

Krishis SUTRA 2



SUCCESS STORIES OF
FARMER PRODUCER ORGANISATIONS

Krishi Sutra 2

Success stories of
FARMER PRODUCER ORGANISATIONS

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सत्यमेव जयते

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भारत सरकार
MINISTER OF AGRICULTURE &
FOOD PROCESSING INDUSTRIES
GOVERNMENT OF INDIA

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MESSAGE

Krishi Sutra 2 is focused on success stories of FPO's which have emerged as an important platform to provide voice and bargaining power to farmers. The launch of this publication at the very outset of 2014, which has been declared as the "Year of Farmer Producer Organizations" by the Ministry of Agriculture, is indeed timely.

The inspiring stories in this collection serve as a reminder that seemingly impossible goals can be achieved through collective action. Our farmers have given food security to this country but have often been deprived of a fair value for their produce. The efforts of the Ministry of Agriculture during the XII Plan are, therefore, being focused on strengthening the bargaining power of farmers by mobilizing thousands of FPOs across the country and creating linkages with investments, services and markets.

I compliment SFAC on this effort and hope that they will maintain the momentum of supporting FPOs across the length and breadth of the country.

(Sharad Pawar)

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Government of India
Ministry of Agriculture
Department of Agriculture & Cooperation

MESSAGE

The first compilation of innovations in agriculture was brought out by SFAC under the Krishi Sutra series almost two years ago. I am happy to note that SFAC have followed up with a second publication in this series, which is focused on success stories of farmer collectives. FPOs have contributed significantly in enhancing farmer incomes wherever they have been backed by strong support systems. The stories in this compilation attest to the fact that given adequate support, FPOs can engage meaningfully at every stage of the agricultural value chain.

This publication heralds the beginning of the "Year of Farmer Producer Organizations" in 2014, and is expected to set the tone for similar initiatives during the course of the next few months. I hope SFAC would continue their efforts to convince State Governments, private sector companies, financial institutions as well as the farming community at large of the importance of building member-based farmer organizations and supporting them with credit, services and market linkage to ensure sustainability and viability of farming operations.

A handwritten signature in black ink, appearing to read 'Ashish Bahuguna'.

(Ashish Bahuguna)

Date: December 13, 2013



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Introduction

Member based FPOs offer a proven pathway to successfully deal with a range of challenges that confront farmers today, especially small producers. Overcoming the constraints imposed by the small size of their individual farms, FPO members are able to leverage collective strength and bargaining power to access financial and non-financial inputs, services and appropriate technologies, reduce transaction costs, tap high value markets and enter into partnerships with private entities on more equitable terms. With fragmentation of holdings due to generational transfer unlikely to abate, FPOs offer a form of aggregation irrespective of land titles with individual producers and uses the strength of collective planning for production, procurement and marketing to add value to members' produce. International and national experience in the performance of FPOs makes a strong case for policy support to member based farmer bodies, to significantly increase their power in the market place, reduce risks and help them move up the agri value chain.

With the increasing emphasis on FPO at the Central and State level, questions are being raised about the viability and sustainability of these institutions in the long run and their ability to promote interests of their members. In the context of 2014 being declared as "Year of Farmer Producer Organizations (FPOs)" by the Ministry of Agriculture, Government of India, greater attention is likely to be given to these emerging bodies. Any case for enhanced allocation of public and private resources to promote FPOs must be based on solid evidence, which illustrates the benefits of aggregation of farmers into institutions for increased access to income, investments and market opportunities.

This compilation of brief case studies of successful examples of collective action by farmers, working through organized institutions is a attempt to provide such evidence. While most of the successes are modest in nature, they are pointers to the immense potential of FPOs to integrate producers in the value chain. As the number of FPOs across the country rapidly increases, these success stories will perhaps serve as a source of inspiration and signposts of the direction in which the farming community is moving.

We also hope that the publication of these stories will generate interest in FPOs among a diverse range of stakeholders including policy makers, financial institutions, private sector entities and the media.

IN THE CONTEXT OF
2014 BEING DECLARED
AS "YEAR OF
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(FPOS)" BY THE
MINISTRY OF
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GOVERNMENT OF
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EMERGING BODIES.

1.

Developing Climate Resilience In Karnataka

Name of Farmer Producer Organisation (FPO):
Krishikabandhu Farmer Producer Company Ltd.

Supporting Resource Institution (RI):
Vrutti Livelihood Resource Centre

THE GULBARGA DISTRICT in northern Karnataka has the unique distinction of being known as the ‘tur bowl’ of the state. But even though 330,000 hectares of land is put under tur, or red gram, cultivation and production every year, the yield from this crop is abysmally low. A primary reason for this is the traditional method in which it is cultivated, which exposes the crop to drought, erratic rainfall and pest attacks. It is because of this that the tur farmers don’t get returns that are commensurate with their investments in the crop.

The traditional method of growing red gram involves a process called “dibbling”, in which the seeds are sown in a straight line while ploughing the land. Unfortunately, not much attention is given to the spacing between the seeds sown, and fertilizers are also indiscriminately sprayed. Because of these, any delay in rains directly affects the yield of the crop, while simultaneously increasing the risk of a pest attack.

Taking cognizance of these problems, a new technology was developed with the aim to significantly improve the yield of the crop. Under this new method, farmers first set up a separate nursery and grow red gram saplings, which are then transferred onto the field – in a scientifically measured fashion. For instance, while planting the saplings the farmers would need to ensure a 5 feet distance between each row of the saplings, and a minimum of 2 feet distance between the saplings themselves. This spacing allows them to sow an intercrop of maize or marigold.

Vrutti Livelihood Resource Centre – with support from the Krishi Vigyan Kendra (KVK) and the Agricultural Department, Karnataka and financial backing from the Small Farmers Agri-Business Consortium (SFAC) – demonstrated this new red gram transplanting method to the farmers of Gulbarga. This new technology has



» Nursery Raising



» Transplanted field

immensely benefited the farmers, and its introduction has helped reduce input cost, increase crop yield and mitigate the potential risk of crop loss due to late rainfalls.

A case in point is that of Malikarjun Patil – a progressive farmer from Gulbarga – who is a beneficiary of this new technology. The farmer from Kinnisultan village, Aland taluk, was approached by the Vrutti field staff, who introduced him to the sapling method. Initially, he tried this technique of red gram cultivation on 1 of the 10 acres of land that he owns. Commenting on the return-on-investment factor of this experiment, Patil says, “in the traditional method, I would spend Rs. 10,420 per acre on the inputs in one season, on which I would get a yield of 4 quintals. After selling this at Rs. 4,000 per quintal, I would earn a total of Rs. 16,000 from the product. In addition, I also grew green gram as (an) intercrop and this earned me Rs. 3,000 (more). My net profit from 1 acre of land was, thus, Rs. 8,760”.

Though there is an additional cost of setting up of the nurseries (to grow the saplings) in the new method, but that is entirely offset by the increase in yield, and lowered costs of seeds and chemical sprays used. To illustrate this point, another farmer, like Patil, talks about his successful experience with the new technology. He says, “The input cost in transplantation method was Rs. 10,260 per acre – not different from the traditional methods we used. However, the big difference was in the yield. I was able to produce 7 quintals of red gram with the new method, for which I earned Rs. 28,000. And with an additional Rs. 4,000 income from maize intercrop, I was able to make a net profit of Rs. 21,240 per acre, which is more than double the income from the traditional method.”

The viability of this new method is reflected in the success stories of Mallikarjun and many other farmers – members of Farmers Interest Groups and Farmer Producer Organization – who have adopted these practices. They say that even with little rainfall during the early stages of the growth of the crop, the plants are able to withstand dry conditions because they begin sprouting in the nurturing environment of nurseries. Because of this, farmers can now wait out the rain-less months without any fear of loss. Moreover, they are also able to get more



» Installation of pheromone trap for pest monitoring



» Transplanted - Nipping has been done



» Fully grown Red Gram plants

branches and flowers compared to the traditional method. Such is the impact of this new technology that they are planning to double the area of production by next year. This initiative is also replicable in other red gram-growing areas, which are vulnerable to drought and erratic rainfall. A scale-up of this initiative in the Gulbarga district has been facilitated by demonstrating the systematic training of the farmers in this process, and the results because of it.



Location/Address of FPO: Krishikabandhu Farmer Producer Company Ltd, Village: Kinnisultan, Taluka Aland, District: Gulbarga, Karnataka. Phone: Baburao Patil- 09740621115.

Contact Details of RI: Vrutti Livelihood Resource Centre, No. 19, 1st Main, 1st Cross, RMV 2nd Stage, Ashwathnagar, Bengaluru, Karnataka - 560094. Phone: 080-23419616, 23517241. Email: bala@vrutti.org | Website: www.vrutti.org.

2.

Aggregation Of Finer Cotton From Small-Holders

Name of Farmer Producer Organisation (FPO):

(1) Nimad Farmer Producer Company Ltd.

(2) Barwani Farmer Producer Company Ltd.

(3) Khargone Farmer Producer Company Ltd.

Supporting Resource Institution (RI):

Action for Social Advancement (ASA)

COTTON IS A high-paying cash crop, but in spite of increasing investments in this sector, the farmers are not getting adequate returns from cotton production and have even incurred losses in numerous cases.

Madhya Pradesh is known as the cotton belt and even though cotton is a cash crop, the farmers are usually smallholders from tribal communities. Due to the unavailability of supporting infrastructure, they face various problems right from the growth stage to the sale of crops.

The baseline survey showed that more than 90% of the target farmers sell cotton to local vendors or middlemen working for bulk procurers, who not only quote low prices but also subject the farmers to the hazards of improper weighing. Add to it the fact that each producer has a small quantum of produce further hampers their bargaining power, thus, resulting in the cotton being priced low. The NGO, Action for Social Advancement (ASA), introduced a way to address this issue by linking small cotton producers with the better cotton value chain in a manner that they get better prices. This has resulted in the elimination of the middlemen, and fair pricing and trade practices.

The producers in these areas were the members of the farmer producer companies (FPCs) who motivated the FPCs to step in as aggregators to overcome the various problems. The mediation is being actively implemented by FPCs and facilitated by ASA in the Barwani and Khargone districts, through the Barwani Farmer Producer Company Ltd, Nimad Farmer Producer Company Ltd and Khargone Producer Company Ltd, which are legal entities located in the general region of the state where most of the farmers are traditionally involved in cotton cropping.



» Weighing in progress at one of the procurement centers

The FPCs have entered into formal agreements with nine ginners in addition to establishing village-wise procurement centres where the farmers bring the produce. The farmers are required to grow the cotton under certain scientific guidelines, and the cotton thus produced is said to be more fine in quality, in terms of the fibre length and strength. The cotton quality is checked at the procurement centres, and weighed. The farmers are given a receipt for the goods, and the payment can be collected from the FPC office the following day. Sometimes, in a few bigger villages, the sale proceeds are



» Quality check by ginner buyer



» Better cotton to destination

directly transferred to the farmer's account.

This process has innumerable economic, social and professional benefits since it's a good bargain for both stakeholders. The farmers save time and money in transportation, their produce is correctly weighed and they are paid timely and since no middlemen are involved, while the ginners get bulk produce – in small lots and at one place – which insures quality. This aggregation of producers in FPCs also provides farmers with a platform to address the issues of backward and forward marketing linkages. For instance, the timely availability of agricultural

inputs such as fertilizers and seeds, etc.

At present, these services are restricted to the members of the company but there are plans to extend it to include non-members who reside in the vicinity. Similar services can also be started for other producers in different locations. One of the hindrances for the process is the lack of availability of the working capital with the FPC. If this problem is resolved, FPC would not be dependent on the ginners and could make direct payments to the farmers at enhanced prices. This is one way of ensuring that finer cotton fetches better prices.



Location/Address of FPO:

- (1) Nimad Farmer Producer Company Ltd., Village: Ojhar, District: Barwani, Madhya Pradesh
- (2) Barwani Farmer Producer Company Ltd., Village: Rajpur, District: Barwani, Madhya Pradesh
- (3) Khargone Farmer Producer Company Ltd, District: Khargone, Madhya Pradesh

Contact Details of RI: Action For Social Advancement (ASA), E-5/A, Girish Kunj,
Above State Bank of India (Shahpura Branch), Bhopal, Madhya Pradesh- 462016.
Phone: 0755-4057926, 2427369. Email: asa@asabhopal.org | Website: www.asaindia.org

3.

Increasing Income Through Value Addition In Tur

Name of Farmer Producer Organisation (FPO):

Akola Soy and Cotton Producer Company Ltd.

Supporting Resource Institution (RI):

Indian Grameen Services (IGS)

WESTERN VIDARBHA IS one of Maharashtra's major tur growing areas. But the farmers here mostly grow tur in small quantities – as an intercrop between soy and cotton. To optimize the income for the farmers interest group (FIG) members of this region, two groups worked towards setting up a dal mill at the village level to process raw dal, which is part of the staple diet of those living in the Vidarbha region – much like most other parts of the country.

The two FIGs (with 20 members each) – Gajanan Maharaj Fasal Utpadak Gat and Shriram Fasal Utpadak Gat – set up a mini-dal mill in Pohi, Maharashtra. These FIGs jointly looked after the operational and managerial aspects of the mill. The FIGs were graded on the basis of documentation, meetings, homogeneity and adoption of new activities. The groups showed a keen interest in the activities of the dal mill, and sought grant support from Sir Ratan Tata Trust for the same. The grant support was approved based on the readiness of the FIG to contribute to the construction cost of the shed required for the mill.

The Sir Ratan Tata Trust (SRTT) extended a support of Rs. 5 lakh from its fund as a loan for the producer company. This included machinery cost and a revolving fund of Rs. 2.5 lakh each and the group was supposed to contribute Rs. 2.5 lakh in the total outlay. A total of 21 household members were involved in this activity and the intention was to support 336 farmers.

But amid all this, there was one matter of concern – that the mill would be operational for only four months during the summer. If kept idle for the rest of the year, the machines would not remain operational, especially because of the extremely low temperatures during the winter months. To add to this, the farmers had to cope with payment of fixed charges for electricity, so keeping the machines operational for the rest of the months was



» Processing of Tur: First step of Processing



» Showing Second Touch of Tur

also not an option. The FIG members decided to return the sheller machinery and, instead, purchased floor machines that could run round the year. This way, the maintenance and electricity charges could be effectively covered from the floor mill profit. The machinery includes graders, double-roller machines, polishers and shellers.

Increase in employment opportunities was fortuitous fallout of this innovative step. Three FIG members were trained to run the machinery and the remaining members in other activities like spreading of tur on the floor, as well as the marketing and management of all activities. The FIG members also shared the mill operations among fellow farmers, with all FIG members being allowed to flour wheat of four-to-five households, including their own. It was also mandatory for all of them to contribute a minimum of 1 quintal tur for processing during the initial stage of the dal mill in order to run the unit.

Over time, there were several innovations within the dal mill which made the processing of tur more efficient. One such example is in the case of polishing tur. Edible oils are used to polish tur at the final stage – and around 150 ml of edible oil is needed for 1 quintal tur. However, the way the existing polishing machine functioned led to 1-2kg of dal per quintal being wasted on a regular basis. The machine operator smartly started using saline bottles to pour in the edible oil, thus, saving the time required for polishing and avoiding unnecessary wastage. Also, the management of the dal mill was assigned to each member of the mill daily on a rotational basis; and they managed the roster and substitutions, etc., amongst themselves.

The most vital and positive part of this change in the system was to bring a sense of ownership among the FIG member farmers. The long-term benefit of this innovative step is that now a similar mini-dal mill can be implemented anywhere since not only has its success been proved, but also because it is now known that understanding the operations and technological implementations of such a dal mill unit is not a difficult task – thereby, making it an easily replicable innovation.

For future projects, it can be said that if an area has the appropriate amount of tur productivity, then starting such



» After Grading Put Tur in Second Machinery (Double Roller Dal Mill)



» Inauguration of Shetkari Dal Mill (Tahasildar, RM of MAIDC, SRTT & IGS Maharashtra Team

a mini-dal mill is recommended. Because if the raw materials (such as tur) are available locally, then the output cost would automatically be less, resulting in an increase in profit margin. However, it would augur well to be cautious that a dal mill modelled on similar lines may face three basic problems: (1) lack of sufficient revolving fund to purchase the raw material (tur), (2) lack of a marketing plan to sell the stock in store, and (3) the seasonal functionality of the unit because of which one has to make arrangements for alternative use of the mill. But these are hardly deterrents since the benefits of the mill far outweigh the problems. Similar FIG groups or other farmer groups can set up such a mill and use it for other purposes during the off-season. This would also provide employment to few more villages during the slack agriculture season.



Location/Address of FPO: Akola Soy and Cotton Producer Company Ltd., Taluka Murtijapur District Akola, Maharashtra-441806. Phone: Ramesh Awaghate- 8888891368.

Contact Details of RI: Indian Grameen Services (IGS), BC- 247, Sector-1, Salt Lake City, Kolkata, West Bengal- 700064. Phone: 033-23596264. Email: info@igsindia.org.in | Website: www.igsindia.org

4. Adopting Floriculture As An Alternative Source Of Livelihood

Name of Farmer Producer Organisation (FPO):

Vrindavan Pushpa Utpadak Sangh

Supporting Resource Institution (RI):

Bharatiya Agro Industries Foundation (BAIF)

FLORICULTURE, OR 'FULSHETI', has emerged as an alternative source of livelihood for small and marginal farmers primarily because of the pioneering efforts made by the Maharashtra Institute of Technology Transfer for Rural Areas (MITTRA), a development organization promoted by the Bharatiya Agro Industries Foundation (BAIF). The income for these farmers, who were entirely dependent on agriculture, was very low because of dwindling natural resources and fragmented landholdings. To augment their income, 'fulsheti' – the model of floriculture suitable for small and marginal farmers – has been successfully tried in the predominantly tribal pockets of Jawhar, Vikramgad, Dahanu, Talasari and Palghar talukas

of the Thane district in Maharashtra.

Floriculture was adopted because of the various advantages associated with it, such as limited (or less) seed capital requirement since it was a small-scale cultivation, it generated faster income compared to tree-based farming, and management is easier, not to forget the permanent income opportunity from selling the flowers. The fulsheti model took shape while working with the tribal community in Thane. It includes the cultivation of 200 jasmine plants on 500 sq. m (0.05 ha) of land, with an investment of Rs. 3,000. The collective marketing of flowers through common-interest groups ensures a net income of around Rs. 27,000 a year

DETAILS OF THE JASMINE CULTIVATION MODEL

Particulars	Details
• Plot size	500 sq. m
• Crop	Jasmine(Mogra)
• Variety	Arabian Nights, locally known as Bangalori
• Nature of the crop	Perennial
• Plant life	12 Years
• Avg. no. of plants in 500 sq.m	200
• Commencement of income	6 months after plantation
• Harvesting interval	Daily
• Avg. production per day	700 gms
• Avg. production per year	189 kg
• Avg. gross income received in one year at Rs160/kg	Rs. 30,240



» Jasmine flower

IN JAWHAR, VIKRAMGAD, Dahanu, Talasari and Palghar talukas – dominated by the tribal communities of the Kokna, Warli, Mahadeo Koli and Katkari tribes – families are predominantly dependent on agriculture. The low quality of land and lack of awareness regarding modern farming practices and money for investment leads to low productivity of crops in these areas. Due to the non-availability of irrigation, rabi cultivation is almost non-existent, while during monsoons, crops such as paddy, finger millet, proso millet (warai) and niger (khursani) are grown.

As a result of such subsistent nature of farming, many families in this region have been forced to migrate to nearby towns for survival after the Holi festival in March. This large-scale migration has a negative impact on the family's health and the children's education. Malnutrition among women and children is very high. Despite its proximity to Mumbai, India's commercial capital, these areas have shortage of basic amenities such as hospitals, schools, roads and electricity.

It was in these talukas that the Vrindavan Pushpa Utpadak Sangh (VPUS) was formed with efficient collective marketing and support from BAIF-MITTRA. Representatives of the villagers form the management committee of these organizations. There is no membership fee for the federation, and the only criterion is that the member has to be a tribal farmer and should have an interest in jasmine cultivation.

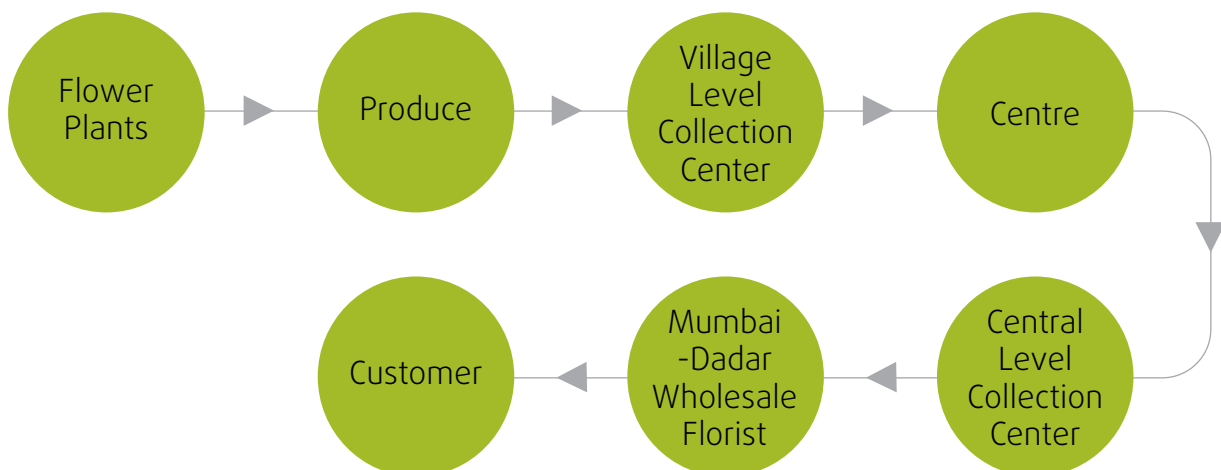
The process begins with having harvested the flowers by 7am, which are then brought to the village collection

centres. The produce from each member is weighed and packed in jute sacks; it is then collected from the village bus stands and transported to Dadar in Mumbai by either bus or train. One or two members accompany the produce for safeguarding it from damage during transportation. The VPUS's secretary keeps a record of income and expenditure to arrive at cost per kg of the flower to be paid to the producers.



» BAIF MITTRA Floriculture Training programme

FLOWER SUPPLY CHAIN



THE FLOWER RATES in the market vary daily on the basis of demand and supply. The traders pay the Sangh every month based on the prevailing rates for each day. The amount received from the trader is deposited in the Sangh's bank account. Members are paid on a monthly basis after deducting the expenditure incurred on marketing. Each member contributes Rs. 10 per kg of flower sold, towards the sustainability fund of the Sangh – which is, in turn, used to purchase input material for cultivation. The input material is provided to the members at a cost.

About 1,904 farmers are involved in floriculture as an income-generation activity in Thane. Over the years, the farmers have earned more than Rs. 2 crore from selling jasmine. Not only has this money helped improve the quality of life, education and health of the farmers but also helped them build their asset base by constructing homes and wells, buying vehicles and other agricultural implements to aid floriculture. Working in groups has improved the social interactions among farmers by developing their communication skills and also helped in developing leadership skills at the community level. Exposure to the markets in Mumbai has boosted the confidence of the members who are now experimenting with other flower varieties such as marigold, gaillardia, rose and tuberose.

The sustainability of this model is definite because the

plants are hardy and even in the most unfavourable conditions there is scope for some nominal income. Since there is a demand for flowers all through the year, it can be categorized as a perennial source of income that helps sustaining the interest of the farmers. This initiative has successfully been replicated by 3,000 tribal families, across 14 tribal dominated talukas of Maharashtra, falling under six districts (Thane, Nasik, Nandurbar, Dhule, Nanded and Ahmednagar) with similar conditions. The formation of common interest groups and their federation at the taluka level has effectively democratized the process and brought in total transparency. Collective marketing has allowed small producers to sell their flowers, enabling producers to realize better incomes from collective bargaining due to higher volumes involved.

Publications:

Article published in the prestigious magazine "LEISA INDIA", Volume 14, No. 3, September 2012, "Collective Marketing for Better Income through Floriculture".

Article published in "Policy Innovation.org", New York, USA, on 11 December 2012, "Buds of Hope: Organic Jasmine Floriculture Supplements Farmer Income in Maharashtra"

Reported by: Kailas Andhale, MITTRA, Nashik



» One Year Jasmine Plot



» Flower value addition



Location/Address of FPO: Vrindavan Pushpa Utpadak Sangh, C/o- BAIF MITTRA Office, Amarai Campus, Jawahar Nasik Road, Post & Taluka Jawhar, District: Thane, Maharashtra- 401609. Phone: Shri. Eknath Baban Mukane – 0970208988.

Contact Details of RI: Bharatiya Agro Industries Foundation (BAIF), BAIF Bhawan, Dr.Manibhai Desai Nagar, Warje, District: Pune, Maharashtra- 411058. Phone: 020-25231661, 64700562, 64700175. Email: baif@baif.org.in | Website: www.baif.org

5. Promoting Backyard Poultry Among The Tribes

Name of Self Help Group (SHG):
Savitribai Mahila Self Help Group

Supporting Resource Institution (RI):
Bharatiya Agro Industries Foundation (BAIF)

IN 2011, A backyard poultry model was initiated in the predominantly tribal area of Nandurbar district, which was largely dependent on agriculture. The model, which was disseminated through a network of existing SHGs (self-help groups) supported by the Bharatiya Agro Industries Foundation (BAIF), had been started with an aim to provide surplus income and gainful self-employment to the Konkani, Bhil and Pawra tribes. The reason for choosing backyard poultry was because of its multifarious advantages including low gestation period, minimal investment that could be easily managed by the family members, less capital and availability of a ready market for chicken.

The process begins with each participant being given one-month-old chicks – at Rs. 60 per chick – through the community-owned hatchery. The MITTRA staff provides them with the necessary technical guidance for bird rearing, which includes proper feeding practices, build

sheds using locally available material, and vaccination schedules. The vaccination, however, is purchased by the participants based on their needs. The mother units (hatchery) are also run by local entrepreneurs or SHG members, depending upon the location.

Initially, in order to involve more participants, extensive demonstrations of different package practices were given to SHG members through exposure visits and awareness campaigns. Group discussions and workshops were also organized at regular intervals, and the members responsible of running the hatchery were provided extended intensive training for managing operations.

The income from this activity is dependent upon various factors, such as the size of birds reared, number of birds used by the family for self consumption and the number of eggs used for self-consumption. It has been found that from 10 birds (1 cock and 9 chicks), each family earns Rs. 2,000-3,000 on an average from sale of birds and eggs



» Vaccination in village



» Cage made up of locally available material



» Mother Unit with 15 day old chicks

(discounting the ones consumed by the family). The lot size of 10 birds doubles by the end of the year after factoring in birds sold and consumed by the family themselves. A major part of the income comes from selling the birds.

Therefore, in order to ensure an uninterrupted supply of quality chicks, MITTRA had set up a mother unit (hatchery). This hatchery was handed over to one local SHG after imparting adequate training to them. Currently, there are five such hatcheries that supply chicks; on an average, the current lot size ranges from 1,000 to 1,500 chicks. The rearing cost of each chick is in the Rs40-45 range, which includes cost of food and vaccination. Each

chick is sold at Rs. 50-60, which begets an average net profit of Rs. 15 per bird. If 1,000 is considered the average lot size, taking into account 10% mortality, then the profit works out to be Rs. 13,500 per batch. In a year, four to five such lots of chicks can be reared in a hatchery.

Backyard poultry is now practised by 770 families in 20 villages of the Nandurbar and Dhule districts. The programme has now become self-sustainable, with people purchasing chicks and other inputs such as vaccination at market rates. Hatcheries, or mother units, are run profitably by local entrepreneurs as well as by SHG members.

NUMBERS AT A GLANCE (MAR 2011 TO SEP 2012)

S No.	Progress 2010-11	Dhadgaon	Akkalkuwa	Nandurbar	Sakri	Total
1.	No. of villages covered	1	2	6	11	20
2.	No. of families involved	30	30	396	314	770
3.	No. of birds given	300	300	6,357	4,768	11,725
4.	No. of participants who own birds	300	300	7,365	1,865	9,680
5.	No. of SHG members involved	30	30	188	314	462



» Locally developed Egg incubator



» Sale of egg in local market

NUMBERS AT A GLANCE (MAR 2011 TO SEP 2012)

S. No.	Owner of Mother Unit (Name)	Village	Block	No. of Batches	No. of Chicks per Batch	Mortality		Chicks Sale per Batch	Avg. Rate of Sale/ Chick	Expen/ Chick	Income from Batch (in Rs)	Total
						No.	%					
1.	Kanhaiyalal Sabale	Karanzhati	Sakri	1	500	0	0	500	60	45	7,500	29,550
				2	800	100	13	700	60	45	10,500	
				3	800	30	4	770	60	45	11,550	
2.	Amit Uttam Mahale	Kuhar	Sakri	1	900	20	2	880	60	45	13,200	41,970
				2	900	40	4	860	60	45	12,900	
				3	300	112	37	188	60	45	2,820	
				4	900	30	3	870	60	45	13,050	
3.	Bhatu Manga Suryawanshi	Ajepur	Nandurbar	1	500	0	0	500	60	45	7,500	65,800
				2	500	0	0	500	60	45	7,500	
				3	800	20	3	780	60	45	11,700	
				4	900	70	8	830	60	45	12,450	
				5	900	90	10	810	60	45	12,150	
				6	600	60	10	540	60	45	8,100	
				7	1,000	200	20	800	50	42	6,400	
4.	Kamalbai Krishna Chaudhari (SHG)	Waghale	Nandurbar	1	1,000	314	31	510	50	42	4,080	6,720
								176	60	45	2,640	
5.	Vimalbai Shatrughna Gangurde	Shrirampur	Nandurbar	1	1,500	36	2	824	60	45	12,360	17,400
								630	50	42	5,040	

Reported by: Yogesh Bhamre, MITTRA, Nashik, and Sharat Jha, BAIF, Pune



Location/Address of FPO: Savitribai Mahila Self Help Group, Shrirampur, Wagale, Block Nandurpur, Maharashtra. Phone: Mr. Shatugan Gagurde – 09552771952.

Contact Details of RI: Bharatiya Agro Industries Foundation (BAIF), BAIF Bhawan, Dr.Manibhai Desai Nagar, Warje, Pune, Maharashtra- 411058. Phone: 020-25231661, 64700562, 64700175. Email: baif@baif.org.in. | Website: www.baif.org

6.

Achieving Economies Of Scale Through Agri Business Centers

Name of Farmer Producer Organisation (FPO):

Shri. Laxmi Rythu Vyaparkendram

Supporting Resource Institution (RI):

Bharatiya Agro Industries Foundation (BAIF)

INDIA'S AGRICULTURAL MARKET is plagued by varied issues such as weak market orientation, lack of infrastructure, dependence on monsoon and ignorance about marketing prospects. With a view to address these issues the BAIF Institute for Rural Development (BIRD) in Andhra Pradesh and ITC-MSK in Kolkata, initiated agribusiness centres (ABCs) Prakasham and Guntur districts of Andhra Pradesh.

The selected sites are located in drought-prone areas of Vinukonda, Bollapalli and Epuru mandals in Guntur, and Kurichedu, Darsi and Donakonda mandals in Prakasham. Most of the farmers here are small or marginal, and mainly grow chilli, tobacco, cotton red gram and castor.

While joining the ABC, there is a one-time membership fee of Rs. 600 for the farmers. Apart from that, each member has to deposit a monthly fee of Rs. 100. These contributions make up the ABC corpus, which is then used to fund its activities, such as collective procurement for inputs, collective marketing, establishing custom hiring centres, savings and internal lending, and some small-scale activities such as collection of neem seed kernels,

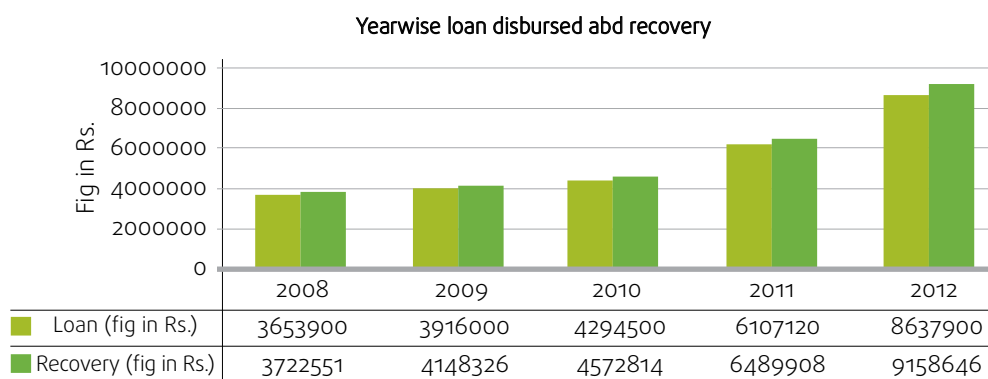
organization of health camps, sale of mineral mixture, fodder on bunds and vermi-composting, etc.

The underlying concept behind the ABCs includes greater community participation while conceptualizing ideas, as well implementing farm-based activities with an aim to make every centre operated by farmers self-reliant. In addition, the ABCs organize farmers into groups so that they can take advantage of economies of scale along with diversifying the risks among the entire group.

The corpus of 25 ABCs now stands at Rs. 52.77 lakh, of which farmers' contributions account for Rs. 8.65 lakh, monthly savings Rs. 4.54 lakh and revolving funds given through project are worth about Rs. 39.58 lakh. This corpus has helped the ABCs to become self-sustainable and successfully develop linkages in the market for the farmers.

ABCs are involved in internal lending where 100% recovery is assured and the rate of interest is mutually decided by the ABC members. The year-wise data has been presented in Fig. 1

FIG. 1: YEAR-WISE LOAN DISBURSED AND RECOVERY (UP TO DEC 2012)



All the ABCs have custom hiring centres, which have the agriculture implements listed in Table 3. ABC rents these equipments for a fee and the collected amount is added to the savings.

TABLE 3: EQUIPMENT AVAILABLE AND RENTAL CHARGES

S. No.	Equipment	Units (No.)	Unit Cost (in Rs)	Total Asset value (in Rs)	Rental Charges per Unit (in Rs)	
					ABC	Private
1.	Pipes	1345	650	8,74,250	3	7
2.	Drums	443	700	3,10,100	10	20
3.	Sprayers	13	12,000	1,56,000	70	150
4.	Ridges	12	1,300	15,600	20	—
TOTAL		1,813	14,650	13,55,950		

Through collective procurement, a group of selected members visit traders and purchase inputs in bulk, thus saving 10-13% per bag on transportation and ensures the timely availability of the quality inputs as well.

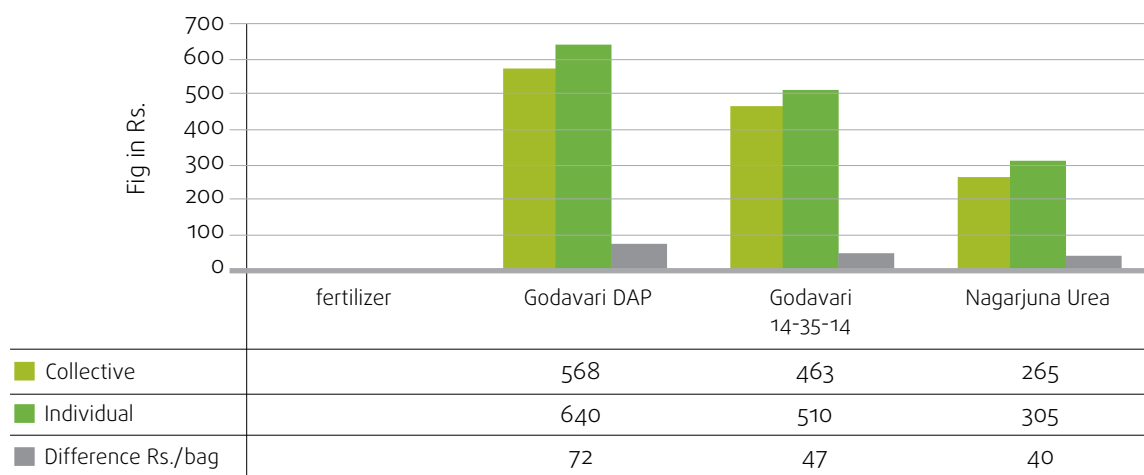


» Collective procurement of fertilizer



» Tobacco stitching machine through Custom hiring center

DIFFERENCE OF RATE DURING PROCUREMENT OF FERTILISER



With the percentage of rate gain in 2011-2012 being 43%, and an additional 50% saved on transportation cost, collective marketing has also shown positive results akin to collective procurement.

The scalability of the model can be gauged from the fact that within a span of six years the number of ABCs has increased from 1 to 25, with the total number of members

currently at 1,285. The concept is replicable across the country as issues addressed by ABCs are prevalent throughout the nation. In fact, this model has already been successfully adopted by 25 vegetable growers in the Damrgidda cluster of Mahbubnagar district in Andhra Pradesh.



» Capacity building of ABC member



Location/Address of FPO: Shri Laxmi Rythu Vyaparkendran, C/o Bareddy Nagireddy, Village- Parvathipuram, Vinukonda, Mondal, District: Guntur, Andhra Pradesh- 522647, Phone: Shri Bareddy Nagireddy- 09441537639

Contact Details of RI: Indian Grameen Services (IGS), Bharatiya Agro Industries Foundation (BAIF), BAIF Bhawan, Dr. Manibhai Desai Nagar, Warje, Pune, Maharashtra- 411058. Phone: 020-25231661, 64700562, 64700175. Email: baif@baif.org.in. | Website: www.baif.org

7.

Resolving Issues of Fodder Scarcity in The Mountains

Name of Self Help Group (SHG):

Bhatwari Valley Association

Supporting Resource Institution (RI):

Appropriate Technology India (ATI)

NESTLED IN THE Himalayan hills of Uttarakhand is a quintessential village “Lata” in Uttarkashi district – one of the remotest villages of the district of Uttarkashi. It was here that a women’s dairy producer group was formed under the dairy subsector programme in 2008 with the aim of developing sustainable livelihood and paving the way for business development services by achieving economies of scale in this sector.

The scarcity of green fodder posed as one of the major hindrances for such an activity in this hilly place, since the entire community is dependent on forests for its fodder supply. This was also one of the reasons why the village women were sceptical about dairy as a business activity, since they felt that this would force them to spend more time in the forest to fetch fodder for the animals.

Realizing that fodder was a critical input for the dairy sector, the group – after much deliberations – found an effective solution to resolve the issue of fodder scarcity by collectively cultivating green grass fodder in the ‘van

panchayat’ land. The 48-member dairy producer group of Lata village collectively started the cultivation of green fodder in van panchayat land, which has now fulfilled the village’s fodder requirement to a great extent (from the initial 3 tonnes to 9 tonnes in a season).

Initially the village women were organized to form five producer groups for the purpose of this dairy subsector development programme. The main purpose behind organizing producers, who were dependent on traditional income sources, was to achieve the scale of economies in the dairy sector, which remained at the subsistence level until recently. The organization of women as dairy producer groups has paved the way for business development services (BDS) and helped them move the activities to business levels. The group has given due attention to address the problem of fodder by negotiating with the van panchayats to initiate permanent fodder cultivation.

The collective commercial production of perennial grass



» Utilizing fallow land for fodder cultivation



» Village women organised to perform collective action

on van panchayat land has provided an additional income to the dairy producers. The production of fodder has had a good impact in terms of increased milk production, because of which the dairy producers have been able to generate a sustainable income. The groups are an example of how collective work can solve problems. They no longer have to spend their time in the forests now and can utilize it for their children's education. Thus, on the one hand, they have reduced their labour on land and, on the other, they have developed a sustainable livelihood option leading to improved resource management in the van panchayats.

To further reduce the workload on women and the pressure on existing forest resources, a stall-feeding system has been adopted by the group since they are adept in natural resource management. These attempts to develop grass fodder have had other positive impacts as well, such as the reduced intensity of soil erosion specifically during the monsoon season. Now, dairy producers ear Rs. 20,000-30,000 annually from the commercial cultivation of fodder and Rs. 1,000-1,200 a month from the sale of fresh milk.

Land cultivation faces many challenges in the mountains, a crucial one being the dependence on nature

for irrigation. This combined with other challenges such as destruction by animals, scattered holdings and difficult terrains – has led to shrinkage in agricultural activities. The answer to these problems lies in the commercialization of subsistence-based livelihood activities. By utilizing fallow land for fodder cultivation, the women federations have been able to generate some income. They are assisted by the veterinary department in the creation of infrastructure, such as fencing and land development, to upscale the commercial fodder activity. This commercial model has been replicated in many other van panchayats that involve community for their own natural resource management. It has also led to the revival of community-based organizations that utilize their own idle resources to generate income and, at the same time, conserve their environment.

AWARDS/HONOURS (If any)

The women's dairy cooperative has received recognition from the district administration, and the veterinary department has been awarded Rs.50,000 for this innovation. The women dairy producers have also been helped by other line departments – with machinery and equipments – to upscale the dairy sector



» Land Development to upscale the Commercial fodder activity



» Resource Management in the Van Panchayats



Location/Address of FPO: Bhatwari Valley Association, Village Lata, District Uttarkashi, Uttarakhand.
Phone: Bharat Singh Negi - 09012155044

Contact Details of RI: Appropriate Technology India (ATI), Mandir Marg, Guptkashi, District Rudraprayag, Uttarakhand- 246439. Phone: 01364-267355, Email: admin@atindia.org | Website: www.atindia.org.

8.

Minimizing Cost Of Production Through Relay Cropping

Name of Farmer Producer Organisation (FPO):

Junnar Taluka Farmer Producer Company Ltd.

Supporting Resource Institution (RI):

Vegetable Growers Association of India (VGAI)

RELAY CROPPING IS a new technique that aims at augmenting the income of the farmers by two to three times by minimizing the cultivation and land preparation costs, which in turn is achieved by paring labour cost and increasing the labour efficiency. It is also directed at providing an escape from the complications caused due to the failure of a single crop that has the potential to provide good prices in the market. By being able to grow two to three crops within four to six months, the technology enables farmers to successfully overcome the fluctuating market prices, thereby, reaping maximum benefits.

Under the method adopted by this technology, different categories of crops are taken and planted consecutively in a row, or relay. The second crop is sown about 20-30 days after the first crop is harvested on the same land, and a similar method is then followed for the third crop. For instance, take the example of three crops, the first being tomato, the second cucumber and the third cowpea.

The third crop (cowpea) will, under this method, be sown 20-30 days before cucumber is harvested and this procedure is then repeated for the first crop.

This method can be made more efficient by leaps and bounds if caution is exercised while making provisions to control soil-borne diseases. One such precaution is to apply Trichoderma races mixed with Farm Yard Manure(FYM) while preparing the raised bed. This application should be carried through the process of 'dripping', which needs to be done at an interval of 15 days.

This innovation has proved to be extremely beneficial for the farmers because it has successfully lowered cultivation cost as well as the amount of time and effort required by these farmers. The concept can be conveniently replicated at all geographical locations, provided the farmers are certain about the crop combinations on their land. In fact, numerous farmers have already started implementing this technology on their farms that are situated in other parts of the country.



» Cabbage-Maize-pumpkin together on the same land



» Soy-Sunflower

For instance, this method is being practised on hundreds of acres of land in Narayangaon, in Pune, Maharashtra, and in other nearby places as well.

Thus, this technology entails a lot of benefits for the farmers. First, it is suitable and can be used on other

locations as well. Second, by cutting down costs, it helps in augmenting the farmers' incomes by two to three times, and third, the farmers can successfully overcome fluctuating market prices by growing two to three crops within four to six months.



» Relay Cropping System



Location/Address of FPO: Junnar Farmer Producer Company Ltd., Nariangaon, Taluka Junnar, Distirct: Pune, Maharashtra.

Contact Details of RI: Vegetable Growers Association of India (VGAI), C/o Parmanand, Co-ordinator, Icon Building, Opposite Nidan Hospital, Nashik Road, Narayangaon, Taluka Junar, District: Pune, Maharashtra- 411005. Phone: Shriram Gadhawe- 07588031777, Email: vegetablegrowersassociation@yahoo.com

9. Spice Seed Production By Small Women Farmers

Name of Farmer Producer Organisation (FPO):

Kirtinagar Valley Association

Supporting Resource Institution (RI):

Appropriate Technology India (ATI)

CULTIVATION OF SPICES on a commercial scale is a new phenomenon in the districts of Rudraprayag, Chamoli, Tehri, Uttarkashi and Pauri Garhwal of Uttarakhand. This started to meet the demands generated by the SHGs for less labour-intensive income generation and high-value crops with low volume. Over 4,500 producers came together as 500 producer groups (PGs) to cultivate variety of organic spices in these mountaineous districts. However, one of the major challenge faced by the PGs was the availability of quality seeds. The seeds – that were initially sourced from outside – were not only costly but also insufficient, and did not even translate into the desired levels of production.

To counter this impediment, the women in this region came up with an innovative solution. They decided to produce their own seeds by marking out certain zones for the production of quality seeds. A few group members were unanimously elected and others vouched for purchasing the seeds from them on cost basis. Thus far, 35 women have been engaged in the production of a variety of spice seeds; around 7 ha of collective land has been put under seed cultivation, 230 mountain villages have been roped into the seed production process in conformity with the organic farming practices, which include biological inputs in seed zones/farms.

The organic spices 11-member group of the Malupani village, in district Tehri Garhwal, has started the seed production experiment in a similar agro-ecological situation (AES). The total requirement of the seeds that the producers outsource, estimated to be nearly 302 quintal, is now being produced by 35 women. The groups and business service providers (BSPs) have been trained by the extension team of Appropriate Technology India (ATI), an NGO working in the region, and other expert institutions. The women now act as seeds supply BSPs for



» Collective land put under seed cultivation



» Collective land put under seed cultivation

their respective groups.

Though seed production is a recent activity, it is expected to generate an annual income of Rs. 28,000 for the BSPs engaged in the activity. In addition, the spice producers have better accessibility over the quality seeds since the seed production takes place in the nearby areas, and the organic practices – which makes the seeds more beneficial for local ecology – can be strictly monitored.

Currently, this seed production experiment has been adopted across villages in all five districts of Rudraprayag, Chamoli, Tehri, Uttarkashi and Pauri Garhwal. In the hills, a majority of the farmers are marginal and have small and

scattered landholdings that are, mostly, rain fed. The cultivation, therefore, requires higher input cost and labour. The quality of seeds is a major factor in reducing cultivation cost and increasing production, and thus, multiplying the farmer's income. This premise has encouraged other Producer Groups (PGs) to replicate the seed-production model in similar Agro-ecological situations (AESs) in their villages, making quality seeds accessible at a lower cost compared with the seeds sourced from elsewhere. At present, seed production zones are present in 34 villages.



» Seed Production Experiment Plot



Location/Address of FPO: Kirtinagar Valley Association, Village: Malupani, Kirtinagar, District: Tehri, Garhwal, Dehradun, Uttarakhand. Phone: Smt. Sangita Devi - 8937411038, Smt. Basu Devi - 9756361221.

Contact Details of RI: Appropriate Technology India (ATI), Mandir Marg, Guptkashi, District Rudraprayag, Uttarakhand- 246439. Phone: 01364-267355. Email: admin@atindia.org. | Website: www.atindia.org.

10.

A Producer Company Owned By Rural Women In Uttarakhand

Name of Farmer Producer Organisation (FPO):

Devbhumi Natural Products Producer Company Limited (DNPPCL)

Supporting Resource Institution (RI):

Appropriate Technology India (ATI).

DEV BHUMI NATURAL Products Producers Co. Ltd (DNPPCL) is a community-owned company with a vision to create conservation through enterprise. It works towards this goal by actively promoting its core activities – such as sericulture, organic honey, organic spices and eco-tourism – in some of the remote villages of Uttarakhand. DNPPCL works closely with 4,500 primary producers, including 3,500 shareholders who're also involved in the commercial cultivation of some of these products. These activities are spread out over 450-odd remote villages in the five districts of Rudraprayag, Chamoli, Tehri, Uttarkashi and Pauri Garhwal in Uttarakhand.

DNPPCL's pioneering efforts to develop infrastructure in all these areas have enabled the primary producers to actively move up the value chain, and also enabled the company to post a turnover of Rs. 1.7 million in 2011-12. Because of this initiative, 4,500 primary producers – mostly women – now get better prices for their produce,

aided by innovative steps like the setting up of primary processing facilities for organic spices, organic honey production and in sericulture. These processes have improved the capacity of primary producers, and helped in value addition, improved processing, sorting and grading, hygienic storage and transportation.

The company has created a strong marketing network across the country and is continually working towards establishing a national and global presence for its certified organic produce from the Himalayan region. This has brought rural produce from the remote hill regions to the mainstream market. Once the producers start cultivating commercial crops, such as honey, spices and other items, they become the DNPPCL shareholders; and the company then helps the primary producers across various stages of value chain so that they don't just limit themselves to the supply aspect of it. This movement across the growth of value chain has ensured economic returns of Rs. 2,000-5,000 per month. The producer company provides



» Oak Tassar Silk



» Devbhumi Oaksilk Shawl

doorstep support in collection, storage, transportation as well as primary processing of the produce, and offers the required infrastructure for effectively undertaking these value chain-based activities.

Thanks to the firm's pioneering work in marketing their products, the DevBhumi brand name is well-recognized and readily available in the market – especially certified organic honey. Also, the company's sericulture wing (which involves rearing and processing cocoons into yarn) weaves a unique blend of "oak tussar" – used to make a variety of designer shawls, stoles and scarves – which is widely popular. Highly priced organic spices and rajma (kidney beans) – indigenous to the Himalayan regions – are also grown, processed and marketed by the company. Its eco-tourism section allows the visitors to experience the lifestyle, culture and natural wealth of rural Uttarakhand without compromising on comfort or luxury, along with minimal damage to the delicate ecological balance of this region.

Thus, it can easily be said that DNPPCL has put in place a viable model of agribusiness for market-oriented growth of small farmers. This is both relevant and suitable due to its focus on sustainable market development for marginalized farmers. Agriculture in remote regions creates challenges that prevent farmers from entering into mainstream markets. By creating a strong supply chain – along with operational and managerial support – several small farmer producer organizations (FPOs) now have the ability to create a strong presence in a highly competitive market and be at par with the best. The model has also been able to leverage the financial resources needed for working capital so as to assist primary producers from the National Bank for Agriculture and Rural Development (NABARD) and Friends of Women's World Banking (FWWB).

AWARDS/HONOURS (If any)

DNPPCL has bagged the "Best Rural Enterprise Award" by Citibank Foundation in January 2013, which included a cash prize of Rs8.5 lakh and continued capacity-building support.



» Devbhumi Ringhal Craft



» Certified Organic Honey



» Devbhumi Rajma



Location/Address of FPO: Dev Bhumi Natural Products Producers Co. Ltd, Old SBI Lane, Plot -15, Mohabelawala Industrial Area, Dehradun-248002, Uttarakhand. Phone: 0135-2641504, 2643980. Email: sales@devbhumi.com Website: www.devbhumi.com

Contact Details of RI: Appropriate Technology India (ATI), Mandir Marg, Guptkashi, District: Rudraprayag, Uttarakhand- 246439. Phone: 01364-267355, Email: admin@atindia.org | Website: www.atindia.org

11.

Organized Milk Production And Marketing In The Hills

Name of Farmer Producer Organisation (FPO):

Madmaheshwar Valley Association

Supporting Resource Institution (RI):

Appropriate Technology India (ATI)

IN THE MOUNTAINS, the dairy sector – akin to the agricultural sector – is underdeveloped, and the women involved are, thus, unable to come out of the vicious spiral of low income. Take the example of Ukkimath village in Rudraprayag, where the women farmers are dependent on traditional agricultural methods and livestock rearing for their livelihood. Both are labour-intensive, but the income generated is not commensurate with the efforts put in. As mentioned, the dairy sector, similar to agriculture, remains at a subsistence level for a majority of households with milk production too being used for self-consumption.

To deal with the dismal situation, dairy producer groups in Ukhimath block (in Rudraprayag) have adopted the business development services (BDS) approach to collectively move the dairy sector into a sustainable business. Several innovations established by the groups – such as herd upgradation, fodder development (grass and tree fodder), stall-feeding practices and animal health and nutrition services – have had a positive effect on productivity and led to additional employment generation for the local unemployed youths in these remote mountain villages.

Through this initiative, the village women formed groups and started trading milk through a self-selected collector's network. Once the milk production started to increase, these producers expanded their selection of milk collectors to add those handling different villages and selling fresh milk in nearby towns. The milk marketing, in turn, paved the way for a variety of business service providers (BSPs) and composting technology service providers. In fact, the BSPs have adequately made their services available to the dairy producers at their doorstep. The women farmers have now adopted improved dairy practices and the local youths have been



» Livestock Rearing



» Milk Trading through collector's network

trained and engaged in a variety of productivity enhancing services.

The approach adopted by the women has moved up milk production to a commercially viable level, and as a result, they have been earning a regular income of Rs. 3,000 by selling around 800 litres of fresh milk per month. Simultaneously, the BSPs are earning a relatively substantial income of Rs. 3,000-10,000.

Today, an association of 200 women farmers from 32 villages of Ukhimath has set an example for others. They have successfully established that dairy can be a commercially viable livelihood option in the mountains. This success is evident by the presence of seven BSPs engaged in gainful employment, something that was hitherto a distant dream in these remote villages.

This business model has been effectively adopted in other parts of Rudraprayag, as well as other districts

where producers have taken the BDS route to organized milk production and marketing. The community-owned business model has not only provided an opportunity to upscale the dairy subsector, but has also enabled women to earn a respectable income and become self-sufficient. At a social level, this model has changed the male perspective prevalent in this region, proving that economic enhancement of women in rural areas is a tool for women empowerment.

AWARDS/HONOURS (If any)

Many producers have been awarded by the local veterinary department for adopting an improved breed of animals and better dairy practices. The area is also being visited by several development agencies and stakeholders to examine the positive impact of the BDS model in the dairy sector.



» Association Meeting



Location/Address of FPO: Madmaheshwar Valley Association, Block Ukhimath, District Rudraprayag, Uttarakhand. Phone: Shri. Gajpal Singh- 9690082388, 8057099356.

Contact Details of RI: Appropriate Technology India (ATI), Mandir Marg, Guptkashi, District Rudraprayag, Uttarakhand- 246439. Phone: 01364-267355. Email: admin@atindia.org. | Website: www.atindia.org.

12.

Adopting Advanced Pulse Production Technology

Name of Farmer Producer Organisation (FPO):

Birdha Farmer Producer Company Ltd.

Supporting Resource Institution (RI):

International Traceability Systems Limited (ITSL)

THE TECHNOLOGY TO improve productivity of black gram (urad) was introduced in Jhansi and Jalaun, two of the Bundelkhand's most backward districts. Both the districts are agrarian, rain-fed, underdeveloped and suffer from low investments compared with other regions. They are further characterized by a weak market and input linkages, lack of access to improved technology, poor infrastructure and low productivity. The land, too, is rocky with inadequate groundwater resources. The irrigation requirements for agriculture are mainly met through monsoon rains with the region experiencing extreme temperatures which soar to 45-47 degrees in summers and dip to 0-1 degree during winters. However, in spite of these disadvantages, the land-use pattern of both these districts was found to be conducive for pulse production.

However, farmers from both districts were constrained by lack of up-to-date technical support that was (and is) essential for high pulse productivity. Understanding their predicament, International Traceability Systems Ltd (ITSL) offered a viable solution in the form of the latest "pulse production technology". This aimed at augmenting the productivity and profitability of the rain-fed pulse production system, along with scientific use of tractors, calibration of seed-cum-ferti drill for sowing seeds at appropriate depth, and the proper mixing of a balanced fertilizer.

The procedure – generally used to sow the kharif pulses – is through "broadcasting", which is a method that is neither scientific nor remunerative. ITSL has successfully initiated "line sowing of black gram through seed-cum-ferti drill", which has brought a positive change that has been recognized and appreciated by the farming community.

Thus, as can be seen from this table, an admirable change of 3.46 q/ha and 3.04 q/ha was obtained in Jhansi and Jalaun, respectively.

To elaborate, some of the most striking results of this innovative technology have been an increase in production, with a 58-66% improvement in yield, which resulted in positive changes in the cost-benefit ratio for farmers and also in their living standards; an improvement in the health of the soil because of black gram cultivation and use of *Rhizobium* culture, *Tricoderma* and *PSB* culture; an increase in the water level due to line sowing; and a decrease in the growth of weed because of the fertilizers. Also, the use of Pursuit weedicide (after 15-20 days of sowing) proved more effective in controlling the weed and was also found to be a cheaper option compared to hand weeding.

As has been seen, the scope of this technology is far-reaching. But to apply a more categorical approach, one can list the following reasons for this:

HERE'S A LOOK AT SOME HEARTENING NUMBERS

District	Area (in acre)	Present Avg. Productivity (q/ha)	Progress 2012-13	Cumulative Progress
Jhansi	100	5.22	8.68	3.46
Jalaun	100	5.23	8.28	3.04

1. Suitability: The farming community in this region was satisfied with the results of this innovation. Along with the small and marginal farmers, the technology was also adopted by big farmers and other farming communities in the nearby villages.

2. Reuseability: This has been successfully replicated in other districts as well. For instance, the farmers in Lalitpur are now able to achieve a better yield and higher remunerative prices for their produce. Almost all the farmers who have practised this technology have advocated it to other farming communities.

3. Scalability: Initially, this technology was tested across 200 acres, largely in the Jhansi and Jalaun districts. The

commendable results led to the increase in the scalability of the technology by the farmers who adopted it over an additional 100 acres in the district of Lalitpur, also in the Bundelkhand region.

4. Sustainability: The use of the root nodule bacteria of black gram in this technology helps fix the nitrogen in the soil and the crop residue supports an increase in the organic matter as well as the humus content in the soil. This has also helped accelerate the efficiency in the utilization of water and fertilizers. With better water-holding capacity, better carbon-nitrogen (CN) ratio and endurance of the pulse production system in Bundelkhand, it has been found that this innovative technology is highly sustainable.



» Difficult rocky area under Bundelkhand region



» Line sowing of Urd crop in Jhansi district



» Clean and graded produce of Urd crop



» Line sowing of Black Gram (Urd) through seed cum Ferti Drill



Location/Address of FPO: Birdha Farmer Producer Company Ltd., District: Lalitpur, Uttar Pradesh-284403.

Contact Details of RI: International Traceability Systems Limited (ITSL), Building No- 261, Second Floor, Okhla Industrial Estate, Phase- III, New Delhi- 110020. Phone: 011-43279100. Email: info@agritrace.in. | Website: www.itsltd.in

13.

Developing The Honey Value Chain In The Mountains

Name of Farmer Producer Organisation (FPO):

Nizmula and Mandal Valley Association

Supporting Resource Institution (RI):

Appropriate Technology India (ATI).

FARMERS IN THE mountain regions have been engaged in traditional beekeeping for quite a while, however, the activity has always been at the subsistence level and part of the barter economy. It was always non-commercial and low-key, with the honey extracted being mainly used for domestic consumption, medicinal uses or religious customs. Appropriate Technology India (ATI), an NGO working in Uttarakhand, demonstrated the scope of developing a honey value chain in the mountains and started consulting the primary producers willing to be a part of this venture.

The producers saw the various economic benefits of this model and organized themselves in groups with an aim to avail the economies of scale in the honey sector. They were introduced to several innovative ideas – such as improved wall hives, better swarm catching, safe extraction methods, seasonal bee management and an induced bee breeding technology – all focused on minimizing the risks in the organic honey value chain.

Armed with knowledge and information on the ideal practices in the organic sector, they have been able to develop an organic farming system and have secured, what is perhaps, the first organic certification for honey in Uttarakhand.

The producer groups – comprising 2,422 honey producers scattered across various villages – increased their production base and developed collaborations with 12 existing business service providers (BSPs) involved in commercial services, such as construction of bee boxes, swarm supply, maintenance of hives and certain beekeeping equipment.

They have also become shareholders of DevBhumi Natural Products Producers Co. Ltd, which has helped them perform certain value-chain-development activities. The final processing and marketing has been undertaken by DNPPCL, for which the company has developed a country-wide network with retailers. Such a group-based approach has resulted in a strong production base of more



» Safe Honey Extraction Methods



» Safe Honey Extraction Methods

than 4,400 bee colonies, enabling the producers to upgrade this activity from a barter system-based production to a commercial scale. This has led to an annual production of 17.6 tonnes of honey.

This adoption of improved beekeeping practices, along with a group-based approach such as induced bee rearing, has had a positive impact on the economy as well as on the agriculture and horticulture sectors. These practices have led to the development of a large number of bee colonies in villages that help in better pollination, thereby, facilitating the conservation of local biodiversity as well. Organic certification by groups has enhanced the scope for the producers to earn a better income of around Rs.1,000 a month. Agriculture in the hills is labour-intensive and not very remunerative. Thus, women have

come forward and successfully adopted beekeeping as a supplementary activity.

Thanks to the technological inputs and innovations just discussed, beekeeping has changed from being just a traditional activity in the hills, to becoming an economically viable activity. It now requires less labour and investment, and can prove to be highly remunerative if adopted properly. This method has been replicated in almost 230 mountain villages in the districts of Rudraprayag, Chamoli, Tehri, Uttarkashi and Pauri Garhwal in Uttarakhand. As mentioned, around 2,422 producers are already engaged in honey production, which has facilitated the employment of the local unemployed youth by involving them, on a commercial basis, in an extended Business Development Service (BDS).



» Training Programme on Honey Value Chain Development activities



Location/Address of FPO: Nizmula and Mandal Valley Association, District Chamoli, Uttarakhand.
Phone: Shri. Ishwar Singh - 9675922651.

Contact Details of RI: Appropriate Technology India (ATI), Mandir Marg, Guptkashi, District:
Rudraprayag, Uttarakhand- 246439. Phone: 01364-267355, Email: admin@atindia.org |
Website: www.atindia.org

14.

Scaling The Value Chain Through Quality Seed Production

Name of Farmer Producer Organisation (FPO):
Bijawar Farmer Producer Company Limited and others.

Supporting Resource Institution (RI):
Action for Social Advancement (ASA).

IT IS A WELL-KNOWN fact that the availability of quality seeds is not only critical but a basic and mandatory factor that affects the increase in production of a particular crop, and if efforts are not made to ensure the quality of seeds, it could lead to a decline in the overall productivity. Therefore, many smallholders – under the aegis of farmer producer companies (FPCs) – have taken the initiative to produce certified soy seeds through a buyback arrangement with apex government agencies that deal with seed players like the National Seeds Corporation Ltd, etc.

On-date seed production is one of the main business activities of more than 25 FPCs in Madhya Pradesh and Bihar. However, the FPC ownership lies with smallholders, who are poorly catered to agriculture extension services.

This results in a low- or no-profit making proposition for them. The state is, thus, characterized by a low-seed replacement rate for almost all crops.

In order to address these issues, steps have been taken to connect smallholders to a bigger arena through the FPCs. These companies have formally entered into an agreement with national-level seed players like the National Seeds Corporation Ltd and State Farms Corporation of India Ltd for the production of 2870 million tonnes (mt) of certified soy seeds. Seeds is a niche product that fetches a premium price in addition to the ordinary grain. This entails an extra income that is generally in the range of Rs. 3,000-5,000 per acre. Besides this, through the facilitating agency, farmers receive capacity-enhancement inputs, such as good



>> CEO Karnawati Agri. Producer Company Ltd. Panna receiving contract of soya seed production from the Regional Manager NSC

agricultural practices (GAP), which reduce production cost and, thus, result in various economic benefits.

This initiative has been extremely beneficial to the farmers – from economic and social to professional. Economic benefits accrue in terms of an extra income that ranges from Rs. 3,000 to Rs. 5,000 per acre, due to the category of the product (seed) and reduction in the cost of cultivation thanks to GAP. Social benefits are linked with

producer's memberships with the FPC, where they can learn and expand their skills. Professional benefits accrue in terms of capacity-building interventions, such as training, exposures, etc. Till date, around 1,000 mt soy seeds have been successfully procured, and the process is still under way. The model is suitable for other regions as well. It may be applied to any crop, and can be adopted by any community.



›Directors & Chief Executive Officers of various FPCs at the seed production contract signing venue



Location/Address of FPO: Bijawar Farmer Producer Company Limited, Block Bijawar, District: Chhatarpur, Madhya Pradesh. Phone: 07869957632.

Contact Details of RI: Action for Social Advancement (ASA), E-5/A, Girish Kunj, Above State Bank of India (Shahpura Branch), Bhopal, Madhya Pradesh- 462016. Phone: 0755-4057926, 2427369. Email: asa@asabhopal.org | Website: www.asaindia.org

15.

A Role Model For Rural Women: Mulukanoor Women's Dairy

Name of Farmer Producer Organisation (FPO):

Mulukanoor Women's Mutually Aided Milk Producers Cooperative Union Ltd (MWCD)

Supporting Resource Institution (RI):

Access Livelihood Consulting India Pvt. Ltd.

THE MULUKANOOR WOMEN'S Mutually Aided Milk Producers Cooperative Union Ltd (MWCD) was formed as a unique initiative for rural women engaged in the dairy sector in and around Mulukanoor, Andhra Pradesh. Established in August 2002, the Mulukanoor Women's Cooperative Dairy Society sets an example for collective action and rural women empowerment. This was the first time when women completely managed and governed a community-based enterprise, where the producers were present at all stages of the value chain. It was, and continues to be, a self-sufficient and self-managed women's cooperative dairy with the primordial mission to improve the economic status of dairy producers and consumers. The underlying vision of this cooperative was to contribute more value for dairy service producers and consumers in India by 2015.

MWCD markets all its products under the brand name Swakrushi. The three categories of products offered to the consumers are milk, cream and value-added products that are currently marketed in the Warangal, Karimnagar,

Medak and Adilabad districts of Andhra Pradesh. By limiting the maximum distance between the village and the dairy from which the milk is procured to 25km, MWCD has ensured the lowest possible cost per litre for procurement.

Since all the villages under the dairy's purview are drought prone, MWCD provides a major source of livelihood for the local women. It has been playing a prominent role in empowering rural women in the economic and social management spheres. By emphasizing that all women members should express their opinions, suggestions and problems at the village-level meetings as well as the society's general body meetings, the MWCD management makes it a more participative process for them.

The cooperative dairy maintains transparency in every aspect related to the stakeholders – their milk supply, accounts, procurement of milk and profit accounts. This has helped to instil faith amid the women members of the society since their monthly income and expenditure are

ORGANIZATIONAL GROWTH PARAMETERS OF THE MWCD (2002-11)

Parameter	2002-03	2011-12
No. of milk producers	8,426	20,118
Village-level primary cooperative societies	67	109
Milk procured during the year (in million litres)	2.43	7.76
Avg. milk procurement per day (in thousand liters)	10.54	21.17
Avg. value of technical support services (cattle feed + fodder seeds + medicines) per member (in Rs)	97.1	611.43

audited at both the village and cooperative levels.

The Mulukanoor model modified the blueprint of unions promoted by National Dairy Development Board (NDDB) during Operation Flood. The design strategy followed by the management was key to the success of the Mulukanoor dairy. In fact, this has helped the cooperatives to ensure daily money inflows back from the market, thus, easing out a working capital requirement. The cooperatives have also institutionalized patronage-linked compulsory development deposits – at the rate of 5% for every milk bill – which has resulted in higher stakes for the members. A standard for keeping minimum performance criteria for members and leaders has

effectively been established to regularly measure performances.

Over the past 10 years of its operations, the Mulukanoor Union has grown from strength to strength. The gross surplus income has increased from Rs. 23.40 lakh in 2002-03 to Rs. 413.52 lakh in 2011-12. As of 2012, the number of milk producers in the network had increased to 21,118, and the number of societies had grown to 109.

AWARDS/HONOURS (If any)

- Best Women Cooperative Award, 2013, National Cooperative Development Foundation
- Best Entrepreneur Award, 2005



» Milk Quality check is ensured at the time of procurement by the plant staff



» Milk Procurement



Location/Address of FPO: Mulukanoor Women's Mutually Aided Milk Producers Cooperative Union Limited (MWCD), Mandal & Village Bheemadevarapally, District: Krimnagar, Andhra Pradesh - 505497. Phone: 9849082818

Contact Details of RI: Access Livelihood Consulting India Pvt. Ltd. (ALC), Plot No. 4, Matrunitayam, Telephone Office Lane, Sai Nagar Colony, Picket, Secunderabad, Andhra Pradesh- 500009. Phone: 040-40177321. Email id: info@alcindia.org | Website: www.alcindia.org

16.

Competing In An Economy Of Mega Corporations

Name of Farmer Producer Organisation (FPO):

Dharmarajupalli Foundation Seed Farmers Mutually Aided Cooperative Society

Supporting Resource Institution (RI):

Access Livelihood Consulting India Pvt. Ltd. (ALC)

THE DHARMARAJUPALLI FOUNDATION Seed Farmers Mutually Aided Cooperative Society was started in 1999 with the objective of producing quality seeds that would better income and market services. Over the years, the cooperative proved wrong the popular point of view that the production and marketing of quality foundation seeds can only be done by big corporate organizations. It set an example by forming a group of 151 small farmers in Dharmarajupalli (a small village in the Huzurabad mandal of Karimnagar district in Andhra Pradesh), proving that they too can successfully produce foundation seeds at par with national standards.

In spite of its humble origins in a relatively unknown village in Huzurabad, the cooperative grew to provide quality foundation seeds to all the member farmers. Its members either belong to the Dharmarajupalli village or adjoining villages such as Kandugula, Kanukula Gidda,

Jupaka in the Hujurabad mandal, and Bheempalli and Uppal villages in the Kamalapuram mandal. At present, there are 151 members and 15 non-members with 600 acres and 200 acres of land, respectively. Ever since its inception, it has been instrumental in bringing about a marked improvement in the social and economic status of its members. It encourages self-reliance, while ensuring cooperation among its members, and follows a democratic functioning process essential to the success of any enterprise.

The cooperative provides various services to its members, including the distribution of foundation seeds between its members (from those who produce them to those farmers who will sow them), providing essential inputs for quality-seed production, among others. To ensure positive management practices by the farmers, an educational programme is conducted every year and



» Training on how to produce and management of resources required for production



» Foundation seed is treated after purchased from the farmers

scientists and agriculture officials are brought directly to the fields to guide the farmers.

As a result of these initiatives, the farmers members of the cooperative have been earning an additional income of Rs. 65-90 per quintal. Also, since the cooperative provides inputs like fertilizers and pesticides, the farmers save up to Rs. 300 (7-10%) on the input costs. Members get fertilizer credit at an interest rate of 12%, and a 9% interest rate on member savings. In fact, 23,647 quintals of certified seed has been marketed at a growth rate of 700% in nine years.

The Development Support Centre (DSC) markets these certified seeds in 30kg bags to almost all districts in Andhra Pradesh, except Srikakulam and Rayalaseema. Major districts include Karimnagar, Warangal, Khammam, Rangareddy, Medak, East Godavari, Nalgonda, Guntur, Vizianagaram and West Godavari. In addition, seeds are supplied to Ramagiri, Raichur, Ballari, Yadagiri and Siricuppa districts of Karnataka, with a distribution

network of 70 dealers. In terms of market share, Warangal and Karimnagar account for 40%, followed by 20% in East Godavari, and 10% in Karnataka. Certified seeds are made available with dealers in the months of May or June every year for the kharif season and in November for the rabi season.

The Dharmarajupalli seed processing cooperative is an ideal model for others to follow, with a group of committed people working together in a democratic and non-hierarchical fashion. In fact, it is far more productive than an individual trying to farm all alone. Such cooperative models allow for economies of scale, which make it easier for smallholding members to compete in an economy of mega corporations. Farmer-supported cooperatives like the one in Dharmarajupalli have the potential to become a national movement, strengthened by increased participation and new connections that are being made on a regular basis.



» Foundation seed collected from member farmers



» Supplying inputs required for quality seeds production to the member farmers



Location/Address of FPO: Dharmarajupalli Foundation Seed Farmers Mutually Aided Cooperative Society, Mandal & Village Bheemadevarapally, District Krimnagar, Andhra Pradesh - 505497.
Phone: 9849082818

Contact Details of RI: Access Livelihood Consulting India Pvt. Ltd. (ALC), Plot No. 4, Matrunitayam, Telephone Office Lane, Sai Nagar Colony, Picket, Secunderabad, Andhra Pradesh- 500009.
Phone: 040-40177321, Email: info@alcindia.org | Website: www.alcindia.org.

17.

Mini Super Market For Rural Consumers

Name of Farmer Producer Organisation (FPO):

Warana Agriculture Commodities Consumer Super Market Cooperative

Supporting Resource Institution (RI):

Access Livelihood Consulting India Pvt. Ltd. (ALC).

WARANA, WHICH WAS a barren land just 60 years back, has today emerged as a model for all-round development. This was possible because of the pioneering work done by the Late Sahakarmaharshi Shri and Tatyasaheb Kore, a great visionary with a commitment towards the upliftment of the poor.

The Shree Warana Co-operative Sugar Factory was founded in 1956, and since then it has proved itself to be The cooperative sugar factory to be reckoned with. The Warana sugar factory is the umbrella institution for several of its industrial and cooperative units, including the Warana dairy, cooperative bank, cooperative bazaar, and educational units like schools and colleges. Cultural units, such as the Warana children's orchestra, and social units, like the Shree Warana Bhagini Mandal, Warana Mahila Credit Society and Lijjat Papad Center, etc., are also a part of this.

Warana Bazar – the first consumer cooperative store –

was founded in 1976, and started functioning on 2 April 1978. Since then it has emerged as one of the most successful stores in India, and is looked upon as a model institution by many. These stores sell retail products, including apparel, food, grocery, agri inputs, vehicles, consumer durables and hardware. The Warana Bazar has 555 employees and 20,111 members, and has an enviable annual turnover of Rs. 113 crore. But one of its biggest achievements is that 80% of its members are women. Also, unlike other cooperative consumer stores in the country, Warana Bazar has been able to keep the government involvement in the share capital at the minimum with a major portion of the working capital requirement being met from the members' deposit.

In the current globalized economy, there is a continuous effort to develop the region. And this is visible in the incentives that the society provides to its members and the special activities it undertakes to win their loyalty and



» Warana Bazar: Inside View



» Variety of Products

build an alliance based on trust. It has tried to make its functioning a more participative one, and numerous steps have been taken to improve stakeholder cooperation with employees, who enjoy a fairly large share in the Warana Bazar's income. The employees also run a credit cooperation of their own.

The society undertakes specific measures to provide staff training and development. To this effect, the Vilasrao Tatyasaheb Kore Consumers Co-op Training Centre was set up in 1995. Every year, a month-long salesman training programme, approved by the Shivaji University, Kolhapur, is conducted at the centre. The top five students of every batch are absorbed by Warana Bazar. Employees who are already in service with various Bazars in Maharashtra are also eligible for admission in this programme.

Warana Bazar has emerged as a successful venture and has become an effective instrument of consumer protection and change. It shows how department stores

that run on cooperative basis can effectively and successfully tap into the emerging rural markets in the country. With the economy opening up and the rapidly changing tastes and habits of people in the rural areas, there is a wide scope for consumer cooperative stores to tap the hitherto neglected clientele of the rural sector. With an enlightened leadership and good management, consumer cooperatives can go a long way to change the lifestyle of the people in the rural sector.

AWARDS/HONOURS (If any)

- First prize to the Warana Co-operative Group, Best Co-operative Group in India, from the Institute of Marketing and Management
- First prize(2001-2002) to the V.S. Chavan, Managing Director, for his work in Warana Co-operative Group of Industries and Educational Institutions, from the United Western Bank Ltd.



» Warana Bazar: Outside View



Location/Address of FPO: Warana Agriculture Commodities Consumer Super Market Cooperative, Warana Bazar, Warananagar, Taluka Panhala, District Kolhapur- 416113, Maharashtra. Phone: 9272227476, 9272227477. Email:wsahgrahak@waranabazar.com, wsahgrahak@dataone.in.

Contact Details of RI: Access Livelihood Consulting India Pvt. Ltd. (ALC), Plot No. 4, Matrunitayam, Telephone Office Lane, Sai Nagar Colony, Picket, Secunderabad, Andhra Pradesh- 500009. Phone: 040-40177321. Email: info@alcindia.org | Website: www.alcindia.org.

18.

Timbaktu Collective: A Producer Owned Business Enterprise

Name of Farmer Producer Organisation (FPO):

Dharani Farming and Marketing Mutually Aided Cooperative Society Limited.

Supporting Resource Institution (RI):

Access Livelihood Consulting India Pvt. Ltd. (ALC).

THE DHARANI FARMING and Marketing Mutually Aided Cooperative Society Ltd is a producer-owned business enterprise, promoted by the Timbaktu Collective, under the brand Timbaktu Organic. It was registered in April 2008, under the Mutually Aided Cooperative Society Act of Government of Andhra Pradesh, 1995.

It provides services like processing and packaging of raw goods procured from farmer members and conducting marketing activities to reach viable customer segments. It also provides agricultural training programmes to members and evaluates their adherence to organic certification standards. The primary intention of Dharani is to procure, process and market products of its farmer members at a premium price, to ensure higher returns.

The Timbaktu Collective began experimenting and researching productivity issues in dry-land farming since 1995. From there it moved on to promoting organic farming among the local communities through various projects supported by donor agencies such as Asha for Education, Sir Dorabji Tata Trust, Evangelischer Entwicklungsdienst (EED) and the European Union. By the end of March 2011, around 1,190 families had shifted to organic food cultivation over 3,570 acres in a sustainable way. In 2005-06, "Adisakthi Dharani" was promoted as a collective enterprise to market organic produce of the smallholder farmers participating in the project.

The overall purpose was to enhance the income and food security of dry land, smallholder farmers in the Anantapur district in the short term, and to improve livelihood security via sustainable agriculture in the long term. The enterprise was initiated by one of the women's thrift cooperatives (Adisakthi MATCS), which was promoted by the Collective, who put in the initial capital for the venture.

In April 2008, the participating farmers organized



» Promoting Organic Farming among the local communities





themselves into a producer-owned cooperative that was registered under the Andhra Pradesh Mutually Aided Cooperative Societies Act, 1995. The Adisakthi MATCS handed over the venture, including the assets and liabilities, to this newly formed cooperative. Thus, the business venture called “Adisakthi Dharani” was renamed “Dharani FAM Co-op Ltd”, with a new board of directors. All the 890 farmers who had adopted organic farming under the earlier projects by then became shareholders of the cooperative. As of March 2011, 1,190 farmers have joined in as shareholding members.

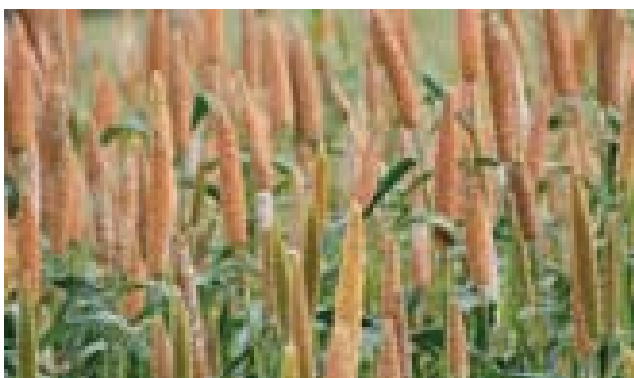
Farmers of the Dharni cooperative realized the need to engage with the market – not as weaker opponents, but from their hitherto unrealized strength of collective numbers. Ecological traditions helped the soil of the farmer’s lands to remain healthy and productive. It resulted in no chemicals or external inputs, total seed sovereignty, less water consumption, low capital costs, more biomass, more livestock, and multiple livelihood options for the producers.

By growing, processing and marketing organic food, farmers have not only been able to reach out to the ever-

growing demand in the niche markets, but also heal their lands, bring back the cattle, sheep, goats and chicken into their lives – increase the productivity of their lands and earn more from their animals. Through the collective, the farmers have started eating better quality food and have begun growing what is right for them, their animals and their land.

The collective intends to raise financial resources – in the form of equity – on lines similar to that adopted by the National Dairy Development Board for Amul. This venture targets better income for the marginalized dry-land smallholder farmers of Anantapur district, and improve their livelihood security through sustainable agriculture methods.

Investment in Dharani is justified not only because it is a well-established producer-owned business enterprise – which will financially benefit the shareholders – but also because it is socially conscious and financially viable. It is successfully increasing the income of the marginalized smallholder farmer community by getting them better prices for their produce, along with improved productivity of their lands and animals, while supplying much-needed healthy foods to the consumers.



» Promoting Organic Farming among the local communities



Location/Address of FPO: Dharani Farming and Marketing Mutually Aided Cooperative Society Limited, Village Chennekothapalli, District Anantpur,- 515101, Andhra Pradesh.

Phone: Shri. Murugesan - 9490180954.

Contact Details of RI: Access Livelihood Consulting India Pvt. Ltd. (ALC), Plot No. 4, Matrunitayam, Telephone Office Lane, Sai Nagar Colony, Picket, Secunderabad, Andhra Pradesh- 500009.

Ph: 040-40177321. Email: info@alcindia.org | Website: www.alcindia.org

19.

Accomplishing Growth and Prosperity Under The Cooperative Framework

Name of Farmer Producer Organisation (FPO):

Gambhira Agriculture Cooperative Society Ltd.

Supporting Resource Institution (RI):

Access Livelihood Consulting India Pvt. Ltd. (ALC).

LOCATED IN THE villages that lie on the banks of river Mahi in the Ankalav taluka of Anand district of Gujarat, the Gambhira cooperative has proved to be instrumental in improving the socio-economic condition of its members. It is through the pioneering efforts of this cooperative that the small and marginal farmers could avail fruits of the green revolution technology in these flood-affected villages. The cooperative and collective farming institutions have also made it possible for the green revolution technology to be economically viable – technically feasible and practically meaningful to the families of the small farmers who live in these villages.

The recurring flooding of the Mahi river caused havoc in the villages situated on its banks. As a result of constant sedimentation and infiltration of waste materials, the

fertile layer of the soil got washed away. Sand was deposited wearing the deep layers and the land has been converted into a desert. This resulted in a loss of livelihood for the farmers, who were dependent on agriculture for their employment – bringing them to the brink of starvation. To help the people affected by the floods, the government, in 1951, granted 246 acres of land to the distressed. The proposal for this was put forward by a Gandhian social worker, Changanbhai Mulijibhai Patel, who wanted the wasteland on the side of Mahi river to be allocated to the farmers. This allocation was done successfully, providing for each and every flood-affected farmer in that village.

Gambhira cooperative is known for the impressive mechanism of groups within society to ensure that its



» Collective Farming by the Society



» Collective Farming by the society

members are able to avail the incentives offered to them. Merit lies in blending land resources with human labour under cooperative framework to accomplish growth along with prosperity for the member households in a well-balanced way.

To improve the socio-economic condition of its members, the cooperative spends money on certain development activities such as building rooms for the primary and secondary schools (anganwadis), constructing small bridges across roads, nals (canals for drainage), sewage and gutter lines, as well as on buying medicines from primary health centres, etc.

The cooperative also benefits its members by buying agricultural and irrigation equipment, improved seeds, chemical fertilizers, pesticides and gypsum. The cooperative even invests in farmers by giving them funds to hire tractors, pay irrigation charges, land revenue taxes, leased-in land charges, transporting costs, go-down costs, etc. Some portion of the surplus money is used for development work as well. In case of a bonus, the cooperative distributes it among its members. Hence, Gambhira is known for its impressive mechanism of groups within the society to ensure a number of incentives that effectively touch the lives of its members.



» Collective Farming by the Society



Location/Address of FPO: Gambhira Agriculture Cooperative Society Ltd., Village: Gambhira, District Anand, Gujarat.

Contact Details of RI: Access Livelihood Consulting India Pvt. Ltd. (ALC), Plot No. 4, Matrunitayam, Telephone Office Lane, Sai Nagar Colony, Picket, Secunderabad, Andhra Pradesh- 500009. Phone: 040-40177321. Email: info@alcindia.org | Website: www.alcindia.org.

20.

Farmers Turn Traders

Name of Farmer Producer Organisation (FPO):

Nachalur Farmer Producer Company Limited

Supporting Resource Institution (RI):

Self Promoted

THE NACHALUR FARMERS Producer Company Ltd. in Tamil Nadu was started by a group of 100 farmers from 30 villages as a Producer Organisation in June 2012. In October of the same year, these farmers decided to open an input supply shop at Nachalur, with the aim of reducing the cost of the inputs (initially, fertilizers and pesticides). The farmers were able to successfully sell 300 tonnes of fertilizers by December – mainly because of the price factor. While every other trader took these farmers for a ride by selling the fertilizers at exorbitant prices, this collective decided to sell the fertilizers at rates fixed by the Union government.

Encouraged by the success of this venture, the farmers decided to expand the initiative to three more villages. Subsequently, the company purchased farm equipments that were then rented out to the farming community at an affordable cost. Their next target is to set up a paddy and black gram seed processing unit for Rs. 30 lakh (financed by the National Bank for Agriculture and Rural Development, or NABARD).

Today, the company mainly consists of small and marginal farmers from various castes and communities. It has also provided members with Internet connections, helping them get the latest updates on weather and commodity prices so that they can improve their bargaining power. The principal goal of this firm has been to reduce the input cost so that cost of production comes down.

AWARDS/HONOURS (If any)

Nachalur is the first producer company in Tamil Nadu, and has been recognized by the District's Agriculture Department and other related Departments.



Location/Address of FPO: Nachalur Farmer Producer Company Limited, 37/4, Valluvar Nagar, Nachalur Post, Nangavaram Via, Kulithalai Taluk, Tamil Nadu-639 110.

Email: nrmurugan2009@gmail.com

Contact Details of RI: Shri. G. Karikalan- 09751222211. Email: rinithaakarikalan@gmail.com



» Fertilizers stored in the warehouse



» District Collector S. Jayandhi handing over the accreditation certificate to the Nachalur Farmers Producers Company Limited at Nachalur in Karur district

21.

Women's Collective Reaps the Rewards of Cooperation

Name of Farmer Producer Organisation (FPO):

Chameli Swayam Sahayata Samuha

Supporting Resource Institution (RI):

Indian Grameen Services (IGS)

ONE OF THE best examples of the benefits that can be reaped through group efforts can be seen from the village of Bhatagaon in Chhatisgarh. This case highlights the efficacy of adopting a practice that improved the livelihood of the farmers in an area where they were living in poor economic conditions and were forced to migrate to nearby areas for labour work. Due to the absence of any support – governmental or non-governmental – the villagers had to face lot of hardships to earn their daily bread.

Thus, during 1997-98, under the Rajiv Gandhi Hariyali Mission, this village saw the plantation of mango trees across 40 acres of wasteland. The area was tended by the landless women farmers who decided to cultivate vegetables to earn their livelihood. This can be said to have been the first phase of change, or maybe it was a sign of things to come.

Then in 2001, 19 industrious women came together to form a self-help group (SHG), Chameli Swayam Sahayata Samuha, aimed at achieving self-sustainability and procuring money for quality seeds. They followed the rules and regulation of an SHG, which involve monthly savings, monthly meetings, record keeping, etc. The capital acquired through it was used for the cultivation of fruits and vegetables. The women also took out Rs. 17,000 from their savings for digging a borewell that would help in irrigating and catering to 19 acres of land.

It was around the same time when the Indian Grameen Services (IGS) started the farmers interest group (FIG) formation process in three blocks of the Raipur district in order to fulfil its objectives. Thus, Bhatagaon village came within its periphery, including the Chameli Swayam Sahayata Samuha, as one of the FIGs. After it was registered, it was linked to the National Vegetable Initiative for Urban Clusters (VIUC) schemes of the



» Washing and Hand Grading



» Ready for selling vegetable in bulk

Department of Agriculture and Cooperation. This enabled it to adopt the best practices for vegetable cultivation and manure management through various training programmes.

Through this initiative, the farmers are now able to successfully cultivate 19 acres of wasteland through their own produce (brinjal, tomato and cauliflower). They sell the products in bulk, which reduces the transportation costs. Each member of this FIG is now able to effectively earn Rs. 10,000-15,000 per month after adopting the group activity process, as opposed to their earlier earnings of Rs. 4,000-5,000 every month from one acre land per woman farmer. The benefits that they received from the department of horticulture include availing 76,000 seedlings of hybrid tomato and brinjal in one season, as well as 60kg of bio-pesticide for cultivation.

The initiative provides the member farmers with the best practices of vegetable cultivation, which – along with group efforts – have made a huge difference to the lives of these farmers. The efforts of these women to come under a group and avail the opportunities to enhance land productivity has successfully empowered them. This is one of the best examples of the benefits that can accrue through group efforts, and which promotes their livelihood by bringing in an enhanced production, while simultaneously increasing the members' bargaining power.



» Ready for mobile selling



» Reaping vegetable



Location/Address of FPO: Chameli Swayam Sahayata Samuha, Village: Bhatagaon, District: Raipur, Chhattisgarh.

Contact Details of RI: Indian Grameen Services (IGS), BC- 247, Sector-1, Salt Lake City, Kolkata, West Bengal- 700064. Phone: 033-23596264. Email: info@igsindia.org.in. | Website: www.igsindia.org

22.

Achieving Sustainability Through Collective Action

Name of Farmer Producer Organisation (FPO):

Koutla- B Mutually Aided Cooperative Society

Supporting Resource Institution (RI):

Indian Grameen Services (IGS)

COTTON IS THE major source of livelihood for a large number of farmers in the Adilabad district of Andhra Pradesh. The district had been in the news because of the large number cotton farmers suicides in 2001. These distressed farmers were overburdened because severe pest infestations and overuse of pesticides had led to an increase in their costs. Coupled with the purchase of inputs on credit from traders and loans from moneylenders at exorbitantly high interest rates, it became increasingly difficult for them to meet the highly fluctuating market prices. When the yields were insufficient to repay the debt, the farmers became desperate and turned to suicide as their last resort.

After assessing the area and realizing the need to support farmers, the Indian Grameen Services (IGS) started an intervention in 2002. They conducted village meetings and discussions with farmers about the challenges faced by them and offered integrated pest management practices as the money-saving solutions. In

order to get access to low-cost bio-inputs, while implementing pest management practices, the IGS team convinced the farmers to create a village-level cotton producers organization in 2003.

The organization came to be called the Koutla-B Mutually Aided Cooperative Society (Koutla-B MACS). The idea was to get farmers to act collectively and obtain group discounts on the purchase of agricultural inputs and, thus, eventually get a better price for the sale of their produce. Koutla-B MACS was a pioneer intervention in the promotion of producers' collectives. It has enabled cotton farmers to exercise more control over their input, output and credit needs. Inspired by its success, farmers in neighbouring areas have also adopted the model.

Initially, the livelihood promotion institution BASIX identified a local reputed dealer in a nearby town and connected them to the cooperative. An interim period was allowed for the cooperative management familiarize themselves with the basic functions of a dealer, and then



»Fertilizer stock



»Bioinputs stock



» BOD explaining functioning of Water Treatment Plant



» Forward Market linkage

they were linked to a reliable distributor. Subsequently, IGS facilitated dealership and distributorship licences of reputed companies for MACS. Thus, Koutla-B MACS established backward input linkages by stocking the entire range of inputs – including seeds, fertilizers, bio-pesticides, pesticides and farm equipments – for its members.

Both the member and non-member farmers have received numerous benefits from this intervention, which included easy accessibility to quality agricultural inputs without the fear of spurious products, and assured availability of the inputs throughout the season. In addition, it ensured affordable and fair prices that led to farmers saving 5-10% on the input costs alone, as well as reduced the amount of time spent to get these inputs, since they are now available in the village itself.

MACS sells these agricultural inputs at a small mark-up price to cover its administration costs, which is lower than those of the town shops nearby. In the first year of its operation (2004-05), it achieved a turnover of around Rs. 68 lakh. This was an amazing achievement by any yardstick as they had originally anticipated that they would achieve a turnover of only about Rs. 200,000.

Koutla-B MACS has demonstrated that farmers have a lot of advantages by being a part of sustainable producer groups. Some of these advantages include sharing of risks and reduction in production costs, improved production scale through input provision and sharing of infrastructure, improved access to markets (output linkage) and reduced

pressure on traders. Also, it supports the well-being of its members, encourages sharing of experiences and improves access to credit. Its success has led to an increase in social status for the collective, thereby, giving it access to various village development funds.

The cooperative has established itself as an expression of collective authority and has taken on the moral responsibility for the well-being of the village by establishing a 5,000-litre water treatment plant. Thus, not only has it proved to be a sustainable and responsible business model, it has achieved increased efficiency, developed solid business management initiatives, and improved product quality and production practices.

Over the years, it has emerged as a role model and an inspiration for other producer groups. It has paved the way to form about 100 other producer groups working on various crops and dairy depending on the community's interest in BASIX operational areas alone. Today, around 25 MACS are operating in the Adilabad district, inspired and influenced by the success of Koutla-B MACS.

AWARDS/HONOURS (If any)

On 11 July 2005, the president of the Koutla-B MACS, Mr Vanga Ram Reddy was presented the Jamshedji National Virtual Academy Fellowship for rural prosperity by the then President of India, Dr A.P.J. Abdul Kalam. He was also felicitated by the district collector and was one of the few farmers to interact with then US President George Bush, during his visit to Hyderabad in 2006.



Location/Address of FPO: Koutla-B Mutually Aided Cooperative Society, D.No. S-23/3, District Adilabad, Andhra Pradesh.

Contact Details of RI: Indian Grameen Services (IGS), BC- 247, Sector-1, Salt Lake City, Kolkata, West Bengal- 700064. Phone: 033-23596264. Email: info@igsindia.org.in. | Website: www.igsindia.org

23.

Creating A Rural Distribution Network For Women Farmers

Name of Farmer Producer Organisation (FPO):

Rudi Multi Trading Company Limited

Supporting Resource Institution (RI):

Self Employed Women Association (SEWA)

RUDI, AS THE name suggests, is a rural distribution chain that processes and sells farm produce after procuring it from marginal farmers (who make up the bulk of producers in India) at market price. It is a shining example of addressing food security issues at both the production and consumption levels through a model managed by the beneficiaries themselves. The supply chain employs hundreds of poor women, who handle the management and are involved at every stage of the chain. RUDI also stands for a brand, signifying quality and affordability.

This set up assures a market for these marginal farmers, improves their economic status and generates purchasing power. This also encourages farmers to make investments on their farm and increase productivity. Moreover, by selling grains and spices in small packets at competitive prices, RUDI not only ensures a high quality standard, but also caters to the food needs of its rural members.

This initiative has been highly beneficial for the community – giving food security by making products and

goods of regular use available to the rural consumers, providing fair and direct market access to small and marginal farmers, and generating sustainable livelihoods. In addition, it has created a local distribution and village-level supply chain to link the farmers to the end customers, thereby, constructing a strong supply chain at the rural level. This ensures that the capital rotates within the villages and, thus, strengthening the rural economy.

RUDI has successfully created a sustainable ecosystem at the village and block level, a mode that can be replicated and expanded seamlessly. Now, the Self Employed Women's Association (SEWA) is setting up to extend the outreach of these initiatives to Rajasthan, Uttar Pradesh, Bihar and Uttarakhand, while simultaneously scaling up its presence across nine districts in Gujarat.

Currently the company is distributing RUDI products in 14 districts of Gujarat through its unique rural distribution network, Rudiben. It intends to reduce incidental expenses, increase the availability of good quality



»RUDI Logo



»Grading at the Procurement Centre

products, eliminate middlemen and, thus, attain socio-economic development of the underprivileged rural poor. Its portfolio of products is based on the needs of its rural consumers, along with the quantity per packet (set according to the standard nutritional requirements). The products are priced according to the purchasing power of poor households.

It has successfully collaborated with research institutes such as the Central Salt and Marine Chemical Research

Institute (CSMCRI) and Central Food Technological Research Institute (CFTRI) to provide regular interventions for technical capacity-building of rural producers for procurement, processing and quality control. In addition, it provides marketing linkages to the rural farmers and producers for enhancing the market of their agricultural produce through tie-ups with private companies, such as ITC, Gujarat Alkalies and Chemicals Ltd, National Dairy Development Board, etc.



» Distribution of quality products through sales women (Rudiben) to rural and urban consumers



Location/Address of FPO: Rudi Multi Trading Company Limited, 8, Navarang Colony, Nr. Kashmira Chamber, B/h. Mount Carmel School, Opp. Navarangpura Railway Crossing, Navarangpura, Ahmedabad – 380009, Gujarat. Tel.: 079 – 26589729, 26574880, E-mail: info@sewarudi.com, rudimtcl@gmail.com

Contact Details of RI: Self Employed Women’s Association, Opp Victoria Garden, Bhadra, Ahmedabad- 380001, Gujarat. Phone: 079-25506444, 25506477, 25506441, Email: mail@ sewa.org.

24.

Powering Agriculture Through Alternative Energy

Name of Farmer Producer Organisation (FPO):

Narayangadh Agro Producer Company Limited

Supporting Resource Institution (RI):

Indian Society of Agribusiness Professionals (ISAP)

ONE OF THE major crises facing the country today is that of scarcity of energy. Solar-based photovoltaic cells have emerged as an alternative source of energy that can address the day-to-day energy scarcity issues. This technology can greatly benefit the agricultural community by providing stable, environment-friendly and utility-based energy at fair prices. It is a cost-effective technology that is free from any major recurring costs. The machines are value-added equipments that can help increase the profit margins of the interested farmers. For instance, those who have already used this technology – to process coriander, mint, cashew, tomato, onion and other leafy vegetables – have directly benefited in the form of handsome monetary returns.

It was to address such energy scarcity problems, among others, that the Narayangarh Agro Producer Company Ltd

was formed in 25th February, 2013 as a collaborative effort by the farmers of Khodad village, Junnar block, Pune. This farmer producer organization (FPO) was recently established under the National Vegetable Initiative for Urban Clusters (VIUC) scheme. Most of the small and marginal farmers have an average income of around Rs. 75 per day per hectare. With the help of these cost-beneficial, solar-based processing machines, farmers are expected to get higher prices for their produce and, subsequently, higher returns.

The man behind this exceptional idea of making use of solar energy is Ravikant Balshiram Fulwade, chairman, Narayangarh Agro Producer Company. An innovative entrepreneur, Fulwade's coordinative effort in adding value to the crop produce is an exemplary and ground-breaking idea that employs solar technology in



» Agri Entrepreneur Mr. Ravikant Fulwade, Chairman of Narayangadh Agro Producer Company Ltd with backside Electric Dryer Machine



» Solar Dryer Machine

agriculture- and horticulture-based processing machines. It is advantageous to group farmers since it enhances their income in more ways than one, especially since it is completely environment friendly.

Until now, most villages did not have adequate electricity supply – which led to a rise in the demand of energy supply for agricultural and allied activities. The development of a solar power facility has helped in generating 10-20 horsepower through the photovoltaic machines. In fact, the farmers of this FPO have already

invested Rs. 50 lakh (with financial aid from Canara Bank) for the manufacturing and processing of crops. The processed products are sold to local retail outlets.

The technology adopted by the company is a live example – to other FPOs, Self Help Groups (SHGs) and agri-cooperative groups – of effective usage of alternative energy to address the energy scarcity issues in India. Exposure visits to this FPO has helped create a ripple effect, propagating the incentives to use alternative sources of energy to resolve the energy needs of farmers.



» Solar Dryer for Vegetables



» Solar Based photo-voltaic machines



Location/Address of FPO: Narayangadh Agro Producer Company Limited, Nagadwadi, Post Kandli, Taluk Junnar, District Pune, Maharashtra- 412412.
Phone: Shri Ravi Kant Bashiram Fulwade – 09405852673.

Contact Details of RI: Indian Society of Agribusiness Professionals (ISAP), 23, Zamrudpur Community Centre, Kailash Colony Extension, New Delhi- 110048. Phone: 011-41731674, 43154100.
Email: isapho@isapindia.org | Website: www.isapindia.org.

25.

One Stop Solution For Irrigation Problems

Name of Farmer Producer Organisation (FPO):

Bhomaikrupa bhungroo juth

Supporting Resource Institution (RI):

Sajjata Sangh

THE RURAL AREAS of arid Gujarat are plagued by irrigation problems, such as paucity of water, soil salinity and water-logging. Amid all this, Bhungroo has emerged as a one-stop solution to deal with these difficulties in an effective and affordable way. This novel idea entails the collection and storage of rainwater. By collecting rainwater for just about 10 days in a year, Bhungroo enables as much as 40 million litres of irrigation-suitable water to be stored in the underground aquifer reservoir. This water reserve enables the farmers to conveniently have two cropping cycles, that is, monsoon and winter farming over seven to eight months in a year.

Participation of women is central to the Bhungroo initiative, in which people are hired to construct drainage systems while drilling is undertaken by five participating families. Each group consists of five women, one of whom gives a part of her land for construction of the Bhungroo, while the other members extend their labour and bring an

added sense of teamwork.

The method involves hand-drilling a porous pipe (4" in diameter) onto the surface. This is done from the lowest point of the catchment area, where rainwater rushes and accumulates to a maximum depth of 110ft to touch the subsoil aquifer. The pipe then guides the captured water to the saline aquifer. It frees the land surface from water-logging, creating various low-density water lenses within the subsoil aquifer, while simultaneously diluting the salinity of the subsoil aquifer. The subsoil low-density water lenses are the primary source of irrigation-suitable water for the farmers whereas non-saline rainwater, when mixed with underground saline water, gradually brings down the salinity of the groundwater.

Small and marginal women farmers have been able to ensure food security and enhance their income through the use of this innovative irrigation technology. Moreover, Bhungroos have helped improve their perennially water-



» Constructed Drainage System



» Salinity affected area

logged, salinity-affected lands and enabled the women farmers to earn higher income within the first two seasons. This initiative also controls desertification, thus, reducing salinity and helping desert areas get green crops in both monsoon and winter. Traditionally, land ownership rights rest with a male member of the family, but with this new process, a power-of-attorney is obtained in the name of the woman member to make the land a part of the Bhungroo initiative, thus enabling women's empowerment.

The solution, which initially covered 14 villages in the Sami and Harij blocks of the Patan district, in Gujarat, has been replicated in other parts of the state by the Gujarat Ecology Commission and Gujarat State Planning Board, while the State Education Board has incorporated the idea into its school curriculum. Collaborations with various civil society organizations for the replication of the initiative in saline coastal regions of West Bengal and Orissa as well as at a national level are also underway. In addition, Change Agent, a Boston-based organization has helped

spread this idea to various parts of Africa.

AWARDS/HONOURS (If any)

Biplab K. Paul, the name behind this initiative, has won a number of awards – such as the 'Ambassador for Peace Award' from the Universal Peace Foundation of New York, recognition as a 'Young Leader on Water Resource Management' from the US Department of State, the 'World Bank's India Development Market Place Award (2007)', and the prestigious 'Ashoka Global Changemaker'.

The World Bank also supported a documentary of Paul's work. A national-level daily conferred the 'Jal Star Award' on him for his contribution in the water segment at the grass-roots level. He was selected as the conceiver of one of the best social entrepreneurship ideas by Maruti-Suzuki Motor Company, as part of a national business ideas competition. In 2013, the Bhungroo initiative was awarded one of the best climate change mitigation processes in Gujarat.



» Land affected due to paucity of water



» Water logged areas of arid Gujarat



Location/Address of FPO: Bhomaikrupa Bhungroo Juth, Village Motajorawarpura, Tehsil Sami, District Pattan, Gujarat.

Contact Details of RI: Sajjata Sangh, C/o Development Support Centre (DSC), Marutinandan Villa, Near Govt. Tubewell, Bopal, Ahmedabad- 380058, Gujarat. Phone: 02717- 235994, 235995. Email: sajjatasangh@gmail.com

26.

Leveraging The Power Of Collective Marketing

Name of Farmer Producer Organisation (FPO):

Babpur Krishak Sangh

Supporting Resource Institution (RI):

Indian Grameen Services (IGS)

CHARUCHANDRA BAG HAS been growing vegetables in Babpur village in Barasat, West Bengal, for more than 20 years. The Barasat and Amdanga blocks are part of the prime zones of vegetables cultivation in the North 24 Parganas district in West Bengal. But the price the farmers get for their produce is much lower than neighbouring markets such as Koley Market, Kolkata.

“We often wonder about the wholesale and retail price of different vegetables at Koley Market. It is much higher compared to what we receive,” he says. Though there are three markets within a radius of 8km from Babpur, it is not economically feasible for individual farmers to carry their produce to these markets – which they would either have to do on bicycles or through individual vans. “How can an individual farmer with a scanty produce think of carrying his produce to distant markets? My margin will be lost in transport cost itself,” laments Bag. The only recourse open to them is to sell their produce to the local aggregators

and wholesalers.

The Vegetable Initiative for Urban Clusters (VIUC) programme has proved instrumental in transforming the lives of marginal farmers such as Bag, Soumitra Maity, Sankar Jana, Montu Jana, and many more, from Babpur, who reside in a village merely 40km away from Kolkata. The programme encourages farmers to form farmers interest groups (FIG) that enable them to market their produce collectively with a motorized vending cart of their own.

The Indian Grameen Services (IGS) formed FIGs under VIUC with the District Horticulture Office (DHO) in this village and convinced the farmers to try selling some of their produce collectively. The Babpur Krishak Sangha, an FIG formed under VIUC, agreed to try this direct selling method with some of its produce at distant wholesale and retail markets for a few days, then review the situation every day, and plan their future course of action.



» Farmers in a retail market



» Montu Jana in Patilpukar Market

Before they knew it, a motorized vending cart was hired and the farmers were geared up trying out greener pastures. Four teams were formed and they were assigned three Kolkata Corporation retail markets, with the help of the DHO, along with Koley Market for wholesale trading. "Each night after returning home, we calculated and found out that we were not earning adequate profits because we have to bear the transport cost of our own, while the farmers are getting more money," recalls Montu Jana, one of the team members who was assigned to New Market, a retail market in North Kolkata. "In comparison to the retail market, however, we realized that the wholesale market is earning profit," he adds.

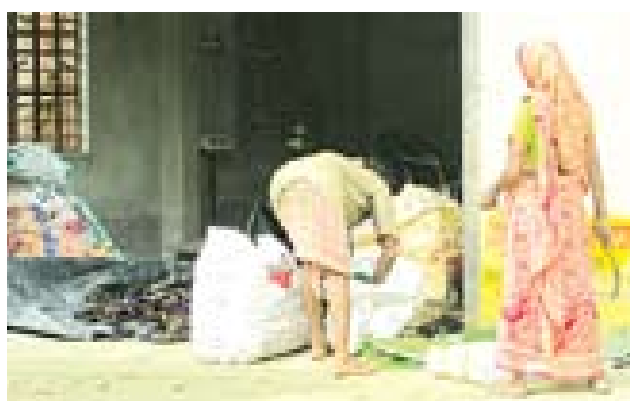
After consecutive losses on the fourth day, IGS, along with members of Babpur Krishak Sangha, sat together to assess the loss and it was identified that the loss was mainly because of scale of the produce that had been sold. The amount sold in retail markets was very less and it did not fit in the scale of economy. Moreover, the large volume could only be justified through wholesale marketing. IGS decided to close the retail marketing rounds and continue with just the wholesale trading.

From then on, the FIG continued to carry some of their vegetables to different wholesale markets with a hired motorized vending cart. After continuing this for a month, the Babpur Krishak Sangha decided to buy a motorized vending cart of its own, and the IGS arranged for a Tata Ace as a part of the VIUC scheme. The bank finance was also arranged by IGS, with 50% subsidy from the Union government under the NVI scheme. Now, the Babpur Krishak Sangha has its own motorized vending cart, which they use to carry their vegetables to different wholesale markets on their own.

Amazed by its success, another FIG – Kakoli Krishak Sangha – has already bought a vending cart to carry its vegetables, and three more FIGs are under way. "It's a very small initiative", says Sankar Jana, director of Barasat Progressive Vegetable Producer Company Ltd, who shoulders the responsibility of taking this initiative up to the level of the farmer producer organization (FPO). "We are now scaling up this initiative at FPO level to work as aggregators and incorporate wholesale marketing of vegetables in our business plan," says Jana.



» Retail outlet at Patipukur market



» Farmer bringing their produce to aggregation centre



» Motorized Vending Cart of Babpur Krishak Sangha

IGS is promoting similar initiatives in all the FPOs formed under VIUC in West Bengal. The FPOs will work as aggregators of output and the marketing margins earned will be one of its major revenue-generating activities. It can be safely said that this is a small initiative towards a brighter future.



Location/Address of FPO: Babpur Krishak Sangh , Village Babpur, Block Barasat, West Bengal.

Contact Details of RI: Indian Grameen Services (IGS), BC- 247, Sector-1, Salt Lake City, Kolkata, West Bengal- 700064. Phone: 033-23596264. Email: info@igsindia.org.in. |

Website: www.igsindia.org

27.

Improving Cotton Growing Practices For Higher Returns

Name of Farmer Producer Organisation (FPO):
Nimad Farmer Producer Company Ltd. and others

Supporting Resource Institution (RI):
Action for Social Advancement (ASA)

THE BETTER COTTON INITIATIVE (BCI) is a global movement and certification programme aimed at improving cotton growing practices. This initiative was started in 2005 by the Action for Social Advancement (ASA) through Solidaridad, a Dutch NGO. Solidaridad, along with others, funds the BCI programme in India. The initiative lists out a set of “minimum production criteria”, or MPC, that defines the conditions in which the cotton needs to be grown. The MPC touches upon all possible aspects of cotton farming, including environment, resource management, cotton yield and quality, and working conditions for the people working on the crop.

The cotton thus produced is qualitatively recognized as “better cotton”. It is better in fibre length and strength than ordinarily grown cotton and has greater demand in the international market. Tentative buyers range from brands such as Adidas to Wal-Mart, who are also BCI members.

In recent years, cotton farmers have increased their investments in cotton production but haven’t received commensurate returns. Even with cotton demands increasing globally, there were cases of negative returns especially in the case of smallholders. To address this situation, BCI launched an alternative cotton production programme with a goal to promote good agriculture practices (GAP), conform to World Health Organization (WHO) norms, save the environment through judicious and efficient use of water and agri-inputs, and also build market linkages for cotton growers.

There is a three-tier system of cotton certification which is used to recognize it as better cotton. At the first stage, the produce is self-assessed at the learning group level; at the second stage, ASA evaluates the cotton; and the third assessment is made by an agency appointed by Solidaridad or BCI. The cotton properly grown is said to



» Good Agriculture Practices - Inter Cropping of cotton with Maize



» Careful picking of the delicate crop

have reported more than 80% success rate in the certification process.

This innovation was implemented in four districts of Madhya Pradesh through six producer units, involving 13,000 small farmers. It was conceptualized and designed to address the issues of poor productivity of soil, sustainable and efficient use of available natural resources, and restoration of soil fertility through judicious use of natural resources. Each producer unit is basically an ASA-promoted farmer producer company (FPC) consisting of an average of 80 learning groups, which are basically activity-based groups (ABGs) each with an average of 20 members and a facilitator, who facilitates the activities of the group.

In India, over 80% of the targeted farmers belong to tribal and other socio-economically marginalised groups. Small landholdings, coupled with factors such as poor irrigation and infrastructure facilities, lead to lower incomes that are not even enough to maintain a decent living. As a result, seasonal migration takes place, wherein at least one member from each family goes to the nearby cities during the non-agricultural season in the search of wage employment. The deficit in income leads to borrowing from local moneylenders, which is hard to meet because of an exorbitant rate of interest. Hence, a large chunk of the income of these farmers goes towards paying off debt services, instead of building assets.

However, this initiative has conferred numerous benefits, including the promotion of soil and moisture conservation practices, initiating work on land and water development through convergence with Union



» ICT Material for the innovation

government schemes, and promotion of inter-cropping and varietal diversification. It has accelerated a huge drive for the use of home-made pesticides and has conducted

ACHIEVEMENTS OF THIS INNOVATIVE PRACTICE

Parameters	2010-11	2011-12	2012-13	Cumulative Progress
No. of farmers trained on the principal of Better Cotton	6,000	8,500	10,184	24,684
No. of farmers registered for voluntary certification	6,000	8,500	10,184	24,684
No. of farmers certified as producers of better cotton by a third party	6,000	8,500	10,184	24,684
BCI Cotton linked to market (mt/value in lack rupees)	—	36,38/1,455.20	1,948/789.03	5,586/2,244.23

Since the innovation is centred on GAP and conservation of the environment, it may be applied to any crop, whatsoever, and can be adopted by any community.

many demonstrations to reduce the use of hazardous chemicals in order to save the health of the farmers and as well as the environment.

The development of a cadre of paraprofessionals has significantly lowered the risk of cotton production. The FPCs formed in the project facilitate the procurement of better cotton between the ginners and producers, thereby, eliminating the middlemen and fetching the maximum price benefits for the producers. Since the inception of this system, 5,586 million tonnes (mt) of cotton, worth Rs. 2,244.23 lakh, has been produced. The per farmer income

has also shown a significant increase, and it now stands at Rs. 9,000.

Excerpts from impact assessment of the intervention:

- Around 65% of farmers have adopted the recommended seed rate of 30kg per acre, while the rest have reduced the seed rate from 50kg to 30-40kg per acre
- Home-made pesticides and indigenous methods of insect control was widely used to save the farmers' hard-earned money



» ICT Material for the innovation



Location/Address of FPO: Nimad Farmer Producer Company Ltd., Village: Ojhar, District: Barwani, Madhya Pradesh.

Contact Details of RI: Action for Social Advancement (ASA), E-5/A, Girish Kunj, Above State Bank of India (Shahpura Branch), Bhopal, Madhya Pradesh- 462016. Phone: 0755-4057926, 2427369, Email: asa@asabhopal.org.

28.

Return To Vegetable Farming Through FPO

Name of Farmer Producer Organisation (FPO):

Harihar Samruddhi Utpadak Samuh

Supporting Resource Institution (RI):

Indian Grameen Services (IGS)

SHER SINGH is a resident of Kajlas village in Fanda block of Bhopal district. His family includes his wife, three children, his brother and sister-in-law. The Indian Grameen Services (IGS) came to his village with the Small Farmers' Agribusiness Consortium (SFAC) Vegetable Initiative, and shared the concept of the project "SFAC – Promotion of FPO (Farmer Producer Organization) under VIUC (Vegetable Initiative for Urban Clusters)" with him. Singh was not interested because he had not been growing vegetables for the last 13 years, but he still liked the FPO part.

To make him a member of a Farmers Interest Group (FIG), the team decided to motivate him to grow vegetables. After being called for all the FIG meetings, Singh attended discussions on the methods of vegetable cultivation and production. In these, the one thing which impressed him the most was that the farmers who had shown exceptional productivity were using this forum to discuss the methods and processes to enlighten the rest of the farmers. To have the encouraging support of the IGS staff in the sharing of processes was heartening for him.

Another meeting that proved instrumental in bringing about a change in Singh's views was on the FIG demand collation of fertilizers and vegetable seeds. He saw that a demand of 300 bags of Diammoniumphosphate and different vegetable seeds were collected and certified by the State Seed Certification Agency (SSCA), Bhopal. He was told that seeds could be arranged in adequate quantities from the Rajgarh district, if FIG members wanted to grow this. Many FIG members, including Singh put forward their demand for the seeds in adequate quantities from Rajgarh.

The IGS staff was happy to receive this demand and in

a matter of three to four days, the fertilizers and seeds were arranged for the members. Singh took the seeds of the lady's finger and sowed it on a 1-acre land. The germination percentage communicated by IGS was 70%, but it successfully resulted in 84-92% germination of seeds.

At present, Singh – who is also a member of Harihar



» Sher Singh with his Son and Brother

Samruddhi Utpadak Samuh – helps in the vegetable seed demand accumulation by FIGs and advance planning of input needs. Till date, in Kajlas village, seeds of sponge gourd, bitter gourd, tomato, round gourd, cauliflower and

lady's finger have been provided through demand accumulation. The seeds were provided to the members at significantly low rates in comparison to the MRP which they were paying earlier.



» Sher Singh in his Cultivated Land



Location/Address of FPO: Harihar Samruddhi Utpadak Samuh, Village: Kajlas, Block: Fanda, District: Bhopal, Madhya Pradesh.

Contact Details of RI: Indian Grameen Services (IGS), BC- 247, Sector-1, Salt Lake City, Kolkata, West Bengal - 700064. Phone: 033-23596264. Email: info@igsindia.org.in. | Website: www.igsindia.org

29.

Faith In Collective Action

Name of Farmer Producer Organisation (FPO):

Jain Hanuman Samruddhi Utpadak Samuh

Supporting Resource Institution (RI):

Indian Grameen Services (IGS).

IN OCTOBER, the Indian Grameen Services (IGS), Bhopal, team went to the village of Baurkhedi in Madhya Pradesh to share the objectives of Small Farmers Agribusiness Consortium-Farmer Producer Organization (SFAC-FPO) promotion project. This village was selected because it had a large number of small and marginal landholders, was close to other villages for potential cluster densification and was in an implicit need for guidance.

The village producers, however, were not ready to listen to an outsider. But this was something that the IGS team was aware of, along with the fact that the producers would also give in if they were continuously persuaded. The team then approached the village headman and tried to explain the vision behind this project. The idea was to aggregate small and marginal farmers, empower them with a bargaining power and also promote better environment and health-friendly vegetable management practices. This was the first step towards an association. Finally, with the help of the producers, a primary village-level meeting for the formation of a farmers interest group

(FIG) was organized.

The meetings were used to communicate the problems of the farmers' existing cultivation model and the benefits of group purchasing and selling, should the members develop faith on each other and start collective action. Building up on this, it was explained to them that through bulk purchase they could tackle, up to an extent, the rise in input prices, and slowly they could move towards bulk selling at FPOs. It was in this manner that the farmers were made aware of the latent need for group formation to deal with problems such as pricing issues, and how groups and FPOs would give the bargaining power to them.

Finally, in due course, the Jain Hanuman Samruddhi Utpadak Samuh – a group of 14 farmers – was formed. Two group leaders were elected by the members to manage the group better and ensure its smooth functioning. The group decided on its own norms, including a mandatory monthly meeting. It also opened a bank account in the name of the FIG and started saving



» BOD Training



» Farmers Training By Horticulture Dep.

Rs. 100 on a monthly basis. Slowly and steadily, the group members were trained on how to carry out bulk purchasing and pre-planning for inputs. Slowly, they themselves started constructive discussions in the meeting.

Now, they have progressed as far as to be linked with mobile-based crop advisory services, which also provide information of various schemes from the horticulture department. The farmers discuss these schemes regularly at the group meetings and come to a consensual decision for the entire group. The group members got together and identified different schemes and the procedures to avail their benefits. They approached the IGS staff for help, who, along with two group members, went to the horticulture department and carried out the required formalities.

The results of various capacity-building exercises have

also been demonstrated by the farmers. In kharif, the farmers underwent an advance planning exercise of input requirement in the group. The IGS personnel identified four to five dealers/distributors after they were asked to help with market linkages. The selected dealers provided the requisite materials to the farmers at rates that were less than what they were purchasing. They purchased 250 bags of Diammoniumphosphate at Rs. 1,000 per bag, when market price had shot to Rs. 1115 per bag, thereby, increasing the total saving to Rs. 28,750 on just DAP.

Over time, this group has also helped in the formation of FIGs in other villages and, today, all the village-level primary groups have come together and formed a producer company, Unnat Kisan Producer Company, to increase their bargaining power and to get benefits of aggregation at an even higher level.



» Distribution of Seed kit by Department of Horticulture



» BOD Meeting



Location/Address of FPO: Jain Hanuman Samruddhi Utpadak Samuh, Village: Bourkhedi, Tehsil: Huzur, District: Bhopal, Madhya Pradesh.

Contact Details of RI: Indian Grameen Services (IGS), BC- 247, Sector-1, Salt Lake City, Kolkata, West Bengal- 700064. Phone: 033-23596264. Email: info@igsindia.org.in. | Website: www.igsindia.org

30.

Developing Governance Systems For Collective Action

Name of Farmer Producer Organisation (FPO):
Wardha Cotton and Soya Producer Company Ltd.

Supporting Resource Institution (RI):
Indian Grameen Services (IGS).

IN THE LAST few years, six districts of Maharashtra's Vidarbha region witnessed many cases of farmers' suicides. Despite the state government concentrated efforts, such as waiving of loans and providing subsidies, the distress situation has not changed so far.

While implementing the Agrarian Sustainability through Action Research (AGRASAR) project in Vidarbha, Indian Grameen Services (IGS) incorporated four producer companies in the Akola, Amravati, Wardha and Yavatmal districts in December 2011. The objective of the project was to build up confidence in poor and vulnerable farmers so that they can fight against their problematic situations and change their livelihood for the better.

As a part of this initiative, the IGS team initiated many practices to make the process better – one of them was adapting an accounting system. Accounting is a very important part of running an organization and in order to

maintain the books, an intensive training was imparted to the producer groups (PGs) teaching them the nuances of proper account keeping and account maintaining.

The dal mill, which is a sub-unit of a producer company (PC) handled by a PG also maintains its accounts and carries out audits in a timely manner. This practice has instilled transparency among the PG members and even in the board members. The monthly account statements are presented in the monthly board meetings of the PC. In addition, Tally – an accounting software – has been installed and is maintained at every PC.

IGS understood that information and communication tools can be a very powerful medium, and thus the team taught them how to use these tools in order to make the functioning process of the PCs easy and understandable. This motivated the board members to take closed user group (CUG) mobile plans. Some board members, from



» BODs involvement in Dal Mill accounting



» Making minutes in register

different districts, are now using a CUG phone service, which helps them get all the information and updates free of charge, while also staying in touch with each other.

For effective communication, four chairmen of the PCs conduct weekly conference calls between themselves to share weekly updates of their PC with others. The offices are fitted with Internet connections and all the PCs have desktop computers and Internet dongles that keep them connected to the Internet at all times. The directors effectively use this to keep tabs on agricultural websites such as National Bank for Agriculture and Rural Development (NABARD), Maharashtra Industrial Development Corporation (MIDC), and other government sites for availing schemes.

Mr. Gyaneshwar Diwane, director of the Wardha PC, who had not even completed his school education, purchased his own laptop on EMI so that could always work for his company. He taught himself how to work on the computer by observing others, and now is quite adept at using social websites like Facebook and Twitter, apart from supporting the company with updates.

The decision-making process, which involves many stakeholders, is a lengthy and time-consuming one. Therefore, to quicken this process, it was decided to keep one record register at the PC office. Anyone starting on any particular work first has to discuss his initiative over the phone with at least four directors, note the details from the discussion(s) into the register, and then proceed on the task in accordance with what was decided by the forum. The details of the register are read in the monthly

meeting and any issues are resolved by the directors. Many organizations who visited the PCs have appreciated this initiative and have said that they intend to implement a similar process as well.

The board directors of all the PCs have been suitably empowered through an increase in their participation levels in every business activity. They are actively involved at every stage, right from making business plans to the implementation of the task, with support from the implementation team. In 2012, about 1,500 quintals of soybean trading, 600 quintals of tur and 1,500 quintals cotton supply had been successfully conducted. The whole process from selection to transportation had been carried out by the directors who feel confident about taking on the business now.

These companies are successfully growing each day and the work is compounding, due to which it has become important for the board members to be actively involved and contribute to the various processes. IGS has assigned responsibilities to the board members and has also been supporting them in its implementation. Every board member has been given the role of a guardian for his own village and even some of those that are nearby.

The directors organize evening village meetings for share collection and visit each other's villages to spread the word of information sharing. At present, all responsibilities – such as arranging events, exposure visits, managing training programmes and organizing the exposure visit to other organizations – are shared by the PC directors and the IGS team.



Location/Address of FPO: Wardha Cotton & Soya Producer Company Ltd., Plot No.17, Bhong Lay Out, Near Bus Stand, Deoli, Taluka: Deoli, District: Wardha, Maharashtra.

Contact Details of RI: Indian Grameen Services (IGS), BC- 247, Sector-1, Salt Lake City, Kolkata, West Bengal- 700064. Phone: 033-23596264. Email: info@igsindia.org.in | Website: www.igsindia.org

31.

Promoting Tribal Cuisine Among Urban Communities

Name of Farmer Producer Organisation (FPO):

Jai Ambe Mahila Mandal and Bajarangbali Mahila Mandal

Supporting Resource Institution (RI):

Bharatiya Agro Industries Foundation (BAIF)

THE TERM NAHARI is an initiative connoting tribal women led traditional indigenous food sales corner set up successfully by BAIF in villages of South Gujarat. The Concept of community owned and operated Nahari is an effort to promote tribal cuisine among tourist and urban community of South Gujarat and generate alternate innovative source of livelihood for tribal women.

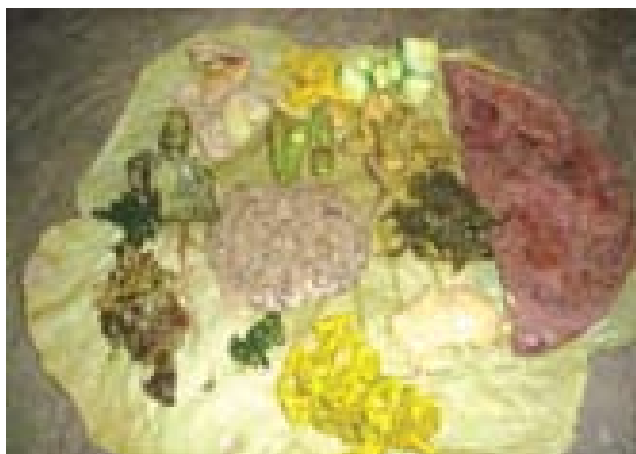
Naharis involve setting up of stall by group of tribal women for sale of delectable ethnic preparations of finger millet, lentil and traditional chilies and wild tubers and also seasonal forest foods, which are cooked in a traditional manner by the same group of women.

The first NAHARI was set up in village Ganpur, near Valsad in the year 2006. The concept got originated when BAIF's local team members were conducting study under the theme of eco health. Various activities and events were planned as a part of this study to assess the wild

food resources that are available and that are consumed by local communities.

A few enterprising women's groups such as "Jai Ambe Mahila Mandal" and "Bajarangbali Mahila Mandal" took the bold initiative of jointly setting up a stall for selling ethnic cuisine. The strategy worked. Their surprise knew no bounds when they realized that their maiden venture had fetched them a net profit of Rs. 12,000. Encouraged by this success, the groups started supplying traditional homemade food for various events.

The year 2006 saw these women setting up first Nahari outlet in village Ganpur for serving authentic Tribal Thali to visitors. Traditionally, Tribal Thali usually comprises of Ragi chappatis (called Nangli Rotla), Urad daal and 1 local seasonal vegetable. Nahari women decided to serve these items along with 1-2 additional food items prepared from material available locally.



» Tribal Thali



» Nahari Outlet in Ganpur, Vansda block, Navsari district

The Nahari interiors have been designed deliberately with tribal decor to create a suitable ambience. Its quaint interiors nestled against an archetypal village backdrop makes it a perfect setting of modern and traditional harmony while amply demonstrating the culinary skills of these women.

Ganpur Nahari is run by a SHG of 17 women, this Nahari has reached a self-sustaining level. This Nahari does an average daily business of over Rs. 1000. Today they get wages of Rs 50 per person per day of work apart from the profits which add up to their combined savings. They have made 3 sub-groups of 6-6-5 people whose duty alternates, so that one person has to work only 10 days a month. Everybody has a different responsibility like cooking, serving, cleaning, etc. and people are divided into sub-groups to ensure that each group can complete all the activities needed to run the food corner

Apart from serving ready to eat fresh food, these women today have also started a sales outlet to market the products of Vasundhara Cooperative with an investment of Rs. 5000 from the income earned from managing this food corner. Nahari today is doing brisk business as is evident from the jingling of the cash register. Patronised by the villagers of Ganpur, residents of neighbouring villages as well as weary travellers who love to savour the variety of tribal delights, it has indeed become a prominent landmark of Ganpur village and a popular destination as well.

The entire activity involved lot of painstaking effort in the form of building internal capacity for management of enterprise, building confidence, providing required trainings and skills to groups of these tribal women and shaping Nahari as a viable business enterprise. BAIF also assisted them wherever possible with loans and one time infrastructural assistance.

Taking a cue from this 7-8 such Naharis have been set up at locations adjacent to highways in South Gujarat. Further replication of this approach was undertaken in the year 2008, through BAIF's Thematic Center for "Developing options for innovative livelihoods for rural and tribal communities through provision of hospitality services in rural areas"

The concept stands well received by both tourist as well as local population. These are seen as a tool for

empowerment of tribal women, while ensuring that the traditions and habits of the tribals are not lost in the path to income generation.

The Naharis are emerging as a model of women led group enterprise in tribal setting which typically faces problems in the form of most underdeveloped regions characterized by vast untapped resources on one-hand and underdeveloped communities living at subsistence level and struggling for basic means of survival and well-being on the other hand. The regions are backward and are predominantly inhabited by tribal population, such as Kukana, Koli, Warli, Kotwalia, Kolcha, Nayaka. Tribal in this part are engaged in continuous struggle for existence and livelihood options are very limited to them.

Apart from creation of self-employment for tribal women near their residence, the NAHARIS have also helped in popularizing the traditional food based dishes amongst both tribal and non-tribal population in the region. Visitors have become aware about nutritional and tasty dishes of tribal communities and they cherish this experience.

The success of Naharis is also seen as recognition and reward to local communities for conserving and being able to revive their traditional food based knowledge and skills

Demand creation for local wild food resources is also expected to result in to resource conservation actions.

The initiative has helped in creating required financial incentive and providing opportunity for gainful employment for tribal women in their own villages without getting displaced.

This work flexibility has proven most useful to tribal women who otherwise did not have much options of work in their own setting. This is because problem in rural areas is that of underemployment rather than unemployment. Underemployment creates the issue graver as it means that these rural women are available only during part of day when they do not have household chores. Although they need income, they cannot leave their houses during morning hours when they have to do household duties.

There is no looking back for these emboldened women who have graduated from being ordinary housewives to successful entrepreneurs capable of giving other eateries a run for their money.



Location/Address of FPO: Jai Ambe Mahila Mandal and Bajarangbali Mahila Mandal, Village Ganpur, District Valsad, Gujarat.

Contact Details of RI: Bharatiya Agro Industries Foundation (BAIF), BAIF Bhawan, Dr.Manibhai Desai Nagar, Warje, Pune, Maharashtra- 411058. Phone: 020-25231661, 64700562, 64700175, Email: baif@baif.org.in

32.

Commercial Seed Production For Prosperity

Name of Farmer Producer Organisation (FPO):

Bijawar Farmer Producer Company

Supporting Resource Institution (RI):

Action for Social Advancement (ASA)

SOY CULTIVATION IN India is mainly concentrated in Madhya Pradesh, Uttar Pradesh, Maharashtra and Gujarat. With more than 5 million hectares of land under soybean cultivation in a single season (kharif), Madhya Pradesh is the highest soybean producer in the world and is known as India's "soybean state". Despite this, the productivity of the state is very low compared with neighbouring states such as Maharashtra.

The pertinent issues restricting small and marginal farmers are the lack of awareness on improved and sustainable agricultural practices, along with the absence of appropriate, viable and competitive marketing facilities and extension services, which degrade soil health and produce a low yield. In these areas, the farmers use a high seed rate – up to 135kg/ha against the recommended 80-90kg/ha. The unavailability of quality seeds and a low replacement rate at 19.37% are issues that further

aggravate the problem.

Most of these farmers don't know how to optimally use agricultural input and are not conscious about the disadvantages and side effects of harmful chemical pesticides and herbicides. Due to the lack of any formal or informal agricultural extension delivery systems in the area, their main source of agricultural information are local moneylenders, small traders and vendors. Conditions such as the lack of a market-preferred quality, poor access to genuine markets, lack of awareness about the soy value chain, along with the farmers' poor negotiation capacity have resulted in poor returns from the sale of their produce, making the small farmers more vulnerable.

So, to popularize responsible soy production among soy farmers, the NGO Action for Social Advancement (ASA) has been working in collaboration with the Round Table on Responsible Soy (RTRS) Association, a Netherlands-



» Promoting use of indigenous plant medicines



» Farmers field training

based international mechanism. RTRS aims to facilitate a global economically viable, socially equitable and environmentally sound dialogue on soy production. It provides stakeholders and interested parties – including the producers, social organizations, business and industry – with the opportunity to jointly develop global solutions leading to “responsible soy production”. The programme is currently running in five countries: Argentina, Bolivia, Brazil, India and Paraguay. In India, it is being implemented in Madhya Pradesh. The ingeniousness of the method, of course, is that it is not just limited to soy production, but can be implemented for all other agri product, and in any community.

ASA’s innovative method aims to help smallholders meet the increasing soybean needs in today’s generation, without endangering the natural resource base and natural habitat. With the participation of farmers and labourers, such a responsible production method could be a sustainable way to achieve professional growth and production enhancement, while maintaining social harmony.

The innovations

This new technique of sapling cultivation had initially been implemented in five districts – Damoh, Chhatarpur, Tikamgarh, Narsinghpur and Guna – and adopted by the 10,500-odd farmers residing here. About 70% of the people in the first three districts (especially those in the

intervention area) are backward i.e. behind others in progress or development and have very small landholdings. Thus, the farmers have smaller interests in proportion to their holdings and, to add to their trouble, they face bouts of drought or heavy rains after every two to three years.

This innovation was conceptualized and designed to address the issues of poor soil productivity. In addition, it also helped the efficient use of available natural resources, lowered the use of hazardous pesticides, improved market linkages and hiked the prices for their soy produce, which consequently increased the farmers’ net returns. The idea was also to create awareness on issues of child labour and the safe use of chemicals and pesticides, while promoting sustainable and eco-friendly agricultural practices by creating a multi-stake farmer support system.

ASA – with help from its partners – trained more than 10,000 farmers, across 116 villages, on how to practise responsible soybean production. The soy, thus produced, was exposed to third-party audits on the parameters of responsible production by the Control Union and certification firm SGS in Mumbai. Over 70% of the producers were approved and certified. The certificates of the farmers were traded with European buyers fetching a premium of Rs8 lakh over and above the market price. These farmers produced 10,326 million tonnes (mt) of certified soy during 2012.



» Safe Seed Treatment



» Safe Pesticide Application

This innovation has effectively brought various benefits to the field – including adoption of eco-friendly and sustainable agriculture practices, restoration of natural ecosystems and access to better quality agriculture inputs – which led to an increased net return from soy cultivation. The achievements are enumerated below:

ACHIEVEMENTS OF THIS INNOVATIVE PRACTICE

S. No.	Parameter	Achievements
1.	No. of registered farmers	9,197
2.	No. of certified farmers	7,165
3.	Certified soy produced during the project	32,727 mt
4.	Increased productivity of project farmers	18%, over state average
5.	Land certified under sustainable social, environmental and economic conditions	6,902 ha
6.	Change in seed replacement rate of soy crop	8-22%
7.	No. of farmers who received internationally recognized social and environmental certification on soy production	7,165
7a.	No. of female farmers	1,837
7b.	No. of male farmers	5,328
8.	No. of trade contracts between small producers and buyers	1
8a.	No. of international contracts	1
9.	No. of producers in cooperative or other organizational arrangement	22,700 producers under 9 farmer producer companies in 5 districts of Madhya Pradesh
10.	Average benefit to producers, in terms of reduced cost of cultivation	Rs. 2,500-5,000 per ha
11.	Estimated monetary benefits over average rate of ordinary soy	Rs. 100 per quintal

The Certification

The RTRS programme for certification is called the Soy Producer Support Initiative (SOYPSI). Its aim is to support small-scale farmers and farm workers and prepare them for certification. Participating soy farmers are expected to comply with RTRS principles and are monitored through both internal audit and external audit systems. On successfully passing the external audit, the farmer groups (not individual farmers) are awarded a certification stating that they have produced “responsible soy”. The certificates are tradable in the international market. With the help of Solidaridad, they are sold to international dairy companies like Friesland Campina, who buy them as a part of their corporate social responsibility (CSR) initiative.

As part of the SOYPSI, there was an intervention to enhance soy productivity in Madhya Pradesh. A village

identification survey found that these farmers were unorganized and, so, the best course of action seemed to be to adopt a group approach as opposed to working with individuals.

A process for farmer identification was carried out by taking soy farmers from target villages with a landholding of up to 4 ha. Meetings were held to take decisions and these groups had the freedom to develop their own rules, regulations and values. To make sure packages were in accordance with RTRS guidelines – like INM, integrated weed management (IWM), integrated pest management (IPM), bio-pesticides, sowing practices and water-management practices, including bund plantation – they were trained, and one demo plot was given for every 25-30 farmers.

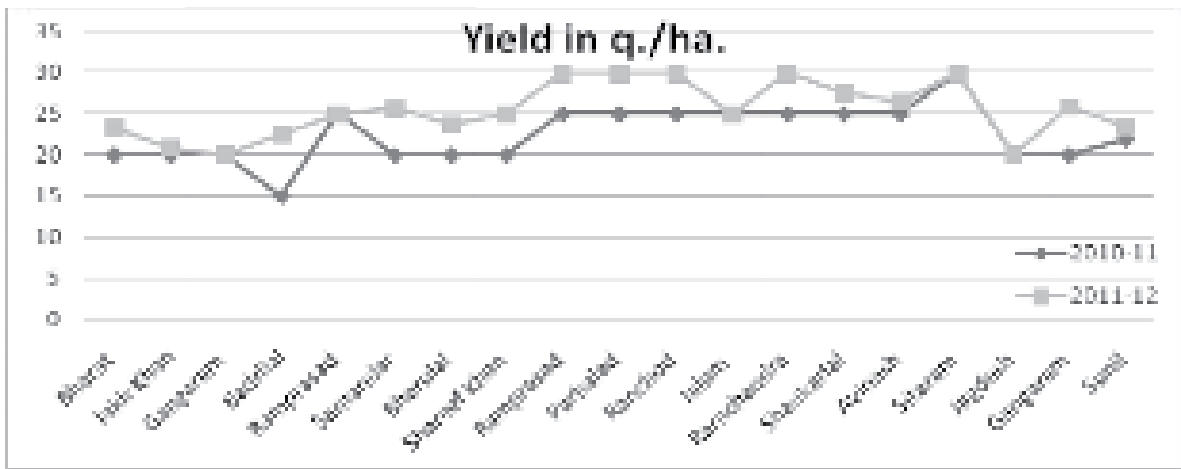
For agri inputs, backward linkages of producer groups

were chosen because of which they got wholesale rates. Certificates were traded in the international market for additional revenue, and they were sold to FrieslandCampina, with the help of Solidaridad. For soybean produce, food and animal feed companies became aware of the international trends. Companies like Unilever, Cargill and Nutreco have been proactively identifying soy cultivated in accordance with the RTRS

principles.

Thanks to this initiative, the farmers have now started practising soil tests and applying balanced fertilizer doses on the basis of soil-testing reports, among a series of other steps. These have effectively increased productivity. For instance, in 2011, the average productivity of an RTRS farmers was 13.65 q/ha while the current state average is 11.05 q/ha .

Here are a few samples of a farmer’s soy harvest yields in Sunwani Gopal village. Also shown in the following figure, are the RTRS principles that have led to greater yield:



Additional income for farmers

Before intervention:

Yield from an acre – 4.42 quintal, market price Rs2,000/q
 Revenue to farmer = 4.42 * 2,000 = 8,840

Farmer groups have provided significant social benefits to its members, like, promoting saving, bulk buying, not using child labour, providing equal wages and spreading awareness of the dangerous effects of pesticides. Other practices like the use of primary health kits in case of emergency, use of vermin compost, pest management, take permissions and authorization when needed, use crop residue for manure, etc., have also been adopted. The RTRS principles have evolved as an important answer to correct various malpractices.

One of the important lessons learned through the principle was that the producer-group approach worked excellently and eased the process of awareness

generation, training, as well as increased the rate of adoption of the prescribed RTRS principles. The group approach gave the farmers bargaining power, which helped them link up to several agricultural schemes.

Farmers have been able to earn additional income ever since they are certified. A farmer’s failure to correctly follow RTRS principles disqualifies his entire producer group from being certified. This group pressure has helped to get better returns. Since the practices of a single farmer can affect the revenue of an entire group, peer pressure has played a strong role in ensuring adoption of RTRS principles.



Location/Address of FPO: Bijawar Farmer Producer Company Ltd., Block Bijawar, District Chhattarpur, Madhya Pradesh. Phone: 078-69957632

Contact Details of RI: Action For Social Advancement (ASA), E-5/A, Girish Kunj, Above State Bank of India (Shahpura Branch), Bhopal, Madhya Pradesh- 462016. Phone: 0755-4057926, 2427369, Email: asa@asabhopal.org.

33.

Developing Direct Market Linkages to Improve Profitability

Name of Farmer Producer Organisation (FPO):
Krishak Janhit Samiti and others.

Supporting Resource Institution (RI):
International Traceability Systems Limited (ITSL)

ALIPUR DISTRICT IN the north of Delhi has 89 Farmer's Interest Groups (FIGs) and the 1,639 members of these FIGs are progressive cultivators. Ever since the launch of the Vegetable Initiative for Urban Clusters (VIUC) scheme, and with the constant support and the help of the nodal office and Resource Institutions (RI), they have started believing in collectivization. The Farmer Producer Organizations (FPOs) registered by them have collectively procured urea, muriate of potash, gypsum and di-ammonium phosphate. This has taken this FIG a step closer to being self sufficient.

The farmers of this district have been growing brinjal, spinach, sponge gourd and cabbage among others. Prior to the introduction to this scheme they would sell their produce at the Agricultural Produce Marketing Committee (APMC), Azadpur, where they felt cheated because the 'adhtiyas' or commission agents deduct a certain volume

of produce for weight loss and sampling.

A progressive farmer from Bakhtawarpur Village, Surat Singh became a member of one of the FIGs after being advised to join other farmers to form a group. Surat Singh, together with the rest of the members of the FIG, started selling fresh produce to the Bharti Walmart collection centre instead of the Azadpur APMC where they had been selling their produce thus far. The experience proved to be positive.

Following the success of selling to Bharti Walmart, these farmers have now been regularly selling to Bharti Walmart and have further extended their links with Mother Dairy and Reliance Fresh. They have sold 1,558 mt, 2,273 mt and 1,322 mt of produce at Bharti Walmart, Mother Dairy and Reliance Fresh, respectively so far in 2013. This market tie up has started bearing fruit, resulting in additional savings for the farmers as no deductions are made before sale,



» Collective procurement of fertilizers



» Market linkages established by Farmers

unlike at the Azadpur APMC.

The success of the scheme is the result of the constant efforts made by the various stakeholders under Vegetable Initiative for Urban Clusters (VIUC). To name a few: SPV Organic Agro Producer Pvt. Ltd., Palla, has 893 shareholders with a total landholding of 2,150 acres, Dabar Kishan Society, Gumenhera, Najafgarh, has 987 farmers

with a accumulative 1,775 acres under vegetable cultivation and the Khrishak Janhit Samiti, Dichaon Kalan, Najafgarh, which has 895 farmer members with a total landholding of 2,404 acres. Their market tie-up during 2013 resonates the theory and has been listed in the table below:

MARKET TIE-UP WITH BHARTI WALMART AND MOTHER DIARY OF FOUR FPOS PROMOTED IN DELHI DURING 2013

FPOs	Quantity of Vegetables (in quintal)	Market Rate (Rs)	Tie-up Rate (Rs)	Profit (Rs)
<ul style="list-style-type: none"> • SPV Organic Agro Producers Pvt. Ltd, Palla • Dabar Kishan Society, Ghumanhera • Karshak Janhit Samiti, Dichaon Kalan • Krishak Bharti Seeds & Fertilizers Pvt. Ltd Company, Bakhtawarpur 	895	10,76,520	11,89,945	1,13,425



Location/Address of FPO: Krishak Janhit Samiti, H.No- 250, Near Pole No.100, Dichoan Kalan, Bada Pana, Bako Gali, New Delhi-110043.

Contact Details of RI: International Traceability Systems Limited (ITSL), Building No- 261, Second Floor, Okhla Industrial Estate, Phase- III, New Delhi- 110020. Phone: 011-43279100, Email: info@agritrace.in | Website: www.itsltd.in

34.

Enabling Greater Reach To The Market Through Organised Retail

Name of Farmer Producer Organisation (FPO):

Subi Sahayata Samuh and others

Supporting Resource Institution (RI):

Indian Grameen Services (IGS)

THE PRIMARY CHALLENGE for small farmers today is their inability to earn good profits from their produce owing to the difficult marketing process. VIUC (Vegetable Initiative for Urban Clusters) scheme have been trying to better the situation. According to both the presidents of the above mentioned FIGs, the tangible benefits of the scheme have been visibly pronounced among the farmers of Goa.

The Brahmadevi Suteri Sahayta Samuh FIG consists of 16 female members and functions in an area where Konkani Chilli is among the main vegetables grown. Before the implementation of the scheme, the farmers could barely manage to grow enough crop for their personal consumption, but now, not only is the produce surplus, they manage to sell a considerable amount in the markets as well. Also, the organized form of retail has encouraged the all-female group to willingly carry out large scale vegetable cultivation which was earlier

discarded because of the uncomfortable primitive practice of selling on the roadsides.

The initiative of opening a procurement centre was taken by the Goa State Horticulture Corporation Ltd (GSHCL) with the support of VIUC. This initiative has solved their problem of reaching out to the markets to a great extent enabling them to sell large quantities of vegetables to the state -owned procurement centre. The procurement centre also sends its vehicle to the farm gate for collection of produce and provides highly remunerative prices for the vegetables. In addition, this GSHCL initiative has also opened up employment avenues at the local collection centre and kiosks which is gainfully engaging many of these people. The members of both these FIGs are highly pleased with the scheme and their socio - economic status is improving gradually.

The State Horticulture Corporation Ltd (SHCL) procures



» State owned collective centre



» Retail Kiosk

the vegetables from the farmers' group on a fixed rate basis; the rates are valid for 15 days. Payments are remitted to these farmers after 15 days. The vegetables are collected at the Corporation's collection centres and are thereafter distributed to about 600 of its retail kiosks across the state. For a fair bargain, the vegetable prices are displayed on the notice board of each kiosk and maintained which avoids fluctuation in the prices.

The testimony of the members of the all-female FIG, Saraswati Farmers Group is heartening and inspiring.

These farmers from South Goa's Gulem Village (Cancona Taluka) would only grow vegetables for their consumption and ever since they have inculcated this scheme in their farming practises, they have been collectively growing brinjal, bitter gourd, chilli, cluster beans and other seasonal vegetables and selling them SHCL procurement centre at very good prices. Thanks to the steps taken by the Department of Horticulture and the Resource Institution, Indian Grameen Services, the socio - economic conditions of these farmers have completely changed for the better.



Location/Address of FPO: Subi Sahayata Samuh, Village: Barcem, Block: Quepem, District: South Goa, Goa.

Contact Details of RI: Indian Grameen Services (IGS), BC- 247, Sector-1, Salt Lake City, Kolkata, West Bengal- 700064. Phone: 033-23596264. Email: info@igsindia.org.in. | Website: www.igsindia.org

35.

Achieving Profit Through Collective Marketing

Name of Farmer Producer Organisation (FPO):

Ekta Group Vegetable and Fruits Production and Marketing Cooperative Ltd.

Supporting Resource Institution (RI):

Development Support Centre (DSC)

FARMERS PRACTICING THE newly introduced concept of collective marketing through a farmer producer organization (FPO) work together in the fields as well as during the process of marketing the crops. This requires additional storage, processing and packaging of the crop, and the costs are shared by the group of growers. Collective marketing has the advantage of spreading costs over a larger crop volume, creating a significant presence in the marketplace, and focusing the marketing and selling efforts.

Farmers used a broad range of skills to successfully manage a vegetable business, some of these include: agronomy, staff management, financial management, and marketing the crop. Marketing the crop, which includes promoting, selling and the efficient distribution of the crop, can help procure additional profits in the vegetable business. Growers with marketing skill have more opportunity to achieve a premium price. Thus, marketing is a key skill in a vegetable business. This collective marketing of vegetables was adapted by a Farmers' Interest Group (FIG) in Gujarat. This FIG introduced the collective marketing of vegetables as a pilot experiment along with selling the produce in a night market instead of regular day market.

The main vegetable market in Ahmedabad, known as Jamalpur market, has a system of receiving and auctioning vegetables late in the night. This is because most of the vegetables sold at night are then sent to nearby cities like Rajkot, where vegetables are not grown locally.

The farmers took the initiative of selling their produce in this night market instead of the regular one. They contributed towards a transportation cost of Rs. 0.75 per kg, which was lower in comparison to the previous cost of Rs. 1.80 per kg when vegetables were sold individually.



» Training on production practices



» Collective marketing of vegetables - more accuracy in weight

Another important change was that it was decided that only one farmer would go to the market to sell the vegetables, instead of a whole bunch, thereby saving time for everyone as well. And so far, it seems quite successful.

The experiment was conducted by 35 farmers from 11 Farmer's Interest Groups (FIG) for three days. Five villages that participated in this experiment were Kuha, Karoli, Chaturpura, Kodrail and Pasuniya. During this, around 5.25 tonnes of vegetables – including Brinjal, Chilli, Drumstick, Bottle Gourd and Tomato, as well as exotic vegetables like Broccoli and different coloured Capsicum – were sold for a total sum of Rs 43,581.

This experiment had various benefits:

1. It helped the farmers reduce their engagement in marketing affairs, which had been too much.
2. By selling 5.25 metric ton of vegetables in groups, the farmers saved Rs5,512 on transportation cost.
3. The farmers could manage time in a better way now and were able to give more time to their household

duties.

Some of the benefits from this pilot :

1. The farmers attained confidence in the concept of collective marketing and arranging transport by themselves.
2. There was reduction in the weight loss of vegetables during transportation.
3. There was a reduction in loss by market labourers, who would take away vegetables while loading and unloading. Previously, this loss had amounted to around 3%.
4. More accuracy in the weighing of vegetables than the existing market system.

The farmers undertook this experiment with active support from the Resource Institution (RI). They were encouraged to undertake more group activities of this kind in the near future by using the training on production practices as well as marketing aspects provided by the Resource Institutions.



» Collective marketing of vegetables – arranging transport themselves



Location/Address of FPO: Ekta Group Vegetable and Fruits Production and Marketing Cooperative Ltd., Village: Kuha, Taluka Daskoj, District: Ahmedabad- 382433, Gujarat. Phone: Ambalal Patel (Chairman)- 9426532649

Contact Details of RI: Development Support Centre (DSC), Near Government Tube Well, Bopal, Ahmedabad- 380058, Gujarat. Phone: 2717- 235994, 235995, 235998. Email: dsc@dscindia.org | Website: www.dscindia.org

36.

Paving The Way For A New Revolution

Name of Farmer Producer Organisation (FPO):

Bhangar Vegetable Producer Company Ltd.

Supporting Resource Institution (RI):

Access Development Services (ADS).

IN THE SOUTH 24 Parganas district of West Bengal, a highly motivated team of farmers have established Bhangar Vegetable Producer Company Ltd. The farmers were mobilized to form the Farmer Producer Organization (FPO) by the State Department of Horticulture and Food Processing in association with Local Resource Institution – Access Development Services (ADS).

Bhangar Vegetable Producer Company is the first company registered under the VIUC (Vegetable Initiative for Urban Clusters) and has a membership of 1750, marginal farmers. These marginal farmers own less than 1 hectare of land on an average. The members of the FPO have shown commendable spirit and hard work to make their company one of the best producer companies in the region. The members have also shown great awareness of objectives and are equally motivated to succeed. The

members regularly organize meetings to deliberate and discuss the targets, savings, resource pooling, production objectives, marketing targets, linkages, etc. These farmers have realized the value of economy of scale and the benefit of collective bargaining power.

In the process of forming the FPO, the farmer members gave their lands on lease to the (Farmer Interest Groups) FIGs thereby making the available land of all the FIG members as a single unit for production of vegetables. This has led to economies of scale and enabled the FIG to opt for high-tech farming methodology.

Today the Bhangar Vegetable Producer Company boasts a total cultivable area of 18,800 sq.m which includes 94 poly shade net house of 200 sq.m each used for protected cultivation of vegetables. The FPO also received a subsidy of Rs 121.63 lakhs for various components such as



» Direct Sale of Vegetables at Kolkata Corporation Market



» Vegetable Sorting and Grading at Bhangar Packhouse, Kolkata

vegetable cultivation (Rs 28 lakh), shade net (Rs 52 lakh), motorized vending cart (5 Tata Ace for Rs 10 lakh), vermicompost (1,200 HDPE unit and 12 vermi units at Rs 31 lakh) and INM & IPM (120 farmers used the micro-organism – MAPLE, for Rs 65,000).

A direct tie-up has been made with the Indian Farmers' Fertiliser Cooperative Ltd (IFFCO) for procurement of fertilizers and till now 100 mt of NPK fertilizers worth Rs22 lakh have been procured. The company has arranged to purchase farm equipment, such as 240 hand sprayers, 240 foot sprayers, 250 bags of vermin compost, 500 spades, 500 bags of neem manures, 250 rose sprayers, etc., at subsidized rates by converging with other programmes and government schemes.

The company recently submitted a proposal of Rs31.75 lakh for establishing a packhouse and sorting grading centre (Rs 7 lakh), and for purchasing six static vending carts (Rs 75,000) and six refrigerated carts of 6 mt capacity each (Rs 24 lakh). A temporary packhouse is already operational from the Bhangar wholesale market, in a rented premise. Plus, the company has also applied for permission to establish a modern packhouse for the grading, sorting and packaging of vegetables.

The state's nodal agency has facilitated the company to retail its produce directly at various places in Kolkata, with the help of the municipal body. The company had to be initially provided with police protection, as existing traders were resisting the direct retailing of vegetables in the market. The company has also established links with Mother Dairy for the direct supply of vegetables to their outlets, and is supplying vegetables to seven corporation markets and three wholesale markets, namely, the Kole and Sealdah markets in Kolkata, and the Dhulagar

wholesale market in Howrah district. The company is also planning to set up its own vegetable dehydration facility for the dehydration of cauliflower and green chilli, with support from the Department of Horticulture and Food Processing, Government of West Bengal.

Tie-ups have been made with IIT Kharagpur, KVK Nimpit Ramkrishna Mission and Bidhan Chandra Krishi Vidyalaya for providing Technical support and training to the FPO. Discussions have been already been initiated with ECOCERT for starting Organic Certification of fields for around 500 farmers. The Local Resource Institution organizes regular documentary film shows of the movie 'Manthan – the Amul India Story' for FIG and FPO members in order to keep them motivated and provide them with a vision for their future.

Currently the company boasts of an impressive saving of around Rs16 lakh. This collectivized efforts of this small but highly motivated group of farmers is surely paving the way of a new revolution in the Indian farm sector.

The achievements of the Bhangar Vegetable Producer Company is not just a sum total of all the efforts of the farmers, a lot of institutional support has gone into it making it a success story to boast about. The institutional support has been instrumental in their success and have achieved through rigorous and inspirational training of farmers and the teamwork of department officials and RI staff at the ground level.

Mr. Atanu Gupta, District Horticulture Officer, South-24-Parganas and Indranil Mazumdar, District in-charge and Project Coordinator from ADS, and their team members deserve much appreciation for facilitating this collectivized efforts of the farmers.



Location/Address of FPO: Bhangar Vegetable Producer Company Ltd., Bhogali-II G.P office (Ground Floor), Kathaliya Bus Stand, Bhangar-II block, District South 24 Parganas, West Bengal.

Contact Details of RI: Access Development Services (ADS), 28, Hauz Khas Village, New Delhi- 110016. Phone: 011- 26510915, 26536435. Email: suryamani@accessdev.org | Website: www.accessdevelopment.com

37.

Green Terraces: Roof Top Vegetable Cultivation In Kerala

Name of Farmer Producer Organisation (FPO):
Swasrya Krashka Amithy Kovilnada and others.

Supporting Resource Institution (RI):
State Horticulture Mission, Government of Kerala.

IN THE LIVES of the rural and urban people of Kerala, terrace farming has become an integrated part of their lives. We all know Kerala is one of the most beautiful coastal areas in India but this serves as a disadvantage to the people too. As it remains waterlogged for most of the year, the operational holding size for a farm is very small.

Kerala faces a problem of expensive vegetables as the production of these farms is very low and we all know how difficult it is to survive when the vegetables are of high prices so the farmers and residents are finding it very difficult to fulfill their own needs. Being very sympathetic to the situation, the State Department of Horticulture has taken the initiative of promoting roof top cultivation in rural as well as urban areas. This initiative has resulted in over 30,000 households in Thiruvananthapuram and Ernakulam happily carrying out roof top cultivation of

vegetables like cauliflower, tomato, bottle gourd, bitter gourd, amaranthus and other vegetables in plastic bags. This initiative has not only helped the families in achieving self-sufficiency with respect to vegetables, but the terrace farms also act as a cooling mechanism for the house and maintains a healthy and happy atmosphere.

The village Kalliyoor in the district of Thiruvananthapuram has two Farmer Interest Groups (FIG) namely Swasrya Krashka amithy Kovilnada and Vallamcude having 25 members respectively. Both the Farmer's Interest Group in this cluster is registered under the Companies Act as well as with the Vegetable and Fruits Promotion Council of Kerala (VFPCCK).

In the village of Kalliyoor, both the FIG's members go to a common collection centre that has been constructed and the members collect their produce at 5% commission.



» Roof top cultivation of vegetables

Their functioning is uninterrupted. 2% of the commission is set aside for the expenses incurred while running the FPO and the rest is given to the farmers. The farmers here are very happy and don't face any marketing problems. The FPO has also extended a hand to the local dealers who pick up their produce from the collection centre.

More than 20 farmers in this cluster are having an average holding size of 0.70 acres. Among the wonderful crops grown, cowpea and cucumber are the major ones. The farmers are very happy with this scheme. According to the farmers, before the VIUC (Vegetable Initiative for

Urban Clusters) scheme was implemented, they were habituated to grow these vegetables only on the ground. After becoming the proud members of FIG, and the resulting training and inputs provided by the department, they found out that they could grow these vegetables on sticks and poles as well. This scheme has resulted in a manifold increase in production, with least crop loss. Presently, the FIG members are also selling their produce for lucrative prices in the VFPC market. The farmers seem to have been highly benefited by the scheme and they are happy and at peace.



Location/Address of FPO: Swasrya Krashka Amithy Kovilnada, Village Kaliyoor, District: Thiruvananthapuram, Kerala.

Contact Details of RI: State Horticulture Mission, Kerala University, P.O. Palayam, Government of Kerala, Thiruvananthapuram- 695034, Kerala. Phone: 0471- 2330856. Email: mdshmkerala@yahoo.co.in | Website: www.nhm.nic.in.

38.

Another Approach To Value Chain Integration

Name of Farmer Producer Organisation (FPO):
Rani Sukadei Farmer Producer Company Ltd.

Supporting Resource Institution (RI):
CTRAN Consulting Pvt. Ltd.

THE DIRECTORATE OF Horticulture, Odisha, under the Vegetable Initiative for Urban Cluster (VIUC) has identified Surendra Agritech Pvt. Ltd. as its sole aggregator. Surendra Agritech responsibly handles all the front-end activities like aggregation, distribution and retailing for the farmers registered under the FPOs (Farmer Producer Organisations). With ample support received from the government, the company is all set to develop a modern and integrated front end model using state-of-the-art infrastructure and information technology for information flow as well as financial transactions.

Farmers under this FPO bracket bring their produce to the collection-centre-cum-pack houses constructed by Surendra Agritech at different locations in the most convenient areas of the FPOs. These centres display the production prices in a very precise manner and that too in the local language making it easy for the farmers to decide whether they want to sell their produce there or not. Arrangements have been made at the centres for proper weight measurements which is connected to an IT system. This system then transfers related data, like the farmer & their output, to the central server. Thereafter the same information is transferred to distribution centre of the aggregator.

To make the financial transactions effortless Axis Bank has tied up with the company. As soon as a material is displayed at the distribution centre the bank automatically generates the credit note, and the amount is transferred into the farmer's account on the same day. This payment gateway model has been prepared by the collaborative effort of Directorate of Horticulture (Odisha), Surendra Agritech and Axis Bank. The potential of Odisha has been well noted through this payment gateway model and taking a cue from Odisha other states should implement it as well. Because of the transparency of the process,



» Aggregation and distribution of vegetables



» Transfer of Vegetables Data through Digital Transfer

there is no scope for cheating. An added benefit is the elimination of the middlemen as well as their scope for fraudulent practises; the result is that urban areas like Bhubaneshwar can avail good quality supplies at a reasonable price. Owing to the transparency of this practice, the members of the Rani Sukadei Farmer Producer Company Ltd, Banki, Cuttack has also implemented the same pattern in their FPO.

It has been noted that the members of FIGs who produce organic crops are getting high yields. Vishwarchandra Naik, a progressive farmer from the Bhagatpur village of the Rasulpur Block of Jajpur district in Odisha is a living example of the same. The farmer who belongs to the Maa Mangla FIG has benefited because of the adoption of the modern techniques that he learnt from the training sessions conducted by the Resource Institutions. Initially he was using chemical fertilizers on his land to grow cucumbers on 0.16 acre of field. But after attending VIUC sessions he got a whole new view to the modern techniques of organic farming which he is practicing in his farm too. Now, his cultivation area has increased to 0.25 acres which in turned him with high profits as compared to previous seasons. In addition to this, HDPE vermibeds have also been provided to the farmers to prepare Vermicompost which has helped them even more to yield better organic produce.

Subhash Chandra Sahoo is a small farmer of Odisha

from Koimundi, Parthapur Cluster in the Banki village at Cuttack. He attends every session organised by the Resource Institution under the VIUC scheme where he attains deep knowledge about increasing productions and new methods to be used in farming. After attending such sessions, he has adopted various modern techniques which also resulted in increased profit margins for his output. From such training sessions, Mr. Sahoo learnt how to prepare Panchgabya mixture under the special guidance of some agricultural experts.

Panchgabya has very exceptional antibiotic properties and is also very ancient bio-pesticide which can be used for healing. After knowing the pros and cons of the mixture, he decided to prepare the mixture on his own and then apply it on his fields. He attained remarkable results from this preparation and after seeing the results on Mr. Sahoo's field others have also started trying it. He mixed the Panchgabya in the ratio of 1:10, that is, 1 litre of Panchgabya with 10 litres of water, and applied it on to the field. After applying this on his field he noticed an impressive difference in pest attack on his crops which eventually lowered his cost incurred in production. Thus now he gets more than the normal rate of output as compared to others because of the improved quality of production. Sahoo has proved himself as a great example linked to the benefits of the farmer, and has encouraged others to take it up as well.

BENEFITS OF THE PANCHGABYA

Particulars	Normal Pesticides	Panchgabya
Cost incurred	Rs2,000/litre	Rs150-200/litre
Exclusive Functions	Pesticides for pest repelling	Pesticide repels pests, manure increases yield, boosts immunity, and protects against soil Microbes
Affect on soil fertility	Depletes soil fertility due to inorganic chemicals and hardens soil texture	Improved soil fertility increase in the population of beneficial microbes, and softens soil texture

Panchgabya consists of nine products, namely, cowdung, cow urine, milk, curd, jaggery, ghee, banana, tender coconut and water. When suitably mixed and used, these have miraculous effects.



Location/Address of FPO: Rani Sukadei Farmer Producer Company Limited., At/Po.- Ghasiput, PS.- Banki,Cuttack - 754008, Odisha.

Contact Details of RI: CTRAN Consulting Pvt. Ltd., A1-A2, 3rd Floor, Lewis Plaza, Lewis Road, BJB Nagar, Bhubaneswar- 751014, Odisha. Phone: 0674-2430041. Email: ctran@ctranconsulting.com | Website: www.ctranconsulting.com

39.

Moving Into New Arenas Through Collective Strength

Name of Farmer Producer Organisation (FPO):

Satwaji Baba Agro Producer Company Ltd. and others

Supporting Resource Institution (RI):

Indian Society of Agribusiness Professionals (ISAP)

THE VASUNDHARA KRISHI Vikas Group was formed with 20 innovative and enthusiastic farmers of the Avasari Village of the Ambegaon Taluka in Pune on 11 November 2011 by Indian Society Agribusiness Professionals (ISAP). This FIG realized the benefits of the concept of group farming and adopted it, together they cultivate crops such as coccinia and ridge gourd. These FIG farmers have also adopted lucrative saving practices, such as depositing their savings and profits from business activities in their own bank account. By doing this, they have been saving around Rs 500 a month. Along with that, they have been depositing Rs 10,000 per month in their bank account. Till date, they have saved more than Rs 3 lakh in their account, with which they purchase farming equipment and utilize it for other activities in group welfare.

With regular support they have developed direct market

linkages and have been sending their produce to Mumbai. By doing this, they have been able to eliminate middlemen and traders in the local market and the trouble associated with them, thus, getting a fair price for their produce.

Currently, the group is working on organic compost production and has produced around 150 mt of organic compost. They use it for self-consumption and sell the surplus quantity to other farmers at the reasonable price of Rs 6/kg. The group has also started its own agri-input shop, which eliminates the problem of non-availability of fertilizer and seeds, which has saved them up to 15% on the procurement of seeds. The other members of the group who do not have the capability of buying equipments independently are taking advantage of the group's purchasing power and means to buy farming



» Direct retailing of produce to residential societies in Pune



» Common purchase of vegetable seeds

equipment like sprayers, weeders, etc.

With continuous support from the Resource Institution, they have learned how to grade and pack coccinea, and are getting a better price which is Rs 3/kg more than the market rate. Now, the group is working towards developing a vegetable nursery and adopting other advanced farming technologies. Along with these developments, the resource institution has been implementing the VIUC programme via an output selling model that entails retailing fresh produce in Pune's housing societies, through this programme the farmers in Pune and Nashik are carrying out direct marketing of around 60 mt of vegetables on a weekly basis to housing societies in Pune and Mumbai.

This collective initiative has proved to be highly beneficial to both the farmers as well as consumers. Farmers are getting higher prices than the mandi and even consumers are getting reasonably priced fresh vegetables that are priced lower than most of the retail market. The FIG representatives directly sell the vegetables to residents in housing societies in the cities of Pune and Mumbai twice a week (Thursday and Saturday). There are 13-14 types of vegetables that are sold on these days, including onion, okra, tomato, cabbage, cauliflower etc. At present, more than 40 FIGs have been undertaking direct marketing and are getting an average net profit of Rs1,000-1,200 per truckload of about 1.5 mt. Another FIG practicing the same trend of direct retailing is the Shri Satwa Ji Baba Agro Producers Company Ltd. Every week they sell around 3 mt of produce to the residential societies of Pune. The aggregation has changed the outlook of farmers towards marketing. This collective strength has empowered them to take risks and move into new arenas. Direct marketing ensures that they trade vegetables with higher margins thanks to the absence of middlemen. Around 5 mt per day of all the vegetables – cabbage, bottle gourd, bitter gourd, brinjal, coriander, spinach, etc. – at an average price of Rs 15 per kg, has an estimated value for sale of Rs 75,000.

Inspired by the output of the programme, Bharatiya Agro Industries Foundation (BAIF) decided to enter into procurement of raw mangoes through growers' cooperatives to address the issue of harassment faced by

unfair dealing of goods and remunerations. Initially, it was decided to provide a price that was at least 5-10% higher than the prevailing rate in the nearby town market. This provided excellent support for the farmers as they did not have to sell in distress. Once the price was declared by BAIF, which served as a benchmark, it was difficult for other local traders to buy raw mangoes at a lower price. Hence, they also had to fix more or less the same price. This proved to be very effective. However, it was necessary to increase the volume of procurement to ensure that all the growers get a fair price and can market it at a remunerative price. It was also essential to manage the business without incurring any loss, so as to ensure its sustainability. Thus, various innovative approaches were adopted, including packing superior quality graded mangoes in cardboard boxes and supplying them directly to the end customers.

The Resource Institution has gained the trust of the farmers and hence the farmers are keeping an open minded approach towards organic farming, this was something they were a little skeptical about before the implementation of the scheme. Catering to the need a smooth and non – fraudulent transition towards organic farming, Suraj Shree Chemicals carried out a demonstration of organic fertilizers at eight different sites on the field of project farmers in Pune, and the results have been quite encouraging so far. Registered FPOs have applied for input license offered by Suraj Shree Chemicals organic fertilizers at dealer price.

Common Purchase of Vegetable Seed in Raigad

After the Resource Institution Vegetable Growers Association of India (VGAI) in Maharashtra supported the bulk purchase of okra seeds at minimum prices from a vegetable seeds company, many private seed companies such as Rashi Seeds Pvt. Ltd, Krishidhan Seeds Pvt. Ltd, Nunhems Seeds Pvt. Ltd, East-West Seed International Pvt. Ltd, US Agriseeds Pvt. Ltd, etc., were approached. By directly dealing with and buying from these seed companies, more than 7% of the FIGs have eliminated the need for agents and distributors, which has yet again saved them the extra commission worth 25-30% of the cost.

MARKET TIE-UP WITH BHARTI WALMART AND MOTHER DIARY OF FOUR FPOS PROMOTED IN DELHI DURING 2013

Sl.No.	FIG Name	Vegetable	Seed	Quantity	Purchase Price (in Rs)	Market Price (in Rs)
1.	Shri Kelambadevi Shetkari Sanghatna No. 1, Kharoshi, Tal. PEN	Bitter Gourd	Nikita, Compan, Krishidhan	5kg	3,900/kg	5,600/kg
2.	Shri Kelambadevi Shetkari Sanghatna No. 2, Kharoshi, Tal. PEN					
3.	Shri Kelambadevi Shetkari Sanghatna No. 3, Kharoshi, Tal. PEN					
4.	Shri Kelambadevi Shetkari Sanghatna No. 4, Kharoshi, Tal. PEN					
5.	Shriram Bhajipala Utpadak Sangh, Balvali, Tal. PEN Company-Nunhems	Bitter Gourd	V-Amanshri	3.25kg	4,000/kg	4,800/kg
6.	Shriram Bhajipala Utpadak Sangh, Balvali, Tal. PEN Company: East West Seed International	Ridge Gourd	V-Naga F1	500g	6,800/kg	8,400/kg
7.	Shriram Bhajipala Utpadak Sangh, Balvali, Tal. PEN Company: US Agriseeds	Ridge Gourd	V-US 276	500g	6,000/kg	7,400/kg

In addition to this, these FIGs also save on transportation cost by using common transportation for marketing, which saves them 40-50% on the transportation cost. Around 30% of the FIGs use organic sprays or fertilizers like Dashaparnark, local Feromen Trap (Bio-Control Lures), Yellow Sticky Trap, etc., which are cheaper than chemical sprays by almost 50%; the use of which saves the FIGs an average of Rs5,000. Other farmers have been encouraged to follow a similar model to save on input costs and have been feeling inspired to do the same following the success of the other FIGs.



Location/Address of FPO: Satwaji Baba Agro Producer Company Ltd., At/Post Wafgaon, Taluka Khed, District Pune, Maharashtra.

Contact Details of RI: Indian Society of Agribusiness Professionals (ISAP), 23, Zamrudpur Community Centre, Kailash Colony Extension, New Delhi- 110048. Phone: 011-41731674, 43154100. Email: isapho@isapindia.org | Website: www.isapindia.org.

40.

Augmenting Farmers' Income Through Sustainable Farming

Name of Farmer Producer Organisation (FPO):
Narayangarh Agro Producer Company Limited and others

Supporting Resource Institution (RI):
Indian Society of Agribusiness Professionals (ISAP)

IN THE VILLAGE of Wafgaon of the Khed Taluka situated in Pune, the farmers there formed a Farmer Interest Groups (FIG) namely The Ujjawal Krishi Vikas Group in December 2011. This group was basically formed by the FIG's group leader with an undying regular support and guidance from a Resource Institution. The FIG has a bank account which is collective and it deposits a monthly sum of Rs 100 per member which makes the total deposit of Rs 2,000 per month. Presently the total amount in their account is more than Rs 20,000 which is used for the group interests. The FIG is a proud owner of an agri-input shop for the timely purchase of inputs at reasonable prices. Currently, with continued support and guidance from a Resource Institution, they have linked up with a dealer, Paras Irrigation Systems Pvt. Ltd, for the installation of drips, sprinklers and PVC pipes. The group is very happy with the support from the government and has been

availing the benefit of other government schemes and has saved more than Rs 47,000 by purchasing fertilizers as a group.

Now we will hear the story of a farmer Mr. Mahendra Kandaji Gawade of the Farmer's Interest Group namely Om Sai Vegetable Growers hailing from the village Ari of the Junnar Taluka in Pune.

Mahendra is one of the progressive farmers in this village. He has been involved in vegetable seedling production in the nursery for in-demand vegetables as the main enterprise. He did not have sufficient capital to establish a polyhouse by himself, when he became aware of the assistance provided by VIUC scheme under various components. After joining the scheme and availing a subsidy of Rs 3 lakh, he used this funding to erect a polyhouse that cost him Rs 9 lakh. He also underwent a training conducted by the Resource Institution, and went



» Adoption of New Technologies saves time and money



for exposure visits to learn cultivation techniques under protected conditions. Mahendra because of the schemes and his hard work is now earning a handsome profit with least damage to the crops. His success has motivated others such as his neighbor Ranjit Gawade, who also started a similar vegetable production set-up by becoming the beneficiary of the scheme. This improvement in the socioeconomic conditions of both these farmers because of the VIUC scheme is an assurance that the scheme works for the benefit of the farmers.

The Shivneri Agriculture Graduate Association of Junnar in the Pune district introduced the concept of an open auction tomato market.

A separate temporary shed has been set up in the periphery of the mandi, where farmers can auction/sell tomatoes directly to institutional and retail buyers without involving any middlemen.

This open auction takes places across five months in a year:

The Auction Place being Narayangaon of Junnar Taluka in District Pune.

The Sub-market Yard was Narayangaon.

The Open auction first started on 8 August 2004.

This open auction takes places across five months in a year: May, June, July, August and September

The participating tomato growers are from villages Junnar, Ambegaon, Shirur and Khed tahsils of Pune district and Sangamner, Parner and Akole tahsils of Ahmednagar district

The cities who have the participating merchants (purchasers) are Ahmadabad, Surat, Baroda, Jodhpur, Kota, Indore, Jabalpur, Jhansi, Lucknow, Agra, Delhi, Bangalore, Hyderabad, Chennai, Pune and Mumbai.

The farmers need not pay anything. But the commission charged from purchasers are Rs 1 per crate (20 kg).

The Junnar Taluka Farmers Producer Company Ltd was registered in Pune in April 2013. The members thought that the farm operations should be eased with the introduction of new technologies such as laying mulching paper, field preparation, burring paper from both sides and making holes into the paper, etc. The machine saves labour cost and time of operation, brings uniformity in work like setting the paper, drip and application of fertilizers; therefore the FPO members decided to collectively purchase a mulching paper laying machine. This machine helps in the following: preparing a land bed, applying fertilizers on bed, setting drip irrigation laterals on the bed, laying plastic mulching paper on bed 1MT/1.2 MT width, burring paper from both sides and making the holes on paper. The machine helps in increasing the crop productivity by 2-3 times. The cost saving from this

ACHIEVEMENTS OF THIS INNOVATIVE PRACTICE

Operations	Manually	By Machine	Saving
Expenditure for laying Paper	Rs 3,500/acre	Rs 1,200/acre	Rs 1,800
Expenditure for applying fertilizers and drip	Rs 1,000/acre	1200/acre	Rs 1,000
Total saving			Rs 2,800/acre
Time required	2 days	4 hrs	15 hrs

Particulars	Quantity	Price Through FPO (Rs)	Prices Through Market (Rs)	Net Benefit (Rs)	Total Savings (Rs)
Low-cost dripmaterial					
Bhavani drip	30,000 mtr	4.50/mtr	5.25/mtr	0.75/mtr	22,500
Green India	20,000 mtr	4.20/mtr	4.75/mtr	0.55/mtr	11,000
Drip tech	15,000 mtr	1.85/mtr	2.50/mtr	0.65 /mtr	9,750
Mulching paper	300 bundle	1500/bundle	1750/bundle	250/bundle	75,000
Lure (Feromen Trap)	1,000 nos	10-15	25-30	15-20 for each	15,000
Yellow trap	400 bundle	325/bundle	500/bundle	175/bundle	70,000
Staking (Karvi)	22,000 nos	10/each	14/each	4/each stick	88,000

machine is in the following table.

This initiative, along with group farming, has helped all the farmers in the FPO immensely. The group would purchase agriculture inputs in bulk from private companies that deal with low-cost materials, such as like drip irrigation, mulching paper, pheromone trap, staking material for tomato, bio- control lures, etc. The FPO is following the strategy of common and direct purchase of agricultural inputs from companies, which eliminate the agent and distributor commission, resulting in an additional 25-30% net benefit to farmers.

Relay cropping demonstration has doubled the income of farmers in the Pune district. This was conducted in April 2012 (summer) with a tomato plantation. Thereafter, it was implemented among at least 50 FIGs (with about 500 farmers) in the same district. In this, crops of 2-3 family

categories were planted one by one. Under the Relay Cropping Demonstration, the second crop was planted 20-30 days before harvesting the first crop and the third was sowed on same land before harvesting of the second. Plant-protection chemicals were applied timely by mixing Trichoderma with FYM at the time of preparing the plant bed or raised bed, and drip fertigation was applied at a 15-day interval. This initiative helped generate a net income from three simultaneous crops. It doubled, and even tripled in some cases, the net income from farm produce in a single season. This also helps the farmers overcome uncertain/fluctuating market prices because they can harvest 2-3 crops within 4-6 months. The best combination that was found was of Tomato - Cucumber - Cowpea.



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