvannamalai	7	18	10	4	-
29	Vellore	8	20	22	14	Vellore
30	Villupuram	8	22	15	3	-
31	Virudhunagar	8	11	9	7	
	Total	208	385	561	150	

Source: Tamil Nadu Economic Appraisal (2005-06), Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai.

2.3. Rainfall

The quantum and distribution of rainfall influence the pattern of cropping and crop growth in a locality. The agricultural production and productivity of crops mainly depends on the timely onset of South-West and North-East monsoons and the quantum

^{*}Before bifurcation into Coimbatore and Tirupur

and spread of rainfall. Therefore, the details on the normal annual rainfall pattern, district-wise, in Tamil Nadu have been presented in Table 2.2.

Table 2.2 District-wise Distribution of Normal Rainfall

(in mm)

		1	,			(in mm)	
C)		South- west	North- East	Winter	Hot weather	Total	
Sl. No	District	(June- Sep)	(Oct- Dec)	Jan & Feb	March to May	Total	
		Normal	Normal	Normal	Normal	Normal	
1	The Nilgiris	1060	367.7	30.8	237.2	1695.7	
2	Chennai	443.5	753.1	37.3	64.2	1298.1	
3	Kancheepuram	462.7	697.2	32.1	60.1	1252.1	
4	Thiruvallur	449.5	604.1	33.5	65.7	1152.8	
5	Cuddalore	373.6	716.5	56.4	89.3	1235.8	
6	Villupuram	433	484.8	34.5	77.1	1029.4	
7	Thanjavur	342	545.7	50.7	114.6	1053.0	
8	Thiruvarur	301.8	665.4	57.9	104.8	1129.9	
9	Nagapattinam	274.1	886.4	81.5	99.7	1341.7	
10	Pudukkottai	350.7	418	38.2	114.6	921.5	
11	Thiruvannamalai	465.8	439.8	32.8	108.2	1046.6	
12	Vellore	442	353	20.3	101.7	917	
13	Dharmapuri	361	316.7	18.5	156.9	853.1	
14	Krishnagiri	403.6	290.9	14.3	154.7	863.5	
15	Salem	380	347	21.3	149.7	898.0	
16	Namakkal	317	291	18.1	150.4	776.5	
17	Erode	213.1	323.5	20.7	154.1	711.4	
18	Coimbatore	192.9	327	26.1	148.4	694.4	
19	Tiruchirapalli	270.3	356.1	25	110.1	761.5	
20	Karur	249.7	365.4	24	103.1	742.2	
21	Perambalur	349.6	449.6	34.5	115.9	949.6	
22	Madurai	305.4	373	29.8	131.8	840.09	
23	Theni	178.4	384	48.4	222.7	833.5	
24	Dindigul	251.4	399.2	33	148	831.6	
25	Ramanathapuram	136.1	507.4	53.9	123.8	821.2	
26	Virudhunagar	181.8	431.2	42	174.6	829.6	
27	Sivagangai	289.6	415.5	35.8	135.1	876.0	
28	Thirunelveli	92.6	429.8	72.6	141.9	736.0	
29	Thoothukudi	86.8	410.1	46.6	112.2	655.7	
30	Kanniyakumari	327.8	427.4	33.4	217.4	1006.0	
	State average	332.8	459.2	36.8	129.6	958.4	
Seaso	on-wise distribution (%)	34.73	47.91	3.84	13.52	100.00	
Source: Tamil Nady Feonomic Appraisal (2005-06) Evaluation and							

Source: Tamil Nadu Economic Appraisal (2005-06), Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai.

As could he seen from Table 2.2 the average normal rainfall of 958.4 mm is received in the state as a whole. About 48 per cent of the total average rainfall is received during North-East monsoon, while about 35 per cent is received during South-West monsoon. The balance of about 17 per cent is obtained during winter as well as summer months, as could be evidenced from the table. It is also pertinent to note that the districts of Salem, Namakkal and Dharmapuri received almost equal quantities of rainfall in both South-West and North-East monsoons. On the other hand, Krishnagiri and the Nilgiris are benefited more by the South-West monsoon. All other districts are benefited more by North-East monsoon.

As regards geographical distribution of rainfall in the state, the maximum normal rainfall of about 1700 mm is received in the Nilgiris district, while the minimum of about 694 mm is received in Thoothukudi district. The table also reveals the fact that almost all the mid and northern coastal districts receive more than 1000 mm of normal rainfall. The mid-inland and southern districts, receive lesser than 1000 mm. Because of high rainfall and high elevation, the sub-tropical and temperate crops like coffee, tea, hill vegetables, peaches, plums, straw berries etc, are grown in the Nilgiris district. On the other hand, in the remaining plains of Tamil Nadu characterized by tropical climate, the field crops like paddy, cholam, cumbu, ground nut, sugar cane, banana, cotton, etc are cultivated. Even among the districts in the plains, in mid and northern coastal districts, paddy is predominantly grown in wetlands in larger areas, while in the mid and northern in-land districts, garden land crops like cholam, cumbu, ragi, maize, groundnut, cotton etc are cultivated. Southern districts are characterized more by dryland agriculture due to low rainfall regime and hence cotton, pulses, cholam, cumbu etc are predominantly grown under rainfed conditions and in a few pockets where irrigation facilities are available, farmers resort to invariably for paddy cultivation. However, the southern most district viz. Kanyakumari, comes under high rainfall zone and hence the paddy and plantation crops like rubber are grown.

The temporal spread of rainfall in the State is furnished in Table 2.3.

Table 2.3 Temporal Spread of Rainfall in Tamil Nadu State

(in mm)

Sl. No.	Year	SWM	NEM	Winter	Hot weather	Total
1.	1993-94	305.2	709.9	35.5	121.3	1171.9
2.	1994-95	220.3	479.0	27.2	203.3	929.8
3.	1995-96	347.5	248.3	10.5	115.2	721.5
4.	1996-97	454.8	541.1	13	112.3	1121.2
5.	1997-98	286.0	782.3	5.5	78.4	1152.2
6.	1998-99	340.1	602.4	21.5	116.4	1080.4
7.	1999-00	199.9	499.5	119.5	77.9	896.8
8.	2000-01	314.5	335.6	16.8	118.4	785.3
9.	2001-02	260.0	379.4	70	85.8	795.2
10.	2002-03	185.4	407.1	8.7	129.7	730.9
11.	2003-04	336.5	403.1	11.6	283.4	1034.6
12.	2004-05	360.7	472.1	14.3	23.70	870.8
13.	2005-06	380.5	828.8	15.9	150.9	1376.1

Source: Tamil Nadu Economic Appraisal (2005-06), Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai (various issues)

It could be seen from the table above, that the total rainfall received from South-West monsoon during 2004-05 was 8.80 percent above normal rainfall. However, during 2005-06 it was 7.3 percent. The rainfall received from South West monsoon was excess in one district, normal in 23 districts and deficient in six districts during 2005-06. The precipitation in the North East monsoon was comparatively improved from 472.1 mm in 2004-05 to 828.8 mm in 2005-06. The State has experienced an improvement in the overall rainfall to the tune of 36.10 percent against the normal rainfall during the review year.

The month-wise distribution of rainfall for the period from 2002-03 to 2005-06 along with normal rainfall is furnished in Table 2.4.

Table 2.4. Month-wise Distribution of Rainfall - Tamil Nadu (in mm)

Sl. No.	Month	Normal	2002-03	2003-04	2004-05	2005-06
1.	June	46.3	48.5	44.7	45.9	29.5
2.	July	77.6	24.6	82.2	61.2	80.6
3.	August	95.3	53.3	141.4	35.7	82.0
4.	September	113.6	59.0	68.1	217.9	116.4
South W	est Monsoon	332.8	185.4	336.5	360.7	308.5
5.	October	187.1	225.3	208.4	273.6	292.0
6.	November	179.4	146.2	172.7	182.4	370.9
7.	December	92.7	35.7	22.0	16.1	165.9
North E	ast Monsoon	459.2	407.2	403.1	472.1	828.8
8.	January	22.1	0.8	8.8	3.1	15.8
9.	February	14.4	7.9	2.8	11.3	0.1
Winter S	Season	36.8	8.7	11.6	14.4	15.9
10.	March	19.9	46.0	4.8	25.8	54.5
11.	April	43.4	37.2	34.4	133.6	34.4
12.	May	66.3	46.5	244.2	72.3	62.0
Hot wea	ther season	129.6	129.7	283.4	231.7	150.9
Total		958.4	731.0	1034.6	1078.8	1304.1

Source: Tamil Nadu Economic Appraisal (2005-06), Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai.

From the table, it could be seen that comparatively high rainfall was received in the months of September, October, November and December and low rainfall was received in the months of January and February in all the years under question.

The study carried out by the Department of Agricultural Economics, Tamil Nadu Agricultural University revealed that due to increasing temperature and changing rainfall the reduction in rice yield is expected to go down by 10-15 percent in 2020 and even 80 per cent in 2080.

2.4. Soils of Tamil Nadu

Major portion in Tamil Nadu is covered by red sandy and red loam soils. Red sandy soils have developed from acidic parent material like granite, gneiss, quartzite, sandstone etc. Sand particles are coated with red coloured hematite or yellow coloured limonite, which is responsible for the various shades of red and yellow soils, which usually contain ferruginous gravel containing iron, aluminum and silica. These sandy, loamy sand and sandy loam soils are heavily leached and therefore poor in basic elements and plant nutrients. The red colour of soils is due to the coating of ferric oxides on soil particles. Calcium is the important exchangeable cation. They are neutral to slightly alkaline in reaction.

Black soils of Tamil Nadu which are either shallow (3 to 4 ft. deep) or deeper, are of very heavy texture, with high moisture retention capacity. They are rich in lime and alkaline in reaction. They contain low amounts of nitrogen but sufficient quantities of phosphorus and potash.

Mixed red and black soils occur in Coimbatore, Madurai, Ramanathapuram and Tirunelveli districts. Black soils are dominated by beidellite, while red soils are dominated by kaolinite. The cation exchange capacity of the black soils is much higher than that of the red soils. However, the cation exchange capacity of red soils is high at an intermediate depth only. Black soils contain almost the same amount of nitrogen.

Laterite soils occur in the Chengleput and Thanjavur districts, formed from varieties of parent materials in humid climate. Paddy is grown in lower elevation and tea, cinchona, rubber and coffee at the higher elevation. They are rich in humus and plant nutrients and strongly acidic in reaction. Soil acidity increases with elevation.

Deltaic alluvium occurs in Thanjavur district and a belt of coastal alluvium covers extends from Chennai to Kanyakumari. Alluvial soils are most extensive and most fertile, several feet deep at higher elevations. These soils consist of alternate layers of silt, clay and sand of varying thickness. The texture of the surface soils is usually loamy. The Cauvery alluvium is poor in humus, nitrogen and phosphorus, but rich in potash and lime. These soils possess a low cation exchange capacity and are alkaline in reaction.

Soils developed from Cuddalore sandstone are loamy in texture and deep to light red, yellow and light yellow and even grayish white in colour and deficient in humus, nitrogen, phosphorus and lime. These soils are low in cation exchange capacity and neutral to moderately alkaline in reaction. The soils, which have developed from Archean schist, are found only in a small area to the west of Budalur. The profile show brownish grey loam of clay at the top one-foot surface soil and brown sub-soil. Soils are usually sandy below three feet. Surface and sub-soils are usually very hard. They are poor in humus, nitrogen, phosphorus and lime but rich in potash. These soils are slightly alkaline, free from soluble salts and low cation exchange capacity.

The profile characteristics of coastal alluvial soils formed from recent marine deposits are similar to Cauvery alluvium in their alternate layers of clay, silt and sand, but exhibit the influence of sea as indicated by the presence of shells and bleached sand. They are poor in nitrogen and available phosphorus but rich in potash and lime. Some of them also contain salts. Peaty soils, which occur mainly on the south east coast of Tamil Nadu, are usually coloured blue due to the presence of ferrous iron. They contain varying amounts of organic matter.

The types of soil and their availability in Tamil Nadu are furnished in Table 2.5.

Types of soil Areas in Tamil Nadu Red Loam Parts of Kancheepuram, Cuddalore, Salem, Dharmapuri, Coimbatore, Tiiruchirappalli, Thanjavur, Ramanathapuram, Madurai, Tirunelveli, Sivagangai, Thoothukudi, Virudhunagar, Dindigul, and The Nilgiris Districts Laterite soil Parts of The Nilgiris District Black soil Parts of Kancheepuram, Cuddalore, Vellore, Thiruvannamalai, Salem, Dharmapuri, Madurai, Ramanathapuram, Tirunelveli, Sivagangai, Thoothukudi, The Nilgiris Districts, Virudhunagar and Dindigul districts Sandy Coastal alluvium On the coasts in the districts of Ramanathapuram, Thanjavur, Nagapattinam, Cuddalore, Kancheepuram and Kanyakumari Red sandy soil Small patches in the districts of Coimbatore and The **Nilgiris**

Table 2.5. Types of Soil and area covered in Tamil Nadu

Source: Statistical Handbook of Tamil Nadu, 2006

2.4.1. Soil Taxonomy

As per the USDA system of the classification, the soils of Tamil Nadu are classified into six orders *viz.*, Entisols, Inceptisols, Alfisols, Mollisols, Utilsols and Vertisols. There are 12 sub-orders, 29 great groups, 44 sub-groups and 94 soil families. About 50 percent of the total area of State is occupied by Inceptisols, 30 percent by vertisols, six percent by entisols, one percent by utisols and very negligible area by mollisols.

Entisols include young river alluvium sandy and eroded red and laterite soils, moderately deep red, laterite and black soils are included under inceptisols. Deep red and laterite soils are grouped under alfisols. Ultisols consists of highly weathered laterite soils. Deep black cotton and old alluvial soils are classified under vertisols. The salient features of soils series of Tamil Nadu are furnished in Table 2.6.

 Table 2.6
 Salient Features of Soil Series of Tamil Nadu State

Sl.No	Soil series	Area (ha)	Taxonomy	Potentials	Brief description	Districts
1	Irugur	998960	Fine loamy,	Moderately deep to deep	Red to dark red,	Coimbatore,
		Kaolinitic,	i inc rounty ter	Fine loamy texture	deep, fine loamy,	Dindigul, Erode,
			isomegathermic	Gentle slope	non calcareous,	Salem, karur,
			deep, Typic	Moderately rapid permeability	slightly acid to	Tiruchirapalli,
			Ustorthents	Low cation exchange capacity	neutral soils	Namakkal,
				Neutral reaction		Theni, Madurai
				Free from salinity		
				Non-calcareousness		
2	Vannapatti	488089	Coarse loamy,	Coarse loamy textured	Reddish brown to	Dharmapuri,
			mixed,	Very gentle slope	red, moderately	Erode,
		isomegathermic	Well drained	deep coarse	Kancheepuram,	
			moderately	Neutral reaction	loamy non-	Vellore,
			deep, Typic Ustorthents	Free from salinity	calcareous, well drained, neutral	Thiruvallur, Karur
				Non-calcareousness	soils	
3	Tulukkanur	422121	Fine loamy,	Deep to very deep	Reddish brown to	Namakkal,
			mixed	Fine textured	dark grayish	Erode, Karur,
			isomegathermic	Gentle slope	brown, moderately deep to very deep, fine loamy, calcareous, well	Salem,
			calcareous deep,	Moderate to rapid permeability		Tiruchirapalli,
			Typic	High water holding capacity		Theni, Madurai
			Haplustalfs	Medium cation exchange capacity		
				High organic matter	drained soils	
				Neutral reaction	Granica Bons	
				Free from salinity		

Table 2.6 Contd.....

Sl. No.	Soil series	Area (ha)	Taxonomy	Potentials	Brief description	Districts
4	Vayalogam	291778	Fine loamy, Kaolinitic, isomegathermic deep, Typic Rodustalfs	Deep Sandy clay loam in sub-surface Gentle slope Medium cation exchange capacity Free from salinity Non-calcareousness	Yellowish red to red, moderately deep to deep, fine loamy to fine, non- calcareous, with quartz mixed iron gravel present	Pudukottai, Madurai, Dindigul, Tiruchirapalli, Theni
5	Mangulathu -patti	287092		Non- calcareous	Upland undulating Well drained weathered genesis, Brown soil deep (50-100 cm) Fine loamy moderately rapid	Vellore, Kancheepuram, Thiruvallur, Pudukottai
6	Madukkur	256810	Fine loamy, Kaolinitic, isomegathermic, very deep, Ultic Haplustalfs	Very deep Loamy textured in surface Very gentle slope Moderately rapid permeability High water holding capacity Neutral reaction Free from salinity Non-calcareousness	Yellowish brown, very deep fine loamy, moderately well drained soils	Thanjavur, Perambalur, Pudukkottai, Madurai, Tiruchirapalli
7	Peelamedu	244912	Fine, Montmorillonitic, isomegathermic, very deep, Typic Calciusterts	Very deep Clay loam to clay Very gentle slope High organic matter High cation exchange and water holding capacities Free from salinity	Dark brown to very dark greyish brown, deep to very deep calcareous moderately alkaline soils.	Madurai, Perambalur, Coimbatore, Namakkal, Salem, Tiruchirapalli, Dindigul, Karur, Theni, Erode

Table 2.6 Contd.....

Sl. No.	Soil series	Area (ha)	Taxonomy	Potentials	Brief description	Districts
8	Palladam	217732	Fine	Gentle slope	Dark brown, shallow,	Coimbatore,
			montmorillonitic,	Well drained	corase loamy, calcareous	Erode, Karur,
			isomegathermic,	High organic matter	midly alkaline, well drained soils	namakkal,
			calcareous, very deep, Typic	Free from salinity	dramed sons	Dindigul
			Halpusterts			
9	Palaviduthi	203662	Fine loamy,	Very deep	Red to dark reddish	Dindigul,
			Kaolinitic	Clay loam to clay in sub-surface	brown, very deep fine	madurai, Tiruchirapalli, Theni, Karur
			isomegathermic	Very Gentle slope	loamy, slightly acidic to neutral, well drained soil.	
		deep, Typic Rodustalfs Moderate permeability High cation exchange capacity	neutrai, wen dramed son.	Them, Kalui		
				Neutral reaction		
				Free from salinity		
10	Mayamankurichi	197020		Crusting	Very Gentle slope lands,	Tirunelveli
				Medium water holding capacity	Moderately well drained	
				Non saline	Calcgneiss brown soil	
				Mild alkalinity (7.4 - 7.8)	very deep (> 100 cm), Sandy day loam,	
					Moderately slow	
11	Kalathur	180104	Fine	Very deep	Brown to dark, Greyish	Thiruvarur,
			montmorillonitic,	Loamy textured	brown, very deep, fine calcareous, moderately well drained, alkaline alluvial soils	Thanjavur,
			isomegathermic, calcareous, very	Very gentle slope		Nagapattinam, Perambalur,
			deep, Typic	High water holding capacity		Tiruchirapalli,
			Halpusterts	High cation exchange capacity and organic matter		Madurai

Table 2.6 Contd.....

Sl. No.	Soil series	Area (ha)	Taxonomy	Potentials	Brief description	Districts
12	Pattukkottai	162624	Fine loamy, Kaolinitic isomegathermic, very deep, Ultic Haplustalfs	Very deep Loamy sub-surface Level to gentle slope Rapid moderately rapid permeability Neutral reaction	Yellowish brown to reddish brown, deep to very deept, fine loamy to fine, slightly acidic, well drained soils	Pudukottai, Perambalur, Thanjavur, Thiruvarur, Tiruchirapalli
				Free from salinity Non-calcareousness		
13	Nanguneri	146290		Non saline Neutral (6.6 - 7.3)	Very Gentle slope lands, Moderately well drained weathered gneiss, Brown soil moderately deep (25- 50 cm) Sandy loam rapid	Tirunelveli
14	Palathurai	116878	Coarse loamy, Kaolinitic, isomegathermic, calcareous, deep Ultic Haplustalfs	Moderately deep Loamy textured Gentle slope Medium cation exchange capacity Slight erosion	Dark red to dark brown, moderately deep to deep, fine loamy soils occuring on very gentle slope lands	Coimbatore, Dindigul, Karur, Theni, Namakkal, Erode, Perambalur, Tiruchirapalli
15	Hosur	111317		Non saline Non-calcareousness High water holding capacity (>50%) Neutral (6.6 - 7.3)	Gently slope undulating well drained, Granitic gneiss with quarts veins red soil very deep (> 100 cm) Fine moderately rapid	Dharmapuri

2.4.2. LAND DEGRADATION CATEGORIES

Land degradation, in general, implies temporary or permanent recession from a higher to a lower status of productivity through deterioration of physical, chemical and biological aspects. The physical processes, which contribute to land degradation, are mainly water and wind erosion, compaction, crusting and water logging. The chemical processes include salinization, alkalization, acidification, pollution and nutrient depletion. The biological processes, on the other hand are related to the reduction of organic matter content in the soil, degradation of vegetation and impairment of activities of micro-flora and fauna.

The different land degradation categories are shown in the map given below in Fig 2.

ANDHRA PRADESH STHIRUVALLUR KANCHEEPURAN KARNATAKA KRISHNAGIRI TIRUVANNAMALAI DHARMAPURI VILUPPURAM SALEM CUDDALLIRE ERODE THE NILGIRIS NAMAKKAL PERAMBALUR COMBATORE THANJAVUR S 7 NAGAPATTINAM TIRUCHIRAPPALLI PUDUKKOTTAI DINDIGUL MADURAL SIVAGANGA THEN KERALA VIRUDHUNAGAR RAMANATHAPURAM Этноотниккий BAY OF BENGAL TIRUNELVELI

MNIYAKUMARI

INDIAN OCEAN

ARABIAN SEA

Fig 2. LAND DEGRADATION MAP OF TAMIL NADU

Opyright @ 2009

Remote Sensing and GIS Centre, Tamil Nadu Agricultural University, Coimbatore - 641003.

Salinity

- Sodicity

Acidity

Water erosion Waterlogging
Wind erosion Mining / dumping

Rocky / stony waste

Sand deposits

- Pollution

Water Erosion

Water erosion is the most widespread form of degradation and occurs widely in all agro-climatic zones. The displacement of soil material by water can result in either loss of top soil or terrain deformation or both. This category includes processes such as splash erosion, sheet erosion, rill and gully erosion. The soil erosion is initiated when raindrops fall onto the bare soil surface. The impact of raindrops breaks up the surface soil aggregates and splashes particles into the air. On sloping land relatively more of the detached material will fall down slope resulting in runoff. This subsequently lead to different types of water erosion depending on the gravity of the problem, susceptibility of land and continuity of the process.

1. Sheet erosion

It is a common problem resulting from loss of topsoil. The loss of topsoil is often preceded by compaction and/or crusting, resulting in a decrease of infiltration capacity of the soil. The soil particles are removed from the whole soil surface on a fairly uniform basis in the form of thin layers. The severity of the problem is often difficult to visualize with naked eyes in the field.



2. Rills

When the surface runoff goes in the form a concentric flow, a tiny water channels are formed in the field. These are small rivulets of such a size that they can be worked over with farm machinery. Rills are generally associated with the cultivated lands and are visible in the ploughed soil after first heavy showers. One important feature of

rills is that they do not occur at the same place repeatedly. This is a temporary concentric flow of runoff, which could vanish after ploughing the land.



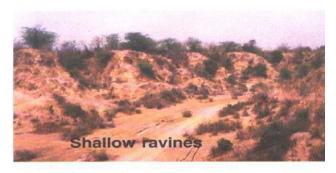
3. Gullies

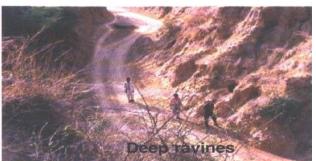
Gullies are formed as a result of localized surface run-off affecting the unconsolidated material resulting in the formation of perceptible channels causing undulating terrain. If rills are neglected and the erosion continues for a long time, it develops in to gullies. They are commonly found in sloping lands, developed as a result of concentrated run-off over fairly long time. They are mostly associated with stream courses, sloping grounds with good rainfall regions and foot hill regions. These are the first stage of excessive land dissection followed by their networking which leads to the development of ravenous land.



4. Ravines

The word ravine is usually associated not with an isolated gully but an intricate network of gullies formed generally in deep alluvium and entering a nearby river, flowing much lower than the surrounding tablelands. Ravines are basically extensive systems of gullies developed along river courses. Further classification of this category is possible based on the depth, width, bed slope, frequency and morphology of bed material of the ravines. Based on the depth of the ravines, which has a characteristic manifestation on the satellite image, two subcategories are possible for delineation viz., shallow ravinous and deep ravenous lands.





Wind Erosion

It implies uniform displacement of topsoil by wind action. It can result in loss of topsoil and the deposition of the eroded material elsewhere leads to formation dune complexes. The risk of wind erosion is severe in the arid and semi-arid areas. It includes both the removal and deposition of soil particles by wind action and the abrasive effects of moving particles as they are transported. Not only can the wind remove topsoil from good farmland; it can result in additional damage by burying land, buildings, machinery, etc. with unwanted soil. It occurs when soil is left devoid

of vegetation either because of poor rainfall to support any vegetal cover or loss of vegetation due to overgrazing. In the sand deposited areas with rainfall the sand gets stabilized partially of fully depending on vegetal cover it establishes.

During high winds the finer, and commonly more fertile, particles are swept high in the air and are sometimes carried for great distances as dust storms; while coarser particles are rolled or swept along on or very near the soil surface to be piled into depressions. The process is highly dynamic and requires careful evaluation of the site and process.

5. Sheet Erosion

It implies uniform displacement of topsoil by wind action as thin layers / sheets. During wind storms, the dry finer soil particles which could be suspended into air will be transported longer distances, while the heavier particles creeps on the surface and generally will be transported to a shorter distances. It may seriously influence the infrastructures (roads. railway lines. buildings. waterways, etc.). The uneven displacement of soil material by wind action leads to deflation hollows and dunes. The lifted medium to coarse soil particles may reduce the productivity of adjacent fertile land when they are deposited in the form of sand castings.



6. Stabilized Dunes / Partially stabilized Dunes

Depending on the rainfall and protection available from grazing, the bare sand dunes gradually establishes vegetal cover thus making them to get stabilized. In partially stabilized dunes, the erosion / deposition will be still active to some extent. When they established a good vegetal cover either in the form of grasses, shrubs and scrubs, they get stabilized and the erosion / deposition activity will be at minimal. By virtue of vegetal cover and physiography, they are discernible on satellite imagery.



Stabilized sandune



Partially stabilized sanddune

7. Un-stabilized dunes

Due to their inherent vulnerability because of lack of vegetal cover, these are quite active during summer season. The sand starts moving and engulfing the adjoining agricultural lands, engineering structures and demands immediate attention for their stabilization. The unstabilized sand dunes changes their location and shape from season to season and hence they are often called shifting dunes.



Water logging

Water logging is considered as physical deterioration of land. It is the affected by excessive ponding / logging of water for quite some period and affects the productivity of land or reduces the choice of taking crops.

8. Surface Ponding

This category addresses the water logging caused by flooding of river water, submergence by rainwater and human intervention in natural drainage systems that adversely affect the natural drainage, where the water stagnates for quite a long time. Depending the number of crops it affects it has been sub-divided into two severity classes, slight- affecting one crop and moderate – affecting more than one crop. Flooding of paddy fields is not included as it is a unique cultural practice rather than degradation of soil.

Waterlogging may be seasonal or permanent. Seasonally waterlogged areas are those low lying or depression areas that get saturated due to heavy rains and are normal in post-monsoon season. Permanent waterlogged areas are those areas where there is continuous surface ponding of water or soil profile is saturated for one or more seasons.

9. Sub-surface Water logging

If the water table is with in 2 m from the surface it adversely affects crop by virtue of saturating the root zone due to capillary rise. These areas are potential threat to get surface ponded in due course of time, if the water accumulation continues. The subsurface waterlogged areas can be reclaimed with little ease.

10. Salinization / Alkalization

Salinization can result from improper management of canal irrigation water resulting in the rise of water table and consequent accumulation of salts in the root zone in arid, semi-arid and sub humid (dry) conditions and ingress of sea water in coastal regions and/or use of high-salt containing ground water. They also become saline when soils have developed on salt-containing parent materials or have saline ground water. The soils with EC more than 2ds/m in vertisols and >4ds/m in non-vertisols was considered as saline in the present project. Increase in soil pH beyond 8.5 results in sodicity or alkalization that result in increase of exchangeable sodium percentage in soils (> 15). Based on the type of problem, it has been divided into saline, sodic and salinesodic.





Salinity Sodic

11. Acidification

pH is one of the most-important soil property that affects the nutrient uptake by plants and there by influencing the crop productivity. Any soil processes or management practices which lead to buildup of hydrogen cations (also called protons) in the soil will result in soil acidification. It also occurs when base cations such as Calcium, Magnesium, Potassium and Sodium are lost from the soil leading to high hydrogen ion concentration. This results in decrease of soil pH below 6.5. It occurs in laterite regions, coastal regions upon drainage or oxidation of pyrite containing soils.

If the pH is 4.5 to 5.5 then they are called *moderate* and if the pH is < 4.5,then they are mapped under *severe* category. The soils respond to lime application, which results in improvement of crop productivity.



Glacial

These are the areas under perpetual snow covered areas confined to Himalayan region. The type of degradation includes frost heaving and snow covered areas.

12. Frost Heaving

Frost heaving is defined as a process in glacial and periglacial environment where intense frost action and freezing of water evolves peculiar forms of rock, regolith and soil. The water crystallizes to ice below the surface horizon leading to micro-relief variations on the surface. This process affects the germination and root growth of several crops there by limiting the productivity of land.

13. Snow covered areas

The area covered with permanent snow cover will limit any vegetation to come up in these areas leading to a desert like conditions. These areas are generally associated with very high mountainous regions. The glacier regions are also included in this category.

Degradation due to anthropogenic factors

Human economic activities like mining, industries etc., have also contributed to decreased biological productivity, diversity and resilience of the land. Mining, brick kiln activities and industrial effluent affected areas are included under this type of degradation.

14. Industrial effluent affected areas

These are areas where the human activity is observed in the form of industry along with other supporting establishments of maintenance. Heavy metallurgical industry, thermal, cement, leather, petrochemical, engineering plants etc., are included under this. These are the lands which have been deteriorated due to large scale industrial effluent discharge. These areas are seen around urban areas and other areas where industrial activity is prominent.

15. Mining and dump areas

These are the areas subjected to removal of different earth material (both surfacial and sub-surfacial) by manual and mechanized operations. Large scale quarrying and mechanizations results in mining and mine dumps. It includes surface rocks and stone quarries, sand and gravel pits, brick kilns, etc. Mine dumps are those areas where waste debris is accumulated after extraction of required minerals. Generally these lands are confined to the surroundings of the mining area.



16. Brick kiln areas

These areas are associated with human activity and are generally seen in the vicinity of urban activity. The areas include brick kiln per se and area dugged for making bricks.



Others

Some of the degraded lands, which could not be included in the above type of land degradation, are included here. They are mass movement/ mass wastage, barren rocky / stony waste areas.

17. Mass movement/ Mass wastage

Landslide areas are mostly included under mass movement/ mass wastage type of land degradation. On sloping land when soil is saturated, the weight of the soil may exceed the forces holding the soil in place. Under such circumstances mass movement in the form of landslides or mudflows may occur. On steep slopes this mass movement may be very rapid, involving the movement of large volumes of soil, usually on an isolated event and localized basis. In geologically recent and unstable mountain areas, such as the Himalayas, and areas prone to seismic and volcanic activity, landslides may be natural phenomena. This class also includes the areas with mass wastage in terms of foothill depositions like scree and bazada zones, where the coarse material like sand and pebbles gets deposited because of erosion in upper catchment area. However, their frequency and severity may greatly increase following destruction of the natural vegetative cover by logging and/or clearing for cultivation

18. Barren rocky / stony areas

Barren / rocky / stony areas are the rock exposures of varying lithology often barren and devoid of soil and vegetal cover. They occur in hill forests as openings or as isolated exposures on plateau and plains. These can be easily delineated from other type of degraded land because of their severe nature of degradation and typical spectral signature.



19. Miscellaneous

This includes riverine sand areas, sea ingression areas mainly with sand deposition excluding the sandy areas of desert region.



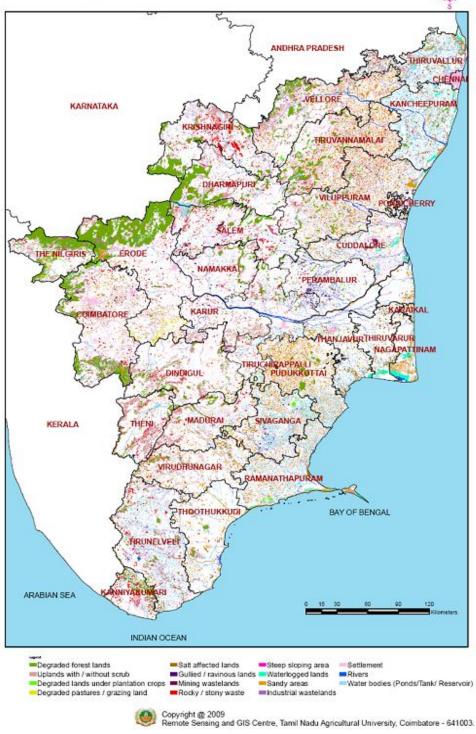
Sea Ingress areas

WASTELAND CLASSIFICATION

The waste land of Tamil Nadu is furnished below in Fig 3.

Fig 3. WASTELAND MAP OF TAMIL NADU





Culturable Wastelands

Land which is capable or has the potential for the development of vegetative cover and is not being used due to different constraints of varying degrees is termed as culturable wastelands. Culturable wastelands comprise the following categories.

- i. Agricultural Land inside notified forest: Lands put under cultivation within the restricted forest areas.
- **ii. Degraded forest Scrub domination:** Lands as noticed under the Forest Act and those lands with various types of forest cover, in which vegetative cover is less than 20% are classified as degraded forest land. Among the vegetative types scrubs and thorny bushes are dominated species.
- iii. Degraded land under plantation crops: This includes degraded lands containing plantations inside and outside of the notified forest area.
- iv. Degraded pastures / grazing land: All those grazing land in non-forest areas, whether or not they are permanent pastures or meadows, which have become degraded due to lack of proper soil conservation and drainage measures fall under this category.
- v. Gullied / ravenous land: The gullies are formed as a result of localised surface run off affecting the friable unconsolidated material resulting in the formation of perceptible channels resulting in undulating terrain. The gullies are the first stage of excessive land dissection followed by their networking which leads to the development of ravinous land. The world 'ravine' is usually associated not with an isolated gully but a network of gullies formed generally in deep alluvium and entering nearby river flowing much lower than the surrounding table lands. The ravines then are extensive systems of gullies developed along river courses.
- vi. Land with or without scrub: This is the land which is generally prone to degradation and may or may not have scrub over. Such land occupies topographically high locations in the respective systems. This excludes hilly and mountainous terrain.

- **vii. Water-logged and marsh:** Surface water-logged land is that land where the water is near the surface and water stands for most of the year. Marsh is a land which permanently or periodically inundated by water and is characterised by vegetation which includes grasses and reeds.
- viii. Salt Affected Lands (Saline / Alkaline): The salt affected land is generally characterised as the land that has adverse effects on the growth of most of the plants due to the action or presence of excess soluble salts or excess exchangeable sodium. The saline soils have more of soluble salts with electrical conductivity of more than 4 dSm⁻¹. Alkali land has an exchangeable sodium percentage (ESP) of above 15 which is generally considered as the limit between normal and alkali soils. The predominant salts are carbonates and bicarbonates of sodium.
 - *ix.* **Sands**: Sandy areas are those areas which have stabilized accumulation of sand, in situ or transported, in tank / river bed, coastal, riverine or inland areas.
 - **x. Mining / industrial Waste lands**: These are lands where large-scale mining operations bring about the degradation of land and resultant mine dumps.

Unculturable Wastelands

Lands which cannot be developed for vegetative cover are defined as unculturable wastelands. Unculturable wastelands are divided into:

- i. Barren rocky / stony wastes / sheet rock area.
- ii. Steep sloping area Land with very steep slopes (greater than 35 degrees);Prone to erosion and mass wasting (Landslides).

2.5. Land Use Pattern in Tamil Nadu State

Land use statistics in general indicate the way in which the land area is put under various uses. Land as a scarce resource, is to be managed effectively to benefit the human race that depends on land for its livelihood. Therefore, the details on the land use pattern in Tamil Nadu State as a whole and for the individual district are furnished in Table 2.7. The changes in land use pattern in the State over a period of time are shown in Table 2.8

i) Geographical Area

It could be seen from Table 2.7, that the total geographical area in the State is 13 million hectares. Among the districts, Erode has the maximum geographical area of 8.16 lakh hectares and Thiruvarur has the minimum geographical area of 2.10 lakh hectares, as could be visualized from Table 2.7.

ii) Forest

Perusal of the Table.2.7 further indicates that the area under forest is around 21 lakh hectares accounting for 16 percent of the geographical area. The district of Erode has the maximum area of 2.29 lakh hectares and Cuddalore has the minimum area under forest with 1,415 hectares only. Over years, the area under forest had increased very marginally by about 1.50 lakh hectares. This is a good sign. However, it is pointed out that for a natural / environmental balance to receive good rains there must be 33 percent of the geographical area under forest cover. This indicates that afforestation must be taken up on war-footing. Since, the scope for bringing more area under natural forest cover is almost an impossible proposition, the development efforts must be dovetailed for intensification of green cover in forest area as well as on hills and hillocks and planting tree crops in shrub-jungles, village wastelands and farms in almost all the districts in the State.

iii) Barren land

The barren and uncultivable land is around 5.03 lakh hectares in 2005-06 as compared to that of 6.10 lakh hectares in 1979-80 as indicated in Table 2.8. Thus, a reduction of 1.00 lakh hectare over the period of 25 years could be witnessed. This

down-trend is a good sign and might be due to increase in area under forest, waste land development programme etc. However, still there exist scopes to reduce the extent of the barren land through wasteland development efforts. Among the districts, (Table 2.7) the barren land area is more pronounced in the districts of Villupuram, Theni, Salem, Dindigul and Nagapattinam.

iv) Cultivable Waste

Table 2.8 indicates that the area under cultivable wastelands was 3.74 lakhs hectares in 2005-06, while it was 3.51 lakh hectares in triennium ending 1979-80. Thus, a very marginal increase of about 0.23 lakh hectares could be observed during the period under question. Among the districts, (Table 2.7) the maximum area under culturable waste is found in Karur district, with 67,831 hectares followed by Thiruvannamalai (14963 ha), Theni (14700 ha) and Coimbatore (13997 ha) districts in that order.

v) Other Fallow Lands

Other fallow lands, which are also otherwise considered as wastelands have shown an alarming uptrend. While it was 4.56 lakh hectares in TE 1979-80, it was almost 17 lakh hactares in 2005-06. This upsurge is a serious problem that needs immediate attention of the policy makers and planners. The districts of Tirunelveli, Virudhunagar, Sivagangai and Erode have more than 1.00 lakh hectares under other fallow lands as could be noted from Tables 2.7 and 2.8.

vi) Current Fallows

The area under current fallows was quite high in TE 1979 with 12.57 lakh hectares and it had reduced by about 4.54 lakh hectares to 8.03 hectares in TE 2005-06. This is a good sign and might be due to tapping more of ground water and stabilization of ayacuts under irrigation systems in some areas. Further reduction of current fallows is quite possible by the modernization of irrigation systems and adoption of water harvesting techniques, in addition to other moisture conservation measures. Erode, Villupuram, Coimbatore, Thiruvannamalai, Ramanathapuram and Thoothukudi districts have sizeable area under current fallows.

vii) Net Area Sown

Table 2.8, further exhibits the fact that the net sown area was reducing considerably from 62.56 lakh hectares in TE 1979-80 to 50.10 lakh hectares in TE 2005-06. This is rather a disturbing trend that needs immediate attention of the policy makers and planners. This might be, of course, due to marked increase in lands put to non-agricultural uses, due to rapid industrialization and urbanization. The districts of Coimbatore, Erode and Villupuram have more than 3.00 lakh hectares of net sown area and it was the lowest in Kanniyakumar district with 0.79 lakh hectare (Table 2.7).

viii) Area Sown more than once

Area sown more than once had shown a drastic down-trend over the period considered (Table 2.8). This is rather an astonishing fact and quite contradictory to the normal expectations. Inspite of modernization of existing irrigation systems and more tapping of ground water, the steep fall in area sown more than once during the planned period so far, is a serious issue that needs an indepth analysis. There exists scope to arrest this down-trend and to either increase or atleast stabilize the area sown more than once through rehabilitation of the existing irrigation systems and structures and energization of pumpsets and motors at a faster rate through pumping more of public investments. The Table 2.8 reveals that the districts of Nagapattinam, Thiruvarur and Thanjavur have sizable area under area sown more than once and this might be due to the cauvery ayacut. Thiruvannamalai, Villupuram, Cuddalore and Kancheepuram districts also have sizeable area under area sown more than once.

The cropping intensity for the State as a whole, as could be visualized from Table 2.8, had decreased from 121.60 percent in TE 1979-80 to 118.12 percent in TE 1999-2000 and 114.67 percent in 2005-06. This down-trend must be reversed and augmented to keep agriculture growing at a faster rate.

The district of Nagapattinam has the maximum cropping intensity of 162.43 percent followed by Thiruvarur (155.13 percent) and Thiruvallur (140.86 percent) districts. The cropping intensity is around 125 percent in the districts of Kancheepuram, Thiruvannamalai and Thanjavur. It is around 120 percent in

Cuddalore, Dharmapuri and Thirunelveli districts. The remaining districts have the intensity of less than 120 percent with the exception of Ramanathanpuram, Sivagangai and the Nilgiris districts. Therefore, concerted efforts in increasing the area sown more than once, must be bestowed in the districts of Ramanathapuram, Sivagangai, The Nilgiris, Pudukottai, Karur, Perambalur, Coimbatore, Tiruchirapalli, Erode, Dindigul, Theni, Madurai, Thoothukudi etc.,

In sum, perusal of the land use statistics of Tamil Nadu State clearly showed that there exist scopes for,

- 1. Arresting the down-trend in the net sown area and its stabilization
- 2. Reducing the extent of current fallows
- 3. Developing the wastelands like barren and uncultivable land as well as other fallow lands.
- 4. Intensive fodder development activities and
- 5. Regulations for preventing diversion of lands to non-cultivable uses.

The study to find out the impact of urbanization and industrialization on Land Use Pattern in Tamil Nadu State revealed that the share of Agriculture sector in Net State Domestic Product, Per Capita Net State Domestic Product and Road Density were found to have a negative impact on the share of the land put to Non-agricultural uses. Thus, the study pointed out the need for strengthening the infrastructure facilities especially roads and also continued increase in the Net State Domestic Product of the State. Further, Road Density was found to have a negative impact on urbanization as it facilitates not only improved infrastructure and other ammunities in the rural areas, but also helps the agricultrual development by mitigating the mass exodus of the rural people to urban areas in search of livelihood.

Table 2.7. District wise Land Use Classification in Tamil Nadu - 2006

(Hectares)

Sl. No	Districts	Geogra phical Area	Percen- tage	Forest Area	Percen- tage	Barren and Unculturable Lands	Percen- tage	LPNA Use	Percent age	Culturable Waste	Percent age	PP and Other Grazing Lands	Percen -tage
1	Chennai	17098	0.13	300	0.01	0	0.00	16798	0.79	0	0.00	0	0.00
2	Kancheepuram	443210	3.40	23856	1.13	10948	2.18	146085	6.83	10430	2.83	18328	16.62
3	Thiruvallur	342243	2.63	19736	0.94	13638	2.71	102580	4.80	8326	2.26	8164	7.40
4	Cuddalore	367781	2.82	1415	0.07	14647	2.91	55875	2.61	6072	1.65	608	0.55
5	Villupuram	722203	5.54	71697	3.40	56651	11.26	135874	6.35	10405	2.82	4195	3.80
6	Vellore	592018	4.54	150722	7.14	24379	4.84	83735	3.92	5513	1.50	3998	3.62
7	Thiruvannamalai	631205	4.85	153318	7.26	21058	4.18	92598	4.33	14963	4.06	2908	2.64
8	Salem	520530	4.00	125682	5.95	39098	7.77	58673	2.74	6528	1.77	4206	3.81
9	Namakkal	336335	2.58	43909	2.08	24743	4.92	38302	1.79	4781	1.30	6684	6.06
10	Dharmapuri	449777	3.45	164177	7.78	19648	3.90	51248	2.40	5364	1.45	6209	5.63
11	Krishnagiri	514326	3.95	202409	9.59	26679	5.30	42140	1.97	4991	1.35	8156	7.39
12	Coimbatore	747079	5.74	158801	7.52	7464	1.48	106025	4.96	13997	3.80	85	0.08
13	Erode	816191	6.27	228749	10.84	7074	1.41	80708	3.77	556	0.15	187	0.17
14	Tiruchirapalli	440383	3.38	36246	1.72	13599	2.70	84791	3.96	8856	2.40	659	0.60
15	Karur	289557	2.22	6187	0.29	2901	0.58	37264	1.74	67831	18.40	10801	9.79
16	Perambalur	369137	2.83	16999	0.81	11388	2.26	59341	2.77	9299	2.52	1446	1.31
17	Pudukottai	466329	3.58	23535	1.12	9863	1.96	129297	6.05	10392	2.82	5126	4.65
18	Thanjavur	339657	2.61	3390	0.16	2149	0.43	81676	3.82	14700	3.99	1385	1.26
19	Thiruvarur	209709	1.61	2452	0.12	113	0.02	37059	1.73	1896	0.51	768	0.70
20	Nagapattinam	271583	2.08	4633	0.22	33419	6.64	47655	2.23	3837	1.04	964	0.87
21	Madurai	374173	2.87	48473	2.30	13154	2.61	74417	3.48	7127	1.93	233	0.21
22	Theni	324230	2.49	103718	4.91	43322	8.61	23993	1.12	3894	1.06	314	0.28
23	Dindigul	626664	4.81	138923	6.58	36210	7.20	65184	3.05	8931	2.42	6946	6.30
24	Ramanathapuram	408957	3.14	4488	0.21	4591	0.91	8443	0.39	4245	1.15	154	0.14
25	Virudhunagar	424323	3.26	26466	1.25	4525	0.90	70286	3.29	9663	2.62	804	0.73
26	Sivagangai	418900	3.22	21877	1.04	4747	0.94	117569	5.50	18375	4.98	1367	1.24
27	Tirunelveli	682308	5.24	120801	5.72	30961	6.15	103669	4.85	47442	12.87	5271	4.78
28	Thoothukudi	459054	3.52	11012	0.52	19762	3.93	74489	3.48	58139	15.77	5132	4.65
29	The Nilgiris	254485	1.95	142577	6.75	3375	0.67	9975	0.47	2018	0.55	5078	4.60
30	Kanyakumari	167200	1.28	54177	2.57	3149	0.63	26890	1.26	0	0.00	133	0.12
	State	13026644	100.00	2110703	100.00	503255	100.00	2138679	100.00	368661	100.00	110309	100.00
	% to State Total	100	-	16.20	-	3.86	-	16.42	-	2.83	-	0.85	-

Table 2.7 Contd..

Table	2.7 Contd	T												
Sl. No	Districts	Land Under Misc. Tree Crops and Groves not included in the Net Area Sown	Percen tage	Current Fallows	Percen -tage	Other Fallow Lands	Percen tage	Net area Sown	Percen tage	Area Sown more than once	Percen tage	Gross Cropped Area	Percen tage	Cropping intensity
1	Chennai	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
2	Kancheepuram	16273	5.93	8156	1.07	73136	4.82	135998	2.59	34460	4.37	170458	2.83	125.33
3	Thiruvallur	7779	2.84	19931	2.63	46365	3.05	115724	2.21	47286	5.99	163010	2.70	140.86
4	Cuddalore	19716	7.19	35588	4.69	13969	0.92	219891	4.19	52268	6.63	272159	4.51	123.77
5	Villupuram	6142	2.24	86725	11.43	19802	1.30	330712	6.31	58680	7.44	389392	6.45	117.74
6	Vellore	2976	1.08	55061	7.26	55731	3.67	209903	4.00	27930	3.54	237833	3.94	113.31
7	Thiruvannamalai	2690	0.98	68662	9.05	32621	2.15	242387	4.62	62541	7.93	304928	5.05	125.80
8	Salem	3460	1.26	43871	5.78	21566	1.42	217446	4.15	33127	4.20	250573	4.15	115.23
9	Namakkal	3854	1.40	28375	3.74	9143	0.60	176544	3.37	29145	3.69	205689	3.41	116.50
10	Dharmapuri	2894	1.05	31464	4.15	5720	0.38	163053	3.11	33595	4.26	196648	3.26	120.60
11	Krishnagiri	10316	3.76	27097	3.57	10419	0.69	182119	3.47	22603	2.87	204722	3.39	112.41
12	Coimbatore	3383	1.23	84525	11.14	57842	3.81	314957	6.01	18375	2.33	333332	5.53	105.83
13	Erode	1360	0.50	90697	11.95	105878	6.97	300982	5.74	23719	3.01	324701	5.38	107.88
14	Tiruchirapalli	1931	0.70	21142	2.79	81812	5.39	191347	3.65	12886	1.63	204233	3.39	106.73
15	Karur	1278	0.47	4774	0.63	46802	3.08	111719	2.13	2835	0.36	114554	1.90	102.53
16	Perambalur	20855	7.60	19969	2.63	18654	1.23	211186	4.03	16789	2.13	227975	3.78	107.94
17	Pudukottai	28112	10.25	7089	0.93	92684	6.11	160231	3.06	1843	0.23	162074	2.69	101.15
18	Thanjavur	5010	1.83	9404	1.24	29913	1.97	192030	3.66	49262	6.24	241292	4.00	125.65
19	Thiruvarur	2132	0.78	5709	0.75	6353	0.42	153227	2.92	84488	10.71	237715	3.94	155.13
20	Nagapattinam	10554	3.85	2747	0.36	19232	1.27	148542	2.83	92749	11.76	241291	4.00	162.43
21	Madurai	4014	1.46	7356	0.97	66317	4.37	153072	2.92	7728	0.98	160810	2.67	105.05
22	Theni	2334	0.85	1636	0.22	33330	2.20	111599	2.13	8472	1.07	120071	1.99	107.59
23	Dindigul	7414	2.70	15425	2.03	94126	6.20	253505	4.83	8253	1.05	261758	4.34	103.25
24	Ramanathapuram	41210	15.02	27784	3.66	56439	3.72	185563	3.54	0	0.00	185563	3.08	100
25	Virudhunagar	6568	2.39	3063	0.40	160066	10.54	142883	2.72	5961	0.76	148843	2.47	104.17
26	Sivagangai	8712	3.18	7342	0.97	118460	7.80	120451	2.30	0	0.00	120451	2.00	100
27	Tirunelveli	10009	3.65	32053	4.22	165481	10.90	166621	3.18	34082	4.32	200703	3.33	120.45
28	Thoothukudi	39256	14.31	6693	0.88	72756	4.79	171815	3.28	7239	0.92	179054	2.97	104.21
29	The Nilgiris	3538	1.29	5069	0.67	1855	0.12	81000	1.54	79	0.01	81079	1.34	100.09
30	Kanyakumari	581	0.21	1433	0.19	1536	0.10	79323	1.51	12484	1.58	91807	1.52	115.73
	State	274351	100.00	758840	100.00	1518008	100.00	5243839	100.00	788879	100.00	6032718	100.00	115.04
	% to State Total	2.11	-	5.83	-	11.65	-	40.26	-	6.06	-		-	

Source: Tamil Nadu – An Economic Appraisal, 2005-06, Evaluation and Research Department, Government of Tamil Nadu, Chennai.

Table 2.8. Land Utilization Pattern in Tamil Nadu State

(Area in lakh hectares)

Sl. No.	Classification		ge area 979-80	Averag TE 199			ge area 05-2006
		Area	%	Area	%	Area	%
1.	Forests	20.25	15.58	21.38	16.45	21.18	16.27
2.	Barren and Uncultivable land	6.10	4.69	4.78	3.68	5.07	3.89
3.	Land put to non-agrl uses	16.82	12.94	19.66	15.13	21.26	16.33
4.	Cultivable waste	3.51	2.70	3.47	2.67	3.74	2.87
5.	Permanent pastures and other grazing lands	1.65	1.27	1.23	0.95	1.12	0.85
6.	Land under missed crop and groves not included net area sown	1.95	1.50	2.38	1.83	2.82	2.16
7.	Current fallow	12.57	9.67	10.08	7.76	8.03	6.16
8.	Other fallow lands	4.56	3.50	11.37	8.75	16.95	13.01
9.	Net area sown	62.56	48.15	55.60	42.78	50.10	38.49
10.	Total geographical area	130.01	100.00	129.96	100.00	130.15	100.00
11.	Area sown more than once	13.52		10.08		7.51	
12.	Gross cropped area (9+11)	76.11		65.68		51.45	
13.	Cropping intensity (12÷9)	121.60		118.12		114.67	

Source: Tamil Nadu – An Economic Appraisal, 2005-06, Evaluation and Research Department, Government of Tamil Nadu, Chennai. TE:Triennium Ending

Shift in Land Use

The land use pattern of the state has undergone distinct changes over years. For example, net sown area which accounted for 42.80 percent during 1999-2000 had declined to 40.75 percent in 2005-2006. Similarly, other fallow lands had increased from 8.80 percent in 1999-2000 to 11.65 percent during 2005-06. On the contrary, the share of current fallows had declined from 7.80 percent to 5.83 percent during the periods under question.

Markov chain analysis was resorted to find out the shift in land use pattern in Tamil Nadu State. The data on land use pattern were collected for the period from 1970 to 2006 and five year average was taken into consideration for analysis.

Markov analysis is a way of analyzing the current movement of variables in an effort to forecast their future movement. The transaction matrix in a rectangular array would summarize the transition probabilities for a given Markov process. In such a

matrix, the rows would identify the current state of system being studied and the columns would identify the alternative status to which the system could move.

Emana	To							
From	S_1	S_2	S_3	S ₄				
S_1	P ₁₁	P ₁₂	P ₁₃	P_{1n}				
S_2	P ₂₁	P ₂₂	P ₂₃	P_{2n}				
S_3	P ₃₁	P ₃₂	P ₃₃	P_{3n}				
Sn	P _{n1}	P _{n2}	P _{n3}	P_{nn}				

The generalized state transition matrix is represented by a matrix of order where P_{ij} denotes the probability of moving from state S_i to S_j . The interpretation of a given state matrix would depend on the problem itself. However, the diagonal probabilities are associated with the consumer's retention and the column probabilities are associated with gain from others and row probabilities would indicate the loss. The sum of probabilities in each row must be equal to one.

The retention, gain and loss probabilities were calculated and the state transition matrix was constructed. While the retention probabilities were listed along the main diagonal, loss probabilities (if any) were inserted in the appropriate rows cells of matrix and gain probabilities (if any) were inserted in the appropriate column cells of the matrix. The results of the Markov analysis are presented below.

Table: 2.9. Markov Chain Analysis – Probability Matrix

•	Loss												
	Forest	Barren and uncultivable land	Land put to non- agrl. uses	Cultivable waste	PP + MTC	CF+ OF	NSA	1					
Forest	0.50	0.00	0.29	0.08	0.11	0.00	0.00						
Barren and uncultivable land	0.00	0.32	0.00	0.00	0.00	0.00	0.67						
Land put to non-agrl.uses	0.00	0.00	0.58	0.00	0.00	0.41	0.00	Gain					
Cultivable waste	0.00	0.09	0.00	0.00	0.13	0.00	0.77						
PP + MTC	0.04	0.52	0.00	0.42	0.00	0.00	0.00						
CF+OF	0.20	0.05	0.00	0.00	0.00	0.51	0.21						
NSA	0.09	0.00	0.00	0.00	0.00	0.06	0.78	1 ↓					

Note: PP - Permanent Pastures MTC – Miscellanous Tree Crops NSA – Net Sown Area OF – Other Fallows CF – Current Fallows It could be seen from Table 2.9 that the forest area retained its area by 0.50 percent and the remaining area has been moved to land put to non-agricultural uses (29 percent), cultivable waste (8 percent) and permanent pastures and land under miscellaneous tree crops and groves not included in the net area sown (11 percent). Net sown area has gained 67 percent of the area from barren and uncultivable land. Land put to non-agricultural uses retained its area by 58 percent and the rest has moved to current fallows and other fallow lands (41 percent). Cultivable waste had completely lost its area to barren and uncultivable land (9 percent), permanent pastures and area under miscellaneous tree crops and groves not included in the net area sown (13 percent) and net sown area (77 percent). Though net sown area retained its majority of the area (78 percent), it lost nine percent to forest land and rest four percent to land put to non-agricultural uses, six percent to current fallow and other fallow lands and one percent to permanent pastures.

2.6 Operational Holdings

Operational holding often determines agricultural production and productivity. The operational holdings as per Agricultural census are furnished in Table 2.10. The results of successive agricultural census confirm the growing imbalance and asymmetry in the distribution of size of holdings. The number of marginal farmers in the State had increased from 64.95 percent of the total holdings operated in 1976-77 to 74.3 percent of total holdings operated in 1995-96. However, the marginal farmers have operated only 21.07 and 30.27 percent of total area in 1976-77 and 1995-96 respectively. Semi-medium, medium and large farmers accounted for a small proportion of 10 percent of holdings and they have operated a higher proportion of 46.1 percent of total area in 1995-96. In sum, the number of marginal farmers has been increasing over years which show that the process of marginalization of farmers is continuing and they tend to subsist on low income levels.

Table 2.10. Operational Holdings as per Agricultural Census

Sl.	Catagory	1970	6-77	1979	9-80	198	5-86	199	0-91	199	5-96
No	Category	No	Area								
1	Marginal	3951175	1607533	5014754	1906499	5497735	2017615	5848096	2117826	5951104	2210341
1	(below 1.0 Ha)	(64.95)	(21.07)	(69.74)	(24.73)	(71.34)	(25.88)	(73.11)	(28.34)	(74.28)	(30.27)
2	Small	1125740	1586429	1209059	1709987	1260306	1771545	1274515	1794471	1233836	1721286
2	(1.0-2.0 Ha)	(18.42)	(20.80)	(16.81)	(22.18)	(16.35)	(22.72)	(15.93)	(24.01)	(15.40)	(23.57)
3	Semi-Medium	683086	1875796	657868	1821579	648822	1778376	617605	1686514	600833	1622811
3	(2.0 to 4.0 Ha)	(11.18)	(24.59)	(9.15)	(23.63)	(8.42)	(22.81)	(7.72)	(22.57)	(7.50)	(22.22)
4	Medium	305496	1763039	269059	1555400	260645	1507987	227594	1301124	199791	1134853
4	(4.0 to 10.0 Ha)	(5.00)	(23.11)	(3.74)	(20.18)	(3.38)	(19.34)	(2.85)	(17.41)	(2.49)	(15.54)
	Large	46056	795663	39763	714394	39215	720418	31122	573742	26268	613910
5	(10.0 Ha and	(0.75)	(10.43)	(0.55)	(9.27)	(0.51)	(9.24)	(0.39)	(7.68)	(0.33)	(8.41)
	above)										
	Total	6111553	7628460	7190503	7707859	7706723	7795941	7998932	7473577	8011832	7303201
		(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

Figures in bracket indicates percent to total

Source: Tamil Nadu and Economic Appraisal 2005-06 Evaluation and Research Department, Government of Tamil Nadu, Chennai.

Size of Holdings

The distribution of size of holdings in Tamil Nadu is furnished in Table 2.11. It could be seen that the average size of marginal holdings had declined from 0.41 hectare in 1976-77 to 0.37 hectare in 2000-01. However, there had been no marked differences in the size of small, semi-medium and medium holdings over years. The size of large holdings had increased from 17.28 hectares in 1976-77 to 19.48 hectares in 2000-01. In sum, the average size of holdings in Tamil Nadu State had decreased from 1.25 hectares in 1976-77 to 0.89 hectare in 2000-01.

Table 2.11. Size of Holdings in Tamil Nadu State

(Area in hectare)

Sl.	Categories	1976-77	1979-80	1985-86	1990-91	1995-	2000-
No.						96	01
1.	Marginal	0.41	0.38	0.37	0.36	0.38	0.37
2.	Small	1.41	1.41	1.41	1.41	1.40	1.39
3.	Semi-medium	2.75	2.76	2.74	2.73	2.73	2.72
4.	Medium	5.77	5.78	5.78	5.72	5.60	5.68
5.	Large	17.28	17.96	18.78	18.44	21.68	19.48
		1.25	1.07	1.01	0.93	0.95	0.89

Source: Tamil Nadu – An Economic Appraisal, 2005-06, Evaluation and Research Department, Government of Tamil Nadu, Chennai.

2.7. Rivers, Irrigation and Drainage Systems

All river systems of the State flow eastward from the Western Ghats and are rainfed. The Palar, the Pennaiyar and the Cheyyar are the three important river systems in the North. None is perennial. Cutting across the centre of the state is the Cauvery fed by both the monsoons; it is practically perennial, although in recent years, this has become drier mainly to the impounding of water in the dams of Karnataka. Yet, along with it tributaries, the Bhavani and the Amaravathi, it is the most important source of canal irrigation. South of the Cauvery are three important rivers, namely the Vaippar, the Vaigai and Tamiravaruni. Of these, Tamiravaruni is perennial and a source of canal irrigation. Besides these, there are several other smaller and less important rivers in the State. The rivers naturally, graded almost to their heads with only slight interruptions of

profiles when they pass through the Eastern Ghats. Though these rivers are not long, the deltas present extremely distinctive features and the power and irrigation developments are outstanding.

Tamil Nadu with seven percent of population of the country is endowed with only three percent of the water resources of India. The State's water resources are dependent on rainfall. The Tamil Nadu Water Policy, 1994 was formulated based on the National Water Policy, 1987. Taking into account of the National Water Policy, 2002, the state Water Policy has been redrafted emphasizing the need for utmost efficiency in water utilization and public awareness of the importance of its conservation.

2.7.1. Total Water Potential

The total water potential of the State including groundwater is 46,540 million cubic meters (MCM). The total surface water potential of the State is 24,160 MCM, including the contribution from neighbouring states of Andhra, Karnataka and Kerala. Of the total water potential, the surface water potential of about 2.4 million hectares has almost been fully (more than 95 percent) tapped since the late sixties. Ground water is, therefore, the only alternative source available for further development. The details of blocks with present level of ground water development are furnished in Table 2.12.

Table. 2.12. Groundwater Potential among Blocks

CI	District	(Over Exploited	Cr	itical (Dark)*		Semi critical (Grey)*	Safe (White)*	
Sl. No	District	Greater than 100%		Between 90 and 100%		70 and 90%		Less than 70%	
1.	Kancheepuram	1.	Lathur	1.	Sittamur	1.	Acharapakkam	1.	Kancheepuram
		2.	Uthiramerur	2.	T.Kundram	2.	Kattankulathur	2.	Sriperumbudur
						3.	Kunrathur		
						4.	Maduranthagam		
						5.	St.Thomas Mt		
						6.	Wallajabad		
2.	Thiruvellore	1.	Ellapuram	1.	Kadambathur	1.	Gummidipoondi	1.	Villivakkam
		2.	Minjur	2.	Poonamalee	2.	Madhavaram		
		3.	Pallipattu			3.	Poondi		
		4.	R.K.Pet			4.	Sholavaram		
		5.	Thiruvalankadu			5.	Tiruvallur		
		6.	Tiruttani						

Table 2.12. Contd.....

Sl. No	District	Over Exploited	Critical (Dark)*	Semi critical (Grey)*	Safe (White)*
	District	Greater than 100%	Between 90 and 100%	70 and 90%	Less than 70%
3	Cuddalore			 Annagrmam Cuddalore Kammapuram Kattumannarkoil Kurinjipadi Mangalore Melbhuvanagiri Nallur Panriti Vridhachalam 	 Keerapalayam Kumaratchi Portonova
4	Villupuram	 Gingee Kandamangalam Kolianur Mailam Marakanam Melmalaiyanur Mugaiyur Olakkur Rishivandhiyam Sankarapuram Tiruvennainallur Ulundurpet Vallam 	 Kallakurichi Thirunavalur Vanur Vikravandi 	 Chinnasalem Kanai Thiyagadurgam Tirukovilur 	1. Kalrayan hills
5	Vellore	 Alangayam Anaicut Arcot Gudiyatham Jolarpet K.V.Kuppam Kandili Kaniyambadi Katpadi Madanur Natrampalli Pernampet Sholinghur Timri Tiruppathur Vellore 			

Table 2.12 Contd....

Sl.No	District	Over Exploited	Critical (Dark)*	Semi critical (Grey)*	Safe (White)*
	District	Greater than 100%	Between 90 and 100%	70 and 90%	Less than 70%
6	T.V.Malai	 Chengam Kalasapakkam Kilpenathur Polur Pudupalayam Thandaranpattu Thiruvannamalai Thurinjapuram Vandavasi 	 Arni West Javadi hills 	 Anakavur Arnl East Chetpet Cheyyar Vembakkam 	 Pernamallur Thellar
7	Salem	 Attur Ayotiapattinam Gangavalli Konganapuram Magudan chavadi Mecheri Nangavalli Omalur P.N.Palayam Panamarathupatti Salem Talaivasal Valapadi Veerapandi 	1. Kadayampatti	 Edapadi Kolathur Sankari Tharamangalam 	1. Yercaud
8	Namakkal	1. Erumaipatti 2. Namagiripettai 3. Namakkal 4. Pallipalayam 5. Puduchatram 6. Rasipuram 7. Sendamandalam 8. Vennandur	Mallasamudram Paramathi	 Kabilamalai Mohanur Tiruchengodu 	Elachipalayam Kolli hills

Table 2.12 Contd....

Sl. No	D:-4:-4	Over Exploited	Critical (Dark)*	Semi critical (Grey)*	Safe (White)*
	District	Greater than 100%	Between 90 and 100%	70 and 90%	Less than 70%
9.	Dharmapuri	 Burugr Dharmapuri Harur Karimangalam Mathur Morappur Nallampalli Palacode Pappireddipatti Uthangarai Vepanapalli 	1. Pennagaram	 Hosur Kaveripattinam Krishnagiri Shoolagiri 	Kelamangalam Thalli
10.	Coimbatore	 Annur Avinashi Kinathukadavu Madukarai P.N.Palayam Pollachi north Pollachi south Sarkarsamakulam Sultanpet Sulur Thondamuthur 	 Gudi- mangalam Karnamadai Palladam Udumalpet 	 Anamalai Madathukulam Pongalur Thiruppur 	
11.	Erode	 Ammapet Andiyur Nambiyur 	Bhavanisagar Satya- mangalam Thalavadi	 Bhavani Dharampuram Gobichettipalayam Kangeyam Kundadam Modakurichi Mulanur Perundurai T.N.Palayam Vellakoil 	 Chennimalai Erode Kodumudi Uthukuli

Table 2.12 Contd....

Sl.No.	District	Over Exploited	Critical (Dark)*	Semi critical (Grey)*	Safe (White)*
	District	Greater than 100%	Between 90 and 100%	70 and 90%	Less than 70%
12	Trichy	 Thatiengarpettai Thuraiyur Uppiliyapuram 	Manaparai Musiri	 Manacha nallur Marungapuri Puliambadi Thiruverumbur Vaiyampatti 	 Andanallur Lalgudi Manikandam Thottiam
13	Karur	Kadavur Thanthoni		Aravakurichi Karur Krishnaraya- puram Kulithalai Thogamalai	1. K.Paramathy
14	Perambalur	 Alathur Perambalur Veppanthattai Veppur 		1. Ariyalur	 Andimadam Jayamkondam Sendurai Thirumanur T.Palur
15	Pudukottai			1. Thiruvaran- kulam	 Annavasal Aranthangi Arimalam Avudiarkoil Gandharva kottai Karambakudi Kunnandarkoil Manamelkudi Ponnamara vathi Pudukottai Thirumatyam Viralimalai
16	Thanjavur	Thiruppanandal Thiruvidai maruthur	Ammapet Kumba- konam	 Madukur Orathanadu Peravoorani Thiruvaiyaru Thiruvonam 	 Budalur Papanasam Pattukottai Sethubhava chattiram Thanjavru

Table 2.12 Contd....

Sl. No	District	Over Exploited	Critical (Dark)*	Semi critical (Grey)*	Safe (White)*		
	District	Greater than 100%	Between 90 and 100%	70 and 90%	Less than 70%		
17	Thiruvarur	1. Valangaiman	1. Kodavasal	 Mannargudi Nannilam Needamangalam Thiruvarur 	 Koradachery Kottur 		
18	Nagapattinam	 Kollidam Kuttalam Sembanarkoil Sirkazhi 		1. Myladuthurai			
19	Madurai	 Chellampatti Sedapatti Usilampatti 	1. Alanganallur	 Kallikudi T.Kallupatti Thirumanagalam Thiruparan kundram 	 Kottampatti Madurai east Madurai west Melur Vadipatti 		
20	Theni	 Andipatti Chinnamanur Myladumparai Periyakulam Uthamapalayam 	 Bodinaikkanur Cumbum Theni 				
21	Dindigul	 Attur Batlagundu Dindigul Guzliamparai Oddanchattiram Reddiarchattiram Sanarpatti Thoppampatti Vadamadurai Vedasandur 	Nilakottai Palani	1. Natham	1. Kodaikanal		

Table 2.12 Contd....

Sl. No.	District	Over Exploited	Critical (Dark)*	Semi critical (Grey)*	Safe (White)*
	District	Greater than 100%	Between 90 and 100%	70 and 90%	Less than 70%
22	Ramanatha- puram		1. Thirupullani	Mandapam Paramakudi Ramanatha- puram	 Bogalur Kadaladi Kamuthi Mudukulathur Nainarkoil R.S.Mangalam Tiruvadanai
23	Virudhunagar	Rajapalayam Watrap	 Kariapatti Sivakasi Srivilliputhur Vembakottai 	 Aruppukottai Narikudi Sattur Trichuli Virudhunagar 	
24	Sivagangai			 Kaliyarkoil Sivagangai S.Pudur 	 Devakottai Illayangudi Kallal Kannankudi Manamadurai Sakkottai Singampunari Thiruppathur Thiruppuvanam
25	Tirunelveli	 Melaneelithanallur Radhapuram Sankarankoil Valliyur 		 Alangulam Kadayanallur Keelapavoor Kuruvikulam Vasudeva nallur 	 Ambasamudram Cheranmadevi Kadayam Kalakadu Manur Nanguneri Palayamkottai Pappakudi Shenkottai Tenkasi

Table 2.12 Contd....

Sl.No.		Over Exploited	Critical (Dark)*	Semi critical (Grey)*	Safe (White)*
	District	Greater than 100%	Between 90 and 100%	70 and 90%	Less than 70%
26	Thoothukudi	 Kayathar Kovilpatti Ottapidaram Sathankulam Thoothukudi Udangudi Vilathikulam 	1. Pudur	 Alwarthiru nagar Karunkulam Srivaikundam Tiruchendur 	
27	Nilgiri				Gudalur Coonoor Uthaga mandalam Kothagiri
28	K.Kumari				 Agastheeswaram Rajakka mangaiam Thovalai Tiruvattar Kurunthenkode Melpuram Munchirai Killiyur Thuckalay

Source: Report on Dynamo Ground Water Resources of Tamil Nadu as on Tamil Nadu, State

The change in availability of ground water in Tamil Nadu is furnished in Table 2.13.

Table 2.13. Change in Availability of Groundwater in Tamil Nadu

			Cat	tegory of b	locks		
Sl. No.	Years of Assessment	Safe blocks	Semi critical blocks	Critical blocks	Over exploited blocks	Saline	Total
1	1987	251	86	41	-	-	378
2	1992	209	86	89	-	-	384
3	1998	137	70	35	135	8	385
4	2003	97	105	37	138	8	385
		(25.20)	(27.27)	(9.61)	(35.84)	(2.08)	

Source: Report on Dynamo Ground Water Resources of Tamil Nadu as on Tamil Nadu, State.

The ground water potential for future development has been estimated at 3142.27 MCM as of January's 2003. This balance potential is mostly distributed in 239 blocks compressing safe, semi-critical and critical categories. The ground water availability is found to be in safe condition only in 97 blocks (25.20 percent) of Tamil Nadu State.

2.7.2. Sources of Irrigation

The major irrigation sources of the State are canals, tanks and wells. The percapita availability of water in the State stood at 900 cubic meters as against the All – India level of 2200 cubic meters. The sources of irrigation and percentage of net and gross area irrigated are indicated in Table 2.14.

Table 2.14. Source-wise Net Area Irrigated and Percentage to Total Irrigated Area

(in lakh hectares)

Sources of Irrigation	1950-	1960-	1970-	1980-	1990	1997-	1998-	1999-	2000-	2001-	2002-	2003-	2004-
	51	61	71	81	-91	98	99	2000	2001	2002	2003	2004	2005
Canal	7.88	8.82	8.84	8.89	7.69	8.38	8.34	8.67	8.33	8.01	6.14	4.49	7.54
	(42.0)	(36.0)	(34.0)	(35.0)	(32.4)	(28.45)	(27.63)	(29.20)	(28.8)	(28.6)	(26.6)	(20.9)	(28.6)
Tanks	5.65	9.36	8.98	5.90	5.31	6.75	6.90	63.30	5.88	5.36	4.22	3.85	4.65
	(30.0)	(38.0)	(35.0)	(22.0)	(22.3)	(22.90)	(22.83)	(21.30)	(20.4)	(19.2)	(18.3)	(17.9)	(17.6)
Wells	4.26	5.98	7.75	10.67	10.59	14.13	14.75	14.54	14.49	14.48	12.63	12.99	14.00
	(240)	(24.0)	(30.0)	(42.0)	(44.6)	(47.97)	(48.91)	(48.90)	(50.2)	(51.7)	(54.2)	(60.5)	(53.1)
Other sources	0.76	0.46	0.35	0.24	0.14	0.19	0.18	0.17	0.16	0.14	0.11	0.15	0.18
	(4.0)	(2.0)	(1.0%)	(1.0)	(0.7)	(0.64)	(0.61)	(0.6)	(0.6)	(0.5)	(0.4)	(0.7)	(0.7)
Total	18.55	24.62	25.92	25.70	23.73	29.45	30.18	29.72	28.87	28.01	23.09	21.48	26.37
Percentage of net area irrigated to net area sown	36.00	41.10	42.00	48.00	42.50	52.77	53.60	54.40	54.10	54.10	50.30	45.81	51.70
Gross area irrigated	21.89	32.35	34.10	32.94	28.94	35.19	36.34	35.85	34.90	34.12	26.22	24.79	30.87
Percentage of gross area irrigate to total gross area sown	37.10	44.20	46.20	50.90	43.60	53.66	54.80	54.99	55.10	54.80	50.50	46.60	52.40

Figures in parenthesis indicate percent to total

Source: Tamil Nadu – An Economic Appraisal, 2005-06, Evaluation and Research Department, Government of Tamil Nadu, Chennai.

It could be seen that the percentage of canal area irrigated has come down from 42.00 in 1950-51 to 28.6 in 2004-05. Similarly, the percentage of area irrigated by tanks declined from 30.00 in 1950-51 to 17.6 in 2004-05. On the contrary, wells have shown a constant rise from 24.00 percent in 1950-51 to 52.8 percent in 2005-06. The other sources of irrigation had shown a constant downward trend. The percentage of net area irrigated to net area sown had shown an upward trend with a fall in 1990-91, 2002-03 and 2003-04. The same phenomenon was observed in the case of gross area irrigated to total gross area. The net area irrigated and gross area-irrigated had improved by 35.8 and 37.1 percent respectively during 2005-06 over 2003-04. The area under canal, tank and well irrigation had witnessed an upward shift between 2003-04 and 2005-06.

The district wise area irrigated over years is furnished in Table 2.15. The net area irrigated was more pronounced in the districts of Villupuram, Coimbatore, Thanjavur, Erode, Thiruvannamalai, Cuddalore and Thiruvarur in that order in 2005-06. Area irrigated more than once was found to be more in the districts of Thiruvannamalai, Villupuram, Thiruvalur, Thanjavur, Nagapattinam, Cuddalore and Erode in that order. The gross area irrigated in 2005-06 ranged from 38,885 hectares in Kanyakumari district to 2,81,185 hectares in Villupuram district.

Table 2.15 District – wise details of Net Area and Gross Area Irrigated in Tamil Nadu

(in hectares)

CLN	District.	Net .	Area Irrig	ated	Area irrig	gated more	e than once	Gross	Area Irri	gated
Sl.No.	District	2003-04	2004-05	2005-06	2003-04	2004-05	2005-06	2003-04	2004-05	2005-06
1	Kancheepuram	109488	105478	120700	32030	32884	32605	141518	138362	153305
2	Thiruvallur	85681	83954	92498	20858	19839	37138	106539	103793	129636
3	Cuddalore	142736	146355	155013	26111	28503	25779	168847	174858	180792
4	Villupuram	126360	222021	243141	42804	41021	38044	169164	263042	281185
5	Vellore	78420	70294	103345	15282	26814	21983	93702	97108	125328
6	Thiruvannamalai	92404	144156	160639	40003	44325	58511	132407	188481	219150
7	Salem	59391	80199	97973	10908	17556	21707	70299	97755	119680
8	Namakkal	53126	47420	74318	11282	13739	13828	64408	61159	88146
9	Dharmapuuri	30682	51447	66690	1553	5814	11691	32235	57261	78381
10	Krishnagiri	35045	44075	49002	5259	4367	9248	40304	48442	58250
11	Coimbatore	152963	160261	170511	7278	13313	10960	160241	173574	181471
12	Erode	79935	149713	161217	4374	28668	23687	84309	178381	184904
13	Thiruchirapalli	68830	91549	110054	9048	12243	11798	77878	103792	121852
14	Karur	33819	42880	54709	1264	2046	2681	35083	44926	57390
15	Perambalur	49011	63987	66855	7611	12049	9726	56622	76036	76581

Table 2.15 Contd..... (in hectares)

CLNI	D: 4:4	Net	Area Irrig	ated	Area irrig	ated more	than once	Gross	s Area Irri	gated
Sl.No.	District	2003-04	2004-05	2005-06	2003-04	2004-05	2005-06	2003-04	2004-05	2005-06
16	Pudukkotai	83037	102713	109827	1242	1486	1355	84279	104199	111182
17	Thanjavur	126963	160889	165679	25570	35814	27991	152533	196703	193670
18	Thiruvarur	118275	141206	147564	10568	15320	17798	128843	156526	165362
19	Nagapattinam	104594	118174	125014	21834	27925	27113	126428	146099	152127
20	Madurai	48631	77206	92245	1141	8284	7163	49772	85490	99408
21	Theni	49985	52657	55718	6029	8009	7912	56014	60666	63630
22	Dindigul	69409	92955	104672	4502	7156	7399	73911	100111	112071
23	Ramanathapuram	70678	72718	68547	0	0	0	70678	72718	68547
24	Virudhunagar	54790	52596	55365	5390	5118	4544	60180	57714	59909
25	Sivagangai	73124	83160	88999	0	0	0	73124	83160	88999
26	Thirunelveli	85525	110389	111132	10454	25541	28646	95979	135930	139778
27	Thoothukudi	37100	40038	39674	1555	1131	6657	38655	41169	46331
28	Nilgiris	820	736	750	0	0	0	820	736	750
29	Kannyakumari	26851	27972	27694	6935	10945	11191	33786	38917	38885
	Total	2147673	2637198	2919545	330885	449910	477155	2478558	3087108	3396700

Source: Tamil Nadu – An Economic Appraisal, 2005-06, Evaluation and Research Department, Government of Tamil Nadu, Chennai.

2.7.3. District-wise Details of Net Area and Gross Area Irrigated and Irrigation Intensity

The district wise details of net area and gross area irrigated along with the irrigation intensity for the period from 2003-04 to 2005-06 are furnished in Table 2.16. It could be seen that the irrigation intensity at the state level varied from 115.41 percent in 2003-04 to 116.34 percent in 2005-06. The irrigation intensity was found to be higher than the state level in the districts of Kancheepuram, Thiruvarur, Cuddalore, Vellore, Thiruvannamalai, Salem, Namakkal, Dharmapuri, Krishnagiri, Thanjavur, Nagapattinam, Tirunelveli and Kanyakumari in 2005-06. Further, there had been increase in the irrigation intensity continuously from 2003-04 to 2005-06, only in the districts of Salem, Dharmapuri, Karur, Thiruvarur, Tirunelveli and Kannyakumari.

Table 2.16 Irrigation Intensity - By Districts

(Area in hectares)

GL NI	D: 4 : 4	Net	Area Irrig	ated	Gross	s Area Irri	gated	Irrigation Intensity (in percentage)			
Sl. No.	District	2003-04	2004-05	2005-06	2003-04	2004-05	2005-06	2003-04	2004-05	2005-06	
1	Kancheepuram	109488	105478	120700	141518	138362	153305	129.25	131.18	127.01	
2	Thiruvallur	85681	83954	92498	106539	103793	129636	124.34	123.63	140.15	
3	Cuddalore	142736	146355	155013	168847	174858	180792	118.29	119.48	116.63	
4	Villupuram	126360	222021	243141	169164	263042	281185	133.87	118.48	115.65	
5	Vellore	78420	70294	103345	93702	97108	125328	119.49	138.15	121.27	
6	Thiruvannamalai	92404	144156	160639	132407	188481	219150	143.29	130.75	136.42	
7	Salem	59391	80199	97973	70299	97755	119680	118.37	121.89	122.16	
8	Namakkal	53126	47420	74318	64408	61159	88146	121.24	128.97	118.61	
9	Dharmapuuri	30682	51447	66690	32235	57261	78381	105.06	111.30	117.53	
10	Krishnagiri	35045	44075	49002	40304	48442	58250	115.01	109.91	118.87	
11	Coimbatore	152963	160261	170511	160241	173574	181471	104.76	108.31	106.43	
12	Erode	79935	149713	161217	84309	178381	184904	105.47	119.15	114.69	
13	Thiruchirapalli	68830	91549	110054	77878	103792	121852	113.15	113.37	110.72	
14	Karur	33819	42880	54709	35083	44926	57390	103.74	104.77	104.90	
15	Perambalur	49011	63987	66855	56622	76036	76581	115.53	118.83	114.55	

Table 2.16 Contd.... (Area in hectares)

Sl. No.	District	Net	Area Irriga	ated	Gros	s Area Irriș	gated	`	gation Inter n percentag	•
NO.		2003-04	2004-05	2005-06	2003-04	2004-05	2005-06	2003-04	2004-05	2005-06
16	Pudukkotai	83037	102713	109827	84279	104199	111182	101.50	101.45	101.23
17	Thanjavur	126963	160889	165679	152533	196703	193670	120.14	122.26	116.89
18	Thiruvarur	118275	141206	147564	128843	156526	165362	108.94	110.85	112.06
19	Nagapattinam	104594	118174	125014	126428	146099	152127	120.88	123.63	121.69
20	Madurai	48631	77206	92245	49772	85490	99408	102.35	110.73	107.77
21	Theni	49985	52657	55718	56014	60666	63630	112.06	115.21	114.20
22	Dindigul	69409	92955	104672	73911	100111	112071	106.49	107.70	107.07
23	Ramanathapuram	70678	72718	68547	70678	72718	68547	100.00	100.00	100.00
24	Virudhunagar	54790	52596	55365	60180	57714	59909	109.84	109.73	108.21
25	Sivagangai	73124	83160	88999	73124	83160	88999	100.00	100.00	100.00
26	Thirunelveli	85525	110389	111132	95979	135930	139778	112.22	123.14	125.78
27	Thoothukudi	37100	40038	39674	38655	41169	46331	104.19	102.82	116.78
28	Nilgiris	820	736	750	820	736	750	100.00	100.00	100.00
29	Kannyakumari	26851	27972	27694	33786	38917	38885	125.83	139.13	140.41
	Total	2147673	2637198	2919545	2478558	3087108	3396700	115.41	117.06	116.34

Source: Tamil Nadu - An Economic Appraisal - 2005-06 Evaluation and Research Department, Government of Tamil Nadu, Chennai

2.7.4. Command Area Development Programme

Farmer's participation in water management activities is necessary for ensuring optimum utilization of available quantity of water and for covering maximum area. The centrally sponsored command area development programme aims at improving water use efficiency in canal irrigated areas by means of On-Farm Development Works (OFD) and Rotational Water Supply (RWS). The expenditure incurred under this programme is shared equally between the centre and state. The programme had been implemented in thirteen commands during 2004-05 and 2005-06 in the state. In the thirteen command areas, On Farm Development Works were carried out at a total cost of Rs.37.12 crores during 2004-05 and Rs.39.89 crores during 2005-06. However, only areas of 19,792 hectares have been benefited during 2004-05. The total expenditure on Rotational Water Supply (RWS) declined from Rs.1.42 crores in 2004-05 to Rs.0.75 crore in 2005-06. The area benefited has also reduced from 53.317 hectares in 2004-05 to 25,550 hectares in 2005-06. Cauvery, Parambikulam, Aliyar, Tamiravaruni and Manimuthar commands together accounted for more than 60 percent of the total area benefited under both OFD and RWS works during 2005-06.

2.7.5. Micro Irrigation

Micro irrigation consists of Drip Irrigation and Sprinkler Irrigation. Under the centrally shared scheme for providing micro irrigation where in the scheme cost is shared between the centre and state in the ratio of 90: 10, drip irrigation system was provided during 2004-05 to cover an extent of 6,935 hectares at a cost of Rs.304.30 lakhs. Similarly, sprinkler system covering an extent of 2,890 hectares was provided at a cost of Rs.154.80 lakhs.

2.8. Cropping Pattern

The principal crops raised in the state comprises of food crops like paddy, millets, pulses and oilseeds and non-food crops like cotton and sugarcane. The total cropped area and gross production of principal crops depend on the quantum and spread of precipitation and availability of ground water. Paddy, a staple food crop, is grown extensively in the districts of Thanjavur, Thiruvarur and Nagapattinam.

The area, production and productivity of principal crops are furnished in Table 2.17. The area under paddy increased from 13.97 lakhs hectares in 2003-04 to 18.73 lakhs hectares (34.3 percent) in 2004-05 and further to 20.50 lakhs hectares (9.5 percent) during 2005-06. However, the area under paddy declined from 26.36 hectares in 1970-71 to 20.50 lakhs hectares in 2005-06. The area under millets declined from 9.03 lakhs hectares in 2003-04 to 8.24 lakhs hectares in 2004-05 and further declined to 7.41 lakhs hectares in 2005-06.

However, the area under food grains exhibited a steady increase during the period under consideration. It had increased from 28.37 lakhs hectares in 2003-04 to 32.87 lakhs hectares in 2004-05 and further to 33.17 lakhs hectares in 2005-06. As regards oilseeds, the area had increased from 6.95 lakhs hectares in 2003-04 to 7.09 lakhs hectares in 2005-06. Similarly, the area under cotton increased from 0.98 lakhs hectare in 2003-04 to 1.29 lakhs hectares in 2004-05 and then declined to 1.10 lakhs hectares in 2005-06. Similar phenomenon was observed in the case of sugarcane also.

Table 2.17 Area, Production, Productivity of Principal Crops

	Arc	ea (lakh	ha)	Prod	uction (1	Lakh	Yield	Rate (K	gs./ha)
Crops					tonnes				
Crops	2003-	2004-	2005-	2003-	2004-	2005-	2003-	2004-	2005-
	2004	2005	2006	2004	2005	2006	2004	2005	2006
Paddy	13.97	18.73	20.50	32.23	50.62	52.09	2308	2703	2541
Millets	9.03	8.24	7.41	8.88	6.30	6.30	983	1053	850
Pulses	5.37	5.90	5.25	2.01	1.77	1.77	375	367	337
Food grains	28.37	32.87	33.17	43.12	61.14	61.16	1520	1870	1844
Oilseeds	6.95	7.15	7.09	9.64	11.52	11.52	1387	1484	1527
Cotton	0.98	1.29	1.10	1.23	1.68	1.68	213	244	260
Sugarcane	1.92	2.22	1.92	17.66	32.44	32.44	102	110	105

Oilseeds - Groundnut, gingelly, castor and sunflower

Cotton - in lakh bales of 170 kgs.of lint each Sugarcane - in terms of gur, Yield rate tonnes / hec.

Source : Tamil Nadu – An Economic Appraisal – Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai.

2.8.1. Shift in Area

Markov Chain analysis was attempted to trace the shift in area of principal crops over years. The data collected for the period from 1970 to 2006 were taking into consideration of five year average area. The results revealed that paddy retained 44 percent of its area and the rest was shared by total cereals (42 percent), total pulses (4 percent) and total oilseeds (10 percent). Total cereals retained 63 percent of its area and the remaining area was shared by groundnut (18 percent), total oilseeds (10 percent), cotton (8 percent) and paddy (1 percent) in that order. Likewise, total pulses retained 49 percent of its area and the remaining is shared by paddy (26 percent) and sugarcane (25 percent) almost equally. As regards sugarcane, 59 percent of area is retained by it and the remaining area is shared by total pulses. As regards cotton, all its area is shared by total cereals only. As regards groundnut, only two percent of area is retained by it and the remaining 98 percent of area is shared by paddy only. Similarly, as regards fruit crops, the entire area is retained by fruit crops only. In the case of total oilseeds, 54 percent of area is retained by it, 29 percent is shared by groundnut, 13 percent by total pulses, four percent by total fruits and negligible area by sugarcane. Thus, it could be seen that shift in area is more pronounced in the case of area under cotton and groundnut. The actual of transitional probability matrix of area under principal crops in Tamil Nadu is given in Table 2.18.

Table 2.18. Transitional Probability Matrix of Area under Principal Crops in Tamil Nadu

-				— Los	s —				—
	Paddy	Total cereals	Total pulses	Sugar- cane	Cotton	Ground- nut	Total fruits	Total oilseeds	1
Paddy	0.44	0.42	0.04	0.00	0.00	0.00	0.00	0.10	
Total cereals	0.01	0.63	0.00	0.00	0.08	0.18	0.00	0.10	
Total pulses	0.26	0.00	0.49	0.25	0.00	0.00	0.00	0.00	 Gain
Sugarcane	0.00	0.00	0.41	0.59	0.00	0.00	0.00	0.00	1
Cotton	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	
Groundnut	0.98	0.00	0.00	0.00	0.00	0.02	0.00	0.00	
Total fruits	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	→
Total oilseeds	0.00	0.00	0.13	0.00	0.00	0.29	0.04	0.54	

2.8.2. Production of Crops

The yield rate of paddy rose by 17.1 percent to reach 2703 kgs/ha in 2004-05 and 2541 kgs/ha in 2005-06. In harmony with this, the production of paddy rose from 32.33 lakh tonnes in 2003-04 to 50.62 lakh tonnes in 2004-05 and to 52.09 lakh tonnes in 2005-06. However, the production of millets in the State declined marginally by 2.3 percent from 8.9 lakh tonnes in 2003-04 to 8.68 lakh tonnes during 2004-05 and sharply reduced to 6.30 lakh tonnes in 2005-06 due to reduction in area under crops by about 8.7 percent in 2004-05 and 10.1 percent in 2005-06. On the other hand, the production of pulses had increased by 7.5 percent from 2.01 lakh tonnes to 2.16 lakh tonnes and declined to 1.77 lakh tonnes in respective years. The total food grains production was 43.12 lakh tonnes and it increased to 61.46 and 61.16 lakh tonnes in 2004-05 and 2005-06 respectively. The oilseeds (groundnut, gingelly, castor and sunflower) production increased from 9.64 lakh tonnes in 2003-04 to 11.52 lakh tonnes in 2005-06 due to increase in production from 1387 kg/hectare in 2003-04 to 1527 kg/hectare in 2005-06. The production of sugarcane (in terms of gur) had increased from 17.66 lakh tonnes in 2003-04 to 32.44 lakh tonnes in 2005-06.

The index numbers of area, production and productivity of food and non-food crops for a period of three years from 2003-04 is furnished in Table 2.19.

Table 2.19. Index number of Area, Production and Yield rate of Principal crops

Crops	Aı	rea	Prod	uction	Yielo	l Rate
Food Crops						
2003-04	76.06	(0.69)	67.93	(-7.9)	83.34	(-1.79)
2004-05	87.37	(11.31)	96.72	(28.79)	98.06	(14.72)
2005-06	91.61	(4.24)	108.91	(12.19)	97.55	(-0.5)
Non-food Crops						
2003-04	66.27	(6.77)	66.66	(-1.51)	70.50	(-6.37)
2004-05	69.17	(2.9)	87.75	(21.09)	90.88	(20.38)
Overall						
2003-04	75.22	(4.54)	67.65	(-5.90)	80.20	(-3.14)
2004-05	83.22	(8.10)	94.45	(26.80)	96.27	(16.07)
2005-06	85.36	(2.04)	106.61	(12.16)	98.46	(2.19)

Figures in parentheses indicate the change over the previous year

Source: Tamil Nadu An Economic Appraisal – 2005-06, Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai

From the table, it is evident that the index of agricultural production has gone up by 12.19 points over the previous year due to 2.04 points increase in area and 2.19 points increase in productivity. Further, the increase in the production of food crops (12.19 points) was marginally higher as compared to that of non-food crops (12.16 points). The increase in production of food crops was due to the increase in area under crops (4.24 points) and the increase in the production of non-food crops was due to increase in productivity (10.60 points).

The study carried out in the Department of Agricultural Economics, Tamil Nadu Agricultural University to identify the potential crops to exports indicated that commodities like cotton, groundnut, gingelly, tomato, banana, onion and potato have high competitiveness. Further, the study suggested that large area available under the rainfed conditions and marginal lands can be planted with cashew. The study also called for the encouragement of private exporters to take up banana export by resorting to contract farming.

2.8.3. Growth Rates of Area, Production and Productivity of Principal Crops in Tamil Nadu

The growth rates of area, production and productivity of select crops of Tamil Nadu state are furnished in Table 2.20. To have a better perception of the performance of area, production and productivity, the total period considered were classified into four periods viz 1970-71 to 1979-80, 1980-81 to 1989-90, 1990-91 to 2005-06 and 1970-71 to 2005-06.

Table 2.20. Growth Rates of Area, Production and Productivity of major Crops of Tamil Nadu State

	197	0-71 to 79	-80	198	0-81 to 89	-90	199	0-91 to 20	05-06	1970	-71 to 200)5-06
Crop	Area	Produ ction	Prod ucti vity	Area	Produ ction	Prod ucti vity	Area	Produ ction	Produc tivity	Area	Produ ction	Produc tivity
Paddy	0.17	0.77	0.60	-2.53	4.80	7.52	-1.44	-2.50	-1.08	-1.07	0.51	1.60
Cholam	-4.16	6.52	11.15	-0.99	4.81	5.86	-3.11	-6.09	-3.08	-1.50	-2.18	-0.69
Maize	5.10	5.38	1.46	5.89	6.95	1.00	13.31	12.50	-0.71	6.95	8.52	1.46
Total Pulses	-4.91	0.64	5.83	3.76	6.77	2.90	-4.71	-3.60	1.17	0.84	1.37	0.52
Sugarcane	2.46	8.11	5.51	2.82	-0.98	-3.70	0.61	0.93	0.32	2.37	3.56	1.16
Cotton	-2.89	2.79	5.85	4.62	7.87	3.10	-6.82	-8.80	-1.37	-1.50	-1.57	-0.07
Groundnut	-5.61	0.10	6.05	2.33	4.14	1.77	-4.98	-3.66	1.39	-0.09	0.87	0.95
Chillies	2.00	-6.03	-7.87	-3.37	-2.69	0.70	0.07	0.86	0.79	-0.33	-3.10	-2.78
Banana	3.40	3.96	0.55	0.22	-2.69	6.94	1.29	3.30	1.99	2.11	2.08	0.53

It is evident from the table, that during the period from 1970-71 to 1979-80, the area under sorghum, total pulses, cotton and groundnut exhibited a negative growth rates. As regards the other crops under question, the growth rate of area ranged from 0.17 per cent per annum in paddy to 5.10 per cent per annum in maize. As regards the production, all the chosen crops showed a positive growth rate, with the exception of chilies. Similar phenomenon was observed in the productivity of chillies. The growth rates in the productivity of the remaining chosen crops varied from 0.55 per cent in banana to 11.1 percent per annum in sorghum crop.

During the period from 1980-81 to 1989-90, the area under paddy, sorghum and chillies witnessed a negative growth rate and among the other chosen crops, the growth rate in area ranged from 0.22 per cent per annum in banana to 5.87 percent per annum in maize. As regards the growth rate in production, the rate of growth was found to be maximum (7.87 per cent per annum) in cotton and minimum (4.14 percent per annum) in groundnut. Sugarcane, chillies and banana exhibited a negative growth rate in production and the same varied from -0.98 to -2.69 percent per annum respectively. All the chosen crops with the exception of sugarcane exhibited a positive growth rate in productivity. The rate of growth of productivity was found be the highest in paddy (7.52 per cent) followed by banana (6.94 percent), sorghum (5.86 percent), cotton (3.10 percent) and total pulses (2.90 percent) in that order.

A different phenomenon was observed in the growth rates of area, production and productivity of the crops under question during the period from 1990-91 to 2005-06. It could be seen that paddy, sorghum, total pulses, cotton and groundnut exhibited a negative growth rate in area. As regards the production, with the exception of Maize, sugarcane, chillies and banana all other crops exhibited negative growth rates. As regards the growth rates of productivity it was found to be the highest in banana (1.99 per cent per annum) and the lowest in sugarcane (0.32 per cent per annum). Paddy (-1.08 percent), sorghum (-3.08 percent), maize (-0.71 percent) and cotton (-1.37 percent) witnessed a negative growth rate in its productivity.

In the entire study period, the area under paddy, sorghum, cotton, groundnut and chillies exhibited a negative growth rate. Among the other crops, the growth rate in area varied from 0.84 per cent per annum in total pulses to 6.95 per cent per annum in maize. As regards the rate of growth of production, with the exception of sorghum, cotton and chillies, all the other chosen crops witnessed a positive growth rate. However, the growth rate of production in paddy was found to be 0.51 percent only. Likewise, a negative growth rate in productivity was observed in sorghum, cotton and chillies. Since majority of crops chosen for the study exhibited a negative growth in area, concerted efforts must be taken up for augmenting the productivity of the crops for sustaining the production. The negative growth rates in area under Paddy, sorghum, cotton, groundnut and chillies over a period of 35 years clearly indicated the shift of lands of these crops to some other purposes. This tendency has to be arrested and steps should be taken for augumenting the productivity of the crops under question.

In sum, it could be inferred that over the period of 36 years (from 1970-71 to 2006-07) considered, among the 9 major crops for which the growth rates were marked out, the growth rates were found to be positive with reference to area, productivity as well as production in four crops viz., maize, total pulses, sugarcane and banana. On the other hand, the three crops viz cholam, cotton and chillies witnessed negative growth rates in area, productivity as well as production. In paddy and groundnut, while area alone had shown negative growth rates, the productivity and production had been on the positive growth.

The above growth trends implied that the down trends in area under paddy and groundnut must be arrested and thrust must be given to accelerate the growth rates in productivity and hence production. The negative trends in cotton are rather the highly disturbing signs. The cotton textile industry is the largest manufacturing industry in the country and to feed this industry with the raw material viz., cotton, it becomes necessary to reverse the negative trends in area, productivity and production into positive ones and hence the strategy must be atleast to increase the area under cotton and boost cotton productivity so as to increase cotton production.

Maize and sugarcane have shown excellent growth trends. The former is the raw material for the feed industry, while the latter is the raw material for sugar industry. Therefore, this trend may be encouraged to support these industries' growth in the state. These two crops are also quite impressive in increasing the income of the farmers through crop diversification.

The positive growths of area, productivity and production of total pulses are quite encouraging as they form the important sources of protein to human well – being. However, the productivity growth is rather marginal and hence needs strategy to increase the pulses productivity through sizable investment on research and extension activities relating to pulses.

With reference the horticultural crops like chilly and banana, the former experienced negative growth trends in area, productivity as well as production and these trends must be atleast arrested and productivity may be given a fillip. As regards banana, the trends may be kept up, as the demand for protective foods like banana is on the increase due to per capita income growth.

The study carried out by the Department of Agricultural Economics, Tamil Nadu Agricultural University revealed that the production losses due to leaf folder in paddy were the maximum in the state accounting for 11.40 percent of the total losses. The Benefit Cost analysis and Net Present Value for leaf folder were worked out to be 26.72 and 21.49 for Bio-control/Bio-technology and conventional breeding respectively. The BCR and NPV revealed that the Bio-control/Bio-technology method is economically profitable for solving the top ten constraints namely lead folder, yellow Stem Borer, Drought/Water Scarcity, Rice blast, Ear head bug, Rice Tungro Virus(RTV), Sheath rot, Brown Plant Hopper (BPH) and Bacterial Leaf Blight (BLB). The economic surplus for controlling leaf folder was the maximum which amounted to Rs.169.01 million. This is followed by stem borer (127.30), drought (117.90), rice blast (118.31) and ear head bug and BLB (57.28). The study also indicated that there is greater scope for increasing the productivity level, thereby increasing the production of rice, by addressing these constraints.

2.8.3.1.District-wise Growth rates of Area, production and Productivity of Crops

Growth rates of Area, Production and Productivity of major crops in all the districts of Tamil Nadu with the exception of Chennai and the Nilgiris districts over the years were worked out as detailed in Table 2.21.

Table 2.21 Years of Estimation of growth rates – District wise

S.No	Years of estimation	Districts		
1	1970-71 to 2005-06	Kancheepuram, Cuddalore, Vellore, Salem,		
		Dharmapuri, Coimbatore, Tiruchirapalli,		
		Pudukkottai, Thanjavur, Madurai,		
		Ramanthapuram, Thirunelveli and Kanykumari.		
2	1998-99 to2005-06	Thiruvallur, Namakkal, Karur, Perambalur and		
		Theni		
3	1996-99 to 2005-06	Thiruvarur and Villupuram		
4	1994-95 to 2005 -06	Nagapattinam		
5	1991-92 to 2005-06	Thoothukudi, Sivagangai and Virudhunagar		
6	1986-87 to 2005-06	Dindigul		
7	1987-88 to 2005-06	Thiruvannamalai		
8	1981-82 to 2005-06	Erode		

The classification of the districts was necessitated due to bifurcation and trifurcation of the districts over years. The results of the analysis are presented in Tables 2.22 to Table 2.48.

As regards the area under Paddy, negative growth rate was observed in all the districts with the exception of Thiruvannamalai, Erode and Virudhunagar districts. Similarly negative growth rate in production was observed in the districts of Kancheepuram, Cuddalore, Vellore, Salem, Coimbatore, Tiruchirapalli, Thanjavur, Ramanathapuram, Thirunelveli, Thiruvallur, Namakkal, Perambalurm, Theni, Villupuram, Thiruvarur, Nagapattinam, Erode and Dindigul. Like-wise, Dharmapuri, Thiruvallur, Karur, Perambalur, Theni, Villupuram, Thiruvarur, Nagapattinam, Erode and Virudhunagar districts exhibited a negative growth rate in the productivity of paddy.

As regards Cholam, Thiruvallur and Namakkal districts alone exhibited a positive growth rate in area. Further only Namakkal district had exhibited a positive growth rate in the production of Cholam. The productivity of cholam exhibited a positive growth rate in the districts of Vellore, Salem, Madurai, Ramanathapuram, Thirunelveli and Namakal.

With reference to total pulses, a positive growth rate in area, production and productivity was observed in the districts of Dharmapuri and Villupuram.Likewise Kancheepuram, Cuddalore, Salem, Coimbatore, Trichirapalli, Pudukkottai, Thanjavur, Madurai, Ramanathapuram, Thirunelveli, Kanyakumari, Namakkkal, Erode, Dindigul and Virudhunagar districts had shown positive growth in productivity. Similarly a positive growth in area, production and productivity was observed in the case of sugarcane in the districts of Kancheepuram, Cuddalore, Pudukkottai, Thanjavur, Thirunelveli, Namakkal, Perambalur, Villupuram, Erode and Thoothukudi.

In Chillies, a negative growth rate in area, production and productivity was observed over years in the districts of Kancheepuram, Cuddalore, Vellore, Salem, Dharmapuri, Coimabtore, Thiruchirapalli, Pudukkottai, Thanjavur, Madurai, Ramanathapuram, Thirunelveli, Thiruvallur, Namakkal, Karur, Villupuram, Nagapattinam, Erode, Dindigul and Virudhunagar.

With regard to Banana, a positive growth rate in area, production and productivity was observed in the districts of Cuddalore, Vellore, Dharmapuri, Coimabatore, Pudukkottai, Namakkal, Kanyakumari, Perambalur, Thiruvarur, Erode, Dindigul, Sivagangai, and Thoothukudi. Karur alone had exhibited a negative growth rate in area, production and productivity of banana.

Cuddalore, Coimbatore, Pudukkottai, Madurai, Karur, Theni, Villupuram, Erode, Dindigul, Sivagangai, Virudhunagar, and Thoothukudi districts had shown a negative growth rate in area, production and productivity of cotton. Thiruvannamalai district had alone exhibited a positive growth rate in all the three aspects in cotton.

A positive growth rate in area, production and productivity of groundnut was observed in the district of Thiruvarur only. Similarly negative growth rate of area, production and productivity was observed in Salem, Coimbatore, Karur and Virudhunagar districts. The positive growth rate of productivity in groundnut was more pronounced in Theni district (7.66 percent) as compared to other districts.

In sum, in Kancheepuram district with the exception of chillies an increase in productivity was observed in all the crops. In Erode district with the exception of paddy and cotton, productivity in all other crops under consideration had shown a positive growth rate. On the contrary, in Dindigul district all the crops with the exception of Groundnut, Chillies, Cholam and Maize had shown a negative growth rate over years. In Thoothukudi, Cotton, Cholam, Total pulses and Chillies exhibited a negative growth rate in productivity.

In Tiruchirapalli district with the exception of cotton and banana, all other crops exhibited a negative growth rate. In Theni, all other crops with the exception of maize had exhibited a negative growth rate. In Coimbatore district, all crops with the exception of maize and banana exhibited a negative growth rate in production. In Ramanathapuram district all the selected crops had exhibited a negative a growth in the production. In Nagapattinam district, all the crops with the exception of cotton had exhibited a negative growth rate in production.

Table 2.22. Growth rates of Area, Production and Productivity of Major Crops in Kancheepuram District

			(Percentage)		
Crop	1970-71 to 2006				
	Area	Production	Productivity		
Paddy	-3.29	-1.76	1.58		
Total Pulses	-0.43	2.21	0.42		
Sugarcane	3.06	4.19	1.09		
Cotton	0.86	1.12	0.55		
Groundnut	-2.71	0.37	3.16		
Chillies	-7.51	-9.99	-2.69		
Banana	-5.00	-2.70	3.24		

Table 2.23. Growth rates of Area, Production and Productivity of Major Crops in Cuddalore District

Crop	1970-71 to 2006				
	Area	Production	Productivity		
Paddy	-3.75	-2.62	1.17		
Maize	6.65	11.10	1.52		
Cholam	-9.81	-12.81	-3.32		
Total Pulses	-0.10	2.43	0.72		
Sugarcane	1.50	2.23	0.81		
Cotton	-4.36	-4.56	-0.20		
Groundnut	-5.60	-3.09	2.65		
Chillies	-8.08	-10.82	-2.99		
Banana	7.36	7.68	1.13		

Table 2.24. Growth rates of Area, Production and Productivity of Major Crops in Vellore District

Crop	1970-71 to 2006					
	Area	Production	Productivity			
Paddy	-6.60	-4.68	2.06			
Maize	0.00	1.27	1.26			
Cholam	-4.44	-3.17	1.32			
Total Pulses	0.67	-0.04	-1.06			
Sugarcane	-1.41	-1.29	0.21			
Cotton	10.41	9.44	-0.89			
Groundnut	-5.13	-2.84	2.41			
Chillies	-4.60	-6.16	-1.64			
Banana	3.46	4.75	2.21			

Table 2.25. Growth rates of Area, Production and Productivity of Major Crops in Thiruvannamalai District

Crop	1990-91 to 2006				
	Area	Production	Productivity		
Paddy	0.62	2.02	0.91		
Maize	-6.37	-8.20	-7.05		
Cholam	-8.97	-14.69	-4.85		
Total Pulses	-6.51	-8.36	-0.76		
Sugarcane	0.18	0.69	-0.57		
Cotton	17.27	16.84	3.13		
Groundnut	-3.69	0.23	4.12		
Chillies	-2.19	-2.74	0.35		
Banana	0.58	1.05	-1.37		

Table 2.26. Growth rates of Area, Production and Productivity of Major Crops in Salem District

Crop	1970-71 to 2006				
	Area	Production	Productivity		
Paddy	-2.31	-0.13	2.22		
Maize	12.80	14.38	1.40		
Cholam	-3.80	-2.80	1.04		
Total Pulses	-0.80	0.07	1.63		
Sugarcane	-1.14	-1.26	-0.12		
Cotton	0.46	0.32	-0.14		
Groundnut	-1.40	-1.58	-0.19		
Chillies	-0.48	-1.75	-1.28		
Banana	-2.41	0.27	2.74		

Table 2.27. Growth rates of Area, Production and Productivity of Major Crops in Dharmapuri District

Crop	1970-71 to 2006				
	Area	Production	Productivity		
Paddy	-1.45	1.07	2.56		
Maize	-0.21	0.08	0.28		
Cholam	-1.82	-1.93	1.33		
Total Pulses	0.04	1.49	2.00		
Sugarcane	2.44	2.71	0.57		
Cotton	3.64	3.59	-0.05		
Groundnut	0.59	0.88	1.37		
Chillies	-2.53	-3.75	-0.34		
Banana	0.22	2.90	2.67		

Table 2.28. Growth rates of Area, Production and Productivity of Major Crops in Coimbatore District

Crop	1970-71 to 2006				
	Area	Production	Productivity		
Paddy	-7.90	-6.07	1.20		
Maize	2.86	3.28	0.40		
Cholam	-1.78	-4.30	-2.56		
Total Pulses	-2.88	-3.06	0.20		
Sugarcane	-4.20	-3.98	0.23		
Cotton	-5.63	-7.89	-2.39		
Groundnut	-4.36	-4.38	-0.03		
Chillies	-4.31	-6.11	-1.89		
Banana	2.93	5.19	2.20		

Table 2.29. Growth rates of Area, Production and Productivity of Major Crops in Tiruchirapalli District

Crop	1970-71 to 2006				
	Area	Production	Productivity		
Paddy	-3.34	-1.09	2.32		
Maize	-3.04	-3.39	1.03		
Total Pulses	-0.25	-5.10	0.54		
Sugarcane	-2.72	-2.59	0.48		
Cotton	-3.23	1.51	0.90		
Groundnut	1.26	-2.57	2.57		
Chillies	-3.74	-7.02	-1.25		
Banana	-5.62	1.86	2.09		

Table 2.30. Growth rates of Area, Production and Productivity of Major Crops in Pudukkottai District

Crop	1970-71 to 2006				
	Area	Production	Productivity		
Paddy	-0.70	1.81	1.55		
Cholam	-3.46	-5.21	-0.04		
Maize	-10.01	-8.03	1.36		
Total Pulses	-1.21	-1.82	0.25		
Sugarcane	8.54	9.65	1.03		
Cotton	-3.36	-3.84	-0.50		
Groundnut	-0.34	0.14	1.70		
Chillies	-8.02	-11.06	-2.50		
Banana	16.18	18.50	2.00		

Table 2.31. Growth rates of Area, Production and Productivity of Major Crops in Thanjavur District

Crop	1970-71 to 2006			
	Area	Production	Productivity	
Paddy	-4.91	-3.33	1.65	
Maize	-7.91	-4.96	3.21	
Total Pulses	-5.78	-6.50	1.35	
Sugarcane	2.33	3.03	0.68	
Cotton	5.73	5.04	-0.66	
Groundnut	-5.31	-3.80	1.60	
Chillies	-11.20	-12.37	-1.32	
Banana	-0.49	1.69	2.19	

Table 2.32. Growth rates of Area, Production and Productivity of Major Crops in Madurai District

Crop	1970 to 2006			
	Area	Production	Productivity	
Paddy	-3.07	-1.28	1.06	
Cholam	-8.13	-8.28	0.89	
Maize	3.02	5.25	2.17	
Total Pulses	-7.63	-3.58	1.00	
Sugarcane	-1.67	0.80	2.52	
Cotton	-4.25	-7.20	-2.37	
Groundnut	-6.88	-6.54	1.68	
Chillies	-9.57	-12.61	-2.73	
Banana	-6.02	-3.96	2.19	

Table 2.33. Growth rates of Area, Production and Productivity of Major Crops in Ramanathapuram District

Crop	1970 to 2006		
	Area	Production	Productivity
Paddy	-2.33	-2.33	0.74
Cholam	-5.44	-6.42	0.20
Total Pulses	-7.95	-6.57	0.54
Sugarcane	-10.72	-10.35	0.91
Cotton	-9.70	-9.80	0.84
Groundnut	-3.91	-4.45	1.32
Chillies	-0.59	-2.50	-1.92
Banana	-9.32	-6.03	3.62

Table 2.34. Growth rates of Area, Production and Productivity of Major Crops in Thirunelveli District

Crop	1970 to 2006		
	Area	Production	Productivity
Paddy	-2.24	-0.17	2.12
Cholam	-9.11	-8.33	0.87
Maize	20.33	18.17	-1.80
Total Pulses	-0.35	-1.94	1.43
Sugarcane	4.70	5.12	0.29
Cotton	-7.19	-4.43	2.97
Groundnut	-2.77	-1.86	0.93
Chillies	-7.14	-8.29	-1.24
Banana	-0.62	2.44	3.08

Table 2.35. Growth rates of Area, Production and Productivity of Major Crops in Kanyakumari District

Crop	1970-71 to 2006			
Стор	Area	Productivity		
Paddy	-1.17	0.09	2.72	
Total				
Pulses	-0.34	0.20	0.96	
Groundnut	-5.13	-10.63	2.01	

Table 2.36. Growth rates of Area, Production and Productivity of Major Crops in Thiruvallur District

(Percentage)

Crop		1998-99 to 2005- 2006			
_	Area	Production	Productivity		
Paddy	-4.53	-10.62	-3.02		
Cholam	8.31	-17.32	-12.89		
Total Pulses	4.49	-2.03	-4.76		
Sugarcane	-5.25	-10.75	-1.65		
Groundnut	-7.47	-5.71	2.44		
Chillies	-6.46	-3.79	-4.76		
Banana	2.57	9.78	-4.76		

Table 2.37. Growth rates of Area, Production and Productivity of Major Crops in Namakkal District

Crop	1998 to 2006			
	Area	Production	Productivity	
Paddy	-10.40	-12.98	-2.88	
Maize	11.04	7.49	-3.20	
Cholam	7.68	0.24	-6.90	
Total Pulses	-13.87	-13.38	0.56	
Sugarcane	2.48	2.06	-0.41	
Cotton	0.33	-0.59	-0.91	
Groundnut	-6.64	-9.82	-3.41	
Chillies	-0.94	-1.38	-0.44	
Banana	0.80	5.74	4.90	

Table 2.38. Growth rates of Area, Production and Productivity of Major Crops in Karur District

Crop	1998 to 2006			
	Area	Production	Productivity	
Paddy	-1.14	-3.57	-2.46	
Cholam	0.22	-3.67	-3.88	
Total Pulses	-2.42	-5.55	-5.25	
Sugarcane	-5.71	-9.78	-4.31	
Cotton	-13.81	-14.55	-0.86	
Groundnut	-4.95	-5.02	-0.07	
Chillies	-17.88	-15.08	3.42	
Banana	-4.58	-8.18	-3.77	

Table 2.39. Growth rates of Area, Production and Productivity of Major Crops in Perambalur District

Crop	1998 to 2006		
	Area	Production	Productivity
Paddy	-2.27	-6.13	-3.95
Cholam	-8.73	-11.12	-2.62
Maize	105.57	104.71	-0.42
Total Pulses	-7.57	-8.19	-1.18
Sugarcane	0.24	2.23	1.99
Cotton	-27.83	-26.12	2.36
Groundnut	-4.51	-4.29	0.22
Chillies	-10.14	-5.62	5.03
Banana	2.22	1.02	-1.18

Table 2.40. Growth rates of Area, Production and Productivity of Major Crops in Theni District

Crop	1998 to 2006			
	Area	Production	Productivity	
Paddy	-2.81	-1.11	-7.30	
Cholam	-1.35	-1.14	-5.60	
Maize	8.16	5.06	-4.07	
Total Pulses	-6.25	-2.05	-3.79	
Sugarcane	-5.66	-5.18	-0.96	
Cotton	-9.96	-19.06	-14.93	
Groundnut	-16.15	-17.24	7.66	
Chillies	-8.36	-13.31	12.85	
Banana	-5.81	-9.46	21.29	

Table 2.41. Growth rates of Area, Production and Productivity of Major Crops in Villupuram District

Crop	1996-97 to 2005- 2006		
	Area	Production	Productivity
Paddy	-1.80	-3.45	-0.82
Cholam	-6.71	-9.57	-3.89
Total Pulses	15.09	17.87	2.41
Sugarcane	0.76	1.05	0.29
Cotton	-7.16	-7.52	-0.39
Groundnut	-4.57	-0.90	3.84
Chillies	-6.85	-9.92	-3.30
Banana	0.03	-2.35	-2.38

Table 2.42. Growth rates of Area, Production and Productivity of Major Crops in Thiruvarur District

Crop	1997 to 2006		
	Area	Production	Productivity
Paddy	-0.75	-6.46	-4.83
Maize	1.28	-2.60	-1.62
Total Pulses	0.65	0.72	-3.00
Sugarcane	-2.82	-2.39	4.25
Cotton	3.42	0.60	-6.91
Groundnut	1.23	3.80	0.93
Chillies	-1.50	-0.99	2.51
Banana	-0.66	1.19	2.75

Table 2.43. Growth rates of Area, Production and Productivity of Major Crops in Nagapattinam District

	1994 to 2006						
Crop	Area	Production	Productivity				
Paddy	-6.04	-12.60	-6.95				
Maize	-6.87	-17.59	-0.20				
Total Pulses	-1.30	-6.40	-3.54				
Sugarcane	-4.45	-9.72	0.27				
Cotton	0.87	0.41	-1.56				
Groundnut	-4.56	-8.26	2.15				
Chillies	-5.72	-13.89	-1.39				
Banana	-1.75	-2.24	1.81				

Table 2.44. Growth rates of Area, Production and Productivity of Major Crops in Erode District

Crop	1980-81 to 2006							
	Area	Production	Productivity					
Paddy	-3.88	-1.81	2.16					
Maize	11.52	12.41	0.80					
Cholam	-13.02	-12.19	0.95					
Total Pulses	-1.05	-0.13	-0.36					
Sugarcane	1.50	2.89	1.37					
Cotton	-1.49	-2.03	-0.55					
Groundnut	1.70	-0.13	1.61					
Chillies	2.87	-0.71	2.23					
Banana	2.98	5.53	2.48					

Table 2.45. Growth rates of Area, Production and Productivity of Major Crops in Dindigul District

Crop		1987 to 2006	
Стор	Area	Production	Productivity
Paddy	-1.68	-1.28	0.08
Cholam	-3.25	-8.28	-1.63
Maize	17.25	5.25	-1.11
Total Pulses	-3.39	-3.58	1.92
Sugarcane	-0.49	0.80	2.70
Cotton	-5.08	-7.20	-2.75
Groundnut	-4.23	-6.54	5.07
Chillies	-2.56	-12.61	-0.35
Banana	1.37	-3.96	2.87

Table 2.46. Growth rates of Area, Production and Productivity of Major Crops in Sivagangai District

Crop	1986 to 2006						
	Area	Production	Productivity				
Paddy	-0.14	1.76	1.91				
Cholam	-10.58	-12.60	-2.26				
Total Pulses	-7.66	-5.00	-0.89				
Sugarcane	0.36	2.38	-0.48				
Cotton	-0.23	-2.12	-1.90				
Groundnut	-4.30	-0.49	3.98				
Chillies	3.13	-0.61	-3.62				
Banana	1.98	4.04	2.02				

Table 2.47. Growth rates of Area, Production and Productivity of Major Crops in Virudhunagar District

Crop	1986 to 2006						
	Area	Production	Productivity				
Paddy	1.13	0.40	-0.72				
Cholam	-5.08	-1.73	-1.65				
Maize	22.97	23.32	0.29				
Total Pulses	-1.66	0.92	0.33				
Sugarcane	4.08	9.12	-0.97				
Cotton	-9.99	-5.49	-0.32				
Groundnut	-1.85	-1.98	-1.98				
Chillies	-3.51	-1.77	-1.77				
Banana	-1.01	1.96	3.00				

Table 2.48. Growth rates of Area, Production and Productivity of Major Crops in Thoothukudi District

Crop	1986 to 2006							
	Area	Production	Productivity					
Paddy	-3.44	1.32	1.14					
Cholam	-1.87	-6.38	-4.59					
Maize	28.04	34.39	4.95					
Total Pulses	-4.05	0.23	-0.44					
Sugarcane	8.05	11.96	3.62					
Cotton	-11.94	-12.81	-0.99					
Groundnut	-5.45	-4.00	1.54					
Chillies	6.48	5.85	-2.91					
Banana	2.25	5.97	3.63					

2.8.3.2 Implications

The implications based on the growth rates are discussed below

1. Paddy

Paddy is cultivated in almost all the districts in Tamil Nadu State. The growth rate of area was positive only in two districts namely Tiruvannamalai and Virudhunagar. In all other 27 districts the trend was negative. The growth rate of productivity was found to be positive in 21 districts and negative in eight districts viz. Thiruvannamalai, Karur, Perambalur, Theni, Vilupuram, Thiruvarur, Nagapattinam and Virudhunagar. Similarly, the production trend was positive in eight districts of Thiruvannamalai, Dharmapuri, Pudukottai, Sivaganagi, Virudhunagar, Kanyakumari, Tirunelveli and Thoothukudi, while it was negative in all other 21 districts. This implied that the down trend in area under paddy in 27 districts (Table) must be arrested and the productivity trend must be stepped up especially in the eight districts, where negative trend has been observed, in order to increase production. In sum, the strategy must be to increase production through productivity increase in all the districts of Tamil Nadu.

2. Maize

Maize crop was cultivated in about 20 districts during the period under study. With reference to area, 13 districts experienced positive growth, while seven districts have shown negative trend. Similarly, with regard to productivity, while 11 districts witnessed positive growth, seven districts had negative trend. The production witnessed uptrend in 14 districts and downtrend in six districts. The growth rates in area, productivity and production are quite perceptible in majority of the districts where maize is cultivated. Maize in one of the important crops introduced for crop diversification in Tamil Nadu State. Moreover, the growing feed industry keeps demanding maize, as it is an important ingredient in feed mix.

3. Cholam

Cholam is grown in more than 21 districts in the state. The growth rate of area was positive only in three districts. Similarly, the productivity was positive only in four districts and production was positive only in one district. Thus, the negative trend in majority of the districts is a common phenomenon. Due to changing purchasing power and food habits, the consumption of cholam has drastically come down in majority of small farmer / labour households. One of the important crops that replaces cholam is maize. Therefore, these trends indicate that the development strategy for cholam must give full thrust on productivity increase only.

4. Total Pulses

Pulse crop is cultivated invariably in all the districts, with the exception of the Nilgiris, in Tamil Nadu State. Majority of the districts experienced negative growth trends regarding area and production. More than half of the districts in Tamil Nadu had positive productivity growth. Pulses are the major sources of cheap protein particularly for the vegetarians and poor. Therefore, there is a need to keep producing more and more pulses. As pulses are more sensitive to excessive moisture the unusual continuous rain and flooding devastate the entire rice-fallow pulses once in 3 or 4 years, reducing production drastically. Therefore, the development strategy must focus not only on productivity increase, but also on the water management / flood management tactics.

5. Cotton

Cotton is the raw material for the cotton industry, which is the largest manufacturing industry in the country. Traditionally cotton is cultivated more in the districts of Salem, Coimbatore, Erode, Madurai, Virudhunagar, Theni, Tirunelveli, etc. However, recently the area and production of cotton has been dwindling to the alarming level especially in Coimbatore, Salem, Erode, and Theni districts. The crop development strategy must aim at reversing the recent trend to that of the past, so as to keep increasing cotton production and feeding the cotton textile mills in the state. The pricing is an important factor that merit consideration in addition to assured market demand through contract farming etc.

6. Sugarcane

Sugarcane is an important industrial crop grown in more than 26 districts in Tamil Nadu. It forms as the raw material for the sugar industry, which is the second largest manufacturing industry in the country. The growth was quite convincing with positive trend in more than 15 districts. The growth trend must be kept up to meet the growing demand for sugar. Therefore, the development strategy must focus on sugarcane productivity as well as area increase in the years to come, so as to keep increasing production in almost all the districts of Tamil Nadu State. However, the negative trend in area, production and productivity need to be reversed through proper strategy planning.

7. Groundnut

Groundnut is yet another important food/oilseeds crop, whose production performance had shown negative growth in majority of the districts. A positive trend in growth of area, production and productivity in groundnut was observed in three, four and five districts respectively. Therefore, before reaching an alarming situation of down trends, strategy planning must aim at increasing growth trend, especially in area and production.

8. Chilli

Chilli is an important horticultural / commercial crop grown in more than 25 districts in the state. In all these districts Chilli is grown in specified pockets only. The rainfed chilli is famous in Pudur / Vilathikulam areas of Thoothukudi district.

The Sathur samba of Virudhunagar district and Paramakudi gundu Chilli of Ramnad district are also popular in southern districts. Perusal of table , exhibits the fact that Sivagangai and Thoothukudi districts alone witnessed positive growth in area. Similarly, Thoothukudi district abone had positive growth in production. The productivity trend was positive in six districts. In all other districts, negative trend could be observed. This is really a critical situation that needs solution. In sum, the development of chilli crop in Tamil Nadu requires a thorough planning to increase area, productivity and production, as this crop has got export market as well.

9. Banana

Banana is yet another horticulture crop that is used both as vegetable and fruit. However, it is consumed more as fruit. Fairly large number of districts shows positive growth regarding area, production and productivity. Yet, few districts show negative growth. As the level of living of people is changing due to per capita income increase, the demand for protective foods like banana fruit is also increasing in the recent times. Hence, there is an urgent need to keep increasing the production of banana. The export potential also indicates importance of boosting banana production. The strategy, therefore, must keep increasing productivity and production of banana in the state to meet the growing domestic and export demand.

The distribution of districts according to growth trends in area, productivity and production is exhibited in Table 2.49. The districts requiring special attention for crop development has also been indicated there in.

Table 2.49. Crop-wise distribution of districts according to growth trends in Tamil Nadu State

Sl.	Crop		Area	Pro	ductivity	Pr	oduction	District requires
No	F	Positive	Negative	Positive	Negative	Positive	Negative	special attention
1.	Paddy	Tiruvannamalai Virudhunagar	All other 27 districts	All other 20 districts	Thiruvallur Karur, Theni Namakkal Perambalur Villupuram Thiruvarur Nagai Virudhunagar	Thiruvannamalai Dharmapuri Pudukottai Sivagangai Virudhunagar Thoothukudi Kanyakumari Tirunelveli	All other 20 districts	Thiruvallur, Karur, Theni Namakkal Perambalur Villupuram, Nagai
2.	Maize	Cuddalore Salem, Madurai Coimbatore Thirunelveli Namakkal Perambalur Theni, Erode, Thiruvarur Dindigul Virudhunagar Thoothukudi	Thiruvannamalai Dharmapuri Trichirapalli Pudukottai Thanjavur Nagai Vellore	Cuddalore Vellore, Salem Dharmapuri Coimbatore Thiruchirapalli Madurai Namakal, Erode Virudhunagar Thoothukudi	Thiruvanamalai Tirunelveli Perambalur Theni Thiruvarur Nagai Dindigul	Cuddalore Vellore, Salem Dharmapuri Coimbatore, Theni Madurai, Namakal, Tirunelveli Perambalur, Erode Dindigul, Virudhunagar Thoothukudi	Thiruvannamalai Thirichirapalli Pudukottai Thanjavur Thiruvarur Nagai	Thiruvanamalai Nagai Thiruvarur
3.	Cholam	Thiruvallur Namakkal Karur	Cuddalore, Vellore Thiruvanamalai Salem, Dharmapuri Coimbatore Pudukottai, Madurai, Ramanad, Tirunelveli Perambalur, Theni Thoothukudi Virudhunagar Sivagangai, Erode Vilupuram, Dindigul	Thirunelveli Ramnad Dharmapuri Madurai	Thoothukudi Namakal, Salem, Cuddalore, Karur Thiruvanamalai Coimbatore, Erode, Dindigul, Pudukottai, Ramanad,Theni Thiruvallur, Virudhunagar Sivagangai Vilupuram, Perambalur	Namakkal	Thoothukudi Ramnad, Cuddalore Vellore, Thiruvanamalai Salem, Dharmapuri Madurai Coimbatore Erode, Pudukottai Thiruvallur, Thirunelveli Karur, Perambalur Theni, Villupuram	Thoothukudi Ramnad Cuddalore Thiruvannamalai Salem, Karur Coimbatore Erode, Pudukkottai Thiruvallur, Theni Vilupuram Perambalur

Sl.	Crop	1	Area	Pro	oductivity	P	Production	District requires
No	Стор	Positive	Negative	Positive	Negative	Positive	Negative	special attention
4.	Total Pulses	Vellore Dharmapuri Thiruvallur Villupuram Thiruvanamalai	Kancheepuram Cuddalore Thiruvannamalai Salem Coimbatore Tiruchirapalli Pudukottai Thanjavur Madurai, Ramnad Tirunelveli Kanyakumari Namakkal Perambalur, Theni Nagai, Erode Dindigul, Sivagangai Virudhunagar Thoothukodi	Kancheepuram Cuddalore Salem Dharmapuri Kanyakumari Vilupuram Dindigul Virudhunagar Coimbatore Tiruchirapalli Pudukottai Thanjavur Madurai Ramnad Tirunelveli Namakkal	Vellore Thiruvanamalai Thanjavur Thiruvallur Karur Perambalur Theni Nagai Erode Sivagangai Thoothukudi Thiruvarur	Cuddalore Salem Dharmapuri Kanyakumari Vilupuram Virudhunagar Thoothukudi Thiruvarur	Kancheepuram Vellore Thiruvannamalai Thiruvallur Karur Perambalur Theni, Nagai Dindigul Sivagangai Coimbatore Tiruchirapalli Pudukottai Thanjavur Madurai, Ramnad Tirunelveli Namakkal, Erode	Vellore Thiruvannamalai Thanjavur Thiruvallur Karur Perambalur Theni Nagai Erode Sivagangai
5.	Cotton	Kancheepuram Vellore Thiruvanamalai Salem Dharmapuri Thanjavur Ramnad Namakkal Thiruvarur Nagai	Cuddalore Coimabtore Thoothukudi Tiruchirapalli Pudukottai Madurai Tirunelveli Karur Virudhunagar Perambalur Theni Villupuram Erode, Theni Dindigul Sivagangai	Kancheepuram Thiruvannamalai Tiruchirapalli Ramnad Tirunelveli Perambalur	Cuddalore Thoothukudi Vellore Virudhunagar Salem, Sivagangai Dharmapuri Coimbatore Pudukottai Thanjavur Madurai, Namakkal Karur, Theni Villupuram Thiruvarur Nagai, Erode Dindigul	Kancheepuram Vellore Salem Dharmapuri Tiruchirapalli Thanjavur Ramnad Thiruvarur Nagai	Cuddalore Thiruvannamalai Sivagangai Coimbatore Virudhunagar Pudukottai Thoothukudi Madurai Tirunelveli Namakkal Karur Perambalur Theni, Villupuram Erode Dindigul	Cuddalore Toothukudi Virudhunagar Sivagangai Coimbatore Pudhukottai Madurai Namakkal Karur Theni Villupuram Erode Dindigul

Sl.	Chan	A	area	Produ	ıctivity	Pr	oduction	District requires
No	Crop	Positive	Negative	Positive	Negative	Positive	Negative	special attention
6	Sugar Cane	Kancheepuram Cuddalore Thiruvannamalai Dharmapuri Pudukottai Thanjavur Tirunelveli Namakkal Perambalur Villupuram Erode Sivagangai Virudunagar Thoothukudi	Vellore, Salem Coimbatore Tiruchirapalli Madurai, Ramnad Thiruvallur, Karur Theni, Thiruvarur Nagai, Dindigul	Kancheepuram Cuddalore, Vellore Dharmapuri Coimbatore Trichirapalli Pudukottai Thanjavur, Madurai, Ramnad, Tirunelveli Namakkal Perambalur Villupuram Tiruvarur, Nagai Erode, Dindigul Thoothukudi	Thiruvannamalai Salem Thiruvallur Karur Theni Sivagangai Virudhunagar	Kancheepuram Cuddalore Thiruvannamalai Dharmapuri Pudukottai Thanjavur Madurai Namakkal Perambalur Villupuram Dindigul, Sivagangai Virudunagar Thoothukudi	Vellore Salem Coimbatore Trichirapalli Ramnad Thiruvallur Karur Theni Thiruvarur Nagai Erode	Salem Thiruvallur Karur Theni
7	Ground	Dharmapuri Tiruchirapalli Thiruvarur	Kancheepuram Cuddalore Thoothukudi Vellore, Nagai Thiruvannamalai Salem, Sivagangai Coimbatore Pudukottai Thanjavur Madurai, Dindigul Ramnad,Namakkal Tirunelveli Virudunagar Kanyakumari Thiruvallur Karur, Erode Permbalur Theni, Villupuram	Kancheepuram Cuddalore, Vellore Thiruvannamalai Dharmapuri Tiruchirapalli Pudukottai Dindigul Thanjavur Thiruvarur Madurai, Ramnad, Sivagangai Tirunelveli Kanyakumari Thiruvallur Namakkal Thoothukudi Perambalur,Theni Villupuram Nagai, Erode	Salem Coimabtore Karur Virudunagar	Kancheepuram Thiruvannamalai Dharmapuri Pudukottai Thiruvarur	Cuddalore Vellore Salem Coimbatore Thiruchirapalli Thanjavur Madurai Virudhunagar Ramnad Thoothukudi Kanyakumari Thiruvallur Namakkal Karur, Erode Perambalur Dindigul Sivagangai	Salem Thiruvallur Karur Virudhunagar

Sl.	Crop	A	rea	Produ	ectivity	Pro	oduction	District requires
No	Crop	Positive	Negative	Positive	Negative	Positive	Negative	special attention
8	Chillies	Sivagangai Thoothukudi	Kancheepuram Cuddalore, Vellore Thiruvanamalai Salem, Dharmapuri Coimabatore Tiruchirapalli Pudukottai Thanjavur Madurai, Ramnad Tirunelveli Thiruvallur Namakkal, Karur Perambalur Theni, Villupuram Thiruvarur Nagai, Erode Dindigul Virudhunagar	Thiruvanamalai Karur Perambalur Theni Thiruvarur Erode	Kancheepuram Cuddalore Vellore, Salem Dharmapuri Coimabatore Thiruvanamalai Pudukottai Thanjavur Madurai Ramnad Tirunelveli Thiruvallur Namakkal Villupuram Nagai, Dindigul Sivagangai Thoothukudi Virudhunagar	Thoothukudi	Kancheepuram Cuddalore, Vellore Thiruvanamalai Salem, Dharmapuri Coimabatore Tiruchirapalli Pudukottai, Thanjavur Madurai, Ramnad Tirunelveli, Thiruvallur Namakkal, Karur Perambalur, Theni Villupuram, Thiruvarur Nagai, Erode Dindigul, Sivagangai Virudhunagar	Kancheepuram Cuddalore Vellore Salem Dharmapuri Coimbatore Thiruvannamalai Pudukottai Thanjavur Madurai Ramnad Thirunelveli Thiruvallur Namakkal Villupuram Nagai Dindigal Sivagangai Virudhunagar
9	Banana	Cuddalore Vellore Thiruvanamalai Dharmapuri Coimabatore Pudukottai Thiruvallur Namakkal Perambalur Villupuram Erode, Dindigul Sivagangai Thoothukudi	Kancheepuram Salem Tiruchirapalli Thanjavur Madurai Ramnad Tirunelveli Karur Theni Thiruvarur Nagai Virudhunagar	Kancheepuram Cuddalore, Salem, Vellore, Virudunagar Thoothukudi Dharmapuri, Coimbatore Tiruchirapalli Pudukottai Madurai, Ramnad, Tirunelveli Namakkal, Theni, Thiruvarur, Nagai, Erode, Dindigul, Sivagangai	Thiruvanamalai Thiruvarur Karur Perambalur Villupuram	Cuddalore, Salem, Vellore, Tiruchy, Virudunagar Thiruvanamalai Thoothukudi Dharmapuri, Coimbatore Pudukottai Thanjavur, Ramnad Tirunelveli, Thiruvallur Namakkal, Perambalur Thiruvarur, Erode Sivagangai	Kancheepuram Madurai, Karur Theni Villupuram Nagai Dindigul	Karur Villupuram

In Paddy cultivation special attention is required to boost productivity and hence production in the districts of Thiruvallur, Karur, Namakkal, Perambalur, Theni, Villupuram and Nagapattinam. Similarly, to increase maize production, the districts like Tiruvannamalai, Nagapattinam and Thiruvarur require immediate attention. To increase cholam productivity and production, special thrust may be given to the traditionally cholam growing areas of Salem, Coimbatore, Erode, Karur, Perambalur and Virudhunagar.

To boost pulses productivity and production emphasis may be given in transferring technologies in the rice fallow districts as well as in districts indicated in the table. Again, cotton productivity and hence production need adequate attention in the traditionally cotton growing areas of Salem, Coimbatore, Erode, Theni, Virudhunagar, Thoothukudi, Tirunelveli districts etc.

The growth trends in sugarcane with reference to area, productivity and production are though convincing in most of the care growing districts, special care may be given in the districts like Thiruvallur, Salem, Karur and Theni. The growth rate in area is rather negative in 23 out of 26 groundnut growing districts and this needs immediate attention to arrest the disturbing trend. Moreover, the districts of Salem, Karur, Coimbatore and Virudhunagar need special attention to increase productivity and production of groundnut.

With reference to horticultural crops, chilli cultivation requires special attention almost in all the chilli growing districts in the state. Growth trends with reference to area, productivity and production are quite convincing in majority of the banana growing districts. However, the districts of Karur and Villupuram deserve special attention, as could be visualized from the table.

2.9. Horticulture

Allied sectors including horticulture, animal husbandry would provide additional employment opportunities and additional income to the farm families. Thus the income of the farm families is supplemented by the allied sectors.

The State is endowed with agro-climatic conditions conducive for growing a wide range of horticulture crops such as fruits, vegetables, spices, plantation crops, flowers, medicinal and aromatic plants. Tamil Nadu shares 8.7 percent of the production of these crops and 5.3 percent of the area at All India level.

The area and yield rate of major horticultural crops increased marginally by 4.8 and 0.20 percent respectively during 2005-06. The total production of horticulture crops improved from 126.20 lakhs tonnes in 2004-05 to 135.68 lakhs tonnes in 2005-06.

The production of vegetables registered an increase of 7.8 percent from 63.08 lakhs tonnes in 2004-05 to 68.00 lakhs tonnes in 2005-06. Similarly, the production of spices and condiments and flowers increased to 7.8 and 8.0 percent respectively as compared to 2004-05. The production of plantation crops increased from 8.13 lakhs tonnes in 2004-05 to 8.30 lakh tonnes in 2005-06. The details of area, production and productivity of core groups in horticultural crops are furnished in Table 2.50.

Table 2.50. Area, Production and Productivity of Horticulture Crops

Sl.	Core Groups		2004-05			2005-06			
No.	Core Groups	A	P	Y	A	P	Y		
1.	Fruits	2.36	44.98	19.07	2.55	48.56	19.07		
2.	Vegetables	2.15	63.08	29.29	2.32	68.00	29.36		
3.	Spices and condiments	1.43	8.05	5.62	1.54	8.68	5.64		
4.	Plantation crops	2.57	2.57	8.13	3.43	2.49	8.30		
5.	Flowers	0.23	1.87	8.06	0.25	2.02	8.11		
6.	Medicinal plants	0.05	0.05	0.09	1.82	0.06	0.11		
Total		8.79	126.20	14.70	9.21	135.08	14.71		

Note: Area: Lakh hectares P: Production lakh tonnes Y: Tonnes / ha

Source: Commissioner, Department of Horticulture and Plantation crops, Chennai

2.9.1. District-wise Performance of Select Horticulture Crops

- (i) Banana: Banana is the third trinity of fruits and is also grown all over the State. Banana is the most widely consumed and is available in all seasons and in different varieties in the State. The total area under banana was 94,648 hectares during 2005-06. Thoothukudi, Tiruchirapalli, Coimbatore, Erode, Tirunelveli, Kanyakumari, Vellore and Thanjavur districts together accounted for 60.2 percent of the total area under banana during 2005-06. The area under banana increased to 81,498 hectares in 2005-06 registering an increase of 16.14 percent. Likewise, the productivity also exhibited an increase of 15.6 percent over 2004-05.
- (ii) Mango: Mango is one of the trinity of fruits in Tamil Nadu and is a seasonal one. It is generally grown under rainfed conditions in the State. The area under mango increased from 1.18 lakhs hectares in 2004-05 to 1.25 lakhs hectares in 2005-06 (5.62 percent). However, the production and productivity of mango had declined to 0.3 and 5.6 percent respectively in 2005-06 as compared to 2004-05. Mango is generally grown all over the State and concentrated specifically in the districts of Salem, Krishnagiri, Dindigul, Vellore, Thiruvallur and Dharmapuri and they together accounted for 63.9 percent of the total area under mango during 2005-06.
- (iii) Jack: Jack is yet another trinity fruit in Tamil Nadu. Mostly jack fruit is grown under rainfed condition. The area under jack fruit in 2005-06 was 2,911 hectares. Kanyakumari, Cuddalore, Dindigul, Pudukottai, Namakkal, Perambalur and Kancheepuram districts together accounted for 75.19 percent of the total area under jack in Tamil Nadu state.
- (iv) Guava: Guava is yet another important fruit crop of Tamil Nadu State. It is grown both under irrigated and rainfed conditions. The concentration of area under guava was more pronounced in the districts of Dindgul, Madurai, Villupuram, Virudhunagar, Thiruvallur and Vellore and they together accounted for 54.18 percent of total area under guava in Tamil Nadu state in 2005-06.
- v) Sapota: Sapota is yet another fruit crop of Tamil Nadu State and it is mostly grown under irrigated condition. The area under sapota was 6,011 hectares during 2005-06. The sapota was concentrated in the districts of Dindigul, Theni, Virudhunagar,

Coimbatore and Namakkal in that order and they together accounted for 57.14 percent of total area under sapota in 2005-06.

- vi) Grapes: The area under grapes during 2005-06 was 2,611 hectares and it is grown under irrigated conditions only. The cultivation of grapes was mostly confined to Theni, Coimbatore and Dindigul districts and they together accounted for 92.30 percent of area under grapes in Tamil Nadu state.
- vii) Total Fresh Fruits: Nearly 2.47 lakhs hectares were under fresh fruits in 2005-06. and 54.80 percent of the area under fresh fruits was grown under irrigated condition. The concentration of area under fresh fruits was found in the districts of Krishnagiri, Dindigul, Vellore, Theni, Thiruvallur, Coimbatore, Tirunelveli and Tiruchirapalli in that order.
- viii) Total Vegetables: Nearly 2.29 lakh hectares were under vegetables in Tamil Nadu State during 2005-06. The concentration of vegetables was seen in the districts of Salem, Dharmapuri, Namakkal, Villupuram and Dindigul and they together accounted for 52.38 percent of the area under vegetables in Tamil Nadu State during 2005-06.

The details of production and yield of selected horticulture crops are furnished in Table 2.51. It could be seen that production of banana had increased from 25.15 lakh tonnes in 2003-04 to 46.48 lakh tonnes in 2005-2006. However there had been a decline in the production of mango form 6.15 lakh tonnes in 2003-04 to 5.38 lakh tonens in 2005-06. In all the other fruit crops, there had been an increase in production. In the case of vegetables, with the exception of potato and brinjal, there had been an increase in production over years.

As regards the productivity, substantial increase in productivity was observed in all the fruit crops with the exception of mango. Among the vegetables, a reduction in productivity was observed in potato, onion and brinjal.

The low levels and high fluctuations in productivity in fruit trees and vegetables might be due to lack of knowledge among the farmers about high tech approach and also due to frequent failures of the monsoons and skewed distribution of rainfall. High investment requirements particularly in wasteland reclamation and irrigation facilities and long years of waiting time for an economic bearing of fruit trees are the important reasons that constrain the area expansion. Non- availability of ready market, the difficulties in having good access to nearby markets and lack of institutional support for marketing is yet another set of constraints that deter the farmers from venturing into the cultivation of horticultural crops.

Table 2. 51. Production and Yield Rates of Horticultural Crops

S.No	Crops	Produc	tion in '000	tonnes	Yield	l Rate (kgs	s/ha.)
Fruits		2003-04	2004-05	2005-06	2003-04	2004-05	2005-06
1	Banana	2515	3462	4648	35375	42477	49104
2	Mango	615	539	538	5354	4554	4299
3	Jack	26	25	38	9662	8943	12346
4	Guava	58	64	92	7021	7995	10904
5	Grapes	60	70	85	24112	28176	32488
Vegetal	oles						
6	Potato	70	79	75	16149	15705	14901
7	Tapioca	3201	4584	4857	33691	41298	38211
8	Sweet Potato	10	21	30	14484	15117	20857
9	Onion	211	256	234	9004	9677	8015
10	Brinjal	101	101	76	11180	12650	10690
11	Tomato	225	322	278	10149	12705	12627

Source: Tamil Nadu – An Economic Appraisal – 2005-06 Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai.

2.10. Agricultural Engineering

The machaization ensures reduction of drudgery associated with various farm operations as also to economize the utilization of inputs and thereby harnessing the

potential of available resources. The priorities for machenization are decided as per the actual requirement of various agro-climatic zones and involve land preparation equipment and crop production techniques for cereal crops, cash crops, oil seeds, pulses, horticultural crops etc.

The constraints in the promotion of mechanization include the varied requirement of equipments for each agro-climate zone, the small and fragmented land holding, low investment capacity of the farmers, inadequate irrigation facilities, know how status of the farmers, repairs and maintenance facilities etc.

Tractors sales in Tamil Nadu along with the states like Maharashtra, Karnataka and Andrapradhesh have been showing consistent growth since mid 1980s. The details of agricultural machinery and implements in Tamil Nadu state are furnished in Table 2.52.

Table 2.52. Details of Agricultural Machinery and Implements

Sl. No.	Item			
1	Ploughs			
	a)Wooden	755183		
	b) Iron	330147		
	Total	1085330		
2	Bullock Carts	155857		
3	Sugarcane Crushers	1407		
	a) Worked by Power	6550		
	b) Worked by Bullocks	7957		
4	Tractors (Crawlers Tractors, Hand Tractors and Four wheeled Tractors)	69391		
5	Oil Engines (Used for Irrigation and other Agricultural purposes)	237031		
6	Oil Ghanis	1794		
7	Plant Production Equipments	124241		
	a) Sprayer – dusters operated manually	79172		
	b) Sprayers – duster by Power	42685		
	c) Sprayers –dusters operated by Tractor	2384		

Source: 17th Livestock Census – 2004,

Department of Animal Husbandry and Veterinary Services, Chennai-6. Statistical Handbook of Tamil Nadu – 2008, Special Commissioner and Director, Department of Economics and Statistics, Chennai-6.

2.11. Animal Husbandry

Activities allied to agriculture *viz.*, Animal Husbandry, Fisheries and Poultry have the potential for providing significant employment opportunities to rural and urban population. Allied activities provide supplementary occupation to the people besides contributing to Gross State Domestic Product. The dependence on the agricultural sector for supporting livelihood is well known while the allied sectors offer scope for absorbing surplus labour from the agriculture sector.

The total livestock population of the State which stood at 249.42 lakhs in 2007 had declined by 3.85 percent over that of 1997 census. The bovine (Cattle and buffalo) population in the State had witnessed steady decline between 1982 and 2004. While Sheep population showed sign of decline, the goat population had steadily increased during the reference period. The details of livestock particulars are furnished in Table 2.53

Table 2.53. Livestock Census of Tamil Nadu (in lakhs)

Year	Cattle	Buffalo	Sheep	Goats	Others	Total	Poultry
1982	103.66	32.12	55.37	52.46	18.26	261.87	182.84
	(-4.03)	(4.35)	(4.69)	(24.85)	(135.31)	(8.45)	(27.88)
1989	93.53	31.28	58.81	59.20	20.85	263.66	215.70
	(-9.77)	(-2.62)	(6.21)	(12.85)	(14.18)	(0.68)	(17.97)
1994	90.96	29.31	56.12	58.65	21.75	256.79	238.52
	(-2.75)	(-6.30)	(-4.57)	(-0.93)	(4.32)	(-2.61)	(10.59)
1997	90.47	27.41	52.59	64.16	24.76	259.39	365.11
	(-0.54)	(-6.48)	(-6.29)	(9.39)	(13.84)	(1.01)	(53.06)
2004	91.41	16.58	16.58	81.77	3.73	249.42	865.90
	(1.03)	(-39.51)	(-6.35)	(27.45)	(0.00)	(-3.85)	(137.16)

Figures in parentheses indicate the percent of growth over preveious censuses.

Source: Commissioner and Director of Animal Husbandry and Veterinary Services, Chennai – 6.

The district wise details of livestock particulars as per livestock census of 2004 are furnished in Table 2.54. Cattle accounted for 36.65 percent of the total livestock population. Next to cattle, goats accounted for 32.78 percent of the total livestock population. Sheep accounted for 22.43 percent of livestock population. Buffaloes, pigs and others accounted for 6.65, 1.28 and 0.21 percent of the total livestock population respectively.

Table 2.54. District wise Livestock Census – 2004

(in Numbers)

Sl.No.	District	Cattle	Buffaloes	Sheep	Goats	Pigs	Others	Total
1.	Chennai	3973	2736	301	3330	67	34	10441
2.	Coimbatore	362570	40912	206835	286499	12665	5721	915202
3.	Cuddalore	343131	38407	57607	251160	25137	1273	716715
4.	Dharmapuri	297796	100074	266720	277311	3063	538	945502
5.	Dindigul	245116	68112	214143	351211	6443	4890	889915
6.	Erode	398572	230004	506015	562270	7288	3904	1708053
7.	Kancheepuram	364813	115650	131183	173304	5467	1604	792021
8.	Kaniyakumari	101712	6077	1143	100698	1266	15	210911
9.	Karur	117781	65486	218514	173591	10205	555	586132
10.	Krishnagiri	299512	18935	294230	149744	14118	893	777432
11.	Madurai	226507	12380	216416	238588	3260	1523	698674
12.	Nagapattinam	292335	56666	33054	429924	2650	873	815502
13.	Namakkal	222381	182202	146217	388832	23392	1500	964524
14.	Perambalur	284208	22341	96175	372142	21824	566	797256
15.	Pudukottai	333326	31958	151078	177816	2022	1464	697664
16.	Ramanatha puram	128566	3877	245304	234727	2804	630	615908
17.	Salem	593847	176521	371026	497814	33270	1691	1674169
18.	Sivagangai	280572	15183	227672	234746	5164	1849	765186
19.	Thanjavur	489693	34476	42123	339807	4781	151	911031
20.	Nilgiris	53075	3412	4593	18841	89	669	80679
21.	Theni	101683	11955	52247	83454	21574	2107	273020
22.	Thiruvallur	261915	111877	103821	197795	6056	2071	683535
23.	Thiruvanna malai	481443	23229	198318	150141	7259	295	860685
24.	Thiruvarur	332124	18286	13251	375318	2047	752	741778
25.	Thoothukudi	163343	20933	202419	342180	6941	3268	739084
26.	Tirunelveli	418694	78777	487273	390570	12752	1206	1389272
27.	Thiruchirap palli	354301	49577	257271	366753	14164	6719	1048785
28.	Vellore	501634	29392	295135	232315	12355	1159	1071990
29.	Villupuram	824136	49003	227455	471428	38672	2351	1613045
30.	Virudhunagar	262284	39977	325946	305111	14073	527	947918
	Total	9141043	1658415	5593485	8177420	320868	50798	24942029
	1							

Source: Commissioner and Director of Animal Husbandry and Veterinary Services, Chennai-6.

The cattle population was concentrated in 13 districts which together accounted for more than 60 percent of the total cattle population in the state. Of these districts, Villupuram topped the list and shared nine percent of the total cattle population followed by Salem (6.5 percent) and Vellore (5.5 percent) in that order.

Buffalo's population was found to be higher in the districts of Dharmapuri, Erode, Kancheepuram, Namakkal, Salem and Thiruvallur and they put together accounted for 55.25 percent of the total goat population of the State.

Sheep population was found to be higher in the districts of Coimbatore, Dharmapuri, Dindigul, Erode, Kancheepuram, Karur, Krishnagiri, Madurai, Namakkal, Pudukkottai, Ramanathapuram, Salem, Sivagangai, Thiruvallur, Thiruvannamalai, Thoothukudi, Thirunelveli, Tiruchirapalli, Vellore, Villupuram and Virudhunagar and they together accounted for 94.62 percent of the total sheep population of the state. Sheep population was found to be the highest in Erode (9.05 per cent) followed by Tirunelveli (8.71 per cent) and Salem (6.63 percent) districts in that order.

Tamil Nadu Livestock Agency has brought all breeding activities under a single umbrella and artificial insemination programme is being carried out effectively. As per livestock census of 2004, a decline in breedable population was noticed from 47.12 lakhs in 2001 to 41.17 lakhs in respect of cattle and from 15.15 lakhs to 9.01 lakhs in rest of buffaloes. The share of exotic and crossbred cattle accounted for 62.9 percent and that of indigenous and native pure worked out to 37.1 percent of the total breedable cattle population. Among the buffaloes population, the share of murrah and graded was 32.08 percent while indigenous buffaloes accounted for the remaining 67.92 percent in 2004. The details are furnished in Table 2.55.

10.18

15.15

6.12

9.01

(in lakhs) 1997 2004 2001 Category Cattle Exotic and Cross 12.61 18.78 25.89 Indigenous and Native Pure 32.02 28.34 15.28 Total 44.63 47.12 41.17 **Buffaloes** 4.97 Murrah and Graded 3.74 2.89

Table 2.55. Breedable Cattle Population

Source: Commissioner and Director/ of Animal Husbandry and Veterinary Services, Chennai – 6.

13.64

17.38

Milk Production

Indigenous

Total

Milk Production in Tamil Nadu rose from 47.53 lakh tonnes in 2003-04 to 47.84 lakh tonnes in 2004-05 and to 54.74 lakh tonnes in 2005-06. The state's share in total milk production at the All India level was 5.4 percent in 2003-04 and 5.3 percent in 2004-05. The percapita availability of milk per day which witnessed a marginal increase from 209 gms in 2003-04 to 210 gms in 2005-06 and further increased to 234 gms in 2005-06. The details are furnished in Table 2.56.

Table 2.56. Milk Production and Availability

Year	Tamil Nadu	All India	Percentage Share of	Percapita availability (gms.per day)	
	(Lakh tonnes)		Tamil Nadu	Tamil Nadu	All India
2003-04	47.53(2.8)	881(1.6)	5.4	209(2.5)	231(0.4)
2004-05	47.84(0.7)	907(2.9)	5.3	210(0.5)	232(0.4)
2005-06	54.74(14.4)	-	-	234(11.4)	-

(Figures in brackets indicates percentage change over the previous year)

Source: Commissioner and Director of Animal Husbandry and Veterinary Services, Chennai – 6.

The details of district wise milk production are furnished in Table 2.57. It could be seen from the table that milk production was found to be the highest in the districts of Salem (7.94 percent), Vellore (6.66 percent), Coimbatore (6.06 per cent), Erode (5.95 per cent), Tirunelveli (5.18 per cent) and Namakkal (4.90 per cent) and they together accounted for 36.69 percent of total milk production of Tamil Nadu State in 2005-06.

Table 2.57. District wise Milk Production

(000' Tonnes)

Sl.No.	District	2003-04	2004-05	2005-06
1.	Chennai	34.3	27.3	4.3
2.	Kancheepuram	216.2	231.2	141.7
3.	Thiruvallur	223.6	202.0	169.8
4.	Cuddalore	243.7	211.7	197.5
5.	Villupuram	267.7	275.6	211.2
6.	Vellore	306.4	320.4	364.5
7.	Thiruvannamalai	259.0	269.1	248.4
8.	Salem	254.6	248.1	434.5
9.	Namakkal	195.3	205.4	268.5
10.	Dharmapuri #	225.8	155.3	208.9
11.	Krishnagiri	0	92.0	178.4
12.	Coimbatore	255.8	247.8	332.0
13.	Erode	246.7	287.2	325.8
14.	Thiruchirappalli	172.5	163.3	222.6
15.	Karur	91.9	93.3	99.2
16.	Perambalur	136.9	129.4	149.1
17.	Pudukottai	121.1	146.8	115.7
18.	Thanjavur	129.7	131.1	188.9
19.	Thiruvarur	93.7	111.7	166.8
20.	Nagapattinam	134.2	120.1	140.6
21.	Madurai	167.9	153.2	170.8
22.	Theni	117.8	121.2	92.1
23.	Dindigul	216.4	191.7	178.2
24.	Ramanathapuram	74.1	72.4	64.2
25.	Virudhunagar	93.5	102.3	174.7
26.	Sivagangai	89.7	80.2	94.0
27.	Tirunelveli	153.5	160.9	283.9
28.	Thoothukudi	90.9	105.9	99.8
29.	Nilgiris	60.3	60.3	45.6
30.	Kanniyakumari	79.5	66.7	102.1
	State	4752.70	4783.8	5473.6

Composite Dharmapuri district

Source: Commissioner and Director of Animal Husbandry and Veterinary Services, Chennai-6.

Poultry

Poultry farming provides livelihood support besides contributing to nutritional requirements of the population. Poultry activity creates employment opportunities and provides income. The State ranks second in egg production in the country and accounts for 17.7 per cent of the total poultry population in India. The poultry population over different livestock census is furnished in Table 2.58.

Table 2.58. Poultry Population of Tamil Nadu (in lakhs)

S.No	Year	Poultry
1	1982	182.84 (27.44)
2	1989	215.70 (17.97)
3	1994	238.54 (10.59)
4	1997	365.11 (53.6)
5	2004	865.9 (137.16)

Figures in parenthesis are percentage changes over previous census Source: Commissioner and Director of Animal Husbandry and Veterinary Service, Chennai

The poultry population had increased from 182.84 lakhs in 1982 to 865.9 lakhs in 2004. In 2004, poultry population had recorded an increase of 137.16 per cent over previous census. Poultry rearing has become a commercial activity in the districts of Namakkal, Erode and Coimbatore. The district-wise poultry population along with population of Horses, Donkeys and Dogs as per 2004 census is furnished in Table 2.59.

Table 2.59. District-wise Poultry and other Animals Population

(in numbers)

District	Poultry	Donkeys	Dogs	Fowls	Horses and ponies
Chennai	33345	7	39878	24276	27
Kancheepuram	353844	1178	106369	328516	422
Thiruvallur	654317	735	120628	608673	1336
Cuddalore	333043	54	41264	323491	1219
Villupuram	732090	680	144690	732743	1671
Vellore	1155183	806	99894	1100428	353
Thiruvannamalai	252314	153	36575	246160	142
Salem	2678324	478	165716	2674079	1208
Namakkal	19275185	146	84913	19267146	1354
Dharmapuri	1549232	4040	90855	1546253	134
Krishnagiri	1293388	7323	47348	4289526	161
Erode	5270334	3074	152827	5180399	827
Coimbatore	42028686	3437	153685	41968683	2277
Nilgiris	75599	83	120592	74932	586
Tiruchirappalli	940619	5406	37699	932418	1309
Karur	498470	123	31746	493883	432
Perambalur	262330	477	34520	260483	89
Pudukottai	476110	1102	46994	472311	362
Thanjaur	634546	9	88402	626018	142
Nagapattinam	402045	9	83108	385633	864
Thiruvarur	339253	6	43076	336659	746
Madurai	685529	1046	58658	675968	477
Theni	517155	1213	18095	514278	894
Dindigul	2037985	569	86561	2030614	4321
Ramanathapuram	330309	230	15855	324317	396
Virudhunagar	890571	346	46520	881664	181
Sivagangai	720831	45	47169	715907	1800
Thirunelveli	1218583	961	67877	1205376	245
Thoothukudi	450229	2257	35400	447566	1011
Kanyakumari	463824	13	697175	451529	2
State	86591273	25779	2716631	86119929	24988

Source: Tamil Nadu – An Economic Appraisal, 2005-06 Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai.

From the table, it could be seen that poultry population was found to be high in the districts of Coimbatore, Namakkal, Erode, Salem, Dindigul and Dharmapuri in that order and they put together accounted for 84.11 per cent of total poultry population of the State. Poultry population was found to be the least in the Nilgris district.

Egg Production

Tamil Nadu is one of the leading states in egg production and export. The ecofriendly backyard poultry rearing is practiced along with commercial poultry farming in the State. The egg production in the State increased from 3,784 million numbers in 2003-04 to 6,395 million numbers in 2004-05 but declined marginally to 6,223 million numbers in 2005-06. The district-wise egg production details over years are furnished in Table 2.60

Table 2.60. Details of Egg Production

(in lakh numbers)

District	2003-04	2004-05	2005-06
Chennai	55.4	50.8	7.2
Kancheepuram	266.8	402.8	292.6
Thiruvallur	633.3	509.2	170.2
Cuddalore	201.4	153.1	109.8
Villupuram	239.7	451.8	246.2
Vellore	440.5	278.9	250.8
Thiruvannamalai	201.6	146.5	100.4
Salem	720.4	3316.3	2513.9
Namakkal	24686.1	40177.1	39828.9
Dharmapuri and Krishnagiri	1919.9	2041.2	1769.4
Coimbatore	2517.2	697	816.8
Erode	2268.9	10345.4	10924.7
Tiruchirappalli	437.7	1508.5	663
Karur	525.5	680.3	2110.5
Perambalur	107	93.3	136.7
Pudukottai	182.9	504.1	111.6
Thanjavur	245.8	455.8	440.2
Thiruvarur	187.9	176.1	123.3
Nagapattinam	131.2	146.7	87.9
Madurai	197.1	167.1	125
Theni	183.2	271.5	67.8
Dindigul	267.1	233.6	188.9
Ramanathapuram	75.5	80.7	80.1
Virudhunagar	168.2	255.5	358.7
Sivagangai	219.5	155.8	119.6
Thirunelveli	156.3	149.1	155.2
Thoothukudi	254.3	285.6	313.9
Nilgiris	20.1	15.9	18.7
Kanyakumari	326.3	198	93.6
State	37835.8	63947.70	62225.4

Source: Tamil Nadu – An Economic Appraisal, 2005-06 Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai.

Namakkal district has became an "egg basket" and accounted for 65 per cent of total egg production in the State. Next to Namakkal district, Erode district accounted for 17.08 per cent of total egg production in the State. These two districts shared nearly 82.00 per cent of the total egg production of the State.

Veterinary Care Infrastructure

In order to provide health care to animals, promote scientific breeding of cattle and control of diseases, the State has created and maintains the animal care institutions as detailed in Table 2.61.

Livestock health care prevents loss of lives and helps to improve the productivity of livestock. Development Programmes like "Kalnadai Padhukappu Thittam" is being implemented in the State. The number of animals treated in the State rose by 8.7 percent from 186.15 lakhs in 2004-05 to 202.41 lakhs in 2005-06. The vaccination and deworming done put together had increased from 426.60 lakhs in 2004-05 to 635.92 lakhs in 2005-06.

Table 2.61. Details of Animal Health Care Activities

(in Lakh Numbers)

S.No	Items of Activities	2004-05	2005-06
1	Animals Treated	186.15	202.44
2	Vaccination done	344.22	449.91
3	Deworming done	82.38	186.01
4	Castration done	6.58	6.44
5	Artificial Incrimination Performed	29.23	32.87

Source: Commissioner and Indicator of Animal Husbandry and Veterinary Services, Chennai – 6.

2.11. Fisheries

Tamil Nadu has a coastal line of 1,076 kms sharing 13.3 per cent of the nation's coast line of 8118 kms. The State possesses 0.19 million sq.km of Exclusive Economic Zone (EEZ) accounting for 9.7 per cent of the country's Exclusive Economic Zone of

2.02 million sq.kms. The sector provides employment to 10.02 lakhs persons and contributes Rs.1,99,572 lakhs to foreign exchange. The inland fisheries sector in the State spread over 3.71 lakh hectares of water spread area comprising reservoirs, major irrigation and long seasonal tanks, short seasonal tanks and ponds, estuaries and backwaters.

2.11.1. Fish Production

Overall fish production during 2005-06 was estimated at 5.46 lakh tonnes which accounted for an increase of 38.2 percent over the production in 2004-05. More than 70 percent of total production was accounted for by marine fish. The details are furnished in Table 2.62.

Table 2.62 Fish Production in Tamil Nadu (in Lakh Tonnes)

Sl.No.	Years	Inland	Marine	Total
1.	2003-04	0.77	3.81	4.58
		(-24.5)	(0.50)	(-4.8)
2.	2004-05	0.87	3.08	3.95
		(13.0)	(-19.2)	(-13.7)
3	2005-06	1.56	3.90	5.46
		(79.3)	(26.6)	(38.2)

Figures in parentheses indicate percent variation over previous year.

Source: Commissioner of Fisheries, Chennai-6

2.11.2. Fish Export

The State has rich potential for fish culture and Tamil Nadu is one of the major fish exporting States in India. The quantity of fish and fish products exported was 0.68 lakh tonnes in 2003-04 which improved to 0.71 lakh tonnes in 2004-05 and 0.72 lakh tonnes in 2005-06. The share in fish export accounted for 15 percent of the total export of the country in 2005-06.

2.12. Agricultural Marketing

The entire thrust and efficiency of Agriculture sector is dependent on marketing support so that the farmer's risk is minimized besides getting assured and fair returns. An

efficient marketing system holds the key to the success of diversification of agricultural production. Market intelligence has a vital role to play. Tamil Nadu Agricultural University has a market intelligence unit which provides vital information to framers on marketing.

At present 21 market committees are functioning in Tamil Nadu at the district level. Under these market committees 273 regulated markets, 15 check posts, 108 rural godowns and 108 grading centers are functioning. Nearly 42 agricultural commodities, *viz.*, cereals, oilseeds, pulses, cotton, turmeric etc. were notified. The total value of agricultural produce transacted through agricultural marketing cooperatives had improved and more than doubled from Rs. 307.25 crores in 2004-05 to Rs. 674.26 crores in 2005-06. The details are furnished in Table 2.63.

Table 2.63. Value of Agricultural Produce sold by Marketing Co-operatives

(Rs. in Crores)

(======================================			,	
S.No	Crops	2003-04	2004-05	2005-06
1	Food grains	38.73	35.97	32.60
2	Cotton	90.43	94.59	69.81
3	Chillies	2.81	2.80	2.18
4	Sugarcane	92.72	79.74	466.72
5	Spices	0.11	44.84	28.79
6	Oilseeds	16.09	13.05	18.07
7	Others	99.99	36.24	56.08
Total		340.88	307.25	674.26

Source: The Registrar of Cooperatives, Chennai

A detailed analysis of infrastructure, administrative and operation constraints in 23 farmers markets was taken up by the Centre for Agricultural Rural Development Studies. The results showed that there is continued patronage from farmers as well as consumers and most of these markets could with stand the test of time against many odds, such as reduced support to the markets and political and official apathy towards the markets. The consumers are also benefited by good quality and freshness of the vegetables besides getting a wide variety of vegetables in a single place. The major infrastructure constraints faced by the farmers markets include the non availability of scientific storage

facilities, adequate number of stalls, canteens, rest room facilities and drinking water. Eventhough waste disposal is not a problem the utilization of waste for productive purposes remains elusive in most of the farmers markets.

2.13. Agricultural Inputs

Among the improved agricultural technologies, seeds, fertilizers and pesticides are the most important ones. The improved seeds have more genetic vigour for high yield potential and the fertilizers and the balanced nutrient management trigger the potentials for increasing the yield levels. Therefore, the timely and adequate availability of these inputs, that too at affordable prices to farmers, are the essentials to keep agriculture growing. The details of agricultural inputs supplied to the farmers in the State over a period of five years from 2001-02 to 2005-06 are briefly discussed in this section.

i) Seeds

The quantities of seeds distributed over five years period from 2001-02 to 2005-06 are presented in Table 2.64

Table 2.64. Distribution of improved Seeds by Crops (in tonnes)

Sl. No.	Crops	2001-02	2002-03	2003-04	2004-05	2005-06
I.	FOOD GRAINS					
a.	Paddy	18799	15483	12985	10738	16681
b.	Millet	404	363	351	363	489
c.	Pulses	1544	941	1273	1340	1424
	Total (I)	20747	16787	14609	12441	18594
II.	NON – FOOD G	RAINS				
a.	Oilseeds	4202	4269	3127	3261	4171
b.	Cotton	174	124	163	154	235
	Total (II)	4376	4393	3290	3415	4406
	Grand Total	25213	21180	17899	15856	23000
	(I + II)					

Source: Tamil Nadu An Economic Appraisal – 2005-06, Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai

It could be discerned from the table that 16,681 tonnes of paddy seeds were distributed to the farmers during 2005-06 and it was fairly higher than that distributed in the previous three years. However, as compared to 18,799 tonnes distributed in 2001-02 it was lower. About 489 tonnes of millets were distributed in 2005-06 and it is the maximum as compared to earlier years. Further 1,424 tonnes of pulses were distributed to the farmers in 2005-06 and it was higher as compared to earlier three years and lower as compared to that of 2001-02. Thus, a total of 18,594 tonnes of food grain seeds were distributed to the farmers in 2005-06 and it was higher than that of previous three years. As regards, non-food grains, oilseeds and cotton seeds were distributed to the tune of 4,406 tonnes of which oilseeds accounted for 4,171 tonnes and cotton accounted for 235 tonnes. Again, these quantities are lower than that of 2001-02 and higher than that of previous three years. The production as well as distribution of seeds was almost on par, with minor variations in all the five years under question. The minor variations in the quantities of seeds produced and distributed among the five years, might be mainly due to the variations in the behaviour of the monsoons.

Perusal of the details on seed replacement rates targeted and achieved in 2003-04 given in Table 2.65 indicate that the targets in paddy, varietal cholam, maize, pulses and oilseeds could not be achieved.

Table 2.65. Seed Replacement by Crops - Percentage to Total Cropped Area

	Crop	2003-04	
A.	FOOD CROPS	Target	Actual
1.	Paddy	17	13
2.	Varietal chloam	8	1.5
3.	Cumbu	6	7.49
4.	Ragi	6	10.57
5.	Maize	8	2.4
6.	Pulses	12.5	8.6

Table 2.65. Contd.....

	Crop	2003-04			
В.	NON-FOOD CROPS				
1.	Oilseeds	5	3.5		
a.	Groundnut	15	9		
b.	Gingelly	50	12		
c.	Sunflower	20	5		
d.	Soybean	30	1		
e.	Castor	15 (Irri)	15 (Irri)		
2.	Cotton	10 (RF)	10 (RF)		

Source: Statistical Handbook of Tamil Nadu, 2004

The shortfalls indicate the need for increasing seed production particularly in State seed farms. Moreover, in the recent years, the farmers buying behaviour with reference to seeds have changed towards the use of more and more purchased seeds. This trend again reinforces the need for production and distribution of more quality seeds each year.

ii) Fertilizers

The details given in Table 2.66 indicate the trend in fertilizer distribution in the State.

Table 2.66. Distribution of Nitrogen, Phosphorus and Potash: by Districts

(in thousand tonnes)

						mousan	housand tonnes)			
Sl.		1	Nitrogei	1	Pł	nosphor	us		Potash	
No	District	2003-	2004-	2005-	2003-	2004-	2005-	2003-	2004-	2005-
		04	05	06	04	05	06	04	05	06
1.	Kancheepuram	0.16	2.13	0.25	0.07	0.09	0.11	0.08	0.16	0.17
2.	Thiruvallur	0.15	0.18	0.20	0.07	0.07	0.09	0.04	0.06	0.07
3.	Cuddalore	0.22	0.26	0.30	0.08	0.10	0.12	0.09	0.13	0.14
4.	Villupuram	0.29	0.37	0.42	0.14	0.21	0.26	0.12	0.18	0.20
5.	Vellore	0.20	0.24	0.28	0.08	0.10	0.13	0.07	0.08	0.09
6.	Thiruvannamalai	0.17	0.22	0.26	0.07	0.09	0.11	0.05	0.08	0.09
7.	Salem	0.18	0.21	0.23	0.08	0.11	0.13	0.15	0.22	0.24
8.	Namakkal	0.04	0.05	0.05	0.02	0.02	0.03	0.01	0.02	0.02
9.	Dharmapuri	0.06	0.05	0.06	0.04	0.36	0.04	0.03	0.04	0.04
10.	Coimbatore	0.19	0.24	0.28	0.07	0.07	0.08	0.18	0.22	0.24
11.	Erode	0.18	0.22	0.25	0.11	0.15	0.18	0.08	0.11	0.13
12.	Tiruchirappalli	0.26	0.34	0.39	0.11	0.18	0.22	0.16	0.21	0.29
13.	Karur	0.03	0.04	0.05	0.01	0.02	0.02	0.02	0.02	0.02
14.	Perambalur	0.07	0.08	0.09	0.03	0.04	0.05	0.02	0.02	0.02
15.	Pudukottai	0.21	0.29	0.33	0.11	0.16	0.20	0.09	0.13	0.14
16.	Thanjaur	0.26	0.34	0.40	0.07	0.10	0.12	0.09	0.14	0.15
17.	Thiruvarur	0.15	0.21	0.25	0.05	0.07	0.08	0.03	0.06	0.07
18.	Nagapattinam	0.15	0.18	0.21	0.04	0.06	0.07	0.05	0.08	0.08
19.	Madurai	0.13	0.17	0.20	0.06	0.07	0.09	0.08	0.11	0.13
20.	Theni	0.10	0.13	0.15	0.05	0.06	0.08	0.06	0.08	0.09
21.	Dindigul	0.10	0.15	0.17	0.05	0.06	0.08	0.04	0.06	0.06
22.	Tamnathapuram	0.06	0.09	0.11	0.02	0.04	0.04	0.01	0.01	0.01
23.	Virudhunagar	0.05	0.07	0.09	0.02	0.02	0.03	0.03	0.05	0.06
24.	Sivagangai	0.05	0.06	0.29	0.01	0.03	0.11	0.01	0.01	0.14
25.	Thirunelveli	0.17	0.25	0.98	0.07	0.1	0.02	0.08	0.12	0.01
26.	Thoothukudi	0.05	0.09	0.09	0.02	0.02	0.03	0.01	0.03	0.03
27.	Nilgiris	0.05	0.03	0.14	0.01	0.01	0.01	0.04	0.04	0.04
28.	Kanyakumari	0.05	0.06	0.07	0.03	0.03	0.04	0.04	0.06	0.07
	State	3.78	6.75	5.59	1.59	2.11	2.57	1.76	2.53	2.84

Source: Tamil Nadu An Economic Appraisal – 2005-06, Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai

It could be discerned from the table that the maximum of 42000 tonnes of 'N' was distributed in Villupuram district followed by Thanjavur, Tiruchirapalli, and Pudukottai. However, in the districts of The Nilgiris, Kanyakumari, Thoothukudi, Tirunelveli, and Virudhunagar less than 15,000 tonnes of Nitrogenous fertilizers were distributed.

A maximum of 26,000 tonnes of phosphatic fertilizers was distributed in Villupuram district, followed by the districts of Tiruchirapalli (22,000 tonnes), Pudukottai (20,000 tonnes), Erode (18,000 tonnes) etc. The distribution was hovering around 10,000 tonnes in the districts of Kancheepuram, Thiruvallur, Cuddalore, Vellore, Thiruvannamalai, Salem, Thanjavur, Madurai, Nagapattinam and Sivagangai, Coimbatore, Dindigul and Theni. In the remaining districts, the distribution of phosphatics fertilizers varied from 1000 to 5000 tonnes.

With reference to K₂O distribution, Tiruchirapalli had a record high of 29,000 tonnes followed by Coimbatore and Salem with 24000 tonnes each. The distribution was around 15,000 tonnes in the districts of Cuddalore, Erode, Pudukottai, Thanjavur and Madurai. It was around 10,000 tonnes in Thiruvallur, Vellore, Thiruvannamalai, Thanjavur, Nagapattinam, Theni and Kanyakumari. In all the other districts, the distribution of K₂O varied from 1000 tonnes in Tiruneveli and Ramanathapuram districts to 6000 tonnes in Dindigul district.

The disproportionate distribution of NPK among the districts in a way indicates the imbalanced application of fertilizers by the farmers. Therefore, the farmers have to be educated and trained in the application of proper proportions of NPK in the crop fields.

Introduction of bio-fertilizers is yet another recent land mark that adds to the increased crop productivity with the least cost. However, it is yet to gain momentum among farmers and hence a special thrust in the plan may be given for popularizing bio-fertilizers among the farmers of Tamil Nadu.

The research study carried out in the Department of Agricultural Economics, Tamil Nadu Agricultural University indicated that the Integrated Fertilizer Management (IFM) through the use of judicious mix of Organic Manure, Bio-fertilizers, Green Manures and Chemical Fertilizers require urgent attention for minimizing the adverse environmental effects in the long run. Similarly, the study called for effective implementation of Integrated Pest Management (IPM) to interanalise the pesticides externalities at the farm level.

iii) Pesticides

The particulars on pesticides consumption in the State over a period of 23 years from 1982-83 to 2004-05 are furnished in Table 2.67.

Table 2.67. Pesticide Consumption (Technical Grade in MT)

Sl.No.	Year	Target	Achievement
1.	1982-83	8800	7437
2.	1983-84	9600	10367
3.	1984-85	10200	10926
4.	1985-86	10985	8667
5.	1986-87	11200	8642
6.	1987-88	11600	8237
7.	1988-89	12500	8594
8.	1989-1990	13000	9970
9.	1990-1991	10200	3923
10.	1991-92	10200	4840
11.	1992-93	10500	4890
12.	1993-94	10550	5010
13.	1994-95	9500	3394
14.	1995-96	4000	2080
15.	1996-97	3279	1851
16.	1997-98	2929	1809
17.	1998-99	2950	1730
18.	1999-2000	2782	1685
19.	2000-01	2735	1663
20.	2001-02	2820	1577
21.	2002-03	2934	1605
22.	2003-04	2564	1434
23.	2004-05	2592	2466

Source: Tamil Nadu An Economic Appraisal – 2005-06, Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai

Perusal of the details in the above table, clearly exhibits the fact that the utilization of pesticides was around 10,000 tonnes upto 1989-90 and it started declining thereafter drastically reaching 2466 tonnes of technical grade in 2004-05. The drastic reduction in the pesticides use was primarily due to the advocacy of the concept of Economic Threshold Level (ETL) and the concept of Integrated Pest Management (IPM) as well. The introduction of biopesticides also reduced the chemical uses. Thus, the need-based plant protection measures are becoming popular among the farmers in the State, so as to reduce the cost of production of the crops and the unnecessary environmental pollution with chemicals. However, to make the concepts of ETL and IPM more popular among all categories of farmers, effective extension education with field demonstrations are the need of the hour, on which the planned activities have to be focused in the future.

Use of bio-pesticides on the other hand, is gradually increasing since 1997-98 as could be visualized from Table 2.68.

Table 2.68. Bio-pesticides Distribution in Tamil Nadu State

Sl.No.	Year	Quantities dis	tributed	
S1.1NU.	1 ear	Dust in MT	Liquid in Lts.	
1.	1997-98	16.80	103986	
2.	1998-99	18.30	98890	
3.	1999-2000	23.00	90320	
4.	2000-2001	23.60	87400	
5.	2001-2002	22666	72736	
6.	2002-2003	23301	72736	
7.	2003-2004	22507	67006	
8.	2004-2005	20682	63593	

Source: Tamil Nadu An Economic Appraisal – 2005-06, Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai.

It could also be observed from the table that the demand for bio-pesticides in dust form is picking up as compared to that of liquid form.

The study on pesticide use efficiency of major pesticides consuming crops revealed that the pesticides had marginal negative impact on yield of paddy in thalady season and insignificant in other two seasons. The output elasticity for other crops were -0.25 in cotton, -0.079 in groundnut, 0.008 in chillies, -0.124 in brinjal and -0.105 in tomato. The important factors which influenced farmers' choice of chemicals were his previous experience with that chemical, recommendations of dealers, progressive farmers, department officials and field work of chemical companies. In Paddy cultivation farmers' awareness on the different recommended practices ranged from 20-100 percent but adoption was relatively low and it varied from nil to 60 percent for different Integrated Pest Management (IPM) practices.

2.14. Sericulture

The state has a long tradition of producing silk fabrics. The silk sarees of Kancheepuram, Arni, Kumbakonam and Rasipuram have earned a niche in the world of fabrics. Mulberry cultivation in the State has declined from 11,060 hectares in 2000-01 to 6613.93 hectares as on 1.4.2006. An additional area of 2568.39 hectares has been brought under mulberry cultivation. The production of the cocoon in the State had increased from 3101.20 metric tonnes in 2004-05 to 524.90 metric tonnes in 2005-06 and the production of raw silk had increased from 443.00 metric tonnes to 738.80 metric tonnes in 2005-06. The production of raw silk was found to be high in the districts of Krishnagiri and Erode. The value of raw silk stood at Rs.8577.47 lakhs in Tamil Nadu State during 2005-06. The details are furnished in Table 2.69.

Table 2.69. District wise Details of Mulberry Cultivation

				As on	01.04.2006			
District	Irri-gated (ha.)	Rain-fed (ha.)	Total (ha.)	Mulberry Area newly Planted (ha.)	Pro-duction of Reeling Cocoon (MT)	Value of Reeling Cocoons (Rs.in lakhs)	Pro- duction of Raw Silk (MT)	Value of Raw Silk (Rs.in lakhs)
Kancheepuram	1.70	0.00	1.70	0.90	0.50	0.63	0.10	1.16
Thiruvallur	22.30	0.00	22.30	8.90	8.50	10.75	1.20	13.93
Cuddalore	17.10	0.00	17.10	12.50	5.50	6.96	0.80	9.29
Villupuram	92.08	1.24	93.32	35.88	64.80	81.97	9.00	104.49
Vellore	484.80	51.26	536.06	139.60	379.70	480.32	52.60	610.69
Thiruvannamalai	100.16	20.02	120.18	40.42	68.20	86.27	9.50	110.30
Salem	311.20	0.58	311.78	175.82	157.00	198.61	22.10	256.58
Namakkal	248.96	10.80	259.76	116.20	192.50	243.51	26.70	309.99
Dharmapuri	758.04	0.00	758.04	293.08	481.60	609.22	67.30	781.35
Krishnagiri	1479.66	0.00	1479.66	408.46	1445.40	1828.43	202.70	2353.35
Erode	1028.99	26.44	1055.43	431.33	1174.10	1485.24	167.60	1945.84
Coimbatore	730.18	0.00	730.18	288.80	556.00	703.34	81.00	940.41
The Nilgris	0.00	25.04	25.04	14.30	8.40	10.63	1.20	13.93
Thiruchirapalli	83.96	0.88	84.84	49.40	48.20	60.97	6.90	80.11
Karur	34.50	0.00	34.50	26.50	18.40	23.28	2.50	29.03

Table 2.69. Contd.....

				As on	01.04.2006			
District	Irri-gated (ha.)	Rain-fed (ha.)	Total (ha.)	Mulberry Area newly Planted (ha.)	Pro-duction of Reeling Cocoon (MT)	Value of Reeling Cocoons (Rs.in lakhs)	Pro- duction of Raw Silk (MT)	Value of Raw Silk (Rs.in lakhs)
Perambalur	22.00	0.00	22.00	12.80	9.20	11.64	1.30	15.09
Pudukkottai	89.20	0.00	89.20	37.20	51.00	64.52	7.00	81.27
Thanjavur	49.20	0.00	49.20	30.20	16.50	20.87	2.30	26.70
Nagapattinam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thiruvarur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Madurai	48.20	0.00	48.20	25.70	26.30	33.27	3.60	41.80
Theni	275.40	0.00	275.40	129.90	171.00	216.32	24.30	282.12
Dindigul	385.84	0.00	385.84	174.10	230.50	291.58	33.50	388.94
Ramanathapuram	10.60	0.00	10.60	4.80	1.90	2.40	0.30	3.48
Virudhunagar	38.80	0.00	38.80	20.80	21.20	26.82	2.90	33.67
Sivagangai	11.60	0.00	11.60	10.20	0.50	0.63	0.10	1.16
Tirunelveli	143.20	0.00	143.20	67.60	82.20	103.98	11.50	133.52
Thoothukudi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kanyakumari	6.52	3.48	10.00	13.00	5.80	7.34	0.80	9.29
Total	6474.19	139.74	6613.93	2568.3.9	5224.90	6609.50	738.80	8577.47

Source: Tamil Nadu – An Economic Appraisal, 2005-06, Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai

It could be seen from the table that the sericulture industry is yet to develop in Tamil Nadu State. Majority of the farmers are aware of the economic benefit of mulberry cultivation and silkworm rearing and the associated production technologies. The cultivation of mulberry is highly localized in the districts of Kanyakumari, Erode, Dharmapuri and Coimbatore that too with less than 1500 acres each and in all other districts, the area under mulberry is very meager. The rearing units are limited in numbers.

2.15. Mineral Wealth

Tamil Nadu has significant amount of mineral reserves such as lignite (87%), vermiculite (66 per cent) garnet (42%), Zircon (38%), graphite (33%), limonite (28%), rutile (27%), monazite (25%) and magnesite (17%). India's leading steel producer SAK has a steel plant in Salem.

The rich and varied mineral resource of the Tamil Nadu has contributed handsomely towards the development and industrialization of the State. It is one of the leading States in the reserves of the following minerals: lignite, garnet, magnesite, quartz, feldspar, clay, limestone, baurite, graphite and granite. The mining in Tamil Nadu are industry-friendly and pro-active. The potential reserves of the various minerals offer good business opportunities for the investors.

Geographically, the hilly terrains and the middle level plain contain crystalline hard rocks such as charnokites, granite, gneiss, khondalites, leplynites, metamorphic gneisses with detached occurrence of crystalline limestone, iron quartzo feldspathic veins and basic intrusive such as doleintes and anorthosites.

Coastal zones contain sedimentary limestones, clay, laterites, heavy mineral sands and silica sands. The hill ranges are sporadically capped with laterites and bauxites of residual native.

Gypsum and phasphatic nodules occur as sedimentary veins in rocks of the creta age. Gypsum of secondary replacement occurs in some of the areas adjoining the foot hills of the Western Ghats. Lignite occurs as sedimentary beds of tertiary age. The black granite and other hard rocks are able for high polish. These granites occur in most of the districts except the coastal area. Potential of gold deposits in Maharajakadai region of Dharmapuri district as southern extension of kolar gold fields and in the Gudalur –Devala region in the Nilgiris district exist.

2.15.1. Mineral Receipts

The diligent measures for mineral administration which have been taken by the Department of Logy and Mining find reflection in the generation of the sizeable revenue receipts for the State and the details are given in Table 2.70.

Table 2.70. Revenue Receipts of Mines

(Rs. in crores)

Year	Amount
1999 – 2000	124.86
2000 – 2001	163.12
2001 – 2002	254.26
2002 – 2003	317.20
2003 – 2004	474.81

The Department has to take strict measures to increase mineral revenue by better enforcement, guidance and encouragement to mineral based industries and with various explorations.

2.16. Agro-Based Industries

To the ideal climatic conditions, a strong agro-based food industry has emerged in the State. The State is a world leader in agricultural production with a high yield per hectare of sugarcane, rice and groundnut. The Madurai - Dindigul belt in Tamil Nadu has favourable climatic conditions for the cultivation of a variety of fruits and vegetables.

The floriculture industry is likely to get a thrust with the area around Coimbatore, Dharmapuri and the Nilgiris being earmarked as ideal locations for the cultivation of flowers such as rose and chrysanthemum. Its coastline (1000 kms), opportunities for marine products based industries exist.

Among the large and medium scale industries, more than 40 percent are depending on the agricultural sector as a source of their raw materials and almost half of the industries are agro-based. The major segments of the agro - based industries comprise of Coir retting units, dairies, edible oils of vanaspathi industries, fermentation industries (bistelleries, maltries and brevieries), flour mills, food and fruit processing industries, jute retting units, pulp and paper mill, starch (maize product industries), sugar mills etc.

Presently agro-based industries in Tamil Nadu have welcomed the measures to encourage the export of agri - produce and the proposals on setting up agri - export zones. This may enrich the scope fore commercial agriculture.

SIPCOT has promoted an agro park at Nilakottai and Dindigul. Realizing the tremendous potential in the State, a number of joint ventures involving Dutch companies are, being set up in the area involving major corporate. TIDCO is developing a floriculture park; TANFLORA at Hosur and 6 B 10 - Valleys including an Economic centre and a Bio-incubator park in collaboration with Cornell University, USA.

2.17. Demographic Details

Tamil Nadu is the seventh most populous state in India with a population of 66,396,000, as of July 1,2008 (approximately 5.79% of India's population). It is the eleventh most densely populated state in India. In 2008, its population density was 511 persons per square kilometer, having increased from 429 in 1991, significantly higher than the Indian average of 324 persons per square kilometer. 44% of the state's population lives in urban areas, the highest in India.

Tamil Nadu's population grew by 11.19% between 1991 and 2001, the second lowest rate for that period (after Kerala) amongst populous states (states whose population exceeded 20 million in 2001). Its decadal rate of population growth has declined in every decade since 1971, one of only three populous states (along with Kerala and Orissa) to show this trend. The state has registered the lowest fertilily rate along with Andhra Pradesh and Goa in India in year 2005-06 with 1.8 children born for each woman, lower than required for population sustainability. According to National Family Health Survey-3 (NFHS-3), Tamil Nadu registered a fertility rate of 1.8, the lowest in India in year 2005-2006.

The salient features of population in Tamil Nadu State are given in Table 2.71. It could be seen that the population of Tamil Nadu State had increased from 30.12 millions in 1951 to 62.41 millions in 2001. The population had increased nearly 2.07 times over a period of six decades. The population growth was confined at lower levels: the rate of 1.83 per cent in 1981 came down to 1.44 per cent in 1991 and further to 1.11 per cent in 2001. The male population had increased from 22.79 millions in 1951 to 31.40 millions in 2001. Similarly the female population had increased from 7.33 millions in 1951 to 31.01 millions in 2001. There had been a gradual increase in female population unlike that of male population which witnessed a decline in 1961.

Table 2.71. Salient Features of Population in Tamil Nadu

Year	Population in million			Literacy	rate (Pei	Decennial growth	
1 cai	Total	Male	Female	Persons	Male	Female	rate (Percentage)
1951	30.12	22.79	7.33	20.9	31.7	10.1	14.7
1961	33.69	16.91	16.78	31.4	44.5	18.2	11.9
1971	41.2	20.83	20.37	39.5	51.8	26.9	22.3
1981	48.41	24.49	23.92	46.8	58.3	35	17.5
1991	55.86	28.30	27.56	62.7	73.8	51.3	15.4
2001	62.41	31.4	31.01	73.5	82.3	64.4	11.7

Source: Tamil Nadu - An Economic Appraisal, Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai.

Tamil Nadu has long standing commitment to education and ranks third in terms of overall and female literacy rate due to the efforts made through various plans. The literacy rate had increased from 20.9 per cent in 1951 to 73.5 per cent in 2001. As regards the literacy rate of males, it had increased from 31.7 per cent in 1951 to 82.3 per cent in 2001. Similarly the literacy rate of females had increased from 10.1 per cent in 1951 to 64.4 per cent in 2001. The district-wise analysis shows that literacy rate was the highest in Kanyakumari district (87.55 per cent) and the lowest in Dharmapuri district (61.39 per cent).

There is a wide disparity between male and female literacy rates. As per 2001 census, the literacy rate was 64.4 per cent and 82.3 per cent for females and males respectively in the State. There also existed a rural – urban gender divide in literacy rate in Tamil Nadu. The rate was 76 per cent for Urban female whereas it was 55 per cent for its rural counterparts. Compared to Urban female literacy rates, the rural rate was lower by 20.71 percentage points, whereas the percentage point difference among males in Urban and rural areas were only 11.82. The difference in the levels of literacy between males and females was significantly higher in rural areas than in urban areas. This indicates that specific interventions may be required for developing the literacy rates of the female population especially in rural areas.

A concomitant of economic development and growth has been Urbanisation. As per 2001 census, Tamil Nadu was the most urbanized among larger states with 44.0 per cent of urban population and ranked first in Urbanization among the 15 major states in the country. Tamil Nadu accounted for seven per cent of country's total population and 9.6 per cent of Country's urban population. While the country's Urban population increased from 17.3 per cent to 27.8 per cent during 1951-2001, that of Tamil Nadu increased from 24.4 per cent to 44.0 per cent.

Sex ratio, i.e., (the number of females per thousand males) is a significant indicator of the status of women. In Tamil Nadu, the ratio has registered continuous decline with the exception of 2001. According to 2001 census, the sex ratio stood at 987 as against 974 in 1991 census. The rural sex ratio was relatively favourable at 992 as compared to 981 in urban areas. It may also be noted that sex ratio in Tamil Nadu was consistently better than all India average.

2.17.1. District-wise Salient Features of Population

District-wise salient features of census are furnished in Table 2.72. With the exception of Chennai, the density ranged from 275 per sq. km. in Sivagangai district to 800 in Tiruvallur district. Sex ratio was found to be the highest in Thoothukudi district (1050 females per 1000 males). The sex ratio was less than State average in the districts of Chennai, Kancheepuram, Thiruvallur, Cuddalore, Villupuram, Salem, Namakkal, Dhamapuri, Erode, Coimbatore, Madurai, Theni and Dindigul. The increase in population since 1991 was found to be at 11.72 per cent for the State as a whole and the increase in population was found to be varied from 4.25 per cent in Theni district to 23.06 per cent in Thiruvallur district. The increase in population in 2001 was found to be more than that of State level in the districts of Thiruvallur, Vellore, Salem, Namakkal, Dharmapuri, Coimbatore and Virudhunagar. Urban population in the State ranged from 11.36 per cent in Ariyalur district to 66.02 per cent in Coimbatore district. In the districts

of Cuddalore, Villupuram, Vellore, Thiruvannamalai, Salem, Namakkal, Dharmapuri, Karur, Perambalur, Ariyalur, Thanjavur, Nagapattinam, Thiruvarur, Pudukottai, Ramanathapuram, Sivagangai and Thoothukudi, the share of urban population to total population was less than the share of urban population to the total population at the State level. The literacy rate at the State level was found to be 73.45 per cent as per 2001 census and the same varied from 61.39 per cent in Dharmapuri district to 87.55 per cent in Kanniyakumari district.

Table 2.72. District-wise Salient Features of Census 2001

GI.		Density	Females	Increase in	Urban	Literacy
Sl.	District / State	per	per 1000	Population	Population	Rate
No.		Sq.Km	Males	since 1991 (%)	(%)	(%)
Tam	il Nadu	480	987	11.72	44.04	73.45
1	Chennai	24231	957	13.07	100	85.33
2	Kancheepuram	647	975	19.15	53.34	76.85
3	Tiruvallur	800	971	23.06	54.45	76.94
4	Cuddalore	626	986	7.66	33.01	71.01
5	Villupuram	406	984	7.43	14.42	63.80
6	Vellore	573	997	14.90	37.62	72.36
7	Tiruvannamalai	352	995	7.01	18.33	67.39
8	Salem	573	929	17.20	46	65.06
9	Namakkal	436	967	12.91	36.51	67.41
10	Dharmapuri	294	938	17.61	15.96	61.39
11	Erode	314	972	11.26	46.25	65.36
12	Coimbatore	566	963	21.76	66.02	76.97
13	The Nilgris	300	1014	7.31	59.65	80.01
14	Tiruchirapalli	542	1001	10.10	47.10	77.90
15	Karur	311	1010	9.54	33.27	68.08
16	Perambalur	278	1006	9.45	16.05	66.07
17	Ariyalur	358	1006	9.29	11.36	64.08
18	Thanjavur	649	1021	7.91	33.78	75.45
19	Nagapattinam	548	1014	8.07	22.18	76.34
20	Tiruvarur	538	1014	6.31	20.29	76.58
21	Pudukkottai	312	1015	9.98	17.02	71.12
22	Madurai	733	987	7.41	56.01	77.82
23	Theni	357	987	4.25	54.10	71.58
24	Dindigul	317	986	9.22	35.01	69.35
25	Ramanathapuram	287	1036	6.12	25.46	72.96
26	Virudhunagar	409	1012	11.90	44.39	73.70
27	Sivagangai	275	1038	4.74	28.22	72.18
28	Tirunelveli	411	1042	8.88	48.03	76.09
29	Thoothukudi	339	1050	7.99	42.28	81.52
30	Kanyakumari	992	1014	4.73	65.28	87.55

Source: Tamil Nadu - An Economic Appraisal, Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai.

2.17.2. Decennial Growth of Population

The decennial growth of population of Tamil Nadu is furnished in Table 2.73. From the table, it could be seen that the percentage of variation of total population varied from 3.47 in 1921 to 41.75 in 1951. The percentage of variation of urban population in the state varied from 8.86 per cent in 1921 to 44.06 in 2001. A marked decline of rural population was observed in 2001.

Table 2.73. Population of Tamil Nadu- Decennial Growth

Period		Population		Percentage Variation since previous Census		
	Total	Rural	Urban	Total	Rural	Urban
1911	20902616	17753479	3149137	+8.57	+7.41	+15.57
1921	21628518	18200439	3248079	+3.47	+2.52	+8.86
1931	23472099	19241717	4230382	+8.52	+5.72	+23.40
1941	26267507	21093825	5173682	+11.91	+9.63	+22.30
1951	30119047	22785522	7333525	+41.75	+11.85	+8.39
1961	33686953	24696425	8990528	+11.85	+8.39	+22.59
1971	41199168	28734334	12464834	+22.30	+16.35	+38.64
1981	48408077	32456202	15951875	+17.54	+12.95	+27.98
1991	55858946	36781354	19077592	+15.39	+13.32	+19.59
2001	62405679	34921681	27483998	+11.72	-5.06	+44.06

Source: Statistical Hand book of TamilNadu 2004

According to the 2001 Census, Tamil Nadu has the highest level of urbanization (43.86%) in India, accounting for 6% of India's total population and 9.6% of the urban population and is the most urbanized state in India.

2.17.3. Population by Religion

The distribution of population by religion is furnished in Table 2.74. It could be seen that the population of Hindus accounted for 88.11 per cent in Tamil Nadu as compared to 80.46 per cent at country level. The population of Muslims in Tamil Nadu accounted for 5.56 and 13.43 per cent at state and country levels respectively. Nearly 6.07 per cent of the population was Christians in Tamil Nadu State as compared to 2.34 per cent at country level.

100.00

100.00

	Persons in Tamil	Variation Since	Percentage		
Religion	Nadu (Nos.)	1991-2001 (Nos.)	Tamil Nadu	All India	
Hindus	54985079	5453027	88.11	80.46	
Muslims	3470647	417930	5.56	13.43	
Christians	3785060	605650	6.07	2.34	
Sikhs	9545	4096	0.02	1.87	
Buddhists Jains	5393	3265	0.01	0.77	
Other Religions	83359	16459	0.13	0.41	
Religions not stated	7252	4632	0.01	0.65	
Total Population	59344	41674	0.09	0.07	

6546733

Table 2.74. Population by Religion 2001

Source: Statistical Hand book of Tamil Nadu 2004

Total Population

2.17.4. Population by Industrial Categories

62405679

The distribution of population by broad industrial categories of workers is furnished in Table 2.75. It is evident from the table that the workers having economically gainful activity for the major part of the year classified as main workers numbered 237.58 lakhs in Tamil Nadu as per 2001 census and it accounted for 85.22 per cent of the total workers. The marginal workers accounted for 14.78 per cent of the total workers in Tamil Nadu state. At all India level, the main workers and marginal workers accounted for 77.8 and 22.2 per cent of the total workers respectively. The cultivators, agricultural labourers, workers engaged in house hold industry and other workers accounted for 18.4, 38.1, 5.3 and 45.2 per cent respectively of the total workers in Tamil Nadu State.

Table 2.75. Population by Broad Industrial Categories of Workers

S.		Tar	nil Nadu	All	India
N	Industrial Category	Persons	Percentage of Total workers	Persons	Percentage of Total workers
1	Main workers	23757783	85.22	313004983	77.8
2	Marginal Workers	4120499	14.78	89229741	22.2
	Total workers(1+2)	27878282	100.00	402234724	100.0
a	Cultivators	5116039	18.4	127312851	31.7
b	Agricultural Laborers	8637630	31.0	106775330	26.5
С	Household Industry, Manufacturing, Processing, Servicing and repairs	1499761	5.3	16956942	4.2
d	Other workers	12624852	45.2	151189601	37.6
3	Non-workers	34527397	-	877641173	-
Tot	al Population	62405679	-	1028830774	-

Source: Statistical Hand book of Tamil Nadu 2004

2.17.5. Poverty Level

There has been dramatic change in the level of poverty in the State during the last two decades due to implementation of various development programmes. During the period from 1973-74 to 1987-88, the proportion of rural population living below poverty line was higher in Tamil Nadu than the national average. Rural poverty which stood at 57.43 per cent in 1973-74 declined to 32.48 per cent in 1993-94 and further to 22.8 per cent in 2004-05. Similarly, the urban poverty declined from 49.40 per cent in 1973-74 to 22.2 per cent in 2004-05. The details of population below poverty line of Tamil Nadu are furnished in Table 2.76.

Table 2.76. Status of Population below Poverty line in Tamil Nadu (in percent)

Sl.No.	Year	Rural	Urban	Combined
1	1973-74	57.43	49.40	56.94
2	1977-78	57.68	48.69	54.79
3	1983-84	53.98	46.96	51.66
4	1987-88	45.80	38.64	43.39
5	1993-94	32.48	39.77	35.03
6	1998-2000	20.55	22.11	21.12
7	2004-05	22.8	22.2	22.5

Source: Tamil Nadu - An Economic Appraisal, 2005-06, Evaluation and Research Department, Government of Tamil Nadu, Chennai.

Incidence of poverty is still an important issue posing a challenge in terms of interventions required and ensuring outcomes.

The trend in incidence of poverty in Tamil Nadu and India is presented in Table 2.77.

Table 2.77. Trend in Incidence of Poverty in Tamil Nadu and India (in percent)

Year	Rural		Urba	n	Combined		
	Tamil Nadu	India	Tamil Nadu	India	Tamil Nadu	India	
1973-1974	57.43	56.44	49.40	49.01	54.94	54.88	
1977-1978	57.68	53.07	48.69	45.24	54.79	51.32	
1983-1984	53.99	45.65	46.96	40.79	51.66	44.48	
1987-1988	45.80	39.09	38.64	38.20	43.39	38.86	
1993-1994	32.48	37.27	39.77	32.36	35.03	35.97	
1999-2000	20.55	27.09	22.11	23.62	21.12	21.10	
2004-2005	22.80	28.30	22.20	25.70	22.50	27.50	

Source: Tamil Nadu – An Economic Appraisal, 2005-06, Evaluation and Research Department, Government of Tamil Nadu, Chennai.

It could seen from the table that the incidence of poverty in rural areas in India was less than that of the State level upto 1987-88 and thereafter it showed a increasing trend than that of the State level. Similar phenomenon was observed in the case of urban poverty also upto 1993-94. In sum, the level of poverty in India exhibited an increasing trend than that of Tamil Nadu from 1993-94 onwards.

2.17.6. Human Capital Formation and Human Development

Human development is considered as a vital component of economic development. The human development index and the relative ranks reflected that Tamil Nadu has made significant improvement in human development index over the years. Tamil Nadu was positioned in seventh place in 1981 with a human development index value of point 0.343. The value had enhanced to 0.531 in 2001 which ranked Tamil Nadu third among the major states. The details are furnished in Table 2.78.

Table 2.78. Human Development Index of Major States

States	1981 value	Rank	1991 value	Rank	2001 value	Rank
Andhra Pradesh	0.298	9	0.377	9	0.416	10
Assam	0.272	10	0.348	10	0.386	14
Bihar	0.237	15	0.308	15	0.367	15
Gujarat	0.360	4	0.431	6	0.479	6
Haryana	0.360	5	0.443	5	0.509	5
Karnataka	0.346	6	0.412	7	0.478	7
Kerala	0.500	1	0.591	1	0.638	1
Madya Pradesh	0.245	14	0.328	13	0.394	12
Maharashtra	0.363	3	0.452	4	0.523	4
Orissa	0.267	11	0.345	12	0.414	11
Punjab	0.411	2	0.475	2	0.537	2
Rajasthan	0.256	12	0.347	11	0.424	9
Tamil Nadu	0.343	7	0.466	3	0.531	3
Uttar Pradesh	0.255	13	0.314	14	0.388	13
West Bengal	0.305	8	0.404	8	0.472	8
All India	0.302	-	0.381	-	0.472	-

Source: Tamil Nadu - An Economic Appraisal – 2005- 06, Evaluation and Applied Research Department, Government of Tamil Nadu, Chennai

2.18. State Income

Tamil Nadu's gross state domestic product for 2007 is estimated at Rs. 275,000 crores (70 billion USD) in current prices. The state experienced a GDP growth rate of 12.1% for this period. Possessing the third largest economy (2007-2008) among states in India, Tamil Nadu is also the most industrialized state in India. The per capita income for the period 2007 -2008 for the state was Rs.43,000 ranking second among the South Indian states. It ranks third in foreign direct investment approvals (cumulative 1991-2002) of Rs.225,826 million (\$5,000 million), next only to Maharashtra (Rs. 366,024 million (\$8,100 million) and Delhi (Rs.303,038 million (\$6,700 million) and the State's FDI investment constitutes 9.12% of the total FDI in the country. The details of Gross State Domestic Product over years are furnished in Table 2.79.

Table 2.79. Gross State Domestic Product

(Rs. in Crores)

Year	GSDP	Change (%)	Share of India (%)
1994-95	68,666	19.32	7.49
1996-97	89,237	19.96	7.18
1998-99	118,209	32.47	7.40
2000-01	141,100	19.36	7.33
2002-03	155,099	09.92	6.85
2004-05	188,921	21.81	6.61

The share of primary sector to gross domestic product at factor cost in Tamil Nadu is furnished in Table 2.80.

Table 2.80. Contributions of Sub-sectors to Primary Sector at Constant Prices (Rs. in Crores)

Subsector	2003-04		20	004-05	2005-06	
Subsector	Income	Growth (%)	Income	Growth (%)	Income	Growth (%)
Agriculture and Allied activities	15928	(-) 1.60	19035	19.51	20521	7.81
Forestry and Logging	596	(-) 5.33	594	(-) 0.31	589	(-) 0.71
Fishing	1983	(-) 2.08	1690	(-)14.76	2404	42.22
Mining and quarrying	992	22.58	1055	6.36	1102	4.45
Primary sector	19499	(-) 0.77	22374	14.75	24616	10.02

Source: Directorate of Economics and Statistics, Chennai -6.

It could be seen from the table above that within the four sub-groups of primary sector, agriculture and allied activities was the largest component which registered a growth of 7.81 percent. Among the other three sectors, forestry and logging declined by 0.71 percent and mining and quarrying registered a growth of 4.45 percent. Though the income generation from fishing sub-sector was negative during the past few years; it turned positive and recorded an impressive growth in 2005-06.

2.18.1. Inter District Comparison

Estimates of income generation at district level are furnished in Table 2.81. It could be seen that between 1993-94 and 2002-03, income from all the districts rose at a compound growth rate of 5.3 per cent. Total income generation was more than Rs.4000 crores in eight districts and they together accounted for more than 50 percent of the total state income in 2002-03. The per capita income showed that Chennai ranked first followed by Coimbatore and Virudhunagar. The lowest percapita income was observed in Villupuram district. Further, a perusal of the relative performance of districts in terms of percapita income showed that eleven districts, viz., Chennai, Coimbatore, Virudhunagar, Kancheepuram, Tiruvallur, Theni, Thoothukudi, Erode, Namakkal, Madurai and Tirunelveli had percapita income above the State average.

Table 2.81. District Income Estimates: GSDP at Constant (1993-94) Prices

Districts	1993-94 (Rs. Lakhs)	2002-03 (Rs. Lakhs)	CGR (GDP)	Per capita GDP* (Rs.)	Rank (Per capita)
Chennai	627727	1045488	5.83	24069	1
Coimbatore	511299	899894	6.48	21066	2
Virudhunagar	227661	358885	5.19	20492	3
Kancheepuram	303132	549553	6.83	19098	4
Thiruvallur	277666	513660	7.07	18646	5
Theni	115105	188160	5.61	17200	6
Thoothukudi	178339	267982	4.63	17044	7
Erode	259544	415677	5.37	16102	8
Namakkal	163499	228883	3.81	15326	9
Madurai	226884	387509	6.13	15030	10
Tirunelveli	253725	400508	5.20	14703	11

Table 2.81. Contd...

State	5754902	9170326	5.31	14695	
Villupuram	171074	231270	3.41	7812	29
Thiruvannamalai	135288	192685	4.01	8814	28
Dharmapuri	182834	282943	4.97	9906	27
Thiruvarur	89576	118442	3.15	10128	26
Pudukkottai	96745	153066	5.23	10487	25
Thanjavur	149751	235952	5.18	10647	24
Cuddalore	165291	245412	4.49	10738	23
Nagapattinam	115157	166472	4.18	11181	22
Sivagangai	84563	130957	4.98	11335	21
Ramanathapuram	89043	145912	5.64	12286	20
Kanniyakumari	150071	210025	3.81	12531	19
Vellore	284925	436065	4.84	12540	18
Perambalur	106987	149516	3.79	12573	17
Karur	81443	118842	4.29	12701	16
Trichy	195812	313328	5.36	12956	15
Salem	266548	400949	4.64	13293	14
The Nilgiris	75119	106309	3.93	13949	13
Dindigul	170094	275982	5.52	14352	12

Note: * Pertains to GDP 2002-03 and Population 2001 census Source: Directorate of Economics and Statistics, Chennai – 6.

CHAPTER – III

SWOC ANALYSIS OF THE STATE

SWOC is an acronym for strengths, weaknesses, opportunities and challenges. An understanding of the strengths, weaknesses, opportunities and challenges of the various facets of the economy is a pre-requisite for effective development planning. The SWOC analysis is also an important management tool. Carrying out a SWOC analysis involves identifying internal strengths and weaknesses as well as examining external opportunities and challenges and then seeing how they relate to each other. Once the strengths are identified, they can be made use of for accelerating the development process. Weaknesses once brought to light, can be rectified or reduced so as to keep up the tempo of development. Always the opportunities must be uncovered, tapped or made use of at the earliest for toning up the economic activity. However, the challenges must be either avoided or counteracted, so as to keep the development process always on its right track. Therefore, the SWOC analysis has been attempted first for the state economy, as a whole and then for the agriculture sector as well as allied sectors like horticulture, agricultural engineering, agricultural marketing, animal husbandry, fisheries, and irrigation systems.

I. SWOC Analysis of the State Agricultural Economy

The SWOC analysis of the State agricultural economy is briefly indicated below.

A. Strengths

- 1. The day-time round the year sun-shine and the visititudes of both south-west and north-east monsoons are the boons to the living of human race and the animal kingdom on this part of the planet earth.
- 2. The State possesses varied types of agro-climatic conditions ranging from hot tropical through sub-tropical to temperate climate.
- 3. The major types of soils like red, black, alluvial, loamy and sandy loam found in the State are highly suitable for growing a variety of crops.
- 4. The State is fairly well endowed with water and land resources. Ground water potential is also fair in many parts of the State.
- 5. A wide range of crops starting from tropical cereals, pulses, oilseeds vegetables etc. to temperate fruits and vegetables are cultivated under varied agro-climatic conditions and elevations in the State.

- 6. The livestock population is sizable in the State. There exist very good potential for boosting milk production and sheep / goat / poultry meat in the State through scientific feeding, breeding and health management.
- 7. The long coastal length of 1,076 kms and the widely spotted inland water bodies indicate the high growth potential of fishery sector in the State.
- 8. Well-developed agri-based cotton and sugar-industries are the added strength for the rapid growth of the economy.
- 9. People in the State are always industrious and hard-working and hence a sciencebased technological back-up can go a long way in improving agricultural production.
- 10. The rail as well as road transport system, which are essentials for agricultural development, are also well – knitted in the State and
- 11. Both urban and rural electrification is almost 100 percent in the State and acts as the catalyst for the growth of the State economy.

B. Weaknesses

- 1. In spite of more than five decades of planning, the success of agriculture yet depends on the successful monsoons. Frequent monsoon failures, low and uncertain rainfall and its skewed distribution affect the tempo of agricultural growth.
- 2. Uneconomic size of very large number of marginal and small farms and poor economic status of the farmers and the low literacy level among farmers affect the full adoption of scientific technologies and hence the agricultural production and
- 3. Many of the irrigation systems and structures are in dilapidated conditions for want of funds. The tank and water ways are highly silted and filled with the growth of bushes. Heavy seepage losses and hindrance to the free flow of water are found in conveying the water through the irrigation canals from dams, reservoirs and big tanks. Moreover, unauthorized encroachment of catchment and water spread areas of the irrigation tanks is a common phenomenon throughout the State. Improper up-keep of canal and river bunds results in recurring breaches and consequent damages to the standing crops, livestock and human life in the villages during rainy seasons and flash flooding.

C. Opportunities

- 1. Normal quantity of rainfall and its even distribution provide scope for raising almost all field and horticultural crops round the year in most pockets of the State.
- 2. As the urbanization and industrialization is on the accent in the recent years, the market demand for quality agricultural products and protective foods like milk, fruits and vegetables is getting increased. These indicate the opportunities for increasing the yield per acre, the milk production, vegetables and fruits production etc. in the years to come. The demand for ready to cook as well as ready to eat foods is also increasing. Thus, there is ample opportunity for the agri-processing units to flourish in the years to come in the State.
- 3. The red, black, alluvial and loamy soils found in the State are highly productive soils. The capability can be sustained through the proper and planned nutrient management practices.
- 4. As the labour availability is becoming scarce, especially during peak agricultural operations like transplanting, harvesting etc. the farm mechanization is on the increase. However, the high investment requirement and non-affordability of the individual farmer, especially marginal and small farmers, gives way for custom services and evolution of small agri-business entrepreneurs in the State and
- 5. Large extent of land (about 24 lakh hectares) is considered as waste land in the State. This provides opportunities for reclamation and development of horticulture and plantation crops in the State.

D. Challenges

- 1. Low and skewed distribution of rainfall and heavy down-pour in a few days especially during north – east monsoon and consequent flash floods in frequent years and inadequate infrastructure to control and store the flood water, damages the standing crops heavily and spoils the level of production.
- 2. High fluctuations and non-remunerative prices of farm products and consequent non-profitability of the farm business perforce many farmers to quit the agricultural profession itself.
- 3. The out break of pests and diseases are often recurring in certain endemic areas of the State. These pose the threat to destroy the crops leading to complete loss to many farmers.

- 4. In recent years, due to heavy pumping of ground-water especially in summer and early kharif seasons, the reversal of ground water flow results in sea-water intrusion in the inlands along the coastal belt and consequently making the bore wells as well as open well-water unfit for crop production and drinking. Many farmers infact abandoned the cultivation especially of the kharif crop.
- 5. The inter-state disputes on the major irrigation systems like Cauvery, Periyar etc. affect the agricultural growth of the State to a great degree by posing the threat of abandoning the crop production often and
- 6. Fast urbanization and industrialization and indiscriminate conversion of agricultural lands to non-agricultural purposes, pose a great threat of contraction of land put to agricultural uses and consequent reduction in production.

II. SWOC Analysis of Agriculture Sector

A. Strengths

- The agro-climatic and soil conditions of the State are highly favourable to raise a variety of field crops like paddy, sugarcane, cotton, pulses, millets, oilseeds etc. under three distinct seasons of kharif, rabi and summer.
- Most of the field crops are the food crops for human consumption and hence have recurrent demand.
- Sugarcane and cotton form the raw materials for the manufacturing industries like sugar and textile. These two products also have continuous demand from the sugar mills and cotton spinning mills in the State.
- The technologies of crop production are also constantly changing due to research and development activities of the TNAU in the State. Constantly changing technologies are the essentials for agricultural development.
- Many of the grains and the by-products are used to prepare the animal feed mix for both cattle (white + black) and poultry and hence demand for them is high for the development of livestock and poultry.
- The agricultural development department in the State is also well equipped with technical human power and the much needed infrastructure, to keep agricultural development going.

- There also exists an excellent growing export markets for fine rice, cotton, sugar, etc. that act as a strength in cultivating these field crops and
- The irrigation system and supply of irrigation water supports the cropping systems in the fields of Tamil Nadu.

B. Weaknesses

- Monsoon failures and consequent non-availability of irrigation water for the crop growth in the fields.
- Non-availability of inputs like fertilizers in time and their exorbitant prices.
- Post-harvest glut in commodities and price crashing
- Delayed issuing of cutting orders for sugarcane harvest by the sugar mills and the consequent sucrose losses and associated loss to farmers and
- Widely fluctuating cotton prices.

C. Opportunities

- The productivity of all the field crops can be increased through the application of latest production technologies.
- Export market potential can be tapped further especially for flowers, fruits and vegetables.
- Installation of agri-processing units can be taken up at an early date
- Crop diversification is possible especially under rainfed agriculture by the introduction of maize, sunflower, etc.
- The palm oil tree cultivation in wet and garden lands can also be tried and
- Intensive cotton cultivation in rice fallows can be encouraged.

D. Challenges

- Price risks associated with most of the field crops.
- Heavy down-pour of rainfall and flash flood and consequent loss of crops, livestock and human life.
- Scarcity of labour during peak seasons of operations, especially during transplanting and harvesting and
- Non-availability of important fertilizers and their exorbitant sale prices.

III. SWOC Analysis of Horticulture Sector

A. Strengths

- Horticulture crops in general are high-earning crops in the State
- Soil and climatic conditions are highly favourable for raising many of the horticultural crops.
- The horticulture department in the State has got the much needed technical wherewithal, supported by a separate College of Horticulture and Research Institure and few Research Stations in the State.
- Increasing industrialization and urbanization and consequent per capita income increase create an effective internal and external demand for horticultural products, which are supposed to be the protective foods in human nutrition.
- The hill stations spotted in the Western Ghats and in the middle of the state grow vegetables like carrot, cabbage, cauliflower, potato etc., temperate and subtropical fruits like plums, peaches, strawberries and plantation crops like tea, coffee, cardamom etc and
- The state support for growing horticultural products in the form of launching State horticultural mission, central horticultural mission, etc is an added strength to grow a variety of horticultural crops in the state.

B. Weaknesses

- The major weakness is the high-cost of high-tech horticultural crops.
- Most of the fruit crops are highly season-bound and hence the year-round production is not possible.
- · Lack of adequate demand for processed fruit and vegetable products and infrastructure facilities for processing value-added products.
- Inadequate network of horticultural extension machinery in the State.
- Highly perishable nature of horticulture products and
- Lack of effective demand from low income and lower-middle income families for horticulture crops.

C. Opportunities

As the urbanisation, industrialization and the family income are in the up-trend in the recent years, the effective demand for protective foods is growing. Hence there exist ample opportunities to increase fruit and vegetable production in the State.

- The tempo of liberalization of the economies in the world and the functioning of WTO give importance to the export of horticultural products.
- Season-bound production, highly perishable nature of products and the year round demand provide excellent opportunity for the agro-processing entrepreneurs.
- Recent policy of reclaiming waste land and its allotment to landless labourers provide good opportunities to raise deciduous fruit trees like wood-apple, pomegranate, zizubus, jambulana, vegetables and bio-fuel plants like Jatropha, medicinal plants, etc and
- Crop diversifications from low-return field crops to high-earning crops and raising the horticultural crops are the other possible opportunities.

D. Challenges

- High-cost of high-tech involved in raising horticulture crops and low financial capability of majority of farmers
- Presence of rocky subsoils and unawareness of the farmers pose severe threat.
- High perishability and inadequate post-harvest care also pose threat to grow horticultural crops and
- Post-harvest glut of season-bound fruits and rock bottom prices are the other threats confronted by horticultural farmers.

IV. SWOC Analysis of Agricultural Engineering Sector

A. Strengths

- Propensity of farmers to utilize the farm machineries like motor-pumpsets, tractors, tillers, thrashers, transplanters etc. is a positive strength gained in the recent years in farm mechanization front.
- Young enterprising farmers / rural youths are coming forward to provide custom services to all sections of the farmers, by taking the risk of heavy investment.
- Owning of the machineries by big farmers
- Effective water harvesting techniques and
- Proven soil and water conservation techniques are also available.

B. Weaknesses

- Large number of marginal and small farms
- Majority of the farmers are resource poor
- · Lack of effective machineries for carrying out the farm operations like transplanting, weeding, etc.
- Inadequate number of water harvesting structures often led to flash floods and surface run-off of waste water.
- Farmers are yet to practice the scientific soil and moisture conservation activities especially in dryland areas and
- Seasonality of usage of machineries.

C. Opportunities

- Scarcity and high cost of labour and availability of machineries and their uses at low cost are providing opportunities for intensifying farm mechanisation.
- Financial institutions are coming up in a big may to help the rural youths and young entrepreneurs in owning the high priced machineries and render custom services to the fellow-farmers.
- There exists scope for organizing more number of entrepreneurial development programmes to the rural youths and to the innovative large farmers.
- There exists vast scope for soil and water conservation measures like contour-bunding, basin-listing, construction of waste-weirs etc.
- There are ample opportunities for the popularization and adoption of water harvesting techniques like farm ponds, perculation ponds etc and
- Researchers have innumerable opportunities for product / machinery development to meet the existing latent demand for effective farm equipments.

D. Challenges

- High price and heavy investment and lack of effective repairing workshops in the easy reach of the farmers
- Farmers are exploited by charging very high rates of hiring charges by owners of the machineries and
- Labour oppositions backed by political and trade-union supports affected the mechanization process till recently.

V. SWOC Analysis of Agricultural Marketing Sector

A. Strengths

- Network of periodic markets are functioning in the State.
- Well-knit regulated marketing system has been developed in the State.
- Co-operative marketing societies in certain pockets of the State render yeoman service to farming community
- Fairly a large number of commission mandies, wholesalers and retailers are eking out their livelihood through rendering marketing services to farmers and consumers.
- A large number of export agencies have become active in the recent years in exporting agricultural products, particularly in the context of recent economic liberalization.
- The functioning of TANFED, NAFED and CCI is an added strength to the marketing system, especially the export marketing system.
- Well established warehousing system by the CWC, SWC and co-operatives with three-tier approaches adds further strength to the marketing system in the State and
- Changing life style and food habits of the people especially in the contexts of urbanization, industrialization and Information Technology revolution.

B. Weaknesses

- Presence of innumerable intermediaries between farmers and consumers weakens the marketing system.
- Perishable nature of the farm products and the high profit-motive tactics adopted by many of the intermediaries weaken the bargaining power of the farmers.
- Ineffective functioning of majority of the organized marketing institutions also adds to the weakness of the marketing system.
- Post-harvest glut and consequent low prices of agricultural commodities
- Ineffective storage structures at the farm level and consequent losses of food grains due to storage pests, including rats and dampness.
- The post-harvest losses have been estimated at 30 per cent for fruits and vegetables and 10 percent for food grains and
- Agri-processing system is yet to gain momentum in a big way.

- Strengthening the existing marketing organizations
- Effective regulation of marketing activities
- More construction of rural godowns at village level
- Gaining fillip to the growth of agro-processing industry
- Developing effective communication network
- Capacity building among farmers through training and exposure visits.
- Development of cold chains for perishables
- Strengthening storage system at farm level and
- Tapping the export markets.

D. Challenges

- Volatile prices / wide price fluctuations are the major threats that make the agricultural proposition non-profitable and hence perforce the farmers to exit agricultural profession once for all.
- Lack of proper thrashing floors in the village impede the preparation of quality products for the market and
- Lack of tarpaulins and exposure of produce to the sudden rainfall spoil the quality of the products.

VI. SWOC Analysis of Animal Husbandry Sector

Animal husbandry activities have been inextricably inter-woven with crop husbandry activities at the farm level from time immemorial. The two-way interdependence between crop husbandry and animal husbandry could be quite rewarding and appreciable. The livestock depended on crop husbandry for the feed and fodder, while crop cultivation depended on livestock for manure and draught power. In addition, the livestock enterprises provided the most important low-cost protective food viz., milk for all ages of human survival. Livestock enterprise also provide supplementary income to the farm family intermittently to meet out the day-to-day family as well as cultivation expenses, while the crop husbandry yield once in a crop season in an year, depending on the cropping pattern. Animal husbandry activities like sheep and goat rearing and poultry farming provide meat for healthy living of mankind. Thus, the crop and livestock enterprises are complimentary enterprises in the farm sector.

In the recent years, due to accent in farm mechanization, the dependence of agriculture on animal draught power has started decling and hence the importance of rearing male calves of both cattle and buffalo has also started declining. On the other hand, the demand for milk and meat has started picking up due to the rise in the purchasing power of the households. Thus, these changing scenarios have resulted in declining livestock population and increasing milk and meat productivity per animal. Under such present changing situations, the SWOC analysis of animal husbandry sector has been attempted to understand the existing real world situation of animal husbandry activities in the State.

1. Dairy Sub-Sector

A. Strengths

- Sizable cattle population in the State
- Uptrend in cross-bred cows population
- Eagerness of Self Help Groups in dairying
- Readily available bank credit
- Ready market for fluid milk and its by-products
- Involvement of private dairy farmers is also on the increase in milk procurement and distribution
- Very high export potential for hides and skins.
- The availability of fairly large number of veterinary institutions along with infrastructure facilities
- Propensity of dairy farmers to market the surplus milk through co-operatives and excellent network of dairy co-operatives
- Availability of superior germ plasm with high exotic blood levels and
- Availability of fairly a large number of Artificial Insemination Centres in the state.

B. Weaknesses

The weaknesses associated at present with the animal husbandry sector are as under:

- Shortage of green fodder to the tune of above 80 per cent of the requirement.
- Lack of scientific knowledge on enriching the available dry fodder with nutrient supplements.

- Lack of knowledge on hygienic milk production, scientific rearing of calves and management of cross bred cows during advanced pregnancy period.
- Insufficient cold chain management of vaccines
- Poor quality control system
- Problems in controlling the disease out-breaks
- Improper housing and frequent incidence of diseases
- Poor slaughter facilities
- Non-availability of veterinary services within the easy reach of the farmers due to insufficient technical manpower.
- Delayed conceivement, shy bearing in buffaloes and lesser percentage of artificial insemination success and
- Decreasing buffalo population

- Constantly increasing demand for milk and milk products from both domestic and export markets.
- The performance of genetically up-graded non-descript local breeds are quite promising in terms of increased milk productivity
- Financial institutions, especially the commercial banks, are liberal in extending credit facilities for starting mini-dairy farms
- Technology empowerment on scientific dairy farming among farmers / rural women to boost milk production.
- Presence of well knit Self Help Groups all over the State and
- Availability of well-knit co-operatives milk marketing system and the growth of private procurement and distribution business units.

D. Challenges

- Diminishing grazing land area
- High incidence of mastitis and loss of milk productivity
- Increasing cost of feeds
- Non-availability of labour and high labour cost and
- Sudden outbreaks of epidemic diseases like Anthrax, black quarter, foot and mouth disease etc.

2. Small Ruminants Sub-sector

A. Strengths

- Additional sources of income to farmers
- Easy marketability and heavy demand
- Consumers' preference towards mutton and savnon is more
- Suitable climatic condition and the local breeds
- Low input requirement
- Easy flock / herd management
- Low investment requirement
- Sizable sheep and goat population and
- Availability of waste lands and fallow lands

B. Weaknesses

- Unorganized / conventional slaughtering methods
- Pricing of sheep by subjective assessment and exploitation of farmers by the middleman
- Inadequate grazing land / seasonal grazing in cropped fields during off-season.
- Non recognized breeds of goat / sheep in the State
- Non-availability of veterinary aids within the easy reach of sheep/goat farmers
- Lack of quality germplasm
- Lack of technological interventions
- Lack of scientific method of feeding, breeding and health management
- Scarcity of fodder
- Improper / insufficient housing leading to low productivity and disease problems.
- Creation of social problems due to indiscriminate grazing at the gardens of neighbours and
- High susceptibility to mastitis due to nomadic type of herd farming.

C. Opportunities

- Quality germ plasm production and distribution by private entrepreneurs.
- Popularizing proven improved and less labour intensive farming system
- Reducing mineral deficiency related problems and
- Adoption of technology interventions by illiterate shepherds.

D. Challenges

- Resistance to adopt new technologies by illiterate shepherds
- Reaching the nomadic type of shepherd with goat and sheep herd farming
- Non-availability of shepherds for tending the sheep / goat herd.
- Frequent occurrences of killer diseases like Blue tongue, sheep pox, PPR etc.
- Inadequate / non-availability of sufficient quantity of vaccines
- Cyclone, heavy and continuous downpour of rainfall and flooding and
- Inadequate disaster management infrastructure.

VII. SWOC Analysis of Fishery Sector

A. Strengths

- Tamil Nadu State is endowed with a coastal line of 1,076 kms, accounting for 13.3 per cent of the Nation's Coastal line of 8118 kms.
- State possesses 0.19 million sq.kms of Exclusive Economic Zone (EEZ) accounting for 9.7 per cent of the country's EEZ of 2.02 m.sq.kms and a continental shelf of about 41,412 sq.kms.
- Diversified flora and fauna estimated at more than 3,509 species to support marine fisheries.
- The inland fisheries is spread over 3.71 lakh hectares of water spread area comprising reservoirs, major irrigation and long seasonal tanks, short seasonal tanks and ponds, estuaries and backwaters.
- Many fishermen cooperatives and fisher women cooperatives are functioning in the State.
- Sizable number of mechanized boats, motorized FRP boats and traditional crafts are available in the State.
- Sizable fishermen / fisher women population in the State and
- Existence of a Fisheries College and Research Institute and a Fisheries Department is an added strength to accelerate fisheries development in the State.

B. Weaknesses

- Many water bodies received water only during north-east monsoon.
- Non-availability of adequate infrastructure facilities for seed production, rearing, fish landing and marketing.

- Fish culture in natural and small water systems is being practiced by stock and harvest method and not by scientific culture method.
- Lack of post-harvest facilities like cold storage and fish processing units at the shore.
- No self-sufficiency in fish seed production
- Low fish productivity of tanks.
- Non-availability of stock size quality fish seeds throughout the year.
- Lack of efficient fishing gears for operation in deep waters.
- Inadequate training packages on fish culture, breeding and seed rearing, feed formulation, fish diseases diagnosis etc.
- Paucity of funds to fish seed rearing centres.
- Insufficient area for fish seed production
- Lack of hygienic handling of fish in marketing
- Low infrastructure support for fisherman impede the growth in fish production
- Poor technology adoption in the mechanized crafts and low hygiene are the major bottle necks in promoting export oriented fishing and product development
- Under-utilization of short seasonal tanks and
- Absence of dead storage level in the reservoirs affects the natural fish stock.

- Vast expansion of marine resources with diverse fishes in the off-shore area provides good opportunity for increasing marine fish catching.
- Large scale coastal acquaculture is possible.
- Mariculture, including pearl culture, spat production, lobster fattening and multiple newer fishing product preparations are possible.
- Rehabilitating the affected and unutilized shrimp farms for mari-culture activities.
- Ample opportunities for developing coastal / back water shrimp farming on large scale with much more vigour.
- Effective utilization of short seasonal tanks and ponds in the network of inland water ways for fish production and
- Establishment of large scale seed production and supply centres.

D. Challenges

- Frequent monsoon failures, visititutes of cyclones and occurrence of tsunami are the natural hazards that pose major threats to the growth of the fishery industry as a whole.
- Inadequate infrastructure for seed production discourages the farmers in taking up inland fish culture
- Improper waste disposal and environmental pollution by coastal / brackish water shrimp farming act as the threat for their own survival and growth and
- High siltation of tanks and water ways and lack of periodic desilting activities.

VIII. SWOC Analysis of Poultry Sub-sector

A. Strengths

- Improved and high yielding breeds are available
- Development from subsistence commercial farming possible
- Introduction of integrated system by private entrepreneurs
- Growing demand for desi-chicken meat and eggs as well as for exotic chicken meat and eggs.
- Premium prices for desi chicken meat and eggs.
- Adequate Bank loan facilities and
- Development of well-knit SHGs throughout the State.

B. Weaknesses

- Reluctance on the part of the farmers in feeding the birds with nutrient rich feed
- Inability of small farmers in competing with the large commercial farms
- Wide price fluctuations of meat and eggs
- Dwindling of desi-line population and
- Inadequate veterinary aids to have full immunization coverage against Raniket disease.

C. Opportunities

- Renewal of technology support to encourage back-yard poultry farming.
- Fool proof health cover to the existing desi lines.
- Empowerment of poultry farmers / rural women with latest technologies
- Encouragement of custom hatching units in rural households.

- Supplementing micro-nutrients to boost up production
- Scope for Japanese quail and turkeys.
- Encouraging rural women / members of Self Help Groups to take up backyard poultry farming and
- Involvement of Self Help Groups in poultry farming through capacity building activities.

D. Challenges

- Newly emerging diseases like bird-flue devastates the whole industry in a locality, if it outbreaks and hence high level of risk is associated with poultry farming.
- High feed cost threatens the growth of poultry industry
- Wide fluctuations in prices of broilers and eggs
- Unhygienic slaughter of birds and
- Diminishing indigenous germ plasm

IX. SWOC Analysis of Irrigation Systems (PWD)

A. Strengths

- The presence of major irrigation systems like Mettur dam, PAP, Sathanoor dam, Papanasam dam, Aliyar dam etc. and a large number of medium irrigation projects in the State indicates the good strength of the irrigation system in the State
- The ground water potential in many parts of the State is good and
- The State is endowed with a network of well developed irrigation tanks and canals.

B. Weaknesses

- Many of the water bodies including feeder channels and distribution channels are highly silted reducing the water holding capacity and the flow of water.
- Many of the irrigation structures are in dilapidated conditions resulting in wastage of stored water through seepage etc.,
- Paucity of funds to modernize most of irrigation systems and structures.
- Lack of awareness on the importance of maintenance of irrigation structures among the farmers, extra vagant use of water and meddling with structures and
- No organized flood control measures in the areas chronically affected by frequent flash floods.

- Modernization of irrigation systems
- Taking up repairing works of dilapidated water structures
- Desilting of reservoirs, tanks and canals.
- Strengthening the bunds of tanks, rivers, canals etc.
- Modernizing approach roads along and around the water bodies.
- Construction of check dams.
- Construction of barrages at the point of confluence of river water into the sea near seashore and irrigation shafts to prevent sea water intrusion in the coastal belt of the State and
- Taking up flood control measures with long-term perspective.

D. Challenges

- Heavy seasonal / monsoon down-pour in a short spell of time and the consequent flash floods and breaches of the bunds and associated crop, livestock and human losses.
- Social threat of unauthorized encroachment of catchment areas, water spread areas meddling with irrigation structures and devices and spoiling them wantonly
- Sea water intrusion in coastal areas and
- Inter-state disputes on river water sharing with neighbouring States of Karnataka, Kerala and Andhra Pradesh.

3.3 Accommodating SWOC (Addressing Issues emerging out of the Analysis)

- The agro-climatic conditions of the State is highly favourable for good growth of a wide range of crops from tropical through sub-tropical to temperate
- Through proper organization of land, labour and capital and application of agricultural technologies, the farm / agricultural production could be optimized.
- The farm mechanization, the soil and water conservation measures and water harvesting techniques would enhance the agricultural production to a greater degree
- Rehabilitation and modernization of the irrigation systems would be an insurance against crop failures

- The crop and livestock productivity could be enhanced through the application of constantly changing technologies
- The horticulture development can be given thrust in the years to come, particularly in the context of reclamation of vast areas of waste lands and
- The long coastal belt and well spotted inland water bodies with the application of scientific methods would provide ample scope for boosting the fishery production in the State.

CHAPTER – IV

DEVELOPMENT OF AGRICULTURE SECTOR

Keeping in view of the natural resource base potential and the inputs management practices, development issues in agriculture sector have been identified and highlighted. In addition, the on-going schemes have been listed and the constraints have been brought to light. Finally, the required interventions have been recommended in this chapter.

4.1 Issues of Agriculture Sector

The issues of agriculture sector could be summarized as under:

- 1. Erratic and inadequate monsoon rain
- 2. Declining trend of net area sown
- 3. Diversion of fertile agricultural lands to non-agricultural purposes
- 4. Cropping intensity hovering around 115-119 per cent in the last five decades
- 5. Depletion of ground water
- 6. Increase of fallow lands
- 7. Deterioration of soil health
- 8. Unfavorable pattern of land ownership
- 9. Yield gap in majority of the crops
- 10. Slowdown in growth rate of yield
- 11. Inadequate seed availability and seed replacement rates for most of the crops
- 12. Over use of certain chemical fertilizers and leaching away of organic matter of the soil
- 13. Dissemination of appropriate agricultural technologies
- 14. Access to credit from organized financial institutions at reasonable interest rate
- 15. Promoting rational use and management of surface and groundwater
- 16. Strengthening of area under rainfed crops by introduction of drought resistant varieties
- 17. Incentivizing water saving techniques and
- 18. Timely availability of quality seeds, fertilizers and pesticides

4.2 On-going Schemes

The details on the schemes sponsored by the State and Central Governments and implemented by the Department of Agriculture in Tamil Nadu are given in below.

4.2. State Plan Schemes : The Part I and Part II Schemes implemented by the Department of Agriculture in Tamil Nadu are detailed below 4.2.1 Plan Schemes - State Schemes - Part I and II

			Phy	vsical	%		Financial (Rs. In lakhs)	% of	% of	% of
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Achmt. Upto 31.3.2008	Achmt. W.r.t B.E	Achmt. W.r.t R.E	Achmt. W.r.t FMA
	PART I SCHEME	-	-	-	-	-	-	-	-	-	-	-
	2401-00-102-JD											
1	Crop Yield Competition		-	-	-	15.260	14.120	14.120	14.000	92	99	99
a)	State level competition	Nos.	92	27	29	-	-	-	-	-	-	-
b)	District level competition	Nos.	149	70	47	-	-	-	-	-	-	-
	2401-00-103-JB & 2401- 00-789-JA											
2	Procurement and Distribution of Paddy and Millet Seeds		-	-	-	1872.910	2594.490	2317.990	2345.189	125	90	101
	Paddy seed Procurement	MT	18000	17800	99	-	-	-	-	-	-	-
	Millet seed procurement	MT	450	375	83	-	-	-	-	-	-	-
	Paddy seed distribution	MT	18000	18021	100	-	-	-	-	-	-	-
	Millet seed distribution	MT	450	383	85	-	-	-	-	-	-	-
	2401-00-105-JQ											

			Phy	ysical	%]	Financial (Rs. In lakh	s)	% of	% of	% of
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Achmt. Upto 31.3.2008	Achmt. W.r.t B.E	Achmt. W.r.t R.E	Achmt. W.r.t FMA
3	Vermicomposting											
	Demonstrations cum Trg.	Nos	91	90	99	4.710	4.720	4.720	4.700	100	100	100
	Farmers Trained	Nos	4550	4500	99	-	-	-	-	-	-	-
	2401-00-107-JA & 2401- 00-789-JC											
4	Crop and Plant Protection		-	-	-	117.840	119.950	119.950	112.312	95	94	94
5	2401-CH-108-JD & 2401- CH-789-JE											
	Increasing the Production of Oilseeds		-	-	-	645.640	907.930	907.930	904.110	140	100	100
a)	Seed Procurement											
	Groundnut	MT	4142	3860	93	-	-	-	-	-	-	-
	Gingelly	MT	135	68	50	-	-	-	-	-	-	-
	Sunflower	MT	125	29	23	-	-	-	-	-	-	-
	Castor	MT	90	7	8	-	-	-	-	-	-	-
	Soyabean	MT	8	0	0	-	-	-	-	-	-	-

			Ph	ysical	%		Financial (Rs. In lakh	ns)	% of	% of	% of
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Achmt. Upto 31.3.2008	Achmt. W.r.t B.E	Achmt. W.r.t R.E	Achmt. W.r.t FMA
b)	Seed Distribution											
	Groundnut	MT	4142	3377	82	-	-	-	-	-	-	-
	Gingelly	MT	135	52	39	-	-	-	-	-	-	-
	Sunflower	MT	125	35	16	-	-	-	-	-	-	-
	Castor	MT	90	6	7	-	-	-	-	-	-	-
	Soyabean	MT	8	0	0	-	-	-	-	-	-	-
	2401-00-109-JC											
6	Documentary films in Agriculture		0	0	-	0.400	0.400	0.400	0.400	100	100	100
	2401-00-789-JB											
7	Procurement and Distribution of Pulses Seeds (SCP)											
	Procurement	MT	1800	1417	79	117.160	160.870	160.870	160.800	137	100	100
	Distribution	MT	1800	1468	82	-	-	-	-	-	-	-
	2401-CH-796-JD											
8	Tribal area sub plan (Adi Dravida Dept. alloction)		-	-	-	1.570	0.720	0.720	0.720	46	100	100

			Phy	ysical	% A -14]	Financial (Rs. In lakh	ıs)	% of	% of	% of
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Achmt. Upto 31.3.2008	Achmt. W.r.t B.E	Achmt. W.r.t R.E	Achmt. W.r.t FMA
9	2415-01-004-JH											
	Production and Distribution of Micronutrients											
	Production	МТ	1400	1475	105	357.010	357.010	355.810	355.350	100	100	100
	Distribution	МТ	1400	1369	98	-	-	-	-	-	-	-
	2401-00-109-PF & PE & 2401-00-800 PC											
10	IAMWARM											
	Demonstrations	Nos.	14928	14475	97	452.410	452.205	449.310	307.288	-	-	-
	Input distribution		49068	41775	85	-	-	-	63.145	-	-	-
	Implements and equipments distribution	Nos.	4461	4666	105	-	-	-	32.644	-	-	-
	Training	Nos.	-	-	-	-	-	-	22.054	-	-	-
	Capacity building (HQ)		-	-	-	-	-	-	2.599	-	-	-
	Total IAMWARM								427.730	-	-	-

			Phy	vsical	%		Financial (l	Rs. In lakhs)	% of	% of	% of
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Achmt. Upto 31.3.2008	Achmt. W.r.t B.E	Achmt. W.r.t R.E	Achmt. W.r.t FMA
	2401-00-110-JE											
11	National Agricultural Insurance Scheme	L.Nos.	10.00	4.610	46	1500.000	1500.000	1500.000	1113.000	74	74	74
12	NADP		-	-	-	-	-	2787.070	2164.070	-	-	-
	Total (Plan scheme)		-	-	-	5084.910	6112.415	8618.890	7602.381	150	124	88
	Schemes transferred from Plan to Non Plan											
13	2401-00-103-AK											
	Groundnut Foundation Seed Production Centre											
	Foundation seed Production	MT	170.250	107.66	63	79.780	56.640	56.640	56.160	70	99	99
14	2401-CH-103-AW		-	-	-	-	-	-	-	-	-	-
	Procurement and Distribution of Green Manure Seeds(Distribution @25% subsidy)											
	Production	MT	250	180	180	50.000	50.000	50.000	49.080	98	98	98
	Distribution	MT	250	180	180	-	-	-	-	-	-	-
	2401-00-105-AE											

			Ph	ysical	%]	Financial (Rs. In lakh	s)	% of	% of	% of
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Achmt. Upto 31.3.2008	Achmt. W.r.t B.E	Achmt. W.r.t R.E	Achmt. W.r.t FMA
15	Bio Conversion of Farm waste using pleurotus											
	Production of minikits	Nos.	5000	4650	93	7.000	7.000	6.000	5.900	84	84	98
	Distribution of minikits	Nos.	5000	4650	-	-	-	-	-	-	-	-
	2401-00-107-SG											
16	Pesticides Testing Laboratories											
	Samples Analysed	Nos.	14700	14700	100	-	0.010	0.010	0.010	0	100	100
17	2401-00-107-AH											
	Control of Cotton Bollworm using NPV											
	Area	На.	2000	2000	100	0.790	0.670	0.670	0.668	85	100	100
18	2401-00-108-AD											
	Integrated Cotton Development											
	Seed Production	MT	250	146	58	113.870	94.520	94.520	89.495	79	95	95
	Seed distribution	MT	250	161	64	-	-	-	-	-	-	-

			Phy	ysical	%]	Financial (Rs. In lakh	s)	% of	% of	% of
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Achmt. Upto 31.3.2008	Achmt. W.r.t B.E	Achmt. W.r.t R.E	Achmt. W.r.t FMA
19	2401-00-108-AG											
	Integrated Coconut Development											
	Procurement of Tall nuts											
	Tall	L.Nos.	6.00	5.62	94	139.940	122.700	122.700	119.491	85	97	97
	TxD	L.Nos.	7.00	6.28	90	-	-	-	-	-	-	-
	DxT	L.Nos.	0.50	0.37	74	-	-	-	-	-	-	-
	Distribution of seedlings											
	Tall	L.Nos.	4.5	5.72	127	-	-	-	-	-	-	-
	ΤxD	L.Nos.	4.30	3.64	85	-	-	-	-	-	-	-
	DxT	L.Nos.	0.20	0.10	50	-	-	-	-	-	-	-
20	2415-01-004-BE											
	Blue Green Algae											
	Production	MT	525	511	97	21.650	18.990	18.990	17.340	80	91	91
	Distribution	MT	525	509	97	-	-	-	-	-	-	-
	2402-00-101-AG											

			Phy	ysical	%		Financial (Rs. In lakh	s)	% of	% of	% of
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Achmt. Upto 31.3.2008	Achmt. W.r.t B.E	Achmt. W.r.t R.E	Achmt. W.r.t FMA
21	Production and Distribution of Biofertilisers											
	Production of Biofertilisers	MT	1600	1694	106	312.840	286.470	286.410	266.550	85	93	93
	Distribution of Biofertilisers	MT	1600	1586	99	-	-	-	-	-	-	-
	2415-01-120-AF											
22	Remote Sensing		-	-	-	19.250	14.530	7.500	7.200	37	50	96
23	2401-00-107-AG											
	Biological Control of pest in Groundnut and coconut											
	Control of pests in Groundnut	На.	1000	180	18	11.210	8.060	8.060	8.820	79	109	109
	Control of Rhinoceros Beetle in Coconut	Tubes	55000	45100	82	-	-	-	-	-	-	-
	2401-00-109-AE											
24	Agricultural Information service		-	-	-	2.900	2.900	2.900	2.900	100	100	100
	2401-00-109-AA											

			Phy	vsical	%		Financial (l	Rs. In lakhs)	% of	% of	% of
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Achmt. Upto 31.3.2008	Achmt. W.r.t B.E	Achmt. W.r.t R.E	Achmt. W.r.t FMA
25	Sugarcane release of Parasite	На.	11000	11000	100	4.400	4.400	4.400	4.400	100	100	100
	Area											
	Total (Non Plan)		-	-	-	763.630	666.890	658.800	628.014	82	94	95
	GRAND TOTAL		-	-	-	5848.540	6779.305	9277.690	8230.395	141	121	89
	PART II SCHEMES											
	4401-00-103 JB											
1	Purchase of 4 Seed Processing Unit	Nos.	4	4	100	15.000	15.010	15.010	15.000	100	100	100
	2401-00-103 JB											
2	Strengthening of SPU - Repairing		-	-	-	10.000	10.000	10.000	10.000	100	100	100
	2401-00-103 JB											
3	Purchase of Bag closures for SPU and AECs	Nos.	61	61	100	3.000	3.000	3.000	3.000	100	100	100
	Total Part II		-	-	-	28.000	28.010	28.010	28.000	100	100	100
	Total State Schemes (Part I & II)	_	-	-	-	5876.540	6807.315	9305.700	8258.395	141	121	89

4.2.2 Centrally Sponsored Scheme: The Schemes that are centrally sponsored and shared between Central and State are listed in Table 4.2.2.

4.2.2 Plan Schemes - Centrally Sponsored Scheme shared between State and Centre

			Phy	ysical	%		Fina	ancial (Rs.	in lakhs)		% of	% of	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
	2401-00-114-UB & 2401-00-789	-UH											
I.	ISOPOM (including spillove	r)											
1	ISOPOM - Oilseeds												
	Purchase of Breeder seed	Qtls	280	433	155	-	-	-	12.600	12.831	102	-	-
	F seed production	Qtls	7000	8894	127	-	-	-	35.000	59.875	171	-	-
	C seed production	Qtls	35000	22563	64	-	-	-	175.000	197.232	113	-	-
	C seed distribution	Qtls	35000	24563	70	-	-	-	280.000	241.060	86	-	-
	Pipe for carrying water from sources to field	Nos.	738	935	127	-	-	-	110.700	114.652	104	-	-
	Infrastructure development for irrigation facilities	LS	-	-	-	-	-	-	40.000	6.600	17	-	-
	Compact Block Demon. for Groundnut	Nos.	1000	813	81	-	-	-	40.000	27.934	70	-	-
	Compact Block Demonstration for Gingelly	Nos.	450	346	77	-	-	-	6.750	4.818	71	-	-
	Compact Block Demon. for Sunflower	Nos.	102	91	-	-	-	-	2.550	2.257	89	-	-
	IPM demonstration	No.	100	94	94	-	-	-	22.680	20.305	90	-	-
	Distribution of gypsum	На.	34216	24061	70	-	-	-	181.616	167.611	92	-	-
	Distribution of biofertiliser	На.	120000	123588	103	-	-	-	60.000	57.661	96	-	-
	Disbn. of bio pesticides	Ha.	6000	6670	111	-	-	-	15.000	14.472	96	-	-

			Phy	ysical	% Achmt.		Finar	ncial (Rs. in l	akhs)		% of	% of	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approve d Allocatio n	Achmt. Upto 31.3.200 8	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
	Block demn. in Groundnut (Polythene mulch)	Nos.	714	481	67	-	-	-	49.980	40.571	81	-	-
	Disbn. of PP equipments	Nos.	1500	2476	165	-	-	-	12.000	18.697	156	-	-
	Distribution of Power Sprayers	Nos.	500	794	159	-	-	-	10.000	17.825	178	-	-
	Distribution of Weedicide	На.	100	59	59	-	-	-	0.500	0.291	58	-	-
	Farmers Training	Batch	200	195	98	-	-	-	30.000	29.396	98	-	-
	Officers Training	Batch	5	5	100	-	-	-	0.800	0.808	101	-	-
	Publicity	Ls.	0	0	0	-	-	-	0.500	0.500	100	-	-
	Staff and Other contingencies	Ls.	0	0	0	-	-	-	80.000	54.264	68	-	=
	Innovative Components												
	Provision of Audio Visual aids for crop campaign	Nos.	11	0	0	-	-	-	22.000	21.220	96	-	-
	Combined Nutrient Spray for Groundnut	На.	1510	1096	73	-	-	-	3.020	5.330	176	-	-
	TOTAL OILSEEDS					1004.400	1175.410	1190.750	1190.696	1116.210	94	95	94
	2401-00-112-UA & 2401-00-789-UC												
2	PULSES												
	Breeder seed Purchase	Qtls	115	103	90	-	-	-	5.750	6.371	111	-	-
	Foundation seed production subsidy	Qtls	1440	1945	135	-	-	-	7.200	17.547	244	-	-

			Ph	ysical	%		Fi	nancial (Rs.	in lakhs)		% of	% of	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
	Production of Certified Seed	Qtls	18800	8688	46	-	-	-	94.000	90.560	96	-	-
	Distribution of Certified seed	Qtls	18800	8690	46	-	-	-	150.400	107.580	72	-	-
	Block Demonstration to achieve yield potential	Nos.	4000	3557	89	-	-	-	80.000	68.586	86	-	-
	IPM Demonstration	Nos.	200	250	125	-	-	-	24.630	22.109	90	-	-
	Distribution of Biofertiliser	На.	56336	66796	119	-	-	-	28.168	28.500	101	-	-
	Distribution of Biopesticide	На.	2160	2611	121	-	-	-	5.000	4.755	95	-	-
	Distribution of NPV virus	L.Ha.	1000	1418	142	-	-	-	2.500	3.168	127	-	-
	Distribution of Hand operated sprayers	На.	5000	6859	137	-	-	-	40.000	52.816	132	-	-
	Pipe for carrying water from souces to field	Nos	553	1091	197	-	-	-	82.950	112.180	135	-	-
	Farmers Training	Batch	200	193	97	-	-	-	30.000	28.747	96	-	-
	Officers Training	Batch	4	4	100	-	-	-	0.640	0.640	100	-	-
	Publicity	LS							0.500	0.438	0	-	-
	Staff contingencies								20.000	15.936	80	-	-
	Innovative Components												
	Provision of Audio Visual aids for crop campaign	Nos.	15	0	0	-	-	-	30.000	29.919	100	-	-
	DAP Spraying	На.	30050	32820	109	-	-	-	30.050	28.895	96	-	-
	Micro Nutrient Spray	На.	70714	22966	32	-	-	-	49.500	18.094	37	-	-
	TOTAL PULSES		-	-	-	670.500	685.820	699.780	681.288	636.841	93	93	91

			Phy	ysical	%		Finan	cial (Rs. in	lakhs)		0/ 6	0/ 6	0/ 6
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.200 8	% of Achmt. Approved outlay	% of Achmt. W.r.to R.E	% of Achmt. W.r.to FMA
	2401-00-114-UE & 2401-00-789	9-UD											
3	OILPALM												
1	Assistance for Planting Materials (Advance) @ 160 Nos/Ha.	На.	3000	1826	61	-	-	-	96.000	57.780	60	-	-
2	Assistance for Planting Materials @ 143 Nos./Ha.	На.	3956	1780	45	-	-	-	169.710	74.680	44	-	-
3	Area expansion	На.	3956	1780	45	-	-	-	276.920	121.719	44	-	-
4	Cultivation Maintenance Subsidy												
	II Year	На.	1748	1457	83	-	-	-	42.830	33.810	79	-	-
	III Year	На.	1140	910	80	-	-	-	31.920	25.361	79	-	-
	IV Year	На.	565	395	70	-	-	-	18.362	12.795	70	-	-
5	Establishemnt & Maintenance of seed garden	На.	15	-		-	-	-	10.000	0.000	0	-	-
6	Drip Irrigation												
	SF/MF/SC/ST	На.	80	19	24	-	-	-	5.920	1.748	30	-	-
	Other Categories	На.	45	12	27	-	-	-	2.340	0.744	32	-	-
7	Promotional component			-		-	-	-				-	-
	Farmers Training	Batch	2500	2025	81	-	-	-	10.000	8.700	87	-	-
	Officers training	Batch	6	6	100	-	-	-	1.200	1.200	100	-	-
	Block demonstration	Nos.	10	5	50	-	-	-	1.700	0.850	50	-	-

			Phy	sical	%		Fina	ancial (Rs. ir	ı lakhs)		% of	% of	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
8	Precision farming	На.	100	0	0	-	-	-	100.000	-	-	-	-
9	Conversion of Biomass into Organic manure (Vermicompost)	Nos.	5	4	80	-	-	-	0.750	0.600	80	-	-
10	Oil Palm Leaf/Chaff cutter	Nos.	10	-	-	-	-	-	1.000	-			
11	Covering wiremesh to avoid rat menace	Hac.	750	258	34	-	-	-	21.450	7.471	35	-	-
12	Publicity and seminar	LS		-	-	-	-	-	0.500	0.400	80	-	-
13	Review, Workshop, Study Tour	Ls.	114	114	100	-	-	-	1.750	1.750	100	-	-
	TOTAL OILPALM					306.470	773.740	773.720	792.352	349.608	44	45	45
4	2401-00-102-UB 2401-00- 793-UA &2401-00-102-SA												
	ISOPOM - MAIZE												
1	Production of Breeder seed	Qtls.	2	0	0	-	-	-	0.180	0.000	0	-	-
2	Productin of C seeds through Dept.	Qtls.	200	318	159	-	-	-	1.000	2.084	208	-	-
3	Distribution of C seed	Qtls.	300	592	197	-	-	-	2.400	3.904	163	-	-
4	Distribution of Minikits	Nos.	1000	862	86	-	-	-	1.000	1.000	100	-	-
5	Block demonstration	Nos.	275	279	101	-	-	-	11.080	10.872	98	-	-
6	IPM by Dept.	Nos.	36	36	100	-	-	-	8.165	7.977	98	-	-
7	POL	LS	20	0	-	-	-	-	6.300	3.936	62	-	-
8	Training to farmers	Nos.	1800	1800	100	-	-	-	5.466	5.390	99	-	-

			Ph	ysical	%		Fina	ncial (Rs. in	lakhs)		% of	% of	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
9	Officers training	Nos.	300	150	50	-	-	-	1.600	0.800	50	-	-
10	Seminar	Nos.	36	34	94	-	-	-	5.400	5.068	94	-	-
11	State Level Workshop	Nos.	1	1	100	-	-	-	0.200	0.200	100	-	-
12	Pipe line carrying water from Water source to the field	Nos.	150	127	85	-	-	-	17.500	13.726	78	-	-
	Innovative component												
13	Contract farming	Batch	6	0	0	-	-	-	6.750	6.750	100	-	-
14	Provision of Audio Visual aids for Crop Campagin	Nos.	15	0	-	-	-	-	30.000	29.987	100	-	-
	Publicity	LS	-	-	-	-	-	-	0.500	0.464	93	-	-
	Total Maize		-	-	53.070	97.540	97.520	97.541	92.158	94	94	95	-
	GRAND TOTAL (ISOPOM)		-	-	2034.440	2732.510	2761.770	2761.877	2194.817	79	80	79	-
II	Technology Mode Missi	on											
	(2401-00-108-UC &2401-0	0-789-UE	3)										
	ICDP - COTTON												
1	Production of Breeder seed	Qtls	200	171	86	-	-	-	0.260	0.115	44	-	-
2	Distribution of Certified seeds	Qtls.	1000	1325	133	-	-	-	20.000	21.753	109	-	-
3	Seed delinting	Qtls.	1	1	100	-	-	-	40.000	40.000	100	-	-

			Ph	ysical	% Achmt.		Fina	ancial (Rs. i	in lakhs)		% of	% of	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
4	Farmers Field School	Nos.	700	688	98	-	-	-	119.000	95.791	80	-	-
5	Seed treatment with chemicals	Qtls.	700	688	98	-	-	-	0.420	0.323	77	-	-
6	Surveillance and mnitoring pest and disease	Nos.	1500	1200	80	-	-	-	15.000	11.580	26	-	-
7	Distribution of Pheromone traps	На.	4000	2840	71	-	-	-	5.600	3.941	70	-	-
8	Supply of Bio agents	На.	4000	3514	88	-	-	-	18.000	12.575	70	-	-
9	Manually operated sprayers	Nos.	4000	6529	163	-	-	-	32.000	49.182	154	-	-
10	Power Operated sprayers	Nos.	5000	3223	64	-	-	-	100.000	73.442	73	-	-
	Human Resource Development												
11	State level training	Nos.	20	20	100	-	-	-	3.000	3.000	100	-	-
	New Intervensions			-		-	-	-		-		-	-
12	Distribution of biofertilisers	Pock	200000	203746	102	-	-	-	3.000	3.371	112	-	-
13	Distribution of Micro Nutrients	MT	30	19	63	-	-	-	1.800	1.307	73	-	-
14	Intercropping with Pulses	На.	6000	6000	100	-	-	-	3.900	2.486	64	-	-
15	Farmers Training	Nos.	750	689	92	-	-	-	37.500	35.800	95	-	-
16	Contingencies					-	-	-	16.000	10.120	63	-	-

			Phy	sical	0/ 1 1 /		Fin	ancial (Rs. in	n lakhs)		0/ 6	0/ 6	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.20 08	% Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	% of Achmt. Approved outlay	% of Achmt. W.r.to R.E	Achmt. W.r.to FMA
	Components under 100%	assistano	e by GOI										
17	Production of F seed												
	Production by Dept.	Qtl	100	344	344	-	-	-	5.000	14.214	284	-	-
	Production by SIMA, CD & RA	Qtl	374	374	100	-	-	-	18.700	18.700	100	-	-
18	Production of certified seeds												
	Production by Dept.	Qtl	1000	1031	103	-	-	-	15.000	11.489	77	-	-
	Production by SIMA, CD & RA	Qtl	1740	1740	100	-	-	-	26.100	26.110	100	-	-
19	Electronic Print Media / Seminar / Workshop		3	3	100	-	-	-	2.250	2.250	100	-	-
20	FLD on production technology	Nos.	750	791	105	-	-	-	37.500	39.350	105	-	-
21	FLD on farm implements by SIMA CD&RA	Nos.	5	5	100	-	-	-	5.000	5.000	100	-	-
	TOTAL ICDP - Cotton		-	-	-	450.010	525.030	525.030	525.030	481.899	107	92	92
III	Macro Management M	ode Sch	emes										
	Cereal Development												
	(2401-00-102-UA & 2401-	00-789-U	A	•									
1	Paddy Certified Seed Distribution	MT	15000	13216	88	-	-	-	300.000	259.864	87	-	-

	Head of account Scheme		Ph	ysical	%		Fina	ancial (Rs. i	n lakhs)		% of	% of	% of
Sl. No.		Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
2	Promotion of SRI technolgy (New Innovative)	Nos.	1132	1169	103	-	-	-	283.000	290.463	103	-	-
3	Promotion of IPM	Nos.	590	590	100	-	-	-	100.300	104.912	105	-	-
4	Contingency / POL	LS							9.000	7.680	85	-	-
	TOTAL (Cereal Dev. Programme)		-	-	-	691.040	691.700	691.680	692.300	662.919	96	96	96
	2402-101-UA & 2401-00- 105-UJ												
2	Balanced and Integrated	l Use of fe	rtilisers										
1)	Purchase of Analytical instrument to new FCL	Centres								-			
2)	Purchase of Analytical instrument to new PTL	Centres	6	6	100	-	-	-	300.000	300.000	100	-	-
3)	Purchase of Analytical instrument to new STL	Centres	11	11	100	-	-	-	77.000	76.950	100	-	-
4)	Strengthening of MSTL through purchase of AAS	Nos.	8	8	100	-	-	-	80.000	80.000	100	-	-
5)	Printing of Soil Health Card	L.Nos.	10	10	100	-	-	-	10.000	10.000	100	-	-
_	TOTAL (BIUF)		-	-	-	26.230	467.020	466.990	467.000	466.950	100	100	100

			Phy	ysical	%		Fir	nancial (Rs. in	lakhs)		% of	% of	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
3	INNOVATIVE SCHEMES												
	2402-00-102-UR												
1	Farmers Interest Group												
	Foromation of new FIGs for Paddy, Millets, Pulses, Cotton and Oilseeds	Groups	1200	1200	100	-	-	-	60.000	59.500	99	-	-
	Training to Farmers	Groups	1200	1200	100	-	-	-	48.000	48.000	100	-	-
	Issue of ID cards	Groups	1200	1200	100	-	-	-	4.800	4.750	99	-	-
	District level meeting	Groups	74	74	100	-	-	-	14.800	14.800	100	-	-
	State level meeting	Nos.	4	4	100	-	-	-	2.000	2.000	100	-	-
	Contingency / Documentation / Communication		1200	1186	99	-	-	-	18.000	17.780	99	-	-
	Total FIG		-	-	-	0	147.600	147.600	147.600	146.830	99	-	-
2	TANWABE												
a)	Distribution of machineries and equipments	LS											
b)	Promotion of Micro Enterprise activities	LS	725	725	100	-	-	-	72.450	72.450	100	-	-
	Total TANWABE		-	-	-	-	-	-	72.450	72.450	100	-	-

			Phy	ysical	% Achmt.		Fir	nancial (Rs. i	n lakhs)		% of	% of	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
3	TOT training to Extension staff	LS	3650	1050	29	-	-	-	50.000	50.000	100	-	-
4	Creation of Irrigation infrastructure to SSFs	Nos.	15	-	-	-	-	-	0.000	-	-	-	-
	Total Innovative Schemes					270.050	270.050	270.050	270.050	269.280	100	100	100
	Total Macro Mangement M	Mode Schen	nes			987.320	1428.770	1428.720	1429.350	1399.149	98	98	98
	2401-00-109-UC	270.050	270.050	270.050									
5	ATMA												
	Training	Nos.	1575	1575	100	-	-	-	-	-	-	-	-
	Demonstration	Nos.	3580	4877	136	-	-	-	-	-	-	-	-
	Exposure visit	Nos.	47	47	100	-	-	-	-	-	-	-	-
	Farmers Scientists interaction	Nos.	33	33	100	-	-	-	-	-	-	-	-
	Total ATMA (State Share))				169.700	187.280	187.270	190.000	44.350	23	24	24
IV	Coconut Dev. Board Schemes (50:50)												
1	2401-00-108-UD												
a)	TxD Production at Navlock												
	TxD seedlings Procurement	L.Nos.	1.07	1.09	102	21.400	18.750	15.960	18.750	16.821	90	90	105
	TxD seedlings disbn.	L.Nos.	0.75	0.48	64	-	-	-	-	-	-	-	-

			Ph	ysical	%		Fina	ancial (Rs. i	n lakhs)		% of	% of	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
	2401-00-108-VF												
b)	Estt. of Regional Coconut Nurseries												
	Seedlings distribution	L.Nos.	2.50	1.76	70	27.790	30.740	30.730	80.740	43.173	53	100	100
c)	2401-00-108-VC												
	Control of Eriophyid mite		-	-	-	0.000	0.000	400.000	400.000	400.000	100	100	100
	TOTAL (CDB schemes)		-	-	-	49.190	49.490	446.690	499.490	459.994	100	100	100
V.	Centrally sponsored scheme 100% assistance												
	2401-00-114-SB												
1	Integrated farming in Coconut holding for productivity improvement												
a)	Maintenance of disease affected palms	Nos.	25766	25766	100	-	-	-	64.415	64.415	100	-	-
b)	Demonstration Plots		980	980	100	-	-	-	171.500	171.500	100	-	-
c)	Organic Manure pits	Units	25	25	100	-	-	-	5.000	5.000	100	-	-
d)	Estblishmt. of product diversification trg.Centre		-	-	-	-	-	-	41.350	20.675	50	-	-

			Ph	ysical	%		Fin	ancial (Rs. i	n lakhs)		% of	% of	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
e)	Root Wilt initial survey		-	-	1	-	-	-	4.800	4.000	83	-	-
f)	Post survey on Root Wilt		-	-	1	-	-	-	3.200	(G.O. awaited)	-	-	-
g)	Control of Red Palm Weivil	На.	-	-	-	-	-	-	5.000	5.000	100	-	-
h)	Control of Blackheaded caterpillar		-	-	-	-	-	-	5.675	5.675	100	-	-
	Total		-	-	-	600.000	600.000	300.940	300.940	276.265	92	46	92
	2401-00-105-SA												
2	Organic Farming												
	Setting up of Model Organic farm	Nos.	20	-	-	-	-	-	-	-	-	-	-
	Total		-	-	-	45.980	8.010	8.010	0.000	0	-	-	-
						(Revali dation yet to be receive d from GOI)							
	2401-00-102-SB												

			Ph	ysical	%		Fir	nancial (Rs. in	lakhs)		% of	% of	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.3.2008	Achmt. W.r.t Annual Target	BE 2007-08	RE 2007-08	FMA 2007-08	Approved Allocation	Achmt. Upto 31.3.2008	Achmt. Approved outlay	Achmt. W.r.to R.E	Achmt. W.r.to FMA
3	Seed Village Programme												
a)	Distribution of Seeds												
	Paddy	MT	3000	1920	64	-	-	-	210.000	127.000	60	-	-
	Oilseeds	MT	400	189	47	-	-	-	80.000	18.000	23	-	-
	Pulses	MT	100	39	39	-	-	-	20.000	20.000	100	-	-
b)	Training	Nos.	600	300	50	-	-	-	90.000	45.000	100	-	-
	Total Seed Village Scheme		-	-	-	100.100	200.000	424.460	400.000	210.000	53	105	49
	Total CSS 100% assistance		-	-	-	746.080	808.010	733.410	700.940	486.265	69	60	66
	Grand Total (Centrally sponsored scheme)		-	-	-	4436.740	5731.090	6082.890	6106.687	5066.474	83	88	83

4.2.3 Plan Schemes - State Scheme Part I and II for the Period ending 31.08.2008

			Phy	sical	%	Finan	cial (Rs. In la	khs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
	PART I SCHEME									
	2401-00-102-JD									
1	Crop Yield Competition		-	-	-	14.070	14.070	-	-	-
a)	State level competition	Nos.	6	-	-	-	-	-	-	-
b)	District level competition	Nos.	62	-	-	-	-	-	-	-
	2401-00-103-JB & 2401-00-789-JA									
2	Procurement and Distribution of Paddy and Millet Seeds		-	-	-	2584.500	2874.530	526.750	20	-
	Paddy seed Procurement	MT	18000	4064	23	-	-	-	-	-
	Millet seed procurement	MT	450	64	14	-	-	-	-	-
	Paddy seed distribution	MT	18000	8495	47	-	-	-	-	-
	Millet seed distribution	MT	450	141	31	-	-	-	-	-

			Phy	sical	%	Finan	cial (Rs. In la	khs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
	2401-00-105-JQ									
3	Vermicomposting									
	Demonstrations cum Trg.	Nos	300	5	2	8.990	11.550	0.193	2	-
	Farmers Trained	Nos	15000	250	2	-	-	-	-	-
	2401-00-107-JA & 2401-00-789-JC									
4	Crop and Plant Protection		-	-	-	118.340	118.340	2.522	2	-
5	2401-CH-108-JD & 2401-CH-789-JE									
	Increasing the Production of Oilseeds		-	-	-	913.000	913.000	199.280	22	-
a)	Seed Procurement									
	Groundnut	MT	4232	827	20	-	-	-	-	-
	Gingelly	MT	105	5	5	-	-	-	-	-
	Sunflower	MT	65	6	9	-	-	-	-	-
	Castor	MT	90	0	-	-	-	-	-	-
	Soyabean	MT	8	-	-	-	-	-	-	-

			Phy	sical	%	Finan	cial (Rs. In la	khs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
b)	Seed Distribution									
	Groundnut	MT	4232	1065	25	-	-	-	-	-
	Gingelly	MT	105	4	4	-	-	-	-	-
	Sunflower	MT	65	8	12	-	-	-	-	-
	Castor	MT	90	0.14	0	-	-	-	-	-
	Soyabean	MT	8	-	-	-	-	-	-	-
	2401-00-109-JC									
6	Documentary films in Agriculture		0	-	-	0.380	0.380	-	-	-
	2401-00-789-JB									
7	Procurement and Distribution of Pulses Seeds (SCP)									
	Procurement	MT	2500	327	13	160.870	212.500	41.000	25	-
	Distribution	MT	2500	500	20	-	-	-	-	-
	2401-CH-796-JD									

			Phy	sical	%	Finan	icial (Rs. In la	khs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
8	Tribal area sub plan (Adi Dravida Dept. alloction)		-	-	-	1.210	1.210	-	-	-
9	2415-01-004-JH									
	Production and Distribution of Micronutrients									
	Production	MT	1400	548	39	350.310	350.310	151.140	43	-
	Distribution	MT	1400	300	21	-	-	-	-	-
	2401-00-109-PF & PE & 2401-00-800 PC									
10	IAMWARM									
	Demonstrations	Nos.	6575	663	-	-	288.430	16.140	-	Demonstrations are being laid during Aug - Oct.
	Implements and equipments distribution	Nos.	2062	-	-	-	36.086	7.352	-	Procurement of farm implements is in progress.

			Phy	sical	%	Finan	cial (Rs. In la	khs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
	Training	Nos.					66.210	3.508		
	Capacity building (HQ)		-	-	-	-	4.000			-
	Total IAMWARM					529.870	394.726	27.000	7	-
	2401-00-110-JE									
11	National Agricultural Insurance Scheme	L.Nos.	33	0.42		3000.000	3000.000	59.416	2	-
	2401-00-800-KF									
12	NADP									
a)	Precision farming	На.	6100	-	-	2578.130	2959.900	-	-	5690 Ha. identified, 284 clusters formed, 5980 beneficieries selected, 64 farmers' association registered. Preparation of Estimates and loan sanction work is in progress.

			Phy	sical	%	Finan	icial (Rs. In la	khs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
b)	Agri Clinic	Nos	224	-	-	604.800	694.400	-	-	224 applications received, 152 candidates selected, remaining 72 candidates yet to be selected. Training by TNAU has been imparted to 63 candidates.
c)	Dryland development	На.	-	-	-	218.650	-	-	-	
i)	Cultivation Expenses(Ha)		6000	950	16	-	150.000	-	-	Beneficiaries selected from all 40 blocks and
ii)	Distribution of dryland machineries(Nos)		892	-	-	-	101.000	-	-	training conducted. The sowing operation for balance area will be done in October - November season. Approved rates and firms for the supply of dryland machineries received from TNAU and communicated to the districts

			Phy	sical	%	Finan	cial (Rs. In la	ıkhs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
d)	Land resource Inventory - GIS	На.	360000	13000	4	181.010	208.110	21.000	10	Survey work in all 10 blocks of 10 focus districts is under progress. 2 SRFs, 28 JRFs are recruited for the field study.
e)	Promotion of Organic farming and Organic manure production									
	Vermicompost Unit	Nos.	645	2	-	-	290.250	-	-	12900 Beneficiaries selected and 9900 farmers trained. Training completed in all the focus districts except Krishnagiri and Coimbatore.
	Municipal compost Unit	Nos.	129	-	-	623.770	264.450	-	-	The self help groups
	Bio input Production Unit	Nos.	129	-	-	-	161.250	-	-	list have been received by TNAU from all focus districts and training scheduled in Sept. 08.

			Phy	sical	%	Finan	cial (Rs. In la	khs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
f)	e-Agriculture	Computers	300	43	14	118.200	118.200	118.200	100	Amount released to ELCOT and supply awaited to AECs.
g)	Strengthening of Quality seeds									
	Infrastructure Development to State Seed Farms	Nos.	253	-	-	257.170	420.200	-	-	AED is finalizing the estimates for irrigation facilities, land development, etc in SSFs. Work Order will be issued in Sep. 08.
	Purchase of 20 Seed Processing Unit and repairing of SPUs	Nos.	-	-	-	48.000	168.000	-	-	Target communicated to district JDAs. Tender formalities initiated to purchase 20 SPUs. Funds allotted to districts to take up repair work of SPUs.

			Phy	sical	%	Finan	cial (Rs. In la	khs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
	Procurement and distribution subsidy for Pulses / Oilseeds seeds and Coconut seedlings	-	-	-	1	75.000	755.460	-	-	Distribution of Coconut seedlings is in progress. For Pulses and Oilseeds, 'F' Seed production will be taken up in Dec.08.
	Subsidy to SHGs for establishment of Seed Processing Units.	Nos.	75	-	-	-	562.500	-	-	The work for identification of SHGs is in progress.
	Total NADP		-	-	-	4704.730	6853.720	139.200	3	-
13	Development of Jatropha		-	-	-	2004.000	0.000	0	-	-
14	Organic farming scheme under Western Ghat Development		-	-	-	4.750	0	-	-	-
	Total (Plan scheme)		-	-	-	14395.020	14744.336	1146.501	8	-
	Schemes transferred from	n Plan to No	n Plan							
15	2401-CH-103-AW									
	Procurement and Distribution of Green Manure Seeds (Distribution @25% subsidy)									

			Phy	sical	%	Finan	cial (Rs. In la	khs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
	Production	MT	250	126	50	50.000	50.000	0.550	1	
	Distribution	MT	250	50	20					
	2401-00-105-AE									
16	Bio Conversion of Farm waste using pleurotus									
	Production of minikits	Nos.	5000	500	10	7.000	6.000	0.600	9	
	Distribution of minikits	Nos.	5000	-	-	-	-	-	-	
	2401-00-107-SG									
17	2401-00-108-AD									
	Integrated Cotton Development									
	Seed Procurement	MT	250	9.214	4	100.970	110.000	5.650	6	
	Seed distribution	MT	250	8.738	3	-	-	-	-	
18	2401-00-108-AG									
	Integrated Coconut Development									

			Phy	sical	%	Finan	cial (Rs. In la	ıkhs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
20	Prodn and Distribution of Biofertilisers									
	Production of Biofertilisers	MT	1600	657	41	319.020	319.020	98.250	31	
	Distribution of Biofertilisers	MT	1600	300	19	-	-	-	-	
	Total (Non Plan)					622.780	694.030	166.550	27	
	GRAND TOTAL					15017.800	15438.366	1313.051	9	
	PART II SCHEMES									
	4401-00-103 JB									
1	Repairing of 77 AECs and construction of 220 toilets	Nos.	-	-	-	291.500	291.500	-	-	Work has been entrusted to CE (PWD) Buildings.
	2401-00-103 JB									
2	Purchase of Furniture and Materials to 219 AECs		-	-	-	74.460	74.460	32.400	44	Supply order given to TANSI. Supply will be completed before Sept.08

			Phy	sical	%	Finan	cial (Rs. In la	khs)	% of	
Sl. No	Head of Account / Scheme	Unit	Annual Target	Achmt. Upto 31.08.08	Achmt. W.r.t Annual Target	BE 2008-09	Amt. proposed / sanctioned	Achmt. Upto 31.08.08	Achmt. W.r.t B.E	Remarks
3	Providing Telephone Connection to 265 Block AECs	Nos.		-	-	68.900	68.900	1.325	2	Deposit amount paid to BSNL along with list of AECs to be provided with telephone. Concerned JDAs contacting the Telephone Exchange for getting connection.
	Total Part II			-	-	434.860	434.860	33.725	8	
	Total State Schemes (Part I & II)			-	-	15452.660	15873.226	1346.776	9	

			Ph	ysical	%	Fina	ncial (Rs. in l	akhs)	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.8.2008	Achmt. W.r.t Annual Target	BE 2008-09	Approved/ sanctioned allocation	Achmt. Upto 31.8.2008	Achmt. W.r.to sanctioned amount
	2401-00-114-UB & 2401-00-789-UH								
I.	ISOPOM								
1	ISOPOM - Oilseeds								
1	Purchase of Breeder seed	Qtls	280	36	13	-	12.600	1.620	-
2	F seed production	Qtls	6000	1546	26	-	60.000	15.140	-
3	C seed production	Qtls	28000	5899	21	-	280.000	58.690	-
4	C seed distribution	Qtls	28000	7184	26	-	336.000	84.000	-
5	Pipe for carrying water from sources to field	Nos.	500	74	15	-	75.000	6.690	-
6	Infrastructure development for irrigation facilities	LS	-	-	-	-	20.000	-	-
7	Compact Block Demon. for Groundnut	Nos.	250	28	11	-	10.000	1.000	-
8	Compact Block Demonstration for Gingelly	Nos.	100	2	2	-	1.500	0.020	-
9	Compact Block Demon. for Sunflower	Nos.	100	1	1	-	2.500	0.025	-
10	IPM demonstration	No.	100	9	9	-	22.680	1.360	-

			Ph	ysical	%	Fina	ncial (Rs. in l	akhs)	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.8.2008	Achmt. W.r.t Annual Target	BE 2008-09	Approved / sanctioned allocation	Achmt. Upto 31.8.2008	Achmt. W.r.to sanctioned amount
14	Staff contingencies	LS	0	-	-	-	20.000	-	-
15	Publicity		0	-	-	-	0.500	-	-
16	DAP Spraying	На.	30000	1463	5	-	30.000	1.400	-
17	Micro Nutrient Spray	На.	70000	2145	3	-	49.000	1.500	-
	TOTAL PULSES		-	-	-	711.680	807.420	46.552	6
	2401-00-114-UE & 2401-00-789-UD)							
3	OILPALM								
1	Assistance for Planting Materials@ 143 No./Ha.	На.	4000	595	15	-	171.600	25.500	-
2	Area expansion	На.	4000	595	15	-	280.000	41.620	-
3	Cultivation Maintenance	На.	-	-	-	-	-	-	-
a)	II Year	На.	1795	515	29	-	43.978	12.620	-
b)	III Year	На.	1456	375	26	-	40.768	10.500	-
c)	IV Year	На.	910	228	25	-	29.575	7.410	-
4	Establishment & Maintenance of seed garden	На.	15	-	-	-	10.000	-	-

			Ph	ysical	%	Fina	ncial (Rs. in l	akhs)	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.8.2008	Achmt. W.r.t Annual Target	BE 2008-09	Approved / sanctioned allocation	Achmt. Upto 31.8.2008	Achmt. W.r.to sanctioned amount
5	Promotional components								
a)	Farmers Training	Batch	2500	-	-	-	10.000	-	-
b)	Officers training	Batch	6	-	-	-	1.200	-	-
c)	Block demonstration	Nos.	5	-	-	-	0.123	-	-
6	Innovative component								
a)	Precision Farming	На.	200	-	-	-	-	-	-
b)	Conversion of Biomass into Organic manure (Vermicompost)	Nos.	5	-	-	-	-	-	-
c)	Covering wiremesh to avoid rat menace	Hac.	2500	-	-	-	-	-	-
d)	Review, Workshop, Study Tour	Ls.	-	-	-	-	1.750	-	-
e)	Publicity and Seminar	Ls.	-	-	-	-	-	-	-
f)	Assistance for purchase of bunch / leaf chopping machine	Nos.	-	-	-	-	-	-	-
	TOTAL OILPALM		-	-	-	780.800	588.994	97.650	17

15.000

26.100

7.500

125

7

Qtl

Qtl

1000

1740

Production of certified seeds

Production by SIMA, CD & RA

Production by Dept.

			Ph	ysical	%	Fina	ncial (Rs. in l	akhs)	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.8.2008	Achmt. W.r.t Annual Target	BE 2008-09	Approved / sanctioned allocation	Achmt. Upto 31.8.2008	Achmt. W.r.to sanctioned amount
V.	Coconut Dev. Board Schemes (50:50)	•						
1	2401-00-108-UD								
a)	TxD Production at Navlock								
	TxD seedlings Procurement	L.Nos.	1.07	0.58	54	70.640	18.750	8.750	47
	TxD seedlings disbn.	L.Nos.	0.75	0.48	64	-	-	-	-
b)	Estt. of Regional Coconut Nurseries								
	Seedlings distribution	L.Nos.	2.00	0.25	13	0.010	50.000	6.250	13
2	2401-00-108-VC								
	Control of Eriophyid mite		-	-	-	1877.400	1877.400	100.000	5
	TOTAL (CDB schemes)		-	-	-	1948.050	1946.150	115.000	6
V.	Centrally sponsored scheme 100% a	ssistance	•						
	2401-00-114-SB								
1	Integrated farming in Coconut holding for productivity improvement								
a)	Maintenance of demonstration laid during 2007-08	Nos.	250	90	36	-	43.750	15.750	-
b)	Estblishmt. of product diversification trg.Centre		-	-	-	-	20.675	-	-

			Ph	ysical	%	Fina	ncial (Rs. in l	akhs)	% of
Sl. No.	Head of account Scheme	Unit	Annual Target	Achmt. Upto 31.8.2008	Achmt. W.r.t Annual Target	BE 2008-09	Approved / sanctioned allocation	Achmt. Upto 31.8.2008	Achmt. W.r.to sanctioned amount
c)	Root Wilt initial survey		-	-	-	-	4.000	-	-
d	Control of Blackheaded caterpillar		-	-	-	-	5.746	-	-
	Total		-	-	-	500.000	74.171	15.750	21
	2401-00-102-SB								
2	Seed Village Programme								
a)	Distribution of Seeds								
	Paddy	MT	1977	185	9	-	138.600	18.000	-
	Oilseeds	MT	800	49	6	-	80.000	4.800	-
	Pulses	MT	100	3	3	-	20.000	0.660	-
b)	Training	Nos.	641	-	-	-	96.150	-	-
	Total Seed Village Scheme		-	-	-	200.000	334.750	23.460	7
3	National Food Security Mission								
a)	National Food Security Mission - Paddy		-	-	-	-	3714.610	139.562	4
b)	National Food Security Mission - Pulses		-	-	-	-	186.682	28.130	15
	Total NFSM		-	-	-	-	3901.292	167.692	4
	Total CSS 100% assistance		-	-	-	700.000	4310.213	206.902	5

The details on area covered under SRI during 2007-08 and coverage planned in 2008-09 are presented in Ttable 4.2.5.

4.2.5. SRI Coverage details of 2007-08 and Target for 2008-09

(lakh ha)

S.No	District	2007-08	Kur 08 Tar.	Samba 08 Tar	Total
1	Kancheepuram	0.359	0.170	0.335	0.505
2	Thiruvallur	0.220	0.200	0.187	0.387
3	Cuddalore	0.344	0.170	0.309	0.479
4	Villupuram	0.325	0.260	0.345	0.605
5	Vellore	0.074	0.100	0.080	0.180
6	Thiruvannamalai	0.207	0.110	0.336	0.446
7	Salem	0.031	0.040	0.100	0.140
8	Namakkal	0.093	0.012	0.054	0.096
9	Dharmapuri	0.037	0.050	0.050	0.100
10	Krishnagiri	0.032	0.030	0.050	0.080
11	Coimbatore	0.028	0.010	0.022	0.032
12	Erode	0.170	0.050	0.148	0.198
13	Trichy	0.175	0.060	0.208	0.268
14	Perambalur	0.066	0.010	0.159	0.169
15	Karur	0.039	0.000	0.068	0.068
16	Pudukkottai	0.123	0.030	0.238	0.268
17	Thanajvur	0.355	0.280	0.587	0.837

(lakh ha)

	District	2007-08	Kur 08 Tar.	Samba 08 Tar	Total
18	Thirivarur	0.553	0.266	0.458	0.724
19	Nagapattinam	0.520	0.280	0.456	0.736
20	Madurai	0.109	0.090	0.120	0.210
21	Theni	0.035	0.050	0.034	0.084
22	Dindigul	0.031	0.010	0.045	0.055
23	Ramnad	0.000	0.010	0.000	0.010
24	Virudhunagar	0.025	0.000	0.090	0.090
25	Sivaganga	0.000	0.000	0.200	0.200
26	Tirunelveli	0.175	0.130	0.209	0.339
27	Tuticorin	0.045	0.040	0.042	0.082
28	Kanyakumari	0.038	0.042	0.070	0.112
	Total	1.209	2.500	5.000	7.500

4.3. Productivity Level of Select Crops and Constraints

Rice plays an important role in providing food security to the people of Tamil Nadu. Rice production has come to stagnation in recent years due to many constraints with almost no scope for increasing area under rice cultivation. This could be achieved through increasing the productivity of rice grown under rainfed and correcting the imbalances in adoption of various technological inputs. Evidences indicate that at 1.9 percent population growth and 5 percent income growth, the demand projection for sustaining the present level of calorie supply would need 158 million tonnes of grain production by 2010 in India which accounts to annual productivity growth of 2.4 percent.

A comparison of rice productivity among various States in India reveals that productivity of paddy in Tamil Nadu is much above that of the All India average. The share of rice to total area under food grains in the State ranged from 50 to 62 percent and the contribution of rice production to total food grain produced in the State ranged from 75 to 85 percent. The area under rice is fluctuating around 20 lakh hectares in the State for the last ten years. Similarly, rice production in the State was 73.66 lakh tonnes during 2000-01 and it declined to 52.10 lakh tonnes during 2005-06. The rice productivity which was around 3500 kg per hectare during 2000-01 has declined to 2500 kg per hectare during 2005-06.

The details on the district-wise variations of productivity of select crops for the period from 1998-99 to 2005-06 are furnished in Table 4.3.1.

Table 4.3.1. District-wise Productivity Level of Selected Crops - 1998-99 - 2005-2006 (Kg/ha.)

Sl.	Districts	Paddy	Maize	Cholam	Total	Sugar	Cotton	Chillies	Ground	Banana
No.	Districts	1 aday	1VIUIZO	CHOIMIN	pulses	cane	*	Cimiles	nut	Duimin
1	Coimbatore	3376	1134	368	421	108159	241	829	1379	36019
2	Cuddalore	2953		518	585	118729	195	520	1947	44574
3	Dharmapuri	4117	1595	1255	642	78580	263	2132	1825	41212
4	Dindigul	4037	1885	1188	530	105016	381	675	2249	29497
5	Erode	4309	2332	653	676	120233	351	686	1675	39861
6	Kancheepuram	3127	-		920	120768	371	620	2768	39968
7	Kanniyakumari	4139			377				1367	35093
8	Karur	3301	-	157	388	96207	307	642	1852	35019
9	Madurai	3647	1897	1087	827	116781	155	618	1388	45317
10	Nagapattinam	1802			315	99920	339	656	3335	32769
11	Namakkal	4699	1841	1032	601	143711	412	648	1764	50843
12	Nilgiris	3682	-							37145
13	Perambalur	2565	1177	995	526	100136	252	476	1413	43330
14	Pudukottai	2760	1915	989	601	115779	272	619	1472	46933
15	Ramnad	1617		763	368	110194	178	1217	1334	39973
16	Salem	3934	1775	1009	467	107370	300	982	1472	40188
17	Sivagangai	2012	-	850	385	95327	278	480	1407	40563
18	Thanjavur	2970	2487		423	107713	388	1075	2024	32016
19	Theni	3808	1893	1417	517	113072	316	713	1584	50461
20	Thiruvallur	3360	-	1340	569	114164		1608	2998	42392
21	Thiruvannamalai	2865	1602	801	328	89053	365	858	1307	34333
22	Thiruvarur	2091	-		292	116029	340	611	2629	38779
23	Thoothukudi	4300	655	932	506	111528	135	429	2257	62732
24	Tirunelveli	4135		1753	510	109472	324	964	1926	38768
25	Trichy	3602	1317	619	629	109143	281	1023	1747	45186
26	Vellore	3623	1605	1215	450	83810	253	869	1531	41076
27	Villupuram	3217		820	599	107999	340	581	1675	30130
28	Virudhunagar	3178	1904	867	487	114400	197	710	1058	41095
	Average	3330	1688	938	516	108204	289	817	1829	40546

^{* 170} kg of Lint

As regards paddy, the average productivity at the State level was 3330 kg per hectare. In Coimbatore, Dharmapuri, Dindigul, Erode, Kanniyakumari, Madurai, Namakkal, Nilgiris, Salem, Theni, Thiruvallur, Thoothukudi, Tirunelveli, Tiruchirapalli and Vellore districts, the productivity of paddy was found to be higher than the State Level Productivity. However, the potential yield was found to be 6000 kg/ha. Hence there is considerable scope for furthering the productivity of paddy. In Cuddalore, Kancheepuram, Karur, Nagapattinam, Perambalur, Pudukkottai, Ramanathapuram, Sivagangai, Thanjavur, Thiruvannamalai, Thiruvarur, Villupuram and Virudhunagar districts, the productivity of paddy was found to be less than that of State level productivity.

As regards pulses, production of pulses which was 1.03 lakh tonnes during 1950s, increased to three lakh tonnes during 1999-2000 and it declined to about 2.00 lakh tonnes during 2005-06. The average productivity of the pulses is fluctuating around 520 kg per hectare which is less than the All-India productivity of more than 550 kg per hectare. In Cuddalore, Dharmapuri, Dindigul, Erode, Kancheepuram, Madurai, Namakkal, Perambalur, Pudukkottai, Theni, Thiruvallur, Tiruchirappalli and Villupuram districts the productivity of pulses was higher than the State level productivity. In the remaining districts, the productivity of pulses was found to be lesser than the State average. The productivity of pulses was found to be the least in Thiruvarur district with 292 kg/hectare.

As regards maize, the average productivity at the State level was found to be 1688 kg/hectare and it varied from 655 kg per hectare in Thoothukudi district to 2487 kg per hectare in Thanjavur district. In Coimbatore, Dharmapuri, Perambalur, Thiruvannamalai, Thoothukudi, Tiruchirapalli and Vellore districts the productivity of maize was found to be lesser than the State average productivity of 1688 kg/ha.

The State average productivity of groundnut was found to be 1829 kg per hectare as against the potential of 2850 kg per hectare. Only nine districts viz., Cuddalore, Dindigul, Kancheepuram, Karur, Nagapattinam, Sivagangai, Thiruvallur, Thiruvarur and Thoothukudi districts had exhibited productivity higher than the State average. In all the remaining districts the productivity of groundnut was lesser than the State average productivity by groundnut.

As regards sugarcane, the average productivity at State level was 108.204 tonnes per hectare as against the potential of 146.00 tonnes per hectare. Dharmapuri, Dindigul, Karur, Nagapattinam, Perambalur, Salem, Sivagangai, Thanjavur, Thiruvannamalai, Vellore and Villupuram districts, the productivity of sugarcane was found to be lesser than the State average productivity of sugarcane.

In the case of Chillies, the state productivity was found to be 817 kg per hectare and it varied from 429 kg per hectare in Thoothukudi district to 2132 kg per hectare in Dharmapuri district. Dharmapuri, Ramanathapuram, Thanjavur, Thiruvallur and Tiruchirappalli districts had exhibited a productivity level of more than 1000 kg per hectare. Perambalur, Sivagangai and Thoothukudi districts had exhibited a productivity level of less than 500 kg per hectare.

As regards cotton, the State average productivity was found to be 289 kg of lint per hectare. The average productivity of cotton at the district level varied from 135 kg of lint per hectare in Thoothukudi district to 412 kg of lint per hectare in Namakkal district. Dindigul, Erode, Kancheepuram, Karur, Nagapattinam, Namakkal, Salem, Thanjavur, Theni, Thiruvannamalai, Thiruvarur, Tirunelveli and Villupuram districts had exhibited higher productivity as compared to the State level productivity.

The productivity of banana at State level was found to be 40.546 tonnes per hectare. The highest productivity was observed in Thoothukudi district with a productivity level of 62.732 tonnes per hectare and the lowest in the productivity of banana was observed in Dindigul district with a productivity level of 29.497 tonnes per hectare. The yield gap at the district level was observed to the level of 50 per cent of potential yield in the case of paddy and more than 50 per cent in the case of cotton. This is largely because of non-adoption of new / improved technology in the cultivation of crops.

4.4 Interventions Recommended

The interventions recommended for augmenting the productivity of the crops and achieving the desired growth rate of four percent in agriculture are summarized district wise as under:

Ariyalur

- Integrated rice productivity improvement programme (IRPIP)
- Integrated soil health management
- Problem soil management by adopting reclamation methods.
- Dry farming techniques
- Market led extension
- Integrated pest management
- Use of improved implements
- Provision of community thrashing floor
- Distribution of Hybrid seed, micronutrient mixture, green manure seeds and biofertilizer.
- Organizing maize marketing group
- Establishment of market intelligence cell in regulated market and
- Establishing seed testing laboratory

Coimbatore

- Seed production and distribution subsidy for SHGs
- Distribution of green manure seeds
- Assistance to vermi compost production
- Distribution of paddy transplanter and power thresher
- Construction of thrashing floor
- Seed processing machine for State Seed Farm Pappankulam
- Distribution of Bt. Cotton seeds
- Distribution of groundnut decorticator
- Pheromone trap distribution for rhinoceros beetle
- Subsidy for tree climber for harvesting coconut
- Tall x Dwarf coconut seedling distribution
- Study tours
- Enriched FYM preparation and demonstration and
- 2% DAP for pulses

Cuddalore

- Integrated development of major food crops viz., paddy, maize, groundnut, gingelly and sunflower.
- Activities related to enhancement of soil health.
- Establishment of Agri-clinics-cum-mini soil testing labs.
- Integrated pest management.
- Strengthening and promotion of extension activities and
- Support to State seed farms.

Dharmapuri

- Land development measures with technology and credit facilities
- Wasteland development programmes with active participation of local community
- Establishment of model farms to demonstrate latest technologies
- Improving the use of organics and biofertilizers and
- Enhancing the production and productivity of the crops

Dindigul

- Hybrid seed distribution for major crops
- Distribution of micronutrient mixture
- Promotion of SRI
- Distribution of Tarpaulins
- INM and IPM in pulses
- Distribution of gypsum
- Distribution of water soluble inorganic fertilizer and
- Establishment of seed testing laboratories

Erode

- Strengthening of state seed farm
- Strengthening of Parasite Breeding Stations
- Strengthening of soil testing and pesticide testing laboratories
- Strengthening of extension activities
- Developing marketing infrastructure

- Special projects on harnessing and conservation of water resources and
- Farm mechanization

Kancheeepuram

- Use of improved seed, INM, IPM and new machinery for cultivation of paddy, maize, pulses, groundnut, (rainfed and irrigated) gingelly
- Establishment of agri-clinics
- Exposure visit of farms Interstate / Intrastate
- Farmers training
- Organising district level exhibitions / kissan melas
- Hybrid rice seed production and distribution subsidy
- Assistance to start vermi compost units
- Distribution of soil health cards
- Distribution of gypsum / micronutrient mixture
- Farmers field school for Rat control publicity and training.
- Promotion of SRI Distribution of marker, transplanter and conoweeder
- Precision farming by sprinkler
- Construction of rural godowns and
- Establishing agri-clinics-cum-mini soil testing laboratories

Kanyakumari

- High yielding and high quality varieties of paddy
- Improving soil health and crop nutrition
- Mechanisation
- Integrated farming system
- Plant protection intensification
- Transfer of technology and
- Human resource development

Karur

- Supply of quality seeds at subsidized price
- Technological innovation

- Development of varieties and management practices for salinity and alkalinity tolerance in rice.
- Cultivation of high value crops under precision farming
- INM and IPM
- Supply of machines and equipments and
- Scaling up extension activities

Krishnagiri

- Integrated development of paddy, groundnut and ragi
- Extension activities
- Community godowns and
- Establishing seed testing laboratories

Madurai

- Integrated development of Paddy, Pulses, cotton, groundnut and millets
- Distribution of soil health cards
- Distribution of certified seeds
- Integrated nutrient management
- Integrated pest management
- Use of machinery like power tiller, paddy planter, paddy harvester
- Establishing seed processing unit in State seed farm
- Establishing state seed farm at Vinayakapuram
- DAP spray for pulses
- Establishing farmers field school
- Exposure visit to officers / inside / outside the country and
- Farmers training and study tours

Nagapattinam

- Certified seed production and distribution
- System of Rice Intensification (SRI)
- Integrated pest management
- Integrated nutrient management
- DAP spray for pulses

- Back ended subsidy to TANWABE group
- Rodent control
- Training farmers and
- Farmers field schools

Namakkal

- Certified seed production and distribution for paddy
- Seed minikit of new high yielding varieties
- Hybrid rice seeds distribution
- Distribution of green manure seeds
- Distribution of soil health cards
- Assistance for vermi compost production
- Distribution of micronutrient mixture gypsum and biofertilizers
- Rat control campaign
- Promotion of SRI Distribution of marker, conoweeder
- Distribution of phenomenon trap for red palm weevil control
- Establishment of agri clinic and agri business by unemployed agri graduates and
- Video facilities at district headquarters

Perambalur

- Strengthening state seed farms, Parasite Breeding Station, Soil Testing Laboratories and pesticide testing laboratories
- Strengthening extension activities
- Developing marketing infrastructure
- Farm Mechanisation
- Reclamation of soil and water resources affected by water logging and
- Increasing the productivity of sorghum, blackgram, greengram and horsegram

Pudukottai

- Formation of agri-clinics
- Strengthening of STAMIN
- FSS on soil health care
- Strengthening of Government Farms

 Quality seed materials and encouragement to produce adequate quantity of certified seeds

Ramanathapuram

- INM and IPM technologies and
- Organizing Training Programmes, District Level Workshops and Inter State Exposure visits

Salem

- Grant to certified seed production and distribution
- Distribution of soil health card
- Vermi compost production unit
- Massive Rat eradication campaign in village
- Promotion of SRI paddy cultivation
- Provision of community thrashing floors
- Precision farming with sprinkler irrigation
- DAP spray for pulses
- Construction of rural godowns
- Establishment of Agri-clinics and agri business units.
- Exposure visit to inside / outside the state for officers
- Farmers training and
- Establishing seed testing laboratory

Sivagangai

- Establishment of village knowledge centres
- Preparation of land resources interventions and GIS data base
- Establishment of automatic weather stations
- Establishment of agri clinics and mini soil testing units to be run by unemployed graduates
- Upgradation of existing seed processing units
- Upgradation of farmers training centres
- Maximizing crop productivity in drylands

- Precision farming in agricultural crops
- Promotion of organic farming and establishing organic manure and vermi compost production unit
- In situ water harvesting through farm pond cluster
- Establishing solar fencing for stray animals
- Establishment of prosophin biofuel units
- Promotion of jatropha bio-diesel crops
- Establishment of community fodder plots by SHGs / FIGs
- Establishment of cold storage unit for chillies
- 2% DAP spray for pulses and
- Establishment Seed Testing Laboratory

Thanjavur

- Increasing the productivity levels of paddy, groundnut, pulses, gingelly and cotton
- Strengthening the support system of agricultural extension machinery
- Capacity building of the farmers and
- Farm mechanization to reduce the cost of cultivation

Theni

- Distribution of hybrid seeds in maize, cumbu and cotton
- Distribution of green manure seeds in paddy
- Distribution of micronutrient mixture
- Distribution of bio-fertilizers
- Distribution of gypsum for groundnut
- Farmers exposure visits within the state and outside the state
- Exposure visit / officials to MANAGE / ICRISAT Hybderabad, IARI, New Delhi, successful NGOs
- Exposure visit to CHINA to study the advanced production techniques and dissemination of cultivation practices of rice (including Hybrid rice, SRI)
- 2% DAP spray for pulses
- Strengthening infrastructure facilities in State Seed Farm and
- Establishment of seed testing laboratory

Thiruvallur

- Assistance to agri-preneurs for setting up agri clinics / agri business centres.
- Distribution of soil health cards.
- Distribution of vermi compost.
- Distribution of green manure seeds
- Production of foundation and certified seeds
- Integrated nutrient management
- Integrated pest management'
- Improving existing seed processing units
- Distribution of bioopesticides / weedicides
- Technology demonstration
- Distribution of improved farm machinery and
- Establishing seed testing laboratory

Thiruvarur

- Integrated development cotton rice fallow
- Distribution of hybrid cotton seeds
- Farmers field school
- Micronutrient mixture distribution
- Seed subsidy for trap crops viz. maize, cowpea, sunflower
- Distribution of gypsum for soil reclamation
- Distribution of seed treatment chemical
- Farmers field school for training in IPM technology
- Establishing coconut nursery state seed farms
- Distribution of combine harvester / rice transplanter, drum seeder, cono weeder, SRI marker @ 75% subsidy farmers training in running and maintenance of farm machinery
- Recharging ground water using old and new bore wells
- Organizing micronutrients demonstration
- Digging farm ponds
- Fencing state seed farms
- Setting up bio-control lab through TANWABE / FIG

- Organizing farmers training / extension workers training
- Exposure visits
- Study tour farmers / officials
- Eradication of Ipomea in river banks and channels and
- Establishing seed testing laboratory

Thoothukudi

- Integrated Farming System
- Crop diversification
- Soil health management
- Incentive for seed production to self-help-group
- Supply of quality certified seeds at nominal cost
- Distribution of soil health card
- Technology demonstration including minor millets
- Distribution of bio-fertilizers
- Hybrid seed distribution for maize (Rainfed and sunflower)
- Extension activities
- Training to TANWABE women
- Organic farming system
- Introduction of multi-purpose traces in community / private and
- Capacity building to officials / stake holders

Tiruchirappalli

- Quality seed development and production
- Integration of farmers and farmer groups in seed multiplication
- Nutritional management
- Soil testing and distribution of soil health card
- Water budgeting and water-use efficiency
- Crop diversification
- Bio-fertilizers
- Technology demonstration
- Precision farming in groundnut and
- Establishment of agri-clinic and other extension activities

Tirunelveli

- Supply of quality certified seeds at nominal cost
- Distribution of green manure seeds and nutrient mixture
- Demonstration of SRI
- Precision farming for pulse crops
- Technology demonstration and
- Community thrashing floor

Tiruvannamalai

- Seed production and distribution of paddy, groundnut, gingelly, millets and maize.
- Provision of certified seeds at subsidized rate to replace the seeds of farmers choice
- Incentives to TANWABE for hybrid seed production
- Assistance to vermi compost unit
- Distribution of green manure seeds and
- Subsidized to MNM and gypsum

Vellore

- INM and IPM technologies
- Supply of quality certified seeds at nominal prices
- Hybrid seed distribution for major crops
- Strengthening of extension activities and
- Developing marketing infrastructure

Villupuram

- Technology adoption
- Distribution of soil health cards
- Vermi composting
- Increasing productivity with minimum usage of water
- Distribution of MN mixture, micro nutrients, gypsum and green manure seeds
- Supply of implements at subsidized prices
- Distribution of hybrid sunflower mini-kits

- Farmers training and
- Strengthening of state seed farms

Virudhunagar

- One time grant to TANWABE / FIG to take up certified seed production and distribution
- Seed distribution subsidy for the seeds produced by Self Help Groups
- Distribution of Soil Health Cards
- Assistance to start vermi-compost production unit
- Distribution of Micro Nutrient Mixture
- Farmers Field School
- Community thrashing floor and
- Distribution of Tarpaulin

CHAPTER - V

DEVELOPMENT OF ALLIED SECTORS

The focus of the plan is to bring about economic development and improve the quality of public services with emphasis on the poor and the marginalized. In this regard, careful planning is essential to achieve integration across sectors associated with agricultural sector. In what follows, a brief account of issues, ongoing schemes, constraints and interventions recommended in horticulture, agricultural engineering, agricultural marketing and agri business, animal husbandry, fisheries and irrigation systems are presented.

5.1 Horticulture Sector

5.1.1 Issues

- Raising orchards and vegetables is a high investment proposition and many farmers with poor resource-base are unable to take up cultivation of horticultural crops
- Immediate post-harvest glut slashes down the unit prices and erodes the profit of the farmers
- Highly perishable nature of horticultural products and lack of adequate cold storage facilities at cheaper cost
- Horticultural crops are high-tech oriented and many farmers lack knowledge of the same
- Long gestation period from planting to economic bearing of fruit trees
- Seasonal aberrations due to eratic monsonic behavior affects the crop yields drastically
- Highly fluctuating prices and slashing down of prices to the lowest ebb expecially during harvest season
- Lack of appropriate transport mechanisms and remoteness of production centres result in huge transportation cost
- Non-availability of adequate farm labourers especially during harvest seasons pose a major threat to the farmers and
- Ill-developed cold chain system also result in huge spoilage of raw fruits and vegetables

5.1.2 On-going Schemes

The details of schemes implemented by the Department of Horticulture and Plantation Crops are presented below in the Table 5.1.2

5.1.2. Schemes Implemented by the Department of Horticulture

Physical: Area in Ha. Financial: Rs. In lakhs

		Physical	(2007-08)	Financial	(2007-08)	Physical ((2008-09)	Financial (2	2008-09)
S. No.	Name of the Scheme	Target	Achmt.	Target	Achmt.	Target	Achmt. As on 31.7.08	Target	Achmt. As on 31.7.08
I	State Plan Schemes								
1	Integrated Horticulture Development Scheme								
	A) Scheme	16779	17309	266.010	262.357	21792.58	0	273.143	0.000
	B) Horticulture Training Centre	2600	2600	7.610	7.610	2600	0	10.000	0.000
2	Integrated Tribal Development Programme	904.54	904.54	40.005	40.003	904.00	0	40.005	0.000
3	Western Ghat Development Programme	25	25	58.380	46.701	75.00	0	58.000	0.000
4	Hill Area Development Programme	2067	2067	204.160	140.583	0.00	0	152.000	0.000
5	City Vegetable Development Programme	100	100	3.500	3.500	200.00	0	10.000	0.000
6	State Horticulture Farms (Production in Lakh Nos	106.88	88.08	742.38	670	115	20.89	906.626	98.809
7	Precision Farming	735	735	992.950	857.682	-	-	-	-
	Precision Farming- National Agriculture Development Programme	-	-	128.99	0	6100.00	0	2264.740	0.000
	Total	-	-	2443.99	2028.44	-	-	3714.514	98.809

Physical: Area in Ha. Financial: Rs. In lakhs

S.		Physical ((2007-08)	Financial	(2007-08)	Physical	(2008-09)	Financial	(2008-09)
No.	Name of the Scheme	Target	Achmt.	Target	Achmt.	Target	Achmt. As on 31.7.08	Target	Achmt. As on 31.7.08
II	Centrally Sponsored Schemes								
1	National Horticulture Mission (80:15)	52930*	54393	10386.81*	10396.61	50822	0	18079.35	0.00
2	Micro Irrigation (80:20) (This includes funds allotted in the year 2005-06, 2006-07 and 2007-08)	46714	9484	9064.350	1559.910	46714	9949	9064.350	953.97
3	IAMWARM Project	6139	6047	659.06**	634.77	9564	60	1630.03	139.64
4	National Bamboo Mission	-	-	258.32	0.00	950	110	258.32	38.40
	Total	-	-	20368.54	12591.29	108050	10119	29032.05	1132.01
	GRAND TOTAL	-	-	22812.53	14619.72	108050.00	10119.00	32746.56	1230.82

^{*} Cumulative target from 2005-06 to 2008-09

Source: Commissioner of Horticultural and Plantation Crops, Chennai

^{**} Since the fund was released during the fag end of the year achievements could not be made and the amount have been revalidated for the year 2008-09

5.1.3 Interventions Recommended

- 1. Provision of Net house structure
- 2. Nursery/ vegetable production
- 3. Pandal for vegetable production
- 4. Package for plant protection
- 5. Plastic crates (Banana, Vegetables)
- 6. Bore well with casing pipe
- 7. Banana bunch cover
- 8. Banana sucker treatment kit
- 9. Humic acid / Effective E.M.
- 10. Support System for crops Banana
- 11. Sales outlet-cum-information centre
- 12. District level farmers workshop
- 13. Inter state exposure visit (5days)
- 14. 10 Ha Mega demo plot for the district
- 15. Enterprising farmers associations
- 16. Support for Betel vine growers and
- 17. Model fertigation plot for vegetables

5.1.4 Constraints

- High investment cost
- Long gestation period
- High tech involved
- Non-availability of good quality seeds and planting materials and
- Lack of awareness among farmers on the profitability of horticultural crops.

5.2 Agricultural Engineering

5.2.1 Issues

- The development of agricultural engineering in the State is still in its infancy and is yet to gain momentum
- Peak seasonal operations and scarcity of labour promote ample opportunities for hastening the process of farm mechanization.
- Water and soil conservation works are to be intensified especially in dryland tracts
- There exists vast scope for the development of water harvesting structures and
- Farmers need training in the up-keep of the machineries and implements.

5.2.2 On-going Schemes of Agricultural Engineering

5.2.2.1 Progress under Plan Schemes during 2008-2009 (Upto August 2008)

			P	hysical		Fina	ancial (Rs. In l	akhs)	
Sl. No.	Name of the scheme	Unit	Annual Target	Achieve ment upto August'08		Annual Target	Achieve ment upto August'08	% w.r.to Annual target	Remarks
I	Centrally Sponsored	Scheme	es						
a)	Schemes shared betw	veen Cen	tre and Stat	te (90 : 10) (N	Macro Mana	gement Mo	de)		
	Soil and Water Conservation in the	На.	7723	2871	37.2%				Government of India have approved an outlay of
1	catchments of River Valley Project	Nos.	1167	610	52.3%	1064.12	284.98	26.8%	Rs.1064.12 lakhs for 2008-09. G.O. is awaited. Works are under progress.
2	Agricultural Mechanisation Programme	Nos.	585 Nos.	-	-	99.75	-	1	Approval from Government of India is awaited for the revised programme for 2008-09.

			P	hysical		Finar	ncial (Rs. In	ı lakhs)	
Sl. No	Name of the scheme	Unit	Annual Target	Achieve ment upto August'08	% w.r.to Annual target	Annual Target	Achieve ment upto August'08		Remarks
b)	Schemes Shared	between	Centre and	State (50 : 50))				
1	Command Area D	evelopmo	ent and Wat	er Managemen	t Programm	e			
a)	Construction of field channels	На.	9650	4227	43.8%				
b)	Rotational Water Supply Works	На.	18200	7882	43.3%	3901.56	1666.38	42.7%	Works are under progress.
c)	Construction of field drains	На.	66800	46228	69.2%				
II	Central Sector Se	chemes w	vith 100% (Central Assista	ance		<u>.</u>		
1	Demonstration o	f Agricul	tural Imple	ments/ Machi	inery at Fa	rmer's Fiel	d		
a).	Demonstration	Den in N	1 1562	177	11.3%	38.65	3.16	8.2%	Government has released a sum of Rs.9.84 lakhs and demonstrations are under progress.
b).	Purchase of implements for demonstrations	Imp men in N	its 95	-	-	51.33	-	-	Government has released Rs.12.71 lakhs for the purchase of implements for demonstration. Approval is awaited from the Government of India for the purchase of implements.

			Ph	ysical		Finaı	ncial (Rs. In	lakhs)	
Sl. No.	Name of the scheme	Unit	Annual Target	Achieve ment upto Aug.'08	% w.r.to Annual target	Annual Target	Achieve ment upto Aug. '08	% w.r.to Annual target	Remarks
2	Training programmes to farmers in the field of Agricutural Mechanisation	Trainnin- gs in Nos.	180	13	7.2%	45.00	0.75	1.7%	Government have released a sum of Rs.11.25 lakhs and training programmes are under progress.
III	State Plan Schemes								
	Soil and Water	На.	130	-	-				
1	Conservation under Hill Area Development Programme	Nos.	588	-	-	434.45	16.26	3.7%	Government orders are awaited. Expenditure incurred is towards staff component.
	Soil and Water	На.	1580	19	1.2%				Government have issued orders vide
2	Conservation under Western Ghat Development Programme	Nos.	1940	104	5.4%	747.00	18.05	2.4%	G.O.Ms. No.77 P&D dept.dated 21.8.08. Works are under progress.
	Soil Conservation	На.	757	16	2.1%				Government have issued orders vide
3	Soil Conservation Schemes in Tribal Areas under ITDP	Nos.	91	-		142.00 -		-	G.O.(3D).No.210 Agri (AE 2) Dept. dated 13.8.08 Works are under progress.

5.2.2.2 World Bank Assisted IAMWARM Project

		Physi	ical	Fin	ancial (Rs. In la	ıkhs)	
Sl. No	Name of the scheme	Annual Target	Achievement upto August'08	Annual Target	Achievement upto August'08	% w.r.to Annual target	Remarks
a.	Micro Irrigation	24052 На.	-	3185.62	-	-	Work orders issued for 241.97 Ha. as against an interim target of 2000 Ha.
b.	Pipe laying	15 Packages	-	153.09	-	-	The programme will be implemented after evaluation as per the direction of Project officer, MDPU.
c.	Farm Pond	1264 Nos.	-	500.49	-	-	150 Farm Pond works are under progress.
d.	Farm Mechanisation	1259 Nos.	-	833.61	-	-	Tender notified.
e.	Information, Education, Communication (IEC) and Capacity Building	-	-	145.04	1.88	1.3%	The programmes are under progress.
	Total (IAMWARM)	-	-	4817.85	1.88	0.04%	

		2008-2009 (Financial Rs. in lakhs)						
Sl.								
No.	Details	Annual Target	Achievement upto August'08	% W.r.to Annual Target				
1	Centrally Sponsored Schemes Shared between centre and State	5065.43	1951.36	38.52%				
2	Central Sector Schemes	135.00	3.91	2.90%				
3	State Plan Schemes	8750.75	222.90	2.55%				
	Total	13951.18	2178.17	15.61%				

5.2.2.3 Expenditure of Agricultural Engineering Department

5.2.3 Constraints

- Heavy investment requirement for agricultural machineries, implements and tools
- Usage of machineries for seasonal operations only
- Exhorbitant rental charges charged by the custom service providers
- Timely non-availability of machine labour
- Inadequate repairing facilities / workshop with trained manpower in rural areas and
- Size of holdings in majority of the areas, restrict the usage of mechanical power.

5.2.4 Interventions Recommended

- 1. Popularisation of Agricultural mechanisation through conventional machinery / Equipments
- 2. Water Harvesting Structures
- 3. Soil Conservation works
- 4. Water Management works
- 5. Introduction of newly developed Agricultural machinery / Implements
- 6. Innavotive water harvesting structures
- 7. Promoting the concept of mechanized villages
- 8. Control of sea water intrusion in coastal belt

- 9. Special scheme for the beneficiaries of land reforms Innovative Scheme for OFD with special focus in SC land holdings
- 10. Western Ghat Development Programme and
- 11. Farmers Training.

5.3 Agricultural Marketing and Agri business Sector

5.3.1 Issues

- 1. Dominance of unorganized non-formal channels
- 2. Institutional innovation for efficient alterative system responsive to market signals
- 3. Developing wholesale markets by providing necessary facilities
- 4. Prevention of wastage at pre-harvest and post-harvest levels
- 5. Construction of roads linking villages with nearby assembling and wholesale markets
- 6. Encouraging private investment in revamping agricultural marketing
- 7. Developing commodity exchanges
- 8. Prior knowledge on post-harvest management, value addition and processing among the farmers and
- 9. Strengthening of marketing Intelligence and Information system

5.3.2 On-going schemes

The details of district-wise on-going schemes other than the schemes covered under NADP with physical and financial targets for 2007-08 and 2008-09 are furnished in what follows.

1. TAMIL NADU IAMWARM PROJECT – WORLD BANK AIDED

Department of Agrl. Marketing and Agri Business

District-wise Target for the Year 2007-08

(Amount in Rupees)

Sl.	District	IE &	CC CB	Civil	works		ninery quip.	Publicity & Advt.	Grand Total
No.	District	Physical	Finance	Physical	Finance	Physical	Finance	Physical Physical	Finance
1.	Coimbatore	12	97556	7	2500000	156	422560	0	3020116
2.	Erode	42	1156603	85	7000000	1844	3912400	0	12069003
3.	Villupuram	11	336979	11	1500000	200	1127572	0	2964551
4.	Pudukottai	42	757200	32	4300000	70	1041580	0	6098780
5.	Sivagangai	36	231400	21	3700000	261	218998	0	4150398
6.	Salem	12	330300	18	2000000	138	1570195	0	3900495
7.	Virudhunagar	12	328300	18	2100000	37	1417848	0	3846148
8.	Chennai (H/Qtrs)	0	1025800	0	100000	0	980000	700000	2805800
	Total	167	4264138	192	23200000	2706	10691153	700000	38855291

Note: IEC & CB: 1. Exposure visit inside and outside the State, 2. Interface

workshop, 3. Post Harvest tech training

Civil works : 1. Storage shed, 2. Drying yard, 3. Agricultural Business

Centre, 4. Collection centre and 5. Pack house.

Machinery and : 1. Moister meter, 2. Weighing scale, 3. Goods Auto and

Equipments Minilorry, 4. Tarpaulin, 5. Dunnage, and Professional service

District-wise Target for the Year 2008-09

(Amount in (Rupees)

Sl. No.	District	IEC o	& CB	Civil works Spec		Special	Special services		Grand Total
		Physical	Finance	Physical	Finance	Physical	Finance	Physical	Finance
1.	Coimbatore	4	200000	0	0	1	120000		320000
2.	Erode	13	900000	0	27000000	2	240000		28140000
3.	Villupuram	4	200000	0	3130000	1	120000		3450000
4.	Pudukottai	11	750000	4	8500000	2	360000		9610000
5.	Sivagangai	10	600000	0	4440000	2	120000		5160000
6.	Salem	7	300000	2	4950000	1	360000		5610000
7.	Virudhunagar	7	300000	0	4600000	1	240000		5140000
8.	Thanjavur	10	600000	0	0		240000		840000
9.	Perambalur	7	300000	3	0		120000		420000
10.	Krishnagiri	4	200000	4	0		120000		320000
11.	Madurai	8	400000	0	0		120000		520000
12.	Theni	6	200000	4	0				200000
13.	Tiruneveli	6	200000	0	0		120000		320000
14.	Veelore	8	400000	7	0		240000		640000
15.	Chennai (H/Qtrs)		250000	0	19180000	1	3525000	1000000	23955000
	Total	105	5800000	24	71800000	11	6045000	1000000	84645000

Note: IEC & CB : 1. Exposure visit inside and outside the State, 2. Interface

workshop, 3. Post Harvest tech training

Civil works : 1. Storage shed, 2. Drying yard, 3. Agricultural Business

Centre, 4. Collection centre and 5. Pack house.

Special services : Appointment of Marketing Facilitator in sub basins and senior

Marketing Facilitator in Head quarters and other allied works.

2. Uzhavar Sandhais (District-wise Target)

		2007	-08	2008-0	09
S. No.	District	Establishment of Uzhavar sandhais	Finance (in lakhs)	Cold storage facility at Uzhavar sandhais	Finance (in lakhs)
1.	Kancheepuram	Madhuranthaham	32.24		
2.		Medavakkam	25.22		
3.		Alandur	Estimate under preparation		
4.	Tiruvallur	Paruthippattu	22.5		
5.		Naravadikuppan	Estimate under preparation		
6.	Vellore	Tirupattur	22.5		
7.		Natrampalli	19.9		
8.				Vaniyampadi	6.05
9.				Gudiyatham	6.05
10.	Tiruvannamalai	Chengam	22.01		
11.		Vandavasi	21.13		
12.					
13.	Cuddalore	Vadular	22.5	Cuddalore	6.05
14.	Villupuram	Ulundurpet	18.22		
15.		Gingee	36.8		

Uzhavar Sandhais (District-wise Target) contd...

		2007	'-08	2008-0	9
S. No.	District	Establishment of Uzhavar sandhais	Finance (in lakhs)	Cold storage facility at Uzhavar sandhais	Finance (in lakhs)
16.					
17.	Salem	Ellampillai	22.5	Sooramangalam	6.05
18.		Hasthampatti	22.5	Ammapet	6.05
19.				Athur	6.05
20.				Thathakapatti	6.05
21.	Namakkal	Paramathivelur	22.5	Namakkal	6.05
22.		Moganur	22.5		
23.				Rasipuram	6.05
24.	Dharmapuri	Palacode	22.5		
25.		Penngaram	21.4		
26.		Harur	20.8		
27.	Krishnagiri	Kaveripattinam	22.5	Hosur	6.05
28.		Denkanikottai	22.5		
29.	Coimbatore	Sulur	22.5	Kovai R.S.Puram	6.05
30.				Singanallur	6.05
31.				Tiruppur (North)	6.05

Uzhavar Sandhais (District-wise Target) contd...

		2007	-08	2008-0	09
S. No.	District	Establishment of Uzhavar sandhais	Finance (in lakhs)	Cold storage facility at Uzhavar sandhais	Finance (in lakhs)
32.	Nilgiris	Kothagiri	22.5		
33.	Erode	Periyar Nagar	22.5		
34.		Karumandi chellipalayam	22.5		
35.	Tiruchi	Musiri	22.5	Tiruchi Anna Nagar	6.05
36.		BHEL – Trichy	22.5	Tiruchi K.K.Nagar	6.05
37.	Perambalur	Jeyankonadam	21.35		
38.	Karur	Pallapatti	22.5		
39.	Thanjavur	Papanasam	16.4		
40.		Tirukattupalli	22.5		
41.	Nagapattinam	Sirkazhi	22.5		
42.	Tiruvarur	Needamangalam	16.71		
43.		Muthupet	22.5	Mannarkudi	6.05
44.	Pudukottai	Keeranur	22.38		
45.		Gandarvakottai	21.53		
46.	Madurai	Anaiyur	22.35	Madurai Anna Nagar	6.05

Uzhavar Sandhais (District-wise Target) contd...

		200	7-08	2008-09	
S. No.	District Establishment		Finance (in lakhs)	Cold storage facility at Uzhavar sandhais	Finance (in lakhs)
47.		Naganakulam	Estimate under preparation	Chokkikulam	6.05
48.	Dindigul	Batalakundu	22.5		
49.		Kodaikanal	22.5		
50.	Theni	Andipatti	22.1	Theni	6.05
51.		Chinnamanur	22.5	Cumbum	6.05
52.		Devaram	21.41		
53.	Sivagangai	Tirupathur	20.59		
54.		Singampuneri	Estimate under preparation		
55.	Virudhurnagar	Kariyapatti	21.5		
56.	Ramanathapuram	Kamuthi	22.5		
57.		Thalavaipuram	22.5		
58.	Tirunelveli	Melapalayam	22.5		
59.		Ambasamudram	Estimate under preparation		
60.	Tuticorin			Tuticorin	6.05
61.	Kanyakumari	Canyakumari		Vadaseri	6.05

3. Market Committee

District-wise Target for Issue of Pledge Loan in **Rural Godown of Regulated Markets**

Unit: Rs. in lakhs

Sl.	Name of the	Pledge loan	to farmers	Pledge loan to traders		
No.	Market Committee	Target for 2007-08	Target for 2008-09	Target for 2007-08	Target for 2008-09	
1.	Kancheepuram	40.00	87.00	30.00	60.00	
2.	Vellore	50.00	87.00	4.00	80.00	
3.	Tiruvannamalai	50.00	122.00	6.00	120.00	
4.	Cuddalore	50.00	104.00	2.00	40.00	
5.	Villupuram	100.00	235.00	8.00	160.00	
6.	Salem	100.00	100.00 174.00		100.00	
7.	Dharmapuri	60.00	139.00	5.00	100.00	
8.	Coimbatore	250.00	304.00	10.00	200.00	
9.	Erode	250.00	330.00	10.00	200.00	
10.	Trichy	ehy 80.00		9.00	180.00	
11.	Thanjavur	150.00	200.00	5.00	110.00	
12.	Thiruvarur	80.00	35.00	2.00	40.00	
13.	Nagapattinam	nam 60.00 75.00		1.00	60.00	
14.	Pudukottai	ottai 20.00 270.00 2.0		2.00	200.00	
15.	Madurai	80.00	191.00	3.00	100.00	
16.	Theni	40.00	78.00	3.00	60.00	

Market Committee contd...

Unit: Rs. in lakhs

Sl.	Name of the	Pledge loan	to farmers	Pledge loan to traders		
No.	Market Committee	Target for 2007-08	Target for 2008-09	Target for 2007-08	Target for 2008-09	
17.	Dindigul	50.00	99.00	3.00	60.00	
18.	Ramanathapuram	125.00	104.00	10.00	60.00	
19.	Tirunelveli	60.00	112.00	5.00	40.00	
20.	Kanyakumari	30.00	37.00	3.00	30.00	
	Total	1725.00	3000.00	1000.00	2000.00	

4. National Horticulture Mission

Under National Horticulture Mission the following components have been proposed for subsidy.

I. Physical and Financial Target for 2007-08

Sl.	Particulars	Physical	Total	Subsidy
No.		(in Nos.)	Project cost	from NHM
			(Rs. in	(Rs. in lakhs)
			lakhs)	
1.	Pack House*	50.00	125.00	31.25
2.	Controlled Atmosphere	4.00	2400.00	600.00
	Cold storage			
3.	Cold Storage units**	10.00	2000.00	500.00
4.	Terminal Markets	3.00	20000.00	5000.00
5.	Creation of infrastructural facilities on	50.00	3600.00	900.00
	rural markets / rural business hubs /			
	rural market facilitation centres			
6.	Fruits and retarding / ripening chambers	10.00	600.00	150.00

Physical and Financial Target for 2007-08

Sl. No.	Particulars	Physical (in Nos.)	Total Project cost (Rs. in lakhs)	Subsidy from NHM (Rs. in lakhs)
7.	Fruits and vegetables display cabinets with coolers	100.00	100.00	25.00
8.	Market Intelligence and information Centres (Computers for Farmers' Markets)	58.00	145.00	145.00
	Total	285.00	28970.00	7351.25

Note:

- All the components are project based (except Market Intelligence and Information Centre) and DPRs are to be obtained from entrepreneurs and sent to TANHODA.
- 2 Applications for pack house have been sent to TANHODA for approval and release of fund.

Sl. No.	Particulars	Physical (in Nos.)	Total Project cost (Rs. in lakhs)	Subsidy from NHM (Rs. in lakhs)
1.	Wholesale Markets *	2	24000.00	5000.00
2.	Market Intelligence and Information Centres (Computers for farmers' markets)	45	90.00	90.00
	Total	47	24090.00	5090.00

^{*} The preliminary project reports for setting up of wholesale markets received from two firms have been sent to TANHODA. The firms are yet to submit the DPR and once the DPRs are received the same will be sent to TANHODA.

STATE GOVERNMENT SCHEMES

5. Part – II Schemes

Announcement Year: 2006-07 (10th Plan)

Sl.	Name of the scheme	Physical	Financial (Rs. in lakhs)		
No.		(in Nos.)			Present stage
		Target	Project	Token	Tresent stage
			Estimate	Provision	
1.	Creation of Market Complex	1	200.00	10.00	The Request For Qualification (RFQ) and Bid proposal
	Infrastructure with Cold Storage				submitted by m/s. Premium Farm Fresh and Bharat Hotels.
	facilities for Mango at Krishnagiri for				New Delhi was evaluated by the technical consultant – Tamil
	the benefit of Small and Marginal				Nadu Technology Development and Promotion Centre (a unit
	Farmers.				of CII) Chennai and found to be eligible. The draft Request
			200.00	10.00	For Proposal (RFP) and draft operation, Management and
2.	Creation of Marketing Infrastructure	1	200.00	10.00	Development Agreement (OMDA) has been submitted to the
	with Cold Storage facilities for onion				Government for vetting. Meanwhile the eligible Consortium
	at Pongalur in Coimbatore district.				has been asked to submit RFP. The pre-bid proposal meeting
3.	Creation of Market Complex with	1	375.00	100.00	is scheduled to be conducted on November 2008.
0.	cold storage facilities for Grapes in	-	272.00	100.00	
	Odaipatti, Theni district.				
	•				
4.	Setting up of Terminal Markets at	3	20000.00	300.00	The evaluation report, draft RFP document and operation,
	Metro regions of Chennai, Madurai				Management and Development Agreement copy submitted
	and Coimbatore				by the Consultancy agency have been sent to Government
					and M/s. ITCOT, Chennai, for perusal. The matter is under
					active consideration. Based on Evaluation report, action is
					being taken to issue RFP to the eligible private entrepreneurs.

STATE GOVERNMENT SCHEMES

6. Announcement Schemes

Announcement Year: 2006-07 (10th Plan)

Sl.	Name of the scheme	Physical	Financial (Rs. in lakhs)		
No.		(in Nos.)			Present stage
		Target	Project	Token	r resent stage
			Estimate	Provision	
1.	Setting up of marketing complex for	1	400.00		The Request For Qualification (RFQ) and Bid proposal
	coconut at Pattukottai in Thanjavur				submitted by m/s. Premium Farm Fresh and Bharat Hotels.
	district				New Delhi was evaluated by the technical consultant – Tamil
					Nadu Technology Development and Promotion Centre (a unit
2.	Setting up of Market Complex with	1	200.00		of CII) Chennai and found to be eligible. The draft Request
	cold storage facilities for Tomato in				For Proposal (RFP) and draft operation, Management and
	Hosur, Krishnagiri district.				Development Agreement (OMDA) has been submitted to the
					Government for vetting. Meanwhile the eligible Consortium
					has been asked to submit RFP. The pre-bid proposal meeting
					is scheduled to be conducted on November 2008.

5.3.3. Constraints

- Lack of proper and adequate storage facilities at farm level
- Exploitation of farmers by the middleman
- High seasonal fluctuations in prices of major agricultural commodities
- Market information and intelligence activities are still in its infancy
- Regulated markets in many districts are yet to improve their functional efficiency
- Cooperative marketing system is yet to develop in a big way and
- Lack of adequate processing infrastructure

5.3.4. Interventions Recommended

- Establishment/ organization of commodity groups for marketing in the state with financial assistance from NADP
- Facilitation of Contract Farming between farmers and bulk buyers in the state with financial assistance from NADP
- Dissemination of Market intelligence
- Arrangement of Buyers Sellers Meet
- Organizing the exposure visits to important markets within the state and out side the state by commodity groups / farmers and extension functionaries and
- Strengthening of market extension centre at each district/ block level for capacity building and dissemination of marketing information

5.4. Animal Husbandry

5.4.1 Issues

- 1. The gap between requirements and supply of green fodder is rather wide and needs bridging or atleast narrowing
- 2. Diminishing pasture / grazing lands and their poor quality
- 3. Lack of knowledge on balanced feeding of animal especially cross breed cows and on supplementary micro nutrients
- 4. Infertility problem among cross-bred cows and low/delayed conceivement among buffaloes
- 5. Heifer rearing on scientific lines

- 6. Scientific calf rearing to avoid calf mortality
- 7. Lack of adequate genetically superior male breeder and buck
- 8. Non availability of superior Rams and bucks
- 9. Population of rabbit farming and Japanese animal farming
- 10. Strengthening of veterinary institutions
- 11. Insufficient processing and marketing facilities in most of the Milk Producers Unions
- 12. Production of milk products like butter, ghee, ice cream, palpeda etc., on large scale and
- 13. Improving infrastructure for collection, transportation, handling and procurement of milk and processing, packing and marketing of milk and milk products.

5.4.2. Ongoing Schemes of Animal Husbandry Sector

Livestock rearing is an important economic activity for the rural people. It generates more value both economically and socially. The growth in human population, availability and cost of agricultural lands, limited water sources and introduction of better yielding livestock have led farmers to shift to some kind of livestock rearing to earn their livelihood. Hence to provide employment, to enhance the participation of the poor in livestock rearing and as a part of poverty alleviation programmes, the Department is implementing various livestock oriented schemes.

1. Kalnadai Padukappu Thittam

- > Kalnadai Padukappu Thittam is a novel scheme inaugurated on 18.01.2000 by the
 - o Hon'ble Chief Minister Dr. Kalaignar at Thirukazhukundram in Kancheepuram district.
- As per this scheme, total health cover is provided to livestock and poultry reared by farmers in remote villages by conducting special camps.
- > The special camps are conducted at the rate of one camp per month in all the 385 Panchayat unions at a total cost of Rs.5,000/- per camp.
- > On the day preceding the camp, wide publicity is given regarding the place where the camp is to be conducted in the village and surrounding villages. During the process, pamphlets and leaflets are also distributed regarding various activities that are undertaken in the camp.

- > Moreover, the help of local village panchayat president, chairman and interested animal husbandry workers are also sought in publicity and propaganda campaign.
- > In these camps, activities like health care, disease prevention, deworming, castration, artificial insemination, pregnancy verification, infertility treatment, etc. are carried out free of cost.
- > An exhibition depicting various livestock diseases and preventive measures, fodder development measures are also conducted for creating awareness among the farmers. This year a new activity called calf-rally was included and prizes worth Rs.400/- per camp is being distributed to best calves.
- During 2007-08, 5,500 camps have been conducted. 67.00 lakh livestock and poultry were provided with veterinary health services and protected against various animal diseases and 16.98 lakh farmers were benefitted.
- > The beneficiaries are all animal growers in the villages and near by villages where the camps are conducted. The scheme is very popular among the rural farming community as all the facilities are provided at the farmer's doorsteps free of cost.
- > During 2008-09, it is proposed to conduct 5,500 camps at a cost of Rs.5,000/- per camp.

2. Tamil Nadu Irrigated Agricultural Modernization and Water-Bodies Restoration Management Project (TNIAMWARM)

Animal Husbandry Department is one of the line departments involved in implementation of the World Bank assisted Tamil Nadu Irrigated Agricultural Modernisation and Water-bodies Restoration and Management Project. The project is being implemented in the State from 2007 for a period of six years. The main aim of the project is to improve the productivity per unit of water in agriculture and allied activities and enhance the farm income ultimately. For animal husbandry component, World Bank has allotted Rs.3,938 lakhs for implementing various schemes in the 63 sub-basins during the project period.

The objectives of the project are:

- To improve the production potentialities of livestock in the sub-basin
- > To provide veterinary services and breeding support at the farmers' doorsteps or nearest to the farmers

- To ensure total health cover-both preventive and curative
- > To improve conception and calving rate in bovines
- To reduce the gap between requirement and availability of green fodder and
- > To improve the knowledge level of the farmers on best animal husbandry practices / techniques.

The interventions by the department in the sub-basins are:

- > Delivery of veterinary services and breeding support to livestock reared by farmers in unserved areas by establishing Sub-basin Veterinary Units, utilising the services of unemployed veterinary graduates
- > Improving the quality in delivery of veterinary services and diagnosis by strengthening the essential and needy infrastructure of veterinary institutions
- > Utilising the high-yielding frozen semen straws for artificial insemination.
- > Increasing the availability of green fodder by bringing more area under fodder cultivation
- Ensuring total health care and improving the conception rate by conducting Infertility cum total health care camps and distribution of mineral mixture and
- > Improving the know-how level of farmers on best animal husbandry practices / techniques by conducting various information, education, communication and training programmes

During 2007-08, the project is to be initially implemented in nine sub-basins Viz., Varahanadhi, Upper Vellar, South Vellar, Palar (Parambikulam Aliyar Project), Aliyar (Parambikulam Aliyar Project), Pambar, Arjunanadhi, Manimuthar and Kottakaraiyar at a cost of Rs.262.62 lakhs.

The following activities are carried out during 2007-08:

- > Breeding support and veterinary services are made available at the farmer's door steps or nearest to the farmers by establishing 27 Sub-basin Veterinary Units, utilising the services of unemployed veterinary graduates
- Around 770 hectares of land have been brought under fodder cultivation by supply of fodder inputs like Co3 slips, kolukattai etc
- ➤ 600 Infertility-cum-total health care camps have been conducted

- > 800 night meetings have been conducted
- > Information, education and communication campaigns are being carried out by distribution of pamphlets and leaflets, erection of hoardings and carrying out wall paintings and
- > 3,600 farmers have been trained on best animal husbandry practices

During 2008-09, in addition to the nine sub-basins, 15 more sub-basins namely Koundinyanadhi, Poiney, Swethanadhi, Chinnar, Anaivari odai, Agniyar, Ambuliyar, Therkar, Upper Vaigai, Upper Gundar, Sengotaiyar, Kalingalar, Nichabanadhi, Ponaiyar and Varratar-Nagalar have been planned to be taken up for implementation.

The activities planned are:

- > Establishment of 15 Cluster Sub-basin Veterinary Units to provide breeding support and veterinary services at the farmer's door steps or nearest to the farmers, utilising the services of unemployed veterinary graduates on Public Private partnership
- > Bringing 580 hectares of private land under fodder cultivation by supply of fodder inputs like Co3 slips, kolukattai, fodder cholam, fodder maize, etc., free of cost
- ➤ In addition Azolla cultivation will be propagated
- > Bringing in the practice of periodical deworming by carrying out deworming of 14 lakh sheep and goats free of cost
- > Proper identification of breedable bovines by tagging them free of cost
- > Improving the fertility and health care by conducting Infertility-cum-health care camps
- > Improving the know-how level of farmers by conducting farmer's interactive meetings half yearly
- > Carrying out information, education and communication campaigns by distribution of pamphlets and leaflets, erection of hoardings and carrying out wall paintings
- Training of farmers on best animal husbandry practices and
- Providing refresher training to veterinarians

3. Assistance to States for Control of Animal Diseases (ASCAD)

To control economically important diseases affecting livestock, "Assistance to States for Control of Animal Diseases programme (ASCAD) is being implemented with 75% central assistance except for one component "Training / Seminar" for which assistance is 100%.

During 2007-08, the following works have been carried out:

- > 20.00 lakhs cattle covering Thiruvallur, Kancheepuram, Vellore and Villupuram districts have been protected against Haemorrhagic Septicaemia disease
- > 20.00 lakhs cattle covering Kancheepuram, Pudukottai, Sivagangai, Villupuram and Cuddalore districts have been protected against Black Quarter disease
- > 31.51 lakhs cattle. sheep and covering Dindigul, goats Madurai. Thanjavur, Villupuram, Thiruvannamalai, Theni, Tirunelveli and Vellore districts have been protected against **Anthrax** disease
- **Foot and Mouth Disease (FMD)** is a viral disease affecting livestock resulting in economic loss to the farmers. During 2007-08 outbreaks, the Department had intensively covered the State with Foot and Mouth disease vaccination. A total of 82.06 lakhs cattle in the State have been covered and the disease has been brought under control. During 2008-09, it is proposed to cover 95% of the livestock under FMD vaccination
- > 43.44 lakhs sheep and goats in the State have been protected against **Pesti-des**petitsruminant disease
- > Rs.155 lakhs have been allotted for upgrading the Poultry Vaccine Laboratory to Good Manufacturing Practices standards at the Institute of Veterinary Preventive Medicine, Ranipet and the work is in progress
- ▶ 60 Veterinary Assistant Surgeons will be given capacity building training on various disease diagnostic methods and
- > Rs.4.88 lakhs has been provided for purchase of materials required for preparedness and training of Rapid Response Teams against Avian Influenza.

In addition, various pamphlets, leaflets and booklets on various diseases and prevention measures have been distributed to farmers.

4. Western Ghats Development Programme

Implementation Areas: 135 watersheds in eight Western Ghats districts viz., Coimbatore, Dindigul, Theni, Madurai, Tirunelveli, Kanyakumari, Erode and Virudhunagar.

During 2008-09, the scheme will be implemented with the following activities:

- > Fodder Development
- > Training to farmers
- Distribution of Giriraja poultry units
- > Distribution of crossbred heifer calves
- > Distribution of goat and sheep units and
- > Conducting infertility camps

5. Hill Area Development Programme

Implementation Areas: The Nilgiris district

Mode of functioning:

- Reclamation of uncultivable land for fodder production
- > Supply of Giriraja birds at 25% subsidy
- Supply of high pedigree crossbred bulls for breeding and crossbred heifer calf to ST beneficiaries
- ➤ Construction of new Veterinary Dispensary at Sholurmattam and repairs to Veterinary Sub-centres at Erumadu and
- ➤ For 2007-08, Government have released a sum of Rs.16.91 lakhs to carryout the above scheme

6. Foot and Mouth Disease Control Programme

Implementation Area: Kanyakumari district since 2004.

Mode of functioning:

> Systematic coverage of Foot and Mouth disease vaccination in all susceptible cattle in the project area as per the guidelines provided by the Government of India.

- > Upto 2004-05, Foot and Mouth disease vaccination have been carried out in four phases.
- > During 2005-06, Government have provided a sum of Rs.40.61 lakhs and one lakh doses of Foot and Mouth Disease vaccine for vaccination in the project area and the work was completed.
- For 2006-07, Government has released a sum of Rs.12.88 lakhs to carryout the above scheme.
- > For 2007-08, Government have released a sum of Rs.10.00 lakes to carryout the above scheme in Kanyakumari District.

7. Integrated Sample Survey Scheme

Implementation Areas: All districts since 1977

Mode of functioning:

- > Integrated Sample Survey Scheme is a 50% centrally assisted scheme covering all the districts. It provides timely and reliable statistical data on major livestock products like milk, egg, meat, etc.
- > It also studies livestock management practices annually and seasonally in a regular and continuous manner. Estimation of milk production and other livestock products is done by analysing the data collected from the field and
- > During 2007-08, the Department has taken up a study on estimation of yield rate of Meat by products in different species.

Estimated Production of Milk, Egg and Meat during 2006-07 and Target for 2007-08

Item	Achievement	Target	
	(2006-07)	(2007-08)	
Milk (Lakh metric tonnes)	55.60	55.90	
Egg (Million Nos.)	8,044	8,366	
Meat (Million Kgs)	220	229	

This scheme helps to assess and monitor the impact of development activities of Animal Husbandry sector initiated and implemented by the Department. Besides, the survey provides base level data, which helps in planning future programmes.

Performance of Schemes during 2007-08

- 1. 40 new Veterinary Dispensaries have been opened, to expand the veterinary health services, to benefit more number of farmers and to protect the livestock of poor farmers from diseases
- 2. Orathanad and Abishekapatti District Livestock Farms have been sanctioned with a sum of Rs.21.50 lakhs and Rs.16.09 lakhs respectively, to improve their fodder production. Chaff cutter and green fodder harvester have been purchased. Erections of borewell and Sprinkler Irrigation works have been entrusted to Agricultural Engineering Division and the work is being undertaken
- 3. To store excess quantity of eggs produced in flush season and to avoid losses in times of disturbances in transport and Ban on export of eggs in time of out breaks of Avian Influenza in India, which leads to stagnation of large quantities of eggs, it is proposed to construct a Cold Storage Unit for storage of eggs at Namakkal at a cost of Rs.10.00 crores as a Joint Venture project under public-private partnership. For this the Government have released Rs.1.00 crore as Government's equity to TIDCO
- 4. To generate gainful self-employment, improve nutrition and to satisfy the considerable urban demand that exist for pork and pork products, this department is encouraging pig rearing among the rural poor. For this purpose, Piggery Unit at District Livestock Farm, Abishekapatti in Tirunelveli district is being strengthened at a cost of Rs.33.92 lakhs
- 5. A new Regional Joint Director's office for Namakkal district has been established at a cost of Rs.3.42 lakhs for better administration
- 6. To improve the services of Mobile Veterinary Units, the vehicles in Coimbatore, Erode, Mannargudi, Kovilpatti, Sirkazhi and Myladuthurai Mobile units are replaced at a cost of Rs.20.85 lakhs.
- 7. For effective monitoring and control of livestock diseases, an Animal Disease Intelligence Unit has been opened in Dharmapuri district. Supply of necessary chemicals and equipments to be effected by Tamilnadu Medical Services Corporation.
- 8. To provide communication facilities, to 385 Veterinary Dispensaries functioning at Block headquarters, cell phones at a cost of Rs.18.10 lakhs have been purchased and distributed to veterinarians in these dispensaries.

- 9. The Small Animal Pet Clinic in Adyar, Chennai is being strengthened by providing essential infrastructure like X-ray, operation table, etc., at a cost of Rs.20.00 lakhs.
- 10. To improve the first-aid and breeding coverage, 55 Visiting Sub-centres have been opened.
- 11. Government has permitted to recruit and to train 425 individuals and post them as Livestock Inspectors. Training for 110 individuals who were selected on compassionate grounds, is under progress at District Livestock Farm, Hosur.

New Programmes for 2008-09

Under National Agricultural Development Project

A sum of Rs.1.57 crores has been sanctioned towards identification and traceability of breedable bovine population so as to monitor and improve the conception rates of the bovines. Implementing the scheme to 9 lakh bovines will benefit large number of farmers.

Under Part II Scheme

- 1. It is proposed to provide, Sheep units each unit comprising of 20 ewes and one ram, with 50% subsidy to Self Help Groups in the districts of Thoothukudi and Ramanathapuram in all the 23 blocks with the Government's share of Rs.60.00 lakhs.
- 2. It is proposed to create sustainable livelihood opportunities to the rural poor by providing backyard poultry units to Self Help Groups at a cost of Rs.15.00 lakhs in Dindigul, Pudukottai, Ramanathapuram, Sivagangai and Thoothukudi districts.
- 3. It is proposed to undertake vector control operations for control of Blue Tongue disease in Tirunelveli, Thoothukudi, Madurai, Dindigul and Erode districts at a cost of Rs.15.00 lakhs, since it is a viral disease affecting Sheep and is particularly prevalent in the southern districts of Tamilnadu causing economic losses through mortality and morbidity of small ruminants. So far there is no sufficient vaccine available for protecting the Sheep population and hence, vector control measures are the only way to prevent the disease.
- 4. Livestock when fed with green fodder tend to waste a lot of these precious feed. Further the utilization of the fodder (both green fodder & dry fodder) is enhanced and the feed conversion efficiency increases when the fodder is chopped and fed.

Hence it is proposed to provide chaff cutters at a cost of **Rs.6.00 lakhs** that will chop the fodder there by reducing the wastage.

- 5. It is proposed to provide telephone facilities to 16 Animal Disease Intelligence Units (ADIU) which are not having the telephone facility at a cost of Rs. 2.24 lakhs. By this, the information regarding disease outbreaks can be immediately passed on to the ADIU's so that necessary control and containment operations can be undertaken immediately. Further, since all the ADIU's are being provided with computers with internet connectivity, availability of a telephone connection will help in accessing the latest information regarding the guidelines and protocols for disease control measures.
- 6. It is proposed as a pilot programme to provide Genetic upgradation of Goats by artificial insemination in Vellore and Thoothukudi districts in collaboration with Tamil Nadu Veterinary and Animal Sciences University at a cost of Rs.2.00 lakhs.

State and Central Government Schemes:-

Centrally Sponsored Scheme

Support to Training and Employment Programme for Women (STEP)

The Government of India introduced 'STEP' scheme at a total cost of Rs.649.464 lakhs to improve socio economic conditions of poor rural women belonging to SC / ST, asset-less women and self help groups. The grant in aid of Rs.584.518 Lakhs will be met by GOI as its 90% share and the balance 10% share of Rs.64.946 Lakhs to be met by the implementing Agency.

This Scheme is implemented in seven District Co-operative Milk Producers' Unions viz. Salem, Erode, Dharmapuri, Vellore, Villupuram, Coimbatore and Trichy comprising 14 Revenue Districts.

The Government of India has released so far a sum of Rs.425.838 lakhs grantinaid for 1st and 2nd year and the amount was utilized. The third year grant-in-aid of Rs.158.680 lakhs is awaited from GOI for completion of the scheme.

The targeted 145 Women Dairy Co-operative Societies have been organized and 10150 women members have been enrolled. The average milk procurement from STEP societies is 22,439 Litres per day with an average income of Rs.61/- per day per beneficiary.

Intensive Dairy Development Programme

The Government of India has accorded sanction for Rs.312.15 lakhs to Sivagangai District Co-operative Milk Producers' Union as 100% grant to implement 'Intensive Dairy Development Programme' in Sivagangai and Ramanathapuram Districts. During this year Rs.102.14 lakhs has been received and utilized. The objective of this programme is to improve milk procurement, milk sales, creation of infrastructure required for milk processing and marketing, extension of input activities and manpower development in districts for a period of five years.

During the current year, Government of India has sanctioned Rs.554.06 lakhs to Tirunelveli and Rs.291.77 lakhs to Kanyakumari DCMPUs. So far Rs.204.53 lakhs has been received for Tirunelveli union and fully utilized. Kanyakumari union has received Rs.49.83 lakhs grant and fully utilized.

Similarly, the Government of India has accorded administrative approval on 11.10.2007 for the implementation of 'Intensive Dairy Development Programme' in Thanjavur DCMPU for the benefit of Thanjavur, Thiruvarur and Nagapattinam Districts at an outlay of Rs.867.624 Lakhs. As against first year grant of Rs.210.284 Lakhs, Thanjavur union has received Rs.125 Lakhs and utilized.

The above programme has benefited 2.24 lakhs milk producers of 849 functional societies in eight Revenue Districts. The average milk procurement by Unions is 1.31 LLPD and average milk sales to consumers are 1.17 LLPD. In the above southern districts, 71 new milk societies have been organized and 54 dormant milk societies have been made functional. In total, 2518 milch animal loans have been sanctioned and released to improve milk procurement.

Strengthening Infrastructure for Quality and Clean Milk Production

The Government of India sponsored a scheme called 'Strengthening Infrastructure for Quality and Clean Milk Production' to strengthen infrastructure facilities and to ensure Clean milk production at village level on 100% grant. The period of the scheme is two years and above.

The objective of the scheme is to train farmers on clean milk production, to provide chemicals and utensils to members, to strengthen district union dairies / chilling centres laboratory and to install bulk milk coolers at societies to improve initial quality of milk.

The amount was utilized for training, provision of antiseptic solutions, and supply of stainless steel utensils and modernization of Quality Control Laboratories at Dairies / Chilling Centres. The Government of India gives 75% as grant for installation of bulk milk coolers and the remaining 25% is met by the concerned beneficiary District Unions.

So far under this scheme, Rs.1351.37 lakhs was sanctioned to Vellore, Villupuram, Trichy, Dharmapuri, Salem, Kancheepuram-Tiruvallur, Erode, The Nilgiris, Madurai and Dindigul milk Unions. Out of the total project cost sanctioned, Government of India grant portion is Rs.1102.45 lakhs and balance Rs.248.93 lakhs has been contributed by implementing union. 1st year grant of Rs.445.15 lakhs has been received and utilized. Second year grant of Rs.507.80 lakhs and balance of Rs.24.19 lakhs is awaited from Government of India.

Field Performance Recording Programme

Field Performance Recording system is being implemented by the Federation with the financial assistance of Government of India through the Tamilnadu Livestock Development Agency (TNLDA) for production of crossbred bulls required for breeding milch animals belonging to Milk Producers. It is implemented in seven milk unions viz, Vellore, Salem, Erode, Coimbatore, Trichy, Madurai and Tirunelveli.

Under this programme, cows with a peak milk yield of 14 litres and above per day are identified, impregnated and on calving, their milk yields are recorded. Among the milk recorded animals, the high yielding cows are used as Bull Mothers for production of crossbred bulls.

Milk recording has been completed in 810 animals. 62 male calves are born and nineteen male calves have been purchased as breeding bulls and reared by TNLDA.

Government has released its share of Rs.100 lakhs and a matching sanction is expected from Government of India. The Dindigul District Co-operatives Milk Producers' Union has submitted proposal of the same scheme for Rs.180 lakhs.

State Government Schemes

Tsunami Emergency Assistance Programme Schemes

- 160 Milk Producers' Co-operative Societies are functioning in Tsunami affected coastal districts. Stainless steel milk cans, stainless steel milk collection kit, milk testing equipments, furniture, display board along with books and forms are provided to facilitate milk procurement economic activities.
- 9230 litres of milk per day is produced and marketed by self-help-group members generating regular daily income. Out of Rs.80 lakhs received as 100% grant from Asian development bank through rural development and panchyatraj department Rs.31 lakhs has been utilized. The scheme is under progress and anticipated for completion soon.
- Nine Bulk milk coolers are under process of establishment with Rs.153 lakhs financial support from Asian Development Bank through Tsunami Emergency Assistance Project implementation unit of Rural Development and Panchayatraj Department
- Infrastructure assistance worth of Rs.169.39 lakhs is provided to 37 marketing skill developed self help group members for the sale of milk and milk products. 14 Self-Help-Group members received infrastructure like milk parlours and started milk and milk product sales. Three Self-Help-Group members started milk sales economic activity. Rs.108 lakhs is being utilized and balance utilization is under progress.
- Orientation training by National Dairy Development Board Training Center at Erode to 49 district level tsunami scheme implementing officials and nongovernment agency representatives has been provided at a total cost of Rs.1.79 lakhs
- Exposure training for 641 members, orientation and skill development workshop for 381 members and Study tour to Salem and Erode milk product producing dairies for 377 members of self help groups selected for parlour economic activity have been completed at a total cost of Rs.4.31 lakhs.
- Exposure training to 660 members, clean milk production and dairy animal management training to 3936 members of Self-Help-Groups selected for milk society economic activity have been completed at a total cost of Rs.5.30 lakhs.

Part - II Schemes for the Year 2007-2008

For the year 2007-08, an amount Rs.418.00 lakhs was sanctioned for the benefit of milk producers of Tamil Nadu. This is the highest allocation under part II in recent times. State Government's Share is Rs.218.00 lakhs and balance amount of Rs.200.00 lakhs is met by the beneficiary Unions / Societies. The scheme is under progress at various stages.

- a) 5000 Stainless Steel Milk Cans will be purchased at the rate of Rs.4000 per can and supplied to 1000 Milk Producers' Co-operative Societies at a total cost of Rs.200 lakhs. The Government sanctioned Rs.100 lakhs as subsidy.
- b) The Government have provided 50 Stainless Steel Milk Collection Kit containing Stainless Steel Materials like Stainless Steel Collection Trays, Funnel, Filter Units, Measures and Sample bottles for milk testing at the rate of Rs.6000 per kit to the 50 Milk Producers' Co-operative Societies. The total cost of the above kit works out to Rs.3.00 lakhs.
- c) The Government has sanctioned money for the installation of 10 Bulk Milk Coolers of 5000 litre capacity at Milk Producers' Co-operative Societies. The cost of each Bulk Milk Cooler is Rs.20 lakhs and the total cost works out to Rs.200 lakhs out of which Rs.100 lakhs is the Government grant.
- d) The Government has sanctioned money for the installation of 10 PC based milk collection station at the rate of Rs.1.50 lakhs to 10 MPCS. The entire amount of Rs.15 lakhs is Government grant.

Thiruvannamalai Dairy and Milk Powder Plant

The Government has given administrative approval for the establishment of two lakes litre handling capacity dairy and a powder plant with capacity of 20 MTs. The total project cost is Rs.2931 lakes of which the Government share is Rs.146.57 lakes. The remaining portion is NABARD loan. Out of the total project cost Rs.1076.52 lakes have been released by Government during the year 2007-08.

Vision for the Year 2008-09

New Schemes

 "Perarignar Anna Centenary Dairy Scheme for Rural Women" (PACDSRW). To increase the milk production in Tamil Nadu as well as to increase income of the Milk Producers, a new scheme called "Perarignar Anna Centenary Dairy Scheme for Rural Women" will be implemented. Under the scheme 10,000 cross bred milch animals will be provided to rural women self-help-groups at a cost of Rs.22.00 crores for a period of two years through Tamil Nadu Co-operative Milk Producers' Federation Limited which will benefit 5,000 women in 200 villages.

2. It is proposed to create a welfare fund named "Peraringnar Anna Centenary Milk Producers' Welfare Fund" for the benifit of Milk Pouring Members from this financial year. The Milk Pouring Members have to pay Re.1/- per month for the fund and matching fund will be shared and paid by the MPCS and the District Unions. The fund will be utilized to help the Milk Pouring Members and their families during the time of dislocation in milk supplies to the Societies owing to fatal accidents, hospitalization of the members, disability and also expenses towards marriage of the member's daughter and education expenses of their children.

Organization / Revival of Mpcs

It is proposed to organize 250 MPCS and revive 100 MPCS during the year 2008-09.

Milk Procurement

It is proposed to procure 28 Lakh litres of milk per day during the year 2008-09.

Milk Marketing

It is proposed to market 10.30 LLPD of milk in Chennai metro during 2008-09. At District union level, it is proposed to market 10.00 LLPD of milk.

Expansion of Processing Capacity

Rs.2364 lakhs worth of equipments and related work for creation of additional infrastructure for increasing milk handling, processing, packing etc., will be completed in the year 2008-09. Feeder Balanced Dairies will be strengthened to act as regional suppliers of milk and milk products.

Installation of Bulk Milk Cooling Centres

131 bulk milk coolers is proposed to be installed and made operational during the year 2008-09.

Training of Milk Producers

29,600 milk producers will be trained at a cost of Rs.37 lakhs under clean milk production activities. 8000 milk producers will be trained at a total cost of 30.00 lakhs on Dairy animal management activities.

Animal Health

It is proposed to set apart with a minimum of 2.5 paise in every 10 paise deducted from administrative cost for purchase of medicine to take care of milch animals belonging to member producers and also for creating 100 mobile veterinary units to provide health cover by engaging veterinarians on contract basis.

Technical Training

It is proposed to establish a technical training centre at Madhavaram to train technical staff of Milk Unions and Federation.

Proposed Part- II Schemes 2008-09

It is proposed to implement the following schemes at a total cost of Rs.110.85 lakhs, out of which Rs.22 lakhs is being the beneficiary share under part II scheme as detailed below:-

- a) Provision of 2000 Stainless steel milk cans @ Rs.2200/- per can to 500 MPCS. The total cost works out to Rs.44 lakhs out of which Rs.22 lakhs is the Government grant and the remaining Rs.22 lakhs will be met by the beneficiary societies.
- b) Provision of 150 stainless steel kits at Rs.6,000/- each to 150 MPCS. The cost works out to Rs.9 lakhs.
- c) Provision of softy ice cream units to three MPCS @ Rs.60,000/-, per unit, Khoa Pan to three MPCS at Rs.25,000/- per unit and Paneer making machine to two MPCS at Rs,50,000/- per unit. The entire amount is Government Grant.
- d) Provision of five Mobile milking machines at Rs.3.25 lakhs per unit to five MPCS. It includes one milking machine and one mini door auto. The cost works out to Rs.16.25 lakhs.
- e) Purchase of computers, Xerox and Fax machines for development of e-Governance at Commissioner's office at a financial out lay of Rs.7.50 lakhs.
- f) Renovation of training hall in the Commissioner's Office, Dairy Development Department for a financial outlay of Rs.3 lakhs.

- g) Provision of fruit storage-cum-implement shed for 125 acres orchard at Madhavaram Milk Colony at a cost of Rs.10 lakhs.
- h) Provision of two bore wells with motors to irrigate the usufruct trees in the orchard at a total cost of Rs.3 lakhs.
- i) Provision of four Iron grill gates for fodder farm and orchard at Madhavaram Milk Colony at a cost of Rs.1.60 lakhs.
- j) Establishment of whey drink manufacturing unit in The Nilgiris District Co-operative Milk Producers' Union Ltd., with a financial outlay of Rs.35 lakhs.

5.4.3. Constraints

- Heavy shortage of fodder
- Non-availability of good pedigree herds
- Distance to dispensaries / hospitals
- Ignorance of farmers on quality milk production
- Lack of knowledge among farmers on scientific calf rearing.
- Sudden Outbreaks of epidemic diseases
- Lack of adequate grazing lands / areas and
- Non-availability of organized markets for selling the animals.

5.4.4. Interventions Recommended

The district-wise interventions recommended are furnished in what follows.

Coimbatore

- Feed and Fodder Development of cattle, buffalo, sheep and goat.
- Augmentation of fodder production through SHGs / women entrepreneurs.
- Supply of mineral mixture to dairy cows.
- Supply of by-pass protein feed to the milch animals
- Fodder development activities in 25 IDF villages and 50 acres in farmers field
- Programmed breeding indigenous cattle and buffalo to increase conception rate.
- Strengthening of veterinary institutions with basic facilities
- Buffalo calf development programme
- Control of parasitic diseases through treatment to enhance vaccine response
- PC based automatic milk collection station and
- Supply of stall fed goat unit to SHGs

Cuddalore

- Fodder production by SHGs
- Popularizing mineral mixture to improve livestock production
- Disaster management
- Strengthening of veterinary institutions
- Supply of By-pass protein feed to the milch animals
- Revival of dormant MPCs
- Bulk milk and walk in coolers
- AC based automatic milk collection station to IDF village / milk producer co-operation and
- District level livestock farmers workshop

Dharmapuri

- Fodder production by SHGs
- Popularizing mineral mixture to improve livestock production
- Establishment of 6 x 6 x 4 feet silo to ensile sugarcane tops
- Semi intensive sheep / goat farming to improve meat production by SHGs
- Renovation of existing veterinary dispensaries
- Programmed breeding of indigenous cattle and buffalo calf development programme
- Supply of mineral mixture to milch animals
- Supply of by-pass protein feed to the milch animals
- Bulk milk and walk in coolers
- Milk weighing machine for milk producers cooperative societies
- Establishment of model livestock village for educating farmers and
- Renovation of training hall at VUTRC

Dindigul

- Feed and fodder development for cattle, sheep and goat
- Genetic upgradation for cattle, sheep, goat and poultry
- Improvement of livestock health for cattle, sheep, goat and poultry
- Strengthening of Department of dairy development and
- Extension activities

Erode

- Feed and fodder development for cattle and small ruminants
- Genetic upgradation for bovines and small ruminants
- Improvement of livestock health
- Processing and marketing facilities
- Extension facilities for livestock farming
- Supply of stall fed goat and
- Strengthening of PDDL, Erode

Kancheepuram

- Augmentation of fodder production through SHGs / Women entrepreneurship
- Strengthening of veterinary institution with basic facilities
- Control of parasite diseases through treatment to enhance vaccine response
- Establishment of mobile veterinary clinic
- Programmed breeding of indigenous cattle and buffalo to increase consumption rate
- Buffalao calf development programme
- Bulk milk and walk-in-colleres
- Strengthening of buffaloe breeding farm and
- Strengthening of pig breeding farm

Kanyakumari

- Feed and fodder development for cattle, sheep, goat, poultry and pigs
- Genetic upgradation for cattle, buffalo, sheep, goat, poultry and pigs
- Improvement of livestock health for cattle, buffalo and poultry
- Processing facilities for cattle and buffalo and
- Extension facilities for cattle, buffalo, sheep, goat and poultry

Karur

- Feed and fodder development for cattle and buffalo
- Genetic upgradation for cattle and buffalo
- Improvement of livestock health for cattle and buffalo
- Processing facilities for cattle and buffalo
- Extension facilities and
- Development of Chinese hatches in Thirukampuliyur, Government Fish farm

Krishnagiri

- Feed and fodder development for cattle, buffalo, sheep, goat, poultry, pig and others
- Genetic upgradation for cattle and buffalo and
- Extension activities

Madurai

- Augmentation of fodder production through SHGs / livestock farmers
- Fodder development activities in 100 IDF villages and in farmers field
- Establishment of cattle feed plant
- Supply of by-pass protein feed to the milch animals
- Control of parasitic diseases through treatment to enhance vaccine response
- Walk-in and bulk milk coolers
- PC based automatic milk collection stations to IDF villages / milk producers cooperative societies and
- Semi intensive sheep / goat farming to improve meat production by SHGs

Nagapattinam

- Popularizing mineral mixture to improve milk production
- Fodder production by SHGs
- Supply of mineral mixture to milch animals at subsidized rate
- Supply of by-pass protein feed to the milch animals
- Mobile veterinary clinic
- Disaster management
- Control of parasitic diseases through treatment to enhance vaccine responses
- Infrastructure improvement of veterinary institution
- Programmed breeding of indigenous cattle and buffalo to increase conception rate and
- Bulk milk and walk in coolers

Namakkal

- Fodder production by SHGs
- Popularising mineral mixture to improve live stock production
- Establishment of AIDU along with mobile veterinary diagnostic laboratories.
- Semi-intensive goat farming to supply germ plasm by SHGs
- Identification and traceability of Breedable bovine population

- Renovation of existing veterinary dispensaries
- Supply of ELISA kits to PDDL to establish NAI free poultry farms
- Programmed breeding of indigenous cattle and buffalo to increase conception rate
- Buffalo calf development programme
- Supply of by-pass protein feed to the milch animals
- Fodder development activities in 100 IDF villages and in farmers' fields
- Milk weighing machine for milk producers co-operative societies
- Strengthening of infrastructure for sheep and goat at VC & RI, Namakkal farm to distribute germ plasm
- Establishing model livestock villages for educating farmers and
- Establishment of value added symbiotic and conventional dairy food manufacturing unit cum instructional dairy plant at VC & RI, Namakkal.

Perambalur (including Ariyalur)

- Perennial fodder production and 10 acre / block / year and for four years
- Mobile veterinary clinics at @ one per taluk for ten taluks
- Distribution of bucks and rams
- Fodder development activities in IDF villages and in Farmers fields
- Popularizing mineral mixture to improve livestock production
- Control of parasitic diseases through treatment to enhance vaccine response
- Animal intelligence unit for health cover
- Identification and traceability of bovines
- Supply of mineral mixture to milch animals at subsidized rates
- Supply of by-pass protein feed to milch animals
- Bulk-milk and walk-in-coolers
- Infrastructure development of veterinary institution
- Revival of dormant milk producers co-operative societies and
- Milk weighing machine to milk producers cooperative societies

Pudukottai

- Feed and fodder development for cattle and buffalo
- Genetic upgradation for cattle and buffalo
- Improvement of livestock health for cattle and buffalo

- Processing facilities for cattle and buffalo and
- Extension facilities

Ramanathapuram

- Fodder development for cattle, buffalo, sheep, goat and poultry
- Mobile input units
- Supply of mineral mixture and by pass protein feed
- Portable milking machines for farmers
- Bulk and walk in milk
- Farmers study tour
- Skill development for technical staff and
- Establishment of training centre for capacity building

Salem

- Fodder production by SHGs
- Popularizing mineral mixture to improve livestock production
- Identification and traceability of breedable bovine population
- Semi-intensive goat farming to supply germplasm by SHGs
- Control of parasitic disease through treatment to enhance vaccine response
- Renovation of existing veterinary dispensaries
- Programmed breeding of indigenous cattle and buffalo to increase conception rate
- Buffalo calf development programme
- Supply of mineral mixture to milch animals at subsidized cost
- Revival of dormant milk produces co-operative societies
- Milk weighing machine for milk producers cooperative societies
- PC based automatic milk collection stations in IDF villages / MPCs
- Strengthen infrastructure for sheep at Mecheri sheep research station
- Fodder development at Mecheri Sheep Research Station and
- Establishing model livestock village for educating farmers.

Sivagangai

- Fodder production by SHGs
- Mobile veterinary clinics
- Popularizing mineral mixture to improve livestock production

- Renovation of existing veterinary dispensaries
- Improvement of District Livestock Farm (livestock and fodder component)
- Programmed breeding indigenous cattle and buffalo to increase conception rate and
- Bulk milk coolers

Thanjavur

- Fodder development at District Livestock Farm, Orathanad
- Fodder production by SHG
- Supply of by-pass protein feed to the milch animals at 50 per cent subsidized cost
- Production of fodder seed / sheep in dairy or chilling centres and land of DDD
- Control of parasitic disease through treatment to enhance vaccine response
- Programmed breeding indigenous cattle and buffalo to increase conception rate
- Bulk and walk in milk coolers
- P.C. based automatic milk collection station to IDP villages / MPCS
- Establishment of quarantine facilities, strengthening of bull sheds, calf sheds and semen production at Exotic cattle breeding farm at Eanchankottai and
- Renovation of existing veterinary institutions

Theni

- Augmentation of fodder production through SHG / livestock farmers
- Fodder development activities in 100 SDF villages and in farmers field
- Mobile veterinary clinics
- Supplementation of mineral mixture to prevent infertility and augment production to farmers
- Supply of bypass protein feed to the milch animals
- Control of parasitic diseases through treatment to enhance vaccine response
- Bulk and walk-in milk protein
- PC based automatic milk collection station to IDF villages / MPCs
- Strengthening of veterinary institution with basic facilities and
- Semi-intensive sheep / goat farming to improve meat production by SHGs.

Thoothukudi

- Augmentation of fodder production through SHGs / women entrepreneurs
- Fodder development activities in IDF villages and farmers field

- Supply of mineral mixture to dairy cows
- Supply of by-pass protein feed to the milch animals at 50 percent subsidized cost
- Establishment of mobile veterinary clinics in each taluk
- Strengthening of veterinary institution with basic facilities
- Control of parasitic diseases through treatment to enhance vaccine response
- Bulk and walk-in-coolers
- Supply of Nandanam chicken backyard worth to SHG and
- Supply of piggery units to farmers.

Tiruchirappalli

- Fodder development for cattle, buffalo, sheep and goat
- Genetic upgradation for cattle, buffalo, sheep, goat and poultry
- Improvement of livestock health
- Processing facilities and
- Extension facilities for cattle, buffalo, sheep, goat and poultry.

Tirunelveli

- Feed and fodder development for cattle, buffalo, sheep and goat
- Genetic upgradation for cattle, buffalo, sheep, goat and poultry
- Improvement of livestock health for cattle, buffalo and poultry and
- Processing facilities for cattle and buffalo

Tiruvallur

- Augmentation of fodder production through SHGs / women entrepreneurs
- Supply of mineral mixture to dairy cows
- Identification and traceability of breedable bovines
- Establishment of mobile veterinary clinics
- Strengthening of veterinary institutions with basic facilities
- Establishment of Animal Disease Intelligence Unit
- Supply of stall-fed goat units to SHGs
- Programmed breeding indigenous cattle and buffalo to increase conception rate
- Buffalo calf development
- Mobile input units

- Revival of dormant MPCs
- Fodder development activities
- Sensitization of public on dairy activities
- Product production and delivery facilities
- Operational efficiency improvement for dairying
- Strengthening of University Research Farm, Madhavaram Milk Colony
- Establishment of livestock and poultry entrepreneurship development complex
- Improving the productivity of the sheep through introduction of exotic germplasm
- Strengthening of infrastructure for Central University Laboratory and
- Development of inactivated vaccine for Avian infectious Bronchitis.

Tiruvannamalai

- Fodder production by SHGs
- Popularizing mineral mixture to improve livestock
- Intensive sheep / goat farming
- Traceability of breedable bovines
- Strengthening of veterinary institutions
- Buffalo calf development programmes
- Supply of mineral mixture to the milch animals
- Revival of Dormant MPCs
- Milk weighing machine for milk producers cooperative societies
- P.C. based automatic milk collection stations and
- Establishment of VVTRC at Tiruvannamalai.

Tiruvarur

- Fodder development at District Livestock Farm
- Perennial fodder production
- Popularizing mineral mixture to improve livestock production
- Supply of mineral mixture to milch animals at subsidized price
- Supply of by-pass protein feed to the milch animals at subsidized price
- Control of parasitic diseases through treatment to enhance vaccine responses
- Mobile veterinary clinics

- Disaster management
- Programmed breeding of indigenous cattle & buffalo to increase conception rate
- Establishment of Animal Disease Intelligence Unit and
- Bulk and Walk in milk coolers.

Vellore

- Fodder production by SHGs
- Popularising mineral mixture
- Strengthening of veterinary institutions
- Identification and traceability of Breedable bovine population
- Genetic upgradation of livestock in Mukundarayapuram sheep farm
- Buffalo calf development programmes
- P.C.based automatic milk collection stations and
- Creation of infrastructural facilities for conduct of farmers' meet at VVTRC, Vellore.

Villupuram

- Augmentation of fodder production through SHGs / women entrepreneurs
- Supply of mineral mixture to dairy cows
- Identification and traceability of breedable bovines
- Establishment of mobile veterinary clinics
- Strengthening of veterinary institution with basic facilities
- Strengthening of sheep farm at Chinna Salem
- Supply of stall fed goat units to SHGs
- Programmed breeding of indigenous cattle and buffalo to increase conception rate
- Mobile input units
- Buffalo calf development programme
- Supply of mineral mixture to the milch animals at subsidized rate
- Supply of by-pass protein feed to the milch animals at subsidized rate
- Bulk and walk-in-milk coolers
- Revival of dormant MPCs
- Milk weighing machine for MPCs and
- Milk pouch film manufacturing facilities

Virudhunagar

- Fodder production by SHGs
- Identification and traceability of breedable bovine population
- Mobile veterinary clinics
- Popularizing mineral mixture to improve livestock production
- Control of parasitic disease through treatment to enhance vaccine response
- Renovation of existing veterinary dispensaries
- Improvement of sheep farm, Sattur (Livestock component) and
- Bulk and walk-in-milk coolers.

5.5. Fisheries Sector

5.5.1. Issues

- Inland fisheries development is yet to make a headway
- Socio-economic upliftment of the fisher men and fisher women
- Improvement of processing infrastructure facilities
- Development of cold / refrigerated / insulated transport facilities
- Development of retailing services and retail points
- Provision of fishing gadgets at subsidized prices
- Training of farmers venturing into fish farming and
- Training to the fisher-folk on scientific fish farming / sea ranching etc.
- Sustainable fish production
- Strengthening infrastructural facilities for fish landing
- Reduction of post-harvest losses
- Encouragement of integrated fish farming, cage farming and several leg fish farming and
- Production of sea ranching and artificial reefs

5.5.2. Ongoing Schemes

Tamil Nadu is one of the important coastal States in the East coast, having a coastline of 1,076 kms with 13 Coastal Districts and 591 fishing villages. It ranks fourth in fish production in the country. It has a continental shelf of 41,412 sq. kms and an Exclusive Economic Zone spreading over 0.19 million sq. kms. Tamil Nadu has a total fishermen population of 0.69 million of which 0.262 million are actively engaged in fishing. The Fisheries department is implementing the following schemes for the welfare of the fishermen (both inland and marine).

1. Fishermen Free Housing Scheme

Under the Fishermen Free Housing Scheme, Government sanctions 2000 houses yearly to marine and inland fishermen who are below the poverty line, subject to the following conditions:

- ➤ the fisherman should be a member of the Fishermen Co-operative Society and should be below the poverty line
- > the fisherman should live in huts or Katcha houses and
- > the fisherman should own three cents of land

Apart from this, the Government of India sanctions the construction of houses, community halls and tube wells under the centrally sponsored scheme of "Development of Model Fishermen Village" shared between the State and Central Governments on 50: 50 basis.

2. National Savings-cum-Relief Scheme for Marine Fishermen

Under this scheme, as per Government of India norms, a sum of Rs.75/- per month shall be collected from the beneficiary fisherman for a period of eight months in a year. The total sum of Rs.600/- thus collected will be matched with 50% contribution i.e. Rs.300/- each by the State and Central Governments. Thus, a sum of Rs.1200/- will be disbursed to the beneficiary during the four lean months.

3. Savings-cum-Relief Scheme for Fisherwomen

Under this scheme, a sum of Rs.75/- per month should be collected from the beneficiaries for eight months in a year. The total sum of Rs.600/- thus collected will be matched with 100% contribution i.e., Rs.600/- by the State Government. Hence, a sum of Rs.1200/- (Beneficiary contribution and State Government share) will be disbursed to the beneficiary during the four lean months at the rate of Rs.300/- per month.

4. Tamil Nadu Fishermen Group Insurance

Under this scheme, both the State and Central Government will pay the total annual Insurance premium of Rs.14/- per beneficiary fisherman. No premium is collected from the fishermen. The premium is being shared equally on a 50:50 basis by the State and Central Governments. Under this scheme, the fisherman will be given Rs.50,000/- in case of death / permanent disability and Rs.25,000/- for partial disability.

5. Assistance to fishermen for purchase of Diesel

To alleviate the sufferings of the mechanised fishing boat operators, the Government reimburses the excise duty by way of subsidy towards the purchase of HSD to bring down the running cost of mechanised fishing boats. Government of India has sanctioned Rs.3.00 crores as subsidy for 2007-08 as 100% assistance.

6. Sales Tax Exemption on sale of High Speed Diesel to Fishermen

A scheme for the fishermen of Tamil Nadu involved in fishing activities with mechanised boats and motorised country crafts was announced with 100% exemption of payment of Sales Tax for the purchase of High Speed Diesel. Accordingly, 15,000 litres of sales Tax Free Diesel per Mechanised Boat per year and 3000 litres of Sales Tax Free Diesel per country craft per year is supplied.

7. Construction of mechanised fishing boats

The Government is providing subsidy of Rs.20,000 towards the purchase of outboard motors to be fitted in the traditional crafts of fishermen. So far, the Department has provided 18,470 OBM / IBE to the fishermen.

8. Tamil Nadu Fishermen Welfare Board

A new scheme for establishing a separate Welfare Board for the welfare of fishermen, on the same lines as the Welfare Board for Agricultural Labourers was announced in the Tamil Nadu Legislative Assembly on 20.1.2007 by His Excellency the Governor of Tamil Nadu. In the Budget Speech on 23.3.2007 the Hon'ble Minister for Finance announced that all benefits given under the landless agricultural labourers and farmers (social security and welfare schemes) will be extended to the fishermen also. Women who are engaged in activities like drying and sale of fish will also be covered under the above scheme. Government has sanctioned a sum of Rs.500.00 lakhs for this purpose.

9. Work under Tsunami Emergency Assistance Project - (TEAP)

The following works are carried out under TEAP.

- a) Repairs and Rehabilitation of FLCs/FH
- b) Dredging works and
- c) Investigation Studies on Cuddalore backwaters

10. World Bank aided Emergency Tsunami Reconstruction Project (ETRP)

An amount of Rs.80.60 crores has been allotted under World Bank aided ETRP for the following works:

- a) Reconstruction and modernisation of four fishing harbours
- b) Permanent opening of four bar mouths
- c) Construction of two new fish landing centres
 - (i) Nagoor
 - (ii) Annankoil
- d) Seamless communication Network in 13 Coastal Districts and
- e) Assistance to aqua farms / hatcheries

11. Establishment of Fish Farmers' Development Agency (75:25)

Tamil Nadu is having 12 FFDA's covering most of the districts to promote the inland fish culture activities. The main objective of the FFDA is to popularise scientific fish culture activities by giving training, technical guidance and subsidy so as to encourage the farmers to venture into this profession as well.

12. Brackishwater Fish Farmers' Development Agency (50:50)

The changing scenario in the shrimp industry has made it necessary to take up a 'Census of Coastal Aqua Farms'. From the year 2006-07, the Department initiated steps to take census of shrimp aqua farms. To promote shrimp aquaculture, the Government is providing necessary subsidy assistance under Centrally Shared Scheme at Rs.40,000/per hectare to small farmers having land holding of less than two hectares.

There are five Brackishwater Fish Farmers Development Agencies in the State at Thoothukudi, Nagapattinam, Thiruvallur, Ramanathapuram and Cuddalore Districts.

13. Extension and Training

Department of Fisheries is carrying out various extension activities such as conducting training on various culture activities, demonstration of mud crab fattening, lobster fattening, seaweed culture, etc., Under Centrally Sponsored shared Scheme (80:20), it is proposed to establish one awareness centre and three training centres in the State.

14. Swarna Jayanthi Gram Swarozgar Yojana (SGSY)

The SGSY project has been funded by Department of Rural Development at a cost of Rs.28.16 crores. The project will be implemented in the 12 Coastal Districts of Tamil Nadu in two phases within three years.

15. World Bank funded IAMWARM Project

IAMWARM, envisions at improving the productivity of water and agriculture for enhancing the farm income by convergence of the line Department activities using water in an integrated approach. The IAMWARM project is a World Bank funded project,

- > to improve the efficiency of water use
- > to improve sustainable farm income and
- > to improve water resources management

With these objectives, it is proposed to develop the line department activities in 63 sub-basins, and a base cost of Rs.17.3 crores has been approved by World Bank towards fisheries component.

The following activities are undertaken in this project.

- 1. Aquaculture in Farm ponds
- 2. Fish Seed rearing in cages
- 3. (a) Improvement to Govt. Fish seed farm (b) Construction of Fish Seed Bank
- 4. Ornamental fish culture
- 5. Supply of fishing implements
- 6. Kiosks and
- 7. IEC & CB, HQ cell etc.,

Nine sub basins Spill over works and Implementation of fisheries activities in 16 sub basins will be undertaken during the year 2008-09.

16. National Agriculture Development Programme

Under this scheme, the following components have been taken up for implementation.

- Fish Culture in Check Dams under Forest Department involving Village Forest Council.
- 2. River Ranching as a measure of conservation of endangered / endemic species
- 3. Repair and renovation of existing fish seed farms
- 4. Creation of additional space for fish seed production and rearing
- 5. Cage culture of fishes in Inland water bodies
- 6. Study tour of farmers
- 7. Upgradation of extension centres in Tamil Nadu and
- 8. Setting up of modern fish stalls in major cities in Tamil Nadu

17. Development of Landing Facilities

- a) Construction of Fishing Harbour at Thengapattinam in Kanniyakumari District
- b) Construction of Fishing Harbour at Colachel in Kanniyakumari District and
- c) Fishing Harbour at Poompuhar

18. Restoration works in the Fishing Harbour/Fish Landing Centre in Tamil Nadu

Restoration work in FLC at Mudasalodai, Kottaipattinam, Nagapattinam, Mallipattinam and Fishing Harbours in Cuddalore, Thondi, Thoothukudi and Chinnamuttom were completed.

19. Restoration & Reconstruction Works at Chennai Fishing Harbour

The restoration and reconstruction works in Chennai Fishing Harbour is being carried out through Chennai Port Trust.

20. New Schemes- 2008-09

The following schemes have been sanctioned under Part II Schemes for the year 2008-09.

- 1. Setting up of Distress Management Cell in Head Office
- 2. Pilot Project on issue of Smart Cards to fishermen of Rameswaram in Ramanatha puram District
- 3. Supply of inverters to the Offices of the Assistant Director of Fisheries (Marine) in 13 Coastal Districts
- 4. Provision of two solar lights each in 11 Fish Landing Centres
- 5. Installation of artificial reefs in the inshore areas of Tamil Nadu Coast
- 6. Sea Ranching of Shrimp Seeds for Stock Enhancement
- 7. Pilot Project on Demonstration of Cage Farming in Inland Water Bodies
- 8. Seed Transport Facility for Government Fish Seed Farm
- 9. Upgradation of the Existing Fish Seed Farm at Krishnagiri and
- 10. Subscribing to All International Magazines relevant to Fisheries to Central Library of Commissionerate.

21. New Announcements 2008-09

1. Establishment of Fishers Institute of Tamil Nadu

To provide technical assistance and training to marine fishers to take up activities in diversified fishing methods, marine cage culture and crab culture including sea weed farming and for adoption of proper fish processing technique by fisherwomen, a Fishers Institute of Tamil Nadu would be established as a World class facility with the participation of major corporates like TATA Group.

The following are the major activities that would be taken up by the proposed Fishers Institute of Tamil Nadu.

- * Sea farming
- ** Sea weed culture for the Self Help Groups
- * Fish processing in value-added consumer pact and
- * Diversified fishing with carrier vessel Operation

22. Grant of Relief Assistance to Marine Fishermen Families during **Fishing Ban Period**

A sum of Rs.500/- has been paid to the families of the fishermen during the ban period as relief assistance.

23. Tamilnadu State Apex Fisheries Co-Operative Federation Ltd.

Tamil Nadu State Apex Fisheries Co-operative Federation Ltd was registered and started functioning from 6.11.1991 with head quarters at Chennai. At present, 589 Primary Fishermen Co-operative Societies and nine district Fishermen Co-operative Federations have become members in TAFCOFED and have paid Rs.89.055 lakhs as share capital. To uplift the socio-economic status of traditional fishermen, TAFCOFED had been implementing Integrated Marine Fisheries Development Project with financial assistance from NCDC. Under this project, TAFCOFED distributed fishing inputs consisting of fishing crafts, engines and gears to the members of the Fishermen Co-operative Societies.

24. Tamil Nadu Fisheries Development Corporation Ltd.

Tamil Nadu Fisheries Development Corporation Limited was established in 1974 with authorized Share Capital of Rs.500.00 lakhs and the paid up Share Capital as on date is, Rs.445.52 lakhs.

The Corporation undertakes the following activities:

- 1. Fish culture in Reservoirs
- 2. Fish Seed Production
- 3. Fish Processing
- 4. Diesel outlet
- 5. Fish Marketing
- 6. Fish net making factory
- 7. Shrimp Hatchery at Neelankarai
- 8. Model Shrimp farm at Karangadu
- 9. Production and marketing of Ornamental fishes and
- 10. Supply of OBM / IBE under subsidy to motorised the traditional fishing crafts

5.5.2.1 Ongoing Schemes-Fisheries Sector

Sl. No.	Name of the Scheme	Comm- encing year	G.O. No. and Date	Funds allocated	Achieve- ment	U.C Details	Present Stage		
I. SC	I. SCHEMES UNDER TSUNAMI RELIEF								
	World Bank assisted schemes under Emergency Tsunami Reconstruction Project (ETRP)								
1	a) Reconstruction and modernisation of 4 fishing Harbours 1) Mallipattinam fishing harbour 2) Nagapattinam fishing harbour 3) Pazhayar fishing harbour 4) Chinnamuttom fishing harbour	2005-06	G.O.Ms.No:603, Revenue (NC4) Dept Dated:25.10.2005 G.O.Ms.No:56, Revenue (NC4) Dept Dated:4.2.2008	1861.88	21.6		Consultancy service for reconstruction and modernization of Fishing Harbour work was entrusted to M/s. SMEC International (P) Ltd., Australia. The contract agreement was signed on 6.9.2007. M/s. SMEC International (P) Ltd., Australia submitted the final inception report, existing condition and conceptual design of four fishing harbours. Further studies are in progress. After completion of studies, the project will be completed in a period of 18 months. Project Cost: Rs.35.48 crores Amount sanctioned and released: Rs.18.618 crores		
	b) Permanent opening of 4 bar mouths 1) Pulicat lake 2) Uppanar river 3) Vellar river 4) Tamaraparani river		G.O.Ms.No:603, Revenue (NC4) Dept Dated: 25.10.2005	100	14.6		Consultancy service for permanent opening of bar mouths was entrusted to M/s. WAPCOS, Gurgaon. The contract agreement was signed on 13.3.2007. The firm has completed the studies and furnished Draft final report along with BOQ and Draft EIA report on Pulicat lake, Uppanar river, Velar rive and Tamaraparani river after incorporating the comments / remarks made by the Department for the project. But the firm didn't attend many of the remarks pointed out by the Department. The comments / remarks made by the field engineers were sent to Consultancy firm for rectification and to send final report. Project Cost: Rs.19.60 crores Amount sanctioned and released: Rs.1.00 crores		

Sl. No	Name of the Scheme	Commen- cing year	G.O. No. and Date	Funds allocated	Achiev e-ment	U.C Details	Present Stage
							Necessary proposal for sanction of the works for Rs.7.05 crores was sent to Project Director (ETRP/TEAP) on 8.7.2008. then it was revised based on the instructions of OSD (R&R) to Rs.2.93 crores by dropping the works at Pazhayar, Chinnamuttom and Tamaraparani which are to be taken up under ETRP for construction of Fishing harbours and Bar mouths. Meanwhile, Draft bid documents have been prepared for obtaining ADB's approval. Tenders will be floated as soon as approval from ADB.
	C. Investigation Studies on Cooum, Adayar and Cuddalore	2005-06	G.O.Ms.No. 146, Rev. (NCIV.1) dt. 27.2.2006.	25	0		It is planned to conduct study only in Cuddalore backwaters. ADB has approved the evaluation report for conducting studies at Cuddalore backwater through Mahindra Consulting Engineers Ltd. Study consist of Initial Environment Evaluation and Environment Management Plan and preparation of DPR. Agreement executed with the consultancy services on 16.8.2007. M/s. Mahindra consulting Engineers has completed the studies and furnished draft techno economic feasibility report, Bill of quantities, layouts, design calculation and site investigation report on 19.5.2008. The reports received from M/s. Mahindra are under scrutiny.

Sl. No	Name of the Scheme	Commen- cing year	G.O. No. and Date	Funds allocated	Achiev e-ment	U.C Details	Present Stage
3	RESTORATION WOR	KS					
	1) Restoration works in the Fishing Harbour/Fish Landing Centre in TamilNadu		G.O.Ms.No. 143, Revenue (NCIII) Department, Dated 3.3.2005. G.O.Ms.No. 189, Revenue (NCIII) Department, Dated 6.4.2005.	718.5	621.1	U.C for Rs.558.50 lakhs was sent to OSD / Government	Restoration work in FLC at Mudasalodai, Kottaipattinam, Nagapattinam, Mallipattinam and Fishing Harbours in Cuddalore, Thondi, Thoothukudi and Chinnamuttom were completed. In Pazhayar Fishing Harbour, all works had been completed except administrative office building which is nearing completion. Dredging in Ammanar river at Chinnankudi river completed. Superintending Engineer, FHPC, Chennai has been instructed to complete the work immediately and to furnish completion report and Utilization certificate. The balance amount will be surrendered after finalisation of accounts and receipt of completion report.
	2) Restoration & reconstruction works at Chennai Fishing Harbour Sanctioned Amount - Rs.430.50 lakhs. Revised sanction Rs.250.50 lakhs	2004-05	G.O.No.197 Rev. (NC.III) Dept. dt. 8.4.05	250.5	266.39	Utilization certificate for a sum of Rs.221.99 Lakhs has been furnished to OSD by the Chief Engineer, Chennai Port Trust.	The restoration and reconstruction work in Chennai Fishing Harbour is being carried out through Chennai Port Trust. Out of sanctioned Rs.180.00 lakhs, an amount of Rs.172.00 lakhs was remitted back to OSD (R&R) Chennai being the unspent amount allotted for dredging work and Rs.8.00 lakhs was adjusted vide G.O.No.382 Rev. (NC.III) Dept. dt. 18.7.2007. Restoration works were completed by the Chennai Port Trust.

Sl. No.	Name of the Scheme	Commen- cing year	G.O. No. and Date	Funds allocated	Achieve- ment	U.C Details	Present Stage
		2005-06	G.O.No.382 Rev. (NC.III) Dept. dt. 18.7.2007	1956.9	56.6		During the meeting held on 14.2.2008 the Chennai Fishing Harbour Management Committee had approved the total revised estimate of Rs.35.555 crores and a resolution was passed that the excess of the sanctioned estimate will be from the CFHMC funds and progress of development of works has to be reviewed once in a month. The work on carryingout extension of eastern breakwater was finalized for a value of Rs.11.49 crores and the same is in progress. In respect of rehabilitation and extension of trawler wharf and finger jetties retenders invited by CPT.
	3) New 10 Fish Landing Centres under Tsunami Rehabilitation Programme			5000	71.40		Consultancy work towards carrying out studies and preparation of Detailed project report were entrusted to M/s Mahindra Consulting Engineers for a sum of Rs.118.48 lakhs. The agreements for all he ten places were executed during April 2007. The consultancy service has furnished final DPR and EIA report and Bill of quantities for the 10 sites during the end of April 2008. The firm has also applied for extension of time for the above work upto 31.7.2008. The reports received from the consultancy firm are being finalized technically. Based on the report, the cost of each work to construct FLC has been finalized to a tune of 49.97 crores. The proposal for administrative sanction and release of funds to a tune of Rs.49.97 crores was considered and approved by the Empowered Committee on 15.7.2008 G.O. is awaited in this regard. The DCZMA has cleared the proposals for the FLC viz. Annamalaichery, Periyamangodu, Kadalore Periyakuppam, Keezhakarai, Threspuram, Ekkiyarkuppam and forwarded to SCZMA for consideration and issuing necessary clearances. Follow up action is being taken to get the clearance for other centres also. Meanwhile project was cleared by the Empowered Committee for issuing of Administrative Sanction and release of funds.

Sl. No.	Name of the Scheme	Commen- cing year	G.O. No. and Date	Funds allocated	Achieve- ment	U.C Details	Present Stage
4)	Under Rajiv Gandhi Ts	unami Rehab	ilitation Packag	ge			
	(i)Supply of Handy rechargeable lanterns	2006-07	G.O.Ms.No. 532, Revenue Dept., dt 14.8.2006.	110036	3076.00	UC for Rs. 11036.00 lakhs	Government have sanctioned Rs. 110.36 crore under Rajiv Gandhi Tsunami Rehabilitation Programme. Out
	(ii)Supply of Heavy duty bi-cycles					will be sent to Government after distribution of the	of sanctioned amount, SC & CRA has released a sum of Rs.77.248 crores in two instalments. Tokens have been handed over to all the Assistant Directors of Fisheries
	(iii)Supply of Life Jackets					additional relief to fishermen.	and will be issued to 36942 fishermen and these relief materials will be supplied in due course at 32 distribution centers in 13 districts by TNFDC and
	(iv) Supply of Ice Boxes						TAFCOFED.
							42000 H.D bicycles 1,50,000 life jackets, 34000 rechargeable lantern, 6000 Nos of insulated ice boxes of 50lts, 70 lts and 100 lts have been supplied by the successful tenderers. So far, payment of Rs.30.76 crores has been made for the supplied material. Further distribution is in progress.
	v) Supply of nets (webbings)		G.O.No.320 Rev. (NC.III) Dept. dt. 2.6.2008		4163.50		(i) Based on the approval and recommendations of the CRF committee Government have accorded sanction for cash assistance towards purchase of nets at the rate of Rs.10000- per beneficiaries. In accordance to the Govt order a sum of Rs.41.635 crores was released to 13 coastal district collectors for disbursing the amount to the beneficiaries. The releif amount will be released in two instalments through respective District Collectors. Modalities and conditions have to be approved by the Government. Amountreleased- Rs.77.24 crores. Expenditure as on date - Rs.72.40 Crores.

Sl. No.	Name of the Scheme	Commen- cing year	G.O. No. and Date	Funds allocated	Achieve- ment	U.C Details	Present Stage					
5) So	Schemes availing assistance from Prime Ministers National Relief Fund											
	1) Sports equipments	2006-07	G.O.(3D) No.8, AHD&F .(FSIII) Dept., Dated 12.3.2007.	59.1	37.2	-	Government have sanctioned a sum of Rs.59.10 lakh from the Prime Minister's National Relief Fund towards the purchase of Cricket kits, Volley ball, Foot ball and materials for Kabadi, Carrom and Chess. Under the above scheme the sports materials has been distributed to 591 fishing villages of 13 coastal districts of Tamil Nadu.					
	2) Under Support of Social Infrastructure to marine fishermen - First Aid Box Kit worth Rs.2000/-	2006-07		940	830.01	UC for Rs. 830.01 lakhs has been sent to Officer on Special Duty	Government have sanctioned a sum of Rs.9.40 crores towards the purchase and issue of 47,000 First Aid Boxes under Prime Minister National Relief Fund. Tamilnadu Medical Services Corporation was entrusted to procure and supply 47000 First Aid Boxes. So far 34273 nos of First Aid Boxes were distributed to the fishermen along with the Tsunami additional relief materials. Remaining first aid boxes is being distributed. Remaining amount of Rs.109.99 lakhs was received from Tamilnadu Medical Services Corporation Ltd, Chennai and the amount was remitted back to officer on special duty.					

Source: Commissioner of Fisheries, Chennai

5.5.2.2 SGSY Special Projects

Sl.				Amount all pees in lak		Amount	Evnandituna			
No.	Name of the Scheme	G.O. No & Date	Central share (75%)	State share (25%)	Total	released for 2006-07	Expenditure upto 30.6.2008	U.C. Details	Nodal Agency	
7)	SGSY SPECIAL PROJECTS									
	(a) Intensive Training, Skill upgradation and livelihood support for the Tsunami affected fisherfolk in aquaculture and value addition	Government of India No:24015/21/2005-SGSY-II (Spl. Projects) Ministry of Rural Development & Panchayat Raj Department, dated 02.01.06 and Government of Tamilnadu No:65, Rural Development & Panchayat Raj Department (CGS-II Dept), dated 30.06.06.	1077.87	359.29	1437.16	574.864 (40% towards first instalment)	88.34	U.C. for the SGSY special project I has been sent to DRDA, Chennai-15 for the utilized amount of Rs. 13.53 lakhs during 2006-07	Project Officer, DRDA, Nagapattinam	
	(b) Training and livelihood support in fin fish cage culture and value addition to fish catch for the fisherfolk of Tamil Nadu (b) Training and livelihood support in fin fish cage culture and value addition to fish catch for the fisherfolk of Tamil Nadu (c) Panchayat Raj Department, dated 02.01.06 and Government of Tamilnadu No:66, Rural Development & Panchayat Raj Department (CGS-II Dept), dated 30.06.06.		1034.62	344.87	1379.49	551.79(40% towards 1st instalment)	250.62		Project Officer, DRDA, Thiruvallur	

Source: Commissioner of Fisheries, Chennai

5.5.2.3 TN-IAMWARM Project - Progress of Activities as on 5.9.08 (Phase II 16 Sub-Basins - 2008-09)

			Physical		Fi	nancial		
Sl.No	Components		Achie	evement	Amount	Evmandi tura	Status	
51.110	Components	Target	Taken Over	Stocked	(Rs. in lakhs)	Expendi-ture (Rs. In lakhs)	Status	
1	Aquaculture in farm ponds	217	0	0	31.46	0.00	70% of IInd phase ponds location identified	
2	Aquaculture in irrigation tanks by establishing fish seed bank	1			16.00	0.00	Estimates under preparation	
3	Aquaculture in irrigation tanks	3000 Ha	На		29.42	0.00	In Swethanadhi Sub-basin 3 tanks stocked with 53000 fish seeds	
4	Fish seed rearing in cages	17			5.10	0.00	Centralised Procurement in progress	
5	Ornamental fish culture	9			20.97	0.00	Beneficiary selection and site selection is in progress	
6	Construction and improvement to Government Fish seed farm	3			98.00	0.00	Estimates under preparation	
7	Supply of fishing implements	55			10.10	0.00	Beneficiaries identified	
8	Kiosks	6			24.00	0.00	75% locations identified. Sample NCB document is under preparation	
9	IEC / CB				16.98	0.00		
9	Transport Charges	_			2.90	0.00		
10	IAMWARM cell in Head Office	_			4.10	0.21		
	Total		0	0	259.03	0.21	·	

5.5.2.4 Schemes Implemented by Fisheries Department Under Various Sectors and the Details of Progress Upto 31.8.2008

Sl. No	Name of the Scheme	Commencing year	G.O. and Date	Funds allocated	Achieve- ment	U. C Details	Present Stage						
DEP	DEPARTMENTAL PLAN SCHEMES												
1)	State Plan Schemes												
1	Fishermen Free Housing Scheme for fishermen	2005-06 S.E (FHPC)	G.O.Ms.No. 85, AHD & F (FS.III) Dept., dt. 29.8.2006	740.00	9.25		For the year 2005-06, a sum of Rs.740.00 lakhs had been sanctioned. 25 houses have been allotted to Vattanvalasai FCS Ramanathapuram District as per High Court Judgement and a sum of Rs. 9.25 lakhs released to DRDA, Ramanathapuram and under various stages. Govt. vide G.O.Ms.No. 4, dated 8.1.2008 nominated FHPC Chennai as Executive Agency from 2005-06 onwards. As per the orders funds released to Executive Engineer, FHPD, Nagercoil and Nagapattinam through SE, (FHPC) to release the funds based on the construction of houses by the beneficiaries themself.(stagewise) Proposals for raising the unit cost and ratification for the action taken to permit the beneficiaries themselves to construct their houses and to release funds on stage payments by EEs, FHPD is sent to Government. Orders are awaited.						

Sl. No	Name of the Scheme	Commencing year	G.O. and Date	Funds allocated	Achieve- ment	U. C Details	Present Stage
	-	2006-07 S.E (FHPC)	G. O. Ms No. 196 AHD & F (FS III) Dept dt. 01.12.2006 & G. O. Ms No. 26 AHD & F (FS III) Dept dt. 05.02.2007. G.O. No. 226, AH, D & F (FSIII) Department, Dated 26.7.2007.	789.26	49.26	-	For the year 2006-07, Government have nominated S.E. (FHPC) Chennai as Executive Agency from 2005-06 onwards vide G.O.Ms.No.4, AHD & F Department, Dated 8.1.2008. Accordingly, funds (Rs.740.00 lakhs) for the constructions of 2000 houses were released to the E.E. FHPD, Nagercoil and Nagapattinam through S.E (FHPC) Chennai along with the beneficiary list. Also the E.E. (FHPD) concerned were requested to release the stage payment to the beneficiaries for the construction of houses by themselves.
		2007-08 S.E (FHPC)		800.81	39.37		As per the allotment of funds in BE 2007-08, proposals sent to Govt. for the allotment of 2000 houses vide letter No20493/C1/2007 dt13.6.2007. Since no orders were received from the Govt., the funds allotted was surrendered. No Scheme.
		2008-09		740.00	0.00		In continuation to the Budget allotment of Rs.740.00 lakhs in B.E. 2008-09, proposals sent to Govt. requesting for the sanction for the 2000 houses under Fishermen Free Housing Scheme for a sum of Rs. 1100.00 lakhs Orders awaited.

Sl. No	Name of the Scheme	Commencing year	G.O. and Date	Funds allocated	Achieve- ment	U. C Details	Present Stage
2	Savings cum Relief Scheme for Fisherwomen	2007-08	G.O. Ms.No.275 AHD & F Department, Dt.19.9.2007	1260.00	1258.62	UC for Rs.8,50,91,100/- for 71,213 beneficiaties has been sent. UC for Nagai Region will be sent in a weeks time.	Government have sanctioned a sum of Rs.1260.00 lakhs. The scheme has been completed for 12 Districts. In respect of Thoothukudi District, a proposal has been sent to Govt. for Rs.103.51 lakhs. It will be completed on receipt of G.O. Total No. of beneficiaries in 12 Districts 1,05,534.
		2008-09		1261.00			Subscription from the fisherwomen beneficiaties in 13 districts is in progress. Proposal will be sent to Government by September 2008. 1,19,046 beneficiaries has been enrolled in 13 Districts.
3	Tamil Nadu Fishermen Group Insurance	2007-08	G.O.Ms.No.185, AHD & F (FSIII) Department, Dated 19.11.2007.	40.00	38.90	UC for an amount of Rs.38.90 has been sent to Government on 19.12.2007. Balance amount surrendered.	During 2007-2008, 5,55,744 active marine and inland fishermen and fisherwomen were insured in FISHCOFED, New Delhi for the period from 10.12.2007 to 9.12.2008 at a total premium amount of Rs.38.90 lakhs. 127 members have been benefitted and Rs.60.82 lakhs had been disbursed. As on 30.8.2008 31 members have been benefitted and Rs.15.25 lakhs.

Sl. No	Name of the Scheme	Commencing year	G.O. and Date	Funds allocated	Achieve- ment	U. C Details	Present Stage
4	Sea Ranching Programme	2004-05	G.O.Ms.No. 155, A H & F Dept., dt,. 23.12.2004.	128.40	110.00	U.C. for Rs.96.40 lakhs has been sent to Government on 9.3.2007. For the balance amount, UC will be sent to Government shortly	Government have sanctioned Rs.128.40 lakhs for stocking 18 million PL seeds. Due to the tender rate, it has been decided to stock 53 million PL seeds. So far, Rs.110.00 lakh has been utilized for rearing and stocking of seeds. 48 million shrimp seeds have been reared and stocked under this scheme and the remaining 5 million shrimp seeds are to be reared and to be ranched soon. 2.0 million seeds by ADF (Aqua) Thoothukudi and 3.0 million seeds by ADF (Aqua) Nagai have to be lifted. Now, the ADF (Aqua) Nagai and Thoothukudi are not in a position to lift the seeds. Moreover 4 years have been passed after the introduction of this scheme. Hence, we may complete the scheme now itself.
2) Cer	trally Sponsored Sch	emes	Γ				
1	Assistance to fishermen for purchase of Diesel	2007-08	G.O.Ms. 163, A H D & F (FS.III) Dept., dt. 14.10.2007.	500.00	300.00	UC for Rs.300.00 lakhs have been sent to Govt.	. A sum of Rs.300.00 lakhs has been sanctioned by Government of India. This amount has also been disbursed and UC has been sent to Government. So far, 1537 mechanised fishing boat owners have been benefited.

Sl. No	Name of the Scheme	Commencing year	G.O. and Date	Funds allocated	Achieve- ment	U. C Details	Present Stage
110	Science	2008-09		500.00			A proposal has been sent to Government for Rs.2949.35 lakhs in this Office Lr.No.18889/J4/2008 dt. 7.5.2008. Government of India has released a sum of Rs.3.00 crores. Based on this proposal has been sent to Government for financial sanction. Order from Government is awaited.
2	Implementation of C.S.S on development of post harvest infrastructure during	2006-07 and 2007-08	G. O. Ms No. 46 AHD & F (FS IV) Dept dt. 29.03.2007	50.00	50.00	U.C. will be sent to Government shortly	Four insulated trucks were purchased and put into use. Installation of modern fish sales outlets were completed. Works are in different stages and remaining works will be completed shortly.
			G.O.Ms.No.14, AHD & F Department, Dated 4.2.2008.	26.25	26.25	U.C. will be sent to Government shortly	Amount has been received. Action to be taken to fix the target and distribute the money.
3) S	hared Schemes (State a	and Centre)					
1	Model fishermen village scheme under centrally sponsored shared scheme	2005-06 S.E (FHPC)	G. O. (D) Ms No. 157 AHD & F (FS III) Dept dt. 01.06.2006	74.76	0.00		For the year 2005-06, Government have sanctioned a sum of Rs.74.76 lakhs (including 50% Govt. of India's share of Rs.37.38 lakhs) towards first instalment for construction of 2000 houses, 96 tube wells and 7 community halls (at an estimated cost of Rs.840.05 lakhs). Since no further rlease of funds received from Government the scheme could not be implemented. In this regard, Govt. was requested to clarify whether the funds released may be surrendered back to Govt. Orders awaited from Govt.

Sl. No	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achieve- ment	U. C Details	Present Stage
		2006-07 S.E (FHPC)		765.30	0.00		For the year 2006-07, administrative approval has been received from Govt. of India. Based on this, proposals for the allotment of houses, bore wells and community halls at an estimated cost of Rs.840.05 lakhs has been sent to State Government. Government of Tamil Nadu have forwarded the proposals to Government of India. Orders awaited.
		2007-08 S.E (FHPC)		740.00	0.00		For the year 2007-08,administrative approval has been received from Govt. of India. Based on this proposals to the allotment of 3000 houses, 100 tube wells, 10 community halls at an estimated cost of Rs.1247.50 lakhs has been sent to State Government. Government of TamilNadu has forwarded the proposal to Government of India. Since no orders from Govt. were received, the funds were surrendered back to Govt.
		2008-09		740.00	0.00		Administrative sanction has been received from Government of India. Action taken to send proposal to Government.
2	National Savings cum Relief Scheme for marine fishermen	2007-08	G.O.(4D).No. 9. A H D & F (FS.III) Dept dated 13.8.2007 G.O.(4D) No.1, AH D & F Dept, dated 14.1.2008 and G.O.(4D) No.2, AH D & F Dept, dated 14.1.2008.	2083.29	2083.29	UC for Rs.11,39,81,250 for 95713 beneficiaries have been sent. UC for Nagai region will be sent in a weeks time.	For the year 2007-08, a sum of Rs.2083.29 lakhs has been sanctioned by Government of Tamil Nadu. 1,76,017 members have received benefits in 13 coastal districts.

Sl. No	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achieve- ment	U. C Details	Present Stage
		2008-09		2200.00			For 2008-09, collection of subscription from 13 districts is in progress. Proposal for the First Phase i.e. for 10 districts will be sent on completion of subscription is over by September 2008. 1,23,771 beneficiaries have been enrolled in 10 Districts.
3	Construction of mechanised fishing boats (50:50)- Motorisation of Traditional Crafts(OBMs)	2007-08	G.O.Ms.No. 45, A H D & F (FS.I) Dept., dated 29.3.2007	210.00	210.00	UC for Rs.105.00 lakhs has been sent to Government on 18.3.2008	Government of India have permitted to utilize the unspent amount of Rs.210.00 lakhs sanctioned for the year 2006-2007 for distribution of 1050 OBMs to mechanised fishing Boat Owners. A sum of Rs.210.00 lakhs had been utilised and 1050 OBMs had been supplied.
		2008-09		320.00			Proposal for Rs. 400.00 lakhs towards the supply of OBMs for the year 2008-09 have been sent to Government. Orders from GOI is awaited.
4	Development of Inland Fisheries and Cold Water Fisheries Udhagamandalam Avalanchi	2006-07	G.O.(3d).No 6 AH,D & F Dept., dated 04.01.2007	17.38	0		Proposal sent to Government for releasing the balance amount.
5	Establishment of Fish Farmers' Development Agency (75:25)	2006-07	G.O.Ms.No. 47, A H D & F (FS.VI) dept., dt. 29.3.2007 G.O.Ms.No. 173, A H D & F (FS.VI) dept., dt. 19.6.2007	66.67	66.67	UC for Rs. 50.00 lakhs has been sent to Government on 27.12.2007.	Rs.61.97 lakh has been utilised to 163 beneficiaries (147.93 ha.). Action is being taken to disburse the balance amount also.

Sl. No	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achieve- ment	U.C.Details	Present State
		2007-08	G.O.(D).No.42, AH D & F Department, Dated 4.2.2008	66.25	66.25	U.C. will be sent to Government shortly	Amount has been sent to various FFDA's for disbursement to beneficiaries.
6	Brackishwater Fish Farmers' Development Agency (50:50)		G.O.Ms.No. 183, A H D & F (FS.IV) dept., dt. 2.11.2006	88.07	57.60	UC for Rs.44.035 lakhs has been sent to GOI.	ADF (Aquaculture) Chidambaram-So far 39 registration certificates have been given. ADF (Aquaculture) Ponneri-So far 83 registration certificates ;have been given. Subsidy was given to 27 beneficiaries (Thiruvallur-2 & Kancheepuram-25)
							ADF (Aquaculture) Nagapattinam-693 registration certificates have been given so far. Subsidy was given to 136 beneficiaries. ADF (Aquaculture) Ramanathapuram-48 registration certificates have been given. Subsidy amount has been released to 4 eligible beneficiaries. ADF (Aquaculture) Thoothukudi-1 registration certificate was given by CAA.

Sl.	Name of	Commen		Funds		U.C.	(Rupces in lakits)
No.	the Scheme	cing year	G.O. and Date	allocated	Achievement	Details	Present State
7	Extension	2007-08	G.O. Ms.	65.00	39.00	UC will be	Government of India have accorded administrative
'	and	2007-00	No.187,	05.00	37.00	awaited	sanction for Rs.65.00 lakhs in its letter No.
	Training		AH,D& F			from EE	35015/28/95, FY(T&E) dated 20.8.2007 for the
	Training		Dept., Dated			PWD	construction of one awareness centre at Pulicat
			20.11.2007				
			20.11.2007			concerned	(Thiruvallur District) and 3 training centres at
							Rameswaram (Ramnad District) Colachel
							(Kanniyakumari District) and Thoothukudi .
							Government of India has released Rs. 26.00 lakhs as it's
							first instalment of share (80%) and Government of
							TamilNadu has released 20% share of Rs. 13.00 lakhs.
							It has been decided to entrust the work to PWD.
							Concerned EEs have been addressed for execution.
							Amount has been distributed to EEs concerned.
4 (a)	ANNOUNCE						
1	_ 04-044	2006-07	G. O. Ms No.	2.00	1.27	U.C will be	In order to facilitate students, research, scholars and
	Screen		174 AHD & F			sent to	public especially fishermen to know about the various
			(FS I) Dept dt.			Government	Schemes of the Government, fisheries technology,
			27.09.2006			shortly	fisheries statistics and related information, Government
							of Tamil Nadu have sanctioned Rs.2.00 lakh for
							installing an advanced Touch Screen facility at the
							Library of Directorate of Fisheries on pilot basis.
							Touch screen has been purchased from ELCOT on
							9.5.2007. All the available information about the
							Departmental activities and welfare schemes in static
							form have been installed in the touch screen. Special
							software arrangements with animation and photo
							images are to be developed, for which firm has been
							finalised Proposal requesting for funds for installation
							of software is being sent to Government.

						11	(Rupees in lakhs)
Sl. No.	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achievement	U.C. Details	Present State
4 (b)	ANNOUNCEM	ENTS -200'	7-08				
1	TAMIL NADU FISHERMEN WELFARE BOARD	2007-08	G.O.Ms.No. 91, AH,D & F (FSIII) Department, Dated 12.6.2005. G.O.Ms.No. 190, AHD & F (FSIII) Dept., Dated 3.12.07	500.00		UC for Rs. 500.00 lakhs will be sent to Government by Fishermen Welfare Board.	Government have sanctioned a sum of Rs.500.00 lakh for this purpose. The Act came into force with effect from 29.6.2007 for giving relief. First Board meeting has been conducted. Rules and regulations for this Act has been approved by the Government. Application forms were printed and distributed to the Regional JDFs and DDFs and ADFs for enrollment of members for the Welfare Board. The enrollment is in progress and 4,26,800 fishermen have been enrolled as members. The Office for Fishermen Welfare Board is getting ready for occupation. The Office will be opened and relief measures will be given soon.
2	Maritime Education and Employment Opportunities to Fisher youth	2007-08	G. O. Ms No. 25 AHD & F (FS I) Dept dt. 7.03.2008	50.00	1		Sanction has been received from the Government towards the implementation of the scheme of creating employment opportunities to under educated fishermen youths through upgradation of skills in maritime education and nautical sciences at a cost of Rs.50.00 lakh every year @ Rs.50,000/- per student. A sum of Rs.25,000/- each is paid to 4 trainees being the 50% of the training amount. Balance amount of Rs. 25,000/- will be paid to each trainee after completion of the training.
3	Ornamental Techno-Park	2007-08		0.00			2 meeting of Experts committee has been conducted and report has been sent to Government.

Sl. No.	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achievement	U.C. Details	Present State
4	Tuna Resource potential and Exploitation	2007-08		0.00			It is proposed to create awareness among the fishermen about Tuna fisheries and financial assistance for conversion of vessels for the same and to train 110 fishermen (Chennai-40, Cuddalore-15, Nagapattinam-55) through MPEDA. It was also proposed to train 15 fishermen on Tuna fishing at Chennai Fishing Harbour. A number of the 14 fishermen were trained in Chennai and Nagapattinam. Further, a meeting was held with MPEDA and other officials on 20.5.2008 and decided to impart training on Tuna fishing in 3 phases. In the first phase a number of 12 fishermen were trained in Chennai. Further, a committee has been formed for conversion of vessels of Tuna fishing.
5	Amendments to be made in TNMFR Act 1983	2007-08		0.00			In the last assembly session, Hon'ble Minister for Fisheries made an announcement to the effect that the Tamil Nadu Marine Fishing Regulation Act 1983 has to be amended incorporating the various amendments issued subsequently and based on the need for diversification of fisheries. To reduce the fishing pressure in the inshore areas which has been over exploited and to tap the deep sea and offshore resources, the Act has to be amended taking into consideration, the present fleet strength, motorisation of traditional crafts, existing fishery resources in the post Tsunami period, need for fishing Tuna fishes as the export of Shasmi grade tuna yield foreign exchange etc., Draft amendment was prepared and discussions were held on 28.7.2007, 25.10.2007 and 29.1.2008. with JDsF / DDsF.

Sl. No.	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achieve ment	U.C. Details	Present State
							Expert committee was constituted by Government. Stake holders meeting was also convened on 14. 12.2007 and their views were obtained on the proposed amendment. Presentation with revised amendment was made on 29.1.2008 to the Special Commissioner and Secretary to Government, AHD & F Department. Draft amendment suggestion of Regional Officers/Fishermen representatives need to be examined, discussed and finalised with the Expert Committee . A revised draft amendments to TNMFR Act 1983 has been sent to Government for approval.
6	Self Sufficiency in Fish Seed Production (NFDB/ NADP FUND)	2007-08					A proposal has been sent to Government for availing subsidy from NFDB for establishing 10 Nos. of Fish seed hatchery with a production capacity of 8 to 10 million early fry each and also for training of farmers and the total outlay would be Rs.105.00 lakhs and Government orders are awaited.
7	Leasing of Inland and Coastal Land and Waterbodies for Aquaculture	2007-08		0.00			A meeting was conducted with the stake holders on 9.5.2008 at Thanjavur. The consolidated leasing draft policy will be sent to Government by the end of July 2008.
8	Establishment of Modern Fish Stalls	2007-08 TNFDC		60.00			Anna Nagar and Nandhanam -work has been completed. Places identified for Ashok Pillar and Kilpauk Garden. Fish stall with Aquarium-cum-restaurant at Teynampet is under progress.

Sl. No.	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achieve ment	U.C. Details	Present State
(c) AN	(c) ANNOUNCEMENTS -2008-09						
1	Grant of relief assistance to marine fishermen families during fishing ban period	2008-09	G.O.Ms.No. 76, AHD & F (FSIII)Dept. dated 30.5.2008	1008.00	640.00		Amount has been drawn and kept in the SB account. A sum of Rs. 1004.00 lakhs have been allocated to the Asst. Directors of Fisheries in 13 coastal districts. Hon'ble Minister for Fisheries has inauguated the function and distributed relief amount on 3.6.2008. Now, the disbursement of relief amount is in progress. So far, a number of 1,27,218 cheques were distributed to the fishermen families.
2	Establishment of Modern Fishers Training Institute	2008-09		100.00	100.00		The society was registered on 17.8.2008. A sum of Rs. 1.00 crore was drawn and will be deposited in to name of FIT society. MOU between Government and TATA Consulatancy was executed on 2.9.2008 in the presence of Hon'ble Chief Minister of TamilNadu.

Sl. No.	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achieve ment	U.C. Details	Present State
3	Fisheries Management for Sustainable Livelihood Project (FIMSUL)	2008-09	G.O.Ms.No:81, Revenue (NC4) Dept. Dated:14.2.2008	2.50 million \$			Government have issued administrative order for the project on Fisheries Management for sustainable Livelihood (FIMSUL) project in Tamilnadu funded by the World Bank Tsunami Economic Recovery credit and to enter into agreement on behalf of Government of Tamilnadu and Puduchery with Food and Agriculture Organization (FAO) and world Bank and to transfer of necessary funds to Government of Puducherry. Government have also issued orders for formation of a steering committee under the chairmanship of Secretary to Government, AH,D & F dept with officials from Ministry of Agriculture, Government of India, Revenue Dept, Finance Dept, FAO, NFDB, MPEDA and Government of Puduchery. Further, Govt of India, Ministry of Economic Affairs has been requested to address World Bank for extension of one year time to enter into an agreement between the Government of India and FAO of UN for the implementation of the FIMSUL project in Tamilnadu and Puducherry
5) A	PART II SCHEMES 2	2007-08					
1	Installation of Artificial Reefs	2007 - 08	G.O Ms. No. 83, AHD & F (FS IV) Dept., dt. 29.5.2007.	20.00	20.00	UC will be sent on completion of the scheme.	The work on installation of 2 artificial reefs in Thanjavur and Kanniyakumari District at a sanctioned cost of Rs.10.00 lakh each unit was entrusted to TAFCOFED. to execute the work availing the assistance of JE/AEE of FHPC. Report from TAFCOFED is awaited.

Sl. No.	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achievement	U.C. Details	Present State
2	Subsidy assistance to Inland Fishermen for fishing inputs	2007 - 08	G.O.Ms.No.80, AHD&F (FS I) Dept., dated 29.5.07	10.00	10.00	UC will be sent on completion of the scheme.	The following target has been fixed for implementing the scheme, 1. ADF Erode-100, 2. Madurai Region - 50, 3. ADF Krishnagiri -50. 97 coracles have been supplied in Erode & Krishnagiri and orders have been placed for 44 coracles.
3	Upgradation of existing fish seed farms by carrying out repairs to 3000 sq. m area of nurseries	2007 - 08	G.O. Ms.No. 82, AHD & F (FS.V) dt. 29.5.2007	30.00	30.00	UC will be sent on completion of the scheme.	Thirunelveli for Gadana fish farm Rs.21.60 lakh has been allotted. Repair works have been completed in nursery tanks and the remaining works (Pipe line) will be completed by July 2008. Work at Bhavanisagar for Rs. 8.40 lakhs has been completed.
4	Special repairs to 1680 sq.m. nursery area and also to make water supply arrangements at Aliyar fish farm in Coimbatore	2007 - 08	G.O.Ms.No.81, AHD&F (FS V), dated 29.5.07	18.80	18.80	UC will be sent on completion of the scheme.	Plan and estimate approved and sent to TNFDC for implementation. Amount drawn and sent to TNFDC for carrying out of work. Revised estimate has been prepared as per 2008-09 schedule of rates. Work is to start soon.
5	Development of larvicidal fish stock for control and eradication of mosquitos	2007 - 08	G.O.Ms.No.85, AHD & F Dept, dated: 29.05.07	5.00	5.00	UC will be sent on completion of the scheme.	Amount drawn and disbursed to the implementing officers (ADF (Research) Chennai, ADF (Inland) Trichy and ADF (Inland) Metturdam.) 75,350 Nos. of Gambusia fish from Chennai, 2,71,250 from Trichy and 4,23,700 Nos. from Metturdam were supplied to private and various Municipalities.

Sl. No.	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achievement	U.C. Details	Present State
6	Improvement of Library in the Fisheries Directorate	2007 - 08	G. O. Ms No. 84 AHD & F (FS I) Dept dt. 29.05.2007	8.00	2.97	UC will be sent on completion of the scheme.	Action has been taken to carry out the upgradation of the Central Library. Computers and Printers have been purchased. Binding work of books are undertaken by the firm and four sets of books has been received from the firm after binding and another set of books are handed over to the concerned firm. (Computer purchase Rs.1,99,610/- Book binding Rs.1,19,540/-)
В	PART II SCHEMES	2008-09					
1	Installation of Artificial Reefs	2008-09	G.O. Ms. No. 74, A H D & F (FS.3) Dept dt. 30.5.2008	20.00			Installation of artificial reefs in two places are identified. Action is being taken to implement the scheme through CMFRI.
2	Setting up of Distress Management cell at Head Office		G.O. (D) No. 155, A H D & F (FS.6) Dept dt. 29.5.2008	6.00			Computer, Fax machine, Telephone with broad band connection have been purchased and installed. Supply orders issued to TANSI. The cell will be started soon.
3	Pilot Project on issue of Smart Cards to fishermen of Rmeswaram in Ramanathapuram District		G.O. Ms. No. 75, AHD & F (FS.3) Dept dt. 30.5.2008	10.00			Tender received on 1.9.2008 and is being processed.

Sl. No.	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achievement	U.C. Details	Present State
4	Supply of invertors to the Office of the Assistant Director of Fisheries (Marine) in 13 coastal districts		G.O.Ms.No. 77, AHD & F Dept., 2.6.2008	7.00	1		Action is being taken to purchase of invertos to supply of the Asst. Directors of Fisheries (Marine) .
5	Provision of 2 solar lights each in11 fishlanding centres		G.O.Ms.No. 78, AHD & F (FSI) Dept.,dated 2.6.2008	7.00	1		The installation of solar lights will be taken up soon. The work was entrusted to S.E. (FHPC) Chennai to implement the scheme.
6	Sea Ranching of shrimp seeds for stock enhancement		G.O.Ms.No. 79, AHD & F Dept.,dated 3.6.2008	20.00	1		Tenders has to be called for soon.
7	Pilot Project on Demonstration of Cage farming in inland water bodies	2008-09	G.O.(D) No:156, AHD & F (FS.VI) Dept., dated. 29.05.2008	4.80	0.00		Action to be taken for the purchase of cages.
8	Seed transport facility for Government fish seed farm	2008-09	G.O.(D) No:157, AHD & F (FS.VI) Dept., dated. 29.05.2008	10.00	0.00		Action to be taken to purchase a vehicle
9	Upgradation of the existing fish seed farm at Krishnagiri	2008-09	G.O.(D) No:158, AHD & F (FS.VI) Dept., dated. 29.05.2008	20.00	0.00		Action to be taken to draw the amount.

Sl. No.	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achievement	U.C. Details	Present State
10	Subscribing to all international Magazines relevant to Fisheries Central Library of Commissionerate	2008-09	G. O. Ms No. 78 AHD & F (FS IV) Dept dt. 3.06.2008	2.00			Action will be taken to purchase international magazines.
6)	WORLD BANK FUNDED TN IAMWARM PROJECT						
1	World bank funded IAMWARM project. Implementation of fisheries activities in a sub basin during the year 2007-08 1) Varahanadhi, 2) Upper Vellar, 3) South Vellar, 4) Pambar, 5) Arjunanadhi, 6) Manimuthar, 7) Kottakaraiyar, 8) Palar and 9) Aliyar	2007-08	G. O. Ms No. 97 AHD & F (FS IV) Dept dt. 25.06.2007 (IAMWARM) and G.O.Ms.No.119, Public Works (WR1) Department dated 10.5.2007	313.67	143.56	UC will be sent to Government after completion of the scheme.	It is proposed to develop the line department activities in 63 sub-basins and a base cost of Rs.17.30 crore has been approved by World Bank towards fisheries component. During 2007-08, 9 sub-basins have been selected for the above activities. The following activities are undertaken in this project. 1. Aquaculture in Farm ponds 2. Fish Seed rearing in cages 3. (a) Improvement to Govt. Fish seed farm (b) Construction of Fish Seed Bank 4. Ornamental fish culture 5. Supply of Fishing implements 6. Kiosks 7. IEC & CB, HQ cell etc.,

Sl. No.	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achievement	U.C. Details	Present State
	Implementation of fisheries activities in 9 sub basins during the year 2007-08 Spill over works and Implementation of fisheries activities in 16 sub basins during the year 2008-09	2008-09	G.O. Ms. No.90, AH,D& F Dept., Dated 27.6.2008	424.65	18.40		1. Koundinyanadhi, 2. Poiney, 3. Upto Krishnagiri, 4. Swethanadhi, 5. Anaivari odai, 6. Chinnar, 7. Agniyar, 8. Ambuliyar, 9. UpperVaigai, 10. Varattar Nagalar, 11. Upper Gunder, 12. Therkar, 13. Nichabanadhi, 14. Kalingalar, 15. Sindapalli uppodai, and 16. Sinkottaiyar. For the year 2008-09, administraitve sanction for Rs. 424.65 lakhs have been received from Government. Details of Budgetary allocation and abstract of estimates for spill over works of first phase 9 sub-basins and second phase 16 sub-basins for the year 2008-09 is enclosed in the Annexure. Action is being taken to implement the scheme.

Sl. No.	Name of the Scheme	Commen cing year	G.O. and Date	Funds allocated	Achievement	U.C. Details	Present State		
7) Sc	7) Schemes availing assistance from Prime Ministers National Relief Fund								
	Waiver of loan (prior to formation of TAFCOFED)	2007-08		336.00	0.00		Tsunami Loan waiver proposal for loans outstanding as on 31.12.2007 issued to fishermenprior to the formation of TAFCOFED amounting to Rs.3,36,80,321/- was sent to Prime Minister's Office through Special Commissioner and Commissioner of Revenue Administration and the Prime Minister's Office has approved the waiver of principal amount and the amount was released by Officer on Special Duty (Relief and Rehabilitation) Chennai-5, vide cheque No. 948770 dated 21.05.2008 for Rs.3,36,00,000/- and cheque No. 948771 dated 11.06.08 for Rs.80,321/ These cheques were deposited in the P.D. account of the Commissioner of Fisheries. Separate proposal for waiver of Interest and Penal Interest amount to Rs.6,36,80,991/- have been submitted to Government, Animal Husbandry, Dairying and Fisheries Department vide Commissioner of Fisheries Lr.No. 28467/D4/2007 dated 4.6.2008 and the same is under perusal of Government.		

5.5.4. Constraints

- Lack of adequate and appropriate infrastructural facilities in catching and landing especially in marine fishing
- Lack of adequate necessary facilities
- Lack of awareness and interest among majority of the farmers in taking up fish farming
- Seasonal water availability in the inland water bodies and
- Inadequate marketing infrastructure including retail outlets.

5.5.5. Interventions Recommended

The district-wise interventions recommended are furnished in what follows.

Coimbatore

- Strengthening of Thirumuthur, Amaravathy and Aliyar dams
- Establishment of wholesale fish market at Coimbatore and
- Establishment of GIF Tilapia breeding unit at Aliyar

Cuddalore

- Subsidy assistance to private fish seed rearing farmers
- Modernization of existing fishing fleet to tap the off shore fishery and
- Repairs to halpet fish farm.

Dharmapuri

- Repair and renovation of fish seed farm
- Creation of additional nursery space
- Farmers training for capacity building and
- Establishment of fish culture and post harvest technology

Dindigul

- Creation of additional nursery space at Anaipatti
- Supply of fishing outlets
- Expansion of fish culture in hitherto unutilized water bodies
- Subsidy assistance to private fish seed rearing and
- Moped-cum-insulated ice box for fish marketing.

Kancheepuram

- Seed stocking in open waters
- Sea ranching
- Artificial fish habitats
- Marketing value added product and
- Modernization of indigenous FRT long liner.

Kanyakumari

- Repair and renovation of nurseries at Chittar
- Creation of additional nursery space at Chittar
- Insulated vehicle for fish transport
- Provision of moped with ice box for fish marketing
- Construction of landing centre at Pechiparai
- Development of artificial habitat
- Training programme on advanced technologies
- Assessment of productivity for enhancing fish production
- Breeding of ornamental fishes
- Ornamental fish park and
- Training fish farmers.

Karur

- Supply of fishing implements
- Setting of modern retail outlet for fish and
- Supply of moped with ice box for fish marketing

Krishnagiri

- Strengthening of government fish rearing centre, Krishnagiri
- Development of post harvest infrastructure in selected landing centres
- Supply of fishing implements
- Supply of fish culture
- Retail outlet
- Supply of moped with ice box
- Culture for fish rearing

- Creation of farm ponds
- Desilting of tanks
- Establishment of endemic ornamental fish culture unit
- River ranching and
- Farmers training

Madurai

- Custom hatching units + cage units
- 50% subsidy to ornamental fish cultures
- Fish market infrastructure development at Madurai and
- Modern fish retail unit

Nagapattinam

- Establishing rural herbal nursery units for SHG women solar powered units
- Introduction of modern fishing fleet to help the off shore resources
- Sea ranching
- Artificial rocks and
- To sustain / retain the existing infrastructure facility for aquaculture

Namakkal

- Supply of fish seeds with 50% subsidy
- Supply of fishing implements with 90% subsidy
- Setting up of modern fish stall and
- 9Establishment of fish culture and post harvest technology demonstration unit.

Perambalur (including Ariyalur)

- Subsidy assistance to private fish seed rearing / fish seed production and
- Moped with ice box.

Pudukottai

- Repairs to existing rearing nurseries in Thattamannaipatti government fish seed farms
- Supply of fishing implements
- Supply of moped with ice box
- Development of artificial fish habitats
- Sea farming sea weed culture

- Capacity building and
- Strengthening of ornamental fish unit at regional research centre

Ramanathapuram

- Promotion of mariculture activities
- Development of integrated model for coastal aquaculture
- Infrastructure development for modern market
- Fishermen training and
- Expansion of fish culture by streaking fingerlings.

Salem

- Creation of additional nursery space for fish seed production
- Supply of fish seeds at 50 per cent subsidy
- Private fish farming with 50 per cent subsidy
- Introduction of fish culture in cages with 90 per cent subsidy
- Supply of fishing implements with 90 per cent subsidy
- Development of landing centre with 100 per cent grant
- Setting up of modern fish stall
- Desilting of Kannankurichi, Mookaneri, Elambirnji and Servaiputhru lake and
- Breeding endemic ornamental fishes regime training centre.

Sivagangai

Expansion of fish culture in unutilized water bodies by stocking fingerlings.

Thanjavur

- Subsidy assistance to private fish seed rearing/fish seed production
- To sustain / retain the existing infrastructure facilities for aquaculture
- Infrastructure development to conserve the endangered native fish
- Development of integrated model for coastal aquaculture
- Desilting of Samuthiram lake and Naadiamman kulam lakhs
- Capacity building of fish farmers and
- Establishment of water and soil testing laboratory

Theni

- Custom hatching units + cage units + candles for poultry
- Renovation of nurseries at Manjalar Dam
- Development of fish landing centre
- Distilling of Manjalar Dam and
- Farmers training

Thoothukudi

- Modernization of mechanized fishing vessels
- Modernization of traditional fishing vessels
- Pre-processing and chill worm facilities
- Establishment of multi species hatchery
- Deployment of artificial reefs
- Sea ranching for stock enhancement
- Development of E-Extension facility for stakeholders
- Development of sperm bank for production of quality fish seeds
- Production of transgenic fish
- Fisheries bio-diversity reference unit for conservation and
- Resource mapping of marine and inland fisheries.

Tiruchirappalli

- Creation additional nursery area in Asur government seed farm
- Supply of fishing implements
- Establishment of wholesale markets
- Supply of moped with ice box
- Capacity building and
- Development of market strategies for fish.

Tirunelveli

- Extension facilities
- Complete renovation of old department fish seed farm with infrastructure facility at Manimuthar

- Creation of additional rearing space in National fish seed farm, Manimuthar
- Development of landing centre
- Sea ranching
- Development of artificial reefs
- Modern fish retail outlet
- Desilting of Kadana tank
- Provision of insulated van and moped with ice box and
- Assessment of productivity for enhancing fish production in Manimuthar reservoir.

Tiruvallur

- Modernization of FRP boats with OBM
- Sea ranching
- Artificial habitats
- Strengthening of Fisheries Research and Extension Centre and
- Strengthening of Fish Diseases laboratory.

Tiruvannamalai

- Subsidy assistance to private fish seed rearing units and
- Repair of existing fish seed rearing ponds and creation of additional rearing space for landing centre.

Tiruvarur

- Subsidy assistance to private fish seed rearing / fish seed production
- To sustain / retain the infrastructure facilities for aquaculture
- Provision of subsidy for the purchase of drag net
- Sea ranching for stock enhancement
- Development of ornamental fish and Algal culture unit and
- Demonstration unit at Muthupet.

Vellore

- Establishment of three fish landing centres for three reservoirs existing in Vellore district and
- Installation of modern fish stalls at Vellore

Villupuram

- Sea ranching programme
- 50 percent subsidy assistance to provide fish seed / fish seed production
- Creation of additional fish rearing facilities
- Expansion of fish culture in open water system and
- Development of Marakkanam back water.

Virudhunagar

- Expansion of fish culture in hither to unutilized water bodies by stocking and
- Modern fish retail outlet (50 percent subsidy).

5.6. Irrigation Systems (Public Works Department)

5.6.1. Issues of Water Resource Utilization / PWD

- 1. Efficient management of available water resources
- 2. Conservation of rainfall received and efficiency of water use
- 3. Water shed management through extensive soil conservation, preservation of forest and construction of check dams
- 4. Stepping up tank rehabilitation
- 5. Restoration and maintenance of existing water bodies
- 6. Identification of deficiencies and carrying out the improvements in the canals and other control and measuring structures
- 7. Creation of public awareness and training activities on water management and
- 8. Desilting, widening and strengthening of water bodies.

5.6.2 Ongoing Schemes of Public Works Department

5.6.2.1. Irrigated Agriculture Modernisation and Water Bodies Restoration and Management (IAMWARM) Project

The World Bank assisted Tamil Nadu Irrigated Agriculture Modernisation and Water Bodies Restoration and Management project (IAMWARM) was approved by the Government with an outlay of Rs.2, 547 crores, over a period of six years from 2007.

5.6.2.2. Objective of the Project

The IAMWARM project aims to improve the service delivery of irrigation systems and productivity of irrigated agriculture with effective integrated water resources management in a sub-basin framework.

5.6.2.3. Specific Components of the Project

5.6.2.3.1. Irrigation Systems Modernisation in a Sub-basin Framework

This component seeks to improve bulk water delivery through modernisation of irrigation systems in 63 selected sub-basins with an ayacut of 6.17 lakhs hectares. Activities involve tank system modernisation by restoring and repairing water bodies and improving canal irrigation system through repair and rehabilitation.

5.6.2.3.2. Agricultural Intensification and Diversification

This component builds on the improved bulk water delivery to increase the productivity of agriculture-related activities through improved agricultural intensification and diversification of crops, micro irrigation, Animal Husbandry & Fisheries.

5.6.2.3.3. Institutional Modernisation for Irrigated Agriculture

It is sought to improve the institutional capacity for irrigation service delivery through the Water Resources Department and the Water Users Associations (WUAs) with technically better designs and in a socially sustainable manner. The Water Users Association would be utilized to implement Participatory Irrigation Management (PIM) by involving farmers.

5.6.2.3.4 Water Resources Management

The institutional arrangements and capacity for sustainable water resources management is proposed to be improved by the Water Resources Department through the creation of a State Water Resources Management Authority (SWaRMA). Apart from this, topical water research would be taken up through Water Resources Research Fund (WRRF).

5.6.2.4. Project Implementation (2007-2008)

The project covers an area of 6.17 lakhs hectares spread over in 63 sub-basins out of the 127 sub-basins in the State. In the first year i.e., in 2007-2008, implementation was

initiated in nine sub-basins covering an extent of 2.94 lakhs hectares at a cost of Rs.714.94 crores in respect of all departments put together. In the first year itself, works have been successfully initiated by all the Departments.

5.6.2.4.1. Water Resources Department:

In respect of Water Resources Department, for the nine Sub-basins of the first year, necessary bids have been finalised for 58 packages with a bid value of Rs.344.64 crores. Works have been commenced in 39 packages and rehabilitation initiated in Canals, Tanks, Supply channels etc. Under Participatory Irrigation Management, preliminary work has been completed and election is planned for nearly 1250 Water Users Associations in 2008-2009.

5.6.2.4.2. Agriculture Department

Crop Demonstrations for paddy, pulses, maize, groundnut etc were conducted in 13,795 hectares. Significant improvement of 20 to 40 percentages in the yield was achieved in Maize and Rice. An impact area of 1,21,177 hectares has been identified. Critical inputs were distributed for 44,009 hectares along with 2,075 farm implements like sprayers, weeders etc. Exceptional yields were recorded in Hybrid Maize Demonstrations in Arjunanadhi Sub-basin, Athikulam Village – 8,750 Kg per hectare as compared to 4986 Kg per hectare in the previous year.

Palar Sub basin, Pothipalayam Village – 13,150 Kg per hectare as compared to 5,210 Kg per hectare in the previous year.

5.6.2.4.3. Horticulture Department

Both by way of Diversification and Transfer of Technology, an additional area of 4,310 hectares has been brought under fruits, vegetables and other horticultural crops.

5.6.2.4.4. Tamil Nadu Agricultural University

The new System of Rice Intensification (SRI) demonstration was introduced in an area of 1,248 hectares with an impact area of 2,595 hectares. It has been planned to take up demonstrations in another 1660 hectares during 2008-09. With the SRI technique, rice yields have shown 40 to 80 percentage improvement over the conventional practice. In some areas, exceptional yields have been achieved.

Manimuthar Sub-basin, Mahibalanpatti Village – 8,750 Kg per hectare as compared to 4,750 Kg per hectare in the previous year. Upper Vellar Sub-basin, Thumbal Village – 9,750 Kg per hectare as compared to 6,560 Kg per hectare in the previous year.

5.6.2.4.5. Agricultural Marketing

To assist the farmers to get better price, 250 Commodity Groups for diversified crops like Chillies, Maize, Groundnut, Banana etc, have been formed. Eleven Interface Workshops involving farmers and traders have been conducted. Besides, seven Memorandum of Understandings (MoUs) between farmers and companies for different commercial crops like maize, mango and chillies have been facilitated.

5.6.2.4.6. Animal Husbandry Department

To increase the conception rate, 578 Infertility-cum-total Veterinary Health care camps were conducted. To improve milk yield, the availability of green fodder was increased and an additional area of 697 hectares was brought under fodder cultivation.

5.6.2.4.7. Fisheries Department

The Department has promoted Aquaculture in 36 farm ponds by farmers as additional income generating activities. Carp seed rearing in 20 units of net cages has also been promoted.

5.6.2.5. Project Implementation (2008-2009)

During the financial year 2008-2009, 16 more Sub-basins with an ayacut of about 80,000 hectares are proposed to be taken up. The proposed outlay in this year for the 25 Sub Basins is Rs.585 crores for all the departments put together.

5.6.2.5.1. Water Resources Department

In these Sub-basins, Water Resources Department is proposing to take up rehabilitation works in 1,102 Tanks, 186 Anicuts and 554 k.m. of Supply Channel. Special Sub-basin plans based on consultation with the stakeholders have been prepared for all the 16 new sub-basins.

5.6.2.5.2. Agriculture Department

Crop Demonstrations for paddy, pulses, maize, groundnut and ragi are proposed in 4,558 hectares with an impact area of 39,097 hectares.

5.6.2.5.3. Horticulture Department

Both by way of diversification and transfer of technology, an additional area of 6,375 hectares has been proposed under fruits, vegetables and other crops. It is expected that the Agricultural Engineering Department will cover an area of 11,500 hectares including the horticulture area with Micro Irrigation.

5.6.2.5.4. Tamil Nadu Agricultural University

It has been programmed to take up demonstration in 1,660 hectares of System Rice Intensification (SRI) in 16 Sub-basins. Rice fallow pulses are proposed in these areas as a special drive for increasing pulse production. Crops like Sunflower and Thornless bamboo are being introduced on a mission mode.

5.6.2.5.5. Agricultural Marketing

It is proposed to construct eight Agribusiness Centres, 15 Collection Centres, 19 Drying yards and seven Storage Godowns. Along with this, software activities like formation of Commodity Groups, Exposure visits and trainings are proposed to be taken up.

5.6.2.5.6. Animal Husbandry Department

It is proposed to establish 15 Cluster Sub-basin Veterinary Units in the gap area to improve production potentialities of livestock. To increase the availability of green fodder, an additional area of 580 hectares is proposed to be brought under fodder cultivation. To improve the productivity in small ruminants, the practice of de-worming is being introduced.

5.6.2.5.7. Fisheries Department

Aquaculture will be promoted in 250 farm ponds. Ornamental fish culture units will be promoted to generate income and rural employment. Model fish Kiosks (six) will be established to get better price for inland fish. Further, fishing implements will be provided for more efficient inland fish capture.

5.6.2.6. Project Implementation (2009-2010)

During 2009-2010, the last batch of 38 sub-basins covering an extent of 2.28 lakhs hectares is proposed to be taken up. Thus, all the works in the 63 sub-basins under the IAMWARM project should have been initiated by 2009-2010.

5.6.2.7. Dam Rehabilitation and Improvement Project (DRIP)

There is a constant need to strengthen and maintain the dams in view of certain general factors like ageing, maintenance and sometimes low compliance with Dam safety standards and practices. Due attention should be shown to all the Dams irrespective of their size, as even the small Dams with considerable water storage capacity if not maintained well will have the potential to cause damage to people's livelihood and environment. It is, therefore, important to ensure that Dam structures and systems are properly maintained and are backed by regular monitoring, rehabilitation and modernization.

The Dam Rehabilitation and Improvement Project, therefore, propose to introduce a holistic approach to Dam safety, rehabilitation and modernization. The project also includes provision of general infrastructure like training facilities, parks, better environment etc, at a few Dam sites. This project is expected to be funded by the Government of India with the assistance of World Bank.

The Tamil Nadu Government, in the first instance, approached the Government of India for rehabilitation and improvement of 22 Dams at a cost of Rs. 94.22 crores. In the meanwhile, as per discussions held with the representatives of World Bank Mission in February 2008, the number of Dams is likely to be increased and similarly the scope amplified. Based on this, a revised project proposal is being prepared. As per the indications given by the Government of India, the project may commence during 2009-2010.

5.6.2.8. Hydrology Project-II

The Hydrology Project-II (HP-II) is a vertical extension of the Hydrology Project-I (HP-I), which was earlier implemented during 1995-2003. The implementation of Hydrology Project-II at a cost of Rs.25.27 crores commenced in Tamil Nadu on 05.04.2006 with the funding assistance of World Bank through the Ministry of Water Resources. Under this project, the Decision Support System (DSS) will be developed with Hydrological Information System comprising reliable Hydrological and Hydro-Meteorological data to optimize the use of available groundwater potential and water resources among all the sectors like irrigation, drinking and industrial use. As a pilot

study, three different applications of water resources planning using Integrated Water Resources Management (IWRM) concept will be taken up as under:

- Drought Monitoring assessment and Management in Vaippar Basin in Virudhunagar and Thoothukudi districts.
- Flood Management in Tambirabarani Basin in Tirunelveli and Thoothukudi districts and
- Conjunctive use of Surface and ground water in Agniyar Basin in Pudukottai district.

The consolidation of Hydrology Project-I activities like strengthening of monitoring Network and the Awareness Raising Activities is in progress.

5.6.2.9. Cauvery-Modernisation Project

The gross extent of irrigation in the Cauvery basin is 28 lakhs acres and a major part of the area is under paddy cultivation. The irrigation systems in the Cauvery basin like the Cauvery Delta System, the Lower Coleroon Anicut System, Salem Trichy channels, Bhavani and Amaravathi channels are all in existence from time immemorial. Besides these ancient irrigation systems, the Cauvery Mettur Project came into existence in 1934 with the construction of Mettur reservoir and the major projects of Lower Bhavani and Amaravathi reservoirs came during the 1st and 2nd Five Year Plans.

The major irrigation systems like Cauvery Delta, Lower Coleroon etc., need extensive rehabilitation of the infrastructures and modernization of existing irrigation structures. The Cauvery Delta is a natural formation and the river Cauvery branches off into 36 rivers spreading and irrigating over 10 lakhs acres. Since these are natural rivers and meant to carry drainages also, modernization of this Delta has been long over due and attempts to undertake this with the help of external funding could not materialize in the past as Karnataka opposed to this on the plea that the water dispute was pending, even though the proposals were technically found acceptable to the Government of India. None of the rehabilitation works in the Cauvery basin could be taken up either in the WRCP or in the IAMWARM Projects for the same reason.

Now that the Cauvery Dispute has reached the final stage, the Government thought it fit to initiate steps to get the Cauvery basin irrigation improvements carried out. For this purpose, the Government has constituted a Task Force to undertake a study and submit its report, so that the same can be examined and posed for external funding. The Task Force is expected to submit its report before July 2008.

5.6.2.10. Irrigation Schemes

5.6.2.10.1. Long Pending Schemes - Thrust on Completion

A few schemes sanctioned in the early 90's and thereafter could not be completed for a long time owing to one reason or the other. In order to speed up the completion of the projects, a special thrust was given by the Government in the past two years to complete the works by providing all requisite resources and through better strategies.

Of the 18 long pending schemes, seven schemes have been completed during the year 2007-2008; nine Schemes are expected to be completed during 2008-2009; the remaining two schemes viz. Bathalapalli reservoir and Improvements to New Veeranam Project are programmed to be completed during 2009-2010.

State Funded Schemes

5.6.2.10.2. Rehabilitation of Tanks identified by MLAs

As announced on the floor of the Assembly during the Public Works Grant 2007-2008, the Government sanctioned rehabilitation of 365 Non-System Public Works Department tanks at an estimated cost of Rs.34.81 crores. All these tanks have been identified by the MLAs in 190 rural Assembly Constituencies. Even though, as per the original proposal the rehabilitation of tanks was to be taken up with NABARD assistance, the Government has since sanctioned the required amount for taking up the works immediately in anticipation of funding approval by NABARD. Some of these works have just commenced and major part will be implemented in 2008-2009.

5.6.2.10.3. Other Schemes

Schemes sanctioned in the later part of 2007-08 at a project cost of Rs. 10.03 crores, will commence soon.

5.6.2.10.3. NABARD Assisted Schemes

All the schemes and Minor Irrigation tank works taken up with the assistance of Rural Infrastructure Development Fund (RIDF) of NABARD upto RIDF VIII have since been completed during the year 2007-2008. The Schemes and tank works under RIDF IX, X, XI, XII and XIII are at various stages of execution.

5.6.2.10.4. Part II Schemes

I. 2006-2007

Under Part II Schemes for 2006-2007, 19 schemes at a total cost of Rs.36.62 crores were approved, out of which nine schemes have already been completed. five Schemes are at various stages of implementation, three schemes are to be taken up shortly and two schemes are proposed for dropping due to land acquisition problems.

5.6.2.10.5. National Agriculture Development Project (NADP)

The works under the Irrigation component of the NADP was sanctioned in March 2008 at a cost of Rs.12.08 crores. The works include rehabilitation and improvements to tanks, canals and supply channels.

5.6.2.11. Flood Mitigation Schemes

NABARD has sanctioned a sum of Rs. 224.19 crores during October 2007 / February 2008 for 25 flood mitigation works under NABARD (RIDF XIII).

5.6.2.12. Anti Sea Erosion Works

Under the Grants-in-Aid Programme recommended by the 12th Finance Commission, the State received Rs.50 crores towards 33 Anti sea erosion works. Out of these, 25 works have been completed. The remaining eight works are in progress. Apart from this, the State Government sanctioned Rs.1.98 crores for three new works, which are also expected to be completed by June 2008.

5.2.6.13. Emergency Tsunami Reconstruction Project (ETRP)

Under the World Bank assisted project, nine works at a cost of Rs.19.271 crores was sanctioned for the re-construction of Water Resources infrastructure affected by Tsunami in Nagapattinam district. The components of works are desilting, widening and strengthening of banks of canals, drains, straight-cuts and reconstruction of drainage regulators. Seven works have been completed and other two works are in progress.

5.6.2.14. Chennai City Waterways

In order to keep the City Waterways clean and free from pollution, the State Government approved a multi disciplinary project, viz., Chennai City River Conservation Project at a total cost of Rs. 300 crores in 1998. The Tamil Nadu Slum Clearance Board and Corporation of Chennai are partnering with Water Resources Department in this work.

5.6.2.15. Artificial Recharge of Groundwater through Check Dams

Following the announcement in the Governor's Address in the Legislative Assembly, a master plan has been prepared by the State Ground & Surface Water Resources Data Centre (SG&SWRDC) for implementation of artificial recharge to ground water through check dams and other suitable structures at a cost of Rs.565 crores over a period of three years from 2008-2009. The works under the programme are proposed to be executed by Water Resources Department (WRD), Agriculture Engineering Department (AED), Tamil Nadu Water Supply and Drainage Board (TWAD) and Forest Department. The Nodal Agency for the implementation of this programme will be State Ground & Surface Water Resources Data Centre of the Water Resources Department. The project will be initially funded by the State Government. Meanwhile, the possibility of funding by the Government of India will be explored.

5.6.2.16. Krishna Water Supply Project (KWSP)

As per the Agreement entered into between the Governments of Tamil Nadu and Andhra Pradesh in 1983 for drawal of water from river Krishna for Chennai City drinking water supply, the Andhra Pradesh Government has to release and reach at zero point a quantity of 12 TMC of water annually. This is programmed to reach in two installments i.e., eight TMC of water from July to October and four TMC of water from January to April every year.

The Andhra Pradesh Government has released 27.58 TMC of water up to February 2007 since its inception in the year 1996. During the year 2007-08, 4.60 TMC of water has been realised from 3.8.2007 to 6.11.2007. Sri Sathya Sai Central Trust has come forward to renovate the Kandaleru - Poondi canal, Link canal and feeder canal at an estimated cost of Rs.50.00 crores. The renovation work has been commenced in the Kandaleru-Poondi canal on 14.5.2007 and 10.25 km. of canal bund on both sides sectioned and construction of retaining wall for a length of 1005 metres have been completed. Remaining works are in progress.

5.2.6.17. Tamil Nadu Protection of Tanks and Eviction of Encroachment Act, 2007

It has become imperative to protect the water bodies from encroachments and disuse. The tanks and their components, if not protected and restored to their original capacity, may cause reduction in area of cultivation and thereby food grains production, depletion of ground water and environmental degradation.

In order to protect the tanks under the control of Water Resources Department, an Act entitled "Tamil Nadu Protection of Tanks and Eviction of Encroachment Act 2007" (TN Act: 8 of 2007) was legislated as per the announcement made on the floor of Assembly while moving the Demand for grant for the year 2007-2008. The Act and Rules have since come into force from 1.10.2007.

As a first step for purposeful and effective implementation of this Act, action has been taken for creating awareness among the general public especially at village level about the provisions of the Act and Rules and the need to keep the tanks in original shape through hand bills, wall posters, print media and tom-tom. Further follow up action has already been initiated for delineation of tank boundaries with the help of Survey staff, eviction of encroachments and planting of RCC poles along the tank boundaries as a measure of preventing potential encroachments. In the last three months of the year 2007-08, boundary delineation works, eviction of encroachment and planting RCC poles along the boundaries have been completed in respect of 316 tanks. The work will be intensively carried out during 2008-2009.

5.2.6.18. Linking of Rivers within the State

The Hon'ble Chief Minister in the 53rd National Development Council (NDC) Meeting urged the Hon'ble Prime Minister to provide funds for inter-linking of rivers within the State (intra linking) under the Accelerated Irrigation Benefit Programme (AIBP). In response to this, the National Development Council resolved that Inter linking of river projects within the State would also be extended with funding assistance under Accelerated Irrigation Benefit Programme. The Government of India based on this, has

come forward to extend funding for inter-linking of rivers under Accelerated Irrigation Benefit Programme.

In the meanwhile, the Government has taken the initiative to link the rivers within the State to primarily serve as flood carriers and as a measure of flood mitigation and to prevent water wastage and for the flood flows to reach the drought prone areas. In this direction, the following three links have been investigated into:

- i. Cauvery – Agniar - South Vellar – Manimuthar – Vaigai – Gundar
- ii. Tambiraparani – Karumeniar – Nambiar and
- iii. Pennaiyar – Cheyyar

The Detailed Project Report (DPR) for Tambiraparani-Karumeniar-Nambiar link has been prepared. Similarly, the DPR for the first component of Cauvery-Vaigai-Gundar has been completed and for the other component it is under preparation. The DPR for Pennaiyar-Cheyyar is expected to be completed before June 2008. Taking the opportunity of the Government of India coming forward to extend funding under AIBP, these schemes will be posed to Government of India for consideration and sanction of the required financial assistance.

The Tamil Nadu Government in the Budget speech of March 20, 2008 announced to take up Tambiraparani-Karumeniar-Nambiar link project and construction of Kattalai Barrage across Cauvery during 2008-09 at a cost of Rs.369 crores and Rs.165 crores respectively from the State's own fund in anticipation of the funds from the Government of India.

5.6.3. Constraints

- Prevention of sea water intrusion in costal regions
- Heavy budget outlay requirements
- Lack of timely repairing / modernizing efforts
- Ineffective management of irrigation systems
- No effective flood control measures taken up
- No exploratory studies for taking up new projects of small and medium nature
- Wastage of water at various levels including fields and

 Poor maintenance of distribution, irrigation and field channels leading to inefficient management of water.

5.6.4. Interventions Recommended

- Modernization of irrigation systems
- Taking up of repairing works of dilapidated water structures
- Desilting of reservoirs, tanks and canals
- Modernizing approach roads along and around water bodies and
- Taking up flood control measures with long term perspective.

5.7. Agricultural Credit

5.7.1. Credit Disbursement

Government of India, State Government, Reserve Bank of India and NABARD have taken a number of steps and policy measures for the growth and development of Agriculture and Rural sectors. Besides, they have introduced several innovations in Agricultural Credit flow system to augment access of the rural people to the banking system. Some of the important policy measures / innovations are outlined in what follows.

I. Policy Innovations of Government of India:

- 1. Agricultural Debt Waiver (For Small Farmers / Marginal Farmers) and Debt Relief (for other Farmers) Scheme covering direct Agricultural Credit.
- 2. Short Term Crop Loans continued to be disbursed at seven per cent with interest subvention.
- 3. National Agricultural Insurance Scheme (NAIS) to continue in the present form for Kharif and Rabi 2008-09.
- 4. Adoption of concept of Total Financial Inclusion (TFI) and meeting the entire credit requirement of Self-Help-Groups.
- 5. Implementation of Rain-fed Area Development Programme with an allocation of Rs.348 crores with priority to areas not benefited by Watershed Development Schemes.
- 6. Central Banks and Rural Regional Banks (RRBs) to add 250 accounts every year in Rural and Semi-urban branches.

II. Policy initiatives of Reserve Bank of India:

- 1. Guidelines on Priority Sector Lending (PSL) revised enlarging its scope.
- 2. Limits for loans under DRI scheme raised from Rs.6500 to Rs.15000 and that for housing loan under scheme from Rs.5000 to 20000.
- 3. CBs/RRBs to introduce on a pilot basis in one district, a simplified cyclical credit product whereby the farmers can use core component of 20 per cent of credit limit throughout the year, provided interest is serviced.
- 4. Banks are allowed to utilize the services of retired bank / Government employees and ex-servicemen as business correspondents.

III. Policy and Development Initiatives of NABARD:

- 1. NABARD to play an active and supportive role in the implementation of 'Rural Business Hub' Scheme of Ministry of Panchayat Raj envisaging Public-Private-Panchayat Partnership to develop holistic and integrated partnership between decentralized rural production units and larger corporate entities.
- 2. A new find "Farmers' Technology Transfer Fund" created to support programmes, workshops / seminars on technology transfer, marketing of agriculture produce and imparting training on new technologies / agriculture practices
- 3. NABARD in collaboration with Department of Posts, Government of India, to set up showcases in 100 post offices across the country to showcase the products of SHGs and rural artisans.
- 4. Krishak Saathi Scheme introduced to provide refinance to banks to provide loans to farmers to free themselves from the clutches of money lenders.
- 5. RIDF loan at 90 per cent of the project cost allowed for roads and social sector projects in Hill States; also, higher mobilsation advance at 30 per cent of total RIDF loans allowed for these states.

IV. Policy Initiatives of Government of Tamil Nadu:

1. Rs.1150 crores allocated in 2008-09 for compensating co-op. banks for waiver of crop loans.

- 2. It is proposed to disburse new crop loans to the tune of Rs.1,500 crores during 2008-09.
- 3. The rate of interest on crop loan reduced from five per cent to four per cent for prompt repayments in 2008-09.
- 4. Rs.40 crores to provide 50 per cent Insurance Premium for 25 lakhs farmers towards crop insurance.
- 5. SRI cultivation of paddy to be extended to all districts at an estimated cost of Rs.64 crores.
- 6. 25 per cent subsidy to farmers for purchasing farm machinery under NADP.
- 7. Afforestation Programme in 51,500 hectares at a cost of Rs.113 crores. 1,000 check dams and 300 percolation ponds to be constructed throughout the State. Rupees three crores provided for forest roads. Rs.10 crores allocated for planting one crore saplings in private lands.
- 8. Tamil Nadu Co-operative Milk Producers Federation to provide 10,000 crossbred milch animals to Women Self Help Groups in 200 villages covering 5000 women. This scheme will be implemented at a cost of Rs.22 crores for a period of two years.
- 9. IAMWARD Project extended to another 16 sub-basins.
- 10. Construction of 48,500 checkdams and perculation tanks in 232 over exploited blocks for conserving ground water at a cost of Rs.550 crores.
- 11. State Government to open 4 SEZs in Tirunelveli, Tiruvannamalai, Erode and Vellore Districts.
- 12. A sum of Rs.504 crores is allocated under "Anaithu Grama Anna Marumalarchi Scheme" for undertaking basic infrastructure related works in 2521 village panchayats.
- 13. Rs.50 crores provided in 2008-09 for 1625 community developmental works under 'Namakku Naame Thittam'.

Activity wise credit disbursement and projection under agricultural and allied sectors in Tamil Nadu State is furnished in Table 5.7.1.1.

Table 5.7.1.1. Activity Wise Credit Disbursement and Projection under Agricultural and Allied Sectors in Tamil Nadu Stae (Rs in lakhs)

Districts	2008-09	2009-10	2010-11	2011-12	Total	Percentage
Ariyalur	38097.94	40002.85	42002.97	44103.12	164206.88	1.07
Coimbatore	675500.01	709275	744738.75	781975.69	2911489.45	18.94
Cuddalore	111718.15	117304.06	123169.27	129327.72	481519.20	3.13
Dharmapuri	62884.29	66028.5	69329.93	72796.42	271039.14	1.76
Dindigul	117879.31	123773.28	129961.95	136460.03	508074.57	3.30
Erode	270329	283845.45	298037.68	312939.58	1165151.71	7.58
Kancheepuram	104598.94	109828.89	115320.33	121086.35	450834.51	2.93
Kanyakumari	127383.45	133752.62	140440.25	147462.28	549038.60	3.57
Karur	103061.29	108214.34	113625.08	119306.33	444207.04	2.89
Krishnagiri	93363.59	98031.77	102933.36	108080.03	402408.75	2.62
Madurai	148069.56	155473.04	163246.69	171409.03	638198.32	4.15
Nagapattinam	61348.26	64415.68	67636.46	71018.27	264418.67	1.72
Namakkal	109498.08	114972.99	120721.63	126757.71	471950.41	3.07
Perambalur	23506.16	24681.48	25915.55	28571.86	102675.05	0.67
Pudukkottai	77492.09	81366.69	85435.03	89706.78	334000.59	2.17
Ramanathapuram	63468	66641.4	69973.5	73472.16	273555.06	1.78
Salem	118057.35	123960.22	130158.22	136666.13	508841.92	3.31
Sivagangai	85189.47	89448.94	93921.39	98617.45	367177.25	2.39
Thanjavur	117154.96	123012.72	129163.35	135621.51	504952.54	3.28
Theni	81050.57	85103.11	89358.27	93826.17	349338.12	2.27
Thiruvallur	71234	74795.7	78535.52	82462.26	307027.48	2.00
Thiruvarur	55744.11	58531.34	61457.88	64530.8	240264.13	1.56
Thoothukudi	166035.09	174336.86	183053.68	192206.38	715632.01	4.65
Tirunelveli	149001.45	156451.53	164274.09	172487.81	642214.88	4.18
Thiruvannamalai	77792.08	81681.68	85765.78	90054.05	335293.59	2.18
Tiruchirappalli	117555.51	123433.28	129604.94	136085.19	506678.92	3.30
Vellore	120023.58	126024.75	132325.98	138942.29	517316.60	3.36
Villupuram	100569.72	105598.2	110878.13	116422.01	433468.06	2.82
Virudhunagar	119152.76	125110.39	131365.93	137934.23	513563.31	3.34
Total	3566758.77	3745096.76	3932351.59	4130329.64	15374536.76	100.00

From the table it could be seen the projected flow of credit disbursement for agriculture and allied sectors during 2009-10, 2010-11 2011-2012 would be respectively Rs. 3745096.76, Rs. 3932351.59 and Rs.4130329.64 lakhs respectively. Rs.153745.37 crores would be required for disbursement for agriculture and allied sectors during the eleventh plan period. The credit requirement is more pronounced in Coimbatore district as compared to other districts of Tamilnadu State.

CHAPTER - VI

STATE PLAN

The Eleventh Five Year Plan lays emphasis not only on economic growth but also on eliminating social, spatial and sectoral imbalances. Based on the interventions recommended, strategies identified and projects contemplated, it has been estimated that the State would need an amount of Rs. 3931.92 crores for the overall development of agriculture and allied sectors during Eleventh Five Year Plan period, as detailed in Table 6.1, below.

Table 6.1 Sector-wise Budget Requirements

(Rs. in lakhs)

Sl.	N. P.J. C. A	Year					
No	Name of the Sector	2008-09	2009-10	2010-11	2011-12	Total	%
1	Agriculture	25101.89	24658.56	24354.41	24325.75	98440.61	25.04
2	Horticulture	11917.43	12068.57	11421.14	11921.56	47328.70	12.04
3	Agricultural Engineering	17972.80	18570.11	18801.37	19469.72	74814.00	19.03
4.a	Agricultural Marketing	1448.39	1277.70	1352.69	1481.96	5560.74	1.41
4.b	Additional Agriculture Marketing	-	7756.78	6334.16	5468.18	19559.13	4.97
5.a	Animal Husbandry	21932.76	7239.35	5401.28	4863.11	39436.50	10.03
5.b	Fisheries	5559.33	4000.76	2388.54	1576.29	13524.92	3.44
6	Public Works Department	31547.45	21952.13	16940.67	16795.86	87236.11	22.19
7	Sericulture	908.96	915.53	1014.08	1036.41	3874.98	0.99
8	Forestry	496.54	496.25	500.80	505.99	1999.58	0.51
9	Agricultural Research	89.00	122.00	22.00	24.00	257.00	0.07
10	Special Projects	305.26	188.76	302.22	363.64	1159.88	0.29
	Total	117279.81	99246.5	88833.36	87832.47	393192.1	100.00

It could be seen from the table above, that the agriculture sector demanded Rs.984.41 crores for implementing the action plans over a period of four years from 2008-09 and it accounted for 25.04 per cent of the total budget requirement. Next to Agriculture Sector, Public Works Department demanded Rs.872.36 crores and it amounted to 22.19 per cent of the total budget requirement of the State. Agricultural Engineering Department solicited an amount of Rs.748.14 crores accounting for 19.03 per cent of total budget requirement of the State. The Animal Husbandry Department prepared project plans to the tune of Rs.394.36 crores (10.03 per cent). A sum of Rs.473.28 crores (12.04 per cent) was demanded by Horticulture Department. The remaining line departments viz., Fisheries Department, Agricultural Marketing and Agricultural Business Department, Sericulture, Forestry Department, Agricultural Research and Special Project put together accounted for 11.68 per cent of the total budget requirement of the State. The district-wise sectoral financial outlays are given in Tables 6.1 through 6.11.

6.1 Agriculture Sector

Based on the development issues identified, the policy has been opted and hence the specific interventions have been recommended for major crops, viz., namely Paddy, Pulses, Maize, Millets, Oilseeds and Cotton as detailed in Plates 1 through 6. Further, these major recommended interventions have been projectized in the form of action plans of the concerned DAPs. A brief descreption of the major interventions recommended is given below:

6.1.1. Distribution of Soil Health Card @ Rs.25/- per card

Soil Health Care -Issue of Soil Health Card in a phased manner, encouraging the Green Manuring, Vermi Compost, Organic farming to increase Soil Health. To maintain the quality of soil, which is very essential for getting better yield, it is proposed to distribute soil health card to all the farmers, who have offered the soil sample for testing by paying prescribed fee of Rs.25/- for Macro and micro nutrient testing. This service is provided to all the farmes of all the districts, limited to analytical capacity of the laboratory (Appendix I, Item No.66).

6.1.2. SRI Cultivation

SRI technology will be only successful when the key technologies like uniform levelling of field, proper spacing and timely weeding using suitable machineries and implements at the time of requirement are adopted. Since productivity of paddy mainly depends on the use of quality seed materials, it is necessary to distribute quality seeds at nominal prices to farmers to enhance the productivity of paddy (Appendix I, Item No.2).

6.1.3. Seed Production subsidy to SHG (Rs.5/kg)

In order to increase the Seed Replacement Rate in case of pulses and oilseeds, the seed production should be encouraged by giving production subsidy for certified seed production of pulses and oilseeds through Self-Help-Groups. Seed production involves additional farm operations and extra-care on the part of the seed growers. To compensate the higher cost of production of quality seeds, the growers viz., the SHGs are provided with production subsidy at the rate of Rs.5 per kilogram at the time of procuring the seeds from the growers/SHGs. (Appendix I, Item No.11).

6.1.4. Hybrid seed distribution (other than maize)

In order to increase and stabilize the income level, and to get the assured output, farmers have to be provided with high yielding variety seeds / hybrids. Awareness campaigns should be conducted at the field level regarding the usage of hybrid seeds and their knowledge about hybrid seeds can be enlightened through trainings and demonstration. Efforts also should be made to produce and distribute required quantity of hybrid seeds of public bred hybrids by the Department of Agriculture. (Appendix I, Item No.24).

6.1.5. Hybrid seed distribution maize

Hybrid seeds / varietal seeds distribution will definitely increase the production of Millets / Maize. Maize hybrids are performing extremely well as compared to varieties and the private hybrid seeds are always high priced by the private seed producers. Therefore, these hybrids may be purchased by the Government and distributed to the farmers at subsidized prices in order encourage the farmers to go for hybrid maize. (Appendix I, Item No.1).

6.1.6. Hybrid seed distribution –sunflower

Hybrid Seed distribution and crop production demonstration in Sunflower crop will bring major area under Sunflower. In the case of sunflower, mainly private Hybrid seeds are used which are costlier. If subsidy is provided for private Hybrid seeds also, the farmers will come forward to cultivate more area under Sunflower. (Appendix I, Item No.14).

6.1.7. Seed testing laboratory

The main aim of seed testing is to obtain accurate and reproducible results. The seed testing laboratory is carrying out the seed production and certification program to meet the increasing demand from the farming community, Seed growers, seed producers, seed dealers of Tamil Nadu. (Appendix I, Item No.57).

6.1.8. Strengthening of District Information centre

A concerted and well-coordinated effort needs to be made to use the electronic media in the extension strategy by strengthening infrastructural facility at the information centre. Hence, District Information Centre can be strengthened by, providing Lap Top, Printer, LCD, Scanner, Digital Camera, Copier etc. (Appendix I, Item No.53).

6.1.9. District level exhibition/ Kisan mela (@ Rs.2.00 lakhs)

To get higher income, all farmers should be exposed to the recent high technologies through organization of Kisan melas, exhibitions etc. at district level (Appendix I, Item No.89).

6.1.10. Strengthening of State Seed Farms

The breeders seeds obtained from the research stations are multiplied by Department of Agriculture, TamilNadu in its own state seed farms, to obtain foundation seeds, which again are multiplied either in SSFs or in private farms before distribution as certified seeds for commercial production by the farmers. Therefore, the infrastructure facilities at the SSFs like levelled land, more area, assured irrigation, thrashing floor, drying yard, processing units, storage etc., are essential to produce, process and pack quality seeds. Therefore, the strengthening of SSFs is aimed. (Appendix I, Item No.47).

6.1.11. Distribution of hand operated sprayers

To overcome the damages and to get higher production, hand sprayer should be supplied to the farmers at subsidized rate. Also, Farmers should be trained at village level for better utilization of hand sprayer. Hand operated sprayers are becoming handy to the farmers expecially, the small and marginal, in spraying the pesticides/fungicides uniformly over the crops affected by pests and diseases. The small and marginal farmers need financial assistance in buying the sprayers. Hence, the distribution of H.O.S in contemplated at subsidized prices. (Appendix I, Item No.44).

6.1.12. Exposure Visit – Interstate (10 days @ Rs.600 day)

It is observed that farmers lack in the knowledge of recent trends and technologies that are being practiced in other states. Some farmers may know these technologies, but only the spot exposure visit will enhance their learning ability for immediate adoption. Moreover they will develop confidence in taking up the technology. Lack of exposure visit keeps the farmers below their potentials. The places to be visited will be decided in advance based on the requirement of the district. The leading farmers who are having the aptitude for the adoption of new technologies will be selected for the visit to the research stations and to the fields of the successful farmers in other states. They will inturn, motivate the other farmers to learn the new technologies well and adopt them in their own fields. (Appendix I, Item No.81).

6.1.13. Exposure visit- officers outside the country

The agricultural technologies are constantly changing. All officials should be exposed to the changing technologies through exposure visits to other advanced countries. Conducting exposure visits to other countries will improve the official's knowledge on new technologies which in turn will be useful to the farmers to be trained by them. Ultimately, it will also increase the income status of the trained farmers. About Rs.5.00 lakhs are required per officer to take upon foreign visit. (Appendix I, Item No.77).

6.1.14. Distribution of combined harvesters

In the recent context of labour scarcity and high labour cost, the mechanization in agriculture is on the ascent. In the mono-cropping paddy area, the harvesting operateion is to be completed over a larger area in a shorter time span of a week or two. Few custom servicers hire out the combined harvester, which harvests an acre of paddy in an hour or

so. They also charge exhorditant hire charges of Rs.1500 to 1600 per hour and hike up during the peak harvest season. Therefore, it has been planned to distribute more number of combined harvesters to the affordable and enterprising farmers and agri-preneurs at a highly subsidized prices, as a single harvestor costs around Rs.10.00 lakhs or more. (Appendix I, Item No.35).

6.1.15. Distribution of Mini Power tillers

As the animal labour has become scarcer and costlier in the recent years, almost all the farmers particularly in wetland tract go for either tractor or tiller ploughing. Again the custom service providers charge high. Therefore, it has been contemplated to supply mini-power tillers to farmers at subsidized prices. (Appendix I, Item No.38).

6.1.16. Distribution of mini transplanters

One of the important operatations in paddy cultivation, where mechanization could not be possible till recently is the transplantation of paddy seedlings. Fortunatly due to technological break-throughs in agriculture, transplanting machines have been developed and put into use in the recent times by many companies. To mitigate the labour shortage condition and high cost of human labour, farmers have started using these transplanters only recently. Hence, this tempo can be trigered by supplying transplanters to farmers and agri-preneurs, the supply of the same at subsidized price has been contemplated in the plan. (Appendix I, Item No.37).

6.1.17. Technology Demonstration

Agricultural technologies are constantly changing and hence the farmers should be exposed to those changes to equip upto-date knowledge and hence the technology demonstration has been contemplated as an intervention in the plan. (Appendix I, Item No.79).

6.1.18. Construction of Rural godowns

To save the products from the post-harvest losses, it has been contemplated to construct rural godowns at the village level on community basis and hence it is proposed in the plan to construct rural godowns, in the cultivation localized areas (Appendix I, Item No.45).

6.1.19. Distribution of Green Manure Seeds at 75 % subsidy of Rs.15 / kg

To build up the soil health, micro organism and water holding capacity of the soil, the Green Manure Seeds are produced and distributed (12 tonnes) at 25 per cent subsidy. . It also fixes atmospheric nitrogen in the soil through root nodules. These seeds are distributed through Agricultural Extension Centres located throughout all the districts (Appendix I, Item No.67).

6.1.20. Cotton Hybrid Seed Distribution

Cotton is cultivated throughout the year in Tamil Nadu in four seasons namely winter irrigated, summer - Irrigated, Rainfed and Rice fallow. The enhancement of productivity and production of cotton can be achieved by distributing hybrid seeds throughout the state, at subsidized prices (Appendix I, Item No.30).

6.1.21. Farmers Field School @ 17000/ No.

An assistance of Rs.17000/- is provided per FFS of 30 farmers. All the farmers who cultivate cotton crop in all the districts, except Kanyakumari, Kancheepuram, Thiruvallur, Chennai, and the Nilgris are eligible to avail the subsidy (Appendix I, Item No.82).

6.1.22. Seed village programme

Paddy, Oilseeds and pulses seeds are distributed to the framers @ 50 % subsidy for multiplication. This is applicable to all the farmers in the state who are willing to have seed farms and distribute quality seeds to other farmers (Appendix I, Item No.5).

6.1.23. Agri-Clinic-Cum-mini soil Testing laboratory

The unemployed agricultural graduates will be assisted to set up Agri clinic at a cost of Rs.6.00 lakhs per unit with 50 % subsidy of Rs 3.00 lakhs through tie up loan with commercial banks. This intervention made available in all the blocks in 9 focus districts of Coimbatore, Dharmapuri, Dindigul, krishnagiri, Namakkal, perambalur (ariyalur), Ramanathapuram, Salem and villupuram and 5 blocks each in the remaining 19 districts (Appendix I, Item No.48).

6.1.24. Problem Soil Management

Framers' lands have been declared as saline and alkaline affected based on soil test in the districts of Nagapattinam, Thiruvarur, Kancheepuram, Thiruvallur, Vellore, Thiruvannamalai, Salem and Namakkal. To reclaim the problem soils 50% on the cost of gypsum and zinc sulphate will be subsidized and also for drainage, a subsidy subject to maximum of Rs. 1000 /- acre will be provided (Appendix I, Item No.69).

The district-wise details of funds required for carrying out the development plans in agriculture sector are furnished in Table 6.2. It could be seen that a sum of Rs.984.41 crores is required for the agriculture sector. The shares of districts towards the budget requirement ranged from 0.28 per cent in Theni district to 13.37 per cent in Sivagangai. Perusal of proposed activities of Agricultural Sector in Sivagangai district indicated that a sum of Rs.90.00 crores was demanded towards maximizing the ground water usage through borewells. On an average, Rs.33.94 crores is required by each However only nine districts viz., Cuddalore, Dharmapuri, Kancheepuram, district. Salem, Sivagangai, Thiruvarur, Thiruvannamalai, Tiruchirappalli and Villupuram have demanded more than the state' average towards the development of agriculture sector. The district-wise and activity-wise budget provisions are furnished in Appendix I.

Plate 1. Development Issues, Policy Options and the Interventions Recommended for Paddy Crop

Sl. No.	Major Development Issues	Policy Options	Nature of Interventions Recommended
1.	Productivity increase	Introduction of improved new agricultural technologies	 Encouraging SRI cultivation Supply of high quality seeds at subsidized prices
2.	Production increase (4%)	Arresting the diversion of paddy lands to non-agricultural uses	Promulgating the Order to stop diversion of Agrl. Land to Non-Agrl. uses
3.	Soil health management	Improving the soil health through new agricultural technologies	 Encouraging cultivation of green manure crops Application of more organic manures Popularizing vermi-composting Application of bio-fertilizers Balanced fertilization through soil test based recommendation
4.	Rat damage	Practicing effective control measures including off-season campaigns	 Chemical control recommended Physical control by catching manually / physically Organizing off-season mass campaigns in villages
5.	Weed control	Effective weed control measures including the use of weedicides	 Availability of machine labour for tillage operation at reasonable hire chargers Supply of weedicides at subsidized prices.
6.	High-cost of mechanization	Machine Labour may be made available to the farmers at reasonable hire charges	 Popularizing the concept of mechanized village Introduction of newly developed agrl. machineries implements and tools Popularizing the conventional machineries, implements and tools
7.	Phosphatic fertilizers non-availability in time and high prices	Timely availability at specified prices	Supply of phosphatic fertilizers especially the DAP through open market as well as cooperatives with subsidy to the tune of 25% to 50%
8.	Conjunctive use of irrigation water	Liberal credit facilities from financial institutions. Organizing more Irrigation Water Users Association	 Extending credit facilities to farmers at lower interest rate for digging bore-wells and installation of pump sets and motors Subsidizing the replacement of old and worn-out pump sets and motors Formation of Irrigation Water Users Associations.
9.	Wide fluctuations in prices	Opening of adequate Direct Procurement Centres in paddy cultivation localized areas particularly during harvest seasons	Govt. procurement at MSP especially when the open market prices go below the MSP
10.	Spoilage of grains due to unexpected rains	Construction of thrashing floors and supply of tarpaulins	 Constructions of common community thrashing floors in villages where it is absent at present Supply of tarpaulins at 50% subsidized prices

Plate 2. Development Issues, Policy Options and the Interventions Recommended for Pulse Crops

Sl. No.	Major Development Issues	Policy Options	Nature of Interventions Recommended
1.	High prices of seeds	Subsidize seed prices	Timely supply of improved seeds at subsidized prices
2.	Mostly local varieties are grown by the farmers	Seed prizes of new hybrids should be subsidized.	Intensification of extension activities to popularize new and improved varieties through pre and seasonal campaigns
3.	Difficulty in maintaining optimum plant population	Encourage land leveling and weed-free land	 Summer / deep ploughing Leveling of land during off-season/summer Education on weed-free cultivation
4.	Crop is not irrigated	Encouraging irrigation at critical stages of crop growth	Popularization of irrigation practices in raising Pulses
5.	Non-application of fertilizers	Supporting fertilizer application through small grants	Fertilizer subsidy may be extended particularly for foliar spraying
6.	Rat damages	Popularizing the effective control measures	 Physical method of control Chemical method of control Clean cultivation practices Conducting off-season campaigns
7.	No plant protection measures are taken up	Encourage farmers to take up systematic plant protection measures	Popularization of effective plant protection measures with subsidy component of chemicals
8.	Developing appropriate technologies for 1. Rice fallow Pulses 2. Pulses in Dryland 3. Pulses inter-cropped with cotton etc.,	Extend support / grant for continued research on Pulses crops	Allotment of research grant
9.	Least cared crop by the farmers	Educate the farmers on the benefit of adopting improved technologies in Pulses	Intensifying the extension education activities especially through pre-season campaigns

Plate 3. Development Issues, Policy Options and the Interventions Recommended for Maize Crop

Sl. No	Major Development Issues	Policy Options	Nature of Interventions Recommended
1	High prices of hybrid seeds	Seeds may be distributed at subsidized prices	Seed subsidy of 50% price for irrigated maize and 90% for rainfed maize
			Distribution of seed minikits
2	Economy in the use of irrigation water for irrigated maize	Installation of drip irrigation system/precision farming	Installation cost and the pipes may be subsidized
3	Soil health management	Encouraging soil health management	 Raising green manure crop and insitu ploughing back Application of farm yard manure & bio fertilizers Vermi-compost preparation and distributions Balanced fertilization as per soil test recommendation Application of tank silt
4	Micro-nutrients deficiency	Popularizing the application of micronutrients	 Distribution of micro-nutrient mixture Soil testing for micronutrient status Encouraging the application of micronutrients as enriched FYM.
5	Separating the grains from the cob is a difficult process	Encouraging mechanization	Introduction of maize Sheller machine with subsidy
6	Spoilage of grains due to sudden rainfall	Provide tarpaulins	Tarpaulins distribution at subsidized price
7	Lack of awareness and adoption of package of practices	Intensify extension education	Popularization of package of practices through intensified extension education
8	Suitability for crop diversification	Introducing maize in the place of less remunerative crop especially in dry land tracts	Introduce maize for crop diversification

Plate 4. Development Issues, Policy Options and the Interventions Recommended for Other Major Millet Crops

Sl.	Major Development Issues Policy Options		Nature of interventions recommended
No			
1	Improving productivity in Millet crops	Supply of high quality crop seeds	 Distribution of seeds of high yielding Millet variets with subsidy Distribution of hybrid seeds at subsidized prices
2	Knowledge – poor farmers on improved production technologies	Educate farmers on improved crop production technologies	 Conduct demonstrations on improved crop production technologies Conduct off-season campaigns Conduct village group meetings
3	Soil-health management	Educate farmers on proper soil health management specifically under dryland agriculture	 Conduct demonstrations on the use of biofertilizers Demonsrate growing the green manure crops and insito-ploughing Encourage application of FYM / Organic Manures Surface / Subsurface mulching
4	Farmers lack scientific knowledge on the dryland technologies	Popularization of dryland cultivation technologies	 Conducting pre-season campaigns Laying demonstration plots in farmers' fields Conducting FFS in the villages

Plate 5. Development Issues, Policy Options and the Interventions Recommended for Oil seed Crops

Sl. No	Major Development Issues	Policy Options	Nature of Interventions Recommended
1	Difficulty in getting quality seeds	Encouraging production of quality high yielding seeds	Organizing seed village programme
2	High prices of seeds especially hybrids	Distribution of quality seeds / hybrids	Distribution of quality seeds at subsidized prices especially hybrids
3	Application of gypsum	Improving physical condition of the soil for higher productivity	Distribution of gypsum at subsidized prices
4	Micro-nutrients deficiencies	Encouraging micro-nutrient applications	Supply of micro-nutrients to oilseed growers
5	Laying of irrigation pipelines	Extending financial support to farmers	Investment requirement may be subsidized
6	Precision farming	Encouraging precision farming	Extending subsidies for installation
7	Rodents damage	Take up mass propaganda	Physical controlChemical controlOff-season campaigns
8	Educating farmers about improved technologies	Intensify farmers education	Organizing Farmers Field Schools
8	Distribution of seeds mini-kits	Encouraging farmers to go for high yielding/hybrid seeds	Hybrid seeds mini-kits especially in sunflower may be distributed
9	To increase coconut production	Extending financial and technical support to farmers	Distribution of coconut seedlings at subsidized prices for backyard and border planting
10	Popularizing oil palm raising	Encourage raising oil palm plantations	Extending subsidy in raising oil palm plantations

Plate 6. Development Issues, Policy Options and the Interventions Recommended for Cotton Crop

Sl. No.	Major Development Issues	Policy Options	Nature of Interventions Recommended
1.	Declining trend in cotton area	 Educate farmers to plant cotton on more area due to heavy demand Assure market and prices 	 Intensive education on cotton cultivation technologies Arranging for contract farming Procurement in regulated markets
2.	Declining trend in productivity in cotton	Educate farmers on improved technologies including use of hybrid and BT cotton	 Soil health maintenance the INM and balanced fertilization based on soil test recommendation Intensive extension education and training
3.	High prices of seeds of new hybrid varieties of cotton	The seed prices may be subsidized	Distribution of Hybrid/BT cotton seeds to farmers at subsidized prices
4.	Scarcity of irrigation water	Educate and help the farmers on the economy in the use of irrigation water	Precision farming / Drip irrigation may be encouraged with sizable subsidy component
5.	Lack of awareness on the optimum pesticides application practices	Creaters awareness among the farmers on the effective pest management	Intensive extension education on improved cultivation technologies
6.	Fluctuations / uncertain and low prices	Immediate market must be there with assumed prices	Contract farming may be arranged on large-scale
7	Labour-Scarcity	Use of appropriate machineries, implements and tools may be encouraged	Use of Bullock drawn-Ridger/Bund former may be encouraged with subsidy

Table 6.2 District-wise Budget Requirement for Agriculture Sector

(Rs. in lakhs)

Sl.	Name of the		Year				Percen
No.	District	2008-09	2009-10	2010-11	2011-12	Total	tage
1	Ariyalur	802.81	796.81	792.06	788.71	3180.39	3.23
2	Coimbatore	167.98	202.58	231.06	254.58	856.20	0.87
3	Cuddalore	2111.29	1843.17	1840.42	1827.42	7622.30	7.74
4	Dharmapuri	1907.32	1911.72	1918.52	1925.32	7662.88	7.78
5	Dindigul	135.85	158.35	178.35	175.60	648.15	0.66
6	Erode	598.92	394.34	467.56	465.73	1926.55	1.96
7	Kancheepuram	2801.45	2671.18	2654.55	2766.30	10893.48	11.07
8	Kanyakumari	291.61	201.86	201.86	201.86	897.19	0.91
9	Karur	312.49	250.80	265.14	272.68	1101.11	1.12
10	Krishnagiri	537.10	529.10	529.10	529.10	2124.40	2.16
11	Madurai	512.70	550.55	510.74	581.20	2155.19	2.19
12	Nagapattinam	398.85	309.85	353.66	386.62	1448.98	1.47
13	Namakkal	462.55	420.07	424.60	424.60	1731.82	1.76
14	Perambalur	707.25	681.70	679.35	676.70	2745.00	2.79
15	Pudukkottai	95.30	79.30	89.40	79.10	343.10	0.35
16	Ramanathapuram	503.11	649.20	603.82	602.70	2358.83	2.40
17	Salem	1178.56	995.38	977.52	990.77	4142.23	4.21
18	Sivagangai	3199.36	3531.53	3461.53	2971.53	13163.95	13.37
19	Thanjavur	445.35	455.80	547.45	607.16	2055.76	2.09
20	Theni	169.80	27.00	37.73	38.96	273.49	0.28
21	Thiruvallur	278.53	272.53	272.53	272.53	1096.11	1.11
22	Thiruvarur	87.85	88.05	85.05	85.05	346.00	0.35
23	Thoothukudi	583.21	394.98	420.98	432.48	1831.67	1.86
24	Tirunelveli	1184.44	1078.44	1131.84	1143.49	4538.21	4.61
25	Thiruvannamalai	1158.21	1172.84	1035.25	1173.86	4540.15	4.61
26	Tiruchirappalli	1493.65	2792.19	2470.40	2525.46	9281.70	9.43
27	Vellore	845.20	733.00	773.70	748.50	3100.38	3.15
28	Villupuram	1723.48	1107.56	1041.56	1019.06	4891.65	4.97
29	Virudhunagar	407.69	358.69	358.69	358.69	1483.76	1.51
_	Total	25101.89	24658.56	24354.41	24325.75	98440.62	100.00

6.2 Horticulture Sector

Considering the development issues identified, the policy has been opted and hence the specific interventions have been recommended for major horticulture crops, as detailed in Plate 7. Further, these major recommended interventions have been projectized into action plans of the concerned DAPs. A brief descreption of the major interventions recommended is given below:

6.2.1. Ten Hec Mega demo Plot

A demonstration plot with all the cultivation technologies and all the latest cultivation aspects helps the farmers to get the first hand knowledge and ultimately enable them to try the technologies in the farmers' fields (Appendix II, Item No.50).

6.2.2. Supply of Banana bunch cover

Provision of bunch cover helps the farmers in many ways like, to avoid blemishes in the fruit, to protect from pests, uniformity in fruit colour, improvement in the quality of the fruit and ultimately the farmers get a very good price for the quality products (Appendix II, Item No.6).

6.2.3. Supply of banana corm injector

Occurrence of pest and disease in banana crop is unavoidable and hence introduction of corm injector will help the farmers to protect their crop from dreaded diseases, and to increase in the yield (Appendix II, Item No.27).

6.2.4. Banana / Amla in Noon Meal scheme (TANHOPE)

To feed the school children with the complete planned food and to increase the performance, Banana and Amla fruits are supplemented in the ongoing Mid-day meal programme. It involves provision of lunch at free of cost to protect children from classroom hunger, increasing school enrolment and attendance, improved socialization among children belonging to all castes, addressing malnutrition and social empowerment through the provision of employment to women (Appendix II, Item No.54).

6.2.5. Bore well with casing pipe

To increase the production and productivity of crops irrigation is the prerequisite. To increase the irrigation potential, bore well with casing pipes are very much needed (Appendix II, Item No.42).

6.2.6. Cashew High density planting

High density planting in cashew helps the farmers in getting higher yield and production. Therefore, to motivate the farmers to adopt high density planting, it is necessary to give full assistance to farmers (Appendix II, Item No.8).

6.2.7. Community fencing (75 % subsidy)

One of the main hurdles to the farmers who are interested in taking up horticultural crops is the damage done by stray cattle. With community fencing, the cost per unit area becomes highly reduced, because for a particular farmer of the community the full periphery of his field need not be fenced. This project will serve as a demonstration and hence other farmers will take up such a project on their own, resulting in huge areas under horticulture crops (Appendix II, Item No.44).

6.2.8. District Level farmers workshop

Educating the farmers on the latest technology will help in the overall increase in production. Conducting workshops will help the farmers to gain better knowledge in the latest cultivation aspects and the same can be shared with other peer group farmers also, which will lead to a better management of the crop (Appendix II, Item No.55).

6.2.9. Enterprising Farmers' Associations

Encouraging the group of farmers to obtain major achievements in horticulture by providing financial assistance to them so that they will be benefited by sharing available infrastructure facilities. Therefore, well established, recognized associations will be enthused to take action to create common infrastructural facilities so that a cluster of small and marginal farmers can take advantage of the same (Appendix II, Item No.51).

6.2.10. Farm waste shredder / Vegetable waste shredder

Since it is a newly introduced implement, it is being distributed at 75 per cent assistance to the farmers (Appendix II, Item No.29).

6.2.11. Provision of bird net for grapes

Supply of birds net to farmers at 50 per cent subsidy for 1 ha / Farmer will protect grapes fruits from bird damage (Appendix II, Item No.17).

6.2.12. Humic Acid / Effective E Microbes

Humic acid and application of effective microbes plays a very significant role in general cultivation practices of crop. Humic acid 1 litre / ha per spray, for two spray two litres of humic acid per ha can be given at 50 per cent assistance (Appendix II, Item No.18).

6.2.13. Inter State Exposure visit (5 days)

Taking farmers to different states and different research institutions will help them in gaining first-hand information on the latest technologies, being followed there, so that they may be motivated to implement the same in their own fields (Appendix II, Item No.52).

6.2.14. Establishment of Net House Structure and Erection of pandal for vegetable production

Rising of quality, pest free, disease free planting materials in portray is the need of the hour. Under a net house / pandal seedlings can be raised in a compact area and distributed to the farmers according to their demand. Therefore it is proposed to extend financial help to the farmers who are willing to establish net-house for raising seedlings (Appendix II, Item No.4).

6.2.15. Provisions of Mango Harvester

Most of the Mango growing farmers are small and marginal and they incur sizable post-harvest losses due to conventional harvesting method. Mango harvest is one of the major operations and the post-harvest losses can be minimized using Mango harvester. Hence, the same is recommend for distribution at subsidize prices (Appendix II, Item No.30).

6.2.16. Package for plant protection

The pest management in vegetable crops is a great task to the farmers. The third generation chemicals and equipments are yet to reach the remote villages of the district, due to lack of knowledge and poor economic status of the farmers. The farmers who are in need of the package will be supported for effective control of pests in vegetable crops (Appendix II, Item No.7).

6.2.17. Provision of plastic crates for Vegetable handling and Transport

Post-harvest handling of vegetable plays an important role in getting fair prices to the farmers. Hence plastic crates are distributed at subsidised rates to farmers for safe post-harvest handling of fruits and vegetables (Appendix II, Item No.13).

6.2.18. Precision Farming

This is a proven, farming technique in which the farming activities are done with high precision to take care of location-specific requirements. High quality of products ensures higher prices and assured markets. Through precision farming technology, new and advanced farming techniques will be introduced to increase the yield and quality of the crops (Appendix II, Item No.2).

6.2.19. Sales outlet points in Districts (Rent and Infrastructure)

Farmers get the seed or seed materials from various sources and from various locations. Farmers are ready to buy high quality materials, though expensive. But they may not be aware of the quality or its reproducing capacity. If planting materials or seeds and bio-fertilizers are made available in one single point, the buyers will be satisfied by saving time, labour and money. Hence sales outlet point is one of the immense needs of the farmers and hence same is recommended as an intervention (Appendix II, Item No.43).

6.2.20. Support system for crops (Banana)

Establishment of support system for banana is gaining momentum as providing support system prevents any damage due to wind / hailstorm, etc. Any sort of mechanical / physical damage to the crop is prevented by the support system and ultimately the farmers get a better price for the produce. However, the provision of support system involves huge expenditure and hence the farmers are given assistance to develop the system (Appendix II, Item No.1).

The district-wise details of fund solicited for carrying out the projects in horticulture sector are furnished in Table 6.3. It is evident from the table that a sum of Rs.473.28 crores is demanded and the shares of the districts varied from 0.27 per cent in Thanjavur district to 20.53 per cent in Tirunelveli district. Next, Cuddalore district required 57.07 crores amounting to 12.06 per cent of the total budget requirement of the State.

In Tiruchirappalli district, it has been programmed to provide support systems for 6000 hectares of Banana crop at the rate of Rs.1.50 lakhs per hectare. On an average, each district demanded Rs.16.32 crores for the development of horticulture sector. Ariyalur, Coimbatore, Cuddalore, Dharmapuri, Erode, Kanyakumari, Nagapattinam, Namakkal and Tiruchirappali districts required more funds than the state average for the development of horticulture sector. The district-wise and activity-wise budget provisions are furnished in Appendix II.

Plate 7. Development Issues, Policy Options and the Interventions Recommended for Horticulture Crops

Sl. No.	Major Development Issues	Policy Options	Nature of Interventions Recommended
1.	High investment need and poor resource base of the farmers	Encouraging farmers to establish orchards and other plantations through provision of grants	 Subsidizing major investment activities Subsidized seeds & seedlings distribution
2.	Long gestation period from planting to economic bearing stages	Part of the maintenance cost during gestation period may be supported by grant	Subsidizing the annual maintenance cost till economic bearing stage
3.	Low productivity of major horticultural crops	Educate the farmers on high-tech horticulture	Net house structureSeeds and seedlings subsidies
4.	Lack of knowledge on latest technologies and poor cultivation practices followed by the farmers	Subsidize the seed & seedling components Arranging for training and exposure visits	 Intensify the extension activities Farmers training Mega demonstration Visits within the stage Exposure visits to other states
5.	Inefficient use of fertilizers	Educating farming on efficient use of fertilizers	Fertigation may be encouraged
6.	Scarcity of irrigation water	Water-use efficiency methods may be advocated	 Precision farming/Drip irrigation with subsidy component Bore-well digging with casing pipes and subsidy
7.	Lack of appropriate accessories	Since horticulture involves high-tech, many accessories required may be supported by grants	 Banana corm injector Plastic crates for vegetables handling

Plate 7 Contd.,

Sl. No.	Major Development Issues	Policy Options	Nature of Interventions Recommended
8.	Heavy damages caused by the highwind velocity / cyclone	Extend financial support to farmers to create support system Risk must be covered through crop insurance	 Support system may be arranged and subsidized Support system for banana and betel vine Appropriate crop insurance scheme
9.	Shortage of labour	Labour saving tools, implements and machineries	Distribution of Labour saving tools, implements and machineries
10.	Ill - developed cold storage facility and cold chains	Cold-chain movement may be encouraged with financial support	Financial support to establish cold chains by financial institutions
11.	Lack of appropriate transportation mode	Refrigerated van for highly perishable farm products	Encouraging the intermediaries and wholesalers to own refrigerated vans with institutional financial supports
12.	Lack of ready marketing facility/sales outlets	Arrangements for effective sales of produce	Support to open sales outlets in the nearby urban/demand centres
13.	Highly fluctuating prices	Price support, Processing infrastructure Staggered production Consistent demand creation	Improved cultural practicesOpening retail points at demand centres
14.	Ill - developed fruit and vegetables processing industry in rural areas	Community fruit and vegetable processing may be encouraged	Community processing units for tomato etc., may be setup at localized cultivation villages

 ${\bf Table~6.3~District\hbox{-}wise~Budget~Requirement~for~Horticulture~Sector}$ (Rs. in lakhs)

Sl.	Name of the		Yea	ır		T . 4 . 1	Percen
No.	District	2008-09	2009-10	2010-11	2011-12	- Total	tage
1	Ariyalur	439.47	459.51	479.55	499.59	1878.12	3.97
2	Coimbatore	415.82	421.45	421.45	421.45	1680.17	3.55
3	Cuddalore	863.38	1172.92	1540.65	2130.27	5707.22	12.06
4	Dharmapuri	695.20	555.82	591.01	585.28	2427.31	5.13
5	Dindigul	371.15	292.90	427.80	402.80	1494.65	3.16
6	Erode	1426.30	1046.30	1048.30	798.30	4319.20	9.13
7	Kancheepuram	80.86	63.28	64.32	64.47	272.93	0.58
8	Kanyakumari	617.28	629.78	612.28	624.78	2484.12	5.25
9	Karur	162.43	159.25	170.20	177.98	669.86	1.42
10	Krishnagiri	393.90	397.90	397.70	397.70	1587.20	3.35
11	Madurai	110.95	453.87	449.29	332.21	1346.32	2.84
12	Nagapattinam	408.68	469.01	528.85	649.41	2055.95	4.34
13	Namakkal	399.18	399.07	483.35	573.05	1854.65	3.92
14	Perambalur	326.00	338.05	350.08	362.13	1376.26	2.91
15	Pudukkottai	350.37	314.38	347.12	326.32	1338.19	2.83
16	Ramanathapuram	62.36	57.36	57.36	57.36	234.45	0.50
17	Salem	157.85	162.85	168.85	170.35	659.90	1.39
18	Sivagangai	144.42	153.38	201.73	198.53	698.06	1.47
19	Thanjavur	32.20	32.20	32.20	32.20	128.80	0.27
20	Theni	199.98	192.23	197.48	233.73	823.42	1.74
21	Thiruvallur	119.03	127.53	126.81	127.53	500.90	1.06
22	Thiruvarur	66.68	84.28	126.93	149.43	427.30	0.90
23	Thoothukudi	206.75	206.75	206.75	206.75	827.00	1.75
24	Tirunelveli	3208.20	3163.90	1670.10	1676.10	9718.30	20.53
25	Thiruvannamalai	131.47	119.95	96.18	97.39	444.99	0.94
26	Tiruchirappalli	95.50	98.10	98.10	95.50	387.20	0.82
27	Vellore	245.93	268.80	269.30	262.30	1046.33	2.21
28	Villupuram	125.10	154.60	155.60	155.60	590.90	1.25
29	Virudhunagar	61.00	73.15	101.80	113.05	349.00	0.74
	Total	11917.43	12068.57	11421.14	11921.56	47328.69	100.00

6.3 Agricultural Engineering Sector

Depending on the development issues identified, the policy has been opted and hence the specific interventions have been recommended for the development of Agricultural Engineering sector, as detailed in Plate 8. Further, these major recommended interventions have been projectized in the action plans of the DAPs. A brief descreption of the major interventions recommended are given below:

6.3.1. Stream - I

The innovative work components shall be proposed in Stream-I, which would be beneficial to the farming community in respect of introduction of new technology measures, adoption of new methodologies and promotion of new concepts.

6.3.1.1. Introduction of Newly Developed Agricultural Machinery / Implements **Including Gender Friendly Equipments**

In view of inadequate labour availability for farm operations, the promotion of farm mechanisation is inevitable. Besides the conventional type of farm machinery and implements like tractors, tillers, disc ploughs, mould board ploughs etc., various types of agricultural machinery/farm implements suitable for different farm operations are designed and developed. Also, the cost effective, gender friendly farm equipments are developed by TNAU which are useful to farmers, in particular to women. With the help of farm machinery and implements, the agricultural operations would be carried out in efficient and effective manner in time and the farmers would fetch more farm income with increased crop productivity (Appendix III, Item No.1).

6.3.1.2. Innovative Water Harvesting Structures

Rainwater harvesting structures like check dams, farm ponds, sunken ponds, rejuvenation of failed wells, and formation of ooranies are carried out to harvest rainwater and to manage run-off, farm ponds/sunken ponds, are being executed. This technique should be given prime importance particularly in the present context of erratic distribution of rainfall in dryland eco-system (Appendix III, Item No.40 - 44).

6.3.1.3.Promoting the concept of Mechanised Villages

In order to promote farm mechanisation and to create more awareness about different types of farm machinery/implements among farming community, the distribution of crop-based package of agricultural machinery/implements on cluster basis is being done.

The crop-based package of agricultural machinery/implements is arrived at for Paddy, Groundnut and Maize, which are predominantly raised by farmers. In respect of paddy crop, rotovator for tractor, SRI marker, paddy transplanter, cono weeder, and combine harvester shall be distributed as package. For groundnut, ridger, raised bed seed drill, rotovator for tractor, leveller, sub-soil coir pith applicator, groundnut digger, and stripper and groundnut decordicator shall be distributed as package. For maize crop, chisel plough, ridger, sub-soil, coir pith applicator, raised bed seed drill, power weeder, rotovator for tractor, leveller, PTO Operated maize husker/sheller shall be distributed as package (Appendix III, Item No.45).

6.3.1.4. Restoration of Existing Water Bodies

During heavy rains, wells are damaged due to caving in of side walls, thus affecting the water holding capacity of wells as well as farm pumpsets. To maintain water use efficiency, restoration of water bodies like Farm Wells, Checkdams, Percolation ponds, Tanks etc., is very important (Appendix III, Item No.41 & 42).

6.3.2. Stream - II

The work components which were approved under on-going programmes are proposed under Stream-II in order to strengthen the on-going programmes and to supplement the required financial outlay

6.3.2.1. Popularisation of Agricultural Mechanisation through Conventional Farm **Machinery / Implements**

The farm implements like Power tillers, rotovators, cultivators, disc ploughs, offset disc harrows etc., are distributed to the farmers under the centrally sponsored ongoing programme. This programme created much awareness among the farming community through effective publicity measures taken by Agricultural Engineering Department (Appendix III, Item No.3).

6.3.2.2. Water Harvesting Structures

There is much scope for implementation of soil conservation works and rain water harvesting structures outside the designated micro watersheds. So, the work components like Farm Ponds-Unlined in private lands, Check dams-minor, medium and major-in gullies/streams located in public and private lands, Recharge shafts/pits, sunken ponds in public lands, rejuvenation of wells in private lands (by collection of rain water and fed into wells through filter pits) are proposed and the works would be implemented with subsidy pattern prescribed for on-going programmes (Appendix III, Item No.14).

6.3.2.3. Soil / Moisture Conservation Works

The work components viz., land shaping and compartmental bunding are proposed as soil and moisture conservation measures to be implemented in and outside the designated watersheds of the on-going watershed management programmes in need specific and site specific manner. The farmers face hardships to perform agricultural operations due to severe soil erosion and less moisture retention. Hence, the land shaping is proposed to be carried out and subsequently compartmental bunds will be provided to avoid soil erosion and to conserve moisture. By this, the farmers shall raise dry/irrigated crops and the crop productivity would be enhanced (Appendix III, Item No.12).

6.3.2.4. Water Management Works

For irrigated lands, to maximise irrigation efficiency with minimising conveyance losses, the PVC pipe laying works and ground level reservoir/collection tanks are proposed. In the irrigated lands with slope range 5-15 percent, the farmers face hardships to irrigate the annual / perennial crops due to permeable nature of soil with much conveyance losses and soil erosion. In such lands, the PVC pipe laying shall be done to minimize the conveyance losses and time taken for irrigation. The ground level reservoirs/collection taken shall be constructed in uplands to collect the irrigation water from open/bore wells located in lower areas and the irrigation shall be done through PVC Pipes by gravity flow. By this, the irrigation efficiency and crop productivity would be enhanced in irrigated lands (Appendix III, Item No.11).

6.3.2.5. Soil and Water Technology

In order to harvest the rain water, affluent farmers follow the practice of digging farm ponds. Helping the farmers in water harvesting would ease their burden in farming to a greater extent. Intervention measures thought of in this aspect are construction of unlined farm ponds, plastic lined farm ponds and compartmental bunding (all at 90 per cent subsided cost) to the beneficiaries (Appendix III, Item No.14).

It could be seen from Table 6.4 that a sum of Rs.748.14 crores is required by the Agricultural Engineering sector to resort to the development activities contemplated. is evident from the table that Dharmapuri, Thiruvarur and Thanjavur districts required major share and they put together accounted for 42.19 per cent of the total requirement at State level. The amount demanded by the remaining districts varied from Rs.1.72 crores in Kanniyakumari district to Rs.65.92 crores in Villupuram district. In Dharmapuri district nearly Rs.79.60 crores are requested for rain water harvesting structures to improve the ground water recharge and for structures to improve the soil and water conservation measures. The district-wise and activity-wise details are furnished in Appendix III.

Plate 8. Development Issues, Policy Options and the Interventions Recommended for Agrl. Engineering

Sl. No.	Major Development Issues	Policy Options	Nature of Interventions Recommended
1.	Introduction of newly developed farm machineries and equipments	Giving fillip to the spread of newly developed farm equipments and machineries	Distribution of newly developed machineries and equipments like cono -weeder, paddy transplanters, etc., with subsidy
2.	Whole - village mechanization	Popularization of the concept of whole village mechanization	Support to SHGs to own and hire out all possible machineries and equipments
3.	Soil and moisture conservation	Advocating soil and moisture conservation measures	Contour bundingBasin-listing
4.	Rain water harvesting	Popularize the effective rain water harvesting practices	 Deep/ summer ploughing Construction of check dams / waste viers Construction of farm ponds and percolation tanks
5.	Huge investment requirements and poor resource base of the farmers	Farmers may be helped by the financial institution in owning and hiring / using farm machineries	Encourage farmers with sizable subsidy to buy and operate farm equipments
6.	Distribution of conventional machineries and Equipments	Continuing popularization of the conventionally used farm machineries and equipments	 Distribution of conventionally used machineries like power tillers, tractors, trailers, etc.,
7.	Lack of knowledge on the up-keep of machineries and equipments	Educate farmers on the up-keep of farm machineries and equipments	 Arranging training of farmers and machinery operators Arrange visits to mechanized farms, villages, etc.,
8.	Non-affordability of the agrl. labourers in buying farm tools due to high prices	Distribute tool-kits to agrl. labour families particularly in the context of implementing the employment guarantee scheme	Mammuty, crow-bars, sickle, bill-book etc., may be distributed to the agrl. labour families at subsidized prices

Table 6.4 District-wise Budget Requirement for Agricultural Engineering Sector (Rs. in lakhs)

Sl.	Name of the		Ye	Total	Percen		
No.	District	2008-09	2009-10	2010-11	2011-12	Total	tage
1	Ariyalur	164.99	178.70	178.69	154.99	677.37	0.91
2	Coimbatore	764.29	498.38	492.24	557.75	2312.66	3.09
3	Cuddalore	1126.83	1255.25	1194.53	1535.51	5112.12	6.83
4	Dharmapuri	2877.22	3022.96	3164.94	3304.44	12368.56	16.53
5	Dindigul	212.91	215.46	213.96	212.51	854.84	1.14
6	Erode	589.03	580.53	579.08	570.93	2319.57	3.10
7	Kancheepuram	406.93	392.21	484.90	518.13	1802.17	2.41
8	Kanyakumari	33.82	34.30	49.47	54.28	171.87	0.23
9	Karur	204.33	218.78	198.33	213.48	834.92	1.12
10	Krishnagiri	145.19	162.89	145.42	161.77	615.27	0.82
11	Madurai	193.03	204.82	220.24	184.16	802.25	1.07
12	Nagapattinam	249.76	249.76	249.76	249.76	999.04	1.34
13	Namakkal	263.71	279.81	279.65	292.07	1115.24	1.49
14	Perambalur	162.65	177.58	177.58	162.65	680.46	0.91
15	Pudukkottai	564.49	808.11	694.27	690.70	2757.57	3.69
16	Ramanathapuram	62.55	63.00	63.00	63.00	251.55	0.34
17	Salem	651.10	651.42	654.99	657.47	2614.98	3.50
18	Sivagangai	851.51	894.21	922.31	890.91	3558.92	4.76
19	Thanjavur	1863.20	1960.92	2153.82	2509.24	8487.18	11.34
20	Theni	207.16	227.58	219.15	225.01	878.90	1.17
21	Thiruvallur	214.05	213.30	198.81	152.69	778.85	1.04
22	Thiruvarur	2688.88	2758.27	2638.47	2699.90	10785.52	14.42
23	Thoothukudi	214.33	216.09	218.90	219.76	869.08	1.16
24	Tirunelveli	185.83	199.35	207.33	210.49	803.00	1.07
25	Thiruvannamalai	576.36	584.86	639.96	639.08	2440.26	3.26
26	Tiruchirappalli	0.00	0.00	0.00	0.00	0.00	0.00
27	Vellore	504.79	504.79	504.79	504.79	2019.16	2.70
28	Villupuram	1686.46	1682.46	1722.46	1500.94	6592.32	8.81
29	Virudhunagar	307.40	334.32	334.32	334.31	1310.35	1.75
	Total	17972.80	18570.11	18801.37	19469.72	74813.98	100.00

6.4 Agricultural Marketing and Agri-Business Sector

Depending on the development issues identified, the policy has been opted and hence the specific interventions have been recommended for the development of Agricultural Marketing and Agribusiness sector, as detailed in Plate 9. Further, these major recommended interventions have been projectized in the action plans of the DAPs. A brief descreption on the major interventions recommended is given below:

6.4.1. Arrangement of buyer-seller meetings

"Buyers and sellers meet" functions as a platform in linking agribusiness community namely farmers, traders, commission agents, agricultural processed food organizations, millers, machinery manufacturers in an egalitarian exchange of ideas and materials. It could be beautifully explained as a business partnership between producers and buyers to enhance their knowledge for mutual gain. Arrangement of these meetings brings together the two important aspects of success i.e. technology and human resource (Appendix IV, Item No.7).

6.4.2. Capacity building

Under this scheme trainings will be Organized to farmers / commodity groups on warehousing and storage, grading, market intelligence and post-harvest management of selected commodities and awareness programme is to be undertaken to demystify the commodity futures markets and enable the farmers to enter into futures contract so as to insure their price risk. Farmers get benefited from deregulation of markets, minimum guaranteed price scheme, contract farming, and crop/income insurance, only to the extent they organize in marketing groups, self-help groups, cooperatives or companies and learn skills suited to the new marketing environment (Appendix IV, Item No.3)

6.4.3. Commodity group formation

The inefficient marketing system leads to unavoidable waste of the products. Major part of the losses can be saved by introducing scale and technology in agricultural marketing. Now-a-days the extent of benefit obtained by the farmer-producers (out of saving of avoidable waste) depends on the group-marketing practices adopted by them. In this sense, Farmers' Groups / Commodity Groups need to be promoted for undertaking marketing activities on behalf of the individual members of the group. Based on the international experience, in view of expanding retail trade, organizing the farmers and

equipping the commodity groups can facilitate the aggregation of produce and also enhance the bargaining power of the farmers. Adoption of technologies both in production and postharvest management which is expected to flow from the organized retailers and other research institutions can be efficient through the farmers' commodity groups. Therefore it is proposed to organize the commodity groups for marketing of agricultural commodities in Tamil Nadu over a period of five years (Appendix IV, Item No.2).

6.4.4. Exposure visit to markets

Visit to important markets, where new opportunity for marketing of the commodities and consumer preference exist. Visit to other areas, where new technologies are adopted successfully i.e., exposure visits, is an important method to enlighten the farmers for implementing those technologies in their areas also. It is easy to know the new technology through demonstration. Farmers will be selected to visit different places within the State where the technologies are well adopted. Therefore, it is proposed to organize the exposure visits to important markets with-in and out side the state by commodity groups / farmers and extension functionaries in the state over a period of five years (Appendix IV, Item No.4).

6.4.5. Facilitation of contract Farming

Apart from linking the farmers to consumers through farmer's organizations, another initiative for reducing transaction cost is the establishment of direct channel between farmer-producer and bulk consumers, through contract farming (CF). Farmers also get an access to new technologies and inputs, including credit through contracts which other-wise may be beyond their reaches. (Appendix IV, Item No.9)

6.4.6. Market infra structure activities

Marketing of Agricultural commodities and perishable Horticultural commodities with remunerative price is a major challenge for the farmers/ producers. It is essential to develop product specific marketing Infrastructure and also safe and scientific storage methods (Appendix IV, Item No.1).

6.4.7. Market intelligence Dissemination

Dissemination of Market intelligence provided by the Domestic and Export Market Intelligence Cell, Centre for Agricultural and Rural Development Studies, Tamil

Nadu Agricultural University, Coimbatore and other agencies through different mass media to get accurate and timely information about the market prices of the agricultural commodities, place of marketing, time of marketing etc (Appendix IV, Item No.6).

6.4.8. Market Price Surveillance

Collection of real time data in the open markets for major agricultural commodities and further analysis is essential for forecasting of prices well in advance of the sowing season so that farmers can take their sowing decisions on a scientific basis. This collection of time series and current/real time data will be sent to Domestic and Export Market Intelligence Cell of Tamil Nadu Agricultural University, for processing and further analysis to forecast prices of major agricultural commodities. This will enhance the income of the farmers (Appendix IV, Item No.10).

6.4.9. Publicity of regulated markets

Arrivals to market yards of Regulated Markets is only about 15 per cent of the marketed surplus in Tamil Nadu. Similarly sale through Uzhavar Shandies is also limited in case of fruits and vegetables. Hence it is necessary to have publicity programme on the benefits of sale through regulated markets and Uzhavar Shandies, so that the net price realized by the farmers could be increased (Appendix IV, Item No.5).

6.4.10. Strengthening of Market extension Centre

Market led Extension is now becoming more diversified, technology intensive, knowledge oriented and more demand-driven. This requires the extension workers at the cutting edge level to be master of so many trades, which is neither practicable nor possible. Use of IT in extension enables the extension workers to be more effective in meeting the information needs of farmers. The growing Information and communication technologies used widely in the entire developmental sector except in agricultural sector. Use of interactive multimedia and such other tools will help the extension workers to serve the farmers better. Similarly, the extension system has to utilize the existing print and electronic mass media for faster dissemination of information to farmers (Appendix IV, Item No.8).

6.4.11. Strengthening of Village Shandies

Considering the importance of Rural Primary Markets, there is an urgent need to develop the rural periodic markets in a phased manner with necessary infrastructural amenities to have a strong base of the marketing channel. Strengthening of selected village shandies through establishing grading facilities, standardization facilities, price display mechanism and providing electronic weighing machines, is very much needed (Appendix IV, Item No.11).

In all, Rs.55.61 crores are requested by the Agricultural Marketing and Agri-Business Sector as could be seen in Table 6.5. The district-wise, amount required varied from Rs.68.93 lakhs in Ramanathapuram district to Rs.7.04 crores in Tiruchirapalli district. Next to Tiruchirappalli district, Villupuram, Vellore, Erode and Krishnagiri districts demand Rs.3.82 crores, Rs.3.49 crores, Rs.3.45 and 3.23 crores respectively for undertaking the development activities in the marketing sector. The marketing sector of Tiruchirappalli demanded Rs.3.29 crores for market infrastructure activities like collection centres etc. as compared to other districts. District-wise and activity-wise details are furnished in Appendix IV.

The total budget requirement for the agricultural marketing and agricultural business sector amount to Rs. 25129.11 lakhs for the year 2011-12 and the details are furnished in Table 6.5. and 6.5a.

Plate 9. Development Issues, Policy Options and the Interventions Recommended for Agrl. Marketing & Agri business

Sl. No.	Major Development Issues	Policy Options	Nature of Interventions Recommended
1.	Lack of organized efforts among farmers	Encouraging the organized group action among farmers	Organizing commodity groups for paddy, pulses onion, banana, mango & flowers
2.	Price risk and supply uncertainties	Encouraging contract farming between buyers and primary producers viz., farmers	Organizing contract farming between primary producers viz the farmers, traders and processors
3.	Farmers and merchants are in need of market information and intelligence	Strengthening market information and intelligence activities	Price surveillanceDissemination of market information and intelligence
4.	Lack of business contact and co- ordination between buyers and sellers	Encouraging business contacts and co- ordination between farmer sellers and buyer-traders	Aranging farmers and buyers meet
5.	Lack of knowledge on the functional effectiveness of the various marketing systems	Exposing the farmers to various marketing systems	Organizing exposure visits to important markets within and outside the state
6.	Farmers lack knowledge on market- led/demand- driven farming	Strengthnening the marketing extension activities	Establishment of marketing extension centre at each block/district level and educating the farmers
7.	village shandies/periodic markets lack of infrastructure facilities	Modernization of the village shandies/ periodic markets	Modernization /strengthening the village shandies/periodic markets
8.	Poor knowledge base and skill of the farmers regarding farm products marketing decisions	Arranging training programmes for capacity building among farmers	Organizing training programmes for capacity building of the farmers regarding marketing decisions
9.	Organized markets like regulated markets and uzhavar sandais lack adequate infrastructure facilities	Supporting the infrastructure development in the regulated markets and uzhavar sandai	Strengthening the infrastructure facilities including equipments in the select regulated markets and uzhavar sandais
10.	Lack of awareness and wide gap between awareness and adoption	Intensification of publicity/propaganda and public relations activities by regulated markets and uzhavar sandais	Strengthening public relations, propaganda and publicity activities by regulated markets and uzhavar sandais

Table 6.5 a. District-Wise Budget Requirement for Agricultural Marketing and Agri-Business Sector

(Rs. in lakhs)

Sl.	Name of the	Year				, , , , , , , , , , , , , , , , , , ,	Percen
No.	District	2008-09	2009-10	2010-11	2011-12	Total	tage
1	Ariyalur	17.60	21.82	24.86	30.35	94.63	1.70
2	Coimbatore	64.75	61.11	53.58	58.05	237.48	4.27
3	Cuddalore	75.55	32.28	22.74	24.64	155.21	2.79
4	Dharmapuri	70.85	75.15	73.54	76.91	296.45	5.33
5	Dindigul	30.90	33.94	35.78	38.59	139.21	2.50
6	Erode	99.20	76.23	81.75	88.62	345.80	6.22
7	Kancheepuram	31.85	32.29	35.27	38.30	137.70	2.48
8	Kanyakumari	20.70	20.02	22.59	22.97	86.28	1.55
9	Karur	34.85	35.34	38.65	42.00	150.83	2.71
10	Krishnagiri	104.85	72.93	70.91	74.37	323.06	5.81
11	Madurai	99.35	64.12	40.01	43.44	246.91	4.44
12	Nagapattinam	19.60	22.41	25.24	28.71	95.96	1.73
13	Namakkal	27.70	24.92	27.73	29.64	109.99	1.98
14	Perambalur	16.00	16.76	21.74	26.97	81.47	1.47
15	Pudukkottai	57.30	52.44	47.69	36.80	194.23	3.49
16	Ramanathapuram	17.56	15.62	17.16	18.59	68.93	1.24
17	Salem	33.30	30.40	32.94	35.26	131.90	2.37
18	Sivagangai	20.07	20.26	22.23	24.10	86.66	1.56
19	Thanjavur	40.45	40.09	43.74	47.39	171.67	3.09
20	Theni	33.50	29.48	34.35	47.54	144.87	2.61
21	Thiruvallur	35.55	38.99	39.32	42.62	156.48	2.81
22	Thiruvarur	64.95	60.75	67.36	80.19	273.25	4.91
23	Thoothukudi	62.55	28.33	33.69	35.39	159.96	2.88
24	Tirunelveli	20.85	16.34	17.84	19.32	74.34	1.34
25	Thiruvannamalai	19.65	16.45	19.89	20.31	76.29	1.37
26	Tiruchirappalli	157.75	163.61	183.74	199.04	704.13	12.66
27	Vellore	60.79	66.41	99.16	122.70	349.06	6.28
28	Villupuram	85.80	90.53	98.78	107.04	382.15	6.87
29	Virudhunagar	24.57	18.72	20.42	22.13	85.84	1.54
	Total	1448.39	1277.70	1352.69	1481.96	5560.74	100.00

Table 6.5 b. District-Wise Budget Requirement for Additional Agricultural Marketing and Agri - Business Sector

(Rs. in lakhs)

			T 7		(Rs. in lakins)		
Sl. No.	No. Name of the District		No. Name of the District Year			Total	Percentage
		2009-10	2010-11	2011-12			
1	Ariyalur*						
2	Coimbatore	155.91	193.50	223.50	572.91	2.93	
3	Cuddalore	417.41	356.11	335.04	1108.56	5.67	
4	Dharmapuri	252.24	296.99	194.83	744.06	3.80	
5	Dindigul	140.95	220.55	185.65	547.15	2.80	
6	Erode	465.20	375.75	392.45	1233.40	6.31	
7	Kancheepuram	1022.10	277.60	202.60	1502.30	7.68	
8	Kanyakumari	91.16	65.66	72.24	229.06	1.17	
9	Karur	132.35	101.25	109.25	342.85	1.75	
10	Krishnagiri	146.81	227.76	195.06	569.63	2.91	
11	Madurai	285.60	202.80	169.60	658.00	3.36	
12	Nagapattinam	102.55	239.60	94.50	436.65	2.23	
13	Namakkal	101.81	99.73	89.90	291.44	1.49	
14	Perambalur	204.50	191.75	228.50	624.75	3.19	
15	Pudukottai	224.50	248.15	186.00	658.65	3.37	
16	Ramanathapuram	100.50	79.50	49.00	229.00	1.17	
17	Salem	120.70	253.98	237.77	612.45	3.13	
18	Sivagangai	127.23	55.05	36.22	218.50	1.12	
19	Thanjavur	273.17	238.57	247.07	758.81	3.88	
20	Theni	132.10	237.60	248.00	617.70	3.16	
21	Thiruvallur	1232.00	101.00	101.00	1434.00	7.33	
22	Thiruvarur	276.00	282.75	166.10	724.85	3.71	
23	Thoothukudi	243.05	222.15	214.00	679.20	3.47	
24	Tirunelveli	156.50	126.00	138.60	421.10	2.15	
25	Thiruvannamalai	123.68	285.18	133.18	542.04	2.77	
26	Tiruchirappalli	724.11	690.97	710.22	2125.30	10.87	
27	Vellore	66.40	104.90	44.75	216.05	1.10	
28	Villupuram	277.30	402.50	315.60	995.40	5.09	
29	Virudhunagar	160.950	156.814	147.553	465.32	2.38	
	Total	7756.78	6334.16	5468.18	19559.13	100.00	

^{*} Included Perambalur district

6.5 Animal Husbandry Sector

Depending on the development issues identified, the policy has been opted and hence the specific interventions have been recommended for the development of Animal Husbandry Sector, as detailed in Plate 10. Further, these major recommended interventions have been projectized in the action plans of the DAPs. A brief descreption on the major interventions recommended is given below:

6.5.1. Genetic Upgradation

The buffalo calves of both sexes are highly neglected and very often affected with parasites and malnutrition resulting in stunted growth and late sexual maturity. To improve the conception rate and reduce inter-calving period in buffaloe, genetic upgradation is necessary to demonstrate heat synchronization in buffaloes, followed by AI, popularize concentrate feed supplementing strategy to buffalo calves of both sexes and maintain data base on breedable bovines for future planning (Appendix V, Item No.2).

6.5.2. Improvement of livestock health services

There is a shortfall in the number of veterinarians in most of the districts as against the total livestock population. Hence, door-to-door timely health cover facilities especially in the remote villages of the district are very essential. Establishing the mobile veterinary diagnostic laboratory is very much needed during disease out breaks for early diagnosis of the disease so that proper control measures could be initiated. And also, certain basic facilities like fencing, provision of bore-wells, water troughs and minor repair works need to be carried out (Appendix V, Item No.3).

6.5.3. Feed and Fodder development

Acute shortage of green fodder is one of the major factors limiting dairy development in most of the dry tracks of Tamil Nadu. Hence, to augment the availability of green fodder, intensive fodder production programme has been taken up by the Department of Animal Husbandry (Appendix V, Item No.1).

6.5.4. Institutional development and Extension Services

Extension services are the linkages between researchers and farmers for transfer of technologies. Extension services are the tools for technology transfer in time to improve the socio-economic conditions of the farmers. For better services, the extension

unit needs better audio-visual aids, and demonstration units to provide conducive atmosphere for the farmers to learn. (Appendix V, Item No.4).

6.5.5. Capacity Building / Farmers and technical staff

Extension services provide the much needed information resource and develop the skill of Livestock growers to adopt newer technologies. Capacity building is a continuous process having the components of Training, Village level meetings, demonstrations, learning by seeing etc. The project aims at updating the livestock growers with recent scientific interventions and developing their skill to adopt them (Appendix V, Item No.6).

6.5.6. Improvement of milk collection / Marketing / Processing

Provision of milking machines will help to improve the collection and quality of milk. Milk coolers would improve the keeping quality of milk until it is processed and marketed. In societies handling more than 500 litres of milk per day, it is essential to establish PC- based automatic milk collection stations. Energy management system in the main processing plant will save power and will be economical. The quality assurance laboratory at the Aavin main dairy could be strengthened with certain basic facilities for assessment of milk quality at different stages of processing and marketing (Appendix V, Item No.5).

6.5.7. Popularising small Ruminants-Farming System

This system is to educate the farmers and popularize the semi-intensive and intensive management systems. By switching over to Semi intensive or Intensive systems of management with scientific interventions, the animals receive year – round good nutrition and maintain good production potential with better cost-benefit ratio. In these systems the available crop residues could also be effectively utilized (Appendix V, Item No.8).

6.5.8. Provision of ELISA Kit

ELISA kits are provided to test the presence of Avian Influenza antibodies. Although Avian Influenza has not been recorded so far in Tamil Nadu, the exporters of egg and egg products in the state have incurred heavy losses to the tune of Rs.200 crores as the importing countries banned the import of eggs and egg products from Tamil Nadu. The layer farms involved in export of eggs have to produce 'NAI Free Establishment

Certification' and ELISA kits have to be imported for routine screening of sera samples for A.I antibodies (Appendix V, Item No.9).

6.5.9. Popularising Backyard poultry

Encouraging rural women folk to take up backyard poultry, as an incomegenerating venture will help in increasing their house hold income. More over, it will also supplement the vital protein needs of their family. Members of the women self help group are being provided with improved desi chicken/turkeys to augment their house hold income. (Appendix V, Item No.10).

6.5.10. Germplasm production Centre for Small Ruminants

Inbreeding and non-availability of quality germ plasm are the major reasons for low productivity in small ruminants. The Government farms which are the major sources of germ plasm input do not cope up with the demand. Hence, establishing germplasm production centres by SHG for distribution to other needy farmers at nominal rates will help in improved production of germplasm (Appendix V, Item No.7).

The district-wise details of funds required for developing the animal husbandry sector are furnished in Table 6.6. It could be seen that a sum of Rs.394.33 crores is required by the animal husbandry sector to carry out the action plans contemplated by them. Perusal of the table revealed that, the funds required varied from Rs.606.12 lakhs in Nagapattinam district to Rs.3138.99 lakhs in Thiruvallur district. In Thiruvallur district, it has been programmed to establish cattle feed plant at a cost of Rs.465.00 lakhs, Livestock and Poultry Entrepreneurship Development Complex at a cost of Rs.452.40 lakhs and Strengthening of the Infrastructure for Central University Laboratory at a cost of Rs.397.50 lakhs besides the other development activities. On an average Rs.13.59 crores is requested by each district. However, only twelve districts viz., Ariyalur, Dharmapuri, Dindigul, Erode, Kancheepuram, Krishnagiri, Madurai, Namakkal, Salem, Thanjavur, Thiruvallur, Tirunelveli and Villupuram districts have demanded more than the state' average towards the development activities. The district-wise and activity wise details are furnished in Appendix V.

Plate 10. Development Issues, Policy Options and the Interventions Recommended for Animal Husbandry Sector

Sl. No.	Major Development Issues	Policy Options	Nature of Interventions Recommended
1	There exists a wide gap between the demand and supply of green fodder	Encourage farmers to cultivate fodder in their own farms/back yards	 Scheme to intensify fodder cultivation with free supply of slips in small land area/back yards
2	Dimminishing grazing land areas and their poor quality	Arresting the down-trend in grazing land areas and rejunevating with high-yielding grasses	 Commercial cultivation of fodder involving self-help group/private Educating the farmers in arresting the diversion of grass lands to some other purposesses High yielding grass varieties may be popularized
3	Lack of scientific knowledge on balanced feeding especially for the cross-bred animals	feeding of animals	 Supply of mineral mixture at subsidized prices Farmers training on balanced feeding
4	Lack of scientific knowledge on rearing of calves and heafers	rearing of calves and heafers	 Free supply of wormicides with subsidy Conducting demonstrations Arranging Farmers training
5	Inadequate genetically superior bulls, bucks and rams	Provision of infrastructure facilities in the Government Livestock farms	Grant for development of livestock farms / Import of pedigree stock
6	Infertility among cross-bred cows and delayed conceivement among buffallows	Strengthening of the veterinary institutions for quick access	Grant for opening more veterinary -institutions to have easy and quick access to farmers
7	Inadequate animal helath-care centers/veterinary institutions	Starting more veterinary centres/dispensaries/hospitals	Grant for opening more veterinary centres/hospitals/dispensaries
8	Farmers lack knowledge and enthusiasim in rabbit farming and Japanees quail farming	Encouraging farmers on the importance and profitability of rabbit farming and Japaneese quail farming	Educate farmers with subsidy components for starting rabbit farming and Japaneese quail farming
9	Inadequate processing facilities for increasing production of milk products like butter, ghee, palpeda, Ice-cream, etc.,	Developing/modernizing the infrastructure for production of more and more processed products	 Supply of processing equipments and related accessories at subsidized prices
10	The milk and milk products marketing system needs further modernization and improvement	Strengthening the milk marketing system under co-operatives	 Supply of equipments, accessories and transport vechicles at subsidized prices

 ${\bf Table~6.6~District\hbox{-}wise~Budget~Requirement~for~Animal~Husbandry~Sector}$ (Rs. in lakhs)

Sl.	Name of the		Year	•	Total	Percen	
No.	District	2008-09	2009-10	2010-11	2011-12	Total	tage
1	Coimbatore	885.72	296.70	257.68	252.79	1692.89	4.29
2	Cuddalore	570.67	147.54	144.47	140.47	1003.15	2.54
3	Dharmapuri	480.16	196.47	194.38	192.87	1063.88	2.70
4	Dindigul	647.42	376.26	247.40	237.14	1508.21	3.82
5	Erode	812.75	250.44	246.40	245.93	1555.51	3.94
6	Kancheepuram	984.39	250.42	190.14	192.05	1617.00	4.10
7	Kanyakumari	481.19	132.40	120.61	117.07	851.28	2.16
8	Karur	367.51	144.78	142.98	141.31	796.57	2.02
9	Krishnagiri	1542.66	504.48	180.21	177.65	2402.00	6.09
10	Madurai	781.20	521.29	544.40	253.80	2100.69	5.33
11	Nagapattinam	403.11	75.29	64.11	63.61	606.12	1.54
12	Namakkal	841.80	237.79	237.02	233.77	1550.38	3.93
13	Perambalur	430.14	177.52	128.37	124.53	860.56	2.18
14	Pudukkottai	924.07	148.75	117.64	117.14	1307.60	3.32
15	Ramanathapuram	472.12	95.28	95.28	94.78	757.44	1.92
16	Salem	829.38	352.20	292.94	291.67	1766.19	4.48
17	Sivagangai	755.51	86.70	86.70	85.09	1014.00	2.57
18	Thanjavur	1024.44	528.36	306.17	95.91	1954.87	4.96
19	Theni	553.30	246.64	211.82	206.07	1217.82	3.09
20	Thiruvallur	2061.67	555.31	246.10	275.92	3138.99	7.96
21	Thiruvarur	680.23	72.35	55.55	55.05	863.18	2.19
22	Thoothukudi	516.09	213.97	149.72	149.22	1029.00	2.61
23	Tirunelveli	1120.20	298.73	236.97	286.59	1942.49	4.93
24	Thiruvannamalai	636.25	224.52	222.63	218.91	1302.31	3.30
25	Tiruchirappalli	483.35	180.31	194.91	136.32	994.89	2.52
26	Vellore	662.02	191.53	191.53	186.63	1231.69	3.12
27	Villupuram	1528.45	648.83	211.79	208.76	2597.83	6.59
28	Virudhunagar	456.98	84.51	83.39	82.09	706.95	1.79
	Total	21932.76	7239.35	5401.28	4863.11	39433.50	100.00

6.6. Fisheries Sector

Depending on the development issues identified, the policy has been opted and hence the specific interventions have been recommended for the development of Fisheries Sector, as detailed in Plate 11. Further, these major recommended interventions have been projectized in the action plans of the DAPs. A brief descreption on the major interventions recommended are given below:

6.6.1. Fish Seed rearing / production/ Nursery

Expansion of fish seed rearing by private entrepreneurs by providing seed rearing through cages will increase the fish production. Inadequate infrastructure development causing problems to attain self-sufficiency in seed production. Fish seed production / rearing in private sector should be encouraged to minimize import from other States (Appendix VI, Item No.2)

6.6.2. Capacity building / Training / Demonstration / Study Tour

The fisher folks will immensely get benefited by the training given in the recent technologies regarding advanced fish culture methods. As these fishermen are very poor and they must be supported with financial help to undergo the training programme. order to meet out the training cost and the exposure visit expenses for learning the technologies, they must be financially assisted. Imparting training in such fish culture practices would generate employment opportunities and make them self-reliant and socially and economically empowered (Appendix VI, Item No.8)

6.6.3. Establishing fish stall / Retail Market

The improperly stored unsold fish kept overnight result in spoilage and loss of quality and revenue. To avoid this, intervention is necessary to establish modern fish retail outlets throughout the districts of Tamil Nadu. The modern fish retail outlets will be used to keep the excess stock until selling (Appendix VI, Item No.4)

6.6.4. Creation of Infrastructure facilities

At present the shrimp farmers are finding it difficult to continue shrimp farming and composite fish culture because of price fluctuations, diseases, international market price fluctuations etc. Therefore, it is necessary to provide adequate infrastructure facilities to sustain the growth and retain the fish farmers to continue aquaculture practices (Appendix VI, Item No.1)

6.6.5. Provision of moped with Ice box

The mopeds with icebox will be provided to inland fishermen for hygienic marketing. The fish caught in the coast, rivers, weirs and rural ponds reach the market and the consumers in poor quality. To add value and quality to the landings, it is necessary to provide them with mopeds with ice boxes to reach consurring destinations in a shorter time period without much deterioration in quality (Appendix VI, Item No.9)

6.6.6. Fish Culture/ Integrated Coastal Aqua / Ornamental Fish

Fish culture in a natural small water system is being practiced by stock and harvest system and not by scientific culture method (Appendix VI, Item No.3)

6.6.7. Sea Ranching

In the present marine landings the quantity of shrimp and high quality fishes are decreasing. To enhance the quantity of shrimps and other quality fishes, it is necessary to replenish the marine resources by ranching the quality shrimp and fish seeds into the sea (Appendix VI, Item No.5).

6.6.8. Fisheries Research

Ninety five per cent of our ornamental fish export is based on wild collection. Moreover, most of the fish species grown for their ornamental importance can be bred in India successfully (Appendix VI, Item No.6)

A sum of Rs.135.24 crores is required by the Fisheries sector for carrying out the developmental activities and the details are furnished in Table 6.7. required by the districts ranged from Rs.14.77 crores in Thoothukudi district to Rs.56.58 lakhs in Karur district. It has been programmed by Fisheries department in Thoothukudi district to modernize the mechanized fishing vessels at a cost of Rs.137.50 lakhs and establishment of multi species hatchery at an amount of Rs.200.00 lakhs. Similarly TANUVAS has planned to sea ranching for stock enhancement at a cost of Rs.140.00 lakhs, development of E-Extension facility for stakeholders at a cost of Rs.150.00 lakhs and resource mapping of marine and inland fishes using rentle sensing. On an average Rs.4.66 crores are required by each district. In all 14 districts have demanded more than state' average requirement. District-wise and internation-wise budget requirements are furnished in Appendix VI.

Plate 11. Development Issues, Policy Options and the Interventions Recommended for Fisheries Sector

Sl. No.	Major Development Issues	Policy Options	Nature of Interventions Recommended
I.	Marine Fisheris		
1.	Inadequate modern fishing fleet to tap off- shore resources	Helping the fishermen through financial support	Provisions of mechanized fleet at subsidized prices to fishermen
2	In the present marine landings, the quantity of shrimps and high quality fishes are decreasing	Encourage sea ranching with all scientific wherewithals	Sea ranching of quality shrimp and fish seeds into the sea
3	Depleting fish stock and poor fish catch	Enrich the fish stock through scientific approach	Development of artificial reafs as fish habitats in the inshore-with subsidy
4	Poorly maintained and impoverished fish retail markets	Strengthening the retail markets with adequate infrastructure	Construction of retail market with required infrastructure on the scientific lines. Grant may be extended
5	Quick transportation of fresh fish to longer distances and remote places	Support the transport facilities and refrigerated storage	Supplying Moped fitted with ice boxes at subsidized
II	Inland Fisheries		•
1	Heavy demand for fish seeds and low level of production	Supporting the fish seeds production/rearing units	Financial support to start fish seed rearing both in private and Government farms
2	Existing government owned fish seed rearing centres require renovation and strengthening	Supporting with financial aids the government owned fish seed rearing centres	Grants and subsidies may be extended for government owned centres
3	Insufficient fishing crafts and gears with inland fisher folks	Government support may be extended	Supply of crafts and gears/nets at subsidized
4	Un-met demand for ornamented fishes	Encouraging rearing of ornamental fishes for aesthetic sense among publics	Establishment of ornamentel fish rearing centre and breeding unit with financial support and subsidy as a business venture

Table 6.7 District-wise Budget Requirement for Fisheries Sector

(Rs. in lakhs)

Sl.	Name of the	Year				Total	Percen
No.	District	2008-09	2009-10	2010-11	2011-12	1 Otal	tage
1	Coimbatore	466.00	319.50	127.00	17.00	929.50	6.87
2	Cuddalore	174.11	93.63	108.63	162.75	539.12	3.99
3	Dharmapuri	214.86	67.22	19.36	16.36	317.80	2.35
4	Dindigul	23.75	115.93	11.63	19.13	170.43	1.26
5	Erode	134.00	136.00	134.50	2.50	407.00	3.01
6	Kancheepuram	251.75	121.75	123.00	73.50	570.00	4.21
7	Kanyakumari	184.18	214.81	48.50	106.00	553.49	4.09
8	Karur	36.08	14.00	4.00	2.50	56.68	0.42
9	Krishnagiri	75.65	115.00	9.90	8.40	208.95	1.54
10	Madurai	105.80	539.75	57.00	24.50	727.05	5.38
11	Nagapattinam	199.00	218.00	228.00	257.00	902.00	6.67
12	Namakkal	35.45	35.45	17.95	10.45	99.30	0.73
13	Perambalur	8.20	10.40	8.15	6.50	33.25	0.25
14	Pudukkottai	144.35	134.85	140.35	80.35	499.90	3.70
15	Ramanathapuram	149.85	256.35	112.35	98.35	616.90	4.56
16	Salem	313.14	190.50	191.50	142.00	837.14	6.19
17	Sivagangai	18.75	8.75	8.75	8.75	45.00	0.33
18	Thanjavur	434.60	340.85	256.60	221.60	1253.65	9.27
19	Theni	67.90	25.20	9.90	8.10	111.10	0.82
20	Thiruvallur	183.70	65.20	65.20	61.40	375.50	2.78
21	Thiruvarur	265.55	172.55	171.15	38.25	647.50	4.79
22	Thoothukudi	1060.25	210.25	142.75	63.75	1477.00	10.92
23	Tirunelveli	164.50	394.45	186.00	50.50	795.45	5.88
24	Thiruvannamalai	184.16	19.16	13.41	6.50	223.24	1.65
25	Tiruchirappalli	354.20	12.00	12.00	5.50	383.70	2.84
26	Vellore	30.56	20.56	17.31	12.25	80.69	0.60
27	Villupuram	240.48	117.90	132.90	46.15	537.43	3.97
28	Virudhunagar	38.50	30.75	30.75	26.25	126.25	0.93
	Total	5559.326	4000.76	2388.54	1576.29	13524.91	100.00

6.7. Public Works Department Sector

Depending on the development issues identified, the policy has been opted and hence the specific interventions have been recommended for the development of Fisheries Sector, as detailed in Plate 12. Further, these major recommended interventions have been projectized in the action plans of the DAPs. A brief descreption on the major interventions recommended is given below:

6.7.1. Water Resources Organization / PWD

The rivers and water ways and the respective irrigation structures are managed by State Public Works Department. Silting of waterways, dilapidated irrigation structures and the devices are the major problems handled by the PWD, in addition to arranging for orderly flow of irrigation water through the channels to the cultivable fields. Water inundation in low lying areas especially during rainy seasons is the other problem confronted by the PWD in the district. Rehabilitation of the system and non-system tanks in the river basins is the major work, to be carried over. The construction of dams, tanks, anicuts and canals is to be attended to. Rainwater harvesting, Drip Irrigation and wells digging renovation etc. are also to be attended based on the need.

The district-wise budget requirement of Public Works Department in given in Table 6.8. It could be seen that a sum of Rs.872.36 crores in required for the state as a whole. The budget required varied from Rs.2.06 crores in Perambalur district to 171.20 crores in Sivagangai district. Madurai, Nagapattinam, Namakkal, Pudukkottai, Thanjavur, Tiruvarur and Virudhunagar districts have not demanded towards the development activities of Public Works Department. The district-wise and scheme-wise activities are furnished in Appendix VII.

Plate 12. Development Issues, Policy Options and the Interventions Recommended for Public Works Department Sector

Sl. No.	Major Development Issues	Policy Options	Nature of Interventions Recommended
1	Heavy silting of canals, tanks and reservoirs	Desilting of water bodies may be periodically taken up	Desilting of canals, tanks and reservoirs etc., periodically
2	Delapidated water structures / irrigation devices	Repairing and Renovation works may be periodically taken up during off-season	Upkeep works may be taken upon a continuous basis
3	Bad conditions of approach roads to tanks and canals	Approach roads to water bodies may be modernized	Laying and repairing of approach roads along the canals, tanks etc.,
4	Recurring Flash floods and flood damages during rainy seasons	Takingup flood control measures with long term perspective	Flood control measures in frequently recurring flood damaged areas/water bodies
5	Wastage of irrigation water by farmers	Organizing farmers training and formation of Water Users' Association (WUA)	 Farmers training on water management Formation of Water Users Association (WUA)
6	Exploratory survey to identify new irrigation projects	Encourage exploratory survey to conceive new irrigation projects	Exploratory survey on permenant footing and identification of new irrigation projects.
7	Sea water intrusion through rivers especially during summer	Prevention of sea water intrution through irrigation structures	Construction of shafts and barrages just at the confluence of river in to the sea

Table 6.8 District-wise Budget Requirement for Public Works Department Sector (Rs. in lakhs)

Sl.	Name of the	e Year					Percen	
No.	District	2008-09	2009-10	2010-11	2011-12	Total	tage	
1.	Coimbatore	880.00	755.00	635.00	630.00	2900.00	3.32	
2.	Cuddalore	1453.50	1674.00	2940.00	2137.00	8204.50	9.40	
3.	Dharmapuri	615.50	487.00	505.00	533.00	2140.50	2.45	
4.	Dindigul	854.00	942.50	125.00	60.00	1981.50	2.27	
5.	Erode	1541.90	1969.85	1799.55	1692.90	7004.20	8.03	
6.	Kancheepuram	0.00	0.00	0.00	505.00	505.00	0.58	
7.	Kanyakumari	2689.05	2689.05	2689.05	2689.05	10756.20	12.33	
8.	Karur	2719.00	2465.00	500.00	420.00	6104.00	7.00	
9.	Krishnagiri	408.00	180.00	147.00	165.00	900.00	1.03	
10.	Perambalur	44.55	62.11	53.21	46.50	206.37	0.24	
11.	Ramanathapuram	319.43	1756.32	1375.99	962.46	4414.20	5.06	
12.	Salem	125.00	105.00	95.00	125.00	450.00	0.52	
13.	Sivagangai	3127.72	5890.80	3599.09	4505.76	17123.37	19.63	
14.	Theni	950.00	-	-	-	950.00	1.09	
15.	Thiruvallur	618.00	0.00	0.00	0.00	618.00	0.71	
16.	Thiruvannamalai	1084.00	949.50	737.95	539.25	3310.70	3.80	
17.	Thoothukudi	1079.50	600.00	600.00	635.50	2915.00	3.34	
18.	Tiruchirappalli	1901.00	0.00	0.00	0.00	1901.00	2.18	
19.	Tirunelveli	598.00	687.00	436.33	319.58	2040.91	2.34	
20.	Vellore	9132.80	0.00	0.00	0.00	9132.80	10.47	
21.	Villupuram	1406.50	739.00	702.50	829.86	3677.86	4.22	
	Total	31547.45	21952.13	16940.67	16795.86	87236.11	100.00	

6.8 Sericulture Sector

Of the 29 districts considered, only seven districts viz., Dharmapuri, Dindigul, Erode, Karur, Namakkal, Salem Vellore have requested Rs.38.75 crores for undertaking development activities in Sericulture. Among the seven districts, Dharmapuri and Erode put together accounted for 81.74 per cent of the total amount required at the state level. The details are furnished in Table 6.9, below. The budget outlays, activity-wise and district-wise are furnished in Appendix VIII.

Table 6.9 District-wise Budget Requirement for Sericulture Sector (Rs. in lakhs)

Sl.No.	Name of the	Year				Total	Percentage	
	District	2008-09	2009-10	2010-11	2011-12	Total	1 cr centage	
1	Dharmapuri	520.88	520.88	520.88	520.88	2083.52	55.44	
2	Dindigul	13.25	13.25	13.25	13.25	53	1.41	
3	Erode	241.675	241.675	241.675	241.675	966.7	25.72	
4	Namakkal	20	24	30	36	110	2.93	
5	Salem	39.4	39.4	39.4	39.4	157.6	4.19	
6	Vellore	63.75	76.875	93.75	90.75	325.125	8.65	
7	Karur	10	14	18	20	62	1.65	
	Total	908.955	930.08	956.955	961.955	3757.945	100.00	

6.9 Forest Sector

Only three districts viz., Dharmapuri, Kanniyakumari and Sivagangai solicited funds for the development activities in the forestry sector. It could be seen from Table 6.10, that Dharmapuri district demanded 93.46 per cent of the total amount required at the state level. Dharmapuri district requested a sum of Rs.13.60 crores towards soil moisture conservation and strengthening water harvesting structures in forest development activities. The district-wise and activity-wise budget provisions are indicated in Appendix IX.

Table 6.10 District-wise Budget Requirement for Forest Sector

(Rs. in lakhs)

Sl.No.	Name of the District		Yea	Total	Domantaga		
		2008-09	2009-10	2010-11	2011-12	1 Otal	Percentage
1.	Dharmapuri	467.2	467.2	467.2	467.2	1868.8	93.46
2.	Kanyakumari	24.77	29.05	33.6	38.79	126.21	6.31
3.	Sivagangai	4.57	0	0	0	4.57	0.23
	Total	496.54	496.25	500.8	505.99	1999.58	100.00

6.10 Special Projects

A sum of Rs.11.60 crores is solicited by Karur, Namakkal, Pudukkottai and Tiruchirappalli districts towards special projects and the amount varied from Rs.29.00 lakhs in Namakkal district to Rs.527.00 lakhs in Pudukottai district. The district-wise and activity wise budget details are furnished in Table 6.11.

Table 6.11 District-wise Budget Requirement for Special Projects

(Rs. in lakhs)

Sl.No.	Name of the District		Yea	Total	Percentage		
SI.NO.		2008-09	2009-10	2010-11	2011-12	1 Otal	1 ercentage
1	Karur	25.73	25.73	26.01	26.01	103.48	7.30
2	Namakkal	29				29	2.05
3	Pudukkottai	112.25	104.75	205.25	104.75	527	37.19
4	Thoothukudi	89	122	22	24	257	18.14
5	Tiruchirappalli	138.2797	58.2801	70.9566	232.882	500.3988	35.32
	Total	394.2597	310.7601	324.217	387.642	1416.879	100.00

6.11 Agricultural Research

Thoothukudi district demanded Rs.257.00 crores for carrying out research activities and the details are furnished below.

(Rs. in lakhs)

Sl.No.	Name of the District		Total			
51.110.		2008-09	2009-10	2010-11	2011-12	Total
1	Thoothukudi	89	122.00	22.00	24.00	257.00
	Total	89	122.00	22.00	24.00	257.00

CHAPTER VII

PERFORMANCE INDICATORS, MONITORING AND EVALUATION

The NADP aims at four percent growth in agriculture production and its sustenance in the years to come. The whole gamut of development efforts revolve around the development of land resource, water resource, animal resource and crop productivity Transport and road development, market development and other improvement. supportive infrastructure for agricultural development also form an integral part of agricultural development efforts. In sum, the whole village upliftment would be the ultimate motive of the programme.

While implementing the plan prepared, many bottlenecks may arise and hence the same have to be tackled, for the desired results. Therefore, the major performance indicators have been identified, monitoring mechanism has been outlined and the evaluation procedure has been briefed in this chapter.

Performance Indicators

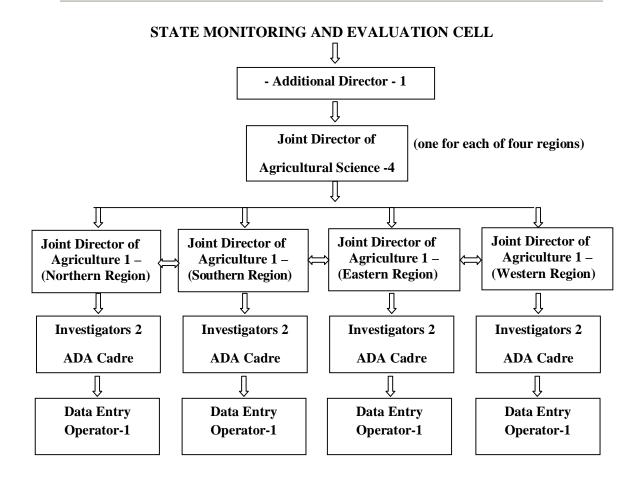
The measurement of performance indicators would indicate the success or otherwise of any project/programme implemented. The performance indicators identified and the likely impact have been precisely indicated below.

Sl.No.	Performance Indicators	Anticipated impact and extent
1.	Yield improvement in major field crops	Minimum of four percent increase per
		annum.
2.	Total production increase	Minimum of four percent increase per
		annum
3.	Targets and achievements under various	Full achievement
	interventions	
4.	Crop diversification	New crop introduction and extent of
		coverage and replacement
5.	Increase in area irrigated	Extent of increase in terms of area

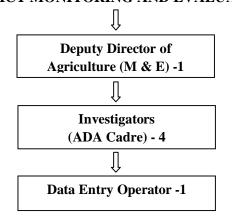
Sl.No. **Performance Indicators Anticipated impact and extent** 6. No. of various implements and New agricultural implements and machineries distributed machineries as targeted for distribution 7. Extent of machineries employed Extent of coverage and its percentage 8. Irrigation infrastructure improvement No. of tanks renovated No. of check dams constructed No. of repair works taken up No. of anicuts constructed 9. Milk production Productivity increase by a minimum of four percent 10. No. of animals artificially inseminated Nos. 11. No. of animals vaccinated Nos. 12. No. of farmers and extent of cultivation No. of farmers took up fodder cultivation under fodder 12. Infrastructure development Nos. Veterinary Hospitals **Veterinary Clinics** Nos. **Veterinary Centres** Nos. Veterinary dispensaries Nos. 13. Road connectivity Kilometers of roads newly laid out ---Kilometers of rural roads repaired - - - -No. of children enrolled in Elementary/ 14. Nos. Middle school/High school/Higher secondary 15. No. of infants enrolled in anganwadies Nos.

MONITORING:

Monitoring involves systematic observation of events, continuous collection of information and analysis and corrective actions, wherever needed. Monitoring helps the implementing authorities/decision makers in effective and efficient project management. Therefore, a Monitoring and Evaluation Cell will be set up both at District and State levels. The organizational structure of the Monitoring and Evaluation Cell is depicted in what follows.



DISTRICT MONITORING AND EVALUATION CELL



EVALUATION

Evaluation is the process of measuring both desirable and undesirable consequences of an action qualitatively and quantitatively. It involves three stages viz., Assessment, Diagnosis and Suggestions (ADS). At the end of each year of implementation, the internal evaluation study will be taken up by the District Monitoring and Evaluation Cell under the guidance of the State Monitoring and Evaluation Cell. The year-wise evaluation report must be prepared and based on which, the District Collectors and Director of Agriculture will take corrective measures. At the end of fifth year, an external agency may be engaged for Ex-post evaluation. In addition, many ad-hoc studies may also be taken up on specific problem areas on the guidance of the executives and higher-ups.

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APPENDIX I

AGRICULTURE SECTOR

ABSTRACT OF INTERVENTIONS OF AGRICULTURE SECTOR IN TAMIL NADU STATE

(Finance in lakhs of Rupees)

SI.	Interventions / Components	Unit	2008	-09	2009-10 2010-11 2011-12			-12	TOTAL			
No.	interventions / Components		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
Α.	Crop Development											
1	Hybrid Seed Distribution – Maize	Tonnes	816.00	545.50	884.50	600.00	935.00	639.00	985.50	677.00	3621.00	2461.50
2	SRI Cultivation		27908.00	545.00	27888.00	565.00	13728.00	471.00	16478.00	616.00	86002.00	2197.00
3	Supply of Quality Seeds at Nominal Price (SRR Rice)	Tonnes	7590.00	393.00	10455.00	536.25	10525.00	539.75	10555.00	541.25	39125.00	2010.25
4	Seed Distribution subsidy for Ground Nut Irrigated @ 50% or Rs.12 / kg	Tonnes	3240.00	234.80	5025.00	418.82	4982.20	526.88	4987.20	637.94	18234.40	1818.44
5	Seed Village Programme	Tonnes	1686.00	337.20	1686.00	337.20	1711.00	342.20	1711.00	342.20	6794.00	1358.80
6	Seed Production subsidy @ Rs.10 /kg for Ground Nut (Irrigated)	Qtls	3890.00	199.10	5470.00	347.65	4530.00	339.20	5815.00	358.25	19705.00	1244.20
7	Maize (Irrigated) Private Seed Distribution Subsidy @50% Rs.75/kg	На	557.00	270.75	607.00	294.75	687.00	354.75	737.00	257.25	2588.00	1177.50
8	Seed Distribution subsidy @ Rs.12/kg (Pulses)	На	2760.00	232.00	5370.00	259.80	6450.00	272.00	7520.00	283.00	22100.00	1046.80
9	Distribution of Tarpaulin	Nos.	4805.00	232.00	5055.00	244.00	5260.00	253.00	5410.00	259.00	20530.00	988.00
10	Distribution of Bt Cotton Private Hybrid @75/kg	На	1770.37	145.55	1910.37	146.45	1960.39	154.25	1911.89	155.05	7552.00	601.32
11	Seed Production Subsidy to SHG (Rs.5 /kg)	Tonnes	2273.00	117.25	2313.00	119.25	2373.00	122.25	2403.00	122.25	9362.00	481.00
12	Hybrid Rice Seeds Distribution (75 % subsidy or Rs.100 /kg)	Tonnes	1339.00	86.30	1393.50	110.15	1449.00	143.80	1429.50	124.05	5611.00	464.30

SI.	Interventions / Components	Unit	2008	-09	2009	-10	2010)-11	2011-12		TOTAL	
No.	mer ventions / Components	Cint	Phy.	Fin.								
13	Incentive to seed Production to TANWABE	Tonnes	2475	74.25	2535	76.05	2745	82.35	2745	82.35	10500	315
14	Hybrid Seed Distribution – Sunflower	Tonnes	37	52.8	41	58.8	44	63.3	51	73.8	173	248.7
15	Promotion of Jatropha Bio-Diesel Crops Cultivation	На	250	50	250	50	250	50	250	50	1000	200
16	Precision Farming in Agricultural Crops	На.	100.00	49.40	100.00	49.40	100.00	49.40	100.00	49.40	400.00	197.60
17	Certified Seed Production-One Time Grant - TANWABE / FIG (Rice)	Nos.	114.00	57.01	63.00	31.50	46.00	23.00	46.00	23.00	269.50	134.51
18	Hybrid Seed Production Subsidy to TANWABE / FIG	Tonnes	76.25	19.95	106.00	33.90	136.00	55.90	96.00	15.90	414.25	125.65
19	Hybrid Seeds Distribution (Millets)	Ha	550	9.67	705.00	15.15	605.00	14.03	605.00	14.03	2465.30	52.88
20	Seed Production Subsidy / Seed Production groups / growers sharing (Pulses)	На	130.00	13.00	130.00	13.00	130.00	13.00	130.00	13.00	520.00	52.00
21	Seed Production by FIG / TANWAEBE - One Time Grant (Pulses)	Tonnes	86.00	43.00	0.00	0.00	0.00	0.00	0.00	0.00	86.00	43.00
22	Seed Minikit of New HYV (@ Rs.100 per minikit Rice)	Nos.	10010.00	10.01	10250.00	10.25	10310.00	10.31	10390.00	10.39	40960.00	40.96
23	Distribution of Certified Seeds @ Rs.20/kg	Tonnes	1575.00	8.70	1675.00	9.00	1775.00	9.30	675.00	9.45	5700.00	36.45
24	Hybrid Seed Distribution - Other than Maize	Tonnes	85.50	4.70	190.00	8.78	190.00	8.78	190.00	8.78	655.50	31.04
25	Seed Production subsidy for Gingelly @ Rs 10/kg	Tonnes	41.00	4.10	44.00	13.40	47.00	4.70	50.00	5.00	182.00	27.20
26	Establishment of Community Fodder Plots by SHGs / FIGs	Nos	25.00	6.25	25.00	6.25	25.00	6.25	25.00	6.25	100.00	25.00
27	Hybrid Seed – Minikit	Nos.	2520	6.33	2320	6.13	2320	6.13	2320	6.13	9480	24.72

SI.			2008-	09	2009-	-10	2010	-11	2011-12		TOTAL	
No.	mer ventions / Components	Unit -	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
28	Seed Distribution subsidy for Gingelly @50% or Rs.12 / kg	Tonnes	140.00	5.35	137.00	5.59	146.00	5.95	149.00	6.31	572.00	23.21
29	Variety Seeds Distribution - Millets	Tonnes	257.00	4.91	264.00	5.57	265.00	5.65	265.00	5.65	1051.00	21.78
30	Hybrid Seed Distribution – Cotton	Tonnes	550.00	3.50	700.00	4.60	750.00	4.90	850.00	5.70	2850.00	18.70
31	Fodder Seed Distribution	На	1050.00	2.16	1050.00	2.16	1050.00	2.16	1050.00	2.16	4200.00	8.65
32	Distribution of certified seeds – Ragi	На	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	4.00
33	Distribution of Foundation and Certified seeds of Sunflower @ subsidies rate	Nos.	5.00	0.60	5.00	0.60	5.00	0.60	5.00	0.60	20.00	2.40
34	Production of Certified Seeds – Ragi	Tonnes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.00	1.70
В.	Mechanization											
35	Distribution of Combined Harvesters	Nos	48.00	609.75	57.00	694.25	48.00	624.00	48.00	624.00	201.00	2552.00
36	Machineries in Sugarcane	Nos	0.00	200.00	0.00	200.00	0.00	200.00	0.00	200.00	0.00	800.00
37	Distribution of Mini Transplanters	Nos.	137	123.99	149	131.98	153	135.99	170	151.18	609	543.14
38	Distribution of Mini power Tillers	Nos.	129.00	80.75	132.20	111.23	179.00	115.00	202.00	127.10	642.20	435.39
39	Distribution of Farm Implements and Hand Tools to Small and Marginal Farmers and Agricultural labourers		3000.00	90.00	3000.00	90.00	3000.00	90.00	3000.00	90.00	12000.00	360.00
40	Distribution of Bund formers	Nos.	260	52.98	338	79.48	387	94.03	437	109.03	1422	335.52
41	Distribution of Power Thrashers	Nos.	78.00	77.50	79.00	78.00	80.00	78.50	86.00	81.50	323.00	315.50
42	Distribution of Power Sprayer	Nos.	320.00	21.79	310.00	20.29	370.00	25.63	375.00	25.97	1375.00	93.68
43	Tree Climber	Nos	430.00	14.70	450.00	14.90	450.00	14.90	450.00	14.90	1780.00	59.40
44	Distribution of Hand Operated Sprayers	Nos.	450.00	5.80	500.00	8.30	175.00	3.63	200.00	3.85	1325.00	21.58
C.	Infra - Structure											
45	Construction of Rural Godowns	Nos.	135.00	1355.00	45.00	455.00	34.00	345.00	35.00	355.00	249.00	2510.00
46	Construction of Thrashing Floor	Nos.	305.00	374.25	320.00	395.25	345.00	434.25	357.00	448.25	1327.00	1652.00

SI.	Interventions / Components	Unit	2008-		2009		2010-11		2011-12		TOTAL	
No.	interventions / Components	Cint	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
47	Strengthening of State Seed Farms	Nos.	0.00	471.04	0.00	140.10	0.00	130.20	0.00	100.40	0.00	841.74
48	Establishment of Agri. Clinics and Mini Soil Testing Units by Unemployed Graduates	Nos.	45	142.5	45	142.5	15	62.5	34	85	129	438.5
49	Upgradation of Existing Seed Processing Units and Block Seed Godowns	Nos.	5.00	125.00	5.00	125.00	20.00	100.00	0.00	0.00	4.00	350.00
50	Preparation of Land Resources Inventory and GIS Data base		3.00	93.00	3.00	93.00	3.00	93.00	2.00	62.00	11.00	341.00
51	Promotion of Organic Farming and Organic Manure Production Units	Nos	12.00	81.00	12.00	81.00	12.00	81.00	12.00	81.00	48.00	324.00
52	Establishment of Zonal Agricultural Research Station	Nos	1.00	50.00	0.00	100.00	0.00	100.00	0.00	50.00	1.00	300.00
53	Strengthening of District Information Centre	Nos.	4.00	128.35	0.00	80.37	0.00	41.00	0.00	41.00	4.00	290.72
54	Vermi Compost Production Units / YARDS	Nos	315	60.1	342	62.8	422	71.3	452	74.8	1531	269
55	Video Conferencing Facilities / Short films	Nos.	20.00	167.00	5.00	22.50	5.00	23.00	5.00	23.50	35.00	236.00
56	Establishment of Modern Mini Processing Unit	Nos.	2.00	55.00	1.00	35.00	1.00	35.00	1.00	35.00	5.00	160.00
57	Seed Testing Laboratories	Nos.	19.00	114.00	0.00	0.00	0.00	0.00	0.00	0.00	19.00	114.00
58	Establishment of Automatic Weather Stations and Automatic Rain gauges	Nos.	2.00	18.00	2.00	18.00	2.00	18.00	1.00	9.00	7.00	63.00
59	Establishment of Solar Fencing for Stray animals menace	Units	60.00	15.00	60.00	15.00	60.00	15.00	60.00	15.00	240.00	60.00
60	Establishment of Cold Storage Unit for Chillies	Nos.	1.00	25.00	1.00	25.00	0.00	0.00	0.00	0.00	2.00	50.00
61	Establishment of Prosophis Bio Fuel Units		1.00	10.00	1.00	10.00	1.00	10.00	1.00	10.00	4.00	40.00

SI.	Interventions / Components	Unit		2008-09		2009-10		2010-11		2011-12		TOTAL
No.	Interventions / Components	Omt	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
D.	Soil Health Management											
62	Distribution of Micro Nutrient Mixture Rs.500/ha or 50% subsidy	На	140314.00	449.42	171308.00	584.67	184586.00	653.61	192916.00	695.39	689123.00	2383.09
63	Enriched Farm Yard Manure	Nos.	6423.00	1308.00	6383.00	368.50	6422.00	299.00	6423.00	309.00	25651.00	2284.50
64	Paddy - Distribution of Zinc Sulphate / Micro Nutrient @ Rs.500 / Ha. (or) 50% subsidy	На	93300.00	391.50	103600.00	516.10	109750.00	580.57	110800.00	621.12	417450.00	2109.29
65	Gypsum 500 kg/ ha @ Rs.1875/Ha. or 100% subsidy	На	81350	384.18	83400	393.18	86750	409.43	89200	420.68	340700	1607.47
66	Paddy - Distribution of soil health card (@ Rs 25/ Card)	Nos.	331750.00	278.12	302800.00	242.82	304700.00	247.51	297700.00	247.62	1236950.00	1016.08
67	Paddy - Distribution of Green Manure seeds at 75% subsidy of Rs.15/kg.	Tonnes	334.00	56.10	445.00	72.78	543.50	88.96	589.50	95.89	1912.00	313.73
68	Pulses DAP 2% Spray	Ha	100000.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	100000.00	200.00
69	Problem Soil Management	Ha	755.00	41.00	755.00	41.00	755.00	41.00	755.00	41.00	3020.00	164.00
70	Assistance to start vermi compost production unit @ Rs. 10000 per unit (Self Help Group Women Farmers)	Nos.	283.00	34.64	299.00	36.24	369.00	43.74	399.00	47.24	1350.00	161.86
71	Bio fertiliser @ 50 % subsidy @ Rs.5 per No.	Nos.	5.50	41.20	5.05	39.85	5.05	39.85	5.05	39.85	20.65	160.75
Е.	Rainfed Farming/Waste land development											
72	Private seed distribution subsidy for maize(Rainfed) @ 90% or Rs.135 /kg	На	420.00	321.00	435.00	335.25	435.00	335.25	435.00	335.25	1725.00	1326.75
73	Seed Distribution subsidy for Groundnut (Rainfed)	На	889.00	106.68	2169.00	259.88	2329.00	279.48	2449.00	293.88	7836.00	939.92
74	Wastelands Development in 50 Acres Cluster Mode		10.00	146.00	10.00	146.00	10.00	146.00	10.00	146.00	40.00	584.00
75	Dry land Development and Maximizing Crop Productivity	На	600.00	36.00	600.00	36.00	600.00	36.00	600.00	36.00	2400.00	144.00

SI.	Interventions / Components	Unit	2008-	09	2009-	-10	2010	-11	2011	-12	TOTA	AL.
No.			Phy.	Fin.								
F.	Extension services											
76	Establishment of Village Knowledge Centres(e-Choupals)		131.00	160.61	130.00	159.38	130.00	159.38	130.00	159.38	521.00	638.75
77	Exposure Visit - Officers outside the Country	Nos.	85.00	108.00	93.00	107.00	98.00	114.50	94.00	123.50	370.00	453.00
78	Massive Rat Eradication/ Control Campaign	Nos.	2023.00	102.15	2203.00	111.65	2203.00	112.65	2201.00	117.55	8630.00	444.00
79	Technology Demonstration	Nos.	1030.00	97.73	1185.00	121.99	920.00	94.98	990.00	116.23	4125.00	430.93
80	Publicity and Propaganda	Nos.	62.80	90.75	60.80	86.75	60.80	85.75	60.80	87.75	245.20	351.00
81	Exposure Visit - Inter State (10 days @ Rs.600 day)	Nos.	293.00	82.15	298.00	82.85	302.00	84.05	300.00	83.45	1193.00	332.50
82	Farmers Field School	Nos.	307.63	76.21	337.63	81.08	330.63	79.72	355.63	66.76	1331.51	303.77
83	Exposure Visit Inter State (@ 50 farmers 5 days @ 300/day)	Nos.	91.00	51.30	110.00	56.55	130.00	62.05	150.00	67.55	481.00	237.45
84	Integrated Nutrient Management Demonstration	Nos	1075.00	29.25	1075.00	29.25	1575.00	50.25	1075.00	29.25	4800.00	138.00
85	Fodder Demonstration	Nos.	1050.00	22.50	1100.00	25.00	1150.00	27.50	1200.00	30.00	4500.00	105.00
86	IPM Demonstration	Nos.	879.00	22.53	879.00	22.48	1279.00	32.53	879.00	22.53	3916.00	100.07
87	Enriched Farm Yard Manure Demonstration	Nos.	2150.00	21.50	2150.00	21.50	2150.00	21.50	2150.00	21.50	8600.00	86.00
88	Tank silt application Demonstration	Nos.	1000	20	1000	20	1000	20	1000	20	4000	80
89	District Level Exhibition / Kisan Mela (@ Rs.2.00 lakhs)	Nos.	10.00	16.00	10.00	16.00	9.00	15.00	10.00	16.00	39.00	63.00
90	Upgradation of FTC	Nos.	1.00	30.00	0.00	20.00	0.00	0.00	0.00	0.00	1.00	50.00
91	Green Manure Crops Demonstration	Nos.	1000.00	10.00	1000.00	10.00	1000.00	10.00	1000.00	10.00	4000.00	40.00
92	Hybrid seed demonstration	Nos.	170.00	3.10	170.00	3.30	101.25	3.75	101.30	4.00	542.55	14.15
93	Demonstration-Fodder Cowpea	Nos.	100.00	1.50	100.00	1.50	100.00	1.50	100.00	1.50	400.00	6.00
94	Demonstration – Lucerne	Nos.	100.00	1.50	100.00	1.50	100.00	1.50	100.00	1.50	400.00	6.00
95	Coir pith Compost Demonstration	Nos.	150.00	1.50	150.00	1.50	150.00	1.50	150.00	1.50	600.00	6.00
96	Silo- Demonstration	Nos.	50.00	0.25	50.00	0.25	50.00	0.25	50.00	0.25	200.00	1.00

SI.	Interventions / Components	Unit	2008	-09	2009	-10	2010	-11	2011	-12	TOT	AL
No.	interventions, components		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
	Water Harvesting / Conservation											
97	Demonstration- Fodder Cholam	Nos.	100.00	0.10	100.00	0.10	100.00	0.10	100.00	0.10	400.00	0.40
98	Maximizing the Ground Water Usage through Bore wells	Nos.	700.00	2100.00	800.00	2400.00	800.00	2400.00	700.00	2100.00	3000.00	9000.00
99	PVC Pipeline / PVC Pipe	Nos.	1315.00	186.15	1469.00	212.97	1701.00	237.35	1828.00	254.85	6313.00	891.32
100	In-situ Rain Water Harvesting through Farm Ponds Clusters	Nos.	12.00	90.00	12.00	90.00	12.00	90.00	12.00	90.00	48.00	360.00
	Total		854812.05	15444.26	781296.05	14363.27	793997.82	14420.93	802881.37	14332.69	3232999.06	58574.21

Sub Total	854812.05	15444.26	781296.05	14363.27	793997.82	14420.93	802881.37	14332.69	3232999.06	58574.21
Others		9657.63		10295.29		9933.48		9993.06		39866.41
Total		25101.89		24658.56		24354.41		24325.75		98440.62

A. Crop Development

1. Hybrid Seed Distribution – Maize

Physical: in metric tonnes Financial: Rs in lakhs

Sl.	District	200	8-09	200	9-10	201	0-11	201	1-12	То	tal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Dindigul	20.00	15.00	40.00	30.00	40.00	30.00	40.00	30.00	140.00	105.00
2	Erode	70.00	58.50	115.00	95.25	165.00	132.75	215.00	170.25	565.00	456.75
3	Kancheepuram	5.00	3.75	5.00	3.75	5.00	3.75	5.00	3.75	20.00	15.00
4	Perambalur	100.00	75.00	100.00	75.00	100.00	75.00	100.00	75.00	400.00	300.00
5	Salem	400.00	300.00	400.00	300.00	400.00	300.00	400.00	300.00	1600.00	1200.00
6	Theni	2.00	1.00	2.50	1.50	3.00	3.00	3.50	3.50	11.00	9.00
7	Thiruvallur	2.00	3.00	2.00	3.00	2.00	3.00	2.00	3.00	8.00	12.00
8	Tiruvannamalai	5.00	3.75	5.00	3.75	5.00	3.75	5.00	3.75	20.00	15.00
9	Thoothukudi	5.00	3.75	5.00	3.75	5.00	3.75	5.00	3.75	20.00	15.00
10	Tiruchirappalli	90.00	67.50	90.00	67.50	90.00	67.50	90.00	67.50	360.00	270.00
11	Tirunelveli	7.00	5.25	10.00	7.50	10.00	7.50	10.00	7.50	37.00	27.75
12	Demonstration	100.00	1.50	100.00	1.50	100.00	1.50	100.00	1.50	400.00	6.00
13	Villupuram	10.00	7.50	10.00	7.50	10.00	7.50	10.00	7.50	40.00	30.00
	Total	816.00	545.50	884.50	600.00	935.00	639.00	985.50	677.00	3621.00	2461.50

2. SRI Cultivation

Financial: Rs in Lakhs

Sl.	District		200	8-09	200	9-10	201	0-11	201	1-12	ТО	TAL
No.	District	Units	Phy.	Fin.								
1	Ariyalur	Nos	300	30.00	300	30.00	300	30.00	300	30.00	1200	120.00
2	Dharmapuri	На	800	40.00	800	40.00	800	40.00	800	40.00	3200	160.00
3	Dindigul	Nos	400	12.00	600	18.00	800	24.00	1000	30.00	2800	84.00
4	Erode	На	750	23.00	750	23.00	750	23.00	750	23.00	3000	90.00
5	Kancheepuram	На	165	5.00	165	5.00	165	5.00	165	5.00	660	20.00
6	Kanniyakumari	На	0	20.00	0	40.00	0	40.00	0	40.00	0	140.00
7	Karur	На	50	2.00	50	2.00	60	2.00	70	2.00	230	7.00
8	Krishnagiri	На	500	15.00	0	0.00	0	0.00	0	0.00	500	15.00
9	Madurai	На	16035	168.00	16040	171.00	1045	60.00	1060	71.00	34180	469.00
10	Nagapattinam	На	2000	6.00	2200	7.00	2500	8.00	5000	15.00	11700	35.00
11	Namakkal	На	500	13.00	500	13.00	800	20.00	800	20.00	2600	65.00
12	Perambalur	Nos	200	20.00	200	20.00	200	20.00	200	20.00	800	80.00
13	Salem	На	3400	102.00	3400	102.00	3400	102.00	3400	102.00	13600	408.00
14	Thiruvallur	ha	70	2.00	70	2.00	70	2.00	70	2.00	280	10.00
15	Thiruvarur	Nos	100	8.00	125	9.00	150	11.00	175	131.00	550	159.00
16	Thoothukudi	На	100	3.00	100	3.00	100	3.00	100	3.00	400	12.00
17	Thiruchirapalli	Nos	288	9.00	288	9.00	288	9.00	288	9.00	1152	35.00
18	Tirunelveli	На	500	15.00	500	15.00	500	15.00	500	15.00	2000	60.00
20	Vellore	На	50	4.00	100	7.00	100	7.00	100	7.00	350	25.00
21	Villupuram	На	1700	51.00	1700	51.00	1700	51.00	1700	51.00	6800	204.00
	Total		27908	545.00	27888	565.00	13728	471.00	16478	616.00	86002	2197.00

3. Supply of Quality Seeds at Nominal Price (SRR Rice)

Physical: in metric tonnes Financial: Rs in lakhs

Sl.	District	200	08-09	200	9-10	201	0-11	201	1-12	ТО	TAL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	200	15.00	200	15.00	200	15.00	200	15.00	800	60.00
2	Coimbatore	10	0.50	10	0.50	15	0.75	15	0.75	50	2.50
3	Dharmapuri	240	12.00	240	12.00	240	12.00	240	12.00	960	48.00
4	Erode	200	10.00	200	10.00	200	10.00	200	10.00	800	40.00
5	Kanyakumari	200	10.00	200	10.00	200	10.00	200	10.00	800	40.00
6	Karur	310	15.50	330	16.50	350	17.50	370	18.50	1360	68.00
7	Krishnagiri	300	21.00	300	21.00	300	21.00	300	21.00	1200	84.00
8	Nagapattinam	700	35.00	275	13.75	300	15.00	300	15.00	1575	78.75
9	Perambalur(T)	100	7.50	100	7.50	100	7.50	100	7.50	400	30.00
10	Salem	450	22.50	450	22.50	450	22.50	450	22.50	1800	90.00
11	Thiruvallur	1050	52.50	1050	52.50	1050	52.50	1050	52.50	4200	210.00
12	Thiruvannamalai(T)	500	25.00	3750	187.50	3750	187.50	3750	187.50	11750	587.50
13	Thoothukudi	30	1.50	30	1.50	30	1.50	30	1.50	120	6.00
14	Tiruchirappalli	2150	107.50	2150	107.50	2150	107.50	2150	107.50	8600	430.00
15	Tirunelveli	650	32.50	670	33.50	690	34.50	700	35.00	2710	135.50
16	Villupuram	500	25.00	500	25.00	500	25.00	500	25.00	2000	100.00
	Total	7590	393.00	10455	536.25	10525	539.75	10555	541.25	39125	2010.25

4. Seed Distribution subsidy for Ground Nut Irrigated @ 50% or Rs.12 / kg

Physical: in tonnes Financial: Rs in Lakhs

Sl.	District	200)8-09	200	9-10	2010	0-11	201	1-12		
No	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	50	6.00	55	6.00	7.2	60.00	7.2	225.00	119.4	297.00
2	Kancheepuram	870	104.40	870	104.40	870	104.40	870	104.40	3480	417.60
3	Karur	60	7.20	60	7.20	60	7.20	60	7.20	240	28.80
4	Madurai	200	5.00	500	12.50	500	12.50	500	12.50	1700	42.50
5	Nagapattinam	30	0.36	40	0.48	45	0.54	50	0.60	165	1.98
6	Namakkal	100	12.00	100	12.00	100	12.00	100	12.00	400	48.00
7	Ramanathapuram	30	3.60	30	3.60	30	3.60	30	3.60	120	14.40
8	Thiruvallur	1220	14.64	1220	14.64	1220	14.64	1220	14.64	4880	58.56
9	Tirunelveli	50	6.00	50	6.00	50	60.00	50	6.00	200	78.00
10	Tiruvannamalai	630	75.60	2100	252.00	2100	252.00	2100	252.00	6930	831.60
	Total	3240	234.80	5025	418.82	4982.2	526.88	4987.2	637.94	18234.4	1818.44

5. Seed Village Programme

Physical: in metric tonnes Financial: Rs in lakhs

Sl.	District	200	8-09	200	9-10	201	0-11	201	1-12	T	otal
No.	District	Phy.	Fin.								
1	Karur	20	4.00	20	4.00	20	4.00	20	4.00	80	16.00
2	Namakkal	50	10.00	50	10.00	75	15.00	75	15.00	250	50.00
3	Tiruchirappalli	200	40.00	200	40.00	200	40.00	200	40.00	800	160.00
4	Tirunelveli	16	3.20	16	3.20	16	3.20	16	3.20	64	12.80
5	Villupuram	1400	280.00	1400	280.00	1400	280.00	1400	280.00	5600	1120.00
	Total	1686	337.20	1686	337.20	1711	342.20	1711	342.20	6794	1358.80

6. Seed Production Subsidy @ Rs.10/kg – Groundnut (Irrigated)

Physical: in Qtls Financial: Rs in Lakhs

Sl.	District	200	08-09	200)9-10	201	10-11	201	11-12	Т	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	50	5.00	55	5.50	60	6.00	60	6.00	225	22.50
2	Kancheepuram	870	87.00	870	87.00	870	87.00	870	87.00	3480	348.00
3	Krishnagiri	0	0.00	0	0.00	0	0.00	80	8.00	80	8.00
4	Thiruvannamalai	630	63.00	2100	210.00	2100	210.00	2100	210.00	6930	693.00
5	Thiruvarur	2110	21.10	2215	22.15	1270	13.20	2475	24.25	8070	80.70
6	Thiruchirapalli	120	12.00	120	12.00	120	12.00	120	12.00	480	48.00
7	Thirunelveli	110	11.00	110	11.00	110	11.00	110	11.00	440	44.00
	Total	3890	199.10	5470	347.65	4530	339.20	5815	358.25	19705	1244.20

7. Maize (Irrigated) Private Seed Distribution Subsidy @50% Rs.75/kg

Physical: in ha Financial: Rs in Lakhs

CI N-	D:-4:-4	200	08-09	200)9-10	201	10-11	201	11-12	Т	otal
Sl. No.	District	Phy.	Fin.								
1	Ariyalur	50	37.50	50	37.50	50	37.50	50	37.50	200	150.00
2	Coimbatore	20	15.00	20	15.00	25	18.75	25	18.75	90	67.50
3	Dindigul	10	7.50	20	1.50	20	1.50	20	1.50	70	12.00
4	Erode	60	45.00	100	75.00	150	112.50	200	15.00	510	247.50
5	Kancheepuram	5	3.75	5	3.75	5	3.75	5	3.75	20	15.00
6	Namakkal	50	37.50	50	37.50	75	56.25	75	56.25	250	187.50
7	Salem	50	37.50	50	37.50	50	37.50	50	37.50	200	150.00
8	Thiruvallur	200	3.00	200	3.00	200	3.00	200	3.00	800	12.00
9	Tiruchirappalli	90	67.50	90	67.50	90	67.50	90	67.50	360	270.00
10	Tirunelveli	7	5.25	7	5.25	7	5.25	7	5.25	28	21.00
11	Tiruvannamalai	5	3.75	5	3.75	5	3.75	5	3.75	20	15.00
12	Villupuram	10	7.50	10	7.50	10	7.50	10	7.50	40	30.00
	Total	557	270.75	607	294.75	687	354.75	737	257.25	2588	1177.50

8. Seed Distribution subsidy @ Rs.12/ kg (Pulses)

Physical : in ha Financial : Rs in Lakhs

Cl. No.	District	200	08-09	200	9-10	201	10-11	201	11-12	T	otal
Sl. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Kancheepuram	180	21.60	180	21.60	180	21.60	180	21.60	720	86.40
2	Karur	80	9.60	80	9.60	80	9.60	80	9.60	320	38.40
3	Madurai	500	4.00	3000	24.00	4000	32.00	5000	40.00	12500	100.00
4	Nagapattinam	400	4.80	450	5.40	500	6.00	550	6.60	1900	22.80
5	Salem	1000	120.00	1000	120.00	1000	120.00	1000	120.00	4000	480.00
6	Thanjavur	200	24.00	250	30.00	280	33.60	300	36.00	1030	123.60
7	Tiruchirappalli	340	40.80	340	40.80	340	40.80	340	40.80	1360	163.20
8	Tirunelveli	60	7.20	70	8.40	70	8.40	70	8.40	270	32.40
	Total	2760	232.00	5370	259.80	6450	272.00	7520	283.00	22100	1046.80

9. Distribution of Tarpaulin

Physical: in Nos Financial: Rs in Lakhs

Sl.	D' 4 ' 4	200)8-09	200	09-10	201	10-11	20	11-12	To	tal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	70	7.00	70	7.00	70	7.00	70	7.00	280	28.00
2	Coimbatore	150	3.00	200	4.00	250	5.00	250	5.00	850	17.00
3	Dharmapuri	80	4.00	80	4.00	80	4.00	80	4.00	320	16.00
4	Dindigul	130	9.75	230	17.25	230	17.25	230	17.25	820	61.50
5	Erode	600	34.00	600	34.00	600	34.00	600	34.00	2400	136.00
6	Kancheepuram	150	7.50	150	7.50	150	7.50	150	7.50	600	30.00
7	Kanniyakumari	100	2.00	100	2.00	100	2.00	100	2.00	400	8.00
8	Karur	150	6.00	150	6.00	200	8.00	200	8.00	700	28.00
9	Krishnagiri	150	3.00	150	3.00	100	2.00	100	2.00	500	10.00
10	Namakkal	400	20.00	400	20.00	400	20.00	400	20.00	1600	80.00
11	Perambalur	45	4.50	45	4.50	45	4.50	45	4.50	180	18.00
12	Ramanathapuram	350	17.50	350	17.50	350	17.50	350	17.50	1400	70.00
13	Salem	130	6.5	130	6.50	130	6.50	130	6.50	520	26.00
14	Thanjavur	200	10.00	250	12.50	300	15.00	400	20.00	1150	57.50
15	Theni	20	1.00	20	1.00	40	2.00	40	2.00	120	6.00
16	Thoothukudi	100	5.00	100	5.00	100	5.00	100	5.00	400	20.00
17	Tiruchirappalli	295	14.75	295	14.75	295	14.75	295	14.75	1180	59.00
18	Tirunelveli	900	45.00	900	45.00	900	45.00	900	45.00	3600	180.00
19	Tiruvannamalai	285	6.75	335	7.75	420	10.50	470	11.50	1510	36.50
20	Villupuram	500	25.00	500	25.00	500	25.00	500	25.00	2000	100.00
	Total	4805	232.00	5055	244.00	5260	253.00	5410	259.00	20530	988.00

10. Distribution of Bt Cotton Private Hybrid @75/kg

Physical: in ha Financial: Rs in Lakhs

Sl.	District	200	08-09	200	9-10	201	10-11	2011	-12	Т	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore*	100	0.08	100	0.08	100	0.08	100	0.08	400	0.32
2	Dindigul**	50	0.20	50	0.20	50	0.20	50	0.20	200	0.80
3	Madurai *	500	3.00	600	3.60	650	3.90	700	4.20	2450	14.70
4	Nagapattinam	20	0.40	10	0.20	10	0.20	10	0.20	50	1.00
5	Namakkal **	1000	3.75	1000	3.75	1000	3.75	1000	3.75	4000	15.00
6	Salem***	0.23	86.25	0.23	86.25	0.25	93.75	0.25	93.75	1	360.00
7	Theni****	50	0.50	100	1.00	100	1.00	1.50	1.50	252	4.00
8	Tiruchirappalli****	0.03	11.25	0.03	11.25	0.03	11.25	0.03	11.25	0	45.00
9	Tirunelveli	0.01	1.88	0.01	1.88	0.01	1.88	0.01	1.88	0	7.50
10	Vellore****	50	0.75	50	0.75	50	0.75	50	0.75	200	3.00
11	Villupuram****	0.1	37.50	0.1	37.50	0.1	37.50	0.1	37.50	0	150.00
	Total	1770	145.55	1910	146.45	1960	154.25	1912.89	155.05	7552	601.32

^{*} Physical unit in kgs

***Nos

**** ha

11. Seed Production Subsidy to SHG (Rs.5 /kg)

Physical: in metric tonnes Financial: Rs in lakhs

		Tilianciai. As ili lakiis									
Sl.	District	200)8-09	200	9-10	201	10-11	201	1-12	TO	TAL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	35	1.75	35	1.75	35	1.75	35	1.75	140	7.00
2	Dharmapuri	8	4.00	8	4.00	8	4.00	8	4.00	32	16.00
3	Erode	250	12.50	250	12.50	250	12.50	250	12.50	1000	50.00
4	Kanyakumari	30	1.50	30	1.50	30	1.50	60	1.50	150	6.00
5	Karur	120	6.00	120	6.00	120	6.00	120	6.00	480	24.00
6	Krishnagiri	300	15.00	300	15.00	300	15.00	300	15.00	1200	60.00
7	Namakkal	300	15.00	300	15.00	300	15.00	300	15.00	1200	60.00
8	Thanjavur	300	15.00	360	18.00	420	21.00	420	21.00	1500	75.00
9	Thiruvannamalai	180	9.00	180	9.00	180	9.00	180	9.00	720	36.00
10	Thoothukudi	0	0.00	10	0.50	10	0.50	10	0.50	30	1.50
11	Tiruchirappalli	420	21.00	420	21.00	420	21.00	420	21.00	1680	84.00
12	Tirunelveli	150	7.50	150	7.50	150	7.50	150	7.50	600	30.00
13	Villupuram	180	9.00	150	7.50	150	7.50	150	7.50	630	31.50
	Total	2273	117.25	2313	119.25	2373	122.25	2403	122.25	9362	481.00

^{**}Packets

12. Hybrid Rice Seeds Distribution (75 % subsidy or Rs.100/kg)

Physical: in metric tonnes Financial: Rs in lakhs

Sl.	D' 4 ' 4	200	8-09	2009	9-10	201	10-11	201	1-12	TO	TAL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	10	12.20	10	12.20	10	12.20	10	12.20	40	48.80
2	Dharmapuri	1200	1.20	1200	1.20	1200	1.20	1200	1.20	4800	4.80
3	Dindigul	1	0.50	1.5	0.75	2	1.00	2.5	1.25	7	3.50
4	Erode	10	10.00	20	20.00	40	40.00	0.00	0.00	70	70.00
5	Kancheepuram	10	10.00	20	20.00	30	30.00	50	50.00	110	110.00
6	Karur	2	2.00	3	3.00	4	4.00	4	4.00	13	13.00
7	Namakkal	8	0.80	8	0.80	12	1.20	12	1.20	40	4.00
8	Perambalur(T)	10	12.00	5	6.10	5	6.10	5	6.10	25	30.30
9	Salem	10	7.50	20	15.00	20	15.00	20	15.00	70	52.50
10	Thanjavur(Qtl)	10	1.00	20	2.00	20	2.00	20	2.00	70	7.00
11	Thiruvallur	22	1.10	22	1.10	22	1.10	22	1.10	88	4.40
12	Thiruvannamalai	2	2.00	4	4.00	4	4.00	4	4.00	14	14.00
13	Tiruchirappalli	10	1.00	20	2.00	30	3.00	30	3.00	90	9.00
14	Tirunelveli	10	1.00	20	2.00	30	3.00	30	3.00	90	9.00
15	Villupuram	24	24.00	20	20.00	20	20.00	20	20.00	84	84.00
	Total	1339	86.30	1393.5	110.15	1449	143.80	1429.5	124.05	5611	464.30

13. Incentive to seed Production to TANWABE

Physical: in Tonnes Financial: Rs in Lakhs

Sl.	District	2008	8-09	200	9-10	201	0-11	201	1-12	To	tal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	35	1.05	35	1.05	35	1.05	35	1.05	140	4.20
2	Dharmapuri	120	3.60	120	3.60	120	3.60	120	3.60	480	14.40
3	Erode	250	7.50	250	7.50	250	7.50	250	7.50	1000	30.00
4	Kancheepuram	300	9.00	300	9.00	450	13.50	450	13.50	1500	45.00
5	Kanyakumari	30	0.90	30	0.90	30	0.90	30	0.90	120	3.60
6	Karur	120	3.60	120	3.60	120	3.60	120	3.60	480	14.40
7	Namakkal	300	9.00	300	9.00	300	9.00	300	9.00	1200	36.00
8	Salem	450	13.50	450	13.50	450	13.50	450	13.50	1800	54.00
9	Thanjavur	300	9.00	360	10.80	420	12.60	420	12.60	1500	45.00
10	Tiruchirappalli	420	12.60	420	12.60	420	12.60	420	12.60	1680	50.40
11	Tirunelveli	150	4.50	150	4.50	150	4.50	150	4.50	600	18.00
	Total	2475	74.25	2535	76.05	2745	82.35	2745	82.35	10500	315.00

14. Hybrid Seed Distribution – Sunflower

Physical: in metric tonnes Financial: Rs in lakhs

	Thinking No.										
Sl.	District	200	8-09	200	9-10	201	0-11	201	1-12	T	otal
No.	District	Phy.	Fin.								
1	Dindigul	2	3.00	3	4.50	3	4.50	3	4.50	11	16.50
2	Erode	5	7.50	7	10.50	9	13.50	15	22.50	36	54.00
3	Karur	2	3.00	3	4.50	3	4.50	4	6.00	12	18.00
4	Namakkal	2	3.00	2	3.00	2	3.00	2	3.00	8	12.00
5	Salem	3	4.50	3	4.50	4	6.00	4	6.00	14	21.00
6	Tiruvannamalai	2	0.30	2	0.30	2	0.30	2	0.30	8	1.20
7	Thoothukudi	2	3.00	2	3.00	2	3.00	2	3.00	8	12.00
8	Tiruchirappalli	15	22.50	15	22.50	15	22.50	15	22.50	60	90.00
9	Tirunelveli	4	6.00	4	6.00	4	6.00	4	6.00	16	24.00
	Total	37	52.80	41	58.80	44	63.30	51	73.80	173	248.70

15. Promotion of Jatropha Bio-Diesel Crops Cultivation

Physical: in ha Financial: Rs in Lakhs

Sl.	Sl. District	2008	2008-2009		2008-2009		-2009	2008-	-2009	2008	3-2009
No.		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	250	50.00	250	50.00	250	50.00	250	50.00	1000	200.00
	Total	250	50.00	250	5.000	250	50.00	250	50.00	1000	200.00

16. Precision Farming in Agricultural crops

Physical: in ha

Financial: Rs in Lakhs

Sl.	No District	2008	2008-2009		2008-2009		-2009	2008	8-2009	2008	8-2009
No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	100	49.40	100	49.40	100	49.40	100	49.40	400	197.60
	Total	100	49.40	100	49.40	100	49.40	100	49.40	400	197.60

17. Certified Seed Production-One Time Grant - TANWABE / FIG(Rice)

Physical: in Nos Financial: Rs in lakhs

Sl.	District	200	8-09	200	9-10	201	0-11	201	1-12	TO	TAL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	30	15.00	30	15.00	30	15.00	30	15.00	120	60.00
2	Dharmapuri	8	4.00	8	4.00	8	4.00	8	4.00	32	16.00
3	Erode	25	12.50	0	0.00	0	0.00	0	0.00	2.5	12.50
4	Kanyakumari	1	0.50	1	0.50	1	0.50	1	0.50	4	2.00
5	Karur	2	1.00	0	0.00	0	0.00	0	0.00	2	1.00
6	Namakkal	20	10.00	0	0.00	0	0.00	0	0.00	20	10.00
7	Thiruvannamalai	6	3.01	17	8.50	0	0.00	0	0.00	23	11.51
8	Thoothukudi	1	0.50	2	1.00	2	1.00	2	1.00	7	3.50
9	Tiruchirappalli	10	5.00	0	0.00	0	0.00	0	0.00	10	5.00
10	Tirunelveli	5	2.50	0	0.00	0	0.00	0	0.00	5	2.50
11	Villupuram	6	3.00	5	2.50	5	2.50	5	2.50	21	10.50
	Total	114	57.01	63	31.50	46	23.00	46	23.00	246.5	134.51

18. Hybrid Seed Production Subsidy to TANWABE / FIG

Physical: in metric tonnes Financial: Rs in lakhs

Sl.	District	200	8-09	200	9-10	201	0-11	201	1-12	TO	TAL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Erode	10	10.00	20	20.00	40	40.00	0	0.00	70	70.00
2	Salem	10	2.00	20	4.00	20	4.00	20	4.00	80	14.00
3	Thiruvallur	22	1.10	22	1.10	22	1.10	22	1.10	88	4.40
4	Thiruvannamalai	0.25	0.05	4	0.80	4	0.80	4	0.80	12	2.45
5	Tiruchirappalli	10	2.00	20	4.00	30	6.00	30	6.00	90	18.00
6	Villupuram	24	4.80	20	4.00	20	4.00	20	4.00	84	16.80
	Total	76.25	19.95	106	33.90	136	55.90	96	15.90	424.25	125.65

19. Hybrid Seeds Distribution - Millets

Physical: in ha

Financial: Rs in Lakhs

Sl. No.	District	2008-09		2009-10		201	0-11	201	1-12	To	otal
SI. NO.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Madurai	500	5.63	600	6.75	500	5.63	500	5.63	2100	23.63
2	Thoothukudi	15	1.20	15	1.20	15	1.20	15	1.20	60	4.80
3	Tiruchirappalli	5	0.40	5	0.40	5	0.40	5	0.40	20	1.60
4	Tirunelveli	5	0.40	5	0.40	5	0.40	5	0.40	20	1.60
5	Tiruvannamalai	12	1.00	70	5.60	70	5.60	70	5.60	222	17.80
6	Villupuram	13	1.04	10	0.80	10	0.80	10	0.80	43	3.44
	Total	550	9.67	705	15.15	605	14.03	605	14.03	2465	52.87

20. Seed Production Subsidy / Seed Production groups / growers sharing (Pulses)

Physical: in ha

Financial: Rs in Lakhs

Sl. No.	District	2008-09		2009-10		201	0-11	201	1-12	To	tal
51. 110.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Kancheepuram	90	9.00	90	9.00	90	9.00	90	9.00	360	36.00
2	Karur	40	4.00	40	4.00	40	4.00	40	4.00	160	16.00
	Total	130	13.00	130	13.00	130	13.00	130	13.00	520	52.00

21. Seed Production by FIG / TANWAEBE - One Time Grant (Pulses)

Physical: in Tonnes Financial: Rs in Lakhs

Sl. No.	District	2008-09		2009-10		2010-11		2011-12		Total	
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Kancheepuram	9	4.50	0	0.00	0	0.00	0	0.00	9	4.50
2	Karur	6	3.00	0	0.00	0	0.00	0	0.00	6	3.00
3	Salem	50	25.00	0	0.00	0	0.00	0	0.00	50	25.00
4	Thanjavur	4	2.00	0	0.00	0	0.00	0	0.00	4	2.00
5	Tiruchirappalli	17	8.50	0	0.00	0	0.00	0	0.00	17	8.50
	Total	86	43.00	0	0.00	0	0.00	0	0.00	86	43.00

22. Seed Minikit of New HYV (@ Rs.100 per minikit Rice)

Physical: in Nos Financial: Rs in lakhs

Sl. No.	District	2008	3-09	2009)-10	2010)-11	2011	1-12	TOT	CAL
51. 140.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Dharmapuri	240	0.24	240	0.24	240	0.24	240	0.24	960	0.96
2	Erode	4000	4.00	4000	4.00	4000	4.00	4000	4.00	16000	16.00
3	Kancheepuram	50	0.05	50	0.05	50	0.05	50	0.05	200	0.20
4	Karur	320	0.32	360	0.36	380	0.38	400	0.40	1460	1.46
5	Namakkal	1000	1.00	1000	1.00	1000	1.00	1000	1.00	4000	4.00
6	Thanjavur	400	0.40	400	0.40	400	0.40	400	0.40	1600	1.60
7	Thiruvannamalai	2400	2.40	2500	2.50	2540	2.54	2600	2.60	10040	10.04
8	Thoothukudi	0	0.00	300	0.30	300	0.30	300	0.30	900	0.90
9	Tiruchirappalli	200	0.20	200	0.20	200	0.20	200	0.20	800	0.80
10	Tirunelveli	200	0.20	200	0.20	200	0.20	200	0.20	800	0.80
11	Villupuram	1200	1.20	1000	1.00	1000	1.00	1000	1.00	4200	4.20
	Total	10010	10.01	10250	10.25	10310	10.31	10390	10.39	40960	40.96

23. Distribution of Certified Seeds @ Rs.20/kg

Sl. No.	District	2008-09		2009-10		2010	0-11	201	1-12	To	tal
51. 140.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Madurai	1500	4.50	1600	4.80	1700	5.10	600	5.25	5400	19.65
2	Salem	10	2.00	10	2.00	10	2.00	10	2.00	40	8.00
3	Tirunelveli	60	1.20	60	1.20	60	1.20	60	1.20	240	4.80
4	Villupuram	5	1.00	5	1.00	5	1.00	5	1.00	20	4.00
	Total	1575	8.70	1675	9.00	1775	9.30	675	9.45	5700	36.45

24. Hybrid Seed Distribution - Other than Maize

Physical: in metric tonnes Financial: Rs in lakhs

Sl.		2008	2008-09		-10	2010	-11	2011	-12	Tot	tal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
	Thiruvallur										
1	(Area of fodder)	50.00	1.50	50.00	1.50	50.00	1.50	50.00	1.50	200.00	6.00
	Tiruvannamalai										
2	(Cumbu in ha.)	12.50	1.00	70.00	5.60	70.00	5.60	70.00	5.60	222.50	17.80
3	Tiruchirappalli	5.00	0.40	5.00	0.40	5.00	0.40	5.00	0.40	20.00	1.60
4	Tirunelveli	5.00	0.40	5.00	0.40	5.00	0.40	5.00	0.40	20.00	1.60
	Vellore										
5	(Cumbu in ha.)	0.00	0.00	50.00	0.08	50.00	0.08	50.00	0.08	150.00	0.24
6	Villupuram	13.00	1.40	10.00	0.80	10.00	0.80	10.00	0.80	43.00	3.80
	Total	85.50	4.70	190.00	8.78	190.00	8.78	190.00	8.78	655.50	31.04

25. Seed Production subsidy for Gingelly @ Rs 10/kg

Physical: in tonnes Financial: Rs in Lakhs

C No	District	2008	2008-09		2009-10		0-11	201	1-12	To	tal
S.No	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Erode	10	1.00	12	10.20	15	1.50	18	1.80	55	14.50
2	Kancheepuram	5	0.50	5	0.50	5	0.50	5	0.50	20	2.00
3	Karur	5	0.50	6	0.60	6	0.60	6	0.60	23	2.30
4	Thiruchirapalli	14	1.40	14	1.40	14	1.40	14	1.40	56	5.60
5	Thirunelveli	2	0.20	2	0.20	2	0.20	2	0.20	8	0.80
6	Villupuram	5	0.50	5	0.50	5	0.50	5	0.50	20	2.00
	Total	41	4.10	44	13.40	47	4.70	50	5.00	182	27.20

26. Establishment of Community Fodder Plots by SHGs / FIGs

	District -	2008	-2009	2008	-2009	2008-	-2009	2008	-2009	2008	-2009
Sl.No.		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	25	6.25	25	6.25	25	6.25	25	6.25	100	25.00
	Total	25	6.25	25	6.25	25	6.25	25	6.25	100	25.00

27. Hybrid Seed – Minikit

Physical: in Nos Financial: Rs in lakhs

	ı							2011-12 Total			
Sl.	District	2008	3-09	2009)-10	2010	-11	2011	-12	To	tal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Dindigul (Sunflower)	500	2.00	500	2.00	500	2.00	500	2.00	2000	8.00
2	Erode (Sunflower)	200	0.80	200	0.80	200	0.80	200	0.80	800	3.20
3	Kanniyakumari (Paddy)	50	0.05	50	0.05	50	0.05	50	0.05	200	0.20
4	Karur	160	0.64	160	0.64	160	0.64	160	0.64	640	2.56
5	Namakkal	200	0.80	200	0.80	200	0.80	200	0.80	800	3.20
6	Tiruvannamalai	40	0.16	40	0.16	40	0.16	40	0.16	160	0.64
7	Tiruchirappalli	100	0.40	100	0.40	100	0.40	100	0.40	400	1.60
8	Tirunelveli	20	0.08	20	0.08	20	0.08	20	0.08	80	0.32
9	Villupuram (Paddy (HYV)	1200	1.20	1000	1.00	1000	1.00	1000	1.00	4200	4.20
10	Villupuram (Sunflower)	50	0.20	50	0.20	50	0.20	50	0.20	200	0.80
	Total	2520	6.33	2320	6.13	2320	6.13	2320	6.13	9480	24.72

28. Seed Distribution subsidy for Gingelly @50% or Rs.12 $/\,\mathrm{kg}$

Sl.	District	200	8-09	2009-10		2010	0-11	201	1-12	To	tal
No	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Erode	10	1.20	12	1.44	15	1.80	18	2.16	55	6.60
2	Kancheepuram	5	0.60	6	0.60	6	0.60	6	0.60	23	2.40
3	Karur	5	0.60	5	0.60	5	0.60	5	0.60	20	2.40
4	Thiurvallur	106	1.27	100	1.27	106	1.27	106	1.27	418	5.09
5	Thiruvannamalai	7	0.84	7	0.84	7	0.84	7	0.84	28	3.36
6	Thirunelveli	2	0.24	2	0.24	2	0.24	2	0.24	8	0.96
7	Villupuram	5	0.60	5	0.60	5	0.60	5	0.60	20	2.40
	Total	140	5.35	137	5.59	146	5.95	149	6.31	572	23.21

29. Variety Seeds Distribution – Millets

Physical: in Tonnes Financial: Rs in Lakhs

CL N-	District	2008-09		2009-10		201	0-11	201	1-12	To	tal
Sl. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Erode	10	1.00	15	1.50	15	1.50	15	1.50	55	5.50
2	Madurai	200	0.15	200	0.15	200	0.15	200	0.15	800	0.60
3	Namakkal	25	2.00	25	2.00	25	2.00	25	2.00	100	8.00
4	Salem	22	1.76	24	1.92	25	2.00	25	2.00	96	7.68
	Total	257	4.91	264	5.57	265	5.65	265	5.65	1051	21.78

30. Hybrid Seed Distribution - Cotton

Physical: in metric tonnes Financial: Rs in lakhs

Sl.	District	2008	8-09	2009)-10	2010)-11	201	1-12	Т	otal
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Madurai	500	3.00	600	3.60	650	3.90	700	4.20	2450	14.70
2	Theni	50	0.50	100	1.00	100	1.00	150	1.50	400	4.00
	Total	550	3.50	700	4.60	750	4.90	850	5.70	2850	18.70

31. Fodder Seed Distribution

Physical: in ha

Financial: Rs in Lakhs

C N-	S.No District	2008-09		2009-10		2010)-11	2011	l -12	Tot	tal
5.N0		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Madurai	1000	2.00	1000	2.00	1000	2.00	1000	2.00	4000	8.00
2	Thiruvallur	50	0.16	50	0.16	50	0.16	50	0.16	200	0.65
	Total	1050	2.16	1050	2.16	1050	2.16	1050	2.16	4200	8.65

32. Distribution of certified seeds - Ragi

Physical: in ha

Financial : Rs in Lakhs

C No	District	2008-09		2009-10		2010)-11	2011	-12	Tot	tal
S.No	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Krishnagiri	0	0	0	0	0	0	0	0	20	4.00
	Total	0	0	0	0	0	0	0	0	20	4.00

33. Distribution of Foundation and Certified seeds of Sunflower @ subsidies rate

Physical: in Nos /ha Financial: Rs in Lakhs

CI No		2008-09		2009-10		2010	0-11	201	1-12	To	tal
Sl. No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	K arur	5	0.60	5	0.60	5	0.60	5	0.60	20	2.40
	Total	5	0.60	5	0.60	5	0.60	5	0.60	20	2.40

34. Production of Certified Seeds - Ragi

Physical: in Tonnes Financial: Rs in Lakhs

Sl. No.	District	2008	8-09	2009-10		2010	0-11	201	1-12	To	tal
SI. NO.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Krishnagiri			Year V	Vise De	tails not	Given			35	1.70
	Total									35	1.70

B. Mechanization

35. Distribution of Combined Harvesters

Physical: in Nos Financial: Rs in lakhs

Sl.	District	200	08-09	2009-10		201	10-11	20	11-12	TO	OTAL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	3	2.25	5	3.75	2	1.50	2	1.50	12	9.00
	Kanyakumari										
2	(Tractor)	5	7.50	5	7.50	5	7.05	5	7.50	20	30.00
	Thiruvannamalai										
3	(Tractor)	0	0.00	2	8.00	0	0.00	0	0.00	2	8.00
4	Thiruvarur	40	600.00	45	675.00	41	615.00	41	615.00	167	2505.00
	Total	48	609.75	57	694.25	48	624.00	48	624.00	201	2552.00

36. Machineries in Sugarcane

Sl.	District	2008-09		2009-10		20	10-11	201	1-12	TO	TAL
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Dharmapuri	0	200.00	0	200.00	0	200.00	0	200.00	0	800.00
	Total	0	200.00	0	200.00	0	200.00	0	200.00	0	800.00

37. Distribution of Mini Transplanters

Physical: in Nos Financial: Rs in lakhs

Sl.	D:-4:-4	200	08-09	200	9-10	202	10-11	202	11-12	TO	TAL
No.	District	Phy.	Fin.								
1	Ariyalur	10	7.50	10	7.50	5	3.75	5	3.75	30	22.5
2	Coimbatore	1	0.75	0	0.00	0	0.00	0	0.00	1	0.75
3	Dharmapuri	8	6.00	8	6.00	8	6.00	8	6.00	32	24.00
4	Kancheepuram	10	7.50	10	7.50	10	7.50	10	7.50	40	30.00
5	Kanyakumari	5	5.00	5	5.00	5	5.00	5	5.00	20	20.00
6	Krishnagiri	4	3.00	3	2.25	2	1.50	1	0.75	10	7.50
7	Madurai	5	4.69	5	4.68	5	4.69	10	9.38	25	23.425
8	Nagapattinam	11	5.50	15	7.50	20	10.00	20	10.00	66	33.00
9	Perambalur	5	3.75	5	3.75	5	3.75	5	3.75	20	15.00
10	Salem	5	3.75	5	3.75	5	3.75	5	3.75	20	15.00
11	Thanjavur	14	10.50	18	13.50	20	15.00	20	15.00	72	54.00
12	Theni	2	0.80	2	0.80	2	0.80	2	0.80	8	3.20
13	Thiruvannamalai	4	3.00	10	7.50	10	7.50	20	15.00	44	33.00
14	Thiruvarur	30	45.00	30	45.00	33	49.50	35	52.50	128	192.00
15	Thoothukudi	5	3.75	5	3.75	5	3.75	5	3.75	20	15.00
16	Tiruchirappalli	8	6.00	8	6.00	8	6.00	8	6.00	32	24.00
17	Tirunelveli	5	3.75	5	3.75	5	3.75	5	3.75	20	15.00
18	Villupuram	5	3.75	5	3.75	5	3.75	6	4.50	21	15.75
	Total	137	123.99	149	131.98	153	135.99	170	151.18	609	543.14

38. Distribution of Mini power Tillers

Sl.	DISTRICT	200	8-09	200	9-10	2010-11		201	11-12	ТО	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Kancheepuram	10	7.50	10	7.50	10	7.50	10	7.50	40	30.00
2	Krishnagiri	4	2.00	4	2.00	4	2.00	3	1.50	15	7.50
3	Madurai	30	18.75	35	21.88	40	25.00	50	31.25	155	96.89
4	Nagapattinam	25	12.50	30	15.00	35	18.00	50	25.00	140	70.50
5	Perambalur	13	8.45	12	7.80	13	8.45	12	7.80	50	32.50
6	Ramanathapuram	2	1.30	2	1.30	2	1.30	2	1.30	10	6.50
7	Thiruvannamalai	10	7.50	4.2	33.00	40	30.00	40	30.00	94.2	100.50
8	Thoothukudi	10	6.50	10	6.50	10	6.50	10	6.50	40	26.00
9	Tirunelveli	25	16.25	25	16.25	25	16.25	25	16.25	100	65.00
	Total	129	80.75	132.2	111.23	179	115.00	202	127.10	642.2	435.39

39. Distribution of Farm Implements and Hand Tools to Small and marginal farmers and Agricultural labourers

Physical: in Nos Financial: Rs in Lakhs

Sl.	District -	2008	-2009	2008-2009		2008	-2009	2008	-2009	2008	-2009
No.		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	3000	90.00	3000	90.00	3000	90.00	3000	90.00	12000	360.00
	Total	3000	90.00	3000	90.00	3000	90.00	3000	90.00	12000	360.00

40. Distribution of Bund formers

C)		200	0.00	200	0 10	201	Λ 11		iliciai; K		
Sl.	DISTRICT	200	8-09	200	9-10	201	0-11	201	11-12	10	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	100	15.00	100	15.00	100	15.00	100	15.00	400	60.00
	Coimbatore (Shredder)	5	2.50	0	0.00	0	0.00	0	0.00	5	2.50
	Coimbatore (Groundnut Decordicator)	20	3.00	20	3.00	20	3.00	20	3.00	80	12.00
	Coimbatore (Chaff cutter)	100	30.00	200	60.00	250	75.00	300	90.00	850	255.00
	Coimbatore	20	1.60	0	0.00	0	0.00	0	0.00	20	1.60
2	Thiruvallur	5	0.13	5	0.13	5	0.13	5	0.13	20	5.00
3	Thiruvannamalai (Electric motor)	0	0.00	3	0.60	0	0.00	0	0.00	3	0.60
4	Thiruvarur (Ridger)	10	0.75	10	0.75	12	0.90	12	0.90	44	3.30
	Total	260	52.98	338	79.48	387	94.03	437	109.03	1422	335.52

41. Distribution of Power Thrashers

Physical: in Nos Financial: Rs in lakhs

Sl.	DISTRICT	200	8-09	200	9-10	201	0-11	201	1-12	ТО	TAL
No.	DISTRICT	Phy.	Fin.								
1	Ariyalur	6	3.00	6	3.00	6	3.00	6	3.00	24	12.00
2	Coimbatore	2	1.00	0	0.00	0	0.00	0	0.00	2	1.00
3	Dharmapuri	8	4.00	8	4.00	8	4.00	8	4.00	32	16.00
4	Namakkal	20	10.00	20	10.00	20	10.00	20	10.00	80	40.00
5	Perambalur	12	42.00	12	42.00	12	42.00	12	42.00	48	168.00
	Perambalur Maize sheller	4	4.50	4	4.50	4	4.50	4	4.50	16	18.00
6	Salem	3	1.50	3	1.50	4	2.00	5	2.50	15	7.50
7	Thiruvannamalai	2	1.00	5	2.50	5	2.50	10	5.00	22	11.00
8	Thoothukudi	5	2.50	5	2.50	5	2.50	5	2.50	20	10.00
9	Tiruchirappalli	14	7.00	14	7.00	14	7.00	14	7.00	56	28.00
10	Tirunelveli	2	1.00	2	1.00	2	1.00	2	1.00	8	4.00
	Total	78	77.50	79	78.00	80	78.50	86	81.50	323	315.50

42. Distribution of Power Sprayer

Physical: in Nos Financial: Rs in lakhs

Sl.	District	200	8-09	2009-10		201	0-11	201	11-12	TO	TAL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	100	10.00	100	10.00	150	15.00	150	15.00	500	50.00
	Coimbatore										
	(Replacement										
	of old pumps)	60	9.00	50	7.50	50	7.50	50	7.50	210	31.50
2	Kanyakumari	100	1.00	100	1.00	100	1.00	100	1.00	400	4.00
3	Madurai	30	1.01	30	1.01	40	1.35	45	1.69	145	5.057
4	Thiruvallur	30	0.78	30	0.78	30	0.78	30	0.78	120	3.12
	Total	320	21.79	310	20.29	370	25.63	375	25.97	1375	93.68

43. Tree Climber

Sl.	Districts	2008	8-09	2008-09		2008-09		2008	8-09	2008	8-09
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	30	0.30	50	0.50	50	0.50	50	0.50	180	1.80
2	Dharmapuri	400	14.40	400	14.40	400	14.40	400	14.40	1600	57.60
	Total	430	14.70	450	14.90	450	14.90	450	14.90	1780	59.40

44. Distribution of Hand Operated Sprayers

Physical: in Nos Financial: Rs in lakhs

Sl. No.	District	2008-09		2009-10		201	0-11	2011	1-12	TO	ΓAL
51. 140.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	50	2.50	100	5.00	50	2.50	50	2.5	250	12.50
2	Madurai	100	0.90	100	0.90	125	1.13	150	1.35	475	4.28
3	Thiruvarur	300	2.40	300	2.40	0	0.00	0	0.00	600	4.80
	Total	450	5.80	500	8.30	175	3.63	200	3.85	1325	21.58

C. Infra-Structure

45. Construction of Rural Godowns

Sl.	District	20	08-09	200)9-10	201	10-11	201	11-12	TO	OTAL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Kancheepuram	8	80.00	0	0.00	0	0.00	0	0.00	8	80.00
2	Krishnagiri (Community godown &Extn. godown)	20	200.00	20	200.00	20	200.00	20	200.00	80	800.00
3	Ramanathapuram	12	120.00	12	120.00	12	120.00	12	120.00	48	480.00
4	Salem	15	150.00	0	0.00	0	0.00	0	0.00	15	150.00
5	Thanjavur	7	70.00	0	0.00	0	0.00	0	0.00	7	70.00
6	Thiruvallur	1	15.00	1	15.00	1	15.00	1	15.00	4	60.00
7	Thiruvarur	12	120.00	12	120.00	1	10.00	2	20.00	27	270.00
8	Tirunelveli	10	100.00	0	0.00	0	0.00	0	0.00	10	100.00
9	Villupuram	50	500.00	0	0.00	0	0.00	0	0.00	50	500.00
	Total	135	1355.00	45	455.00	34	345.00	35	355.00	249	2510.00

46. Construction of Thrashing Floor

Sl.	Division	200	8-09	200	09-10	20	10-11	20:	11-12	Т	otal
No.	District	Phy.	Fin.								
1	Ariyalur	8	24.00	8	24.00	8	24.00	8	24.00	32	96.00
2	Coimbatore	1	1.00	1	1.00	1	1.00	1	1.00	4	4.00
3	Dharmapuri	56	56.00	56	56.00	56	56.00	56	56.00	224	224.00
4	Kancheepuram	20	40.00	20	40.00	20	40.00	20	40.00	80	160.00
5	Karur	1	1.00	1	1.00	1	1.00	1	1.00	4	4.00
6	Madurai	100	5.25	100	5.25	100	5.25	100	5.25	400	21.00
7	Perambalur	5	15.00	5	15.00	5	15.00	5	15.00	20	60.00
8	Pudukkottai	4	8.00	3	6.00	3	6.00	3	6.00	13	26.00
9	Ramanathapuram	15	45.00	15	45.00	15	45.00	15	45.00	60	180.00
10	Salem	5	10.00	5	10.00	5	10.00	5	10.00	20	40.00
11	Thanjavur	8	16.00	14	28.00	28	56.00	30	60.00	80	160.00
12	Tiruchirappalli	1	2.00	2	4.00	2	4.00	2	4.00	7	14.00
13	Tirunelveli	20	40.00	20	40.00	20	40.00	20	40.00	80	160.00
14	Tiruvannamalai	10	10.00	20	20.00	30	30.00	40	40.00	100	100.00
15	Vellore	1	1.00	0	0.00	1	1.00	1	1.00	3	3.00
16	Villupuram	50	100.00	50	100.00	50	100.00	50	100.00	200	400.00
	Total	305	374.25	320	395.25	345	434.25	357	448.25	1327	1652.00

47. Strengthening of State Seed Farms

Financial: Rs in lakhs

Sl.	District	200	08-09	200	09-10	201	10-11	201	1-12	Т	otal
No.	District	Phy.	Fin.								
1	Coimbatore	0	1.00	0	1.00	0	0.00	0	0.00	0	2.00
2	Cuddalore	0	80.37	0	0.00	0	0.00	0	0.00	0	80.37
3	Madurai	0	44.39	0	0.00	0	0.00	0	0.00	0	44.39
4	Pudukottai	0	24.50	0	57.60	0	58.20	0	57.40	0	197.70
5	Theni	0	135.73	0	0.00	0	0.00	0	0.00	0	135.73
6	Thiruvarur	0	30.00	0	20.00	0	14.00	0	8.00	0	72.00
7	Tirunelveli	0	64.55	0	0.00	0	0.00	0	0.00	0	64.55
8	Villupuram	0	90.50	0	61.50	0	58.00	0	35.00	0	245.00
	Total	0	471.04	0	140.10	0	130.20	0	100.40	0	841.74

48. Establishment of Agri. Clinics and Mini Soil Testing Units

Physical: in Nos Financial: Rs in Lakhs

Sl.	DISTRICT	200	08-09	2009-10		201	0-11	201	1-12	TO	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Kancheepuram	3	15.00	3	15.00	3	15.00	3	15.00	12	60.00
2	Namakkal	10	30.00	10	30.00	0	0.00	0	0.00	20	60.00
3	Pudukkottai	1	15.00	1	15.00	1	15.00	1	15.00	4	60.00
4	Salem	5	12.50	5	12.50	0	0.00	0	0.00	10	25.00
5	Sivagangai	5	17.50	5	17.50	5	17.50	5	17.50	20	70.00
6	Thiruvannamalai	2	5.00	5	12.50	6	15.00	15	37.50	28	70.00
7	Tiruchirappalli	8	20.00	6	15.00	0	0.00	0	0.00	14	35.00
8	Villupuram	11	27.50	10	25.00	0	0.00	0	0.00	21	52.50
	Total	45	142.50	45	142.50	15	62.50	34	85.00	129	438.50

49. Upgradation of Existing Seed Processing Units and Block Seed Godowns

Sl.	District	2008	3-2009	2008-2009		2008	8-2009	2008	-2009	2008	3-2009
No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	5	125.00	5	125.00	20	100.00	0	0.00	30	350.00
	Total	5	125.00	5	125.00	20	100.00	0	0.00	30	350.00

50. Preparation of Land Resources Inventory and GIS Data base

Sl.	District	2008	8-2009	2008-2009		2008	8-2009	200	8-2009	2008	8-2009
No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	3	93.00	3	93.00	3	93.00	2	62.00	11	341.00
	Total	3	93.00	3	93.00	3	93.00	2	62.00	11	341.00

51. Promotion of Organic Farming and Organic Manure Production Units

Physical: in Nos Financial: Rs in Lakhs

Sl.	District	2008	-2009	2008-2009		2008	-2009	2008	-2009	2008	3-2009
No.		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	12	81.00	12	81.00	12	81.00	12	81.00	48	324.00
	Total	12	81.00	12	81.00	12	81.00	12	81.00	48	324.00

52. Establishment of Zonal Agricultural Research Station

Physical: in Nos Financial: Rs in Lakhs

Sl.	District	2008-2009		2008-2009		2008	8-2009	2008	-2009	2008	8-2009
No	District	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	1	50.00	0	100.00	0	100.00	0	50.00	1	300.00
	Total	1	50.00	0	100.00	0	100.00	0	50.00	1	300.00

53. Strengthening of District Information Centre

Sl.	District	200	8-09	200	9-10	201	0-11	201	1-12	T	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Kanniyakumari	1	3.00	0	0.00	0	0.00	0	0.00	1	3.00
2	Karur	1	2.50	0	0.00	0	0.00	0	0.00	1	2.50
3	Namakkal	0	83.00	0	63.02	0	23.65	0	23.65	0	193.32
4	Thanjavur	0	2.50	0	0.00	0	0.00	0	0.00	0	2.50
5	Tiruvannamalai	1	2.50	0	0.00	0	0.00	0	0.00	1	2.50
6	Tiruchirappalli	1	2.50	0	0.00	0	0.00	0	0.00	1	2.50
7	Virudhunagar	0	32.35	0	17.35	0	17.35	0	17.35	0	84.40
	Total	4	128.35	0	80.37	0	41.00	0	41.00	4	290.72

54. Vermi Compost Production Units / YARDS

Physical: in Nos Financial:Rs in lakhs

Sl.	District	200	8-09	2009	-2010	2010	-2011	2011	-2012	Т	otal
No.	District	Phy.	Fin.								
1	Coimbatore	10	2.00	10	2.00	15	3.00	20	4.00	55	11.00
2	Kancheepuram	8	0.80	10	1.00	10	1.00	10	1.00	38	3.80
3	Kanyakumari	9	2.70	9	2.70	9	2.70	9	2.70	36	10.80
4	Karur	15	1.50	20	2.00	25	2.50	25	2.50	85	8.50
5	Namakkal	90	9.00	90	9.00	90	9.00	90	9.00	360	36.00
6	Ramnathapuram	11	1.10	11	1.10	11	1.10	11	1.10	44	4.40
7	Salem	20	2.00	20	2.00	20	2.00	20	2.00	80	8.00
8	Sivagangai	12	27.00	12	27.00	12	27.00	12	27.00	48	108.00
9	Thanjavur	20	2.00	20	2.00	30	3.00	30	3.00	100	10.00
10	Tiruchirappalli	20	2.00	20	2.00	30	3.00	30	3.00	100	10.00
11	Tirunelveli	20	2.00	20	2.00	20	2.00	20	2.00	80	8.00
12	Thiruvannamalai	20	2.00	50	5.00	100	10.00	125	12.50	295	29.50
13	Villupuram	600	6.00	50	5.00	50	5.00	50	5.00	210	21.00
	Total	315	60.10	342	62.80	422	71.30	452	74.80	1531	269.00

55. Video Conferencing Facilities / Short films

Financiai: Ks in i											lakiis
Sl.	District	200	08-09	200	9-10	201	0-11	201	1-12	T	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Cuddalore	1	2.50	1	2.50	1	2.50	1	2.50	4	10.00
2	Erode (SF)	1	2.50	0	0.00	0	0.00	0	0.00	1	2.50
3	Kancheepuram(SF)	1	2.50	1	2.50	1	2.50	1	2.50	4	10.00
4	Kanniyakumari	10	100.00	0	0.00	0	0.00	0	0.00	10	100.00
5	Krishnagiri	1	10.00	1	10.00	1	10.00	1	10.00	4	40.00
6	Namakkal	0	2.00	0	2.50	0	3.00	0	3.50	0	11.00
7	Salem (SF+VC)	2	12.50	1	2.50	1	2.50	1	2.50	5	20.00
8	Thanjavur	1	10.00	0	0.00	0	0.00	0	0.00	1	10.00
9	Tiruvannamalai(SF)	1	2.50	0	0.00	0	0.00	0	0.00	1	2.50
10	Tiruchirappalli	1	10.00	0	0.00	0	0.00	0	0.00	1	10.00
11	Villupuram (SF)	1	12.50	1	2.50	1	2.50	1	2.50	4	20.00
	Total	20	167.00	5	22.50	5	23.00	5	23.50	35	236.00

56. Establishment of Modern Mini Processing Unit

Physical: in Nos Financial: Rs in lakhs

Sl. No.	DISTRICT	2008-09		2009-10		201	0-11	201	1-12	ТО	TAL
51. 140.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Krishnagiri	1	20.00	0	0.00	0	0.00	0	0.00	1	20.00
2	Thiruvallur	1	35.00	1	35.00	1	35.00	1	35.00	4	140.00
	Total	2	55.00	1	35.00	1	35.00	1	35.00	5	160.00

57. Seed Testing Laboratories

Sl.No.	District	200	08-09	2009	9-10	2010	0-11	2011		Te	otal
S1.No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
3	Cuddalore	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
5	Dindigul	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
6	Kanniyakumari	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
7	Karur	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
8	Krishnagiri	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
9	Nagapattinam	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
10	Namakkal	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
11	Perambalur	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
12	Pudukottai	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
13	Ramanathapuram	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
14	Sivagangai	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
15	Theni	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
16	Thiruvallur	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
17	Tiruvannamalai	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
18	Thiruvarur	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
19	Thoothukudi	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
20	Vellore	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
21	Virudhunagar	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
	Total	19	114.00	0	0.00	0	0.00	0	0.00	19	114.00

58. Establishment of Automatic Weather Stations and Automatic Rain gauges

Physical: in Nos Financial: Rs in Lakhs

Sl.	District	2008	3-2009	2008-2009		2008	3-2009	2008	8-2009	2008	8-2009
No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	2	18.00	2	18.00	2	18.00	1	9.00	7	63.00
	Total	2	18.00	2	18.00	2	18.00	1	9.00	7	63.00

59. Establishment of Solar Fencing for Stray animals menace

Physical: in Units Financial: Rs in Lakhs

	District -	2008	-2009	2008	-2009	2008	-2009	2008	-2009	2008	-2009
Sl. No.		Phy.	Fin								
1	Sivagangai	60	15.00	60	15.00	60	15.00	60	15.00	240	60.00
	Total	60	15.00	60	15.00	60	15.00	60	15.00	240	60.00

60. Establishment of Cold Storage Unit for Chillies

Physical: in Nos

Financial: Rs in Lakhs

Sl.	District -	2008	-2009	2008-2009		2008-	-2009	2008-	-2009	2008	-2009
No.		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	1	25.00	1	25.00	0	0.00	0	0.00	2	50.00
	Total	1	25.00	1	25.00	0	0.00	0	0.00	2	50.00

61. Establishment of Prosophis Bio Fuel Units

	District	2008	-2009	2008	-2009	2008	-2009	2008	-2009	2008	-2009
Sl.No.		Phy.	Fin								
1	Sivagangai	1	10.00	1	10.00	1	10.00	1	10.00	4	40.00
	Total	1	10.00	1	10.00	1	10.00	1	10.00	4	40.00

D. Soil Health Management

62. Distribution of Micro Nutrient Mixture Rs.500/ha or 50% subsidy

Sl.	Di di di	2008	8-09	2008	8-09	2008	8-09	2008	3-09	To	tal
No.	Districts	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	12500	4.38	12500	4.38	12500	4.38	12500	4.38	50000	17.50
2	Dindigul	500	2.50	600	3.00	600	3.00	600	3.00	2300	11.50
3	Erode	400	2.00	400	2.00	400	2.00	400	2.00	1600	8.00
4	Kancheepuram	27020	135.80	27020	135.80	27020	135.80	27020	135.80	108080	543.20
5	Kanniyakumari	3	1.05	3	1.05	3	1.05	3	1.05	12	4.20
6	Karur	4180	19.30	4200	19.40	4300	19.90	4325	20.03	17005	78.63
7	Madurai	1300	3.28	1575	3.71	1600	3.99	1650	4.13	6125	15.09
8	Nagapattinam	500	2.50	700	3.50	700	3.50	800	4.00	2700	13.50
9	Namakkal	4165	23.00	4165	23.00	5165	28.00	5165	28.00	18660	102.00
10	Perambalur	25000	8.75	25000	8.75	25000	8.75	25000	8.75	100000	35.00
11	Ramanathapuram	100	0.50	100	0.50	100	0.50	100	0.50	400	2.00
12	Thanjavur	14200	71.00	28200	141.00	35200	176.00	42200	211	119800	599.00
13	Theni	5.50	0.60	5.00	0.75	5.50	0.80	6.00	0.85	22	3.00
14	Thiruvallur			Give	n under IN	M of all c	rops				
15	Thiruvarur	1960	7.82	2260	8.04	2212	10.15	2217	10.36	8649	36.37
16	Thoothukudi	150	0.30	550	0.50	550	0.50	550	0.50	1800	1.80
17	Trichy	13610	68.05	13610	68.05	14610	73.05	14610	73.05	56440	282.20
18	Thirunelveli	1320	6.60	2320	11.60	4320	21.60	5320	26.60	13280	66.40
19	Tiruvannamalai	10800	54.00	21000	105.00	23200	116.00	23350	116.75	78350	391.75
20	Vellore	10000	20.00	14600	26.90	14600	26.90	14600	26.90	53800	100.70
21	Villupuram	12600	18.00	12500	17.75	12500	17.75	12500	17.75	50100	71.25
	Total	140314	449.42	171308	584.67	184586	653.61	192916	695.39	689123	2383.09

63. Enriched Farm Yard Manure

	Financial: Rs in lakhs									IIIS	
Sl.	DISTRICT	20	08-09	200	9-10	201	10-11	201	11-12	ТО	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	200	2.00	250	2.50	300	3.00	300	3.00	1050	10.50
2	Kancheepuram	8	80.00	0	0.00	0	0.00	0	0.00	8	80.00
	Krishnagiri										
	(Community										
	godown &Extn.	20	200.00	20	200.00	20	200.00	20	200.00	80	800.00
3	godown)										
4	Ramanathapuram	4000	50.00	4000	10.00	4000	50.00	4000	50.00	16000	160.00
5	Salem	15	150.00	0	0.00	0	0.00	0	0.00	15	150.00
6	Thanjavur	7	70.00	0	0.00	0	0.00	0	0.00	7	70.00
7	Thiruvallur	1	15.00	1	15.00	1	15.00	1	15.00	4	60.00
8	Thiruvarur	12	120.00	12	120.00	1	10.00	2	20.00	27	270.00
9	Tirunelveli	10	100.00	0	0.00	0	0.00	0	0.00	10	100.00
10	Vellore	2100	21.00	2100	21.00	2100	21.00	2100	21.00	8400	84.00
11	Villupuram	50	500.00	0	0.00	0	0.00	0	0.00	50	500.00
	Total	6423	1308.00	6383	368.50	6422	299.00	6423	309.00	25651	2284.50

64. Paddy - Distribution of Zinc Sulphate / Micro Nutrient @ Rs.500 / Ha. (or) 50% subsidy

Physical: Ha Financial: (Rs. in lakhs)

Sl.	D' 4 ' 4	200	8-09	2009	9-10	2010)-11	2011		To	
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	3000	15.00	3000	15.00	3000	15.00	3000	15.00	12000	60
2	Dindigul	1000	5.00	1000	5.00	1000	5.00	1000	5.00	4000	20
3	Kanchepuram	25000	125.00	25000	125.00	25000	125.00	25000	125.00	100000	500
4	Karur	3500	17.50	3500	17.50	3600	18.00	3600	18.00	14200	71
5	Madurai	500	0.75	600	0.90	600	0.90	600	0.90	2300	3.45
6	Nagappattinam	500	2.50	700	3.50	750	3.50	800	4.00	2750	13.5
7	Namakkal	2000	10.00	2000	10.00	3000	15.00	3000	15.00	10000	50
8	Perambalur	2000	10.00	2000	10.00	2000	10.00	2000	10.00	8000	40
9	Ramanathapuram	1000	5.00	0	0.00	0	0.00	0	0.00	1000	5
10	Thanjavur	14000	70.00	14000	140.00	14000	175.00	14000	210.00	56000	595
11	Theni	0	0.25	0	0.30	0	0.35	0	0.40	0	1.3
12	Thiruvallur	1800	1.90	1800	1.90	1800	1.90	1800	1.90	7200	7.6
13	Thiruvarur	0	3.60	0	7.00	0	5.92	0	5.92	0	22.44
14	Trichy	13000	65.00	13000	65.00	14000	70.00	14000	70.00	54000	270
15	Tirunelveli	1000	5.00	2000	10.00	4000	20.00	5000	25.00	12000	60
16	Tiruvannamalai	5000	25.00	15000	75.00	17000	85.00	17000	85.00	54000	270
17	Vellore	10000	20.00	10000	20.00	10000	20.00	10000	20.00	40000	80
18	Villupuram	10000	10.00	10000	10.00	10000	10.00	10000	10.00	40000	40
	Total	93300	391.50	103600	516.10	109750	580.57	110800	621.12	417450	2109.29

65. Gypsum 500 kg/ ha @ Rs.1875/Ha. or 100% subsidy

Physical: Ha Financial: (Rs. in lakhs)

	Financial : (Rs. in lakhs)							us)			
Sl.	District	200	8-09	200	9-10	201	0-11	201	1-12	Te	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	1500	28.13	1500	28.13	1500	28.13	1500	28.13	6000	112.50
2	Kancheepuram	3000	15.00	3000	15.00	3000	15.00	3000	15.00	12000	60.00
3	Karur	1250	6.25	1500	7.50	1750	8.75	2000	10.00	6500	32.50
4	Namakal	2000	10.00	2000	10.00	3000	15.00	3000	15.00	10000	50.00
5	Perambalur	1000	18.75	1000	18.75	1000	18.75	1000	18.75	4000	75.00
6	Ramanathapuram	300	2.25	0	0.00	0	0.00	0	0.00	300	2.25
7	Salem	6000	30.00	7000	35.00	8000	40.00	9000	45.00	30000	150.00
8	Thanjavur	600	0.00	700	0.00	800	0.00	1000	0.01	3100	0.02
9	Thiruvallur	700	8.75	700	8.75	700	8.75	700	8.75	2800	35.00
10	Trichy	10000	0.05	10000	0.05	10000	0.05	10000	0.05	40000	0.20
11	Tiruvannamalai	40000	200.00	41000	205.00	42000	210.00	43000	215.00	166000	830.00
12	Vellore	5000	15.00	5000	15.00	5000	15.00	5000	15.00	20000	60.00
13	Villupuram	10000	50.00	10000	50.00	10000	50.00	10000	50.00	40000	200.00
	Total	81350	384.18	83400	393.18	86750	409.43	89200	420.68	340700	1607.47

66. Paddy - Distribution of soil health card (@ Rs 25/ Card)

	Financial: Rs in lakhs L 2008-09 2009-10 2010-11 2011-12 Total										
Sl.		200	8-09	200	9-10	2010)-11	2011	1-12	To	tal
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
	District										
1	Dindigul	10000	2.5	10000	2.5	10000	2.5	10000	2.5	40000	10
2	Erode @ Rs 100/card	10000	10	10000	10	10000	10	10000	10	40000	40
3	Kancheepuram @ Rs 100/card	40000	40	40000	40	40000	40	40000	40	160000	160
4	Kanyakumari	9000	2.25	9000	2.25	9000	2.25	9000	2.25	36000	9
5	Karur @ Rs 100/card	10000	10	10000	10	15000	15	15000	15	50000	50
6	Namakkal @ Rs 100/card	5000	5	5000	5	5000	5	5000	5	20000	20
7	Perambalur @ Rs 100/card	25000	25	25000	25	25000	25	25000	25	100000	100
8	Ramanathapuram @ Rs 100/card	36000	36	0	0	0	0	0	0	36000	36
9	Salem	0	0.77	0	0.77	0	0.77	0	0.77	0	3.09
10	Thanjavur	67500	67.5	67500	67.5	67500	67.5	67500	67.5	270000	270
11	Thiruvallur @ Rs.50/card	2800	1.4	2800	1.4	2800	1.4	2800	1.4	11200	5.6
12	Thiruvarur	5450	0.55	11000	1.1	7900	0.79	900	0.9	25250	3.335
13	Thoothukudi @ Rs.100/card	500	0.05	2000	0.2	2000	0.2	2000	0.2	6500	0.65
14	Trichy @ Rs.100/card	65000	65	65000	65	65000	65	65000	65	260000	260
15	Tirunelveli @Rs.100/card	4500	4.5	4500	4.5	4500	4.5	4500	4.5	18000	18
16	Thiruvannamalai	20000	5	20000	5	20000	5	20000	5	80000	20
17	Vellore	1000	0.6	1000	0.6	1000	0.6	1000	0.6	4000	2.4
18	Villupuram @Rs100/card	20000	2	20000	2	20000	2	20000	2	80000	8
	Total	331750	278.12	302800	242.82	304700	247.51	297700	247.62	1236950	1016.08

67. Paddy - Distribution of Green Manure seeds at 75% subsidy of Rs.15/kg.

	Financial: Ks in lakhs										
Sl.		2008-09 2009-10 2010-11			201	1-12	T	otal			
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	10	1.13	10	1.13	10	1.13	10	1.13	40	4.50
2	Dindigul @ Rs 20/kg subsidy	5	1.00	5	1.00	7.5	1.50	7.5	1.50	25	5.00
3	Kancheepuram	10	1.50	60	9.00	60	9.00	80	12.00	210	31.50
4	Kanyakumari @ Rs 20/kg subsidy	20	4.00	20	4.00	20	4.00	20	4.00	80	16.00
5	Karur	15	2.25	20	3.00	25	3.75	30	4.50	90	13.50
6	Namakkal	25	3.75	25	3.75	40	6.00	40	6.00	130	19.50
7	Ramanathapuram	5	0.75	0	0.00	0	0.00	0	0.00	5	0.75
8	Thanjavur	80	12.00	90	13.50	120	18.00	140	21.00	430	64.5
9	Theni @ Rs 18/kg subsidy	4	0.72	5	0.90	6	1.08	7	1.26	22	3.96
10	Trichy	40	6.00	50	7.50	70	10.50	70	10.50	230	34.5
11	Thirunel veli @ Rs 20/kg	100	20.00	100	20.00	125	25.00	125	25.00	450	90.00
12	Thiruvannamalai	10	1.50	50	7.50	50	7.50	50	7.50	160	24.00
13	Villupuram	10	1.50	10	1.50	10	1.50	10	1.50	40	6.00
	Total	334	56.10	445	72.78	543.5	88.96	589.5	95.89	1912	313.71

68. Pulses DAP 2% Spray

Sl.	DICTRICT	2008	3-09	2009	9-10	201	0-11	2011	1-12	ТОТ	AL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	1000	2.00	0	0	0	0	0	0	1000	2.00
2	Cuddalore	10000	20.00	0	0	0	0	0	0	10000	20.00
3	Dharmapuri	1200	2.40	0	0	0	0	0	0	1200	2.40
4	Dindigul	1200	2.40	0	0	0	0	0	0	1200	2.40
5	Erode	2500	5.00	0	0	0	0	0	0	2500	5.00
6	Kancheepuram	1600	3.20	0	0	0	0	0	0	1600	3.20
7	Kanniyakumari	300	0.60	0	0	0	0	0	0	300	0.60
8	Krishnagiri	1000	2.00	0	0	0	0	0	0	1000	2.00
9	karur	900	1.80	0	0	0	0	0	0	900	1.80
10	Madurai	1700	3.40	0	0	0	0	0	0	1700	3.40
11	Namakkal	2000	4.00	0	0	0	0	0	0	2000	4.00
12	Nagapattinam	13300	26.60	0	0	0	0	0	0	13300	26.60
13	Perambalur	400	0.80	0	0	0	0	0	0	400	0.80
14	Pudukkottai	1800	3.60	0	0	0	0	0	0	1800	3.60
15	Ramanathapuram	700	1.40	0	0	0	0	0	0	700	1.40
16	Salem	4500	9.00	0	0	0	0	0	0	4500	9.00
17	Sivagangai	300	0.60	0	0	0	0	0	0	300	0.60
18	Thanjavur	7500	15.00	0	0	0	0	0	0	7500	15.00
19	Theni	1200	2.40	0	0	0	0	0	0	1200	2.40
20	Thiruvallur	2800	5.60	0	0	0	0	0	0	2800	5.60
21	Thiruvarur	13200	26.40	0	0	0	0	0	0	13200	26.40
22	Thoothukudi	5500	11.00	0	0	0	0	0	0	5500	11.00
23	Trichy	3200	6.40	0	0	0	0	0	0	3200	6.40
24	Tirunelveli	4000	8.00	0	0	0	0	0	0	4000	8.00
25	Tiruvannamalai	4000	8.00	0	0	0	0	0	0	4000	8.00
26	Vellore	2200	4.40	0	0	0	0	0	0	2200	4.40
27	Villupuram	7500	15.00	0	0	0	0	0	0	7500	15.00
28	Virudhunagar	4500	9.00	0	0	0	0	0	0	4500	9.00
	Total	100000	200.00	0	0	0	0	0	0	100000	200.00

69. Problem Soil Management

Physical: in hectarce Financial: Rs in lakhs

Sl.		2008-09		8-09 2009-2010		2010-2011		2	011-2012	Т	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	5	3.50	5	3.50	5	3.50	5	3.5	20	14.00
									37.5 (soil		
2	Nagapattinam	750	37.50	750	37.50	750	37.50	750	reclamation)	3000	150.00
	Total	755	41.00	755	41.00	755	41.00	755	41.0	3020	164.00

70. Assistance to start vermi compost production unit @ Rs. 10000 per unit (Self Help Group Women Farmers)

Sl.	District	200	8-09	200	9-10	201	0-11	201	1-12	Т	otal
No.	District	Phy.	Fin.								
1	Coimbatore	10	2.00	10	2.00	15	3.00	20	4.00	55	11.00
2	Kancheepuram	8	0.80	10	1.00	10	1.00	10	1.00	38	3.80
3	Kanyakumari	9	2.70	9	2.70	9	2.70	9	2.70	36	10.80
4	Karur	15	1.50	20	2.00	25	2.50	25	2.50	85	8.50
5	Namakal	90	9.00	90	9.00	90	9.00	90	9.00	360	36.00
6	Ramanathapuram	11	1.10	0	0.00	0	0.00	0	0.00	11	1.10
7	Salem	20	2.00	20	2.00	20	2.00	20	2.00	80	8.00
8	Thiruvallur	0	3.54	0	3.54	0	3.54	0	3.54	0	14.16
9	Trichy	20	2.00	20	2.00	30	3.00	30	3.00	100	10.00
10	Tirunelveli	20	2.00	20	2.00	20	2.00	20	2.00	80	8.00
11	Tiruvannamalai	20	2.00	50	5.00	100	10.00	125	12.50	295	29.50
12	Villupuram	60	6.00	50	5.00	50	5.00	50	5.00	210	21.00
	Total	283	34.64	299	36.24	369	43.74	399	47.24	1350	161.86

71. Bio fertiliser @ 50 % subsidy @ Rs.5 per No.

Physical: L.No Financial: (Rs. in lakhs)

Sl.	District	200	8-09	200	9-10	201	0-11	201	1-12	To	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	0.3	1.50	0.3	1.50	0.3	1.50	0.3	1.50	1.2	6.00
2	Dindigul	0.2	0.60	0.25	0.75	0.25	0.75	0.25	0.75	0.95	2.85
3	Kanyakumari	0.5	1.50	0.5	1.50	0.5	1.50	0.5	1.50	2	6.00
4	Namakal	1	3.00	1	3.00	1	3.00	1	3.00	4	12.00
5	Perambalur	0.2	1.00	0.2	1.00	0.2	1.00	0.2	1.00	0.8	4.00
6	Ramanathapuram	0.5	1.50	0	0.00	0	0.00	0	0.00	0.5	1.50
7	Theni	0.5	1.50	0.5	1.50	0.5	1.50	0.5	1.50	2	6.00
8	Thiruvallur	0	9.00	0	9.00	0	9.00	0	9.00	0	36.00
9	Thoothukudi	0.1	0.30	0.1	0.30	0.1	0.30	0.1	0.30	0.4	1.20
10	Trichy	0.6	1.80	0.6	1.80	0.6	1.80	0.6	1.80	2.4	7.20
11	Tirunelveli	1.5	4.50	1.5	4.50	1.5	4.50	1.5	4.50	6	18.00
12	Vellore	0.1	15.00	0.1	15.00	0.1	15.00	0.1	15.00	0.4	60.00
	Total	5.5	41.20	5.05	39.85	5.05	39.85	5.05	39.85	20.65	160.75

E.Rainfed Farming/Waste Land Development

72. Private seed distribution subsidy for maize(Rainfed) @ 90% or Rs.135/kg

Physical: in ha Financial: Rs in Lakhs

Sl.No	District	2008-09		2009-10		201	10-11	201	11-12	1	Total
51.110	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Dindigul	10	7.50	20	15.00	20	15.00	20	15.00	70	52.50
2	Erode	10	13.50	15	20.25	15	20.25	15	20.25	55	74.25
3	Salem	400	300.00	400	300.00	400	300.00	400	300.00	1600	1200.00
	Total	420	321.00	435	335.25	435	335.25	435	335.25	1725	1326.75

73. Seed Distribution subsidy for Groundnut (Rainfed)

Physical: in ha Financial: Rs in Lakhs

	Timurem V Ato in Zumio										
CLNs	DICTRICT	200	08-09	2009-10		201	10-11	201	11-12	T	otal
Sl.No	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Erode	60	7.2	60	7.2	100	12	100	12	320	38.4
2	Kancheepuram	20	2.4	20	2.4	20	2.4	20	2.4	80	9.6
3	Namakkal	100	12	100	12	100	12	100	12	400	48
4	Thiruvannamalai	640	76.8	1920	230	2040	244.8	2160	259.2	6760	810.8
5	Thoothukudi	5	0.6	5	0.6	5	0.6	5	0.6	20	2.4
6	Thiruchirapalli	50	6	50	6	50	6	50	6	200	24
7	Thirunelveli	14	1.68	14	1.68	14	1.68	14	1.68	56	6.72
	Total	889	106.68	2169	259.88	2329	279.48	2449	293.88	7836	939.92

74. Wastelands Development in 50 Acres Cluster Mode

Sl.	No District	2008	2008-2009		2008-2009		8-2009	2008	8-2009	2008	3-2009
No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	10	146.00	10	146.00	10	146.00	10	146.00	40	584.00
	Total	10	146.00	10	146.00	10	146.00	10	146.00	40	584.00

75. Dry land Development and Maximizing Crop Productivity

Physical: in ha

Financial: Rs in Lakhs

Sl.	District	2008-2009		2008-2009		2008	3-2009	2008	8-2009	2008	3-2009
No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	600	36.00	600	36.00	600	36.00	600	36.00	2400	144.00
	Total	600	36.00	600	36.00	600	36.00	600	36.00	2400	144.00

F. Extension Services

76. Establishment of Village Knowledge Centres(e-Choupals)

Physical: in Nos

Financial: Rs in Lakhs

Sl.	District	2008-2009		2008-2009		2008	8-2009	200	8-2009	2008	3-2009
No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	131	160.61	130	159.38	130	159.38	130	159.385	21	638.75
	Total	131	160.61	130	159.38	130	159.38	130	159.385	21	638.75

77. Exposure Visit - Officers Outside the Country

Sl.	District	200)8-09	200)9-10	201	0-11	201	1-12	To	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	20	2.00	30	3.00	30.00	3.00	20.00	2.00	100.00	10.00**
2	Cuddalore (Other States)	50	15.00	50	15.00	50.00	15.00	50.00	15.00	200.00	60.00
3	Kanniyakumari	1	37.50	0	37.50	0.00	37.50	0.00	37.50	1.00	150.00*
4	Krishnagiri	1	10.00	1	10.00	1.00	10.00	1.00	10.00	4.00	40.00
5	Madurai	5	7.50	5	7.50	10.00	15.00	15.00	22.50	35.00	52.50
6	Theni	1	6.00	1	6.00	1.00	6.00	1.00	6.00	4.00	24.00
7	Thiruvarur	6	3.00	6	3.00	6.00	3.00	6.00	3.00	24.00	12.00
8	Tiruchirappalli	0	25.00	0	25.00	0.00	25.00	0.00	25.00	0.00	100.00
9	Vellore	1	2.00	0	0.00	0.00	0.00	1.00	2.50	2.00	4.50
	Total	85	108.00	93	107.00	98.00	114.50	94.00	123.50	370.00	453.00

^{*} Inclusive of Rs.10.00 lakhs to other States by Officers

^{**} Outside the State

78. Massive Rat Eradication Control Campaign

Physical: in Nos Financial: Rs in lakhs

Sl.	District	2008	3-09	200	9-2010	2010)-2011	2011	1-2012	T	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	380	1.90	38	1.90	38	1.90	36	1.80	150	7.50
2	Cuddalore	300	15.00	300	15.00	300	15.00	300	15.00	1200	60.00
3	Dharmapuri	160	8.00	160	8.00	160	8.00	160	8.00	640	32.00
4	Erode	100	2.50	100	2.50	100	2.50	100	2.50	400	10.00
5	Kancheepuram	400	20.00	400	20.00	400	20.00	400	20.00	1600	80.00
6	Kanyakumari	20	1.00	20	1.00	20	1.00	20	1.00	80	4.00
7	Karur	70	3.50	70	3.50	70	3.50	70	3.50	280	14.00
8	Nagapattinam	0	3.50	0	4.00	0	5.00	0	10.00	0	22.50
9	Namakkal	150	7.50	150	7.50	150	7.50	150	7.50	600	30.00
10	Perambalur	25	1.25	25	1.25	25	1.25	25	1.25	100	5.00
11	Ramnathapuram	200	10.00	200	10.00	200	10.00	200	10.00	800	40.00
12	Salem	210	10.50	210	10.50	210	10.50	210	10.50	840	42.00
13	Thoothukudi	10	0.50	10	0.50	10	0.50	10	0.50	40	2.00
14	Tiruchirappalli	170	8.50	170	8.50	170	8.50	170	8.50	680	34.00
15	Thiruvannamalai	170	8.50	350	17.50	350	17.50	350	17.50	1220	61.00
	Total	2023.00	102.15	2203	111.65	2203	112.65	2201	117.55	8630	444.00

79. Technology Demonstration

	Financia. As in dans										
Sl.	DISTRICT	200	8-09	200)9-10	201	0-11	201	11-12	TO	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Erode	30	1.08	30	1.08	30	1.08	30	1.08	120	4.32
2	Kancheepuram	200	25.00	325	40.63	0	0.00	0	0.00	525	65.63
3	Madurai	170	45.25	200	53.88	260	67.50	330	88.75	960	255.38
4	Namakkal	200	4.00	200	4.00	200	4.00	200	4.00	800	16.00
5	Perambalur	200	16.00	200	16.00	200	16.00	200	16.00	800	64.00
6	Ramanathapuram	30	0.60	30	0.60	30	0.00	0	0.00	90	1.20
7	Salem	0	0.00	0	0.00	0	0.60	30	0.60	30	1.20
8	Thiruvarur	130	4.40	130	4.40	130	4.40	130	4.40	520	17.60
9	Thoothukudi	25	0.50	25	0.50	25	0.50	25	0.50	100	2.00
10	Tiruchirappalli	35	0.70	35	0.70	35	0.70	35	0.70	140	2.80
11	Tirunelveli	10	0.20	10	0.20	10	0.20	10	0.20	40	0.80
	Total	1030	97.73	1185	121.99	920	94.98	990	116.23	4125	430.93

80. Publicity and Propaganda

Sl.		2008	3-09	2009	9-10	201	0-11		1-12	Ks in lak	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	3.00	7.50	3.00	7.50	3.00	7.50	3.00	7.50	12.00	30.00
2	Cuddalore	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	16.00
3	Dharmapuri	0.00	1.20	0.00	1.20	0.00	1.20	0.00	1.20	0.00	4.80
4	Dindigul	3.00	8.00	3.00	8.00	3.00	8.00	3.00	8.00	12.00	32.00
5	Erode	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	8.00	8.00
6	Kancheepuram	2.00	1.50	2.00	1.50	2.00	1.50	2.00	1.50	8.00	6.00
7	Kanniyakumari	12.00	12.50	12.00	12.50	12.00	12.50	12.00	12.50	48.00	50.00
8	Karur	0.00	3.50	0.00	3.50	0.00	3.50	0.00	3.50	0.00	14.00
9	Nagapattinam	1.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.00
10	Namakkal	13.00	19.00	13.00	19.00	13.00	19.00	13.00	19.00	52.00	76.00
11	Perambalur	5.80	8.05	5.80	8.05	5.80	8.05	5.80	8.05	23.20	32.20
12	Ramanathapuram	8.00	5.00	8.00	5.00	8.00	5.00	8.00	5.00	32.00	20.00
13	Salem	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	12.00
14	Thanjavur	2.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	8.00	4.00
15	Tiruvannamalai	3.00	1.50	3.00	1.50	3.00	1.50	3.00	1.50	12.00	6.00
16	Thoothukudi	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.000	12.00	12.00
17	Tiruchirappalli	3.00	5.50	2.00	3.50	2.00	2.50	2.00	4.50	9.00	16.00
18	Tirunelveli	1.00	0.50	1.00	0.50	1.00	0.50	1.00	0.50	4.00	2.00
19	Villupuram	1.00	2.00	1.00	2.00	1.00	2.00	1.00	2.00	4.00	8.00
	Total	62.80	90.75	60.80	86.75	60.80	85.75	60.80	87.75	245.20	351.00

81. Exposure Visit - Inter State (10 days @ Rs.600 day)

Physical: in Nos Financial: Rs in lakhs

Sl.	District	200	8-09	200	9-10	201	0-11	201	1-12	Т	otal
No.	District	Phy.	Fin.								
1	Coimbatore	250	15.00	250	15.00	250	15.00	250	15.00	1000	60.00
2	Cuddalore	0	5.40	0	5.40	0	5.40	0	5.40	0	21.60
3	Kancheepuram	2	3.60	2	3.60	2	3.60	2	3.60	8	14.40
4	Kanniyakumari	3	5.40	3	5.40	3	5.40	3	5.40	12	21.60
5	Karur	4	10.20	4	10.20	4	10.20	4	10.20	16	40.80
6	Krishnagiri	10	15.00	10	15.00	10	15.00	10	15.00	40	60.00
7	Madurai	4	1.75	5	1.25	5	1.25	5	1.25	19	5.50
8	Salem	4	7.20	4	7.20	4	7.20	4	7.20	16	28.80
9	Thanjavur	3	5.40	3	5.40	3	5.40	3	5.40	12	21.60
10	Theni	2	3.00	2	3.00	2	3.00	2	3.00	8	12.00
11	Thoothukudi	0	1.80	0	1.80	0	1.80	0	1.80	0	7.20
12	Tiruchirappalli	3	5.40	3	5.40	3	5.40	3	5.40	12	21.60
13	Vellore	4	1.20	8	2.40	12	3.60	10	3.00	34	10.20
14	Villupuram	4	1.80	4	1.80	4	1.80	4	1.80	16	7.20
	Total	293	82.15	298	82.85	302	84.05	300	83.45	1193	332.50

82. Farmers Field School

Sl.No	District	2008	3-09	2009	-10	2010	-11	2011	-12	Tot	tal
51.10	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	15.00	2.55	15.00	2.55	15.00	2.55	15.00	2.55	60.00	10.20
2	Cuddalore	26.00	4.42	26.00	4.42	26.00	4.42	26.00	4.42	104.00	17.68
3	Dindigul	15.00	2.25	15.00	2.25	15.00	2.25	15.00	2.25	60.00	9.00
4	Kancheepuram	38.00	7.14	38.00	7.14	38.00	7.14	38.00	7.14	152.00	28.57
5	Karur	3.63	20.00	3.63	20.00	3.63	20.00	3.63	2.72	14.51	62.72
6	Madurai	50.00	8.50	70.00	11.90	80.00	13.60	90.00	15.30	290.00	49.30
7	Nagapattinam	10.00	1.70	10.00	1.70	10.00	1.70	10.00	1.70	40.00	6.80
8	Namakkal	62.00	11.22	62.00	11.22	62.00	11.22	62.00	11.22	248.00	44.89
9	Pudukottai	13.00	5.20	13.00	5.20	13.00	5.20	13.00	5.20	52.00	20.80
10	Ramnathapuram	7.00	1.59	0.00	0.00	0.00	0.00	0.00	0.00	7.00	1.59
11	Thiruvarur	16.00	2.72	25.00	4.25	16.00	2.72	25.00	4.25	82.00	13.94
12	Thoothukudi	22.00	3.82	30.00	5.35	22.00	3.82	28.00	4.91	102.00	17.90
13	Tirunelveli	30.00	5.10	30.00	5.10	30.00	5.10	30.00	5.10	120.00	20.40
	Total	307.63	76.21	337.63	81.08	330.63	79.72	355.63	66.76	1331.51	303.77

83. Exposure Visit Inter State (@ 50 farmers 5 days @ 300/day)

Physical: in Nos Financial: Rs in Lakhs

Sl.	D:-4-:-4	200	8-09	200	9-10	201	0-11	201	1-12	T	otal
No.	District	Phy.	Fin.								
1	Cuddalore	0	9.00	0	9.00	0	9.00	0	9.00	0	36.00
2	Kancheepuram	2	1.50	2	1.50	2	1.50	2	1.50	8	6.00
3	Kanniyakumari	3	2.25	2	1.50	2	1.50	2	1.50	9	6.75
4	Krishnagiri	10	18.00	10	18.00	10	18.00	10	18.00	40	72.00
5	Madurai	40	6.00	60	12.00	80	17.50	100	23.00	280	58.50
6	Salem	2	3.00	2	3.00	2	3.00	2	3.00	8	12.00
7	Thanjavur	3	2.25	3	2.25	3	2.25	3	2.25	12	9.00
8	Thiruvallur	20	1.80	20	1.80	20	1.80	20	1.80	80	7.20
9	Thoothukudi	0	1.50	0	1.50	0	1.50	0	1.50	0	6.00
10	Tiruchirappalli	3	2.25	3	2.25	3	2.25	3	2.25	12	9.00
11	Vellore	4	3.00	4	3.00	4	3.00	4	3.00	16	12.00
12	Villupuram	4	0.75	4	0.75	4	0.75	4	0.75	16	3.00
	Total	91	51.30	110	56.55	130	62.05	150	67.55	481	237.45

84. Integrated Nutrient Management Demonstration

Physical: in Nos Financial: Rs in Lakhs

Sl.	District	2008-2009		2008-2009		2008-2009		2008	-2009	2008-	2009
No	District	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Vellore	1075	29.25	1075	29.25	1575	50.25	1075	29.25	4800	138
	Total	1075	29.25	1075	29.25	1575	50.25	1075	29.25	4800	138

85. Fodder Demonstration

	District -	2008	-2009	2008	-2009	2008	-2009	2008	-2009	2008	3-2009
Sl.No		Phy.	Fin								
1	Madurai	50	2.50	100	5.00	150	7.50	200	10.00	500	25.00
2	Vellore	1000	20.00	1000	20.00	1000	20.00	1000	20.00	4000	80.00
	Total	1050	22.50	1100	25.00	1150	27.50	1200	30.00	4500	105.00

86. Integrated Pest Management Demonstration

Physical: in Nos Financial: Rs in Lakhs

Sl.	No District	2008-2009		2008-2009		2008	-2009	2008	-2009	2008	3-2009
No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Thiruvallur	4	0.28	4	0.28	4	0.28	4	0.28	16	1.12
2	Vellore	875	22.25	875	22.2	1275	32.25	875	22.25	3900	98.95
	Total	879	22.53	879	22.48	1279	32.53	879	22.53	3916	100.07

87. Enriched Farm Yard manure demonstration

Physical: in Nos Financial: Rs in Lakhs

Sl.	District	2008-2009		2008-2009		2008-2009		2008	-2009	2008	-2009
No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Vellore	2150	21.50	2150	21.50	2150	21.50	2150	21.50	8600	86.50
	Total	2150	21.50	2150	21.50	2150	21.50	2150	21.50	8600	86.50

88. Tank silt application Demonstration

Physical: in Nos

Financial: Rs in Lakhs

	District	2008	-2009	2008	-2009	2008	-2009	2008	-2009	2008	-2009
Sl.No		Phy.	Fin								
1	Vellore	1000	20.00	1000	20.00	1000	20.00	1000	20.00	4000	80.00
	Total	1000	20.00	1000	20.00	1000	20.00	1000	20.00	4000	80.00

89. District Level Exhibition / Kisan Mela (@ Rs.2.00 lakhs)

	I munches Ab in minib										
Sl.	District	200	8-09	2009-10		201	0-11	201	1-12	To	tal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Cuddalore	2.00	4.00	2.00	4.00	2.00	4.00	2.00	4.00	8.00	16.00
2	Kancheepuram	1.00	2.00	1.00	2.00	1.00	2.00	1.00	2.00	4.00	8.00
3	Kanniyakumari	1.00	2.00	1.00	2.00	1.00	2.00	1.00	2.00	4.00	8.00
4	Thanjavur	1.00	2.00	1.00	2.00	1.00	2.00	1.00	2.00	4.00	8.00
5	Thiruvarur	4.00	4.00	4.00	4.00	3.00	3.00	4.00	4.00	15.00	15.00
6	Tiruchirappalli	1.00	2.00	1.00	2.00	1.00	2.00	1.00	2.00	4.00	8.00
	Total	10.00	16.00	10.00	16.00	9.00	15.00	10.00	16.00	39.00	63.00

90. Upgradation of Farmers Training Centre

Physical: in Nos Financial: Rs in Lakhs

Sl.	District	2008-2009		2008-2009		2008	-2009	2008	3-2009	2008	-2009
No	District	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	1	30.00	0	20.00	0	0.00	0	0.00	1	50.00
	Total	1	30.00	0	20.00	0	0.00	0	0.00	1	50.00

91. Green Manure Crops Demonstration

Physical: in Nos

Financial: Rs in Lakhs

Sl.	District	2008-2009		2008-2009		2008	-2009	2008	-2009	2008	-2009
No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Vellore	1000	10.00	1000	10.00	1000	10.00	1000	10.00	4000	40.00
	Total	1000	10.00	1000	10.00	1000	10.00	1000	10.00	4000	40.00

92. Hybrid seed demonstration

Physical: in Nos

Financial: Rs in Lakhs

		2008-2009		2008-2009		2008-2009		2008-2009		2008-	2009
Sl.No	District	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Salem	70	1.60	70	1.80	1.25	2.25	1.3	2.50	142.55	8.15
2	Vellore	100	1.50	100	1.50	100	1.50	100	1.50	400	6.00
	Total	170	3.10	170	3.30	101.25	3.75	101.3	4.00	542.55	14.15

93. Demonstration-Fodder Cowpea

Physical: in Nos

Financial: Rs in Lakhs

	District	2008-2	2009	2008-2	2009	2008-2	2009	2008-2	2009	2008-2	2009
Sl.No	District	Phy.	Fin								
1	Vellore	100	1.5	100	1.5	100	1.5	100	1.5	400	6
	Total	100	1.5	100	1.5	100	1.5	100	1.5	400	6

94. Demonstration – Lucerne

Physical: in Nos

Financial: Rs in Lakhs

	District	2008-2009			008-2009 2008-			2008-	2008-2009		2009
Sl.No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Vellore	100	1.50	100	1.50	100	1.50	100	1.50	400	6.00
	Total	100	1.50	100	1.50	100	1.50	100	1.50	400	6.00

95. Coir Pith Compost Demonstration

Physical: in Nos

Financial: Rs in Lakhs

Sl.	District	2008-2	2008-2009		2008-2009		2008-2009		2009	2008-2009	
No	District	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Vellore	150	1.50	150	1.50	150	1.50	150	1.50	600	6.00
2	Total	150	1.50	150	1.50	150	1.50	150	1.50	600	6.00

96. Silo- Demonstration

Physical: in Nos

Financial: Rs in Lakhs

	District -			2008	2008-2009		2008-2009		2008-2009		2009
Sl.No		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Vellore	50	0.25	50	0.25	50	0.25	50	0.25	200	1.00
	Total	50	0.25	50	0.25	50	0.25	50	0.25	200	1.00

97. Demonstration- Fodder Cholam

Physical: in Nos

Financial: Rs in Lakhs

Sl.No	District	2008-2009		2008-2009		2008-2009		2008-2009		2008-2009	
	District	Phy.	Fin								
1	Vellore	100	0.10	100	0.10	100	0.10	100	0.10	400	0.40
	Total	100	0.10	100	0.10	100	0.10	100	0.10	400	0.40

G.Water Harvesting / Conservation

98. Maximizing the Ground Water Usage through Bore wells

Physical: in Nos Financial: Rs in Lakhs

Sl.	District	200	8-2009	200	8-2009	200	8-2009	200	8-2009	200	8-2009
No	District	Phy.	Fin								
1	Sivagangai	700	2100.00	800	2400.00	800	2400.00	700	2100.00	3000	9000.00
	Total	700	2100.00	800	2400.00	800	2400.00	700	2100.00	3000	9000.00

99. PVC Pipeline / PVC Pipe

Physical: in Nos Financial: Rs in Lakhs

Sl.	Di-4-1-4	200	08-09	200)9-10	201	10-11	201	1-12	Total	
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	100	15.00	100	15.00	100	15.00	100	15.00	400	60.00
2	Coimbatore	175	13.13	230	17.25	275	20.63	335	25.13	1015	76.14
3	Dharmapuri	16	2.72	16	2.72	16	2.72	16	2.72	64	10.88
4	Kancheepuram	150	22.50	150	22.50	150	22.50	150	22.50	600	90.00
5	Karur	40	6.00	50	7.50	50	7.50	50	7.50	190	28.50
6	Madurai	200	30.00	300	45.00	450	67.50	500	75.00	1450	217.50
7	Namakkal	100	15.00	100	15.00	100	15.00	100	15.00	400	60.00
8	Perambalur	200	30.00	200	30.00	200	30.00	200	30.00	800	120.00
9	Pudukottai	4	1.30	3	9.00	5	1.50	2	7.00	14	18.80
10	Ramnathapuram	30	4.50	0	0.00	0	0.00	0	0.00	30	4.50
11	Theni	20	4.00	20	4.00	35	7.00	35	7.00	110	22.00
12	Thiruvallur	140	21.00	140	21.00	140	21.00	140	18.00	560	81.00
13	Tirunelveli	140	21.00	160	24.00	180	27.00	200	30.00	680	102.00
	Total	1315	186.15	1469	212.97	1701	237.35	1828	254.85	6313	891.32

100. In-situ Rain Water Harvesting through Farm Ponds Clusters

	District	2008	-2009	2008	-2009	2008	-2009	2008	3-2009	2008	3-2009
Sl.No.		Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin	Phy.	Fin
1	Sivagangai	12	90.00	12	90.00	12	90.00	12	90.00	48	360.00
	Total	12	90.00	12	90.00	12	90.00	12	90.00	48	360.00

APPENDIX II

HORTICULTURE SECTOR

ABSTRACT OF INTERVENTIONS IN HORTICULTURE SECTOR IN TAMIL NADU

(Finance in lakhs of Rupees)

SI.	Interventions / Components	Unit	2008-	09	2009-	10	2010-	-11	2011-	-12	TOT	AL
No.	interventions / Components	Unit	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
A.	Crop Development											
1	Support system for Crops Banana	Nos.	6099.00	6022.88	6321.00	5763.88	5961.00	4430.88	6421.00	4372.04	24802.00	20589.68
2	Precision Farming	Nos.	4841.30	640.62	5511.30	764.22	6141.30	857.24	7071.30	991.66	23465.20	3253.74
3	Erection of net for production of disease free planting material inTapioca	Nos.	551.00	249.00	973.00	370.95	1085.00	482.40	1202.00	600.10	3811.00	1702.45
4	Pandal for vegetable production	На	390.20	246.60	469.00	303.30	641.00	351.35	618.00	431.94	2118.20	1333.19
5	Nursery & Vegetable cultivation	Sq.Km	66220.00	253.17	70932.00	273.98	76255.00	297.68	81283.00	323.37	294690.00	1148.20
6	Banana Bunch Cover	Nos./ha	1291101.5	133.94	1046151.50	160.34	1381101.50	176.99	1430251.50	191.14	5148606	662.41
7	Package for plant protection measures	На	5522.50	117.61	6631.50	138.42	6723.50	138.85	7237.50	146.20	26115.00	541.08
8	Cashew –High Density Planting	Nos.	869.00	62.15	1429.00	100.85	1889.00	135.05	2599.00	185.50	6786.00	483.55
9	Support price for chillies & coriander	Nos.	2000.00	100.00	2000.00	100.00	2000.00	100.00	2000.00	100.00	8000.00	400.00
10	Support price for betelvine	Nos.	604.00	98.15	604.00	86.33	674.00	92.70	784.00	91.95	2666.00	369.13
11	Support system for Crops Gloriosa	Nos.	265.00	82.00	265.00	82.00	265.00	82.00	265.00	82.00	1060.00	328.00
12	Support for Senna cultivation @ Rs. 15000 / ha with (50 percent subsidy)	На	1150.00	61.25	1200.00	65	1200.00	65	1200.00	65	4750.00	256.25
13	Plastic Crates for vegetables handling and transport	Nos.	30665.00	44.92	35557.00	56.64	41105.00	63.47	44815.00	68.09	152142.00	233.12

Abstract (Contd.,)

SI.	Interventions / Commence	Unit	2008-	09	2009-	10	2010-	11	2011-	-12	TOTAL	
No.	Interventions / Components	Umt	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
14	Assistance for water soluble Fertilizers	На	240.00	36.00	240.00	36.00	240.00	36.00	240.00	36.00	960.00	144.00
15	Betelveine new area cultivation	На	10.00	30	5.00	25	5.00	25	5.00	25	25.00	105
16	Distribution of Tarpaulin sheets at 50 per cent subsidy	Nos.	500.00	25.00	500.00	25.00	500.00	25.00	500.00	25.00	2000.00	100.00
17	Grapes bird net	Nos.	50.00	25.00	50.00	25.00	50.00	25.00	50.00	25.00	200.00	100.00
18	Humic acid/Effective E Microbes	Litres	26552.00	23.59	26730.00	24.16	26905.00	24.70	27175.00	26.22	107362.00	98.67
19	Support for vasambu cultivation	Nos.	52.00	9.40	82.00	13.90	102.00	15.40	132.00	21.40	368.00	60.10
20	Hybrid vegetable cultivation-Seed material	На	70.00	13.25	70.00	13.25	65.00	12.50	65.00	12.50	270.00	51.50
21	Hybrid vegetable cultivation Banana plantlets	Nos.	20020.00	12.50	20020.00	12.50	20015.00	11.75	20015.00	11.75	80070.00	48.50
22	Pollinator Village for Honey Bee rearing	Nos.	500.00	8.00	500.00	8.00	500.00	8.00	500.00	8.00	2000.00	32.00
23	Support system for Crops Tomato	Nos.	30.00	4.00	30.00	4.00	30.00	4.00	30.00	4.00	120.00	16.00
24	Raising fruit crops in delta areas by providing raised beds and drainage channels	Nos.	10.00	1.50	15.00	2.25	20.00	3.00	25.00	3.75	70.00	10.50
25	Model Fertigation plot for vegetable cultivation	Nos./ha	25.00	2.5	25.00	2.5	25.00	2.5	25.00	2.5	100.00	10
26	Staking	Nos.	0.00	1	0.00	1.5	0.00	1.58	0.00	1.65	0.00	5.73
В.	Mechanization											
27	Banana corm injector	Nos.	6391.00	53.72	7911.00	57.72	8421.00	58.83	8861.00	59.52	31584.00	229.79
28	Supply of Plant Protection kits	Nos.	3500.00	35.00	4000.00	40.00	4500.00	45.00	5000.00	50.00	17000.00	170.00
29	Farm waste shredder/vegetable waste shredder	Nos./ha	176.00	21.9	187.00	24.42	199.00	27.14	209.00	29.46	771.00	102.92
30	Mango harvester	Nos.	4985.00	18.50	6578.00	22.82	7078.00	27.42	8083.00	32.55	26724.00	101.29

Abstract (Contd.,)

SI.	Interventions / Commence	Unit	2008-	09	2009-	-10	2010-	-11	2011-	-12	TOT	AL
No.	Interventions / Components		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
31	Post Harvest Management in Onion Cultivation (pack house (100 percent subsidy)	Nos.	20.00	11.50	20.00	11.50	15.00	10.75	15.00	10.75	70.00	44.50
32	Support price for Acidlime	Nos.	100.00	10.00	100.00	10.00	100.00	10.00	100.00	10.00	400.00	40.00
33	Tractor mounted steam boiler	Nos.	24.00	9.00	24.00	9.35	24.00	9.70	24.00	10.05	96.00	38.10
34	Banana sucker treatment kit	На	200.00	5.00	300.00	7.50	400.00	10.00	500.00	15.00	1400.00	37.50
35	Supply of Aluminium ladder	Nos.	50.00	3.00	50.00	3.00	50.00	3.00	50.00	3.00	200.00	12.00
36	Horticulture Air Drier for Spices	Nos.	5.00	5.00	5.00	5.00	0.00	0.00	0.00	0.00	10.00	10.00
37	Distribution of Power Sprayer at 75 per cent subsidy	Nos.	20.00	0.75	20.00	0.75	20.00	0.75	20.00	0.75	80.00	3.00
38	Distribution of hand Operated Sprayer at 75 per cent subsidy	Nos.	50.00	0.56	50.00	0.56	50.00	0.56	50.00	0.56	200.00	2.25
39	Providing handy horticultural equipments kit	Nos.	100.00	0.50	100.00	0.50	100.00	0.50	100.00	0.50	400.00	2.00
40	Support system to vegetable growers / Hand operated sprayers	Nos.	20.00	0.15	20.00	0.15	20.00	0.15	20.00	0.15	80.00	0.60
41	Support system to perennial tree growers / Foot operated sprayers	Nos.	20.00	0.15	20.00	0.15	20.00	0.15	20.00	0.15	80.00	0.60
C.	Infra Structure	Nos.										
42	Bore well with casing pipes	Nos.	938.00	1045.50	1012.00	1124.85	1122.00	1230.45	1232.00	1354.80	4304.00	4755.60
43	Sales outlet points cum information centre in districts	Nos.	61.00	157.20	60.00	162.62	86.00	233.04	165.00	436.26	372.00	989.12
44	Community Fencing	Nos.	91.00	69.18	143.00	110.80	200.00	170.55	320.00	293.05	754.00	643.58
45	Agriculture Clinic at Block level ADH Office	Nos.	0.00	0.00	5.00	125.00	5.00	125.00	3.00	75.00	13.00	325.00
46	Rural food Processing and knowledge centre	Nos.	0.00	0.00	1.00	75.00	1.00	75.00	0.00	0.00	2.00	150.00

Abstract (Contd.,)

SI.	International Comments	Unit	2008-	-09	2009	-10	2010	-11	2011	-12	TOT	AL
No.	Interventions / Components		Phy.	Fin.								
47	Refrigerated Van	Nos.	3.00	30.00	3.00	30.00	3.00	30.00	3.00	30.00	12.00	120.00
48	Distillation unit for aromatic plants	Nos.	5.00	6.25	5.00	6.25	5.00	6.25	5.00	6.25	20.00	25.00
49	Venture Capital Scheme - TNAU	Nos.	250.00	5.00	250.00	5.00	250.00	5.00	250.00	5.00	1000.00	20.00
D.	Extension services	Nos.										
50	10 hectare mega demonstration plot for the districts	Nos.	39.00	714.38	41.00	764.38	41.00	764.38	38.00	689.38	159.00	2932.52
51	Enterprising Crop Growers Associations	Nos./ha	34.00	602.13	31.00	514.63	26.00	402.13	28.00	439.63	119.00	1958.5
52	Inter State Exposure visit (5 days)	Nos.	2548.00	144.75	2648.00	149.75	2798.00	157.25	2898.00	162.25	10892.00	614.00
53	Strengthening of extension – technical knowledge centre	Nos.	0.00	0.00	3.00	30.00	5.00	50.00	5.00	50.00	13.00	130.00
54	Mango/Amla in Noon meal scheme	Nos.	22865.00	28.27	2407.00	28.46	25207.00	29.71	26457.00	31.01	76936.00	117.45
55	District Level Farmers Workshop	Nos.	3807.00	27.10	4206.00	26.20	4706.00	28.20	4906.00	29.00	17625.00	110.50
56	Prize for Crop yield competition to the best cashew growers / vegetable growers	Nos.	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	80.00	80.00
57	Farmers literary programme through TNAU – ODL Programme	Nos.	1000.00	15.00	1000.00	15.00	1000.00	15.00	2000.00	30.00	5000.00	75.00
58	Tourism to Agriculture Festival	Nos.	0.00	0.00	1.00	20.00	1.00	20.00	1.00	20.00	3.00	60.00
59	Cinematography documentation	Nos.	0.00	0.00	1.00	10.00	1.00	10.00	1.00	10.00	3.00	30.00
60	POL and Hiring of Vehicles	Nos.	5.00	2.50	5.00	2.50	5.00	2.50	5.00	2.50	20.00	10.00
61	Village level pre season Campaign (Kharif and Rabi)	Nos.	200.00	2.00	200.00	2.00	200.00	2.00	200.00	2.00	800.00	8.00
62	Publicity and Training at District level	Nos.	2.00	3.00	2.00	1.00	2.00	1.00	2.00	1.00	8.00	6.00
	Sub Total		1505866.50	11351.02	1257740.30	11875.83	1630179.30	11049.45	1696100.30	11761.33	6089786.40	46037.62
	Others			566.41		192.74		371.69		160.23		1291.07
	Total			11917.4		12068.57		11421.14		11921.56		47328.69

HORTICULTURE SECTOR

A. Crop Development

1. Support System for Crops Banana

Sl.	DISTRICT	20	08-09	20	09-10	20	10-11	20	11-12	TO	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	200	300.00	200	300.00	200	300.00	200	300.00	800	1200.00
2	Cuddalore	1500	1.50	2000	2.00	2500	2.50	3000	3.00	9000	9.00
3	Dharmapuri	40	60.00	40	66.00	40	72.00	40	78.00	160	276.00
4	Erode	1000	1125.00	600	750.00	600	750.00	400	500.00	2600	3125.00
5	Kancheepuram	5	3.75	5	3.75	5	3.75	5	3.75	20	15.00
6	Kanniyakumari	500	562.50	500	562.50	500	562.50	500	562.50	2000	2250.00
7	Karur	0	37.50	0	5.25	0	8.25	0	8.66	0	59.66
8	Nagapattinam	200	225.00	250	281.25	300	337.50	400	450.00	1150	1293.75
9	Namakkal	100	112.50	150	168.75	200	225.00	250	281.25	700	787.50
10	Perambalur	10	15.00	10	15.00	10	15.00	10	15.00	40	60.00
11	Pudukkottai	195	219.38	195	219.38	195	219.38	195	219.38	780	877.52
12	Salem	100	75.00	100	75.00	100	75.00	100	75.00	400	300.00
13	Theni	50	56.25	50	56.25	50	56.25	50	56.25	200	225.00
14	Thiruvallur	14	21.00	18	27.00	18	27.00	18	27.00	68	102.00
15	Thiruvarur	18	13.50	16	18.00	16	18.00	16	18.00	66	67.50
16	Thoothukudi	50	56.25	60	67.50	100	112.50	120	135.00	330	371.25
17	Trichy	2000	3000.00	2000	3000.00	1000	1500.00	1000	1500.00	6000	9000.00
18	Tirunelveli	50	56.25	50	56.25	50	56.25	50	56.25	200	225.00
19	Tiruvannamalai	27	37.50	27	37.50	27	37.50	27	37.50	108	150.00
20	Vellore	20	15.00	30	22.50	30	22.50	20	15.50	100	75.50
21	Villupuram	20	30.00	20	30.00	20	30.00	20	30.00	80	120.00
	Total	6099	6022.88	6321	5763.88	5961	4430.88	6421	4372.04	24802	20589.68

2. Precision Farming

Physical : in Nos/ha Financial : Rs in Lakhs

Sl.	DISTRICT -	2008	3-09	2009)-10	2010)-11	2011	-12	тот	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	110.00	45.32	130.00	53.56	130.00	53.56	130.00	53.56	500.00	206.00
2	Cuddalore	750.00	103.00	1050.00	144.20	1350.00	185.40	1800.00	247.20	4950.00	679.80
3	Dharmapuri	860.00	148.32	1180.00	197.76	1480.00	238.96	1930.00	300.76	5450.00	885.80
4	Erode	1500.00	206.00	1500.00	206.00	1500.00	206.00	1500.00	206.00	6000.00	824.00
5	Karur	100.00	41.20	130.00	53.56	160.00	58.87	190.00	64.28	480.00	217.91
6	Madurai	600.00	2.00	600.00	2.00	600.00	2.00	600.00	2.00	2400.00	8.00
7	Nagapattinam	600.00	43.20	600.00	55.56	600.00	60.87	600.00	66.28	2400.00	225.91
8	Salem	20.00	10.00	20.00	10.00	20.00	10.00	20.00	10.00	80.00	40.00
9	Thiruvallur	270.00	41.58	270.00	41.58	270.00	41.58	270.00	41.58	1080.00	166.32
10	Tirunelveli	31.30	0.00	31.30	0.00	31.30	0.00	31.30	0.00	125.20	0.00
	Total	4841.30	640.62	5511.30	764.22	6141.30	857.24	7071.30	991.66	23465.20	3253.74

3. Erection of net for production of disease free planting material inTapioca

Sl.	DISTRICT	200	08-09	200)9-10	201	10-11	201	11-12	TC	TAL
No.	DISTRICT	Phy.	Fin.								
1	Ariyalur	1	1.00	1	1.00	1	1.00	1	1.00	4	4.00
2	Cuddalore	200	200.00	300	300.00	400	400.00	500	500.00	1400	1400.00
3	Dharmapuri	7	7.00	7	7.70	7	8.40	7	9.10	28	32.20
4	Kancheepuram	300	0.50	600	1.00	600	1.00	600	1.00	2100	3.50
5	Namakkal	20	20.00	30	30.00	30	30.00	40	40.00	120	120.00
6	Perambalur	2	2.00	3	3.00	4	4.00	5	5.00	14	14.00
7	Salem	10	7.50	15	11.25	20	15.00	20	15.00	65	48.75
8	Trichy	6	6.00	12	12.00	18	18.00	24	24.00	60	60.00
9	Villupuram	5	5.00	5	5.00	5	5.00	5	5.00	20	20.00
	Total	551	249.00	973	370.95	1085	482.40	1202	600.10	3811	1702.45

4. Pandal for vegetable production

Sl.	DISTRICT	200	8-09	2009	9-10	201	0-11	201	1-12	TO	ΓAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	10.00	10.00	20.00	20.00	30.00	30.00	40.00	40.00	100.00	100.00
2	Coimbatore	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	40.00	40.00
3	Cuddalore	250.00	125.00	300.00	150.00	350.00	175.00	400.00	200.00	1300.00	650.00
4	Dharmapuri	13.00	13.00	13.00	14.30	13.00	15.60	13.00	16.90	52.00	59.80
5	Kancheepuram	20.00	10.00	20.00	10.00	20.00	10.00	20.00	10.00	80.00	40.00
6	Karur	0.00	10.00	0.00	15.00	0.00	15.75	0.00	16.54	0.00	57.29
7	Nagapattinam	5.00	2.50	5.00	2.50	5.00	2.50	5.00	2.50	20.00	10.00
8	Namakkal	3.20	1.60	4.00	2.00	4.00	2.00	4.00	2.00	15.20	7.60
9	Perambalur	20.00	20.00	30.00	30.00	40.00	40.00	50.00	50.00	140.00	140.00
10	Pudukkottai	9.00	4.50	13.00	6.50	15.00	7.50	17.00	8.50	54.00	27.00
11	Ramanathapuram	10.00	10.00	10.00	10.00	10.00	10.00	10.00	40.00	40.00	70.00
12	Sivagangai	5.00	2.50	5.00	2.50	5.00	2.50	10.00	5.00	25.00	12.50
13	Thiruvallur	8.00	8.00	10.00	10.00	10.00	10.00	10.00	10.00	38.00	38.00
14	Trichy	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	40.00	40.00
15	Thiruvarur	2.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	8.00	4.00
16	Tirunelveli	10.00	5.00	10.00	5.00	10.00	5.00	10.00	5.00	40.00	20.00
17	Tiruvannamalai	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	8.00	8.00
18	Vellore	3.00	1.50	5.00	2.50	5.00	2.50	5.00	2.50	18.00	9.00
19	Villupuram	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	100.00	0.00
	Total	390.20	246.60	469.00	303.30	641.00	351.35	618.00	431.94	2118.20	1333.19

5. Nursery & Vegetable cultivation

Physical: in Sq.Km Financial: Rs in Lakhs

		2008	_no	2009-	-10	2010-	.11	2011	-12	тот	`AT
Sl. No.	DISTRICT				1					_	
110.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	3.00	3.00	4.00	4.00	5.00	5.00	6.00	6.00	18.00	18.00
2	Coimbatore	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	12.00	12.00
3	Cuddalore	130.00	65.00	150.00	75.00	175.00	87.50	200.00	100.00	655.00	327.50
4	Dharmapuri	15.00	15.00	15.00	16.50	15.00	18.00	15.00	19.50	60.00	69.00
5	Erode	20.00	10.00	10.00	5.00	5.00	2.50	5.00	2.50	40.00	20.00
6	Kancheepuram	1500.00	2.50	1500.00	2.50	1500.00	2.50	1500.00	2.50	6000.00	10.00
7	Karur	0.00	12.00	0.00	17.00	0.00	17.85	0.00	18.74	0.00	65.59
8	Krishnagiri	3000.00	10.00	3000.00	10.00	3000.00	10.00	3000.00	10.00	12000.00	40.00
9	Nagapattinam	50000.00	83.00	50000.00	83.00	50000.00	83.00	50000.00	83.00	200000.00	332.00
10	Namakkal	10.00	5.00	10.00	5.00	10.00	5.00	10.00	5.00	40.00	20.00
11	Perambalur	2.00	2.00	3.00	3.00	4.00	4.00	5.00	5.00	14.00	14.00
12	Pudukkottai	8.00	4.00	9.00	4.50	10.00	5.00	11.00	5.50	38.00	19.00
13	Salem	20.00	10.00	20.00	10.00	20.00	10.00	20.00	10.00	80.00	40.00
14	Sivagangai	10000.00	16.67	15000.00	24.98	20000.00	33.33	25000.00	41.63	70000.00	116.61
15	Thiruvallur	600.00	2.00	300.00	1.00	300.00	1.00	300.00	1.00	1500.00	5.00
16	Thiruvarur	1.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.50
17	Trichy	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	8.00	8.00
18	Tiruvannamalai	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	4.00	4.00
19	Vellore	900.00	1.50	900.00	1.50	1200.00	2.00	1200.00	2.00	4200.00	7.00
20	Villupuram	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	20.00	20.00
	Total	66220.00	253.17	70932.00	273.98	76255.00	297.68	81283.00	323.37	294690.00	1148.20

6. Banana Bunch Cover

Sl.	DIGTRICA	2008-0)9	2009-1	10	2010-	11	2011-1	12	ТОТА	L
No.	DISTRICT	Phy.	Fin.								
1	Ariyalur	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	4.00	4.00
2	Coimbatore	400.00	0.04	400.00	0.04	400.00	0.04	400.00	0.04	1600.00	0.16
3	Cuddalore	200000.00	10.00	30000.00	15.00	350000.00	17.50	400000.00	20.00	980000.00	62.50
4	Dharmapuri	31000.00	4.00	31000.00	4.40	40000.00	4.80	40000.00	5.20	142000.00	18.40
5	Erode	100000.00	5.00	100000.00	5.00	100000.00	5.00	100000.00	5.00	400000.00	20.00
6	Kancheepuram	20000.00	2.00	20000.00	2.00	20000.00	2.00	20000.00	2.00	80000.00	8.00
7	Kanniyakumari	0.5	2.5	0.5	2.5	0.5	2.5	0.5	2.5	2.00	10.00
8	Krishnagiri	10000.00	1.00	20000.00	2.00	20000.00	2.00	20000.00	2.00	70000.00	7.00
9	Namakkal	100000.00	5.00	15000.00	7.50	20000.00	10.00	20000.00	10.00	155000.00	32.50
10	Pudukkottai	12500.00	1.25	12500.00	1.25	12500.00	1.25	12500.00	1.25	50000.00	5.00
11	Salem	100000.00	5.00	100000.00	5.00	100000.00	5.00	100000.00	5.00	400000.00	20.00
12	Theni	50.00	11.25	100.00	22.50	150.00	33.75	200.00	45.00	500.00	112.50
13	Thiruvallur	56000.00	5.60	56000.00	5.60	56000.00	5.60	56000.00	5.60	224000.00	22.40
14	Thiruvarur	1000.00	0.05	950.00	0.05	950.00	0.05	950.00	0.05	3850.00	0.20
15	Trichy	500000.00	50.00	500000.00	50.00	500000.00	50.00	500000.00	50.00	2000000.00	200.00
16	Tirunelveli	100.00	12.50	100.00	12.50	100.00	12.50	100.00	12.50	400.00	50.00
17	Tiruvannamalai	50000.00	0.50	50000.00	0.50	50000.00	0.50	50000.00	0.50	200000.00	2.00
18	Vellore	50.00	6.25	100.00	12.50	1000.00	12.50	100.00	12.50	1250.00	43.75
19	Villupuram	110000.00	11.00	110000.00	11.00	110000.00	11.00	110000.00	11.00	440000.00	44.00
	Total	1291101.50	133.94	1046151.50	160.34	1381101.50	176.99	1430251.50	191.14	5148606.00	662.41

7. Package for plant protection measures

Sl.	DISTRICT	2008	-09	2009	9-10	2010	-11	2011	-12	ТОТ	AL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	100.00	3.00	100.00	3.00	100.00	3.00	100.00	3.00	400.00	12.00
2	Cuddlaore	500.00	7.50	750.00	11.25	1000.00	15.00	1250.00	18.75	3500.00	52.50
3	Dharmapuri	105.00	3.15	105.00	3.47	105.00	3.78	105.00	4.10	420.00	14.49
4	Kancheepuram	50.00	0.75	50.00	0.75	40.00	0.60	50.00	0.75	190.00	2.85
5	Kanniyakumari	100.00	1.50	100.00	1.50	100.00	1.50	100.00	1.50	400.00	6.00
6	Karur	0.00	3.00	0.00	3.90	0.00	4.10	0.00	4.30	0.00	15.29
7	Krishnagiri	400.00	12.00	400.00	12.00	400.00	12.00	400.00	12.00	1600.00	48.00
8	Madurai	100.00	4.50	100.00	4.50	100.00	4.50	100.00	4.50	400.00	18.00
9	Nagapattinam	100.00	1.50	100.00	1.50	100.00	1.50	100.00	1.50	400.00	6.00
10	Namakkal	250.00	3.75	300.00	4.50	350.00	5.25	400.00	6.00	1300.00	19.50
11	Perambalur	100.00	3.00	100.00	3.00	100.00	3.00	100.00	3.00	400.00	12.00
12	Pudukkottai	175.00	2.63	82.00	4.20	385.00	5.78	490.00	7.95	1132.00	20.56
13	Ramanathapuram	300.00	9.00	300.00	9.00	300.00	9.00	300.00	9.00	1200.00	36.00
14	Salem	200.00	3.00	200.00	3.00	200.00	3.00	200.00	3.00	800.00	12.00
15	Sivagangai	200.00	3.00	200.00	3.00	200.00	3.00	200.00	3.00	800.00	12.00
16	Thanjavur	200.00	3.00	200.00	3.00	200.00	3.00	200.00	3.00	800.00	12.00
17	Theni	1200.00	18.00	1600.00	24.00	1200.00	18.00	1200.00	18.00	5200.00	78.00
18	Thiruvallur	115.00	3.45	115.00	3.45	115.00	3.45	115.00	3.45	460.00	13.80
19	Thiruvarur	25.00	0.38	27.00	0.41	26.00	0.39	25.00	0.41	103.00	1.58
20	Trichy	200.00	6.00	200.00	6.00	200.00	6.00	200.00	6.00	800.00	24.00
21	Tirunelveli	500.00	7.50	500.00	7.50	500.00	7.50	500.00	7.50	2000.00	30.00
22	Tiruvannamalai	2.50	7.50	2.50	7.50	2.50	7.50	2.50	7.50	10.00	30.00
23	Vellore	500.00	7.50	1000.00	15.00	1000.00	15.00	1000.00	15.00	3500.00	52.50
24	Villupuram	100.00	3.00	100.00	3.00	0.00	3.00	100.00	3.00	300.00	12.00
	Total	5522.50	117.61	6631.50	138.42	6723.50	138.85	7237.50	146.20	26115.00	541.08

8. Cashew -High Density Planting

Physical: in Nos/ha Financial: Rs in Lakhs

Sl.	DISTRICT	200	8-09	200	9-10	201	0-11	201	11-12	ТО	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	100	9.00	200	18.00	300	27.00	400	36.00	1000	90.00
2	Cuddalore	500	40.50	750	60.75	1000	81.00	1500	121.50	3750	303.75
3	Kancheepuram	10	0.45	10	0.45	10	0.45	10	0.45	40	1.80
4	Nagapattinam	20	0.90	30	1.35	40	1.80	50	2.25	140	6.30
5	Pudukkottai	202	9.09	402	18.09	502	22.59	602	23.09	1708	72.86
6	Theni	2	0.18	2	0.18	2	0.18	2	0.18	8	0.72
7	Tirunelveli	25	1.13	25	1.13	25	1.13	25	1.13	100	4.52
8	Tiruvannamalai	10	0.90	10	0.90	10	0.90	10	0.90	40	3.60
	Total	869	62.15	1429	100.85	1889	135.05	2599	185.5	6786	483.55

9. Support price for chillies & coriander

Sl.	DISTRICT -	200	8-09	200	9-10	201	0-11	201	1-12	TO	ΓAL
No.	DISTRICT	Phy.	Fin.								
1	Ariyalur	1000	50.00	1000	50.00	1000	50.00	1000	50.00	4000	200.00
2	Perambalur	1000	50.00	1000	50.00	1000	50.00	1000	50.00	4000	200.00
	Total	2000	100.00	2000	100.00	2000	100.00	2000	100.00	8000	400.00

10. Support price for betelveine

Physical: in Nos/ha Financial: Rs in Lakhs

Sl.	Di-4i-4	200	08-09	200	09-10	201	10-11	201	1-12	Т	'otal
No.	District	Phy.	Fin.								
1	Cuddalore	10	2.50	20	5.00	30	7.50	40	10.00	100	25.00
2	Dharmapuri	17	6.80	0	0.00	0	0.00	0	0.00	17	6.80
3	Erode	10	2.00	10	2.00	20	4.00	20	4.00	60	12.00
4	Kancheepuram	1	1.00	0	0.00	0	0.00	0	0.00	1	1.00
5	Nagapattinam	300	11.25	350	13.13	400	15.00	500	18.75	1550	58.13
6	Salem	50	10.00	50	10.00	50	10.00	50	10.00	200	40.00
7	Sivagangai	4	10.00	4	10.00	4	10.00	4	10.00	16	40.00
8	Thanjavur	25	25.00	25	25.00	25	25.00	25	25.00	100	100.00
9	Theni	14	7.00	14	7.00	14	7.00	14	0.00	56	21.00
10	Thiruvarur	48	9.60	6	1.20	6	1.20	6	1.20	66	13.20
11	Tirunelveli	20	10.00	20	10.00	20	10.00	20	10.00	80	40.00
12	Vellore	100	1.00	100	1.00	100	1.00	100	1.00	400	4.00
13	Villupuram	5	2.00	5	2.00	5	2.00	5	2.00	20	8.00
		604	98.15	604	86.33	674	92.70	784	91.95	2666	369.13

11. Support System for Crops Gloriosa

Sl.	DISTRICT -	2008-09		2009-10		2010	-11	2011	-12	ТОТ	`AL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	100.00	40.00	100.00	40.00	100.00	40.00	100.00	40.00	400.00	160.00
2	Erode	100.00	20.00	100.00	20.00	100.00	20.00	100.00	20.00	400.00	80.00
3	Nagapattinam	40.00	12.00	40.00	12.00	40.00	12.00	40.00	12.00	160.00	48.00
	Trichy	25.00	10.00	25.00	10.00	25.00	10.00	25.00	10.00	100.00	40.00
	Total	265.00	82.00	265.00	82.00	265.00	82.00	265.00	82.00	1060.00	328.00

12. Support for Senna cultivation @ Rs. 15000 / ha with (50 percent subsidy)

Physical: in ha Financial: Rs in Lakhs

Sl.	DISTRICT	2008	8-09	2009-10		2010-11		201	1-12	TO	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	1000	50.00	1000	50.00	1000	50.00	1000	50.00	4000	200.00
2	Thoothukudi	50	3.75	100	7.50	100	7.50	100	7.50	350	26.25
3	Tirunelveli	100	7.50	100	7.50	100	7.50	100	7.50	400	30.00
	Total	1150	61.25	1200	65.00	1200	65.00	1200	65.00	4750	256.25

13. Plastic Crates for vegetables handling and transport

Sl.	DIGTRICT	2008	3-09	2009)-10	2010)-11	2011	1-12	ТОТ	CAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	100	0.25	100	0.25	100	0.25	100	0.25	400	1.00
2	Coimbatore	100	0.25	100	0.25	100	0.25	100	0.25	400	1.00
3	Cuddalore	1500	1.88	2000	2.50	2500	3.13	3000	3.75	9000	11.26
4	Dharmapuri	1700	2.38	2200	3.00	2700	3.63	3200	4.25	9800	13.26
5	Erode	2000	2.50	2000	2.50	4000	5.00	4000	5.00	12000	15.00
6	Kancheepuram	500	0.63	500	0.63	500	0.63	500	0.63	2000	2.52
7	Kanni yakumari	1000	1.25	1000	1.25	1000	1.25	1000	1.25	4000	5.00
8	Karur	0	1.25	0	6.25	0	6.25	0	6.25	0	20.00
9	Krishnagiri	2000	1.50	2000	1.50	2000	1.50	2000	1.50	8000	6.00
10	Nagapattinam	500	0.63	1000	1.25	1500	1.88	2000	2.50	5000	6.26
11	Namakkal	1100	1.38	2000	2.50	2000	2.50	3000	3.75	8100	10.13
12	Perambalur	50	0.13	50	0.13	50	0.13	50	0.13	200	0.52
13	Pudukkottai	920	1.40	1020	1.53	1070	1.46	1070	1.46	4080	5.85
14	Ramanathapuram	600	0.75	600	0.75	600	0.75	600	0.75	2400	3.00
15	Salem	2000	2.50	3000	3.75	4800	6.00	6000	7.50	15800	19.75
16	Sivagangai	500	0.63	1000	1.25	1000	1.25	1000	1.25	3500	4.38
17	Theni	1200	2.25	1200	2.25	1200	2.25	1200	2.25	4800	9.00
18	Thiruvallur	2100	5.25	2100	5.25	2100	5.25	2100	5.25	8400	21.00
19	Thiruvarur	295	0.37	187	0.23	185	0.23	195	0.24	862	1.07
20	Thoothukudi	300	0.38	300	0.38	500	0.63	500	0.63	1600	2.00
21	Trichy	500	1.25	1000	2.50	1000	2.50	1000	2.50	3500	8.75
22	Tirunelveli	10000	12.50	10000	12.50	10000	12.50	10000	12.50	40000	50.00
23	Tiruvannamalai	200	0.50	200	0.50	200	0.50	200	0.50	800	2.00
24	Vellore	500	0.63	1000	1.25	1000	1.25	1000	1.25	3500	4.38
25	Villupuram	1000	2.50	1000	2.50	1000	2.50	1000	2.50	4000	10.00
	Total	30665	44.92	35557	56.64	41105	63.47	44815	68.09	152142	233.12

14. Assistance for water soluble fertilizers

Physical: in ha

Financial: Rs in Lakhs

Sl.	DISTRICT	2008-09		2009-10		201	0-11	201	1-12	TO	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Dharmapuri	240	36.00	240	36.00	240	36.00	240	36.00	960	144.00
	Total	240	36.00	240	36.00	240	36.00	240	36.00	960	144.00

15. Betelveine new area cultivation

Physical: in cents Financial: Rs in Lakhs

Sl.	DISTRICT	2008-09		2009-10		201	0-11	201	1-12	ТО	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Madurai	5	25.00	5	25.00	5	25.00	5	25.00	20	100.00
2	Ramanathapuram	5	5.00	0	0.00	0	0.00	0	0.00	5	5.00
	Total	10	30.00	5	25.00	5	25.00	5	25.00	25	105.00

16. Distribution of Tarpaulin sheets at 50 per cent subsidy

Physical: in Nos Financial: Rs in Lakhs

Sl.	DISTRICT	2008-09		2009-10		201	0-11	201	1-12	ТО	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ramanathapuram	500	25.00	500	25.00	500	25.00	500	25.00	2000	100.00
	Total	5000	25.00	500	25.00	500	25.00	500	25.00	2000	100.00

17. Grapes bird net

Sl.	DISTRICT	2008-09		2009-10		201	0-11	201	1-12	TO	ΓAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Theni	50	25.00	50	25.00	50	25.00	50	25.00	200	100.00
	Total	50	25.00	50	25.00	50	25.00	50	25.00	200	100.00

18. Humic acid/Effective E Microbes

Physical: in lit Financial: Rs in Lakhs

Sl.	DICTRICT	2008	3-09	2009)-10	2010)-11	2011	-12	TOTA	A L
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	30	0.12	40	0.16	50	0.20	60	0.24	180	0.72
2	Coimbatore	200	0.80	200	0.80	200	0.80	200	0.80	800	3.20
3	Dharmapuri	80	0.32	80	0.35	80	0.38	80	0.42	320	1.47
4	Kancheepuram	20000	2.00	20000	2.00	20000	2.00	20000	2.00	80000	8.00
5	Karur	0	0.40	0	0.52	0	0.52	0	0.52	0	1.96
6	Krishnagiri	100	0.40	100	0.40	100	0.40	100	0.40	400	1.60
7	Madurai	100	0.20	100	0.20	100	0.20	100	0.20	400	0.80
8	Nagapattinam	100	0.20	200	0.40	300	0.60	400	0.80	1000	2.00
9	Namakkal	250	0.50	300	0.60	300	0.60	400	0.80	1250	2.50
10	Perambalur	20	0.08	30	0.12	40	0.16	50	0.20	140	0.56
11	Pudukkottai	3057	12.11	3065	12.15	3070	12.18	3070	12.18	12262	48.62
12	Salem	100	0.20	100	0.20	100	0.20	100	0.20	400	0.80
13	Sivagangai	50	1.00	50	1.00	50	1.00	100	2.00	250	5.00
14	Theni	800	1.60	800	1.60	800	1.60	800	1.60	3200	6.40
15	Thiruvallur	15	0.06	15	0.06	15	0.06	15	0.06	60	0.24
16	Trichy	50	0.20	50	0.20	100	0.40	100	0.40	300	1.20
17	Tirunelveli	1000	2.00	1000	2.00	1000	2.00	1000	2.00	4000	8.00
18	Tiruvannamalai	100	0.40	100	0.40	100	0.40	100	0.40	400	1.60
19	Vellore	500	1.00	500	1.00	500	1.00	500	1.00	2000	4.00
	Total	26552	23.59	26730	24.16	26905	24.70	27175	26.22	107362	98.67

19. Support for vasambu cultivation

Sl.	DISTRICT -	2008-09		2009-10		2010	-11	2011	-12	TOT	ΓAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Nagapattinam	20	3.00	50	7.50	70	9.00	100	15.00	240	34.50
2	Thiruvarur	32	6.40	32	6.40	32	6.40	32	6.40	128	25.60
	Total	52	9.40	82	13.90	102	15.40	132	21.40	368	60.10

20. Hybrid vegetable cultivation-Seed material

Physical: in Nos/ha Financial: Rs in Lakhs

Sl.	DISTRICT	2008-09		2009-10		201	0-11	201	1-12	ТОТ	AL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	10	10.00	10	10.00	10	10.00	10	10.00	40	40.00
2	Cuddalore	10	1.50	10	1.50	5	0.75	5	0.75	30	4.50
3	Kancheepuram	50	1.75	50	1.75	50	1.75	50	1.75	200	7.00
	Total	70	13.25	70	13.25	65	12.50	65	12.50	270	51.50

21. Hybrid vegetable cultivation- Banana plantlets

Physical: in Nos Financial: Rs in Lakhs

Sl.	DISTRICT	2008	8-09	2009-10		2010-11		2011	-12	TO	TAL
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	10	10.00	10	10.00	10	10.00	10	10.00	40	40.00
2	Cuddalore	10	1.50	10	1.50	5	0.75	5	0.75	30	4.50
3	Kancheepuram	20000	1.00	20000	1.00	20000	1.00	20000	1.00	80000	4.00
	Total	20020	12.50	20020	12.50	20015	11.75	20015	11.75	80070	48.50

22. Pollinator Village for Honey Bee rearing

Sl.	DISTRICT	2008	2008-09		2009-10		-11	2011	-12	ТОТ	`AL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Madurai	500	8.00	500	8.00	500	8.00	500	8.00	2000	32.00
	Total	500	8.00	500	8.00	500	8.00	500	8.00	2000	32.00

23. Support System for Crops Tomato

Physical: in Nos/ha Financial: Rs in Lakhs

Sl.	District	2008	3-09	2009-10		2010)-11	2011	-12	То	tal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Dharmapuri	10	2.50	10	2.50	10	2.50	10	2.50	40	10.00
2	Vellore	20	1.5	20	1.5	20	1.5	20	1.5	80	6
	Total	30	4.00	30	4.00	30	4.00	30	4.00	120	16.00

24. Raising fruit crops in delta areas by providing raised beds and drainage channels

Physical: in Nos Financial: Rs in Lakhs

Cl. No.	District	2008-09		2009-10		2010)-11	201	1-12	To	tal
Sl. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Nagapattinam	10	1.50	15	2.25	20	3.00	25	3.75	70	10.50
	Total	10	1.50	15	2.25	20	3.00	25	3.75	70	10.50

25. Model Fertigation plot for vegetable cultivation

Physical: in Nos/ha Financial: Rs in Lakhs

Sl.	No.	2008-09		2009-10		2010	-11	2011	l -12	То	tal
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Namakkal	25	2.50	25	2.50	25	2.50	25	2.50	100	10.00
	Total	25	2.50	25	2.50	25	2.50	25	2.50	100	10.00

26. Staking

Cl. No.	District	2008-09		2009-10		2010)-11	201	1-12	To	tal
Sl. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Karur	0.00	1.00	0.00	1.50	0.00	1.58	0.00	1.65	0.00	5.73
	Total	0.00	1.00	0.00	1.50	0.00	1.58	0.00	1.65	0.00	5.73

B. Mechanization

27. Banana corm injector

Physical: in Nos/ha Financial: Rs in Lakhs

Sl.	DIGEDICE	2008	3-09	2009	9-10	2010)-11	2011	1-12	TOT	ΓAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	100	40.00	100	40.00	100	40.00	100	40.00	400	160.00
2	Coimbatore	50	0.15	50	0.15	50	0.15	50	0.15	200	0.60
3	Cuddalore	1500	2.25	2000	3.00	2500	3.75	3000	4.50	9000	13.50
4	Dharmapuri	100	0.30	100	0.33	100	0.36	100	0.38	400	1.38
5	Kancheepuram	20	0.03	20	0.03	20	0.03	20	0.03	80	0.12
6	Kanniyakumari	250	0.38	250	0.38	250	0.38	250	0.38	1000	1.50
7	Karur	0	0.08	0	0.27	0	0.54	0	0.54	0	1.43
8	Nagapattinam	100	0.10	120	0.13	130	0.20	150	0.23	500	0.65
9	Pudukkottai	105	0.17	105	0.17	105	0.17	105	0.17	420	0.66
10	Salem	200	0.30	200	0.30	200	0.30	200	0.30	800	1.20
11	Theni	100	0.15	100	0.15	100	0.15	100	0.15	400	0.60
12	Thiruvallur	280	0.84	280	0.84	280	0.84	280	0.84	1120	3.36
13	Thiruvarur	86	0.13	86	0.13	86	0.13	6	0.01	264	0.40
14	Thoothukudi	100	0.15	100	0.15	100	0.15	100	0.15	400	0.60
15	Trichy	100	0.30	100	0.30	100	0.30	100	0.30	400	1.20
16	Tirunelveli	500	0.75	500	0.75	500	0.75	500	0.75	2000	3.00
17	Tiruvannamalai	300	0.90	300	0.90	300	0.90	300	0.90	1200	3.60
18	Vellore	500	0.75	500	0.75	500	0.75	500	0.75	2000	3.00
19	Villupuram	2000	6.00	3000	9.00	3000	9.00	3000	9.00	11000	33.00
	Total	6391	53.72	7911	57.72	8421	58.83	8861	59.52	31584	229.79

28. Supply of Plant Protection kits

Sl.	District -	200	8-09	2009-10		201	0-11	2011	1-12	TO	ΓAL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Namakkal	3500	35.00	4000	40.00	4500	45.00	5000	50.00	17000	170.00
	Total	3500	35.00	4000	40.00	4500	45.00	5000	50.00	17000	170.00

29. Farm waste shredder/vegetable waste shredder

Sl.	Di-di-d	200	8-09	200	9-10	201	0-11	201	1-12	T	otal
No.	District	Phy.	Fin.								
1	Ariyalur	6	2.40	6	2.40	6	2.40	6	2.40	24	9.60
2	Cuddalore	25	5.00	30	6.00	40	8.00	50	10.00	145	29.00
3	Dharmapuri	8	3.20	8	3.52	8	3.84	8	4.16	32	14.72
4	Kancheepuram	1	0.20	2	0.40	3	0.60	3	0.60	9	1.80
5	Kanniyakumari	5	1.00	5	1.00	5	1.00	5	1.00	20	4.00
6	Nagapattinam	2	0.40	2	0.40	2	0.40	2	0.40	8	1.60
7	Perambalur	4	1.60	4	1.60	4	1.60	4	1.60	16	6.40
8	Pudukkottai	9	1.80	14	2.80	15	3.00	15	3.00	53	10.60
9	Salem	10	2.00	10	2.00	10	2.00	10	2.00	40	8.00
10	Theni	1	0.30	1	0.30	1	0.30	1	0.30	4	1.20
11	Thiruvallur	2	0.80	2	0.80	2	0.80	2	0.80	8	3.20
12	Tirunelveli	100	2.00	100	2.00	100	2.00	100	2.00	400	8.00
13	Tiruvannamalai	2	0.80	2	0.80	2	0.80	2	0.80	8	3.20
14	Villupuram	1	0.40	1	0.40	1	0.40	1	0.40	4	1.60
	Total	176	21.90	187	24.42	199	27.14	209	29.46	771	102.92

30. Mango harvester

Sl.	DICTRICT	200	8-09	200	9-10	201	0-11	201	1-12	то	ΓAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Cuddalore	1000	5.00	1500	6.00	2000	10.00	3000	15.00	7500	36.00
2	Dharmapuri	205	1.03	205	1.13	205	1.23	205	1.33	820	4.72
3	Kancheepuram	50	0.13	50	0.13	50	0.13	50	0.13	200	0.50
4	Kanniyakumari	100	0.25	100	0.25	100	0.25	100	0.25	400	1.00
5	Karur	0	0.50	0	0.50	0	1.00	0	1.00	0	3.00
6	Krishnagiri	200	1.00	200	1.00	200	1.00	200	1.00	800	4.00
7	Nagapattinam	150	0.38	200	0.50	200	0.50	200	0.50	750	1.88
8	Pudukkottai	139	0.70	144	0.72	144	0.72	149	0.75	576	2.88
9	Salem	100	0.25	100	0.25	100	0.25	100	0.25	400	1.00
10	Sivagangai	50	0.13	100	0.25	100	0.25	100	0.25	350	0.88
11	Theni	200	0.50	200	0.50	200	0.50	200	0.50	800	2.00
12	Thiruvallur	210	1.05	210	1.05	210	1.05	210	1.05	840	4.20
13	Thiruvarur	71	0.18	69	0.17	69	0.17	69	0.17	278	0.70
14	Trichy	10	0.05	0	0.00	0	0.00	0	0.00	10	0.05
15	Tirunelveli	250	0.63	250	0.63	250	0.63	250	0.63	1000	2.50
16	Tiruvannamalai	50	0.25	50	0.25	50	0.25	50	0.25	200	1.00
17	Vellore	200	0.50	200	0.50	200	0.50	200	0.50	800	2.00
18	Villupuram	2000	6.00	3000	9.00	3000	9.00	3000	9.00	11000	33.00
	Total	4985	18.50	6578	22.82	7078	27.42	8083	32.55	26724	101.29

31. Post Harvest Management in Onion Cultivation (pack house (100 percent subsidy)

Physical: in Nos/ha Financial: Rs in Lakhs

CL NI-	D:-4-:-4	2008-09		2009-10		201	0-11	201	1-12	To	tal
Sl. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	10	10.00	10	10.00	10	10.00	10	10.00	40	40.00
2	Cuddalore	10	1.50	10	1.50	5	0.75	5	0.75	30	4.50
	Total	20	11.50	20	11.50	15	10.75	15	10.75	70	44.50

32. Support price for Acidlime

Physical: in Nos/ha Financial: Rs in Lakhs

Sl.	District	2008-09		2009-10		2010)-11	2011	1-12	To	tal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Perambalur	100	10.00	100	10.00	100	10.00	100	10.00	400	40.00
	Total	100	10.00	100	10.00	100	10.00	100	10.00	400	40.00

33. Tractor mounted steam boiler

Sl.	District	2008-09		2009-10		2010	0-11	201	1-12	To	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Dharmapuri	9	4.50	9	4.85	9	5.20	9	5.55	36	20.10
2	Perambalur	1	0.50	1	0.50	1	0.50	1	0.50	4	2.00
3	Salem	10	2.50	10	2.50	10	2.50	10	2.50	40	10.00
4	Tiruvannamalai	2	1.00	2	1.00	2	1.00	2	1.00	8	4.00
5	Vellore	2	0.50	2	0.50	2	0.50	2	0.50	8	2.00
	Total	24	9.00	24	9.35	24	9.70	24	10.05	96	38.10

34. Banana sucker treatment kit

Physical :ha

Financial: Rs in Lakhs

Sl.	District	2008	-09	2009-10		2010)-11	2011	-12	TOT	AL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Namakkal	200	5.00	300	7.50	400	10.00	500	15.00	1400	37.50
	Total	200	5.00	300	7.50	400	10.00	500	15.00	1400	37.50

35. Supply of Aluminium ladder

Physical: in Nos Financial: Rs in Lakhs

Sl.	Sl. No. District	2008	8-09	2009-10		2010)-11	2011	-12	TOT	AL
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Namakkal	50	3.00	50	3.00	50	3.00	50	3.00	200	12.00
	Total	50	3.00	50	3.00	50	3.00	50	3.00	200	12.00

36. Horticulture Air Drier for Spices

Physical: in Nos/ha Financial: Rs in Lakhs

Sl. No.	District	2008-09		2009	2009-10)-11	201	1-12	TO	ΓAL
S1. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Kanniyakumari	5	5.00	5	5.00	0	0.00	0	0.00	10	10.00
	Total	5	5.00	5	5.00	0	0.00	0	0.00	10	10.00

37. Distribution of Power Sprayer at 75 per cent subsidy

Sl.	District	2008-09		2009-10		2010	-11	201	1-12	TO	TAL
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ramanathapuram	20	0.75	20	0.75	20	0.75	20	0.75	80	3.00
	Total	20	0.75	20	0.75	20	0.75	20	0.75	80	3.00

38. Distribution of hand Operated Sprayer at 75 per cent subsidy

Physical: in Nos Financial: Rs in Lakhs

Sl.	District	2008-09		2009-10		2010	-11	2011	-12	TO	ΓAL
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ramanathapuram	50	0.56	50	0.56	50	0.56	50	0.56	200	2.25
	Total	50	0.56	50	0.56	50	0.56	50	0.56	200	2.25

39. Providing handy horticultural equipments kit

Physical: in Nos Financial: Rs in Lakhs

Sl. No.	District	2008-09		2009-10		2010	-11	2011	-12	TOT	AL
S1. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Nagapattinam	100	0.50	100	0.50	100	0.50	100	0.50	400	2.00
	Total	100	0.50	100	0.50	100	0.50	100	0.50	400	2.00

40. Support system to vegetable growers- Hand operated sprayers

Physical: in Nos Financial: Rs in Lakhs

2008-09 2009-10 2010-11 2011-12 **TOTAL** Sl. **District** No. Phy. Fin. Phy. Phy. Fin. Phy. Fin. Phy. Fin. Fin. 200 1 Kancheepuram 0.15 20 0.15 20 0.15 20 0.15 80 0.60 20 0.15 20 0.15 0.15 20 0.15 80 **Total** 20 0.60

41. Support system to perennial tree growers - Foot operated sprayers

Sl.	District	2008-09		2009-10		2010	-11	2011	l -12	ТОТ	AL
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Kancheepuram	20	0.15	20	0.15	20	0.15	20	0.15	80	0.60
	Total	20	0.15	20	0.15	20	0.15	20	0.15	80	0.60

C. Infra-Structure

42. Bore well with casing pipes

Sl.	D : 4 : 4	20	08-09	20	09-10	20	10-11	20	11-12	TC	TAL
No.	District	Phy.	Fin.								
1	Ariyalur	50	75.00	50	75.00	50	75.00	500	75.00	200	300.00
2	Cuddalore	200	225.00	250	281.25	300	337.50	400	450.00	1150	1293.75
3	Dharmapuri	29	43.50	29	47.85	29	52.20	29	56.55	116	200.10
4	Kanniyakumari	20	15.00	20	15.00	20	15.00	20	15.00	80	60.00
5	Krishnagiri	200	300.00	200	300.00	200	300.00	200	300.00	800	1200.00
6	Namakkal	60	45.00	80	60.00	90	67.50	100	75.00	330	247.50
7	Perambalur	50	75.00	50	75.00	50	75.00	50	75.00	200	300.00
8	Pudukkottai	30	33.75	33	36.00	33	36.00	33	36.00	129	141.75
9	Sivagangai	50	37.50	50	37.50	100	75.00	100	75.00	300	225.00
10	Theni	10	7.50	10	7.50	10	7.50	10	7.50	40	30.00
11	Thiruvallur	2	3.00	3	4.50	3	4.50	3	4.50	11	16.50
12	Thiruvarur	7	5.25	7	5.25	7	5.25	7	5.25	28	21.00
13	Trichy	5	7.50	5	7.50	5	7.50	5	7.50	20	30.00
14	Tirunelveli	20	15.00	20	15.00	20	15.00	20	15.00	80	60.00
15	Tiruvannamalai	5	7.50	5	7.50	5	7.50	5	7.50	20	30.00
16	Vellore	200	150.00	200	150.00	200	150.00	200	150.00	800	600.00
	Total	938	1045.50	1012	1124.85	1122	1230.45	1232	1354.80	4304	4755.60

43. Sales outlet points-cum-information centre in Districts

Physical: in Nos Financial: Rs in Lakhs

Sl.	D' 4 ' 4	200)8-09	200	9-10	201	10-11	201	11-12	Т	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	3	7.80	3	7.80	3	7.80	3	7.80	12	31.2
2	Coimbatore	1	2.60	0	0.00	0	0.00	0	0.00	1	2.6
3	Cuddalore	10	26.00	13	33.80	26	67.60	65	169.00	114	296.4
4	Dharmapuri	14	36.40	16	41.60	29	75.40	68	176.80	127	330.2
5	Kancheepuram	1	1.30	0	0.00	0	0.00	0	0.00	1	1.3
6	Karur	0	2.60	0	2.60	0	2.60	0	2.60	0	10.4
7	Krishnagiri	1	2.60	2	5.20	2	5.20	2	5.20	7	18.2
8	Madurai	1	2.60	2	3.02	3	3.44	4	3.86	10	12.92
9	Nagapattinam	1	2.60	0	0.00	0	0.00	0	0.00	1	2.6
10	Namakkal	15	39.00	15	43.00	15	48.00	15	48.00	60	178
11	Perambalur	2	5.20	2	5.20	2	5.20	2	5.20	8	20.8
12	Pudukkottai	1	2.50	0	0.00	0	0.00	0	0.00	1	2.5
13	Salem	1	2.60	1	2.60	1	2.60	1	2.60	4	10.4
14	Sivagangai	1	2.60	0	0.00	0	0.00	0	0.00	1	2.6
15	Theni	1	2.60	1	2.60	1	2.60	1	2.60	4	10.4
16	Thiruvallur	1	2.60	1	2.60	1	2.60	1	2.60	4	10.4
17	Thiruvarur	5	13.00	0	4.80	0	4.80	0	4.80	5	27.4
18	Thoothukudi	0	0.00	1	2.60	0	0.00	0	0.00	1	2.6
19	Trichy	1	2.60	1	2.60	1	2.60	1	2.60	4	10.4
20	Tiruvannamalai	0	0.00	1	2.60	1	2.60	1	2.60	3	7.8
21	Villupuram	1	0.00	1	0.00	1	0.00	1	0.00	4	0
	Total	61	157.20	60.	162.62	86	233.04	165	436.26	372	989.12

44. Community Fencing

Sl.	District	2008-09		2009-10		2010-11		201	11-12	T	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Cuddalore	25	28.13	50	56.25	100	112.50	200	225.00	375	421.88
2	Erode	40	20.00	40	20.00	40	20.00	40	20.00	160	80.00
3	Kancheepuram	0	0.00	20	10.00	20	10.00	20	10.00	60	30.00
4	Sivagangai	20	10.00	25	12.50	30	15.00	50	25.00	125	62.50
5	Thiruvarur	1	4.05	1	4.05	1	4.05	1	4.05	4	16.20
6	Vellore	1	5.00	1	5.00	1	5.00	1	5.00	4	20.00
7	Villupuram	4	2.00	6	3.00	8	4.00	8	4.00	26	13.00
	Total	91	69.18	143	110.80	200	170.55	320	293.05	754	643.58

45. Agri-Clinic at Block level

Physical: in Nos Financial: Rs in Lakhs

CI No	District	2008	3-09	200)9-10	20	10-11	201	1-12	Phy.013	DTAL	
Sl. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	
1	Madurai	0	0.00	5	125.00	5	125.00	3	75.00	13	325.00	
	Total	0	0.00	5	125.00	5	125.00	3	75.00	13	325.00	

46. Rural food Processing and knowledge centre

Physical: in Nos Financial: Rs in Lakhs

2008-09 2009-10 2010-11 2011-12 **TOTAL** Sl. No. **District** Phy. Fin. Phy. Fin. Phy. Fin. Phy. Fin. Phy. Fin. 1 Madurai 0 0.00 1 75.00 1 75.00 00 0.00 2 150.00 0 0.00 1 **75.00** 10 **75.00** 0.00 2 150.00 **Total** 0

47. Refrigerated Van

Physical: in Nos/ha Financial: Rs in Lakhs

Sl.	District	2008-09		2009-10		201	0-11	201	1-12	T	otal
No.	No. District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Krishnagiri	3	30.00	3	30.00	3	30.00	3	30.00	12	120.00
	Total	3	30.00	3	30.00	30	30.00	30	30.00	12	120.00

48. Distillation unit for aromatic plants

Sl. No.	District	2008-09		2009-10		201	0-11	201	1-12	To	otal
51. 100.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Tiruvannamalai	5	6.25	5	6.25	5	6.25	5	6.25	20	25.00
	Total	5	6.25	5	6.25	5	6.25	5	6.25	20	25.00

49. Venture Capital Scheme - TNAU

Physical: in Nos Financial: Rs in Lakhs

Sl.	District	2008-09		2009-10		2010-	-11	2011-	12	TOT	AL
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Madurai	250.00	5.00	250.00	5.00	250.00	5.00	250.00	5.00	1000.00	20.00
	Total	250.00	5.00	250.00	5.00	250.00	5.00	250.00	5.00	1000.00	20.00

D.Extension Services

50. 10 hectare mega demonstration plot for the districts

		1	1								1
Sl.	District	200	8-09	200	9-10	201	0-11	201	1-12	ТО	TAL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	6.00	150.00	6.00	150.00	6.00	150.00	6.00	150.00	24.00	600.00
2	Coimbatore	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
3	Cuddalore	10	1.88	10	1.88	10	1.88	10	1.88	40	7.52
4	Dharmapuri	1.00	25.00	5.00	125.00	2.00	50.00	1.00	25.00	9.00	225.00
5	Erode	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
6	Kancheepuram	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
7	Kanniyakumari	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
8	Karur	0.00	25.00	0.00	25.00	0.00	25.00	0.00	25.00	0.00	100.00
9	Krishnagiri	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
10	Madurai	0.00	0.00	1.00	25.00	2.00	50.00	2.00	50.00	5.00	125.00
11	Namakkal	1.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	25.00
12	Perambalur	4.00	100.00	4.00	100.00	4.00	100.00	4.00	100.00	16.00	400.00
13	Pudukkottai	1.00	25.00	0.00	0.00	1.00	25.00	0.00	0.00	2.00	50.00
14	Salem	1.00	12.50	1.00	12.50	1.00	12.50	1.00	12.50	4.00	50.00
15	Sivagangai	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
16	Theni	2.00	25.00	2.00	25.00	2.00	25.00	2.00	25.00	8.00	100.00
17	Thiruvallur	1.00	25.00	0.00	0.00	1.00	25.00	0.00	0.00	2.00	50.00
18	Thiruvarur	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
19	Trichy	2.00	50.00	2.00	50.00	2.00	50.00	2.00	50.00	8.00	200.00
20	Tirunelveli	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
21	Tiruvannamalai	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
22	Vellore	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
	Total	39.00	714.38	41.00	764.38	41.00	764.38	38.00	689.38	159.00	2932.52

51. Enterprising Crop Growers Associations

Sl.	D: 4 ! 4	200	08-09	200	9-10	201	.0-11	201	1-12	то	TAL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	3.00	75.00	3.00	75.00	3.00	75.00	3.00	75.00	12.00	300.00
2	Coimbatore	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
3	Cuddalore	5.00	0.94	5.00	0.94	5.00	0.94	5.00	0.94	20.00	3.75
4	Dharmapuri	9.00	100.94	9.00	100.94	9.00	100.94	9.00	100.94	36.00	403.75
5	Kancheepuram	1.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	25.00
6	Kanniyakumari	0.00	0.00	1.00	12.50	0.00	0.00	1.00	12.50	2.00	25.00
7	Karur	0.00	25.00	0.00	25.00	0.00	25.00	0.00	25.00	0.00	100.00
8	Madurai	0.00	0.00	2.00	50.00	0.00	0.00	0.00	0.00	2.00	50.00
9	Nagapattinam	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
10	Namakkal	3.00	75.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	75.00
11	Perambalur	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
12	Pudukkottai	1.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	25.00
13	Sivagangai	1.00	25.00	1.00	25.00	1.00	25.00	0.00	0.00	3.00	75.00
14	Theni	1.00	25.00	0.00	0.00	0.00	0.00	1.00	25.00	2.00	50.00
15	Thiruvallur	0.00	0.00	1.00	25.00	0.00	0.00	1.00	25.00	2.00	50.00
16	Thiruvarur	1.00	25.00	1.00	25.00	0.00	0.00	0.00	0.00	2.00	50.00
17	Thoothukudi	1.00	0.25	1.00	0.25	1.00	0.25	1.00	0.25	4.00	1.00
18	Trichy	2.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	50.00
19	Vellore	1.00	25.00	1.00	25.00	1.00	25.00	1.00	25.00	4.00	100.00
20	Villupuram	2.00	50.00	3.00	75.00	3.00	75.00	3.00	75.00	11.00	275.00
	Total	34.00	602.13	31.00	514.63	26.00	402.13	28.00	439.63	119.00	1958.50

52. Inter State Exposure visit (5 days)

		T				Т		2011-12 TOTAL Phy. Fin. Phy. Fin			
Sl.	District	2008	3-09	2009)-10	2010)-11	2011	-12	TOT	AL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	50.00	2.50	50.00	2.50	50.00	2.50	50.00	2.50	200.00	10.00
2	Coimbatore	25.00	1.25	25.00	1.25	25.00	1.25	25.00	1.25	100.00	5.00
3	Cuddalore	200.00	10.00	300.00	15.00	400.00	20.00	500.00	25.00	1400.00	70.00
4	Dharmapuri	200.00	10.00	200.00	10.00	200.00	10.00	200.00	10.00	800.00	40.00
5	Erode	200.00	10.00	200.00	10.00	200.00	10.00	200.00	10.00	800.00	40.00
6	Kancheepuram	20.00	1.00	20.00	1.00	20.00	1.00	20.00	1.00	80.00	4.00
7	Kanniyakumari	50.00	2.50	50.00	2.50	50.00	2.50	50.00	2.50	200.00	10.00
8	Karur	0.00	2.50	0.00	2.50	0.00	2.50	0.00	2.50	0.00	10.00
9	Krishnagiri	200.00	10.00	200.00	10.00	200.00	10.00	200.00	10.00	800.00	40.00
10	Nagapattinam	150.00	7.50	150.00	7.50	150.00	7.50	150.00	7.50	600.00	30.00
11	Namakkal	150.00	7.50	150.00	7.50	200.00	10.00	200.00	10.00	700.00	35.00
12	Perambalur	50.00	2.50	50.00	2.50	50.00	2.50	50.00	2.50	200.00	10.00
13	Pudukkottai	2.00	5.00	2.00	5.00	2.00	5.00	2.00	5.00	8.00	20.00
14	Ramanathapuram	100.00	5.00	100.00	5.00	100.00	5.00	100.00	5.00	400.00	20.00
15	Salem	250.00	12.50	250.00	12.50	250.00	12.50	250.00	12.50	1000.00	50.00
16	Sivagangai	1.00	10.00	1.00	10.00	1.00	10.00	1.00	10.00	4.00	40.00
17	Thanjavur	50.00	2.50	50.00	2.50	50.00	2.50	50.00	2.50	200.00	10.00
18	Theni	200.00	10.00	200.00	10.00	200.00	10.00	200.00	10.00	800.00	40.00
19	Thiruvallur	50.00	2.50	50.00	2.50	50.00	2.50	50.00	2.50	200.00	10.00
20	Thiruvarur	50.00	2.50	50.00	2.50	50.00	2.50	50.00	2.50	200.00	10.00
21	Thoothukudi	50.00	2.50	50.00	2.50	50.00	2.50	50.00	2.50	200.00	10.00
22	Trichy	200.00	10.00	200.00	10.00	200.00	10.00	200.00	10.00	800.00	40.00
23	Tirunelveli	100.00	5.00	100.00	5.00	100.00	5.00	100.00	5.00	400.00	20.00
24	Tiruvannamalai	50.00	2.50	50.00	2.50	50.00	2.50	50.00	2.50	200.00	10.00
25	Vellore	50.00	2.50	50.00	2.50	50.00	2.50	50.00	2.50	200.00	10.00
26	Villupuram	100.00	5.00	100.00	5.00	100.00	5.00	100.00	5.00	400.00	20.00
	Total	2548.00	144.75	2648.00	149.75	2798.00	157.25	2898.00	162.25	10892.00	614.00

53. Strengthening of extension – technical knowledge centre

Physical: in Nos Financial: Rs in Lakhs

Sl. No.	District	2008	8-09	2009	9-10	201	0-11	201	1-12	Phy. 13.00	otal
51.110.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Madurai	0.00	0.00	3.00	30.00	5.00	50.00	5.00	50.00	13.00	130.00
	Total	0.00	0.00	3.00	30.00	5.00	50.00	5.00	50.00	13.00	130.00

54. Mango/Amla in Noon meal scheme

Sl.	District	2008	2008-09		2009-10		-11	2011	-12	To	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Madurai	2.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	8.00	4.00
2	Pudukkottai	1.00	0.50	1.00	0.50	1.00	0.50	1.00	0.50	4.00	2.00
3	Thiruvarur	9.00	23.77	9.00	24.96	9.00	26.21	9.00	27.51	36.00	102.45
4	Thoothukudi	1.00	0.50	1.00	0.50	1.00	0.50	1.00	0.50	4.00	2.00
5	Trichy	3.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	3.00	1.50
6	Villupuram	2.00	1.00	3.00	1.50	3.00	1.50	3.00	1.50	11.00	5.50
	Total	18.00	28.27	16.00	28.46	16.00	29.71	16.00	31.01	66.00	117.45

55. District Level Farmers Workshop

Sl.	Di i i i	2008-	-09	2009	-10	2010	-11	2011	-12	TOT	AL
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	100.00	0.40	100.00	0.40	100.00	0.40	100.00	0.40	400.00	1.60
2	Coimbatore	300.00	2.40	300.00	2.40	300.00	2.40	300.00	2.40	1200.00	9.60
3	Cuddalore	200.00	0.80	400.00	1.60	800.00	3.20	1000.00	4.00	2400.00	9.60
4	Dharmapuri	200.00	0.80	200.00	0.80	200.00	0.80	200.00	0.80	800.00	3.20
5	Erode	200.00	0.80	200.00	0.80	200.00	0.80	200.00	0.80	800.00	3.20
6	Kancheepuram	200.00	0.80	200.00	0.80	200.00	0.80	200.00	0.80	800.00	3.20
7	Kanniyakumari	100.00	0.40	100.00	0.40	100.00	0.40	100.00	0.40	400.00	1.60
8	Karur	0.00	0.40	0.00	0.40	0.00	0.40	0.00	0.40	0.00	1.60
9	Krishnagiri	100.00	0.40	200.00	0.80	200.00	0.80	200.00	0.80	700.00	2.80
10	Nagapattinam	200.00	0.40	200.00	0.40	200.00	0.40	200.00	0.40	800.00	1.60
11	Namakkal	300.00	1.20	400.00	1.60	500.00	2.00	500.00	2.00	1700.00	6.80
12	Perambalur	100.00	4.00	100.00	4.00	100.00	4.00	100.00	4.00	400.00	16.00
13	Pudukkottai	1.00	2.50	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.50
14	Ramanathapuram	200.00	0.80	200.00	0.80	200.00	0.80	200.00	0.80	800.00	3.20
15	Salem	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	8.00	8.00
16	Sivagangai	1.00	0.40	1.00	0.40	1.00	0.40	1.00	0.40	4.00	1.60
17	Thanjavur	100.00	0.40	100.00	0.40	100.00	0.40	100.00	0.40	400.00	1.60
18	Theni	100.00	0.40	100.00	0.40	100.00	0.40	100.00	0.40	400.00	1.60
19	Thiruvallur	200.00	0.80	200.00	0.80	200.00	0.80	200.00	0.80	800.00	3.20
20	Thiruvarur	200.00	0.80	200.00	0.80	200.00	0.80	200.00	0.80	800.00	3.20
21	Thoothukudi	100.00	0.40	100.00	0.40	100.00	0.40	100.00	0.40	400.00	1.60
22	Trichy	200.00	0.80	200.00	0.80	200.00	0.80	200.00	0.80	800.00	3.20
23	Tirunelveli	500.00	2.00	500.00	2.00	500.00	2.00	500.00	2.00	2000.00	8.00
24	Tiruvannamalai	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	4.00	4.00
25	Vellore	200.00	0.80	200.00	0.80	200.00	0.80	200.00	0.80	800.00	3.20
26	Villupuram	2.00	1.20	2.00	1.20	2.00	1.20	2.00	1.20	8.00	4.80
	Total	3807.00	27.10	4206.00	26.20	4706.00	28.20	4906.00	29.00	17625.00	110.50

56. Prize for Crop yield competition to the best cashew growers / vegetable growers

Physical: in Nos/ha
Financial: Rs in Lakhs

CL N	District	District 2008-09		2009-10		201	0-11	201	1-12	TO	ΓAL
Sl. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	40.00	40.00
2	Perambalur	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	40.00	40.00
	Total	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	80.00	80.00

57. Farmers Literacy Programme through TNAU - ODL programme

Physical: in Nos Financial: Rs in Lakhs

Sl.	District	2008-09		2009-10		2010-	·11	2011	-12	TOT	AL
No.	District	Phy.	Fin.								
1	Madurai	1000.00	15.00	1000.00	15.00	1000.00	15.00	2000.00	30.00	5000.00	75.00
	Total	1000.00	15.00	1000.00	15.00	1000.00	15.00	2000.00	30.00	5000.00	75.00

58. Tourism to Agriculture Festival

Physical: in Nos Financial: Rs in Lakhs

Cl No	District	2008-09		2009-10		201	0-11	201	11-12	To	tal
Sl. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Madurai	0.00	0.00	1.00	20.00	1.00	20.00	1.00	20.00	3.00	60.00
	Total	0.00	0.00	1.00	20.00	1.00	20.00	1.00	20.00	3.00	60.00

59. Cinematography documentation

Physical: in Nos Financial: Rs in Lakhs

2008-09 2009-10 2010-11 2011-12 Total Sl. No. **District** Fin. Phy. Fin. Phy. Phy. Fin. Phy. Fin. Phy. Fin. 1 Madurai 0.00 0.00 1.00 10.00 1.00 10.00 1.00 10.00 3.00 30.00 **Total** 0.00 0.00 1.00 10.00 1.00 10.00 1.00 10.00 3.00 30.00

60. POL and Hiring of Vehicles

Physical: in Nos Financial: Rs in Lakhs

Sl.	District	2008-09		2009-10		2010	0-11	2011	1-12	ТОТ	CAL
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ramanathapuram	5.00	2.50	5.00	2.50	5.00	2.50	5.00	2.50	20.00	10.00
	Total	5.00	2.50	5.00	2.50	5.00	2.50	5.00	2.50	20.00	10.00

61. Village level pre season Campaign (Kharif and Rabi)

Physical: in Nos

Financial: Rs in Lakhs

Sl.	District	2008-09		2009-10		2010-	-11	2011-	-12	TOT	ΓAL
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ramanathapuram	200.00	2.00	200.00	2.00	200.00	2.00	200.00	2.00	800.00	8.00
	Total	200.00	2.00	200.00	2.00	200.00	2.00	200.00	2.00	800.00	8.00

62. Publicity and Training at District level

Physical: in Nos

Financial: Rs in Lakhs

Sl. No.	D:-4:-4	2008-09		2009-10		2010-11		2011-12		TOTAL	
	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Dharmapuri	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
2	Ramanathapuram	2.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	8.00	4.00
	Total	2.00	3.00	2.00	1.00	2.00	1.00	2.00	1.00	8.00	6.00

APPENDIX III

AGRICUTURAL ENGINEERING SECTOR

ABSTRACT OF INTERVENTIONS IN AGRICULTURAL ENGINEERING SECTOR IN TAMIL NADU - STREAM I

(Finance in lakhs of Rupees)

Sl.	Intermediana / Commonante	Unit	2008	3-09	2009	-10	2010	-11	2011	-12	ТОТ	AL
No.	Interventions / Components		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
Α.	Mechanisation and Implements											
1	Introduction of Newly Developed Agrl Machinery	Nos.	7551.00	2228.28	7995.00	2463.44	8303.00	2675.53	8725.00	2823.67	32574.00	10190.91
2	Combine Harvester (Self Propelled)	Nos.	22.00	232.00	29.00	312.00	32.00	376.00	42.00	536.00	125.00	1456.00
3	Combined Harvester (Tractor Operated)	Nos.	30.00	258.40	30.00	282.00	35.00	342.00	41.00	408.00	136.00	1290.40
4	Mini - Combined Harvestor with Transplanter attached (Prime Mover Power Tiller)	Nos.	140.00	262.50	0.00	281.25	0.00	262.50	0.00	281.25	140.00	1087.50
5	Gender Friendly Equipments	Nos.	1870.00	107.68	1892.00	131.62	1931.00	128.98	1832.00	132.64	7525.00	500.90
6	Power Transplanter	Nos.	104.00	106.00	133.00	106.54	136.00	110.18	134.00	111.72	507.00	434.44
7	Knapsac Power Operated Hydraulic Sprayer	Nos.	359.00	53.90	409.00	65.02	556.00	96.44	760.00	137.96	2084.00	353.32
8	Mini Combined Harvester (TNAU Model)	Nos.	66.00	98.77	52.00	77.00	46.00	71.50	49.00	77.50	213.00	324.77
9	Multi Crop Thrashes (High Capacity)	Nos.	68.00	83.00	57.00	56.20	56.00	56.80	55.00	57.35	236.00	253.35
10	Power Thrasher	Nos.	112.00	95.70	79.00	39.90	78.00	39.20	82.00	41.20	351.00	216.00
11	Coconut Dehusker	Nos.	96.00	126.00	78.00	29.16	74.00	28.42	71.00	28.98	319.00	212.56
12	Post hole digger	Nos.	75.00	43.46	77.00	46.11	75.00	46.19	77.00	48.41	304.00	184.17

Abstract (Contd.,)

Sl.	International Community	Unit	2008	-09	2009	-10	2010-	-11	2011-	-12	TOT	AL
No.	Interventions / Components		Phy.	Fin.								
13	Power Weeder with attachment	Nos.	54.00	35.00	72.00	45.60	76.00	49.20	76.00	50.80	278.00	180.60
14	Multicrop Thrasher (Tractor PTO)	Nos.	54.00	40.27	54.00	40.02	63.00	48.76	63.00	48.76	234.00	177.81
15	Power Tiller with Rotavator	Nos.	0.00	0.00	40.00	48.00	40.00	48.00	40.00	48.00	120.00	144.00
16	Korean 4 - Row Walk Behind Transplanter	Nos.	14.00	17.00	22.00	34.00	22.00	34.00	19.00	31.00	77.00	116.00
17	Japanese Yanmar 8-row Transplanter with Nursery Raising System	Nos.	5.00	31.50	5.00	31.50	3.00	21.00	3.00	21.00	16.00	105.00
18	Raton Manager	Nos.	30.00	16.00	46.00	25.01	47.00	26.61	53.00	32.11	176.00	99.73
19	Maize Husker Sheller	Nos.	27.00	12.15	53.00	23.85	57.00	25.65	61.00	27.45	198.00	89.10
20	Rotatory Puddler for Tractor	Nos.	30.00	21.00	30.00	21.00	30.00	21.00	30.00	21.00	120.00	84.00
21	Tractor Trailer	Nos.	40.00	20.00	40.00	20.00	40.00	20.00	40.00	20.00	160.00	80.00
22	Japanese Yanmar 6-row Transplanter with Nursery Raising System	Nos.	5.00	18.75	7.00	26.25	6.00	22.50	3.00	11.25	21.00	78.75
23	Power Operated Chaff Cutter	Nos.	109.00	18.00	122.00	19.80	114.00	18.60	105.00	17.40	450.00	73.80
24	Ground nut decorticator	Nos.	81.00	20.32	85.00	14.89	85.00	14.89	92.00	16.12	343.00	66.21
25	Rotavator for Tractors	Nos.	0.00	0.00	20.00	18.00	20.00	18.00	20.00	18.00	60.00	54.00
26	Chisel Plough	Nos.	131.00	9.81	159.00	11.90	161.00	12.50	147.00	12.21	598.00	46.42
27	Trash Shredder (Sugarcane)	Nos.	13.00	8.13	13.00	8.13	12.00	7.50	12.00	7.50	50.00	31.26
28	Power Weeder - Oleo Mac.	Nos.	21.00	7.49	21.00	7.49	20.00	7.16	20.00	7.16	82.00	29.30
29	Shredder (Medium)	Nos.	26.00	5.20	25.00	5.00	26.00	5.20	26.00	5.20	103.00	20.60
30	Spading Machine (Sugarcane)	Nos.	10.00	5.00	10.00	5.00	10.00	5.00	10.00	5.00	40.00	20.00
31	Tipper Trailer	Nos.	24.00	4.80	24.00	4.80	24.00	4.80	24.00	4.80	96.00	19.20

Abstract (Contd.,)

Sl.			2008	3-09	2009-10		2010-11		2011-12		TOTAL	
No.	Interventions / Components		Phy.	Fin.								
32	Sugarcane Cuttter / Planter	Nos.	10.00	5.00	10.00	5.00	9.00	4.50	9.00	4.50	38.00	19.00
33	Shredder (Heavy)	Nos.	6.00	4.00	7.00	4.50	6.00	4.00	9.00	5.50	28.00	18.00
34	Cutter Planter (Sugar cane)	Nos.	7.00	3.50	7.00	3.50	7.00	3.50	7.00	3.50	28.00	14.00
35	Maize - (Combined Harvester)	Nos.	0.00	0.00	0.00	0.00	0.00	0.00	1.00	8.00	1.00	8.00
36	Shredder (Tractor PTO Operated)	Nos.	2.00	0.85	3.00	1.28	2.00	0.85	3.00	1.28	10.00	4.26
37	Tractor Operated Ridger	Nos.	13.00	0.98	13.00	0.98	13.00	0.98	13.00	0.98	52.00	3.92
38	Leveller	Nos.	12.00	0.72	12.00	0.72	12.00	0.72	12.00	0.72	48.00	2.88
39	Leveller (Pulses)	Nos.	7.00	0.42	7.00	0.42	7.00	0.42	7.00	0.42	28.00	1.68
В.	Water Management											
40	Bore Well with Energitation	Nos.	350.00	885.00	350.00	885.00	350.00	885.00	350.00	885.00	1400.00	3540.00
41	Lined Farm Pond with Mobile Sprinkler	Nos.	469.00	763.80	469.00	764.10	470.00	766.80	469.00	763.80	1877.00	3058.50
42	Rejuvenation of Perculation Ponds with Recharge Shafts	Nos.	476.00	484.00	481.00	489.00	506.00	514.00	521.00	529.00	1984.00	2016.00
43	Control of Sea Water Intrusion	Nos.	431.00	293.00	451.00	243.00	551.00	283.00	551.00	283.00	1984.00	1102.00
44	Portable Pumpset	Nos.	4.00	0.40	4.00	0.40	4.00	0.40	4.00	0.40	16.00	1.60
C.	Others											
45	Crop based package of Agrl. Machinery on Cluster basis in the Adopted Villages	Nos.	49.00	1088.69	57.00	1188.36	51.00	1013.96	46.00	1176.99	203.00	4467.99
46	Thrashing Floor	Nos.	35.00	60.00	35.00	60.00	35.00	60.00	35.00	60.00	140.00	240.00
47	Tarpaulin Sheet	Nos.	40.00	3.00	40.00	3.00	40.00	3.00	40.00	3.00	160.00	12.00
48	Solar Light	Nos.	2.00	0.16	2.00	0.16	2.00	0.16	2.00	0.16	8.00	0.64
	Total	_	13080.00	7579.63	13627.00	7949.90	14243.00	8185.40	14791.00	8815.69	55741.00	32530.57

A. Mechanization and Implements

1. Introduction of Newly Developed Agrl Machinery

Sl.	DICEDICE	20	08-09	20	09-10	20	10-11	20	11-12	Total		
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	
1	Ariyalur	106	55.83	106	55.83	106	55.83	106	55.83	424	223.32	
2	Coimbatore	246	42.25	299	56.83	295	54.28	253	45.65	1093	199.01	
3	Cuddalore	1105	199.49	1409	242.21	1484	294.61	1952	342.98	5950	1079.29	
4	Dharmapuri	368	145.60	368	160.16	368	174.72	368	189.28	1472	669.76	
5	Dindigul	62	15.15	62	15.15	62	15.15	62	15.15	248	60.60	
6	Erode	142	70.20	139	61.07	139	61.07	138	56.45	558	248.79	
7	Kancheepuram	99	61.63	96	60.33	122	71.51	140	89.95	457	283.42	
8	Kanniyakumari	40	2.40	40	2.40	61	4.30	62	5.50	203	14.60	
9	Karur	73	14.60	79	21.10	78	15.10	79	21.10	309	71.90	
10	Krishnagiri	27	4.35	24	5.70	27	4.48	27	4.68	105	19.21	
11	Madurai	79	16.02	82	17.81	82	17.45	81	17.54	324	68.82	
12	Nagapattinam	24	6.96	24	6.96	24	6.96	24	6.96	96	27.84	
13	Namakkal	89	31.30	102	34.70	108	36.70	126	42.65	425	145.35	
14	Perambalur	90	52.63	90	52.63	90	52.63	90	52.63	360	210.52	
15	Pudukkottai	126	28.50	138	31.18	127	26.90	122	31.05	513	117.63	
16	Salem	246	43.32	251	53.60	246	48.17	260	59.65	1003	204.74	
17	Sivagangai	238	84.75	311	85.70	307	85.10	240	85.10	1096	340.65	
18	Thanjavur	376	521.25	457	645.22	649	848.12	720	914.34	2202	2928.93	
19	Theni	36	7.75	36	7.70	46	7.80	44	6.85	162	30.10	
20	Thiruvallur	42	24.16	42	29.66	41	29.61	39	14.00	164	97.43	
21	Thiruvarur	1163	424.83	1069	478.74	1068	437.63	1022	438.06	4322	1779.25	
22	Thoothukudi	43	31.24	43	31.24	43	31.24	43	31.24	172	124.96	
23	Tirunelveli	20	7.85	26	10.05	31	10.90	26	10.20	103	39.00	
24	Tiruvannamalai	67	32.78	61	38.03	58	25.83	60	27.38	246	124.00	
25	Vellore	70	13.25	70	13.25	70	13.25	70	13.25	280	53.00	
26	Villupuram	2574	290.20	2571	246.20	2571	246.20	2571	246.20	10287	1028.80	
	Total	7551	2228.28	7995	2463.44	8303	2675.53	8725	2823.67	32574	10190.91	

2. Combine Harvester (Self Propelled)

Physical: in Nos Financial: Rs in Lakhs

Sl.	DISTRICT	2008-09		2009-10		2010-11		201	11-12	Total	
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	4	32.00	4	32.00	4	32.00	4	32.00	16	128.00
2	Kancheepuram	2	16.00	2	16.00	2	16.00	4	32.00	10	80.00
3	Perambalur	4	32.00	4	32.00	4	32.00	4	32.00	16	128.00
4	Salem	0	0.00	0	0.00	0	0.00	1	8.00	1	8.00
5	Thanjavur	7	112.00	10	160.00	15	240.00	25	400.00	57	912.00
6	Thiruvallur	0	0	1	8.00	1	8.00	0	0.00	2	16.00
7	Thiruvarur	2	16.00	5	40.00	4	32.00	2	16.00	13	104.00
8	Thoothukudi	2	16.00	2	16.00	2	16.00	2	16.00	8	64.00
9	Tiruvannamalai	1	8.00	1	8.00	0	0.00	0	0.00	2	16.00
	Total	22	232.00	29	312.00	32	376.00	42	536.00	125	1456.00

3. Combined Harvester (Tractor Operated)

Sl.	DISTRICT	2008-09		2009-10		2010-11		202	11-12	Total	
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Erode	1	6.00	0	0.00	0	0.00	0	0.00	1	6.00
2	Kancheepuram	2	12.00	2	12.00	3	18.00	3	18.00	10	60.00
3	Karur	1	6.00	2	12.00	1	6.00	2	12.00	6	36.00
4	Salem	0	0.00	0	0.00	1	6.00	0	0.00	1	6.00
5	Sivagangai	2	12.00	2	12.00	2	12.00	2	12.00	8	48.00
6	Thanjavur	15	180.00	17	204.00	22	264.00	27	324.00	81	972.00
7	Thiruvallur	1	6.00	1	6.00	1	6.00	1	6.00	4	24.00
8	Thiruvarur	3	18.00	3	18.00	2	12.00	3	18.00	11	66.00
9	Thoothukudi	1	6.00	1	6.00	1	6.00	1	6.00	4	24.00
10	Tirunelveli	2	0.40	0	0.00	0	0.00	0	0.00	2	0.40
11	Tiruvannamalai	1	6.00	1	6.00	1	6.00	1	6.00	4	24.00
12	Vellore	1	6.00	1	6.00	1	6.00	1	6.00	4	24.00
	Total	30	258.40	30	282.00	35	342.00	41	408.00	136	1290.40

4. Mini - Combined Harvestor with Transplanter attached (Prime Mover Power Tiller)

Physical: in Nos Financial: Rs in Lakhs

Sl.	INICTRICT	2008-09		2009-10		201	10-11	201	11-12	Т	otal
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Thiruvarur	140	262.50	0	281.25	0	262.50	0	281.25	140	1087.50
	Total	140	262.50	0	281.25	0	262.50	0	281.25	140	1087.50

5. Gender Friendly Equipments

Sl.	District	2008	3-2009	2009	9-2010	2010	0-2011	201	1-2012	Т	otal
No.	District	Phy.	Fin.								
1	Ariyalur	20	1.20	20	1.20	20	1.20	20	1.20	80	4.80
2	Coimbatore	50	3.00	50	3.00	60	3.60	60	3.60	220	13.20
3	Dharmapuri	120	9.26	120	10.56	120	11.52	120	12.48	480	43.82
4	Dindigul	30	1.80	30	1.80	30	1.80	30	1.80	120	7.20
5	Erode	50	3.00	50	3.00	50	3.00	50	3.00	200	12.00
6	Kancheepuram	40	2.40	40	2.40	60	3.60	60	3.60	200	12.00
7	Kanniyakumari	40	2.40	40	2.40	60	3.60	60	3.60	200	12.00
8	Karur	50	3.00	79	21.10	78	15.10	79	21.10	286	60.30
9	Krishnagiri	90	0.60	20	1.20	10	0.60	10	0.60	130	3.00
10	Madurai	50	3.00	50	3.00	50	3.00	50	3.00	200	12.00
11	Nagapattinam	10	0.09	10	0.09	10	0.09	10	0.09	40	0.36
12	Namakkal	0	0.00	8	0.64	8	0.64	8	0.64	24	1.92
13	Perambalur	20	1.20	20	1.20	20	1.20	20	1.20	80	4.80
14	Pudukkottai	25	0.23	25	0.23	25	0.23	25	0.23	100	0.90
15	Salem	100	6.00	100	6.00	100	6.00	100	6.00	400	24.00
16	Sivagangai	100	6.00	100	6.00	100	6.00	100	6.00	400	24.00
17	Thanjavur	50	4.00	50	4.00	50	4.00	50	4.00	200	16.00
18	Theni	20	1.20	20	1.20	20	1.20	20	1.20	80	4.80
19	Thiruvallur	10	0.40	10	0.40	10	0.40	10	0.40	40	1.60
20	Thiruvarur	900	54.00	950	57.00	950	57.00	900	54.00	3700	222.00
21	Thoothukudi	20	0.40	20	0.40	20	0.40	20	0.40	80	1.60
22	Tirunelveli	5	0.30	10	0.60	10	0.60	5	0.30	30	1.80
23	Tiruvannamalai	20	1.20	20	1.20	20	1.20	20	1.20	80	4.80
24	Vellore	50	3.00	50	3.00	50	3.00	5	3.00	155	12.00
	Total	1870	107.68	1892	131.62	1931	128.98	1832	132.64	7525	500.90

6. Power Transplanter

Sl.	Diatio	2008	8-2009	2009	9-2010	2010	0-2011	201	1-2012	Т	'otal
No.	District	Phy.	Fin.								
1	Coimbatore	0	0.00	2	1.40	1	0.70	0	0.00	3	2.10
2	Dharmapuri	16	22.40	16	24.64	16	26.18	16	29.12	64	102.34
3	Erode	0	0.00	50	35.00	50	35.00	50	35.00	150	105.00
4	Dindigul	1	0.70	0	0.00	0	0.00	0	0.00	1	0.70
5	Kancheepuram	4	2.80	4	2.80	6	4.20	6	4.20	20	14.00
6	Krishnagiri	1	0.50	1	0.70	1	0.70	2	1.40	5	3.30
7	Madurai	3	2.10	3	2.10	3	2.10	3	2.10	12	8.40
8	Namakkal	0	0.00	10	7.00	10	7.00	10	7.00	30	21.00
9	Salem	5	3.50	5	3.50	5	3.50	5	3.50	20	14.00
10	Sivagangai	15	10.50	15	10.50	15	10.50	15	10.50	60	42.00
11	Thanjavur	16	22.40	0	0.00	0	0.00	0	0.00	16	22.40
12	Theni	1	0.70	1	0.70	1	0.70	1	0.70	4	2.80
13	Thiruvallur	3	2.10	3	2.10	2	1.40	2	1.40	10	7.00
14	Thiruvarur	10	7.00	12	8.40	13	9.10	13	9.10	48	33.60
15	Thoothukudi	2	1.40	2	1.40	2	1.40	2	1.40	8	5.60
16	Tirunelveli	3	2.10	5	3.50	7	4.90	5	3.50	20	14.00
17	Tiruvannamalai	3	2.10	3	2.10	3	2.10	3	2.10	12	8.40
18	Vellore	1	0.70	1	0.70	1	0.70	1	0.70	4	2.80
19	Villupuram	20	25.00	0	0.00	0	0.00	0	0.00	20	25.00
	Total	104	106.00	133	106.54	136	110.18	134	111.72	507	434.44

7. Knapsac Power Operated Hydraulic Sprayer

	I municui V III m Zumiy										
Sl.	DISTRICT	200	8-09	200	9-10	201	0-11	201	11-12	T	otal
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	50	5.00	50	5.00	40	4.00	40	4.00	180	18.00
2	Dharmapuri	56	11.2	56	12.32	56	13.44	56	14.56	224	51.52
3	Kancheepuram	10	1.00	10	1.00	10	1.00	10	1.00	40	4.00
4	Karur	5	0.50	10	1.00	10	1.00	10	1.00	35	3.50
5	Krishnagiri	5	0.50	5	0.50	5	0.50	5	0.50	20	2.00
6	Salem	50	5.00	50	5.00	50	5.00	50	5.00	200	20.00
7	Sivagangai	20	2.00	20	2.00	20	2.00	20	2.00	80	8.00
8	Thanjavur	124	24.80	174	34.80	330	66.00	530	106.00	1158	231.60
9	Theni	5	0.50	5	0.50	5	0.50	5	0.50	20	2.00
10	Thiruvallur	8	0.80	8	0.80	8	0.80	8	0.80	32	3.20
11	Thiruvarur	20	2.00	15	1.50	16	1.60	20	2.00	71	7.10
12	Thoothukudi	1	0.10	1	0.10	1	0.10	1	0.10	4	0.40
13	Tiruvannamalai	5	0.50	5	0.50	5	0.50	5	0.50	20	2.00
	Total	359	53.90	409	65.02	556	96.44	760	137.96	2084	353.32

8. Mini Combined Harvester (TNAU Model)

Sl.	District	2008	-2009	2009	-2010	2010	-2011	2011	-2012	Т	otal
No.	District	Phy.	Fin.								
1	Coimbatore	1	1.25	2	2.50	2	2.50	1	1.25	6	7.50
2	Dharmapuri	8	2.50	8	22.00	8	24.00	8	26.00	32	74.50
3	Erode	4	5.00	2	2.50	2	2.50	2	2.50	10	12.50
4	Kancheepuram	2	2.50	2	2.50	2	2.50	2	2.50	8	10.00
5	Kanniyakumari	0	0.00	0	0.00	0	0.00	1	1.50	1	1.50
6	Krishnagiri	0	0.00	1	1.25	0	0.00	0	0.00	1	1.25
7	Madurai	2	2.50	2	2.50	2	2.50	2	2.50	8	10.00
8	Nagapattinam	1	1.25	1	1.25	1	1.25	1	1.25	4	5.00
9	Namakkal	0	0.00	1	1.25	0	0.00	0	0.00	1	1.25
10	Pudukkottai	1	2.52	2	2.50	2	2.50	2	2.50	7	10.02
11	Salem	2	2.50	2	2.50	2	2.50	2	2.50	8	10.00
12	Sivagangai	5	6.25	5	6.25	5	6.25	5	6.25	20	25.00
13	Thanjavur	20	50.00	13	16.25	11	13.75	13	16.25	57	96.25
14	Theni	1	1.25	1	1.25	1	1.25	1	1.25	4	5.00
15	Thiruvallur	3	3.75	3	3.75	2	2.50	2	2.50	10	12.50
16	Thiruvarur	14	15.00	0	0.00	0	0.00	0	0.00	14	15.00
17	Tirunelveli	2	2.50	2	2.50	1	1.25	1	1.25	6	7.50
18	Tiruvannamalai	0	0.00	5	6.25	5	6.25	6	7.50	16	20.00
	Total	66	98.77	52	77.00	46	71.50	49	77.50	213	324.77

9. Multi Crop Thrashes (High Capacity)

Sl.	Di :4::14	2008	-2009	2009	-2010	2010	-2011	2011	-2012	Т	otal
No.	District	Phy.	Fin.								
1	Ariyalur	10	6.25	10	6.25	10	6.25	10	6.25	40	25.00
2	Coimbatore	1	1.05	2	2.10	2	2.10	1	1.05	6	6.30
3	Dharmapuri	16	16.00	16	17.60	16	19.20	16	20.80	64	73.60
4	Erode	4	4.20	4	4.20	4	4.20	4	4.20	16	16.80
5	Kancheepuram	2	2.10	2	2.10	2	2.10	2	2.10	8	8.40
6	Karur	1	1.05	1	1.05	1	1.05	1	1.05	4	4.20
7	Nagapattinam	2	2.00	2	2.00	2	2.00	2	2.00	8	8.00
8	Pudukkottai	1	1.00	2	2.00	1	1.00	1	1.00	5	5.00
9	Salem	2	3.15	3	3.15	2	2.10	2	2.10	9	10.50
10	Sivagangai	5	5.25	5	5.25	5	5.25	5	5.25	20	21.00
11	Thanjavur	15	31.50	0	0.00	0	0.00	0	0.00	15	31.50
12	Thiruvallur	2	2.10	2	2.10	3	3.15	3	3.15	10	10.50
13	Thiruvarur	2	2.10	3	3.15	3	3.15	3	3.15	11	11.55
14	Tiruvannamalai	4	4.20	4	4.20	4	4.20	4	4.20	16	16.80
15	Vellore	1	1.05	1	1.05	1	1.05	1	1.05	4	4.20
	Total	68	83.00	57	56.20	56	56.80	55	57.35	236	253.35

10. Power Thrasher

Sl.	District	2008	-2009	2009	-2010	2010	-2011	2011	-2012	T	otal
No.	District	Phy.	Fin.								
1	Coimbatore	2	1.00	3	1.50	3	1.50	2	1.00	10	5.00
2	Erode	5	2.50	5	2.50	5	2.50	5	2.50	20	10.00
3	Kancheepuram	0	0.00	2	1.00	2	1.00	4	2.00	8	4.00
4	Kanniyakumari	2	1.00	0	0.00	0	0.00	0	0.00	2	1.00
5	Krishnagiri	1	0.50	1	0.50	0	0.00	0	0.00	2	1.00
6	Madurai	3	1.50	3	1.50	3	1.50	3	1.50	12	6.00
7	Namakkal	0	0.00	4	2.00	4	2.00	4	2.00	12	6.00
8	Pudukkottai	1	1.70	2	1.40	1	0.70	1	0.70	5	4.50
9	Salem	2	1.00	3	1.50	2	1.00	3	1.50	10	5.00
10	Sivagangai	10	5.00	10	5.00	10	5.00	10	5.00	40	20.00
11	Thanjavur	17	17.00	0	0.00	0	0.00	0	0.00	17	17.00
12	Thiruvarur	45	22.50	42	21.00	44	22.00	46	23.00	177	88.50
13	Thoothukudi	2	1.00	2	1.00	2	1.00	2	1.00	8	4.00
14	Tiruvannamalai	2	1.00	2	1.00	2	1.00	2	1.00	8	4.00
15	Villupuram	20	40.00	0	0.00	0	0.00	0	0.00	20	40.00
	Total	112	95.70	79	39.90	78	39.20	82	41.20	351	216.00

11. Coconut Dehusker

Sl.	D . () (2008	8-2009	2009	-2010	2010	-2011	2011	-2012	Т	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	20	6.00	25	7.50	25	7.50	20	6.00	90	27.00
2	Dharmapuri	16	96.00	16	10.56	16	11.52	16	12.48	64	130.56
3	Dindigul	8	2.40	0	0.00	0	0.00	0	0.00	8	2.40
4	Erode	2	0.60	2	0.60	2	0.60	2	0.60	8	2.40
5	Kancheepuram	2	0.60	2	0.60	1	0.30	2	0.60	7	2.10
6	Krishnagiri	3	0.90	3	0.90	2	0.60	2	0.60	10	3.00
7	Madurai	5	1.50	5	1.50	5	1.50	5	1.50	20	6.00
8	Namakkal	0	0.00	5	1.50	5	1.00	5	1.50	15	4.00
9	Salem	3	0.90	2	0.60	2	0.60	3	0.90	10	3.00
10	Sivagangai	4	1.20	6	1.80	4	1.20	4	1.20	18	5.40
11	Thanjavur	20	12.00	0	0.00	0	0.00	0	0.00	20	12.00
12	Theni	2	0.60	2	0.60	2	0.60	2	0.60	8	2.40
13	Thiruvarur	4	1.20	3	0.90	3	0.90	3	0.90	13	3.90
14	Thoothukudi	2	0.60	2	0.60	2	0.60	2	0.60	8	2.40
15	Tirunelveli	4	1.20	4	1.20	4	1.20	4	1.20	16	4.80
16	Vellore	1	0.30	1	0.30	1	0.30	1	0.30	4	1.20
	Total	96	126.00	78	29.16	74	28.42	71	28.98	319	212.56

12.Post hole digger

Sl.	D:-4:-4	2008	-2009	2009	-2010	2010	-2011	2011	-2012	Т	otal
No.	District	Phy.	Fin.								
1	Coimbatore	10	4.25	10	4.25	10	4.25	10	4.25	40	17.00
2	Dharmapuri	16	13.60	16	14.96	16	16.32	16	17.68	64	62.56
3	Erode	2	0.85	2	0.85	2	0.85	2	0.85	8	3.40
4	Kancheepuram	5	2.13	3	1.28	3	1.28	4	1.70	15	6.39
5	Karur	6	2.55	6	2.55	6	2.55	6	2.55	24	10.20
6	Krishnagiri	2	0.85	1	0.85	3	1.28	3	1.28	9	4.26
7	Madurai	2	0.85	4	1.70	3	1.28	1	0.43	10	4.25
8	Namakkal	0	0.00	1	0.43	1	0.43	1	0.43	3	1.29
9	Salem	5	2.13	5	2.13	5	2.13	5	2.13	20	8.52
10	Sivagangai	2	0.85	2	0.85	2	0.85	2	0.85	8	3.40
11	Theni	2	0.85	2	0.85	2	0.85	2	0.85	8	3.40
12	Thiruvarur	2	0.85	4	1.71	1	0.43	4	1.71	11	4.70
13	Thoothukudi	3	1.30	3	1.30	3	1.30	3	1.30	12	5.20
14	Tiruvannamalai	8	3.40	8	3.40	8	3.40	8	3.40	32	13.60
15	Villupuram	10	9.00	10	9.00	10	9.00	10	9.00	40	36.00
	Total	75	43.46	77	46.11	75	46.19	77	48.41	304	184.17

13. Power Weeder with attachment

Physical: in Nos. Financial: Rs. in Lakhs

Sl.	Distant	2008	-2009	2009	-2010	2010	-2011	2011	-2012	T	otal
No.	District	Phy.	Fin.								
1	Coimbatore	0	0.00	4	2.00	4	2.00	4	2.00	12	6.00
2	Dharmapuri	16	16.00	16	17.60	16	19.20	16	20.80	64	73.60
3	Erode	0	0.00	10	5.00	10	5.00	10	5.00	30	15.00
4	Dindigul	1	0.50	0	0.00	0	0.00	0	0.00	1	0.50
5	Kancheepuram	2	1.00	2	1.00	1	0.50	1	0.50	6	3.00
6	Krishnagiri	0	0.00	0	0.00	1	0.50	0	0.00	1	0.50
7	Madurai	4	2.00	6	3.00	6	3.00	8	4.00	24	12.00
8	Namakkal	13	6.50	13	6.50	15	7.50	16	8.00	57	28.50
9	Salem	4	2.00	4	2.00	4	2.00	4	2.00	16	8.00
10	Sivagangai	4	2.00	4	2.00	4	2.00	4	2.00	16	8.00
11	Theni	2	1.00	1	0.50	2	1.00	1	0.50	6	3.00
12	Thiruvarur	4	2.00	7	3.50	7	3.50	4	2.00	22	11.00
13	Thoothukudi	2	1.00	2	1.00	2	1.00	2	1.00	8	4.00
14	Tirunelveli	2	1.00	3	1.50	4	2.00	6	3.00	15	7.50
	Total	54	35.00	72	45.60	76	49.20	76	50.80	278	180.60

14. Multicrop Thrasher (Tractor PTO)

Cl. No.	DISTRICT	200	8-09	200	9-10	201	0-11	201	1-12	Т	otal
Sl. No.	DISTRICT	Phy.	Fin.								
1	Ariyalur	10	6.25	10	6.25	10	6.25	10	6.25	40	25.00
2	Kancheepuram	5	3.13	5	3.13	10	6.25	10	6.25	30	18.76
3	Perambalur	10	6.25	10	6.25	10	6.25	10	6.25	40	25.00
4	Salem	5	3.13	5	3.13	5	3.13	5	3.13	20	12.52
5	Sivagangai	5	3.13	5	3.13	5	3.13	5	3.13	20	12.50
6	Thanjavur	10	12.50	10	12.50	15	18.75	15	18.75	50	62.50
7	Thiruvallur	2	1.50	2	1.25	2	1.25	2	1.25	8	5.25
8	Thiruvarur	6	3.75	6	3.75	5	3.13	5	3.13	22	13.76
9	Thoothukudi	1	0.63	1	0.63	1	0.63	1	0.63	4	2.52
	Total	54	40.27	54	40.02	63	48.76	63	48.76	234	177.81

15. Power Tiller with Rotavator

Physical: in Nos Financial: Rs in Lakhs

Sl.	District _	2008	8-09	2009-10		2010-11		201	1-12	Т	otal
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Villupuram	0	0.00	40	48.00	40	48.00	40	48.00	120	144.00
	Total	0	0.00	40	48.00	40	48.00	40	48.00	120	144.00

16. Korean 4 - Row Walk Behind Transplanter

Physical: in Nos Financial: Rs in Lakhs

Sl.		200	8-09	2009-10		201	0-11	201	1-12	Т	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Kancheepuram	2	2.00	2	2.00	2	2.00	2	2.00	8	8.00
2	Salem	1	1.00	1	1.00	1	1.00	1	1.00	4	4.00
3	Thanjavur	3	6.00	12	24.00	12	24.00	12	24.00	39	78.00
4	Theni	1	1.00	1	1.00	0	0.00	0	0.00	2	2.00
5	Thiruvallur	1	1.00	0	0.00	1	1.00	0	0.00	2	2.00
6	Thiruvarur	4	4.00	5	5.00	5	5.00	3	3.00	17	17.00
7	Thoothukudi	1	1.00	1	1.00	1	1.00	1	1.00	4	4.00
8	Tiruvannamalai	1	1.00	0	0.00	0	0.00	0	0.00	1	1.00
	Total	14	17.00	22	34.00	22	34.00	19	31.00	77	116.00

17. Japanese Yanmar 8-row Transplanter with Nursery Raising System

G1 11	District	2008-09		2009-10		201	0-11	201	1-12	Т	otal
Sl. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Erode	1	5.25	1	5.25	1	5.25	0	0.00	3	15.75
2	Kancheepuram	1	5.25	1	5.25	1	5.25	1	5.25	4	21.00
3	Salem	0	0.00	1	5.25	0	0.00	0	0.00	1	5.25
4	Thanjavur	1	10.50	1	10.50	1	10.50	1	10.50	4	42.00
5	Thiruvallur	1	5.25	0	0.00	0	0.00	1	5.25	2	10.50
6	Thiruvarur	1	5.25	1	5.25	0	0.00	0	0.00	2	10.50
	Total	5	31.50	5	31.50	3	21.00	3	21.00	16	105.00

18. Ratoon Manager

Physical: in Nos. Financial: Rs. in Lakhs

Sl.	District	2008	-2009	2009	-2010	2010	-2011	2011	-2012	To	otal
No.	District	Phy.	Fin.								
1	Kancheepuram	2	1.00	2	1.00	3	1.50	3	1.50	10	5.00
2	Nagapattinam	2	1.00	2	1.00	2	1.00	2	1.00	8	4.00
3	Pudukkottai	3	1.50	3	1.50	2	1.00	2	1.00	10	5.00
4	Salem	5	2.50	5	2.50	5	2.50	5	2.50	20	10.00
5	Sivagangai	15	7.50	15	7.50	15	7.50	15	7.50	60	30.00
6	Thanjavur	2	2.00	2	2.00	5	5.00	10	10.00	19	19.00
7	Thiruvallur	0	0.00	16	9.01	15	8.11	15	8.11	46	25.23
8	Thiruvarur	1	0.50	1	0.50	0	0.00	1	0.50	3	1.50
	Total	30	16.00	46	25.01	47	26.61	53	32.11	176	99.73

19. Maize Husker Sheller

Sl.	District	2008	-2009	2009	-2010	2010	-2011	2011	1-2012	To	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	10	4.50	15	6.75	15	6.75	10	4.50	50	22.50
2	Erode	1	0.45	1	0.45	1	0.45	1	0.45	4	1.80
3	Kancheepuram	2	0.90	1	0.45	1	0.45	1	0.45	5	2.25
4	Madurai	4	1.80	4	1.80	4	1.80	4	1.80	16	7.20
5	Namakkal	0	0.00	20	9.00	25	11.25	34	15.30	79	35.55
6	Salem	2	0.90	3	1.35	2	0.90	3	1.35	10	4.50
7	Sivagangai	5	2.25	5	2.25	5	2.25	5	2.25	20	9.00
8	Theni	0	0.00	1	0.45	1	0.45	0	0.00	2	0.90
9	Thoothukudi	1	0.45	1	0.45	1	0.45	1	0.45	4	1.80
10	Vellore	2	0.90	2	0.90	2	0.90	2	0.90	8	3.60
	Total	27	12.15	53	23.85	57	25.65	61	27.45	198	89.10

20. Rotatory Puddler for Tractor

Physical: in Nos.

Financial: Rs. in Lakhs

Sl.	District	2008	-2009	2009	2009-2010		2010-2011		-2012	T	otal
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Nagapattinam	5	1.50	5	1.50	5	1.50	5	1.50	20	6.00
2	Pudukkottai	5	1.50	5	1.50	5	1.50	5	1.50	20	6.00
3	Villupuram	20	18.00	20	18.00	20	18.00	20	18.00	80	72.00
	Total	30	21.00	30	21.00	30	21.00	30	21.00	120	84.00

21. Tractor Trailer

Physical: in Nos Financial: Rs in Lakhs

Sl.	DICTRICT	200	8-09	2009-10		201	0-11	201	11-12	To	tal
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	20	10.00	20	10.00	20	10.00	20	10.00	80	40.00
2	Perambalur	20	10.00	20	10.00	20	10.00	20	10.00	80	40.00
	Total	40	20.00	40	20.00	40	20.00	40	20.00	160	80.00

22. Japanese Yanmar 6-row Transplanter with Nursery Raising System

Sl.	DISTRICT	2008-09		2009-10		201	0-11	201	1-12	To	otal
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Kancheepuram	1	3.75	1	3.75	1	3.75	1	3.75	4	15.00
2	Sivagangai	1	3.75	1	3.75	1	3.75	1	3.75	4	15.00
3	Thiruvallur	0	0.00	1	3.75	1	3.75	0	0.00	2	7.50
4	Thiruvarur	2	7.50	3	11.25	3	11.25	1	3.75	9	33.75
5	Tiruvannamalai	1	3.75	1	3.75	0	0.00	0	0.00	2	7.50
	Total	5	18.75	7	26.25	6	22.50	3	11.25	21	78.75

23. Power Operated Chaff Cutter

Physical: in Nos Financial: Rs in Lakhs

CI No	DISTRICT	200	8-09	200	9-10	201	0-11	201	1-12	Te	otal
Sl. No.	DISTRICT	Phy.	Fin.								
1	Coimbatore	50	7.50	60	9.00	60	9.00	50	7.50	220	33.00
2	Erode	2	0.30	2	0.30	2	0.30	2	0.30	8	1.20
3	Kancheepuram	2	0.30	2	0.30	0	0.00	0	0.00	4	0.60
4	Karur	10	1.50	10	1.50	10	1.50	10	1.50	40	6.00
5	Madurai	2	0.30	2	0.30	2	0.30	2	0.30	8	1.20
6	Pudukottai	15	2.25	20	3.00	15	2.25	15	2.25	65	9.75
7	Salem	10	1.50	10	1.50	10	1.50	10	1.50	40	6.00
8	Sivagangai	2	0.30	2	0.30	2	0.30	2	0.30	8	1.20
9	Thanjavur	11	3.30	10	3.00	10	3.00	11	3.30	42	12.60
10	Thiruvallur	3	0.45	3	0.45	2	0.30	2	0.30	10	1.50
11	Thiruvarur	1	0.15	0	0.00	0	0.00	0	0.00	1	0.15
12	Thoothukudi	1	0.15	1	0.15	1	0.15	1	0.15	4	0.60
	Total	109	18.00	122	19.80	114	18.60	105	17.40	450	73.80

24. Ground nut decorticator

Sl.	District	2008	-2009	2009	-2010	2010	-2011	2011	-2012	To	otal
No.	District	Phy.	Fin.								
1	Coimbatore	5	0.88	6	1.05	6	1.05	5	0.88	22	3.85
2	Erode	4	0.70	4	0.70	4	0.70	4	0.70	16	2.80
3	Kancheepuram	5	0.88	5	0.88	5	0.88	5	0.88	20	3.52
4	Madurai	2	0.35	2	0.35	2	0.35	2	0.35	8	1.40
5	Namakkal	0	0.00	36	6.30	36	6.30	44	7.70	116	20.30
6	Salem	3	0.53	3	0.53	3	0.53	3	0.53	12	2.12
7	Sivagangai	10	1.75	12	2.10	12	2.10	12	2.10	46	8.05
8	Thanjavur	35	12.25	0	0.00	0	0.00	0	0.00	35	12.25
9	Theni	5	0.88	0	0.00	0	0.00	0	0.00	5	0.88
10	Thiruvallur	0	0.00	5	0.88	5	0.88	5	0.88	15	2.63
11	Thoothukudi	1	0.18	1	0.18	1	0.18	1	0.18	4	0.72
12	Tirunelveli	2	0.35	2	0.35	2	0.35	2	0.35	8	1.40
13	Tiruvannamalai	5	0.88	5	0.88	5	0.88	5	0.88	20	3.50
14	Vellore	4	0.70	4	0.70	4	0.70	4	0.70	16	2.80
	Total	81	20.32	85	14.89	85	14.89	92	16.12	343	66.21

25. Rotavator for Tractors

Physical: in Nos Financial: Rs in Lakhs

Sl. No.	DISTRICT	2008	8-09	2009-10		201	0-11	201	1-12	Т	'otal
S1. No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Villupuram	0	0.00	20	18.00	20	18.00	20	18.00	60	54.00
	Total	0	0.00	20	18.00	20	18.00	20	18.00	60	54.00

26. Chisel Plough

Sl.	District	2008-2	2009	2009-	2010	2010-	-2011	2011	-2012	To	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	20	1.2	40	2.4	40	2.4	20	1.2	120	7.2
2	Dharmapuri	40	4.8	40	5.28	40	5.76	40	6.24	160	22.08
3	Erode	2	0.12	2	0.12	2	0.12	2	0.12	8	0.48
4	Kancheepuram	4	0.24	4	0.24	5	0.3	17	1.02	30	1.8
5	Krishnagiri	5	0.3	5	0.3	5	0.3	5	0.3	20	1.2
6	Madurai	2	0.12	1	0.06	2	0.12	1	0.06	6	0.36
7	Namakkal	0	0	4	0.24	4	0.24	4	0.24	12	0.72
8	Pudukkottai	30	1.35	35	1.58	35	1.58	30	1.35	130	5.86
9	Salem	5	0.3	5	0.3	5	0.3	5	0.3	20	1.2
10	Sivagangai	5	0.3	5	0.3	5	0.3	5	0.3	20	1.2
11	Thiruvallur	3	0.18	3	0.18	3	0.18	3	0.18	12	0.72
12	Tiruvannamalai	5	0.3	5	0.3	5	0.3	5	0.3	20	1.2
13	Vellore	10	0.6	10	0.6	10	0.6	10	0.6	40	2.4
	Total	131	9.81	159	11.9	161	12.5	147	12.21	598	46.42

27. Trash Shredder (Sugarcane)

Physical: in Nos Financial: Rs in Lakhs

CI No	DISTRICT	2008-09		2009-10		2010)-11	2011	1-12	To	otal
Sl. No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Pudukkottai	3	1.88	3	1.88	2	1.25	2	1.25	10	6.26
2	Sivagangai	10	6.25	10	6.25	10	6.25	10	6.25	40	25.00
	Total	13	8.13	13	8.13	12	7.50	12	7.50	50	31.26

28. Power Weeder - Oleo Mac.

Sl.	District	2008	8-09	2009	9-10	2010	0-11	201	1-12	To	otal
No.	District	Phy.	Fin.								
1	Coimbatore	5	1.63	5	1.63	4	1.30	4	1.30	18	5.86
2	Dindigul	2	0.65	2	0.65	2	0.65	2	0.65	8	2.60
3	Erode	1	0.33	1	0.33	1	0.33	1	0.33	4	1.32
4	Kancheepuram	2	0.65	2	0.65	2	0.65	2	0.65	8	2.60
5	Salem	2	0.65	2	0.65	2	0.65	2	0.65	8	2.60
6	Sivagangai	3	0.98	3	0.98	3	0.98	3	0.98	12	3.90
7	Thanjavur	2	1.30	2	1.30	2	1.30	2	1.30	8	5.20
8	Theni	2	0.65	2	0.65	2	0.65	2	0.65	8	2.60
9	Thiruvarur	1	0.33	1	0.33	1	0.33	1	0.33	4	1.30
10	Thoothukudi	1	0.33	1	0.33	1	0.33	1	0.33	4	1.32
	Total	21	7.49	21	7.49	20	7.16	20	7.16	82	29.30

29. Shredder (Medium)

Physical: in Nos Financial: Rs in Lakhs

Sl. No.	DISTRICT	2008-09		2009-10		2010)-11	2011	1-12	Te	otal
S1. No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	20	4.00	20	4.00	20	4.00	20	4.00	80	16.00
2	Erode	2	0.40	2	0.40	2	0.40	2	0.40	8	1.60
3	Thiruvarur	1	0.20	0	0.00	0	0.00	0	0.00	1	0.20
4	Thoothukudi	1	0.20	1	0.20	1	0.20	1	0.20	4	0.80
5	Tirunelveli	2	0.40	2	0.40	3	0.60	3	0.60	10	2.00
	Total	26	5.20	25	5.00	26	5.20	26	5.20	103	20.60

30. Spading Machine (Sugarcane)

Physical: in Nos Financial: Rs in Lakhs

Cl. No.	DISTRICT	2008	8-09	2009-10		2010)-11	2011	1-12	To	otal
Sl. No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Sivagangai	10	5.00	10	5.00	10	5.00	10	5.00	40	20.00
	Total	10	5.00	10	5.00	10	5.00	10	5.00	40	20.00

31. Tipper Trailer

Physical: in Nos Financial: Rs in Lakhs

Sl. No.	District	2008	8-09	2009	9-10	2010	0-11	201	1-12	Phy. 80	tal
S1. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	20	4.00	20	4.00	20	4.00	20	4.00	80	16.00
2	Perambalur	4	0.80	4	0.80	4	0.80	4	0.80	16	3.20
	Total	24	4.80	24	4.80	24	4.80	24	4.80	96	19.20

32. Sugarcane Cutter / Planter

Sl. No.	DISTRICT	2008-09		2009-10		2010)-11	2011	1-12	To	otal
SI. NO.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Nagapattinam	2	1.00	2	1.00	2	1.00	2	1.00	8	4.00
2	Pudukkottai	3	1.50	3	1.50	2	1.00	2	1.00	10	5.00
3	Sivagangai	5	2.50	5	2.50	5	2.50	5	2.50	20	10.00
	Total	10	5.00	10	5.00	9	4.50	9	4.50	38	19.00

33. Shredder (Heavy)

Physical: in Nos Financial: Rs in Lakhs

CI No	DISTRICT	2008-09		2009-10		2010)-11	2011	1-12	To	otal
Sl. No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	2	1.00	3	1.50	2	1.00	5	2.50	12	6.00
2	Erode	1	0.50	1	0.50	1	0.50	1	0.50	4	2.00
3	Thanjavur	2	2.00	2	2.00	2	2.00	2	2.00	8	8.00
4	Thoothukudi	1	0.50	1	0.50	1	0.50	1	0.50	4	2.00
	Total	6	4.00	7	4.50	6	4.00	9	5.50	28	18.00

34. Cutter Planter (Sugar cane)

Physical: in Nos. Financial: Rs. in Lakhs

Sl.	District	2008	-2009	2009	-2010	2010-2011		2011-	2012	To	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Nagapattinam	2	1.00	2	1.00	2	1.00	2	1.00	8	4.00
2	Sivagangai	5	2.50	5	2.50	5	2.50	5	2.50	20	10.00
	Total	7	3.50	7	3.50	7	3.50	7	3.50	28	14.00

35. Maize - (Combined Harvester)

Physical: in Nos Financial: Rs in Lakhs

CI No	DISTRICT	2008-09		2009	2009-10		0-11	2011	1-12	To	tal
Sl. No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Salem	0	0.00	0	0.00	0	0.00	1	8.00	1	8.00
	Total	0	0.00	0	0.00	0	0.00	1	8.00	1	8.00

36. Shredder (Tractor PTO Operated)

Sl. No.	DISTRICT	2008	3-09	2009-10		2010)-11	201	1-12	To	tal
SI. NO.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Salem	2	0.85	3	1.28	2	0.85	3	1.28	10	4.26
	Total	2	0.85	3	1.28	2	0.85	3	1.28	10	4.26

37. Tractor Operated Ridger

Physical: in Nos Financial: Rs in Lakhs

CI No	DISTRICT	2008-09		2009-10		2010)-11	2011	l-12	To	tal
Sl. No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	4	0.30	4	0.30	4	0.30	4	0.30	16	1.20
2	Perambalur	4	0.30	4	0.30	4	0.30	4	0.30	16	1.20
3	Pudukottai	5	0.38	5	0.38	5	0.38	5	0.38	20	1.52
	Total	13	0.98	13	0.98	13	0.98	13	0.98	52	3.92

38. Leveller

Physical: in Nos Financial: Rs in Lakhs

CI No	DISTRICT	2008	3-09	2009	2009-10		0-11	2011	1-12	T	otal
Sl. No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	5	0.30	5	0.30	5	0.30	5	0.30	20	1.20
2	Nagapattinam	2	0.12	2	0.12	2	0.12	2	0.12	8	0.48
3	Perambalur	5	0.30	5	0.30	5	0.30	5	0.30	20	1.20
	Total	12	0.72	12	0.72	12	0.72	12	0.72	48	2.88

39. Leveller (Pulses)

Physical: in Nos.

Financial: Rs. in Lakhs

Sl.No.	District -	2008-	2009	2009-	2010	2010-	-2011	2011	-2012	To	tal
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Nagapattinam	2	0.12	2	0.12	2	0.12	2	0.12	8	0.48
2	Perambalur	5	0.3	5	0.3	5	0.3	5	0.3	20	1.2
	Total	7	0.42	7	0.42	7	0.42	7	0.42	28	1.68

B. Water Management

40. Bore Well with Energisation

Sl.No.	District	2008	2008-2009		2010	20010)-2011	2011	-2012	To	otal
S1.NO.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Sivagangai	150	525	150	525	150	525	150	525	600	2100
2	Thiruvarur	200	360	200	360	200	360	200	360	800	1440
	Total	350	885	350	885	350	885	350	885	1400	3540

41. Lined Farm Pond with Mobile Sprinkler

Physical: in Nos. Financial: Rs. in Lakhs

Sl.	D:-4-:-4	2008	8-2009	2009	9-2010	2001	0-2011	201	1-2012	Т	otal
No.	District	Phy.	Fin.								
1	Ariyalur (90 %)	2	5.40	2	5.40	2	5.40	2	5.40	8	21.60
2	Coimbatore (90%)	10	27.00	10	27.00	10	27.00	10	27.00	40	108.00
3	Dindigul	2	5.40	2	5.40	2	5.40	2	5.40	8	21.60
4	Erode	1	2.70	1	2.70	1	2.70	1	2.70	4	10.80
5	Kancheepuram	2	5.40	1	2.70	1	2.70	1	2.70	5	13.50
6	Madurai	2	5.40	2	5.40	3	8.10	3	8.10	10	27.00
7	Namakkal	25	75.00	26	78.00	26	78.00	25	75.00	102	306.00
8	Salem	10	27.00	10	27.00	10	27.00	10	27.00	40	108.00
9	Sivagangai	5	13.50	5	13.50	5	13.50	5	13.50	20	54.00
10	Thanjavur	100	300.00	100	300.00	100	300.00	100	300.00	400	1200.00
11	Theni	2	5.40	2	5.40	2	5.40	2	5.40	8	21.60
12	Thiruvarur	300	270.00	300	270.00	300	270.00	300	270.00	1200	1080.00
13	Thoothukudi	3	8.10	3	8.10	3	8.10	3	8.10	12	32.40
14	Tiruvannamalai	1	2.70	1	2.70	1	2.70	1	2.70	4	10.80
15	Vellore	4	10.80	4	10.80	4	10.80	4	10.80	16	43.20
	Total	469	763.80	469	764.10	470	766.80	469	763.80	1877	3058.50

42. Rejuvenation of Perculation Ponds with Recharge Shafts

Sl.	District	200	8-2009	2009	9-2010	2001	0-2011	201	1-2012	Т	otal
No.	District	Phy.	Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy.	Fin.
1	Ariyalur (100 %)	4	12.00	4	12.00	4	12.00	4	12.00	16	48.00
2	Coimbatore	20	20.00	20	20.00	20	20.00	20	20.00	80	80.00
3	Erode	10	10.00	10	10.00	10	10.00	10	10.00	40	40.00
3	Kancheepuram	60	60.00	60	60.00	80	80.00	100	100.00	300	300.00
4	Karur	30	30.00	30	30.00	30	30.00	30	30.00	120	120.00
5	Krishnagiri	2	2.00	2	2.00	2	2.00	2	2.00	8	8.00
6	Madurai	20	20.00	20	20.00	20	20.00	20	20.00	80	80.00
7	Salem	15	15.00	15	15.00	15	15.00	15	15.00	60	60.00
8	Sivagangai	20	20.00	25	25.00	30	30.00	25	25.00	100	100.00
9	Thanjavur	110	110.00	110	110.00	110	110.00	110	110.00	440	440.00
10	Theni	5	5.00	5	5.00	5	5.00	5	5.00	20	20.00
11	Thiruvallur	40	40.00	40	40.00	40	40.00	40	40.00	160	160.00
12	Thoothukudi	10	10.00	10	10.00	10	10.00	10	10.00	40	40.00
13	Tiruvannamalai	30	30.00	30	30.00	30	30.00	30	30.00	120	120.00
14	Vellore	100	100.00	100	100.00	100	100.00	100	100.00	400	400.00
	Total	476	484.00	481	489.00	506	514.00	521	529.00	1984	2016.00

43. Control of Sea Water Intrusion

Physical: in Nos Financial: Rs in Lakhs

Sl.	DISTRICT	200	08-09	2009-10		201	10-11	201	11-12	Т	otal
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Cuddalore	40	100.00	60	50.00	80	50.00	80	50.00	260	250.00
2	Kancheepuram	200	100.00	200	100.00	300	150.00	300	150.00	1000	500.00
3	Thiruvallur	25	12.50	25	12.50	25	12.50	25	12.50	100	50.00
4	Thiruvarur	160	80.00	160	80.00	140	70.00	140	70.00	600	300.00
5	Thoothukudi	6	0.50	6	0.50	6	0.50	6	0.50	24	2.00
	Total	431	293.00	451	243.00	551	283.00	551	283.00	1984	1102.00

44. Portable Pumpset

	DISTRICT	2008-09		2009	9-10	2010	0-11	2011	1-12	Tot	tal
	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	2	0.20	2	0.20	2	0.20	2	0.20	8	0.80
2	Perambalur	2	0.20	2	0.20	2	0.20	2	0.20	8	0.80
	Total	4	0.40	4	0.40	4	0.40	4	0.40	16	1.60

C. Others

45. Distribution of Crop based package of Agrl. Machinery on Cluster basis in the Adopted Villages

2 N 3 C 4 I C 5 I F F F F F F F F F F F F F F F F F F	Ariyalur - Paddy Coimbatore - Maize Cuddalore Dharmapuri - Groundnut Dindigul - Maize Erode - Paddy Erode - Maize Kancheepuram - Paddy Kancheepuram - Groundnut Karur	Phy. 0 1 3 8 0 5 1	8-2009 Fin. 0.00 14.93 459.61 35.76 0.00 118.50 74.66	Phy. 1 1 4 8 1 5	9-2010 Fin. 23.70 14.93 506.39 42.96	Phy. 1 1 3 8	Fin. 23.70 14.93 286.39	Phy. 0 1 3	Fin. 0.00 14.93 549.50	Phy. 2 4 13	Fin. 47.40 59.72 1801.89
1	Coimbatore - Maize Cuddalore Dharmapuri - Groundnut Dindigul - Maize Erode - Paddy Erode - Maize Kancheepuram - Paddy Kancheepuram - Groundnut	0 1 3 8 0 5 5	0.00 14.93 459.61 35.76 0.00 118.50 74.66	1 1 4 8	23.70 14.93 506.39 42.96	1 1 3	23.70 14.93 286.39	0 1 3	0.00 14.93	2 4	47.40 59.72
2 N 3 C 4 I C 5 I F F F F F F F F F F F F F F F F F F	Coimbatore - Maize Cuddalore Dharmapuri - Groundnut Dindigul - Maize Erode - Paddy Erode - Maize Kancheepuram - Paddy Kancheepuram - Groundnut	1 3 8 0 5 5	14.93 459.61 35.76 0.00 118.50 74.66	1 4 8 1	14.93 506.39 42.96	1 3	14.93 286.39	1 3	14.93	4	59.72
3 (C) 4 (C) 5 I 6 I 7 I 7 I	Cuddalore Dharmapuri - Groundnut Dindigul - Maize Erode - Paddy Erode - Maize Kancheepuram - Paddy Kancheepuram - Groundnut	3 8 0 5 5	459.61 35.76 0.00 118.50 74.66	4 8 1	506.39	3	286.39	3			
4 I () () () () () () () () () (Dharmapuri - Groundnut Dindigul - Maize Erode - Paddy Erode - Maize Kancheepuram - Paddy Kancheepuram - Groundnut	8 0 5 5	35.76 0.00 118.50 74.66	8	42.96				549.50	13	1801.89
4 (C) 5 II 6 II 7 II C	Groundnut Dindigul - Maize Erode - Paddy Erode - Maize Kancheepuram - Paddy Kancheepuram - Groundnut	0 5 5	0.00 118.50 74.66	1		8	46.40				
6 H H 7 H G	Erode - Paddy Erode - Maize Kancheepuram - Paddy Kancheepuram - Groundnut	5 5	118.50 74.66		2.00		46.48	8	46.48	32	171.68
6 H H 7 H	Erode - Maize Kancheepuram - Paddy Kancheepuram - Groundnut	5	74.66	5	2.09	0	0.00	0	0.00	1	2.09
7 H	Kancheepuram - Paddy Kancheepuram - Groundnut				118.50	5	118.50	5	118.50	20	474.00
7 H	Paddy Kancheepuram - Groundnut	1		5	74.66	5	74.66	5	74.66	20	298.64
I (Groundnut		23.76	2	47.51	3	71.27	3	71.27	9	213.81
8 I	Karur	1	2.64	1	2.64	1	2.64	1	2.64	4	10.56
		3	26.50	4	34.45	0	25.50	0	35.65	7	122.10
9 N	Madurai - Paddy	1	23.30	1	23.30	1	23.30	1	23.30	4	93.20
9 N	Madurai - Maize	1	14.90	0	0.00	1	14.90	0	0.00	2	29.80
	Namakkal - Groundnut	0	0.00	2	7.04	0	0.00	0	0.00	2	7.04
	Perambalur - Maize	0	0.00	1	14.93	1	14.93	0	0.00	2	29.86
12 5	Salem	0	0.00	1	2.64	1	2.64	1	2.64	3	7.92
	Sivagangai - Paddy	1	23.95	0	0.00	1	23.93	0	0.00	2	47.88
	Sivagangai - Groundnut	0	0.00	1	2.43	0	0.00	1	2.43	2	4.86
14	Theni - Paddy	1	23.25	1	23.25	1	23.25	1	23.25	4	93.00
	Thiruvallur - Paddy	1	31.68	1	31.68	1	31.68	0	0.00	3	95.03
1 16 1	Thiruvallur - Groundnut	1	3.52	1	3.52	1	3.52	0	0.00	3	10.56
	Thiruvarur - Paddy	5	118.79	5	118.79	5	118.79	5	118.79	20	475.17
	Thoothukudi- Paddy	1	3.20	1	3.20	1	3.20	1	3.20	4	12.80
	Tirunelveli - Paddy	1	23.76	1	23.76	1	23.76	1	23.76	4	95.04
l I	Tiruvannamalai - Paddy	2	47.51	2	47.51	2	47.51	2	47.51	8	190.02
	Tiruvannamalai - Groundnut	4	10.56	4	10.56	4	10.56	4	10.56	16	42.24
	Vellore -	3	7.92	3	7.92	3	7.92	3	7.92	12	31.68
	Groundnut	49	1088.69	57	1188.36						

46. Thrasing Floor

Physical: in Nos.

Financial: Rs. in Lakhs

Sl.	District	2008	2008-2009		2009-2010		0-2011	2011	-2012	Т	otal
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Dindigul	25	50.00	25	50.00	25	50.00	25	50.00	100	200.00
2	Erode	10	10.00	10	10.00	10	10.00	10	10.00	40	40.00
	Total	35	60.00	35	60.00	35	60.00	35	60.00	140	240.00

47. Tarpaulin Sheet

Physical: in Nos Financial: Rs in Lakhs

CI No	District	2008	3-09	2009	9-10	2010)-11	2011	1-12	To	otal
Sl. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	20	1.50	20	1.50	20	1.50	20	1.50	80	6.00
2	Perambalur	20	1.50	20	1.50	20	1.50	20	1.50	80	6.00
	Total	40	3.00	40	3.00	40	3.00	40	3.00	160	12.00

48. Solar Light

Sl. No.	District	2008	3-09	2009)-10	2010	0-11	2011	1-12	Tot	tal
S1. INO.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	1	0.08	1	0.08	1	0.08	1	0.08	4	0.32
2	Perambalur	1	0.08	1	0.08	1	0.08	1	0.08	4	0.32
	Total	2	0.16	2	0.16	2	0.16	2	0.16	8	0.64

APPENDIX III (Contd.,) AGRICULTURAL ENGINEERING SECTOR

ABSTRACT OF INTERVENTIONS IN AGRICULTURAL ENGINEERING SECTOR IN TAMIL NADU - STREAM II

Sl.	ADSTRACT OF INTERVI		2008		2009		2010		2011			ΓAL
No.	Interventions / Components	Unit	Phy.	Fin.								
Α.	Mechanisation and Implements											
1	Power Tiller	Nos.	1354.00	732.02	1419.00	773.41	1421.00	783.58	1408.00	805.66	5602.00	3094.66
2	Rotavator	Nos.	1156.00	543.43	1154.00	538.40	1162.00	553.02	1160.00	568.50	4632.00	2203.34
3	Popularization of Agricultural Mechanisation	Nos.	579.00	155.62	653.00	170.48	708.00	182.93	730.00	187.56	2670.00	696.59
4	Disc Plough	Nos.	409.00	73.35	426.00	76.73	427.00	77.46	435.00	82.23	1697.00	309.77
5	Cultivator	Nos.	495.00	45.53	535.00	50.12	533.00	50.08	523.70	51.52	2087.00	197.25
6	Fertigation Assembly	Nos.	220.00	15.83	220.00	16.32	220.00	16.32	210.00	15.48	870.00	63.95
7	Off set Disc Harrow	Nos.	67.00	13.12	72.00	14.40	71.00	15.07	82.00	17.11	292.00	59.71
8	Cage Wheel	Nos.	30.00	0.60	30.00	0.60	35.00	0.70	35.00	0.70	130.00	2.60
9	Zero till seed drill	Nos.	3.00	0.15	3.00	0.15	4.00	0.20	3.00	0.15	13.00	0.65
10	Cage wheel Quick fit	Nos.	3.00	0.06	4.00	0.08	2.00	0.04	1.00	0.01	10.00	0.19
В.	Water Management											
11	PVC Pipe Laying	Nos.	7992	1151.15	8037	1157.22	8520	1222.43	8535	1224.21	33084	4755
12	Ground Level Reservoir	Nos.	820.00	617.24	875.00	656.84	876.00	657.74	915.00	685.64	3486.00	2617.46
13	Field drain	Nos.	2750.00	110.00	2750.00	110.00	2750.00	110.00	2750.00	110.00	11000.00	440.00
14	Water Management Works	Nos.	125.00	54.00	200.00	97.50	250.00	111.00	250.00	111.00	825.00	373.50
	Total		16003.00	3512.10	16378.00	3662.25	16979.00	3780.57	17037.70	3859.77	66398.00	14814.67
	Stream I		13080	7579.63	13627	7949.9	14243	8185.4	14791	8815.69	55741	32530.57
	Stream II		16003.00	3512.10	16378.00	3662.25	16979.00	3780.57	17037.70	3859.77	66398.00	14814.67
	Stream I & Stream II		29083	11091.73	30005	11612.15	31222	11965.97	31828.7	12675.46	122139	47345.24
	Others			6881.08		6957.96		6835.40		6794.26		27468.74
	Total			17972.80		18570.11		18801.37		19469.72		74813.98

A. Mechanization and Implements

1. Power Tiller

Sl.		200	08-09	200	9-10	201	0-11		ai: Ks. ii 1-12		OTAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	25	7.25	25	7.25	25	7.25	25	7.25	100	29.00
2	Coimbatore	20	5.80	35	10.15	50	14.50	40	13.05	145	43.50
3	Dharmapuri	120	139.20	120	153.12	120	167.04	120	180.96	480	640.32
4	Dindigul	10	2.90	10	2.90	10	2.90	10	2.90	40	11.60
5	Erode	25	7.25	25	7.25	20	5.80	10	2.90	80	23.20
6	Kancheepuram	15	4.35	15	4.35	10	2.90	10	2.90	50	14.50
7	Kanniyakumari	0	0.00	1	0.23	1	0.23	0	0.00	2	0.45
8	Karur	25	7.25	25	7.25	25	7.25	25	7.25	100	29.00
9	Krishnagiri	25	7.25	25	7.25	25	7.25	25	7.25	100	29.00
10	Madurai	7	2.03	7	2.03	7	2.03	7	2.03	28	8.12
11	Nagapattinam	10	3.00	10	3.00	10	3.00	10	3.00	40	12.00
12	Namakkal	48	55.68	57	66.12	52	60.32	64	74.24	221	256.36
13	Perambalur	25	7.25	25	7.25	25	7.25	25	7.25	100	29.00
14	Pudukkottai	0	0.00	35	10.50	35	10.50	30	9.00	100	30.00
15	Salem	40	11.60	40	11.60	40	11.60	40	11.60	160	46.40
16	Sivagangai	60	17.10	60	17.40	60	17.40	50	14.50	230	66.40
17	Thanjavur	220	255.20	220	255.20	220	255.20	220	255.20	880	1020.80
18	Theni	9	2.61	13	3.77	13	3.77	14	4.06	49	14.21
19	Thiruvallur	5	1.45	5	1.45	5	1.45	5	1.45	20	5.80
20	Thiruvarur	200	58.00	200	58.00	200	58.00	200	58.00	800	232.00
21	Thoothukudi	21	6.09	21	6.09	21	6.09	21	6.09	84	24.36
22	Tirunelveli	34	9.86	35	10.15	37	10.75	42	12.18	148	42.94
23	Tiruvannamalai	40	11.40	40	11.60	40	11.60	40	11.60	160	46.20
24	Vellore	150	43.50	150	43.50	150	43.50	150	43.50	600	174.00
25	Villupuram	220	66.00	220	66.00	220	66.00	225	67.50	885	265.50
	Total	1354	732.02	1419	773.41	1421	783.58	1408	805.66	5602	3094.66

2. Rotavator

G1		200	8-09	200	9-10	20	10-11	2011-12 T			OTAL
Sl. No.	DISTRICT								1		
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	10	2.00	10	2.00	10	2.00	10	2.00	40	8.00
2	Coimbatore	40	9.00	50	11.25	50	11.25	60	13.50	200	45.00
3	Dharmapuri	80	72.00	80	79.20	80	86.40	80	93.60	320	331.20
4	Dindigul	10	2.25	10	2.25	10	2.25	10	2.25	40	9.00
5	Erode	30	6.75	30	6.75	30	6.75	30	6.75	120	27.00
6	Kancheepuram	60	13.50	40	9.00	40	9.00	40	9.00	180	40.50
7	Kanniyakumari	0	0.00	1	0.04	1	0.04	1	0.04	3	0.12
8	Karur	10	2.25	10	2.25	10	2.25	10	2.25	40	9.00
9	Krishnagiri	10	2.25	10	2.25	10	2.25	10	2.25	40	9.00
10	Madurai	5	1.13	5	1.13	5	1.13	5	1.13	20	4.50
11	Nagapattinam	20	4.00	20	4.00	20	4.00	20	4.00	80	16.00
12	Namakkal	134	120.60	123	110.70	131	117.90	143	128.70	531	477.90
13	Perambalur	25	5.00	25	5.00	25	5.00	25	5.00	100	20.00
14	Pudukkottai	30	6.00	35	7.00	35	7.00	30	6.00	130	26.00
15	Salem	30	6.75	30	6.75	30	6.75	30	6.75	120	27.00
16	Sivagangai	30	6.75	40	9.00	40	9.00	40	9.00	150	33.75
17	Thanjavur	220	198.00	220	198.00	220	198.00	220	198.00	880	792.00
18	Theni	7	1.58	7	1.58	7	1.58	7	1.58	28	6.30
19	Thiruvallur	5	1.13	5	1.13	5	1.13	5	1.13	20	4.50
20	Thiruvarur	17	3.83	18	0.00	17	0.00	17	0.00	69	3.83
21	Thoothukudi	2	0.45	3	0.68	3	0.68	3	0.68	11	2.49
22	Tirunelveli	1	0.23	2	0.45	3	0.68	4	0.90	10	2.25
23	Tiruvannamalai	40	9.00	40	9.00	40	9.00	40	9.00	160	36.00
24	Vellore	40	9.00	40	9.00	40	9.00	40	9.00	160	36.00
25	Villupuram	300	60.00	300	60.00	300	60.00	280	56.00	1180	236.00
	Total	1156	543.43	1154	538.40	1162	553.02	1160	568.50	4632	2203.34

3. Popularization of Agricultural Mechanisation

Physical: in Nos. Financial: Rs. in Lakhs

Sl.	District	200	8-2009	2009-2010		2010	0-2011	201	1-2012	T	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Cuddalore	340	73.88	415	88.79	470	101.33	490	105.88	1715	369.88
2	Thiruvarur	239	63.085	238	63.04	238	62.95	240	63.03	955	252.11
3	Virudhunagar	0	18.65	0	18.65	0	18.65	0	18.65	0	74.60
	Total	579	155.615	653	170.48	708	182.93	730	187.56	2670	696.59

4. Disc Plough

Physical: in Nos. Financial: Rs. in Lakhs

2008-09 2009-10 2010-11 2011-12 **TOTAL** Sl. DISTRICT No. Phy. Phv. Fin. Phy. Fin. Phy. Fin. Fin. Phy. Fin. 1 Ariyalur 2 0.18 2 0.18 2 0.18 2 0.18 8 0.72 0.44 10 30 2 Coimbatore 5 10 0.88 5 0.44 0.88 2.63 3 40 14.00 40 15.64 16.80 18.24 Dharmapuri 40 40 160 64.68 5 0.44 5 0.44 0.44 0.44 4 Dindigul 5 5 20 1.75 5 Erode 10 0.88 10 0.88 10 0.88 10 0.88 40 3.50 6 Kancheepuram 10 0.88 10 0.88 10 0.88 10 0.88 40 3.52 0.00 0.09 7 Kanni yakumari 0 1 1 0.09 1 0.09 3 0.26 2 2 8 Karur 0.18 2 0.18 2 0.18 0.18 8 0.72 9 Krishnagiri 5 0.44 5 0.44 5 0.44 5 0.44 20 1.75 10 20 1.20 20 1.20 80 4.80 Nagapattinam 20 1.20 20 1.20 Namakkal 30 10.50 27 9.45 25 8.75 11.90 116 40.60 11 34 12 Perambalur 2 2 2 2 8 0.72 0.18 0.18 0.18 0.18 13 Pudukkottai 60 3.60 70 4.20 4.20 3.60 260 15.60 70 60 14 Salem 1.31 1.31 1.31 1.31 5.24 15 15 15 15 60 15 Sivagangai 50 4.38 50 4.38 50 4.38 4.38 200 17.50 50 Thanjavur 80 28.00 85 29.75 29.75 29.75 335 117.25 16 85 85 17 Theni 10 0.88 11 0.96 10 0.88 10 0.88 41 3.59 Thiruvallur 2 2 18 0.17 0.17 4 0.35 2 0.17 10 0.86 19 0.70 2.10 Thiruvarur 8 4 0.35 0.53 0.53 24 6 6 20 Thoothukudi 8 0.70 9 0.79 0.88 12 1.05 39 3.42 10 21 Tirunelveli 6 0.53 7 0.61 11 0.96 11 0.96 35 3.06 4 22 Tiruvannamalai 0.35 4 0.35 4 0.35 8 0.70 20 1.75 23 Vellore 5 0.44 5 0.44 5 0.44 5 0.44 20 1.75 24 Villupuram 30 3.00 30 3.00 30 3.00 30 3.00 120 12.00 409 73.35 76.73 427 77.46 435 82.23 1697 309.77 **Total** 426

5. Cultivator

	1	1		г				2011-12 TOTAL			
Sl.	DISTRICT	200	8-09	200	9-10	20	10-11	201	1-12	TO	TAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	10	0.40	10	0.40	10	0.40	10	0.40	40	1.60
2	Coimbatore	5	0.20	10	0.40	10	0.40	15	0.60	40	1.60
3	Dharmapuri	40	6.40	40	7.04	40	7.68	40	8.32	160	29.44
4	Dindigul	8	0.32	8	0.32	8	0.32	8	0.32	32	1.28
5	Erode	4	0.16	4	0.16	4	0.16	4	0.16	16	0.64
6	Kancheepuram	10	0.40	10	0.40	10	0.40	10	0.40	40	1.60
7	Kanniyakumari	0	0.00	1	0.04	1	0.04	1	0.04	3	0.12
8	Karur	10	0.40	10	0.40	10	0.40	10	0.40	40	1.60
9	Krishnagiri	10	0.40	10	0.40	10	0.40	10	0.40	40	1.60
10	Nagapattinam	20	0.80	20	0.80	20	0.80	20	0.80	80	3.20
11	Namakkal	89	14.29	109	17.44	104	16.64	114	18.24	416	66.61
12	Perambalur	10	0.40	10	0.40	10	0.40	10	0.40	40	1.60
13	Pudukkottai	60	2.40	70	2.80	70	2.80	60	2.40	260	10.40
14	Salem	30	1.20	30	1.20	30	1.20	30	1.20	120	4.80
15	Sivagangai	25	1.00	25	1.00	30	1.20	30	1.20	110	4.40
16	Thanjavur	75	12.00	75	12.00	75	12.00	75	12.00	300	48.00
17	Thiruvallur	10	0.40	10	0.40	10	0.40	10	0.40	40	1.60
18	Thiruvarur	14	0.56	16	0.64	15	0.60	0.68	0.00	45.68	1.80
19	Thoothukudi	4	0.16	5	0.20	5	0.20	5	0.20	19	0.76
20	Tirunelveli	6	0.24	7	0.28	11	0.44	11	0.44	35	1.40
21	Tiruvannamalai	10	0.40	10	0.40	5	0.20	5	0.20	30	1.20
22	Vellore	25	1.00	25	1.00	25	1.00	25	1.00	100	4.00
23	Villupuram	20	2.00	20	2.00	20	2.00	20	2.00	80	8.00
	Total	495	45.53	535	50.12	533	50.08	523.7	51.52	2087	197.25

6. Fertigation Assembly

Physical: in Nos. Financial: Rs. in Lakhs

Sl.	District	2008	-2009	2009	-2010	2010	-2011	2011	-2012	To	otal
No.	District	Phy.	Fin.								
1	Coimbatore	10	1.08	15	1.62	15	1.62	10	1.08	50	5.40
2	Dharmapuri	40	4.80	40	4.80	40	4.80	40	4.80	160	19.20
3	Dindigul	5	0.30	5	0.30	5	0.30	5	0.30	20	1.20
4	Erode	25	1.25	25	1.50	25	1.50	25	1.50	100	5.75
5	Kancheepuram	10	0.60	5	0.30	5	0.30	0	0.00	20	1.20
6	Sivagangai	30	1.80	30	1.80	30	1.80	30	1.80	120	7.20
7	Theni	50	3.00	50	3.00	50	3.00	50	3.00	200	12.00
8	Vellore	50	3.00	50	3.00	50	3.00	50	3.00	200	12.00
	Total	220	15.83	220	16.32	220	16.32	210	15.48	870	63.95

7. Off set Disc Harrow

							ianciai	iciai: Ks. III Lakiis			
Sl.	DISTRICT	20	008-09	200	9-10	20	10-11	201	1-12	T(OTAL
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	5	0.59	10	1.18	10	1.18	15	1.76	40	4.70
2	Dharmapuri	16	7.52	16	8.24	16	9.02	16	9.76	64	34.54
3	Dindigul	2	0.24	2	0.24	2	0.24	2	0.24	8	0.94
4	Erode	2	0.24	2	0.24	2	0.24	2	0.24	8	0.94
5	Kancheepuram	4	0.47	3	0.35	3	0.35	5	0.59	15	1.76
6	Kanniyakumari	0	0.00	1	0.09	1	0.09	1	0.09	3	0.26
7	Nagapattinam	10	1.00	10	1.00	10	1.00	10	1.00	40	4.00
8	Salem	5	0.59	5	0.59	5	0.59	5	0.59	20	2.36
9	Thiruvallur	3	0.35	3	0.35	2	0.24	2	0.24	10	1.17
10	Thiruvarur	0	0.00	2	0.23	2	0.24	2	0.23	6	0.70
11	Thoothukudi	2	0.23	0	0.00	0	0.00	0	0.00	2	0.23
12	Tiruvannamalai	4	0.47	4	0.47	4	0.47	8	0.95	20	2.36
13	Vellore	2	0.24	2	0.24	2	0.24	2	0.24	8	0.94
14	Villupuram	12	1.20	12	1.20	12	1.20	12	1.20	48	4.80
	Total	67	13.12	72	14.40	71	15.07	82	17.11	292	59.71

8. Cage Wheel

Physical: in Nos. Financial: Rs. in Lakhs

Sl.	District	2008-2009		2009-	2010	2010-	2011	2011-	2012	То	tal
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Nagapattinam	20	0.4	20	0.40	20	0.40	20	0.40	80	1.60
2	Pudukkottai	10	0.2	10	0.20	15	0.30	15	0.30	50	1.00
	Total	30	0.6	30	0.6	35	0.70	35	0.70	130	2.60

9. Zero till seed drill

Physical: in Nos.

Financial: Rs. in Lakhs

Sl. No.	District	2008-2009		2009-	2010	2010	-2011	2011-	2012	To	tal
S1. 1V0.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Pudukkottai	3	0.15	3	0.15	4	0.20	3	0.15	13	0.65
	Total	3	0.15	3	0.15	4	0.20	3	0.15	13	0.65

10. Cage wheel Quick fit

Physical: in Nos.

Financial: Rs. in Lakhs

Sl.	District			2009-	-2010	2010	-2011	2011-	2012	То	tal
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Pudukkottai	3	0.06	4	0.08	2	0.04	1	0.01	10	0.19
	Total	3	0.06	4	0.08	2	0.04	1	0.01	10	0.19

B. Water Management

11. PVC Pipe Laying

Sl.		200	8-2009	200	09-2010	2010	0-2011		1-2012		otal
No	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	20	10.80	20	10.80	20	10.80	20	10.80	80	43.20
2	Coimbatore	200	27.00	250	33.75	250	33.75	300	40.25	1000	134.75
3	Dharmapuri	2800	420.00	2800	420.00	2800	420.00	2800	420.00	11200	1680.00
4	Dindigul	100	13.50	100	13.50	100	13.50	100	13.50	400	54.00
5	Erode	100	13.50	100	13.50	100	13.50	100	13.50	400	54.00
6	Kancheepuram	120	16.20	100	13.50	80	10.80	50	6.75	350	47.25
7	Karur	200	27.00	200	27.00	200	27.00	200	27.00	800	108.00
8	Krishnagiri	100	13.50	100	13.50	100	13.50	100	13.50	400	54.00
9	Madurai	200	27.00	200	27.00	200	27.00	200	27.00	800	108.00
10	Namakkal	60	9.00	60	9.00	60	9.00	60	9.00	240	36.00
11	Perambalur	20	10.80	20	10.80	20	10.80	20	10.80	80	43.20
12	Pudukkottai	25	2.25	25	2.25	25	2.25	25	2.25	100	9.00
13	Salem	150	20.25	150	20.25	150	20.25	150	20.25	600	81.00
14	Sivagangai	250	33.75	250	33.75	250	33.75	250	33.75	1000	135.00
15	Thanjavur	350	52.50	350	52.50	350	52.50	350	52.50	1400	210.00
16	Theni	200	27.00	200	27.00	200	27.00	200	27.00	800	108.00
17	Thiruvallur	50	6.75	50	6.75	50	6.75	50	6.75	200	27.00
18	Thiruvarur	355	47.93	360	48.60	360	48.60	360	48.60	1435	193.73
19	Thoothukudi	12	1.62	12	1.62	15	2.03	15	2.03	54	7.30
20	Tirunelveli	80	10.80	90	12.15	90	12.15	85	11.48	345	46.58
21	Tiruvannamalai	1500	202.50	1500	202.50	2000	270.00	2000	270.00	7000	945.00
22	Vellore	500	67.50	500	67.50	500	67.50	500	67.50	2000	270.00
23	Villupuram	600	90.00	600	90.00	600	90.00	600	90.00	2400	360.00
	Total	7992	1151.15	8037	1157.22	8520	1222.43	8535	1224.21	33084	4755.00

12. Ground Level Reservoir

Physical: in Nos. Financial: Rs. in Lakhs

	I								ianciai. I	10. III 1 2.	uixii)
Sl.	District	200	8-2009	200	9-2010	201	0-2011	201	1-2012	Т	Cotal
No	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Coimbatore	200	144.00	250	180.00	250	180.00	300	216.00	1000	720.00
2	Dharmapuri	240	192.00	240	192.00	240	192.00	240	192.00	960	768.00
3	Dindigul	30	21.60	30	21.60	30	21.60	30	21.60	120	86.40
4	Erode	50	36.00	50	36.00	50	36.00	50	36.00	200	144.00
5	Kancheepuram	20	14.40	15	10.80	15	10.80	15	10.80	65	46.80
6	Krishnagiri	15	10.80	15	10.80	15	10.80	15	10.80	60	43.20
7	Madurai	10	7.20	20	14.40	20	14.40	10	7.20	60	43.20
8	Namakkal	30	24.00	30	24.00	30	24.00	30	24.00	120	96.00
9	Perambalur	2	1.44	2	1.44	2	1.44	2	1.44	8	5.76
10	Pudukkottai	3	2.70	3	2.70	4	3.60	3	2.70	13	11.70
11	Salem	100	72.00	100	72.00	100	72.00	100	72.00	400	288.00
12	Thanjavur	40	32.00	40	32.00	40	32.00	40	32.00	160	128.00
13	Theni	10	7.20	10	7.20	10	7.20	10	7.20	40	28.80
14	Thiruvallur	5	3.60	5	3.60	5	3.60	5	3.60	20	14.40
15	Thoothukudi	5	3.60	5	3.60	5	3.60	5	3.60	20	14.40
16	Vellore	10	7.20	10	7.20	10	7.20	10	7.20	40	28.80
17	Villupuram	50	37.50	50	37.50	50	37.50	50	37.50	200	150.00
	Total	820	617.24	875	656.84	876	657.74	915	685.64	3486	2617.46

13. Field drain

Physical: in Nos.

Financial: Rs. in Lakhs

Sl.	No. District	2008-2009		2009-2010		2010	-2011	201	1-2012	T	otal
No.		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Thoothukudi	2750	110.00	2750	110.00	2750	110.00	2750	110.00	11000	440.00
	Total	2750	110.00	2750	110.00	2750	110.00	2750	110.00	11000	440.00

14. Water Management Works

Physical: in Nos.

Financial: Rs. in Lakhs

Sl.	District	2008-2009		2009	-2010	201	0-2011	201	1-2012	T	'otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy	Fin.	Phy.	Fin.
1	Cuddalore	125	54.00	200	67.50	250	81.00	250	81.00	825	283.50
2	Virudhunagar	0	0.00	0	30.00	0	30.00	0	30.00	0	90.00
	Total	125	54.00	200	97.50	250	111.00	250	111.00	825	373.50

APPENDIX IV

AGRICULTURAL MARKETING AND AGRI -BUSINESS SECTOR

ABSTRACT OF INTERVENTIONS IN AGRICULTURAL MARKETING AND AGRI -BUSINESS SECTOR IN TAMIL NADU

Sl. No.	Interventional Commence	II:4	2008	-09	2009	-10	2010)-11	2011	-12	Tot	al
NU.	Interventions / Components	Unit	Phy.	Fin.								
1	Market Infrastructure Activities	Nos.	16811.00	365.60	16252.00	281.21	22372.00	265.32	23171.00	292.82	78606.00	1204.95
2	Commodity Group Formation	Nos.	1230.00	214.00	1249.00	238.50	1266.00	264.48	1214.00	274.62	4959.00	991.60
3	Capacity Building	Nos.	1418.00	148.50	1421.00	163.75	1531.00	191.98	1594.70	221.22	5964.70	725.45
4	Exposure visit to markets	Nos.	202.00	144.70	200.00	153.27	200.00	166.11	206.00	180.64	808.00	644.71
5	Publicity of Regulated Market	Nos.	27.00	136.00	27.00	150.00	27.00	164.00	27.00	177.50	108.00	627.50
6	Market Intelligence Dissemination	Nos.	0.00	151.10	0.00	144.51	0.00	152.95	0.00	169.23	0.00	617.79
7	Arrangement of Buyer Seller Meetings	Nos.	306.00	58.70	301.00	64.54	308.00	71.96	313.00	79.24	1228.00	274.44
8	Strengthening of Market Extension Centre	Nos.	53.00	131.75	7.00	19.75	3.00	9.50	5.00	16.75	68.00	177.75
9	Facilitation of Contract Farming	ha	259.00	39.65	252	42.54	245	45.14	250	49.85	1006	177.18
10	Market Price Surveillance	Nos.	151.00	16.10	156.00	18.21	158.00	19.94	151.00	20.13	616.00	74.38
11	Strengthening of Village Shandies	Nos.	574.00	42.29	87.00	1.48	12.00	1.30	12.00	0.00	685.00	45.07
	Total		21031.00	1448.39	19952.00	1277.76	26122.00	1352.68	26943.70	1482.00	94048.70	5560.82

1. Market Infrastructure Activities

SI	Sl.		2008-09		2009-10		2010-11		2011-12		Total	
No.	DISTRICT	Phy.	Fin.									
1	Ariyalur	2	1.50	0	0.00	0	0.00	0	0.00	2	1.50	
2	Coimbatore	776	19.25	776	18.43	525	11.70	525	12.68	2602	62.06	
3	Cuddalore	4	28.00	0	0.00	0	0.00	0	0.00	4	28.00	
4	Dharmapuri	1500	25.50	1500	38.50	1500	36.00	1500	39.00	6000	139.00	
5	Dindigul	2000	10.00	2000	11.00	2000	12.00	2000	13.00	8000	46.00	
6	Erode	3000	60.00	2500	38.50	2500	42.00	2500	45.50	10500	186.00	
7	Kancheepuram	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	
8	Kanniyakumari	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	
9	Karur	525	3.75	525	4.13	525	4.50	525	4.88	2100	17.26	
10	Krishnagiri	1800	22.50	1914	19.25	1700	21.00	1700	22.75	7114	85.50	
11	Madurai	3025	36.25	3025	39.88	9600	13.50	10400	14.63	26050	104.26	
12	Nagapattinam	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	
13	Namakkal	10	0.20	10	0.22	10	0.25	10	0.30	40	0.97	
14	Perambalur	2	1.50	0	0.00	0	0.00	0	0.00	2	1.50	
15	Pudukkottai	165	7.00	145	5.50	145	6.00	145	6.50	600	25.00	
16	Ramanathapuram	2	0.36	0	0.00	0	0.00	0	0.00	2	0.36	
17	Salem	52	0.65	52	0.72	52	0.78	52	0.85	208	3.00	
18	Sivagangai	4	0.72	4	0.79	4	0.87	4	0.96	16	3.34	
19	Thanjavur	1000	5.00	1000	5.50	1000	6.00	1000	6.50	4000	23.00	
20	Theni	330	6.40	200	5.50	200	6.00	200	8.58	930	26.48	
21	Thiruvallur	0	0.50	0	0.55	0	0.60	0	0.65	0	2.30	
22	Thiruvarur	1	5.00	0	0.00	0	0.00	1	6.50	2	11.50	
23	Thoothukudi	74	43.10	71	7.81	70	8.40	70	9.10	285	68.41	
24	Tiruchirappalli	2365	74.60	2363	77.66	2363	84.72	2363	91.78	9454	328.76	
25	Tirunelveli	151	2.75	150	0.83	150	0.90	150	0.98	601	5.46	
26	Tiruvannamalai	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	
27	Vellore	12	1.85	11	0.17	23	3.24	21	0.26	67	5.52	
28	Villupuram	8	8.50	5	5.50	5	6.00	5	6.50	23	26.50	
29	Virudhunagar	3	0.72	0	0.79	0	0.86	0	0.94	3	3.31	
	Total	16811	365.60	16251	281.23	22372	265.32	23171	292.84	78605	1204.99	

2. Commodity Group Formation

Sl.		2008-09		200)9-10	2010-11		2011-12		Total	
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	7	1.40	17	3.74	22	5.28	29	7.54	75	17.96
2	Coimbatore	30	6.00	25	5.50	5	1.20	5	1.30	65	14.00
3	Cuddalore	50	10.00	50	11.00	50	12.00	50	13.00	200	46.00
4	Dharmapuri	38	7.60	38	8.36	30	7.20	22	5.46	128	28.62
5	Dindigul	17	3.40	17	3.74	17	4.08	17	4.42	68	15.64
6	Erode	40	8.00	40	8.80	40	9.60	40	10.40	160	36.80
7	Kancheepuram	30	6.00	30	6.60	30	7.20	30	7.80	120	27.60
8	Kanniyakumari	1	0.20	1	0.22	1	0.24	1	0.26	4	0.92
9	Karur	56	11.20	56	12.32	56	13.44	56	14.56	224	51.52
10	Krishnagiri	57	10.40	34	6.82	35	7.68	29	6.76	155	31.66
11	Madurai	19	3.80	19	4.18	19	4.56	19	4.94	76	17.48
12	Nagapattinam	30	6.00	30	6.60	30	7.20	30	7.80	120	27.60
13	Namakkal	23	4.60	23	5.30	23	6.00	23	6.30	92	22.20
14	Perambalur	12	2.40	20	4.40	31	7.44	40	10.40	103	24.64
15	Pudukkottai	60	14.00	65	14.30	45	10.80	0	0.00	170	39.10
16	Ramanathapuram	0	0.80	0	1.32	0	1.44	0	1.56	0	5.12
17	Salem	17	3.40	17	3.74	16	3.84	14	3.64	64	14.62
18	Sivagangai	12	2.40	12	2.64	12	2.88	12	3.12	48	11.04
19	Thanjavur	50	10.00	50	11.00	50	12.00	50	13.00	200	46.00
20	Theni	13	2.60	15	3.30	21	5.04	23	5.98	72	16.92
21	Thiruvallur	40	8.00	40	8.80	40	9.60	40	10.40	160	36.80
22	Thiruvarur	70	14.00	70	15.40	70	16.80	70	18.20	280	64.40
23	Thoothukudi	18	3.60	18	3.96	18	4.32	18	4.68	72	16.56
24	Tiruchirappalli	125	25.00	125	27.50	136	32.64	136	35.36	522	120.50
25	Tirunelveli	16	3.20	16	3.52	16	3.84	16	4.16	64	14.72
26	Tiruvannamalai	10	2.00	10	2.20	10	2.40	5	1.30	35	7.90
27	Vellore	19	3.80	41	9.02	73	17.52	77	20.02	210	50.36
28	Villupuram	185	37.00	185	40.70	185	44.40	185	48.10	740	170.20
29	Virudhunagar	185	3.20	185	3.52	185	3.84	185	4.16	740	14.72
	Total	1230	214.00	1249	238.50	1266	264.48	1222	274.62	4967	991.60

3. Capacity Building

		2008-09		200	09-10	2010-11		2011-12		Total	
Sl. No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	16	1.60	18	1.98	18	2.16	18	2.34	70	8.08
2	Coimbatore	39	3.90	37	4.07	37	4.44	37	4.81	150	17.22
3	Cuddalore	3	1.10	3	1.21	3	1.32	3	1.43	12	5.06
4	Dharmapuri	35	3.50	30	3.30	25	2.88	19	2.47	109	12.15
5	Dindigul	25	2.50	26	2.86	26	3.12	27	3.51	104	11.99
6	Erode	28	2.80	28	3.08	28	3.36	28	3.64	112	12.88
7	Kancheepuram	17	1.70	17	1.87	17	2.04	17	2.21	68	7.82
8	Kanniyakumari	50	5.00	50	5.50	50	6.00	50	6.50	200	23.00
9	Karur	32	3.20	32	3.52	32	3.84	32	4.16	128	14.72
10	Krishnagiri	111	11.10	111	12.21	111	13.32	105	13.65	438	50.28
11	Madurai	30	2.60	29	2.75	25	3.00	25	3.25	109	11.60
12	Nagapattinam	14	2.40	14	2.64	14	2.88	14	3.12	56	11.04
13	Namakkal	40	5.20	40	5.79	40	6.46	40	7.11	160	24.56
14	Perambalur	17	1.80	19	2.09	19	2.28	19	2.47	74	8.64
15	Pudukkottai	50	5.00	50	5.50	50	6.00	50	6.50	200	23.00
16	Ramanathapuram	7	0.70	8	0.88	9	1.08	9	1.17	33	3.83
17	Salem	54	5.40	54	5.94	54	6.48	54	7.02	216	24.84
18	Sivagangai	33	3.30	38	4.18	38	4.56	38	4.94	147	16.98
19	Thanjavur	5	3.10	5	3.41	5	3.72	5	4.03	20	14.26
20	Theni	49	4.90	61	6.71	67	8.04	76	9.88	253	29.53
21	Thiruvallur	70	7.00	69	7.59	67	8.04	67	8.71	273	31.34
22	Thiruvarur	200	20.00	210	23.10	210	25.20	210	27.30	830	95.60
23	Thoothukudi	14	1.40	14	1.54	14	1.68	14	1.82	56	6.44
24	Tiruchirappalli	69	6.90	69	7.59	69	8.28	69	8.97	276	31.74
25	Tirunelveli	14	1.40	14	1.54	14	1.68	14	1.82	56	6.44
26	Tiruvannamalai	41	4.10	41	4.51	42	5.04	42	5.46	166	19.11
27	Vellore	231	23.10	210	23.10	323	38.40	422	54.86	1186	139.46
28	Villupuram	22	11.30	22	12.43	22	13.56	22	14.69	88	51.98
29	Virudhunagar	102	2.50	102	2.86	102	3.12	102	3.38	408	11.86
	Total	1418	148.50	1421	163.75	1531	191.98	1628	221.22	5998	725.45

4. Exposure visit to markets

		200	8-09	20	009-10	201	10-11	2011-12 Total			
Sl. No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	3	1.15	3	1.27	1 ny.	0.24	1	0.26	8 8	2.92
2	Coimbatore	38	20.10	36	18.81	36	20.52	36	22.23	146	81.66
3	Cuddalore	3	2.25		0.83		0.90		0.98		4.96
				17		1		17		6	
4	Dharmapuri	17	9.10	17	10.01	17	10.94	17	11.88	68	41.93
5	Dindigul	3	3.00	3	3.30	3	3.62	3	3.95	12	13.87
6	Erode	10	6.80	10	7.48	10	8.19	10	8.93	40	31.40
7	Kancheepuram	4	5.25	4	5.78	4	6.35	4	6.97	16	24.35
8	Kanniyakumari	5	4.70	5	5.17	5	5.67	5	6.20	20	21.74
9	Karur	6	4.90	6	5.39	6	5.91	6	6.46	24	22.66
10	Krishnagiri	23	14.00	23	15.40	23	16.85	23	18.34	92	64.59
11	Madurai	4	4.50	4	4.95	4	5.43	4	5.94	16	20.82
12	Nagapattinam	2	0.95	3	1.27	6	2.10	6	2.28	17	6.60
13	Namakkal	7	4.45	7	4.70	7	5.10	7	5.50	28	19.75
14	Perambalur	2	0.95	2	1.05	2	0.48	2	0.52	8	3.00
15	Pudukottai	17	11.50	17	12.65	10	8.85	7	7.44	51	40.44
16	Ramanathapuram	1	0.20	1	0.22	1	0.24	2	0.26	5	0.92
17	Salem	9	5.50	9	6.05	9	6.63	9	7.24	36	25.42
18	Sivagangai	3	1.15	4	2.09	4	2.28	4	2.47	15	7.99
19	Thanjavur	1	0.75	1	0.83	1	0.90	1	0.98	4	3.46
20	Theni	6	4.90	2	3.30	2	3.63	2	3.99	12	15.82
21	Thiruvallur	6	5.25	6	5.78	6	6.32	6	6.87	24	24.22
22	Thiruvarur	4	2.45	2	1.05	2	1.14	2	1.24	10	5.88
23	Thoothukudi	3	2.45	3	2.70	4	4.77	4	5.23	14	15.15
24	Tiruchirappalli	9	7.55	9	8.31	9	9.06	9	9.82	36	34.74
25	Tirunelveli	3	2.45	3	2.70	3	2.96	3	3.20	12	11.31
26	Tiruvannamalai	2	1.70	2	1.87	3	3.87	3	4.25	10	11.69
27	Vellore	8	14.30	12	16.61	16	19.08	24	22.75	60	72.74
28	Villupuram	1	1.50	1	1.65	1	1.82	1	2.00	4	6.97
29	Virudhunagar	2	0.95	4	2.09	4	2.28	4	2.47	14	7.79
	Total	202	144.70	200	153.31	200	166.13	206	180.65	808	644.79

5. Publicity of Regulated Market

Physical: in ha Financial: Rs in Lakhs

	2008-09 2009-10 2010-11 2011-12			Total							
Sl.	DIGEDICE		ı		ı		I				
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
2	Coimbatore	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
3	Cuddalore	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
4	Dharmapuri	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
5	Dindigul	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
6	Erode	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
7	Kancheepuram	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
8	Kanniyakumari	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
9	Karur	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
10	Krishnagiri	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
11	Madurai	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
12	Nagapattinam	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
13	Namakkal	0	1.00	0	1.50	0	2.00	0	2.00	0	6.50
14	Pudukkottai	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
15	Ramanathapuram	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
16	Salem	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
17	Sivagangai	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
18	Thanjavur	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
19	Theni	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
20	Thiruvallur	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
21	Thiruvarur	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
22	Thoothukudi	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
23	Tiruchirappalli	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
24	Tirunelveli	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
25	Tiruvannamalai	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
26	Vellore	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
27	Villupuram	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
28	Virudhunagar	1	5.00	1	5.50	1	6.00	1	6.50	4	23.00
	Total	27	136.00	27	150.00	27	164.00	27	177.50	108	627.50

6. Market Intelligence Dissemination

Physical : in ha Financial : Rs in Lakhs

Sl.		2008	8-09	2009)-10	2010	0-11		1-12	To	
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	5020	2.10	5030	6.75	5034	8.36	5040	10.65	20124	27.86
2	Coimbatore	37	3.70	37	4.07	37	4.44	37	4.81	148	17.02
3	Cuddalore	101	10.10	101	11.11	1	0.12	1	0.13	204	21.46
4	Dharmapuri	50032	4.20	50023	4.03	50023	4.76	50022	5.36	200100	18.35
5	Dindigul	5	0.50	5	0.55	5	0.60	5	0.65	20	2.30
6	Erode	66	6.60	67	7.37	61	7.32	61	7.93	255	29.22
7	Kancheepuram	73	7.30	73	8.03	73	8.76	73	9.49	292	33.58
8	Kanniyakumari	1	0.10	1	0.11	7	0.84	3	0.39	12	1.44
9	Karur	10020	2.20	10017	2.17	10017	2.44	10017	2.71	40071	9.52
10	Krishnagiri	25086	23.10	26	2.86	26	3.12	26	3.38	25164	32.46
11	Madurai	5039	4.00	5039	4.44	5039	4.88	5039	5.32	20156	18.64
12	Nagapattinam	10015	1.80	10010	1.51	10010	1.72	10010	1.93	40045	6.96
13	Namakkal	5059	6.10	5055	2.31	5055	2.52	5055	2.73	20224	13.66
14	Perambalur	5020	2.10	5030	6.75	5036	8.84	5040	10.65	20126	28.34
15	Pudukkottai	10029	3.10	10029	3.49	10022	3.04	10022	3.36	40102	12.99
16	Ramanathapuram	15	1.50	10	1.10	10	1.20	10	1.30	45	5.10
17	Salem	5063	6.40	5055	6.31	5056	6.87	5056	7.48	20230	27.06
18	Sivagangai	15	1.50	11	1.21	11	1.32	11	1.43	48	5.46
19	Thanjavur	100	10.00	100	11.00	100	12.00	100	13.00	400	46.00
20	Theni	10001	0.60	6	0.66	6	0.72	6	0.78	10019	2.76
21	Thiruvallur	21	2.10	21	2.31	21	2.52	21	2.73	84	9.66
22	Thiruvarur	10026	2.80	10031	3.71	10036	4.12	10036	5.18	40129	15.81
23	Thoothukudi	9	0.90	1	0.11	10	1.20	1	0.13	21	2.34
24	Tiruchirappalli	251	25.10	251	27.61	273	32.76	273	35.49	1048	120.96
25	Tirunelveli	16	1.60	1	0.11	1	0.12	1	0.13	19	1.96
26	Tiruvannamalai	11	1.10	11	1.21	11	1.32	11	1.43	44	5.06
27	Vellore	10041	4.30	10061	7.01	10071	8.92	10081	11.03	40254	31.26
28	Villupuram	140	14.00	140	15.40	140	16.80	140	18.20	560	64.40
29	Virudhunagar	22	2.20	11	1.21	11	1.32	11	1.43	55	6.16
	Total	161334	151.10	126253	144.51	126203	152.95	126209	169.23	539999	617.79

7. Arrangement of Buyer Seller Meetings

Physical: in ha Financial: Rs in Lakhs

								Financiai : Rs in Lakns			
Sl.		20	08-09	200	9-10	201	0-11	201	1-12	To	otal
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	10	1.50	10	1.65	10	1.80	10	1.95	40	6.90
2	Coimbatore	18	3.60	18	3.96	18	4.32	18	4.68	72	16.56
3	Cuddalore	3	0.60	2	0.44	0	0.00	0	0.00	5	1.04
4	Dharmapuri	20	4.00	15	3.30	15	3.60	15	3.90	65	14.80
5	Dindigul	4	0.80	4	0.88	4	0.96	4	1.04	16	3.68
6	Erode	10	2.00	10	2.20	10	2.40	10	2.60	40	9.20
7	Kancheepuram	12	2.40	12	2.64	12	2.88	12	3.12	48	11.04
8	Kanniyakumari	10	2.00	10	2.20	10	2.40	10	2.60	40	9.20
9	Karur	8	0.80	8	0.88	8	0.96	8	1.04	32	3.68
10	Krishnagiri	20	4.00	3	0.66	4	0.96	4	1.04	31	6.66
11	Madurai	1	1.00	5	1.10	5	1.20	5	1.30	16	4.60
12	Nagapattinam	10	2.00	15	3.30	15	3.60	20	5.20	60	14.10
13	Namakkal	10	2.50	10	2.50	10	2.60	10	2.80	40	10.40
14	Perambalur	10	1.50	10	1.65	10	1.80	10	1.95	40	6.90
15	Pudukkottai	10	2.00	10	2.20	10	2.40	10	2.60	40	9.20
16	Ramanathapuram	0	2.00	0	4.40	0	4.80	0	5.20	0	16.40
17	Salem	4	0.80	4	0.88	4	0.96	4	1.04	16	3.68
18	Sivagangai	10	2.00	10	2.20	10	2.40	10	2.60	40	9.20
19	Thanjavur	3	0.60	3	0.66	3	0.72	3	0.78	12	2.76
20	Theni	8	1.60	8	1.76	8	1.92	8	2.08	32	7.36
21	Thiruvallur	10	2.00	10	2.20	10	2.40	10	2.60	40	9.20
22	Thiruvarur	6	1.20	12	2.64	20	4.80	20	5.20	58	13.84
23	Thoothukudi	3	0.60	3	0.66	3	0.72	3	0.78	12	2.76
24	Tiruchirappalli	40	8.00	40	8.80	40	9.60	40	10.40	160	36.80
25	Tirunelveli	3	0.60	3	0.66	3	0.72	3	0.78	12	2.76
26	Tiruvannamalai	1	0.20	2	0.44	2	0.48	2	0.52	7	1.64
27	Vellore	2	0.40	4	0.88	4	0.96	4	1.04	14	3.28
28	Villupuram	30	6.00	30	6.60	30	7.20	30	7.80	120	27.60
29	Virudhunagar	30	2.00	30	2.20	30	2.40	30	2.60	120	9.20
	Total	306	58.70	301	64.54	308	71.96	313	79.24	1228	274.44

8. Strengthening of Market Extension Centre

Physical: in ha Financial: Rs in Lakhs

Sl.		20	08-09	200	9-10	201	10-11		Financia 11-12	Total		
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	
1	Ariyalur	1	2.50	0	0.0	0	0.00	0	0.00	1	2.50	
2	Coimbatore	1	2.50	0	0.0	0	0.00	0	0.00	1	2.50	
3	Cuddalore	6	15.00	0	0.0	0	0.00	0	0.00	6	15.00	
4	Dharmapuri	4	10.00	0	0.0	0	0.00	0	0.00	4	10.00	
5	Dindigul	1	2.50	1	2.8	1	3.00	1	3.25	4	11.50	
6	Erode	2	5.00	0	0.0	0	0.00	0	0.00	2	5.00	
7	Kancheepuram	1	2.50	0	0.0	0	0.00	0	0.00	1	2.50	
8	Kanniyakumari	1	2.50	0	0.0	0	0.00	0	0.00	1	2.50	
9	Karur	1	2.50	0	0.0	0	0.00	0	0.00	1	2.50	
10	Krishnagiri	5	12.50	3	8.3	0	0.00	0	0.00	8	20.75	
11	Madurai	2	5.00	0	0.0	0	0.00	0	0.00	2	5.00	
12	Namakkal	1	1.75	0	0.5	0	0.50	0	0.50	1	3.25	
13	Perambalur	2	5.00	0	0.0	0	0.00	0	0.00	2	5.00	
14	Pudukkottai	2	5.00	0	0.0	0	0.00	0	0.00	2	5.00	
15	Ramanathapuram	2	5.00	0	0.0	0	0.00	0	0.00	2	5.00	
16	Salem	2	5.00	0	0.0	0	0.00	0	0.00	2	5.00	
17	Sivagangai	1	2.50	0	0.0	0	0.00	0	0.00	1	2.50	
18	Thanjavur	1	2.50	0	0.0	0	0.00	0	0.00	1	2.50	
19	Theni	2	5.00	0	0.0	0	0.00	2	6.50	4	11.50	
20	Thiruvallur	1	2.50	1	2.8	0	0.00	0	0.00	2	5.25	
21	Thiruvarur	2	5.00	0	0.0	0	0.00	0	0.00	2	5.00	
22	Thoothukudi	1	2.50	1	2.8	1	3.00	1	3.25	4	11.50	
23	Tiruchirappalli	2	5.00	0	0.0	0	0.00	0	0.00	2	5.00	
24	Tirunelveli	1	2.50	0	0.0	0	0.00	0	0.00	1	2.50	
25	Tiruvannamalai	2	5.00	0	0.0	0	0.00	0	0.00	2	5.00	
26	Vellore	2	5.00	0	0.0	0	0.00	0	0.00	2	5.00	
27	Villupuram	1	2.50	1	2.8	1	3.00	1	3.25	4	11.50	
28	Virudhunagar	3	7.50	0	0.0	0	0.00	0	0.00	3	7.50	
	Total	53	131.75	7	19.75	3	9.50	5	16.75	68	177.75	

9. Facilitation of Contract Farming

Physical : in ha Financial : Rs in Lakhs

	Financiai :										
Sl.	Sl.		8-09	200	9-10	201	0-11	201	1-12	Total	
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	5	0.75	5	0.83	5	0.90	5	0.98	20	3.46
2	Coimbatore	4	0.60	4	0.66	4	0.72	4	0.78	16	2.76
3	Cuddalore	20	3.00	10	1.65	10	1.80	10	1.95	50	8.40
4	Dharmapuri	5	0.75	5	0.83	4	0.72	4	0.78	18	3.08
5	Dindigul	5	0.75	5	0.83	5	0.90	5	0.98	20	3.46
6	Erode	12	1.80	12	1.98	8	1.44	8	1.56	40	6.78
7	Kancheepuram	8	1.20	8	1.32	8	1.44	8	1.56	32	5.52
8	Karur	8	0.80	8	0.88	8	0.96	8	1.04	32	3.68
9	Krishnagiri	5	0.75	4	0.66	3	0.54	2	0.39	14	2.34
10	Madurai	4	0.60	4	0.66	4	0.72	4	0.78	16	2.76
11	Nagapattinam	3	0.45	3	0.50	3	0.54	3	0.59	12	2.08
12	Namakkal	7	1.40	7	1.60	7	1.80	7	1.90	28	6.70
13	Perambalur	5	0.75	5	0.83	5	0.90	5	0.98	20	3.46
14	Pudukkottai	10	1.50	10	1.65	10	1.80	10	1.95	40	6.90
15	Ramanathapuram	11	2.00	11	2.20	11	2.40	11	2.60	44	9.20
16	Salem	7	1.05	7	1.16	7	1.26	7	1.37	28	4.84
17	Sivagangai	10	1.50	10	1.65	10	1.80	10	1.95	40	6.90
18	Thanjavur	20	3.00	10	1.65	10	1.80	10	1.95	50	8.40
19	Theni	14	2.10	14	2.31	14	2.52	14	2.73	56	9.66
20	Thiruvallur	20	3.00	20	3.30	20	3.60	20	3.90	80	13.80
21	Thiruvarur	40	6.00	50	8.25	45	8.10	45	8.78	180	31.13
22	Thoothukudi	12	1.80	12	1.98	12	2.16	12	2.34	48	8.28
23	Tiruchirappalli	4	0.60	4	0.64	4	0.68	4	0.72	16	2.64
24	Tirunelveli	1	0.15	1	0.17	1	0.18	1	0.20	4	0.70
25	Tiruvannamalai	3	0.45	3	0.50	3	0.54	3	0.59	12	2.08
26	Vellore	16	2.40	20	3.30	24	4.32	30	5.85	90	15.87
27	Virudhunagar	0	0.50	0	0.55	0	0.60	0	0.65	0	2.30
	Total	259	39.65	252	42.54	245	45.14	250	49.85	1006	177.18

10. Market Price Surveillance

Physical: in ha Financial: Rs in Lakhs

									inancial:	KS III	Lakiis
Sl.		200	8-09	200	9-10	201	0-11	2	011-12	Te	otal
No.	DISTRICT	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Ariyalur	1	0.10	1	0.11	1	0.12	1	0.13	4	0.46
2	Coimbatore	1	0.10	1	0.11	2	0.24	2	0.26	6	0.71
3	Cuddalore	5	0.50	5	0.55	5	0.60	5	0.65	20	2.30
4	Dharmapuri	12	1.20	12	1.32	12	1.44	12	1.56	48	5.52
5	Dindigul	10	1.00	10	1.10	10	1.20	10	1.30	40	4.60
6	Erode	12	1.20	12	1.32	12	1.44	12	1.56	48	5.52
7	Kancheepuram	5	0.50	5	0.55	5	0.60	5	0.65	20	2.30
8	Kanniyakumari	12	1.20	12	1.32	12	1.44	4	0.52	40	4.48
9	Karur	5	0.50	5	0.55	5	0.60	5	0.65	20	2.30
10	Krishnagiri	12	1.20	12	1.32	12	1.44	12	1.56	48	5.52
11	Madurai	6	0.60	6	0.66	6	0.72	6	0.78	24	2.76
12	Nagapattinam	10	1.00	10	1.10	10	1.20	10	1.30	40	4.60
13	Namakkal	0	0.50	0	0.50	0	0.50	0	0.50	0	2.00
14	Pudukkottai	12	1.20	15	1.65	15	1.80	15	1.95	57	6.60
15	Salem	1	0.10	1	0.11	1	0.12	1	0.13	4	0.46
16	Sivagangai	0	0.00	0	0.00	1	0.12	1	0.13	2	0.25
17	Thanjavur	5	0.50	5	0.55	5	0.60	5	0.65	20	2.30
18	Theni	4	0.40	4	0.44	4	0.48	4	0.52	16	1.84
19	Thiruvallur	2	0.20	2	0.22	2	0.24	2	0.26	8	0.92
20	Thiruvarur	10	1.00	10	1.10	10	1.20	10	1.30	40	4.60
21	Thoothukudi	12	1.20	12	1.32	12	1.44	12	1.56	48	5.52
22	Tirunelveli	12	1.20	12	1.32	12	1.44	12	1.56	48	5.52
23	Tiruvannamalai	1	0.10	2	0.22	2	0.24	2	0.26	7	0.82
24	Vellore	1	0.60	2	0.77	2	0.72	3	0.39	8	2.48
	Total	151	16.10	156	18.21	158	19.94	151	20.13	616	74.38

11. Strengthening of Village Shandies

Physical : in ha Financial : Rs in Lakhs

	Financiai: Rs in Lakns										
Sl.		2008-09		2009	9-10	201	0-11	2011	l -12	To	otal
No.	District	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Dindigul	80	1.45	70	1.43	0	0.30	0	0	150	3.18
2	Krishnagiri	3	0.30	0	0.00	0	0.00	0	0	3	0.30
3	Madurai	450	36.00	0	0.00	0	0.00	0	0	450	36.00
4	Pudukkottai	20	2.00	0	0.00	0	1.00	0	0	20	3.00
5	Thiruvarur	5	2.50	0	0.00	0	0.00	0	0	5	2.50
6	Tiruchirappalli	12	0.00	12	0.00	12	0.00	12	0	48	0.00
7	Vellore	4	0.04	5	0.05	0	0.00	0	0	9	0.09
	Total	574	42.29	87	1.48	12	1.30	12	0	685	45.07

APPENDIX V

ANIMAL HUSBANDRY SECTOR

ABSTRACT OF INTERVENTIONS IN ANIMAL HUSBANDRY SECTOR IN TAMIL NADU

Sl. No.	Interventions / Components	2008-09	2009-10	2010-11	2011-12	TOTAL
1	Feed and Fodder Development	3764.17	2180.74	2076.85	1826.43	9848.19
2	Genetic Upgradation	4922.78	1127.48	1124.24	1126.65	8301.15
3	Improvement of Livestock Health Services	4649.87	905.64	591.31	589.56	6736.36
4	Institutional Development and Extension Services	4234.69	888.42	683.40	398.98	6467.50
5	Improvement of Milk collection / Marketing / Processing	3453.20	1798.09	450.33	414.12	6115.74
6	Capacity Building / Farmers and Technical Staff	360.25	191.22	190.04	181.05	922.56
7	Germplasm Production Centre for Small Ruminants	289.24	33.40	33.40	33.40	389.44
8	Popularising Small Ruminants - Farming System	103.46	83.35	83.35	83.35	353.51
9	Provisions of ELISA Kit	137.50	2.50	2.50	2.50	145.00
10	Popularising Backyard Poultry	9.90	9.40	9.40	9.40	38.10
11	Establishement of Piggery Unit	7.70	0.00	0.00	0.00	7.70
	Sub Total	21932.76	7220.24	5244.82	4665.44	39325.25
	Others	0	19.11	156.46	197.67	108.25
	Total	21932.76	7239.35	5401.28	4863.11	39433.5

1. Feed and Fodder Development

T-10		D •	T 11
⊦⊓nan	cial:	Ks.in	Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Coimbatore	192.30	46.88	46.88	46.88	332.93
2	Cuddalore	76.09	85.47	84.29	84.89	330.74
3	Dharmapuri	95.01	95.01	94.81	94.34	379.15
4	Dindigul	41.00	81.38	37.63	28.23	188.23
5	Erode	125.10	63.68	63.68	63.68	316.13
6	Kancheepuram	143.64	53.91	53.65	53.65	304.85
7	Kanniyakumari	58.76	58.76	58.76	58.76	235.04
8	Karur	37.73	27.25	27.25	26.07	118.30
9	Krishnagiri	597.90	91.18	90.98	90.51	870.57
10	Madurai	108.00	269.35	267.98	35.48	680.80
11	Nagapattinam	34.75	28.43	27.25	27.25	117.68
12	Namakkal	105.98	100.15	100.15	100.15	406.43
13	Perambalur	38.18	37.53	30.76	30.16	136.62
14	Pudukottai	244.31	34.86	34.86	34.86	348.87
15	Ramanathapuram	77.90	77.90	77.90	77.90	311.58
16	Salem	197.70	121.66	121.66	121.66	562.66
17	Sivagangai	52.76	52.76	52.76	52.76	211.04
18	Thanjavur	223.35	42.58	42.58	42.80	351.31
19	Theni	61.90	24.50	22.55	22.53	131.48
20	Thiruvallur	121.05	53.85	52.48	52.48	279.85
21	Thiruvannamalai	118.09	108.59	108.59	108.19	443.46
22	Thiruvarur	181.70	28.37	28.37	28.37	266.81
23	Thoothukudi	94.91	100.83	94.01	94.01	383.76
24	Tirunelveli	66.68	60.33	46.40	46.40	219.80
25	Trichy	227.17	160.78	145.28	140.28	673.51
26	Vellore	119.68	113.38	113.38	113.36	459.80
27	Villupuram	265.85	111.00	101.60	100.43	578.87
28	Virudhunagar	56.71	50.41	50.41	50.41	207.94
	Total	3764.17	2180.74	2076.85	1826.43	9848.19

2. Genetic Upgradation

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Coimbatore	408.02	78.78	78.78	78.78	644.36
2	Cuddalore	49.52	17.86	17.86	17.86	103.10
3	Dharmapuri	58.70	38.30	38.30	38.30	173.60
4	Dindigul	62.22	35.70	35.70	35.70	169.32
5	Erode	504.41	104.32	104.32	104.32	817.37
6	Kancheepuram	737.96	111.45	113.71	116.12	1079.24
7	Kanniyakumari	49.83	37.71	37.71	37.71	162.96
8	Karur	50.10	50.10	50.10	50.10	200.40
9	Krishnagiri	32.70	17.90	17.90	17.90	86.40
10	Madurai	40.30	16.70	16.70	16.70	90.40
11	Nagapattinam	198.16	33.70	33.70	33.70	299.26
12	Namakkal	88.10	68.50	68.50	68.50	293.60
13	Perambalur	20.20	20.20	20.20	20.20	80.80
14	Pudukottai	154.50	37.00	37.00	37.00	265.50
15	Ramanathapuram	164.50	12.62	12.62	12.62	202.36
16	Salem	98.30	58.30	58.30	58.30	273.20
17	Sivagangai	219.97	22.34	22.34	22.34	286.99
18	Thanjavur	41.70	14.70	14.70	14.70	85.80
19	Theni	23.30	12.50	12.50	12.50	60.80
20	Thiruvallur	327.82	73.61	73.61	73.61	548.65
21	Thiruvannamalai	344.01	53.63	53.63	53.63	504.90
22	Thoothukudi	53.88	37.82	37.82	37.82	167.34
23	Tirunelveli	54.70	14.20	14.20	14.20	97.30
24	Trichy	276.86	39.96	34.46	34.46	385.74
25	Vellore	69.94	23.20	23.20	23.20	139.54
26	Villupuram	600.22	72.79	72.79	72.79	818.59
27	Virudhunagar	192.86	23.59	23.59	23.59	263.63
	Total	4922.78	1127.48	1124.24	1126.65	8301.15

3. Improvement of Livestock Health Services

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Cuddalore	441.51	0.00	0.00	0.00	441.51
2	Dharmapuri	147.69	9.03	9.03	9.03	174.78
3	Dindigul	153.38	91.93	91.43	91.43	428.15
4	Kanniyakumari	287.44	3.50	3.50	3.50	297.94
5	Karur	111.21	39.96	39.78	39.78	230.73
6	Krishnagiri	610.66	298.46	7.96	7.96	925.04
7	Madurai	183.77	99.17	99.17	99.17	481.26
8	Nagapattinam	198.16	33.70	33.70	33.70	299.26
9	Namakkal	229.56	6.73	6.73	6.73	249.75
10	Perambalur	155.27	62.80	53.05	53.05	324.17
11	Pudukottai	242.97	24.64	24.64	24.64	316.89
12	Salem	250.67	9.17	9.17	9.17	278.18
13	Thanjavur	75.83	22.50	22.50	22.50	143.33
14	Theni	140.74	92.84	92.84	92.84	419.26
15	Thiruvarur	204.43	19.63	19.63	19.63	263.32
16	Thoothukudi	293.39	9.21	9.21	9.21	321.02
17	Tirunelveli	151.46	64.10	50.70	48.95	315.19
18	Trichy	494.20	18.28	18.28	18.28	549.04
19	Vellore	277.54	0.00	0.00	0.00	277.54
	Total	4649.87	905.64	591.31	589.56	6736.36

4. Institutional Development and Extension Services

	Financial: Rs.in Lakh							
Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total		
1	Coimbatore	30.00	0.00	0.00	0.00	30.00		
2	Dharmapuri	39.00	9.00	9.00	9.00	66.00		
3	Dindigul	268.51	73.51	73.51	73.01	488.54		
4	Erode	10.00	0.00	0.00	0.00	10.00		
5	Karur	107.70	26.70	25.85	25.05	185.30		
6	Krishnagiri	25.00	9.00	9.00	9.00	52.00		
7	Madurai	281.26	86.76	86.76	86.26	541.04		
8	Nagapattinam	170.20	13.16	3.16	2.66	189.18		
9	Namakkal	24.00	9.00	9.00	9.00	51.00		
10	Perambalur	154.60	25.10	23.60	21.13	224.43		
11	Pudukottai	221.49	21.49	21.15	20.35	284.48		
12	Ramanathapuram	160.10	0.00	0.00	0.00	160.10		
13	Salem	25.50	9.00	9.00	9.00	52.50		
14	Sivagangai	429.57	0.00	0.00	0.00	429.57		
15	Thanjavur	683.56	448.58	226.39	15.89	1374.42		
16	Theni	178.15	63.15	63.15	62.65	367.10		
17	Thiruvallur	857.38	34.89	36.69	25.68	1216.65		
18	Thiruvarur	280.05	20.30	3.53	3.53	307.41		
19	Tirunelveli	147.61	38.78	83.61	26.77	296.77		
20	Vellore	35.00	0.00	0.00	0.00	35.00		
21	Virudhunagar	106.01	0.00	0.00	0.00	106.01		
	Total	4234.69	888.42	683.40	398.98	6467.50		

5. Improvement of Milk collection /Marketing / Processing

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Coimbatore	246.90	69.81	31.90	31.90	380.51
2	Cuddalore	97.02	23.97	23.97	18.58	163.54
3	Dharmapuri	87.64	19.84	17.95	17.95	143.38
4	Dindigul	87.31	118.74	8.78	8.78	223.61
5	Erode	97.91	24.41	21.50	21.50	165.32
6	Kancheepuram	81.84	77.39	15.08	15.08	189.39
7	Kanniyakumari	70.52	20.52	8.73	5.69	105.46
8	Karur	60.77	0.77	0.00	0.00	61.54
9	Krishnagiri	98.46	46.71	15.94	13.88	174.99
10	Madurai	167.83	49.81	75.30	16.74	309.68
11	Namakkal	193.29	21.32	20.55	17.80	252.96
12	Perambalur	61.89	31.89	0.77	0.00	94.55
13	Pudukottai	60.77	30.77	0.00	0.00	91.54
14	Ramanathapuram	66.07	1.21	1.21	1.21	69.70
15	Salem	134.62	106.48	47.22	46.45	334.77
16	Sivagangai	47.76	5.65	5.65	4.54	63.60
17	Thanjavur	0.00	0.00	0.00	0.00	0.00
18	Theni	149.21	53.65	20.00	14.75	237.61
19	Thiruvallur	574.61	460.16	15.52	11.85	1062.14
20	Thiruvannamalai	105.36	44.51	42.62	39.80	232.29
21	Thoothukudi	71.02	63.31	5.89	5.89	146.11
22	Tirunelveli	62.91	2.91	0.00	0.00	65.82
23	Trichy	101.61	36.22	12.47	68.47	218.77
24	Vellore	95.28	24.34	24.34	20.45	164.41
25	Villupuram	537.19	459.19	31.55	30.19	1058.12
26	Virudhunagar	95.41	4.51	3.39	2.62	105.93
	Total	3453.20	1798.09	450.33	414.12	6115.74

5. Capacity Building / Farmers and Technical Staff

Financial: Rs.in Lakhs

GI NI	Financial; Rs.III La						
Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total	
1	Coimbatore	8.55	8.05	8.05	8.05	32.70	
2	Cuddalore	21.80	11.55	11.55	11.55	56.45	
3	Dharmapuri	9.10	9.10	9.10	7.60	34.90	
4	Erode	7.55	7.55	7.55	7.05	29.70	
5	Kancheepuram	20.95	7.70	7.70	7.20	43.55	
6	Kanniyakumari	20.10	10.10	10.10	9.60	49.90	
7	Krishnagiri	50.64	6.35	6.35	5.85	69.19	
8	Nagapattinam	34.75	28.43	27.25	27.25	117.68	
9	Namakkal	7.10	7.10	7.10	6.60	27.90	
10	Ramanathapuram	3.55	3.55	3.55	3.05	13.70	
11	Salem	8.85	8.85	8.85	8.35	34.90	
12	Sivagangai	5.45	5.45	5.45	4.95	21.30	
13	Thiruvallur	8.80	7.80	7.80	7.30	31.70	
14	Thiruvannamalai	58.80	8.80	8.80	8.30	84.70	
15	Thiruvarur	14.05	4.05	4.05	3.55	25.70	
16	Thoothukudi	2.80	2.80	2.80	2.30	10.70	
17	Trichy	36.81	26.81	26.81	26.31	116.74	
18	Vellore	12.05	11.88	11.88	11.89	47.70	
19	Villupuram	19.90	6.65	6.65	6.15	39.35	
20	Virudhunagar	8.65	8.65	8.65	8.15	34.10	
	Total	360.25	191.22	190.04	181.05	922.56	

6. Germplasm Production Centre for Small Ruminants

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Cuddalore	6.50	6.50	6.50	6.50	26.00
2	Dharmapuri	21.14	0.00	0.00	0.00	21.14
3	Krishnagiri	3.30	2.50	2.50	2.50	10.80
4	Namakkal	91.20	0.00	0.00	0.00	91.20
5	Salem	80.40	5.40	5.40	5.40	96.60
6	Thiruvannamalai	9.00	9.00	9.00	9.00	36.00
7	Vellore	77.70	10.00	10.00	10.00	107.70
	Total	289.24	33.40	33.40	33.40	389.44

8. Popularising Small Ruminants - Farming System

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	15.86	12.50	12.50	12.50	53.36
2	Krishnagiri	21.70	15.00	15.00	15.00	66.70
3	Namakkal	32.55	22.50	22.50	22.50	100.05
4	Salem	33.35	33.35	33.35	33.35	133.40
	Total	103.46	83.35	83.35	83.35	353.51

9. Provisions of ELISA Kit

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Erode	67.50	0.00	0.00	0.00	67.50
2	Namakkal	70.00	2.50	2.50	2.50	77.50
	Total	137.50	2.50	2.50	2.50	145.00

10. Popularising Backyard Poultry

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	4.40	4.40	4.40	4.40	17.60
2	Krishnagiri	5.50	5.00	5.00	5.00	20.50
	Total	9.90	9.40	9.40	9.40	38.10

11. Establishment of Piggery Unit

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Krishnagiri	7.70	0.00	0.00	0.00	7.70
	Total	7.70	0.00	0.00	0.00	7.70

APPENDIX VI

FISHERIES SECTOR

ABSTRACT OF INTERVENTION OF FISHERIES SECTOR IN TAMIL NADU STATE

Sl. No.	Interventions / Components	2008-09	2009-10	2010-11	2011-12	Total
1	Creation of Infrastructure Facilities	1735.70	1599.43	850.62	329.71	4515.47
2	Fish Seed Rearing / Production / Nursery	1039.75	800.06	545.61	376.23	2761.64
3	Fish Culture / Integrated Coastal Aqua / Ornamental Fish	564.57	494.26	288.96	366.40	1714.20
4	Establishing of Fish Stall / Retail Market	473.00	363.00	73.00	43.00	952.00
5	Sea Ranching	244.40	204.40	207.00	126.60	782.40
6	Fisheries Research	633.00	61.00	0.00	0.00	694.00
7	Supply of Fishing Implements / Equipments	100.10	88.35	89.85	95.05	373.35
8	Capacity Building / Training / Demonstration / Study Tour	74.20	73.70	74.30	51.30	273.50
9	Provision of Moped with Ice Box	54.90	39.60	39.60	23.40	157.50
10	Others	461.40	86.65	41.40	16.40	605.85
	Sub Total	5381.02	3810.45	2210.34	1428.09	12829.91
	Others	178.31	190.31	178.20	148.20	695.00
	Total	5559.33	4000.76	2388.54	1576.29	13524.91

1. Creation of Infrastructure Facilities

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Coimbatore	405.00	0.00	110.00	0.00	515.00
2	Cuddalore	83.00	27.50	27.50	27.50	165.50
3	Dharmapuri	25.86	6.22	5.86	2.86	40.80
4	Erode	22.50	14.50	13.00	2.50	52.50
5	Kancheepuram	44.00	42.00	42.00	0.00	128.00
6	Kanniyakumari	42.50	55.00	42.50	27.50	167.50
7	Krishnagiri	3.00	3.00	3.00	3.00	12.00
8	Madurai	30.30	500.00	0.00	0.00	530.30
9	Nagapattinam	107.50	127.50	137.50	165.00	537.50
10	Namakkal	20.95	20.95	10.95	3.45	56.30
11	Pudukkottai	9.00	9.00	6.00	6.00	30.00
12	Ramanathapuram	50.00	0.00	50.00	0.00	100.00
13	Salem	80.00	70.00	68.50	19.00	237.50
14	Thanjavur	0.00	50.00	0.00	0.00	50.00
15	Theni	10.00	10.00	0.00	0.00	20.00
16	Tiruvannamalai	150.10	0.10	0.10	0.00	150.30
17	Thiruvarur	140.00	90.00	90.00	30.00	350.00
18	Thoothukudi	370.00	170.00	102.50	25.00	667.50
19	Tirunelveli	74.00	375.45	123.00	0.00	572.45
20	Vellore	11.56	1.56	1.56	0.00	14.69
21	Villupuram	56.43	26.65	16.65	17.90	117.63
	Total	1735.70	1599.43	850.62	329.71	4515.47

2. Fish Seed Rearing / Production / Nursery

GL NI	Financial, Rs.iii Lakiis						
Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total	
1	Cuddalore	10.75	10.38	10.38	20.75	52.26	
2	Dharmapuri	161.00	11.00	3.50	3.50	179.00	
3	Dindigul	11.25	106.43	8.13	8.13	133.93	
4	Erode	111.50	121.50	121.50	0.00	354.50	
5	Kancheepuram	20.00	25.00	25.00	20.00	90.00	
6	Kanniyakumari	40.68	38.31	0.00	0.00	78.99	
7	Karur	22.08	0.00	0.00	0.00	22.08	
8	Krishnagiri	0.75	103.60	0.00	0.00	104.35	
9	Madurai	5.00	0.00	5.00	0.00	10.00	
10	Namakkal	14.50	14.50	7.00	7.00	43.00	
11	Perambalur	5.50	11.00	6.00	0.00	22.50	
12	Pudukkottai	60.00	65.00	60.00	60.00	245.00	
13	Ramanathapuram	11.85	11.85	5.85	11.85	41.40	
14	Salem	160.64	118.00	120.00	120.00	518.64	
15	Sivagangai	6.25	6.25	6.25	6.25	25.00	
16	Thanjavur	6.25	62.50	56.25	56.25	181.25	
17	Theni	38.00	0.00	0.00	0.00	38.00	
18	Thiruvallur	5.00	5.00	5.00	5.00	20.00	
19	Tiruvannamalai	6.50	11.50	5.75	5.00	28.75	
20	Thiruvarur	56.25	56.25	56.25	6.25	175.00	
21	Thoothukudi	140.00	0.00	0.00	0.00	140.00	
22	Tiruchirappalli	45.45	6.25	6.25	1.25	59.20	
23	Vellore	3.25	3.25	0.00	0.00	6.50	
24	Villupuram	82.30	0.00	25.00	25.00	132.30	
25	Virudhunagar	15.00	12.50	12.50	20.00	60.00	
	Total	1039.75	800.06	545.61	376.23	2761.64	

3. Fish Culture / Integrated Coastal Aqua / Ornamental Fish

	Ţ			I	I	s.in Lakns
Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Coimbatore	37.50	2.00	4.00	4.00	47.50
2	Cuddalore	31.11	30.00	30.00	60.00	151.11
3	Kancheepuram	30.00	30.00	30.00	30.00	120.00
4	Kanniyakumari	75.00	100.00	0.00	75.00	250.00
5	Krishnagiri	12.50	2.50	2.50	2.50	20.00
6	Madurai	29.00	11.00	37.00	11.00	88.00
7	Nagapattinam	75.00	75.00	75.00	75.00	300.00
8	Pudukkottai	26.00	45.00	45.00	60.00	176.00
9	Ramanathapuram	0.00	158.00	0.00	0.00	158.00
10	Thanjavur	154.60	4.60	1.60	1.60	162.40
11	Theni	0.30	0.60	0.30	0.30	1.50
12	Thiruvallur	15.00	15.00	15.00	15.00	60.00
13	Tiruvannamalai	1.56	1.56	1.56	0.00	4.69
14	Thiruvarur	32.00	4.00	2.00	2.00	40.00
15	Tirunelveli	30.00	0.00	30.00	30.00	90.00
16	Villupuram	15.00	15.00	15.00	0.00	45.00
	Total	564.57	494.26	288.96	366.40	1714.20

4. Establishing of Fish Stall / Retail Market

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Coimbatore	20.00	310.00	10.00	10.00	350.00
2	Cuddalore	15.00	0.00	15.00	0.00	30.00
3	Dindigul	5.00	5.00	0.00	5.00	15.00
4	Kancheepuram	5.00	5.00	5.00	5.00	20.00
5	Karur	10.00	10.00	0.00	0.00	20.00
6	Krishnagiri	10.00	0.00	0.00	0.00	10.00
7	Madurai	20.00	10.00	10.00	10.00	50.00
8	Sivagangai	10.00	0.00	0.00	0.00	10.00
9	Thanjavur	15.00	0.00	0.00	0.00	15.00
10	Thiruvallur	10.00	0.00	0.00	0.00	10.00
11	Tiruvannamalai	10.00	0.00	0.00	0.00	10.00
12	Thoothukudi	3.00	3.00	3.00	3.00	12.00
13	Tiruchirappalli	300.00	0.00	0.00	0.00	300.00
14	Tirunelveli	10.00	0.00	10.00	0.00	20.00
15	Vellore	10.00	10.00	10.00	10.00	40.00
16	Villupuram	10.00	0.00	0.00	0.00	10.00
17	Virudhunagar	10.00	10.00	10.00	0.00	30.00
	Total	473.00	363.00	73.00	43.00	952.00

5. Sea Ranching

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Erode	20.00	0.00	0.00	0.00	20.00
2	Kancheepuram	14.00	14.00	14.00	14.00	56.00
3	Krishnagiri	20.00	0.00	0.00	0.00	20.00
4	Nagapattinam	13.00	13.00	13.00	13.00	52.00
5	Pudukkottai	1.60	1.60	1.60	1.60	6.40
6	Ramanathapuram	35.00	35.00	35.00	35.00	140.00
7	Thiruvallur	14.00	14.00	14.00	14.00	56.00
8	Thiruvarur	7.80	7.80	10.40	0.00	26.00
9	Thoothukudi	35.00	35.00	35.00	35.00	140.00
10	Tirunelveli	14.00	14.00	14.00	14.00	56.00
11	Villupuram	70.00	70.00	70.00	0.00	210.00
	Total	244.40	204.40	207.00	126.60	782.40

6. Fisheries Research

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Coimbatore	0.00	3.00	0.00	0.00	3.00
2	Cuddalore	18.00	40.00	0.00	0.00	58.00
3	Kancheepuram	34.00	0.00	0.00	0.00	34.00
4	Kanniyakumari	15.00	18.00	0.00	0.00	33.00
5	Madurai	18.00	0.00	0.00	0.00	18.00
6	Namakkal	60.00	0.00	0.00	0.00	60.00
7	Salem	70.00	0.00	0.00	0.00	70.00
8	Thanjavur	15.00	0.00	0.00	0.00	15.00
9	Thiruvallur	90.00	0.00	0.00	0.00	90.00
10	Thiruvarur	15.00	0.00	0.00	0.00	15.00
11	Thoothukudi	280.00	0.00	0.00	0.00	280.00
12	Tiruchirappalli	3.00	0.00	0.00	0.00	3.00
13	Tirunelveli	15.00	0.00	0.00	0.00	15.00
	Total	633.00	61.00	0.00	0.00	694.00

7. Supply of Fishing Implements

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Coimbatore	1.00	0.50	0.50	0.50	2.50
2	Cuddalore	21.75	21.75	21.75	43.50	108.75
3	Dindigul	2.00	1.00	0.00	1.00	4.00
4	Kancheepuram	1.25	1.25	2.50	2.50	7.50
5	Karur	2.50	2.50	2.50	2.50	10.00
6	Krishnagiri	1.00	2.00	1.00	1.00	5.00
7	Perambalur	0.50	1.00	0.75	0.00	2.25
8	Pudukkottai	6.25	6.25	6.25	6.25	25.00
9	Thanjavur	0.00	10.00	10.00	10.00	30.00
10	Theni	0.60	0.60	0.60	0.30	2.10
11	Thiruvallur	43.50	25.00	25.00	21.50	115.00
12	Tiruvannamalai	1.50	1.50	1.50	0.50	5.00
13	Thiruvarur	10.00	10.00	10.00	0.00	30.00
14	Tiruchirappalli	2.50	2.50	2.50	2.50	10.00
15	Tirunelveli	2.50	0.00	2.50	0.00	5.00
16	Vellore	1.25	1.25	1.25	1.25	5.00
17	Villupuram	1.50	1.00	1.00	1.50	5.00
18	Virudhunagar	0.50	0.25	0.25	0.25	1.25
	Total	100.10	88.35	89.85	95.05	373.35

8. Capacity Building / Training / Demonstration / Study Tour

	Financiai: Rs.in Lakns						
Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total	
1	Coimbatore	1.00	1.00	1.00	1.00	4.00	
2	Cuddalore	2.50	2.50	2.50	2.50	10.00	
3	Dharmapuri	10.00	10.00	10.00	10.00	40.00	
4	Dindigul	4.00	2.00	2.00	2.00	10.00	
5	Erode	0.20	0.20	0.30	0.30	1.00	
6	Kancheepuram	2.00	3.00	3.00	2.00	10.00	
7	Kanniyakumari	2.00	2.00	3.00	2.00	9.00	
8	Krishnagiri	0.50	1.00	0.50	0.50	2.50	
9	Madurai	2.00	2.00	3.00	2.00	9.00	
10	Nagapattinam	2.00	1.00	1.00	1.00	5.00	
11	Namakkal	0.50	0.50	0.50	0.50	2.00	
12	Perambalur	1.00	2.00	1.00	0.00	4.00	
13	Pudukkottai	5.00	5.00	5.00	5.00	20.00	
14	Ramanathapuram	5.00	5.00	5.00	5.00	20.00	
15	Salem	2.50	2.50	2.50	2.50	10.00	
16	Sivagangai	2.50	2.50	2.50	2.50	10.00	
17	Thanjavur	10.00	10.00	10.00	0.00	30.00	
18	Theni	2.50	2.50	2.50	2.50	10.00	
19	Thiruvallur	5.00	5.00	5.00	5.00	20.00	
20	Tiruvannamalai	3.00	3.00	3.00	1.00	10.00	
21	Thiruvarur	1.00	1.00	1.00	0.00	3.00	
22	Tiruchirappalli	1.00	1.00	1.00	1.00	4.00	
23	Vellore	3.00	3.00	3.00	1.00	10.00	
24	Villupuram	3.00	3.00	3.00	1.00	10.00	
25	Virudhunagar	3.00	3.00	3.00	1.00	10.00	
	Total	74.20	73.70	74.30	51.30	273.50	

9. Provision of Moped with Ice Box

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Coimbatore	1.50	3.00	1.50	1.50	7.50
2	Cuddalore	3.00	1.50	1.50	1.50	7.50
3	Dindigul	1.50	1.50	1.50	3.00	7.50
4	Kancheepuram	1.50	1.50	1.50	0.00	4.50
5	Kanniyakumari	9.00	1.50	3.00	1.50	15.00
6	Karur	1.50	1.50	1.50	0.00	4.50
7	Krishnagiri	1.50	1.50	1.50	0.00	4.50
8	Madurai	1.50	1.50	3.00	1.50	7.50
9	Nagapattinam	1.50	1.50	1.50	3.00	7.50
10	Perambalur	1.20	2.40	0.90	0.00	4.50
11	Pudukkottai	1.50	3.00	1.50	1.50	7.50
12	Ramanathapuram	3.00	1.50	1.50	1.50	7.50
13	Thanjavur	3.75	3.75	3.75	3.75	15.00
14	Theni	1.50	1.50	1.50	0.00	4.50
15	Thiruvallur	1.20	1.20	1.20	0.90	4.50
16	Tiruvannamalai	1.50	1.50	1.50	0.00	4.50
17	Thiruvarur	1.50	1.50	1.50	0.00	4.50
18	Thoothukudi	2.25	2.25	2.25	0.75	7.50
19	Tiruchirappalli	2.25	2.25	2.25	0.75	7.50
20	Tirunelveli	9.00	0.00	1.50	1.50	12.00
21	Vellore	1.50	1.50	1.50	0.00	4.50
22	Villupuram	2.25	2.25	2.25	0.75	7.50
	Total	54.90	39.60	39.60	23.40	157.50

10. Others

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Kancheepuram	100.00	0.00	0.00	0.00	100.00
2	Krishnagiri	26.40	1.40	1.40	1.40	30.60
3	Madurai	0.00	15.25	0.00	0.00	15.25
4	Thanjavur	80.00	50.00	25.00	0.00	155.00
5	Theni	5.00	10.00	5.00	5.00	25.00
6	Thoothukudi	230.00	0.00	0.00	0.00	230.00
7	Tirunelveli	10.00	5.00	5.00	5.00	25.00
8	Virudhunagar	10.00	5.00	5.00	5.00	25.00
	Total	461.40	86.65	41.40	16.40	605.85

APPENDIX VII

PUBLIC WORKS DEPARTMENT

1. Establishment of Anicuts and Canals

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	206.00	50.00	0.00	0.00	256.00
2	Erode	0.00	650.00	0.00	400.00	1050.00
3	Karur	1050.00	1030.00	500.00	420.00	3000.00
4	Krishnagiri	0.00	0.00	25.00	0.00	25.00
	Total	1256.00	1730.00	525.00	820.00	4331.00

2. Other irrigation structures

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	0.00	116.00	50.00	167.00	333.00
2	Erode	337.50	562.50	562.50	562.52	2025.02
3	Ramanathapuram	0.00	10.00	11.00	3.75	24.75
4	Sivagangai	196.00	0.00	0.00	0.00	196.00
5	Villupuram	165.00	0.00	90.00	0.00	255.00
	Total	698.50	688.50	713.50	733.27	2833.77

3. Establishment of Dams

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	0.00	0.00	0.00	50.00	50.00
2	Erode	211.05	106.00	6.00	0.00	323.05
3	Krishnagiri	20.00	0.00	0.00	0.00	20.00
4	Tiruchirappalli	1901.00	0.00	0.00	0.00	1901.00
	Total	2132.05	106.00	6.00	50.00	2294.05

4. Establishment of Tanks

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	184.50	65.00	96.00	110.00	455.50
2	Dindigul	24.00	0.00	0.00	45.00	69.00
3	Erode	9.50	30.20	15.10	0.00	54.80
4	Kancheepuram	0.00	0.00	0.00	355.00	355.00
5	Kanniyakumari	130.00	130.00	130.00	130.00	520.00
6	Karur	45.00	45.00	0.00	0.00	90.00
7	Krishnagiri	263.00	135.00	100.00	40.00	538.00
8	Perambalur	44.55	62.11	53.21	46.50	206.37
9	Pudukkottai	0.00	0.00	0.00	0.00	0.00
10	Ramanathapuram	15.00	1043.22	558.75	230.90	1847.87
11	Salem	95.00	25.00	20.00	95.00	235.00
12	Sivagangai	2000.00	5529.50	3328.00	4037.26	14894.76
13	Thoothukudi	1079.50	600.00	600.00	635.50	2915.00
14	Tiruchirappalli	1901.00	0.00	0.00	0.00	1901.00
15	Tirunelveli	598.00	687.00	436.33	319.58	2040.91
16	Villupuram	794.00	707.00	602.50	829.86	2933.36
	Total	7183.05	9059.03	5939.89	6874.60	29056.57

5. Establishment of Anicuts

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	100.00	64.00	80.00	70.00	314.00
2	Dindigul	0.00	0.00	0.00	15.00	15.00
3	Erode	240.00	0.00	0.00	0.00	240.00
4	Kancheepuram	0.00	0.00	0.00	150.00	150.00
5	Krishnagiri	80.00	0.00	22.00	0.00	102.00
6	Ramanathapuram	15.00	0.00	0.00	0.00	15.00
7	Salem	10.00	0.00	0.00	0.00	10.00
8	Sivagangai	570.00	0.00	0.00	200.00	770.00
9	Tiruvannamalai	365.00	238.70	101.00	10.00	714.70
10	Tiruchirappalli	234.00	0.00	10.00	0.00	244.00
	Total	1614.00	302.70	213.00	445.00	2574.70

6. Establishment of Canals

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Coimbatore	880.00	755.00	635.00	630.00	2900.00
2	Dharmapuri	65.00	170.00	219.00	136.00	590.00
3	Dindigul	0.00	942.50	125.00	0.00	1067.50
4	Erode	743.85	621.15	1185.95	730.40	3281.35
5	Kanniyakumari	1934.05	1934.05	1934.05	1934.05	7736.20
6	Karur	1124.00	1390.00	0.00	0.00	2514.00
7	Krishnagiri	45.00	0.00	0.00	0.00	45.00
8	Ramanathapuram	289.43	703.10	806.24	727.81	2526.58
9	Salem	20.00	80.00	45.00	15.00	160.00
10	Sivagangai	0.00	12.00	0.00	0.00	12.00
11	Theni	950.00	0.00	0.00	0.00	950.00
12	Villupuram	159.00	0.00	0.00	0.00	159.00
	Total	6210.33	6607.80	4950.24	4173.26	21941.63

7. Establishment of Dams and Canals

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	0.00	0.00	30.00	0.00	30.00
2	Erode	0.00	0.00	30.00	0.00	30.00
	Total	0.00	0.00	60.00	0.00	60.00

8. Establishment of Tanks and Canals

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	60.00	22.00	30.00	0.00	112.00
2	Karur	260.00	0.00	0.00	0.00	260.00
3	Krishnagiri	0.00	0.00	0.00	125.00	125.00
4	Salem	0.00	0.00	30.00	15.00	45.00
5	Sivagangai	55.00	0.00	0.00	0.00	55.00
6	Thiruvallur	618.00	0.00	0.00	0.00	618.00
7	Tiruvannamalai	719.00	710.80	639.95	529.25	2599.00
8	Vellore	9132.80	0.00	0.00	0.00	9132.80
9	Villupuram	54.50	32.00	0.00	0.00	86.50
	Total	10899.30	764.80	699.95	669.25	13033.30

9. Anicuts - Channels - Tanks

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Cuddalore	1453.50	1674.00	2940.00	2137.00	8204.50
2	Dindigul	830.00	0.00	0.00	0.00	830.00
3	Kanniyakumari	625.00	625.00	625.00	625.00	2500.00
4	Karur	240.00	0.00	0.00	0.00	240.00
5	Krishnagiri	0.00	45.00	0.00	0.00	45.00
6	Sivagangai	352.72	349.30	225.09	268.50	1195.61
	Total	3501.22	2693.30	3790.09	3030.50	13015.11

10. Public Works Department Total

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Coimbatore	880.00	755.00	635.00	630.00	2900.00
2	Cuddalore	1453.00	1674.00	2940.00	2137.00	8204.00
3	Dharmapuri	615.50	487.00	505.00	533.00	2140.50
4	Dindigul	854.00	942.50	125.00	60.00	1981.50
5	Erode	1541.90	1969.85	1799.55	1692.00	7003.30
6	Kancheepuram	0.00	0.00	0.00	505.00	505.00
7	Kanniyakumari	2689.05	2689.05	2689.05	2689.05	10756.20
8	Karur	2719.00	2465.00	500.00	420.00	6104.00
9	Krishnagiri	408.00	180.00	147.00	165.00	900.00
10	Perambalur	44.55	62.11	53.21	46.50	206.37
11	Ramanathapuram	319.43	1756.32	1375.99	962.46	4414.20
12	Salem	125.00	105.00	95.00	125.00	450.00
13	Sivagangai	3127.22	5890.80	3599.09	4505.76	17122.87
14	Theni	950.00	0.00	0.00	0.00	950.00
15	Thiruvallur	618.00	0.00	0.00	0.00	618.00
16	Tiruvannamalai	1084.00	949.50	737.95	539.25	3310.70
17	Thoothukudi	1079.50	600.00	600.00	635.50	2915.00
18	Tirunelveli	598.00	687.00	436.33	319.58	2040.91
19	Vellore	9132.80	0.00	0.00	0.00	9132.80
20	Villupuram	1406.50	739.00	702.50	829.86	3677.86
	Total	29645.45	21952.13	16940.67	16794.96	85333.21

APPENDIX VIII

SERICULTURE SECTOR

1. Improved Variety

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	7.20	7.20	7.20	7.20	28.80
2	Dindigul	0.75	0.75	0.75	0.75	3.00
3	Karur	1.25	1.75	2.25	2.50	7.75
4	Namakkal	2.50	3.00	3.75	4.50	13.75
5	Erode	16.50	16.50	16.50	16.50	66.00
	Total	28.20	29.20	30.45	31.45	119.30

2. Organic Manuring / Vermi Composting

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	43.20	43.20	43.20	43.20	172.80
2	Vellore	2.25	4.50	4.50	4.50	15.75
	Total	45.45	47.70	47.70	47.70	188.55

3. Chawvie room and trays

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	45.60	45.60	45.60	45.60	182.40
2	Erode	5.18	8.63	8.63	8.63	31.05
3	Vellore	0.00	0.00	0.00	0.00	0.00
	Total	50.78	54.23	54.23	54.23	213.45

4. Rainwater Harvesting

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	14.40	14.40	14.40	14.40	57.60
	Total	14.40	14.40	14.40	14.40	57.60

5. Drip Irrigation

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	31.68	31.68	31.68	31.68	126.72
2	Karur	2.80	3.92	5.04	5.60	17.36
3	Namakkal	5.60	6.72	8.40	10.08	30.80
4	Vellore	2.25	6.75	6.75	6.75	22.50
	Total	42.33	49.07	51.87	54.11	197.38

6. Plantation – Subsidy

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Vellore	3.75	5.63	7.50	7.50	24.38
	Total	3.75	5.63	7.50	7.50	24.38

7. Sanitary Facilities

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	10.80	10.80	10.80	10.80	43.20
	Total	10.80	10.80	10.80	10.80	43.20

8. Training Centres

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	8.00	8.00	8.00	8.00	32.00
2	Dindigul	1.00	1.00	1.00	1.00	4.00
3	Karur	0.95	1.33	1.71	1.90	5.89
4	Namakkal	1.90	2.28	2.85	3.42	10.45
5	Salem	3.20	3.20	3.20	3.20	12.80
	Total	15.05	15.81	16.76	17.52	65.14

9. Fertilizers / pesticides / Disfectant / Inputs

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Karur	5.00	7.00	9.00	10.00	31.00
2	Namakkal	10.00	12.00	15.00	18.00	55.00
3	Salem	6.00	6.00	6.00	6.00	24.00
4	Vellore	10.00	12.50	10.50	10.50	43.50
	Total	31.00	37.50	40.50	44.50	153.50

10. Demos / Exhibitious

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Salem	0.20	0.20	0.20	0.20	0.80
	Total	0.20	0.20	0.20	0.20	0.80

11. Rearing sheds and Appliances

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	300.00	300.00	300.00	300.00	1200.00
2	Dindigul	11.50	11.50	11.50	11.50	46.00
3	Erode	163.13	148.63	208.75	208.75	729.25
4	Vellore	24.00	24.00	48.00	48.00	144.00
	Total	498.63	484.13	568.25	568.25	2119.25

12. Community Spinning, Twisting and Units

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Erode	56.38	53.38	64.92	82.25	256.92
2	Vellore	18.75	18.75	18.75	18.75	75.00
	Total	75.13	72.13	83.67	101.00	331.92

13. Mechanization

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	60.00	60.00	60.00	60.00	240.00
2	Salem	30.00	30.00	30.00	30.00	120.00
	Total	90.00	90.00	90.00	90.00	360.00

14. Total Sericulture

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	520.88	520.88	520.88	520.88	2083.52
2	Dindigul	13.25	13.25	13.25	13.25	53.00
3	Karur	10.00	14.00	18.00	20.00	62.00
4	Namakkal	20.00	24.00	30.00	36.00	110.00
5	Salem	39.40	39.40	39.40	39.40	157.60
6	Erode	241.18	227.13	298.80	316.13	1083.22
7	Vellore	61.00	72.13	96.00	96.00	325.13
	Total	905.71	910.79	1016.33	1041.66	3874.47

APPENDIX IX

FOREST SECTOR

1. Afforestation

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	24.00	24.00	24	24.00	96.00
2	Sivagangai	0.54	0.00	0	0.00	0.54
	Total	24.54	24.00	24.00	24.00	96.54

2. Agro Forestry

Financial: Rs.in Lakhs

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	12.00	12.00	12	12.00	48.00
2	Sivagangai	1.62	0.00	0	1.62	3.24
	Total	13.62	12.00	12.00	13.62	51.24

3. Soil & Moisture conservation + water harvesting

S.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	340.00	340.00	340	340.00	1360.00
2	Total	340.00	340.00	340.00	340.00	1360.00

4. Wild Life

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	91.20	91.20	91.2	91.20	364.80
2	Sivagangai	24.77	29.05	33.6	38.79	126.21
3	Total	115.97	120.25	124.80	129.99	491.01

5. Forestry total

Financial: Rs.in Lakhs

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Dharmapuri	467.20	467.20	467.2	467.20	1868.80
2	Kanniyakumari	24.77	29.05	33.6	38.79	126.21
3	Sivagangai	4.57	0.00	0	0.00	4.57
4	Total	496.54	496.25	500.80	505.99	1999.58

6. Nursery Raising

Sl.No.	District	2008-09	2009-10	2010-11	2011-12	Total
1	Sivagangai	2.45	0.00	0	0.00	2.45
2	Total	2.45	0.00	0.00	0.00	2.45

PHOTOS

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF ARIYALUR DISTRICT HELD ON 08.05.2008



District Collector Presiding Over the Meeting



TNAU Scientist Explains about the District Agriculture Plan



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF COIMBATORE DISTRICT HELD ON 20.05.2008



District Collector Presiding Over the Meeting



TNAU Scientist Explains about the District Agriculture Plan



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF CUDDALORE DISTRICT HELD ON 23.05.2008



District Collector Presiding Over the Meeting



District Agriculture Plan Presented by the TNAU Scientist



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF DHARMAPURI DISTRICT ON 09.05.08



NADP Briefing session at Dharmapuri Collectorate



TNAU Scientist Interacting with the Participants



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF DINDIGUL DISTRICT HELD ON 06.06.2008



District Collector Presiding Over the Meeting



TNAU Scientist Explains about the District Agriculture Plan



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF ERODE DISTRICT HELD ON 24.05.2008



District Collector Presides the Meeting



Professor and Head, ARS, Bhavanisagar – Presents the Highlights of District Agriculture Plan



Feedback from Participants

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF KANCHEEPURAM DISTRICT HELD ON 21.05,2008



District Revenue Officer Addressing the Gathering



President asking Queries



Participation of Panchayat Presidents

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF KANYAKUMARI DISTRICT HELD ON 12.05.2008



District Collector Addresses the Sensitization Workshop



TNAU Scientist Presents the District Agriculture Plan



Farmers Representatives and Panchayat Presidents Participation

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF KARUR DISTRICT HELD ON 19.05.2008



Joint Director of Agriculture Addresses the Meeting



Professor of Agricultural Economics Presents the Action Plan



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF KRISHNAGIRI DISTRICT HELD ON 16.05.2008



District Revenue Officer Addresses the Gathering



Professor and Head, RRS, Paiyur Welcomes the Gathering



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF MADURAI DISTRICT HELD ON 09.05.2008



District Collector Addresses the Gathering



Comprehensive District Agricultural Plan Presentation by TNAU Scientist



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF NAGAPATTINAM DISTRICT HELD ON 13.05.2008



District Revenue Officer Presides the Meeting



District Agriculture Plan - Presentation by TNAU Scientist



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF NAMAKKAL DISTRICT HELD ON 13.5,2008



Collector In-Charge Presiding the Meeting



TNAU Faculty Dr.K.Mahendran Explains the District Agriculture Plan



A View of the Panchayat Union Presidents and the Line Department Officials

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF PERAMBALUR DISTRICT HELD ON 09.05.08



District Revenue Officer Presides the Meeting



TNAU Scientist Presents the District Agriculture Plan



Participants in the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF PUDUKKOTTAI DISTRICT HELD ON 17.05.08



TNAU Scientists Presents the District Agriculture Plan



Agricultural Engineering Department Official Explains the Interventions to the Participants



Interactions by the Participants

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF RAMANATHAPURAM DISTRICT HELD ON 02.06.08



Address by the District Collector



TNAU Scientists Presenting the District Agriculture Plan



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF SALEM DISTRICT HELD ON 04.06.08



District Collector Presiding the Meeting



Presenting the Salient Feature of the District Agriculture Plan like TNAU Scientist



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF SIVAGANGAI DISTRICT 0048ELD ON 13.05.2008



The District Collector Addressing the Participants



TNAU Scientist Presenting the Report



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF THANJAVUR DISTRICT HELD ON 15.05.2008



Collector Presiding Over the Meeting



TNAU Scientist Explains the Activities of District Agricultural Plan



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF THENI DISTRICT HELD ON 14.05,2008



District Collector Presiding Over the Meeting



TNAU Scientist Explains the Activities of District Agricultural Plan



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF THIRUVALLUR DISTRICT HELD ON 15.05.2008



Presidential Address given by the District Collector



TNAU Scientist Explains the Activities of District Agricultural Plan



A view of the Participants of the meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF THIRUVARUR DISTRICT HELD ON 12.05.2008



The District Collector Presiding Over the Meeting



TNAU Scientist Explains the Activities of District Agricultural Plan



A view of the Participants of the meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF THOOTHUKUDI DISTRICT HELD ON 13.05.2008



The District Revenue Officer Presiding Over the Meeting



TNAU Scientist Explains the Activities of District Agricultural Plan



A View of the Participants of the meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF TIRUCHIRAPALLI DISTRICT HELD ON 24.05.2008



District Collect Presiding Over the Meeting



TNAU Scientist Explains the Activities of District Agricultural Plan



A View of the Participants of the meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF TIRUNELVELI DISTRICT HELD ON 16.05.2008



District Revenue Officer Presides Over the Meeting



Dean, AC & RI, Killikulam Explains the District Agriculture Plan



A view of the Participants of the meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF THIRUVANNAMALAI DISTRICT HELD ON 13.05.2008



District Collector Presides Over the Meeting



JDA Explains the Components Involved in the District Plan



A view of Participants of the meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF VELLORE DISTRICT HELD ON 10.05,2008



Project Officer, DRDA, Vellore presides over the Meeting



TNAU Scientist Explains the Activities of District Agriculture Plan



A view of the participation in the meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF VILLUPURAM DISTRICT HELD ON 10.05,2008



District Collector Presides over the Meeting



Presentation by the TNAU Scientist



A View of the Participants of the Meeting

NADP SENSITIZATION WORKSHOP AND DISCUSSION ON DISTRICT AGRICULTURE PLAN OF VIRUDHUNAGAR DISTRICT HELD ON 16.05.2008



District Collector Addresses the Participants



TNAU Scientist explaining about the District Agriculture Plan



A View of the Participants of the Meeting