

27.03.2015

THE HINDU

Efforts on to protect cattle breed



Even as the ban on ‘jallikattu’ poses a grave threat to survival of bulls, the State government has initiated steps to protect and promote the Pulikulam breed that provides raging bulls for the rural sport.

To propagate other uses of the Pulikulam breed among farmers and encourage bull-rearers to maintain this breed, the Department of Animal Husbandry organised a Pulikulam cattle expo at Muthazhagupatti village on Thursday.

“We spend Rs. 15,000 to Rs. 20,000 a year to maintain a ‘jallikattu’ bull,” said P. Murugan of Pillamanaickenpatti. The population of Pulikulam cattle was 95,000 in 1995 and it dwindled sharply later. A recent survey put the population at 45,000.

“Ninety nine per cent of Pulikulam cattle is bred and maintained by traditional cowherds. Such a drive is necessary to prevent bulls from slaughter,” he added.

Tamil Nadu Veterinary and Animal Sciences University’s Veterinary Research Centre head S. Peer Mohammad said the Pulikulam breed easily adapted to locally available low-quality feed, withstood heat and showed better resistance to tropical diseases when compared to cross-bred ones from England and The Netherlands.

Organic farming

“The Pulikulam cattle contribute significantly to organic farming of horticulture and spices crops through manure. They are kept overnight in fields to enrich the soil with their urine and dung. Some of the indigenous cattle breeds have become rare or endangered. Such measures will surely revive older breeds that have several unique desirable qualities,” he added.

“Our aim is to make the Pulikulam bull more farmer-friendly,” said S. Victor Jebaraj, Joint Director of Animal Husbandry.

Hundred cattle heads from Dindigul, Madurai and Sivaganga districts registered for the expo and of them 50 were chosen for display on the basis of purity. Cash award was given to well-bred animals.

Other breeds

Similar expos are being held to protect Kangeyam indigenous breeds in Erode and Tiruppur districts, Bargur breed in Dharmapuri and Krishnagiri and Umbalaserry cattle in Thanjavur and Tiruvarur districts.

The Breed Registration Committee of National Bureau of Animal Genetic Resources under the ICAR approved Pulikulam cattle breed as an indigenous breed in 2012. It is the 35th registered indigenous cattle breed in the country.

“Save water, preserve nature”



Over 2,000 students of Anna University-BIT campus here took a pledge to save and propagate conservation of water at a function organised by the Rotary Club of Tiruchirapalli Shakthi on university campus on Thursday.

They did a human formation of water drop, sparrow, globe and tree to mark the World Sparrow Day and World Forest Day.

N. Satheesh, IFS, District Forest Officer, called upon students to take up awareness programmes to save water, preserve nature and conserve energy as part of their extracurricular activities.

Prakash M. Swamy, president, America Tamil Sangam, New York, said villagers know the importance of water. Students should organise programmes to save water, protect nature and conserve energy.

T.Senthil Kumar, Dean of Anna University-BIT campus, said students are the right ambassadors to spread the message of water conservation. Allirani Balaji, president, Rotary Club of Tiruchirapalli-Shakthi, said the club decided to initiate awareness projects in colleges to involve the future generation in a positive way.

“We are losing sparrows at the cost of development and should not lose water resources and reservoirs due to modernisation. We should share the earth with other living creatures to help avoid extinction of birds such as sparrows,” she said.

Water level at Mettur

The water level at the Mettur Dam stood at 73.47 feet on Thursday against its full level of 120 feet. The inflow was 139 cusecs and the discharge 600 cusecs.

Research institute

The Association of Women Entrepreneurs of Karnataka (AWAKE), a Bengaluru-based institution, is setting up AWAKE's Research Institute for Skills and Entrepreneurship (ARISE) at the KIADB Industrial Area, Bidadi, Ramanagaram district. Union Minister for Chemicals and Fertilizers Ananth Kumar will inaugurate it on Saturday. – Staff Reporter

Organic farming gets big boost in Kannur

HIGHLIGHTS	
REVENUE	EXPENDITURE
Rs.136,28,43,347	Rs.108,21,02,605
Rs.3 crore for organic vegetable cultivation in schools	Rs.25 lakh for adopting Aralam Farm HS students
Rs.40 lakh for sanitary napkin vending machines in schools	Rs.38 lakh for Mukulam education project
Rs.81 lakh for palliative care activities	Rs.25 lakh for sterilising stray dogs
Rs.23.85 crore for road maintenance	

The district panchayat's budget for 2015-16 has earmarked Rs.9.71 crore for the development of the agriculture sector in the district.

The budget, which envisages a revenue of Rs.136,28,43,347 and an expenditure of Rs.108,21,02,605, gives special emphasis on the agriculture sector. An amount of Rs.3 crore has been set apart for implementing a project for promoting organic vegetable farming in schools in the district. All panchayats in the district will be declared organic farming panchayats.

The budget, presented by panchayat vice president T. Krishnan, also earmarked Rs.80 lakh for development of paddy cultivation.

Mr. Krishnan, who is also chairman of panchayat finance standing committee, said in his budget speech that poly houses would be set up in all government high schools and higher secondary schools and aided schools with the government's permission. Block-level cold storage facilities would be established for organically cultivated vegetables. The budget set apart Rs.20 lakh for the purpose.

The district panchayat will adopt the students of the Aralam Farm High School. A budgetary allocation of Rs.25 lakh has been made for the project. Also proposed is a project for installing sanitary napkin vending machines in schools. The budget allocates Rs.40 lakh for the project.

Health schemes

Another major allocation is Rs.81 lakh for providing financial assistance to grama panchayats for palliative care activities. An additional Rs.20 lakh has been earmarked for supplying nutritional food to bed-ridden patients in the financial backward families.

The budget has set apart Rs.1 crore for converting the electricity connection of the District Hospital to high tension connection. Also earmarked are Rs.25 lakh for providing nutritious food kits to HIV/AIDS patients, Rs.20 lakh for nutritious food for tuberculosis patients, and Rs.15 lakh for strengthening dialysis unit of the District Hospital.

The budget has allocated Rs.25 lakh for sterilising stray dogs. The project will be implemented by utilising the mobile veterinary unit at Peralassery.

Education schemes

Mr. Krishnan said the district panchayat will also implement a Rs.50-lakh project for purchase of musical instruments in 24 model high schools under the panchayat. An amount of Rs.50 lakh has been earmarked for arranging study rooms for students in the Scheduled Caste families.

A project for linking all institutions and model schools under the panchayat through the video linking facility at the District Industries Centre here will also be implemented, for which Rs.10 lakh has been allocated.

While Rs.38 lakh is earmarked for the Mukulam comprehensive education project of the panchayat, Rs.2.11 crore is allocated for school building construction, Rs.1.63 crore for school building repair works, Rs.1.5 crore for purchase of furniture in schools, Rs.1.35 crore for school toilet and drinking water facilities and Rs.14.10 crore for a Plus Two school complex. Other major allocations in the budget is Rs.23.85 crore for road maintenance.

Cattle-feed factory to open soon



A high-tech cattle-feed production plant envisaged under the Kerala Feeds Limited at Thiruvangur here will become operational in the first week of April.

Officials said that the construction of the factory was in the final stages. It is located in the land of the defunct Thiruvangur Coconut Complex.

The computerised factory will produce 300 tonnes of cattle-feed on a daily basis. The construction of the factory was undertaken by the Vadakara-based Uralungal Labour Contract Cooperative Society in September 2014. The construction will be completed within a week.

Officials said that the inauguration could be done after the completion of electrical works. The project would give an impetus to the employment generation and growth in the agriculture and dairy sectors in North Kerala.

The Coconut Development Corporation had transferred 10.8 acres of land to the Kerala Feeds Ltd for establishing the factory. The total cost of the project is Rs 57.30 crore.

The factory has a godown covering an area of 25,924 sq.ft. for storing finished products. This was completed much earlier.

There would also be another godown having an area of 38,493 sq.ft., which was once part of the coconut complex.

Modern equipment has been imported from Turkey for storing 700 tonnes raw materials on seasonal basis. Technical support of engineers had been availed for installing the equipment, officials said.

Works of feeder 35m tall feed mill tower and computerised motor control centre for milling, mixing, cooking and pelleting have also been completed.

Facilities have been made for rain harvesting. The factory has two weighing bridge having a capacity each to load 6,040 tonnes and 24-hour functioning 1010 kw generator.

The high-tech factory has fully automated equipment of international standards. Apart from the producing cattle-feed, the factory would also manufacture 60 tonnes goat feed and coconut extract.

The construction of a new laboratory-cum-administration block is going apace. The Thiruvangur Coconut Complex that functioned under the Coconut Development Corporation had to pay dues amounting to crores of rupees to the Kerala State Electricity Board and the Bharat Sanchar Nigam Limited.

The State government brought the issue under the 100-day task programme. Subsequently Kerala Feeds Limited repaid the arrears and began constructing the factory.

Best breeder to get Rs. 20,000



Bargur farmers have a lot to expect from the Government following the exhibition of indigenous cattle at Thurasanampalayam on March 29.

At the outset, the prize money has been doubled this time. The first prize winner for the best breeder will receive Rs. 20,000. The second and third prize winners respectively will receive Rs. 10,000 and Rs. 5,000.

There will be two first prizes, four second prizes, and eight third prizes. Besides, there will be consolation prize of Rs. 2,500 each. In all, there will be 13 prizes for cows and same number of prizes for oxen.

The prizes will be distributed by Animal Husbandry Minister T.K.M. Chinniah. The Minister is also expected to announce formation of a milk society for Bargur cattle rearers, it is learnt. Presence of the society would logically lead to increase in animal population, which has come down drastically, in due course

At present, the milk sourced from Bargur cows are being used for self-consumption since the yielding capacity of the cows is low.

With the Bargur Cattle Research Station coming up, there is scope for enhancing the yield through selective breeding, sources said.

In the long run, the idea of Aavin is to source the milk yielded by Bargur cows separately and sell it in the premium category, sources said.

Casein 2 protein present in the milk of Bargur cows is considered ideal for consumption by people with cardiac problems, sources said.

‘Pricey’ nut to crack



Coconut offering on auspicious occasion and at temples has become a rare phenomenon in Srikakulam district, thanks to the skyrocketing prices in the market. The reasons are being attributed to the damage done to the coconut plantations during Hudhud cyclone, which has taken a toll on the production.

Coconuts, which were available in the range of Rs.12 to Rs.15 each in the market, are now being sold between Rs. 25 and Rs.30 each, causing heavy burden on the consumers.

A bag of 100 coconuts, at present, costs around Rs.1,700 to Rs.2,100, depending on the variety in the wholesale market of Srikakulam. Needless to say, the consumers have to pay more in the retail market.

“Coconut prices may not come down in near future, as high rates are prevailing in East Godavari and West Godavari districts, which is considered as hot beds for coconut production, apart from Kerala,” S. Srinivasa Rao, a wholesale dealer told *The Hindu*.

Thousands of coconut trees were damaged in Uddanam region with the impact of Phailin and Hudhud cyclones. The region comprising six mandals-- Ithcapuram, Kaviti, Sompeta, Mandasa, Vajrapukotturu and Palasa-- has been known as the Konaseema of Srikakulam district.

Coconuts were always available at affordable price, as transport charges are less within the district.

With more than one lakh trees being reportedly damaged in 30,000 acres during the cyclones, the prices are going through the roof in the market. Increase of labour charge is said to be another reason for the escalation of prices. Farmers are now paying up to Rs. 1.5 for plucking coconut each as the workers have gone on a strike.

Further, the farmers allege that they are not able to go for new plantation, with the delay in payment of government compensation.

“The government is yet to pay compensation for Phailin cyclone which has completely devastated the crop in Uddanam. There is no guidance

from the government over selection of saplings which can withstand natural calamities,” said K. Appala Naidu, a farmer from Kaviti.

Root wilt disease spreading in Marayur



Root wilt disease in coconut trees is fast spreading at Marayur, with many farms in the Pulikaravayal area already under severe threat of the disease.

The symptom of the disease is yellowing of the outer leaves, later resulting in decay of the tender leaves and complete drying up of the trunk. Once the disease is noticed in a few coconut trees, it soon spreads to nearby farms and an area will be affected with the disease.

Control of the disease is ineffective once it starts spreading to nearby farms. According to farmers at Pulikaravayal, they had tried all remedial measures suggested by the Agriculture Department but to no avail. According to Parayil Antony, a farmer, all the trees were affected with the yellowing of leaves. Once it was affected, within two months the top of the tree would start decaying, he said. The nearby farms were also affected with the disease.

The disease poses a major threat to coconut cultivation, a major crop at Marayur.

According to an official of the Agriculture Department, farmers are given training in taking precautionary measures against the disease. He said the disease was caused by a micro plasm-like virus. Insects would spread

from one tree to the other and it was difficult to control once it reached a stage of fast spreading, he said.

According to the farmers, though an entire area was affected with the disease, no government agency had so far come forward with any help.

The remedial measures suggested by the officials were ineffective in controlling the disease. They said that yellowing of the leaves was already recorded in isolated farms in other areas posing a bigger threat to the entire coconut cultivation at Marayur.

The disease could be due to the deficiency of micro nutrients, mainly magnesium, boron, and calcium. Once affected with the yellowing of the outer leaves, it suddenly spreads to the inner leaves and tender coconuts start falling which then leads to the final decay of the palm.

This disease had been identified as a major threat to coconut production and its detection in the Marayur area was a cause for concern, said the official.



PAU develops kit to test purity of drinking water



The Punjab Agricultural University (PAU) has developed a cheap way to test whether the water you are drinking is contaminated or not. They have put forward a 'water testing kit' — a handy way to test your so-called 'filtered water' — in the front at the Kisan Mela as well.

Since water is essential to sustain life, its satisfactory supply must be

made available to consumers. Despite the fact that the 'right to drinking water' is now a part of human rights, one-sixth of the world population still does not have access to safe drinking water. The World Health Organization (WHO) estimated that up to 80% of all sicknesses and diseases in the world are caused by inadequate sanitation, polluted water, or unavailability of water. In India, about 21% of all communicable diseases are water-borne, and among them, diarrhoea is responsible for 25-30% of deaths among children below the age of five years.

Keeping these points in view, the PAU's Department of Microbiology has developed a simple, portable, and inexpensive bacteriological water testing kit to determine the easy potability of drinking water. This kit is available in the Department of Microbiology for Rs40 only.

How to use kit:

Cut open the aluminum foil and keep the rubber stopper intact.

Open the kit near a water source and the water sample to be tested or screened for bacteriological potability should be aseptically dispensed in kit bottles up to the calibrated mark (approximately 15ml).

Allow the kit to stand at a warm place for 24 hours.

Bacterial contamination is indicated when the content of the kit bottle shows a change in colour, turbidity, sediments, pellicle, and popping of lid within 12 hours.

For disposal of the kit, add four drops of dettol/disinfectant in the kit before disposal. Antibiotic susceptibility of consortia can be directly done.

Advantage of PAU kit:

It is the cheapest method known so far.

It is very handy to use.

To perform the test, one needs to add water to the kit and leave it aside.

No equipment is required.

Colour change denotes the presence of microbes.

THE HINDU BusinessLine

Higher tariff in India takes juice off US pears



Ample demand from China and India for US pears is expected to keep pear growers in America's Pacific Northwest happy, despite the small crop of 2014, down from the 2013 season's record. The 2014 Northwest crop was pegged at 20.8 million boxes. In 2013, the crop was 21.6 million boxes.

With the middle class population estimated to increase 160 per cent over the next five years in developing countries such as China and India, demand is set to increase.

"The 2014 pear crop is our second largest crop," said Jeff Correa, International Marketing Director, The Pear Bureau Northwest, a US marketing organisation.

Higher tariffs

"Though it is still 800,000 boxes smaller than the record crop established with the 2013 USA Pear crop, pricing has remained strong through this season, due to strong demand in the US market, Canada, Mexico and several other export markets including India and China," he said.

Speaking to *BusinessLine* about the market potential in India, Correa said, “We see potential export volume of 250,000 (boxes of 20 kg each) being the goal in the next five years for India.”

Currently, India imposes 30 per cent tariff on imported pears.

Correa added that if the “tariff rate were to decrease substantially, that could possibly open up the market for even more rapid growth, and open the Indian market up for greater size, grade and variety diversification.” Currently, Mexico is the top export market, followed by Canada.

“Those two markets account for nearly 56 per cent of the total exports. Russia used to be the (US pear) industry’s third largest market, but with the Russian ban on US agricultural exports, Colombia has emerged as the third largest export market. India is the industry’s eighth largest export market,” he added.

China stranglehold

Though China produces 75 per cent of the world’s pears, it was the sixth largest export market of Northwest pears last year, at around 184,840 boxes of around 20 kg each. This season, China is set to figure in the top five markets for Pear Bureau Northwest.

However, Correa insists India and China are two distinctly different markets. “Both are growth markets for the industry, but India is the more developed export market, due to the fact that we have been actively promoting in India for over 10 years,” he said.

The International Marketing Director added: “In India, consumers are also familiar with western style pears, so we do not face the same set of education challenges in India as we do in China, where we have to educate the consumer about the taste, flavour and eating experience expectations with a western pear versus an Asian pear.” The latter are the varieties that are most commonly grown in China.

Correa went on to add, “India (also) grows western pears. Consumers are more familiar with the taste and eating expectations, and are more knowledgeable about the ripening requirements of western pears.”

Last year, Pear Bureau Northwest was awarded \$40,000 from the Oregon Department of Agriculture and \$20,000 from the Washington State Department of Agriculture through the 2014 Specialty Crop Block Grant.

The grant was aimed at enabling the Pear Bureau Northwest to focus on 'Putting pears on the menu.'

Pear Bureau Northwest promotes fresh USA Pears grown in Washington and Oregon, home to 84 per cent of the US fresh pear crop. The bureau represents 1,600 growers and develops national and international markets for Northwest pear distribution.

Business Standard

Smaller dairy farms have increased rural prosperity: NDDB

Small holders typically have a few cattle in systems closely integrated into crop production through use of crop-residues such as rice straw

Smaller [dairy](#) farms have proved to be an effective tool for increasing rural prosperity in parts of Asia, [NDDB](#) chairman [T Nanda Kumar](#) has said.

"We are witnessing a high degree of urbanisation and have unacceptable levels of hunger and under-nutrition. We have a large number of small farmers depending on [agriculture](#) for their livelihood.

"In many Asian countries, while the contribution of agriculture to [GDP](#) is coming down, the number of people employed in agriculture is still high," Kumar told reporters yesterday at Anand, about 35 km from here, on the sidelines of 'Dairy Asia towards Sustainability' conference.

"Given these conditions, small-holder dairying has proved to be an effective instrument of intervention for increasing rural prosperity in many parts of Asia.

"Therefore, the Asian model for growth has to be different from some of the other countries in the world," Kumar said.

The conference is jointly organised by United Nations' Food and Agriculture Organisation (FAO), National Dairy Development Board of India (NDDB), Animal Production and Health Commission for Asia and the Pacific and Global Agenda for Sustainable Livestock.

Small-holder producers are essentially the ones with a few [buffalo](#) or cattle, in systems closely integrated into crop production through use of crop-residues such as rice straw.

Increasing milk availability by another 50 million tonnes by this decade to reach the expected demand of 320 million tonnes would leave us with many choices, Kumar said, adding that the demand may go up due to various reasons such as climate change.

"The production of milk in India stands at 138 MT and goes up by 6 MT every year," he said.

"We believe that we have to choose a different route to enable our small and marginal farmers produce the required quantity of milk within the country and help them get their legitimate share in the economic growth," he said.

Each society and country has to choose the best route it thinks appropriate, he added.

"The NDDB can offer you lessons learnt in this difficult journey of its 50 years of existence ever since its establishment in 1965, provided you decide to choose this route," Kumar said.

India turns to satellites for crop mapping

Remote analysis to assess soil moisture and crop development can reduce input costs and raise yields, say experts

Sher Singh, a farmer from desert state of Rajasthan, prays to Varuna, the Hindu god of water, for a bountiful harvest. Now, he is also looking to the heavens for satellite imaging to boost his crop.

Prime Minister Narendra Modi wants to promote a "per drop, more crop" approach to [farming](#) to make better use of scarce water, and aims to have a new satellite crop monitoring system working in time for the peak of this year's monsoon in July.

Using remote analysis to assess [soil moisture](#) and crop development has the potential to cut input costs and raise yields, say experts, in a country of 1.25 billion where half of workers make a living from agriculture.

Under the scheme, farmers would be able to access advisories on their mobile phones to help them to choose seed varieties, apply the right fertilisers or time irrigation 'shots', though some are sceptical about how effective the plan will be given natural or other obstacles.

"I hope to cut at least a tenth of input cost with the help of the 'satellite god'," said Singh, 55, who farms less than a hectare of rapeseed and hopes to use savings to educate his two grandchildren.

By his own admission, Singh doesn't know how much to water his crops, the right fertiliser mix - or even the right crop to plant given the land's soil type.

After last year's landslide poll victory, Modi's government rolled out a national Soil Health Card scheme modelled on an initiative he launched

as chief minister of Gujarat to help farmers plant [crops](#) suited to their farmland.

In addition, satellite analysis can assess vegetation cover down to field level, helping to determine how a crop is developing and whether it has been harmed by pests or needs more water.

"The idea is to integrate information under the Soil Health Card with satellite images to raise productivity," said N. Chattopadhyay, a weather department official who is involved in the project.

PRECISION FARMING, INDIAN STYLE

The approach seeks to apply 'precision' farming methods pioneered in North America that use geo-location technology to help farmers micro-manage exactly how much seed, fertiliser or pesticide they apply to their fields.

In countries such as the United States and Canada unmanned aerial vehicles, or drones, are also used to overfly farms to map soil and crops accurately.

The next-best option is satellite analysis, more affordable for India, that uses a method called Normalized Vegetation Difference Index assess how well a crop is developing.

Chattopadhyay said the analysis can be provided to farmers on a near real-time basis and could also be used for impact assessment after natural hazards like floods.

India can use its own geostationary satellites, but some see obstacles to its plans including a need to check findings on the ground or the risk of cloud obscuring images.

"Don't be under any illusion that the remote sensing based [crop mapping](#) technique will be a panacea for all problems in the farm sector," said B C Barah, a New Delhi-based agriculture economist.

FROM THE TOP

India's top bureaucrat Ajit Seth has urged wider use of remote sensing to benefit farmers, many of whom live a precarious existence on tiny plots of land.

Just over half of India's nearly 200 million hectares of arable land is rainfed, leaving farmers at the mercy of an often uncertain monsoon. The remaining arable is under irrigation, which the government plans to expand by a tenth over three years.

The loss of more than half of a crop can trigger government payments to farmers, of \$72 per hectare for rainfed areas and \$144 for irrigated lands. India is also preparing to use satellite based crop forecasts to develop insurance for farmers. Currently, insurance products cover primarily crop loans and exclude farm activities.