Maahi Milk
Maahi Butter Milk | Curd
Maahi Sweets
Maahi Paneer
Maahi Ghee
Maahi Flavoured Milk
Maahi Cattele feed
Maahi Skimmed Milk Powder

Maahi Milk Producer Company Limited
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Indian dairy, a spectacular growth story, has made India’s hinterlands economically stable and nutritionally secure. From being an allied rural enterprise, dairy sector has emerged into a complex multilevel business enterprise.

The success story in dairy sector has its origin in the integrated co-operative system of milk collection, transportation, processing and distribution, conversion of the same to milk powder and products, retail distribution of milk and milk products, sharing of profits with the farmer, which are ploughed back to enhance productivity. India ranks first among the world’s milk producing nations since 1998, and has the largest bovine population in the world.

Unlike many other agriculture commodities, milk has immense potential for value addition. This is an important sector which will see immense growth in the future. Probiotics is also another area which has received much attention from the consumers. Today, consumers are increasingly inclined towards better, healthier alternatives such as camel milk, goat milk etc.

India has the largest livestock population in the world and is also the largest milk producer. But India’s livestock productivity is 20-60 per cent lower than the global average. The low productivity is a result of ineffective cattle and buffalo breeding programmes, limited extension and management on dairy enterprise development, traditional feeding practices that are not based on scientific feeding methods, and limited availability and affordability of quality feed and fodder. Digital technologies in dairy segment can bring a sea change in areas of consumer engagement and product innovation. Digital technologies help identify gaps in existing products, develop new and innovative ways of product usage and packaging, and pave the way for venturing into newer markets. Using Big Data and analytics, companies can perform real-time sales analysis to understand consumption patterns, which can help modify production and marketing strategies to achieve better results at optimum costs.

The changing global economic scenario will result in an increased demand and a high buying power across consumer segments, compelling industry players to invest in research and development efforts. Product innovation will be the key area where most of the developments are bound to happen. As companies foray into new product categories and venture into new markets, there will be a heightened focus on supply chain expansion –procurement and distribution.

The dairy sector in India grew at a rate of 6.4 per cent annually in the last four years against the global growth rate of 1.7 per cent. In this journey, many individuals and institutions have played seminal roles. To give due recognition to the role models of the dairy sector, the Agriculture Today Group organized the first India Dairy Awards in January. It was a seminal event as the technical sessions sparked ideas and spurred innovation. The brilliant minds of India’s dairy segment discussed and debated issues of import and derived solutions. It was an honour for the Agriculture Today group to be the facilitator.
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KARIMNAGAR MILK PRODUCER COMPANY LIMITED

KARIMNAGAR

A COMPANY OF 70 THOUSAND MILK PRODUCER FAMILIES

Avg. Milk Procurement: 1.52 LLPD
Avg. Milk Sales: 1.50 LLPD

Milk purchase price:
Buff. Milk: Rs. 590/Kg. Fat
Cow Milk: Rs. 233/Kg. TS

554 Lakh litres per year
550 lakh litres per year
Annual Turn Over Rs. 312 Crores.

Infrastructure Facilities:
Dairy 2.5 Lacks Ltr. Capacity

Board of Directors

Coverage Of Animal Health:
- One Veterinary Assistant Per Mandal
- Supply of Vaccines on 50% Subsidy
- Emergency Services through Ambulance
- Animal Health Camps

Welfare Activities:

Breeding Development:
- Artificial Insemination (Through BAF)
- Supply of Breeding Bulls on subsidy
- Subsidy on Milk Animals Insurance
- Financial Assistance in case of Milk Animals death
- Financial Assistance for Purchase of Milch Animals
- 50% Subsidy on transportation of Loaning Animals
- Supply of Sorted Semen on 50% Subsidy

CALF REARING: REARING OF CROSS BREED HEIFERS AT DAIRY PROJECT

Fodder Development:
- Supply of Fodder seeds on 50% Subsidy
- Free Distribution of Perennial Fodder Slips
- Incentive of Rs. 3000/- per 10 Gunta's of Land for Fodder Raising.
- Supply of Chaff Cutters on 50% Subsidy

Cattle Feed:
- Supply of Pre-mixed Cattle Feed on No Profit-No Loss Basis.

Milk Producers

KALYANAMASTHU: FREE SUPPLY OF PUSTHELU & MATTELU TO THE FEMALE CHILDREN OF MILK PRODUCERS
- Educational Tours & Trainings
- 50% Subsidy on Premium Aam Aadmi Bheema Yojana Insurance
- Padi Ratalu Bharosa: Rs. 50,000 on Natural or Accidental Death of Milk Producer
- Payment of Scholarships to the School Children of Milk Producers
- Merit Scholarships to the Intermediate Students of Milk Producers
- Payment of Funeral Charges for the Deceased Milk Producers
- Pension Scheme for Milk Producers (PALA NIDHI)

Milk and Milk Products Manufactured at Karimnagar Dairy
Expanding Exports

We need to strengthen the quality attributes of our agri exports

Export rejections of agricultural commodities have started to become a norm, rather than exception. According to data from European Commission’s Rapid Alert System for Food and Feed (RASFF) and USFDA, EU countries issued border rejection notifications for 147 consignments of food items from India in 2019, a little less than the previous year’s rejection of 168, while the US rejected a total of 1,674 consignments compared to 1,939 rejections the year before. With a renewed thrust on increasing the agri exports from India, it becomes imperative that India evolve a serious strategy that can strengthen our export potential.

Trade promotion council of India recently proposed a five-pronged strategy to boost agriculture exports to $100 billion annually. It proposed a 100 per cent pre-export certification, increasing customer base, branding, strengthening last mile connectivity for agri produce, and revamping SEZ policy for food exports.

Before trading in a new market, most countries have certain demands regarding the product imported. Pre export certification ensures regulatory compliance and help to meet the requirements of the countries and reduce the chances of rejection. Besides, this will ensure the quality of the product and will create a brand as a reliable and good quality exporter. Fixing the accountability of testing labs and certifying agencies, as suggested by TPCI, can also further reduce the rate of rejections. A National portal to register the labs that tests the pre-export shipments is also another way to fix the accountability of testing agency. The portal will ensure audits, document checks and assessments of conformity, Physical inspections and Sampling, testing and analysis in fully accredited laboratories.

Our repeated transgressions have earned a notoriety for our products so much so that now EU examines 20% of the total consignment which was initially 10% for analysing pesticides residues. This has also now led to a decline in the export of some commodities as evidenced in the case of basmati exported to EU which declined by 38.35% and 9% in 2018-19 and 2019-20.

India should also create different products that suit the global demands and think of diversifying the export basket. India’s share in the global market for 19 commodities is just 1.5% or USD 1.5 billion as against potential of 97 billion USD. India has been a net exporter of agriculture products with little change in the structure and composition of exports and imports. We mainly cater to the Indian diaspora and we haven’t explored venturing into the needs of a global community.

Branding Indian products through steps such as geographical indication (GI), especially for organically-produced commodities could realise higher returns in global markets. Establishing effective agricultural brands can help farmers gain a competitive advantage in ‘buyer-driven’ global markets. Branding adds value by differentiating the product and also because of the consumer perception that such products are of superior quality than unbranded ones.

Providing the last mile connectivity to the agri produce from the country is also another area that has long been overlooked. Organizing global events showcasing our products, their characteristics, their journey can impress the world.

India has huge potential in the food exports and global investors are looking at SEZs as one destination for investing. Due to the lack of incentives for value added F&B manufacturing and exports, are inhibiting them to reach out to India. A foreign investor should be allowed to import raw materials at zero duty and avail duty rebate proportionate to value addition. Also, foreign investors should be incentivised by lower duty on value addition they achieve, especially for the food sector where duty is already high.

Agri Exports are an important avenue to realize higher income for farmers. They fetch premium price and ensures an assured market. However, there should be adequate safeguards for quality.
Indian agriculture has had some excellent peaks in the past decade in terms of production. However, the storage options have been woefully low. Food loss therefore has been a regular phenomenon. An assessment has once pegged the loss at 16% of fruits and vegetables and 10 per cent for oilseeds, pulses and cereals. These losses cannot be ignored since India has a fair share of malnourished and hungry population. India ranks 103 among 119 countries in the Global Hunger Index (GHI) 2018, sharing the rank with Nigeria.

By and large, foodgrains in India are stored in archaic warehouses without any use of technology. As a result, produce worth $14 billion is damaged annually, even as 194 million Indians go hungry every day, according to the United Nations’ Food and Agriculture Organisation. Silo storage, a widely-accepted global concept that was introduced in India a decade ago, has been changing perceptions and the fortunes of stakeholders across the value chain. Silo structures follow a scientific method of storing grains, which enables bulk preservation of produce for longer periods.

India stores 65 mt of foodgrain, most of which is in conventional open or covered godowns. In fact, more than 10 mt of foodgrains are stored in open warehouses and are prone to damage and the vagaries of weather. Silos are the ideal mode of storage, particularly for a nation such as India which depends on buffer stock for its food security. The concept also benefits all the stakeholders, be it farmers, government or procuring agencies. Besides, silos require only 30% less land as compared to conventional warehouses, and can run round the clock, making them more efficient. Grain storage in silos is vertical, while the storage of grain in warehouses is horizontal. It is easy to keep the optimum storage conditions for the grain, by controlling the temperature, insects, mould, birds, which in long term storage facilities could result in an important economic loss. It is a better solution for storage of the food-grains, from the perspective of long-term reliability. They incur lower costs than warehouses, which entails the automation of the grain transport equipment. The loading as well as the unloading can be completely automated using a SCADA system and at a lower cost. It has lower assembling costs, since this element is designed specifically for this purpose and weighs less than a storage facility. It is less expensive overall, and this is probably the main advantage in comparison to grain warehouses.

However, there was a small glitch that was blocking silos to be built rapidly and extensively. The mandatory requirement of having railway connectivity next to the storehouses has made it difficult for the officials to earmark land area for building silos. The government is planning to roll out new guidelines for construction of silos by doing away this requirement and it is expected to speed up the construction process.

The new model will also incorporate the hub-and-spoke system in which various silos will be connected by road to a mother silo which will have the rail connectivity. The new model will also facilitate the construction of standalone silos. The standalone silos will receive the status of mandis also so that farmers can sell their produce in the silo and the grains can directly be transported through roads to places with good road connectivity. The government will initially work upon creating storage capacity of 10 million tonnes.

A typical standalone silo of 50,000 tonne capacity cost about Rs. 6000 a tonne or about Rs 30 crore to built from scratch, while a silo with rail connectivity including land comes close to Rs 55-60 crore per unit of 50,000 tonnes. With the help of Silo storage mass, to an extent we can address the food loss through improper storage at a reduced cost.
Food processing is a critical sector as it enhances the value of the mundane agricultural products, augments farmers’ income and provides employment. According to the ministry of food processing industries annual report, the sector employs 12.8% of the workforce in the organised sector and 13.7% of the workforce in the unorganised sector. Despite these stated benefits and the fact that India is one of the largest producers of agricultural and food products in the world, the country ranks fairly low in the global food processing value chains. The sector is yet to gain momentum and develop into a full fledged industry.

Food processing provides an opportunity to utilise excess production efficiently. Not just from a growth perspective, food processing is also important from the point of reducing food waste. India is infamous for the mammoth food losses due to excessive production and lack of appropriate storage infrastructures. Recently, NITI Aayog cited a study that estimated annual post-harvest losses of close to Rs 90,000 crore. For a country with a sizeable population of malnourished and hungry population, it is a crime to waste food. Since our granaries and warehouses are ill equipped to handle the country’s food production, we have to invest in technologies that convert the excess production into products that have longer shelf life. Efforts to popularise and promote food processing become significant at this juncture.

The food processing industry has urged the government to formulate a model National Food Processing Policy with the aim of increasing farmers’ incomes and strengthening the value-addition ecosystem for agri-produce in the country. Currently, while some states have enacted their own food processing policies, others have integrated their food processing sector policy with their industrial policy.

According to the pre-Budget recommendations submitted to the Government by the food processing industry under the aegis of the Confederation of Indian Industries (CII), formulation of a comprehensive National Model Food Processing Policy for states to adopt will help capitalise on the diverse food production base and encourage investments in the sector. The policy, if formulated will lead to ease of doing business, alignment between the central and state policies and procedures, empowerment of farmers and overall growth of the sector. The industry chamber has also asked the government to extend the benefits of some of the schemes formulated for the food processing industry, beyond the food parks.

A special fund has been set up by the government with a corpus of Rs. 2,000 crore, to enable National Bank for Agriculture and Rural Development (Nabard) to provide affordable credit to entrepreneurs to set up new food processing units or modernise existing food processing units in the designated food parks. However, limiting the funding assistance only to units in designated food parks is an inhibiting factor. The industry has urged the government to extend this facility to all food processing units to create a level-playing field. The low-interest finance and other benefits of the SAMPADA scheme of Ministry of Food Processing, if extended to industry outside mega food parks, can create a level playing field and lead to a uniform development of food processing sector in the country.

The Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters (SAMPADA) is an umbrella scheme which incorporates various initiatives and schemes of the Ministry of Food Processing aimed at promoting expansion of food processing and preservation capacities, cold-chain infrastructure, mega food parks and agro-processing clusters. Among other recommendations, the industry chamber has also urged the government to ensure that export incentives for agri-products are in line with those extended to some other sectors.

Food processing adds an important dimension to the country’s agriculture. It complements the agriculture sector, and the government through effective assistance in terms of policy and sops can further improve the chances of the segment.
The deep economic turmoil the country has been facing in the past months has placed a profound responsibility on the Union Budget 2020-21. Agriculture sector is looking keenly towards the budget announcements and has pinned hopes for the revival of the sector. The pre-budget consultations with finance minister, Nirmala Sitharaman, were replete with suggestions to strengthen the agri segment.

During the meeting, representatives of the Agro-processing and Rural Development sectors submitted various suggestions to boost investment in agricultural sector and enhance market access to farmers. Removing of GST on agri-inputs, revamping crop insurance scheme, considering land lease rental for fixing MSP and banning futures trade in agri-commodities are among the suggestions made by farm experts during their pre-Budget meeting. There were also demands for measures to promote organic farming, cut import duty from 30 percent to zero on live embryo, animal and semen, tweaks in electronic National Agriculture Market (e-NAM) and revisiting Food Security Act. Significant suggestions received from the stakeholders included building brands of Indian agricultural products abroad, giving processing industry benefits/importance equivalent to agriculture, accelerate depreciation benefit to agri-processing industry, revamping of PMFBY, encouraging development of farm eco-system services and market intelligence systems; further tweaking of e-NAM, developing agro medicinal forestry, fiscal incentives for farmers with primacy to soil health, crop diversification vis-à-vis agro climatic suitability.

Rising cost of cultivation has been affecting the profitability of agriculture. Therefore the demand by the farmers to remove the GST on agri inputs such as fertilisers, seed and agri-equipments become important. There were also suggestions to increase procurement of various crops at the Minimum Support Price (MSP). There were also suggestions for reduction in GST on processed food and dairy products to 5 percent.

The dairy segment was keen on expediting implementation of National Dairy Plan (NDP-II) at the earliest and making a budgetary provision for it. The NDP-II, which aims to boost productivity in the dairy sector, is estimated to cost $1 billion, of which 50 percent will be borne by the World Bank, 30 percent by the Centre and remaining 20 percent by implementing agency NDDB.

Other stakeholders pitched for building brands of Indian agricultural products abroad, accelerating depreciation benefit to the agri-processing industry, encouraging the development of farm eco-system services and market intelligence systems. They also recommended the development of agro-medicinal forestry, crop diversification, revisiting of Food Security Act, extending the subsidy to producers of green manure, bio-fertilisers and bio-pesticides besides steps for promoting large scale production of compost by utilisation of urban solid waste.

Another significant suggestion that came in from the farmers was to include share croppers and tenants under various schemes. For instance, the PM Kisan, allows only landholders to avail the annual benefit of Rs. 6000. A suggestion for the constitution of National Farmers’ Income with a mandate to assess the farmers’ income across the country in different regions under different crops and for recommendation of specific steps for doubling farmers’ income.

The farm experts also emphasised the need for expansion of multi-dimensional research in agriculture sector for the development of new technologies and further suggested for promoting start-ups at the institutes of the Indian Council of Agricultural Research (ICAR) and agriculture universities for young students. Start-ups can remove segmentation in the agriculture market and help in providing remunerative markets for agriculture products.

Union Budget 2020-21 will be a significant budget. It is expected the budget will have some significant steps to dissolve the current economic impasse of the country with emphasis on agriculture especially farmers welfare.
BASF and Arable Labs Join Hands to Provide Insight about Weather & Plants across Europe

Arable Labs and xarvio Digital Farming Solutions by BASF have agreed to come together and integrate Arable Labs’ in-field measurements into Xarvio’s Crop models and recommendations. The integration of the unique dataset of Arable Lab with xarvio’s FIELD MANAGER will allow optimized crop production decisions. An experience of decades in the field of crop production and protection helped BASF build an effective digital platform. With the integration of Arable’s hyper-local crop and weather data, BASF’s platform will enable more precise in-field decisions. The acoustic disdrometer allows the Arable’s Mark device to provide unique value, eliminating the complex maintenance requirements of the traditional tipping bucket. Mark’s real-time insights and multi-spectral sensing capabilities provide us an insight into how plants are responding to observed field conditions. Arable supports the latest generation of wireless internet connection LTE-M, which is housed in a durable casing reinforced with nanotechnology protection. Fit-for-the-farm tech provides over 40 additional in-field measurements like weather measurements and plant health parameters, which makes it a one-of-its-kind solution integrated into xarvio FIELD MANAGER. Commenting on the collaboration, Jim Ethington, CEO, Arable Labs, said, “We are excited to announce this partnership that helps farmers by powering xarvio FIELD MANAGER’s recommendations with Arable’s unique data and analytics.” With a global network of 25 research-grade calibration and validation sites over 12 climatic zones, Arable’s machine learning models are continuously enhancing and thereby, ensure accurate and reliable data delivery. “Ultimately, our customers need integrated technologies that work seamlessly together, and that’s what the xarvio and Arable partnership provide,” added Ethington. Jeff Spencer, BASF Digital Farming’s Head of Technology, said, “Our customers expect more accurate and precise recommendations. We have extensively tested Arable’s Mark over the last two years and are convinced that with this integrated solution we will support our customers to be more profitable and sustainable.”

PI Industries Completes Acquisition of Isagro Asia

PI Industries has completed the process of acquiring Isagro (Asia) Agrochemicals Private Ltd from Isagro Spa and its affiliates. The deal was signed in October 2019. PI Industries is a leading name in the field of agroscience and has an integrated approach towards agri sciences business. The total transaction is valued at Rs 345 cr plus surplus cash on closing date subject to final adjustments for net working capital. Isagro Asia is engaged in contract manufacturing, local distribution and exports of agrochemicals. The company has reported revenue of Rs 314 cr and a net profit of Rs 23 cr for the year ended 31st March 2019. It has a 30-acre manufacturing site including production plants for agrochemical technical and formulations adjacent to PI’s manufacturing unit in Pinoli. Elaborating on the acquisition, Mayank Singhal, VC & MD of PI, says, “I am pleased that our team has successfully completed the transaction within the targeted timelines. This acquisition is one of the strategic initiatives that PI has taken to sustain its growth momentum. We are excited to welcome new members to PI family and will focus on value creation by leveraging both manufacturing and distribution capacities and capabilities of Isagro Asia.” The acquisition provides access to additional manufacturing capacities, synergy benefits of adjacent manufacturing site, long term contract for export of products to Isagro Spa. It will also help PI strengthen its position in domestic market by leveraging complementary product portfolio and pan India distribution channel of the acquired entity. The leadership roles and organization structures are now clearly defined while the eventual structure and integration of the acquired entity is under process. A global consulting firm has also come aboard to support the integration process.
India adds checks to rice exports to European Union

India has tightened the inspection norms for rice exports to the European Union. The commerce and industry ministry amended the export policy for Basmati and non-Basmati rice from ‘free’ to outbound shipments subject to certificates issued by Export Inspection Council (EIC). ‘Export to EU member states and European countries namely Liechtenstein, Norway and Switzerland permitted subject to issuance of certificate of inspection by EIC/Export Inspection Agency,’ the ministry said in a notification. India’s rice export to Europe plunged around 40% in 2018-19 over the issue of maximum residue level (MRL) is pesticides and the market is likely to shrink further this year as rice samples has failed the mandatory testing. ‘There have been pesticide issues with rice exports. So, these additional checks have been put in place,’ said an official in the know of the details. European Commission reduced maximum residues level for Tricyclazole to 0.01 parts per million (ppm) from 1 ppm for all crops in 2018. After 2018, the export of basmati from India to EU declined 38.35% and 9% in 2018-19 and 2019-20 (April-September) respectively, primarily due to the pesticide residue issue. As per the notification, the certificate of inspection by export inspection agencies will be mandatory for exports to remaining European countries with effect from July 1, 2020.

Ministry wants update on grain procurement

The food ministry has asked states to regularly update data on the amount of foodgrains purchased and the money disbursed to farmers along with their names to help it monitor and plan food procurement, and identify beneficiaries across the country. ‘We have 14 states on board covering 361 districts across the country. They are sending us regular updates on procurement. Ten states have joined only a month ago. Among big states, West Bengal will join soon,’ said a senior food ministry official. According to the latest report, 5 million rice farmers have benefited in the kharif season in which the government disbursed over Rs 80,000 crore for purchasing rice at the minimum support price (MSP) of Rs 1,815 a quintal. So far, the government has purchased around 38 million tonnes of rice. ‘We want to make this exercise transparent. We have details at micro level, like how many small and marginal farmers benefited and how many of them belonged to scheduled caste or tribe. These data may be useful in designing any farmers’ welfare scheme,’ the official said. In kharif 2019, the government has the maximum procurement from Punjab, where more than 14 million tonnes of rice has been purchased so far, benefiting 1.2 million farmers. We have distributed over Rs 41,000 crore in the state. This time, most of the money has been transferred directly to farmers’ accounts bypassing the arhthiyas or brokers,’ the official said.

Government to Draft National Fisheries Policy with Rs 45,000 Crore Budget

The government will be drafting first national fisheries policy with a budget of Rs 45,000 crore for next five years. This policy will promote marine fishery, aquaculture and mariculture, as per official sources. However, the only existing policy is on marine fisheries from which the production stands at 4.3 million tonnes annually. There is no policy on inland fisheries which produces the rest 23 million tonnes. Adding to it, the newly carved out Fisheries Ministry is working on an overarching policy that would cover the entire aspects of the fishery sector, the sources mentioned. An official source also told PTI, “The fishery sector never had a policy. Now, a new policy is being made. It will focus on promoting marine, aquaculture and mariculture besides addressing the traceability issues. It will cover both catch and capture fishing.” The draft policy will now soon be placed before the Cabinet for approval. A budget of Rs 45,000 crore will be required for next five years to implement the policy, the sources said. It is to be noted that, a policy is a statement of intent of the government. To execute a policy, certain legislation and regulations either in the form of Act or executive order are required. Schemes are framed to give monetary support. The schemes stay for only 5-10 years, and policy lasts for longer period. Currently, two fishery schemes are being implemented. First, Fishery Infrastructure Development Fund, which is a five year scheme. The second is fishery development scheme funded partially by the World Bank. This scheme is for eight years. However, the third scheme ‘Pradhan Mantri Matsya Sampada Yojana’ which was announced in July 2019 Budget is yet to get the cabinet approval. The scheme aims to boost fish and aquatic products through appropriate policy, marketing and infrastructure support.
Himachal to become natural farming state by 2022

The state government has set the target to make Himachal Pradesh a natural farming state by 2022. State agriculture minister Ram Lal Markanda said Subhash Palekar organic farming scheme has started showing productive results. He said state government has set a target to involve all 9.61 lakh farmers of the state in natural farming. According to Markanda, to make farming healthy and pesticide-free, the state government is promoting natural farming in a big way. Thousands of farmers have adopted Subhash Palekar Prakritik Kheti Khushhal Kisan scheme of the state government and, particularly, women are playing a major role in making it a success. The farmers are being encouraged to grow vegetables and other crops through natural farming individually or by forming self help groups. The minister said 2,664 gram panchayats of the 3,226 have been covered under the scheme. So far, 44,325 farmers have been provided training on natural farming by organising 1,031 training programmes at different places. So far, 39,124 farmers of the state have adopted natural farming against the target of 50,000 farmers. Natural farming is being done in approximately 1,650 hectares of land in the state. A target has been fixed to involve 9.61 lakh farmers with organic farming by 2022. This year, the state hopes to sway two lakh farmers into taking up organic farming, he added. The minister said state government is providing various facilities to the farmers for motivating them towards natural farming.

Eight states finalise action plan for agriculture export policy: Government

The government has said eight states, including Maharashtra, Uttar Pradesh, Punjab and Karnataka, have finalised action plan for agriculture export policy which aims to double such exports. ‘The Agri Export Policy was announced last year with an objective of doubling the export and ensuring doubling of farmers’ income...Many states have nominated nodal agency and nodal officer. Maharashtra, Uttar Pradesh, Kerala, Nagaland, Tamil Nadu, Assam, Punjab and Karnataka have finalised the State Action Plan and other states are at different stages of finalization of the action plan,’ the Ministry of Commerce and Industry said in a statement. The Agricultural and Processed Food Products Export Development Authority (APEDA) has been adopting a focused approach for ensuring greater involvement of the state governments for effective implementation of Agri Export Policy (AEP). Throughout the year APEDA held a series of meetings with state government officials and other stakeholders for preparation of state action plan which included all essential components like production clusters, capacity building, infrastructure and logistics and research and development and budget requirements for the implementation of AEP, it said.

Kesar cultivation to help farmers in Uttarkashi

To better the financial condition of local farmers, KrishiVigyan Kendra in Chinyalisaur town successfully introduced saffron (kesar) crop cultivation in UplaTaknor region of Uttarkashi district, where farmers are largely involved in apple farming. The high value crop was cultivated few months back on a trial basis on small patches of land in Sukki and Jhala villages of the district with support of Institute of Himalayan Bioresource Technology, Palampur, Himachal Pradesh. Delighted with the outcome of the project, local farmers have asked government agencies to provide seeds and technical assistance so that the crop can be cultivated in larger area. ‘We have successfully cultivated kesar crop in Sukki village of UplaTaknor region of Uttarkashi district. In the initial trial, we cultivated the crop in nearly a 2,000 square feet land and got nearly 120 gram of high quality Kesar, which is worth Rs 20,000,’ PankajNautiyal, horticulture expert and in charge of KrishiVigyan Kendra in Chinyalisaur, told TOI. He said that Sukki, Jaspur, Purali, and other villages of Uttarkashi have conducive conditions for the cultivation of kesar as they are situated at an altitude of 1,800-2,200 metre above sea level and also receive optimum sunlight.
MoU Signed Between Forum of Indian Food Importers and NEEA to Strengthen Trade Ties

Forum of India Food Importers (FIFI) and North East Entrepreneurs Alliance (NEEA) agreed to build cooperation by signing a Memorandum of Understanding (MoU) during recently organized North East Food Show 2019 by the Government of Meghalaya and SIAL Paris. The MoU has been signed with an objective to facilitate food business, food processing, food ingredient sourcing, providing market linkages and knowledge exchange between both the parties.

NEEA aims to work closely with FIFI to curate products from the region which can find the platform at par to the international food and beverage products. With this MoU NEEA is also looking forward to creating a few geographical product categories, brand them accordingly and generate long term brand equity for them. The GI tagged commodities remain underutilized and with FIFI, NEEA hopes to leverage the opportunity not only in India, but across the world. Mr. PankajSinghal after signing of the MoU said, While FIFI members see great potential in the North-Eastern states and have expressed keen interest to connect the novel products not only with the Indian market but, to eventually see them getting attention across the globe. We are delighted to take this engagement forward. The MoU was signed by Mr. AmitLohani and Mr. PankajSinghal from the FIFI and members of NEEA in the presence of luminous dignitaries like Mr. Conrad K Sangma, the Chief Minister of the State of Meghalaya, Mr. PremaKhandu, the Chief Minister of the State of Arunachal Pradesh, Mr. KirenRijiju, Minister of State of the Ministry of Youth Affairs and Sports and Minister of State in the Ministry of Minority Affairs of India, Mr. RameswarTeli, Minister of State in the Ministry of Food Processing Industries, Mr. Biplob Kumar Deb, the Chief Minister of the State of Tripura, and Mr. BeduPanth, Minister of Tourism & Civil aviation and Commerce & Industries. Mr. AmitLohani, Founder and Director FIFI said, “We warmly welcome the progressive the regime led by the brigade of politicians and bureaucrats in North East India. The eastern end of the political boundaries of India, the seven states, appears dedicated to connecting their food map to the world. We are keen to take dialogue further in the realm of ease of doing business, better interstate trade, supporting tax reforms, improved logistical connectivity, and education on regulatory compliances. We would like to do continued efforts not only limiting ourselves to a trade show but, with our continued engagements. He was also quoted saying, ‘We firmly believe in cross border trade goods, which are not produced in the region like almonds, pistachios, high-end chocolates, alcoholic beverages, and other products can make way into the North Eastern Market and premium quality turmeric, organic teas, wines, pineapples, and citrus fruits can be traded out at an affordable price.”

Maharashtra contributes 98% to the total exports of grapes

Maharashtra contributes 98% to the total exports of grapes from India and it is the leading state in horticulture in the country, specifically with regards to area, production and export of mangoes, banana, pomegranates and few vegetables. The state is earning sizeable foreign exchange through large-scale exports of these commodities. According to experts, Hortinet traceability systems like Grapenet, Mangonet, Anarnet and Vegnet have been successfully implemented in the state for registration of exportable items to fulfill requirements of importing countries. Grape is an important crop grown in Maharashtra. The state contributes 98% share of total export of the fruit from India due to its quality and residue-free production. According to APEDA, in the year 2018-19, Maharashtra exported 230,203 metric tonne (MT) grapes, which was valued at Rs 2,210 crore and 95% share. Some 21,574 MT of mangoes were exported, which were valued at Rs 193 crore and 48% share. Some 65,559 MT of bananas were exported which were valued at Rs 230 crore and 55% share. Some 57,335 MT of pomegranate were exported which were valued at Rs 537 crore and 78% share. Some 20,345 MT of oranges were exported which were valued at Rs 120 crore and 48% share. However, earlier in 2003-04, the EU rejected Indian grapes import on the ground of pesticide residue. Since then special initiatives were taken for the formation of the system of monitoring of pesticide residue issues under the guidance of Agricultural and Processed Food Products Export Development Authority (APEDA) New Delhi, under Ministry of Commerce and Industries. GovindHande, Technical Advisor, Export, National Horticulture Mission Commissionerate of Agriculture, Pune, informed, To fulfill the SPS (Sanitary and Phytosanitary Measures) requirement of EU pertaining to pesticide residues in exportable grape, the state has taken a lead in formulation of pesticide residue monitoring system in consultation with APEDA, National Research Centre for Grapes and Maharashtra RajyaDrakshBagayatdarSanth. He added that long-term strategies for resolving the problem pertaining to pesticide residues and for assuring export of residue-free grapes to European Union, ‘Farm to Fork’, total traceability system entitled ‘Residue Monitoring System for Export of Grapes to European Union (Grapenet) was formulated and implemented from 2006-07.
Grapes exports up 21% during Apr-Oct

India’s grapes export went up by 21 per cent between April and October 2019 due to an increase in demand from European countries, after Indian exporters ensured quality and traceability with improvement in their farm practices. Data compiled by the Directorate General of Commercial Intelligence and Statistics (DGCI&S) under the Ministry of Commerce showed India’s fresh grapes exports stood at 43,622 tonnes for the period between April and October of 2019 in comparison with 36,180 tonnes of grapes export for the corresponding period in 2018. Exports of mango and other fresh fruits, including citrus and seasonal ones, have also risen by 12.3 per cent and 37 per cent in volume terms. Overall export of fruits from India rose by 30 per cent to 310,286 tonnes in the first seven months of FY20 as against 238,955 tonnes in the same period of FY19. ‘There is a huge demand of Indian fruits in European countries. Exporters have joined farmers to adopt better farm practices which ensure quality as prescribed by importing countries. Farmers have developed skills for better post-harvest management of fruits by up-scaling storage facilities, transportation and market linkages. This has started yielding positive results,’ said Sharad Bhalerao, managing director, Ajinkya Agro Exports, a fruit exporter from Nashik, Maharashtra.

DGFT suspends licence to export cashew kernels against import of shelled ones

The Directorate General of Foreign Trade (DGFT) has issued a notice dated January 1, suspending the ad hoc norms approved in July 2018 for the export of cashew kernels (whole and pieces) against the import of shelled cashew kernels. Terming it as a ‘new year gift’ by the government to the domestic cashew industry, Subraya Pai, President of the Karnataka Cashew Manufacturers’ Association (KCMA), told that the DGFT’s notice suspending the ad hoc input-output norm to import ‘Broma’ kernels (shelled and unpeeled) will help small and medium cashew processors to a great extent. (Broma is a process used in cashew processing). He said some of the multinational cashew processors were misusing the ad hoc norm, and dumping the broken cashews (pieces) in the domestic market. Following this dumping, the prices of brokens came down by almost Rs.200 a kg in the last few months. This affected small and medium cashew processors in the country, he said. Many of the industrial buyers stopped buying broken cashew from small and medium cashew processors as industrial buyers were getting it cheaper from multinational cashew processors. There are around 3,000 cashew processing units in the country, employing around 10 lakh people in this sector, he said. A majority of them are small and medium enterprises providing jobs in rural areas, especially to women, in large numbers.
India exports 3.2 million bales of cotton in first quarter of cotton year 2019-20

India has exported 3.2 million bales of cotton during the first quarter of the cotton year that began on October 1, said trade body Cotton Association of India (CAI), which expects the total exports till September 2020 to hit 42 lakh bales. ‘Cotton export shipments from 1st October 2019 to 31st December 2019 which have already been shipped are estimated at 10 lakh bales while balance 32 lakh bales are expected to be shipped during the period from 1st January 2020 to 30th September 2020. Total exports estimated during the entire season are 42 lakh bales,’ said CAI. According to CAI, consumption by Indian spinning mills for 3 months i.e. from 1st October 2019 to 31st December 2019 is estimated at 78 lakh bales. Cotton stock held by mills in their godowns on 31st December 2019 is estimated at 30.89 lakh bales. CCI, MNCs, Ginners and MCX are estimated to have stock of about 37 lakh bales as on 31st December 2019 which is equal to about 39 lakh running bales. Thus, total stock held by spinning mills and stockists on 31st December 2019 is estimated at 67.89 lakh bales of 170 kgs. each which is equal to about 72 lakh bales. Closing stock as on 30th September 2020 is estimated by the Committee at 30 lakh bales of 170 kgs. each.

TPCI sharpens strategy to boost agricultural exports

Trade promotion body TPCI suggested a five pronged strategy to the government, including mandatory pre-export certification and revamping SEZ policy for food sector, to boost outbound shipments of agricultural goods. The Trade Promotion Council of India (TPCI) said India has the potential to raise agri exports to $100 billion (about 7.10 lakh crore) in the coming years. It proposed 100 per cent pre-export certification, increasing customer base, branding, strengthening last mile connectivity for agri produce, and revamping SEZ policy for food exports. “Before trading in a new market, most countries demand that your products conform to national and international standards. As a result, your products need to be designed and tested so that they can be sold in your target countries without hassles,” TPCI Chairman Mohit Singla told reporters. He said pre-export certification will ensure regulatory compliance for products and meet the requirements of the countries the exporters want to ship. “If this is ensured, the quality of our product will also fetch premium value for food and beverages exports. The mandatory 100 per cent pre-export certification will create the brand as a reliable and good quality exporter,” he added. To enhance customer base, the government should support companies to create different products which suit global demands, Singla said. He added that providing the last mile connectivity to the agri produce from the country is the need of the hour and crucial for exports. “Our farm produce such as pepper, cardamom, cashew, is either undervalued in global market or overvalued domestically as in case of most of the spices which fails to get a market for exports,” he said. For special economic zones (SEZ), he said the lack of incentives for manufacturing and exports of value-added food and beverages is inhibiting global players from coming to India to set up facilities.
India to launch hub to fast track agricultural exports to the Gulf

India's Agricultural and Processed Food Products Export Development Authority (APEDA) is to open an office in Varanasi to fast track exports to the Gulf. The opening follows the success of a trial shipment of locally grown vegetables to Dubai this month, state news agency WAM reported. The shipment is the culmination of an enterprise inaugurated by Prime Minister Narendra Modi in Varanasi 18 months ago. In July 2018, the Prime Minister inaugurated a cargo facility on the outskirts of the city to consolidate agriculture produce through farmer producer organisations in the area, process and pack them for exports. That effort reached fruition this month when 14 metric tonnes of fresh vegetables cultivated by farmers in two districts in the Varanasi area were sent as a container-load on trial to Dubai. An agricultural export hub has now been set up in Varanasi to build on the success of the Dubai trial. Government and business agencies from five predominantly agricultural districts around Varanasi will now coordinate their activities to make the region a source of exports to the Gulf. APEDA is an organisation under India's Ministry of Commerce and Industry, responsible for promoting exports of agricultural and processed food products from India.

India’s tea production in 2019 may top the charts

With November proving to be a better month for tea factories in both the North and South India, it is increasingly clear that India is headed for a new record in tea production in calendar 2019. The Tea Board has released the data for November which shows that India produced 139.39 million kg (mkg) against 121.10 mkg in November 2018, marking a gain of 18.29 mkg or 15.10 per cent. North India produced 16.13 mkg more to reach 117.64 mkg while South India produced 2.16 mkg more to reach 21.75 mkg. India’s production in the 11 months rose to 1322.66 mkg from 1283.11 mkg in Jan-Nov 2018. This increase of 39.55 mkg marked a gain of 3.08 per cent. The increase would have been more had it not been for a fall of 4.23 mkg or 2.06 per cent in the South where the output dropped to 200.91 mkg from 205.14 mkg, mainly because of lower output in earlier months following adverse weather. Here again, the production would have been more had it not been for Tamil Nadu losing 2.74 mkg to produce 142.76 mkg and Kerala losing marginally to produce 54.03 mkg from 54.95 mkg in Jan-Nov 2018 due to bad weather.

India Pulses And Grains Association Announces ‘The Pulses Conclave 2020’

India Pulses and Grains Association (IPGA), the nodal body for India’s pulses trade and industry today announced that the fifth edition ‘The Pulses Conclave’, their biennial global pulses conference will be held from Feb. 12th to 14th, 2020 at Amby Valley City in Lonavala, Maharashtra. IPGA expects close to 1500 trade stakeholders from India and key pulses exporting countries like the USA, Australia, Canada, Myanmar, Ethiopia, Uganda, Tanzania, Mozambique, Malawi, etc. to participate in ‘The Pulses Conclave 2020’ (TPC 2020). The Pulses Conclave 2020, as a part of its agenda, will not just discuss increasing domestic production and consumption but will also bring to fore other areas of the trade like improving processing efficiencies, increasing consumption, exports, value addition, protein extraction, post-harvest crop management, etc. ‘Hon’ble Prime Minister’s vision is to double the farmer’s income by the year 2022 and a huge effort has been put into achieving the same. The result has been that India’s pulses production has steadily grown every year from around 19 million tons in 2013-14 to 23 million tons in 201-19 and the target for 2019-20 is 26.30 million tons. IPGA’s agenda and road map going forward will be to encourage its members to take advantage of the increased domestic production, balance imports vis-a-vis the production and demand thereby ensuring that the Indian consumer does not face any availability crunch nor high retail prices’, said Jitu Bheda, Chairman - IPGA. ‘In recent years, there was deflation in food prices that has brought the overall consumer price index down, leading to a crisis for farmers. When the prices of agricultural commodities are globally low, India’s export in the sector is not so impressive. To make matters worse, the wholesale price index of food items is lower than the agricultural inputs for most years for key reasons in the cost of inputs such as irrigation, electricity, pesticides, and fertilisers.'
India is poised for another record harvest of winter-sown crop as cold weather and showers in key grain-producing areas of northern India are expected to improve yields of wheat, oilseeds and pulses. Agriculture commissioner S K Malhotra informed that weather conditions in many states including Punjab, Haryana, Uttar Pradesh and Rajasthan have been very favourable for crops, which would increase food output to a new high. “Conditions are ideal for wheat, oilseeds and pulses, which are in the growth stage at this moment. Cold conditions with light rains will increase the yield. The only precaution is, water should not stand in the field, he said. According to latest rabi sowing data released by the agriculture ministry, wheat acreage — which accounts for over half the sown area — is up over 11% to 32.646 million ha, because of a rise in planting in Madhya Pradesh, Rajasthan, Gujarat and Maharashtra. The total rabi sown area has also climbed to 62.5 million ha, 8% more than 57.847 million ha planted during this time last year. The surge in sowing is supported by the better availability of water in reservoirs across the country. According to latest Central Water Commission report, 120 major reservoirs have a cumulative storage of 130.28 billion cubic metre (BCM) of water, which is around 53% more than 85.04 BCM recorded last year. If conditions remain ideal, this year will have a record wheat production if strong winds, heavy rains and hailstorms don’t hit the crop during harvesting stage in February and March, he said.

Cold, showers in North may yield record rabi crop

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The animal husbandry sector has the potential to boost farmers' income by two to three times, Union Minister of Fisheries, Animal Husbandry and Dairying Shri Giriraj Singh tells Rajni Shaleen Chopra, Executive Editor of Agriculture Today

‘We have to make dairy a source of farmer prosperity to retain youth in this sector’
The dairy and animal husbandry sector in the country can develop and prosper only if it is able to increase farmers’ income and prosperity. If dairy ensures affluence for the farmer, it shall be seen as a viable business activity, and we shall be able to retain youth in this sector. Around 70 million rural households are engaged in the dairy sector in India. The country’s milk production has increased to 187.75 million tonnes in 2018-19 from 137.7 million tonnes in 2013-14, growing at an average of 6.4 per cent per year. Per capita availability of milk increased from 307 grams in 2013-14 to 394 grams in 2018-19.

Sorting of sex semen has started producing female calves. From this year, the same process will be done through indigenous technology. Our government has given a major thrust to the dairy sector by promoting technologies like sex sorting semen, IVF, and surrogate mother to boost milk productivity and production. All these steps are essential for boosting farmers’ income. The coverage of artificial insemination (AI) in bovine will be increased to 100 per cent from the current 30 per cent by 2025.

I can assure that the Modi government’s current five-year tenure will see the end of the problem of stray cows in the country. The Animal Husbandry Ministry is working on a solution to deal with the issue. In coming years, stray animals will not be seen on road. I am concerned about this. Through use of cow dung and cow urine, helpless cows will be able to provide support to others.

The ministry is currently conducting experiments along with Indian Council of Agricultural Research (ICAR). The entire roadmap will be chalked out accordingly. I urge the scientists, concerned agencies and all stakeholders in this sector to conduct more research on cow dung. Optimum use of cow dung can make it financially viable for farmers to keep their cows even after they have stopped producing milk. If farmers can make money out of cow dung and cow urine, they will not abandon their cattle. There is immense scope for value addition in milk, dung and urine of the cow that would ultimately contribute to the economy of the country. At the same time, if the input cost of agriculture decreases, villages and farmers will progress.

The union government is committed to uplifting the standard of living of dairy farmers. Several welfare schemes have been started for this purpose. For improving the quality of milk-producing animals, especially buffaloes and cows, the Union government shall provide sexed semen to the dairy farmers at much cheaper rate of only Rs 100 within this year.

At present, sexed semen is made available at Rs 600 (with subsidy), whereas the actual cost of the product is Rs 1200. As part of this project, 600 villages have been chosen in the country. We have decided that 200 cattle from each village will be provided quality sexed semen. This shall ensure breed improvement of cattle, and shall lead to higher milk yield. Gradually, the campaign for breed improvement among cattle shall be extended to more and more villages. The birth of only female calves shall also eventually put an end to the practice of abandoning the male buffaloes. This has been posing a major threat to human life in the form of stray cattle menace.

The focus of our government is on increasing earnings of dairy farmers by reducing input costs through introduction of sustainable technology and improved efficiency at all levels, including management, breeding, feeding and health care. Dairying provides year-round income and generates gainful employment in the rural sector. I have instructed our research organizations that R&D work done in the laboratories must be done keeping the farmers in mind and the institutions must establish direct linkages with them.

Under the Rashtriya Gokul Mission to enhance milk production and productivity of indigenous cattle, we have initiated promotion of embryo transfer technology, creation of facilities for sex-sorted semen production and genomic selection. The Ministry has also launched an ambitious FMD and Brucellosis eradication programme. Efforts are being made to tag all cows and buffaloes in the country and provide doorstep delivery of veterinary services to farmers.

We are also highly concerned about improving the quality of milk and milk products. The dairy industry must use the latest technology to check adulteration at every stage from milk collection to processing.
The animal husbandry sector has great potential. The income it generates is a major contributor towards the nutritional and livelihood security of rural India, says Mr Atul Chaturvedi, Secretary, Department of Animal Husbandry and Dairying, Government of India.

The Indian dairy sector is well poised and well placed to achieve the vision and target of the Hon’ble Prime Minister to double farmer income. The Animal Husbandry sector has great potential, and must become the major focus area. The compound annual growth rate of this sector is comparable to the manufacturing and services sector. It must be acknowledged and appreciated that this sector is contributing majorly to total agriculture GVA. This sector is one of the drivers in terms of growth of economy. The income it generates is a major contributor towards the food and livelihood security of rural India. We must look at the livestock sector in terms of strong economics, and not just poverty alleviation. It is in this light that the government is pushing for greater public and private investment into this sector.

We have to set right the input component for the dairy sector. We must bring in the right kind of investment from the government side for these vital inputs. It is essential to ensure that our livestock is well fed and is disease free. Hence livestock disease control is a major focus area for the government.

This sector has great potential for the export market. We have to focus on the challenges faced
by the dairy farmers to ensure the growth and development of this sector. The government has taken many initiatives to give a boost to the dairy sector. We have National Animal Disease Control Program to ensure that our animals stay healthy and productive. The target for animal vaccination is 530 million, twice a year. We are aware that this is a huge target, and it has to be achieved. We are also providing unique identity tag to each animal through Pashu Aadhar. This shall be a game changer for the livestock sector. We are trying to achieve Pashu Aadhar in one year with 100 per cent government assistance. The service shall be provided at the doorstep of the animal owner. This is the kind of focus that the government is giving to the livestock sector.

There is equal focus on breed improvement at the doorstep of animal owner through free artificial insemination. We are going to upscale this program.

Green fodder economics is a major area of concern for us. We have to inculcate into the mindset of the farmers that green fodder can be a major cash crop. We are working on incentivizing integrated farming. Dairy farmers and cooperatives must be the brand ambassadors of such ambitious initiatives for dairy welfare. The private sector can invest in milk processing and value addition.

It is also important for the private sector to address competitiveness in production. Farmers who keep livestock do not commit suicide, such is the livelihood security and food security provided by the dairy sector. Everything is a win win game in this sector.

Livestock and animal husbandry are integral components of Indian agriculture, growing at an appreciable and sustainable rate and is ahead among all sub-sectors of agriculture. India ranks first in milk production, accounting for about 20 per cent of total world milk production. There was steady and remarkable rate of growth in milk production reaching 176.35 million tonnes in 2017-18. India stands first in goat milk production (45.9 lakh tons) and contributes 29 per cent share in the world, though per animal productivity of sheep and goat milk is much below the world average. The advantage of initial low investment cost, high fertility, easy marketing and social acceptance of goat meat, goat farming would be ideal option for poor rural households, if common community land is developed for grazing of small ruminants.

**Farmer Producer Companies for Livestock Products**

Presently, there are around 5,000 FPOs including FPCs in existence in the country, which were formed under various initiatives of the Central government, state governments, NABARD and other organizations over the last eight to ten years. FPOs are farmers’ collective organizations, with membership mainly comprising of small/marginal farmers (around 70 to 80%). For the success of FPOs in case of livestock products, the need is to create some model FPOs in the country. These may be on the lines of the country’s famous ‘milk cooperatives’. Livestock FPOs need support from the government to stand on their feet. Today, many successful milk cooperatives in the country are surviving on their own while competing in the open market, but they have institutional support in the form of the National Dairy Development Board. Livestock FPOs can use similar support for the production of livestock products other than milk. Formation of such SHGs and FPOs is more important in small ruminants farming, as there is complete absence of organizations of small ruminant’s keepers. Formation of FPOs, cooperative societies or the SHGs based on the model demonstrated by the NDRI in dairy sector in villages would enhance farmer’s income and value addition. The producers should be linked to market. Further, clean milk production, traceability, adulterants detection kits and value addition of milk and milk products should be prioritized.

Value addition to dairy products ranging from branding of milk, dahi to highly industrialized yogurts, cheese including Mozzarella, whey powder, dairy probiotics and dairy nutraceuticals have provided handsome returns. These have become imperative for the dairy industry. We must collectively work to harness the full potential of livestock and also scale up livestock products. We need secure and sustainable agriculture-based processing plants, compound feed industry, regulated animal market, animal breeding upgradation programs, veterinary polyclinics, semen banks etc.

Shortage of good semen doses, which has resulted in about 10 per cent of the total breedable and calviable milch animals not being calved even once in their life, is due to non-availability of high number of quality bulls. To maximize the use of available limited germplasm, the promising reproductive biotechniques like multiple ovulation and embryo transfer (MOET) and ovum pick-up and in vitro fertilization need to be utilized to the maximum extent at least for breeding bull production. MOET, sexed semen and sexed embryos of exotic germplasm also need to be used for faster multiplication of superior animal with high genetic potential either from crossbred or non-descript indigenous cattle.

To bridge the gap between demand and availability of male germplasm, a project/scheme to rear superior “the male calf to bull”, which is already in place in some states, needs to be initiated in all states. Similar initiatives are also needed for goat and sheep husbandry for rearing males of improved breeds in their breeding track.
Amul, an Indian cooperative dairy company, based at Anand in the state of Gujarat was formed in 1956. It is a cooperative brand managed by a cooperative body, the Gujarat Co-operative Milk Marketing Federation Ltd. (GCMMF), which today is jointly owned by 3.6 million milk producers in Gujarat. Amul spurred India’s White Revolution, which made the country the world’s largest producer of milk and milk products. In an interview with Rajni Shaleen Chopra, Executive Editor, Agriculture Today, Mr. R S Sodhi, Managing Director, AMUL, discusses about the dairy sector of India.

Amul has become a role model in the field of dairy prosperity. What are your key learnings in the dairy sector?
In India, dairy continues to be in the hands of small producers. The Amul model is the perfect, most apt model for linking small producers with the market. In the mid 1970s, when White Revolution took place with Operation Flood 1, 2 and 3, the Amul model was replicated at various places in the country to make it a leading milk producer.

Our key learning continues to be our abiding faith in the Amul ethos - Value for Many, Value for Money. Any organization that wants to succeed by linking small producers to the market must give them a stable and remunerative price. It must sell products of the highest grade at highly affordable prices and by using the latest technologies.

The basic theme of the Amul model is: Give more to earn more. Give more to farmers, give more to
consumers. If you make these two stakeholders happy, the business and the organization will prosper.

**What is your message on how to project and enhance brand India on the global stage?**

India is one of the largest producers of milk and of agricultural produce. The quality of our products are on par with those in advanced countries. It is important for us to become cost-efficient. Especially in agricultural produce, we have to reduce the level of pesticides and aflatoxins to perform well globally.

**What is your vision for Amul for the New Year and the new decade?**

In the last ten years, our growth rate has been 17 to 18 percent. For the year 2019-20, we are looking at a growth rate of 20 percent. Amul as a brand is valued at more than Rs 52,000 crore. We are working to ensure that in the next five years, Amul shall be a brand valued at Rs 1 lakh crore.

**What is your vision for increasing rural prosperity through strengthening the dairy sector?**

Doubling farmers’ income must become the reality, and not be restricted to a buzzword. To make it a reality, every Indian has to work towards this goal – it is the responsibility of every Indian. The average income of farmers must increase. The gap between urban and rural income must decrease. We as Indians should not make noise when price of any agricultural produce increases. What is the inflation in food for the urban consumers – it is increased income for the rural producer. On one hand, we say – farmers’ income should go up. On the other hand, we are not ready to pay more. People are attributing all mismanagement or inflation to middlemen in the agricultural sector. The dominant feeling is that middlemen make huge profits, and the consumers have to pay more. This way, we demonize the people in the agricultural value chain. The agricultural value-chain provides employment to crores of people. Agricultural whole-sellers, contractors, retailers, vendors – they all have to do their job and earn their living from it too. Through the entire agricultural value chain, middle-men are doing their job in a reasonable and efficient manner vis-à-vis the margins they are earning. Those who consider that they can remove the middle-men in the value chain and give this work to multi-national corporations must realize that the MNCs will have much bigger profit margins. Many MNCs and other corporate houses are buying tomatoes, potatoes etc., from farmers and processing them as diverse products. All these companies pocket the huge profit margins. They don’t pass on any additional benefits to the farmers.

What is required is that all over the country, farmers should form their own cooperatives like Amul, and market their products. Otherwise they have to depend on middlemen, who may or may not give them the right value for their products. What is required is more involvement of technology, so that our systems become more efficient. Farmers associations, traders associations, commission agents, distributors – they should use technology and form online platforms where they can connect with the customers and offer better services.
India’s dairy industry has contributed immensely to the success and growth of the farm economy. Today India is the largest producer and consumer of milk in the world. The dairy sector in India grew at a rate of 6.4 per cent annually in the last four years against the global growth rate of 1.7 per cent. In this journey, many individuals and institutions have played seminal roles. These role models need to be admired and recognized. To give due recognition to the role models of the dairy sector, the Agriculture Today Group organized the first India Dairy Awards on January 10 in New Delhi. The awards were presented by Mr. Atul Chaturvedi, IAS, Secretary, Department of Animal Husbandry and Dairying, Government of India at a glittering function at Hotel Taj Palace.

Speaking on the occasion, Mr. Chaturvedi said that the compound annual growth rate of the dairy sector is comparable to the manufacturing and services sector. He emphasized that the dairy sector is among the future drivers for economic growth. “It offers food and livelihood security for millions of Indians. The Indian dairy and livestock sector shall play a pivotal role in achieving the nation’s dream of becoming a 5 trillion dollar economy”, he stated.

In presenting the awards, Mr. Chaturvedi was joined by Mr. Deepak Singhal, former Chief Secretary of UP; Dr. Sunil Gulati, IAS, Additional Chief Secretary, Haryana; Dr. Purvi Mehta, Director Agriculture for Asia, Gates Foundation; Dr. AK Srivastava, Member, ASRB and former Director NDRI; Dr. JK Jena, DDG-AS, ICAR; Dr. Pravin Malik, Animal Husbandry Commissioner of India and Dr. MJ Khan, Chairman, ICFA.

The award ceremony was preceded by two technical sessions on the theme, Role of Dairy Sector in Achieving $5 Trillion Indian Economy. The sessions brought together top policy & decision makers, national experts, industry leaders, CEOs and other major stake-holders to deliberate upon issues and challenges, opportunities and way forward. Session 1 focused on the Business and Trade aspect of the theme, and Session 2 on the Policy and Technology aspect of the theme.

Awards were given to 17 individuals, institutions and companies for their outstanding performances in the dairy sector. The Awardees were selected by an eminent Jury chaired by Dr. Panjab Singh, President, National Academy of Agriculture Sciences and former DG, ICAR and Vice Chancellor, BHU and comprising luminaries of the nation’s livestock and dairy sector.

Dr MJ Khan, Chairman, ICFA in his address said that in the journey of transformation from a backyard activity to a global leadership position of the Indian dairy sector, many individuals and institutions have played seminal roles. “Agriculture Today Group as the media and policy catalyst has always been on the forefront in providing information, influencing policies, creating business networks and recognizing achievers. The institution of India Dairy Awards is another step in this direction,” he said.

During the technical sessions, the distinguished speakers discussed that quality, safety and cost competitiveness must be the driving factors of the national dairy industry, with major focus on animal health and hygiene. The speakers focused on food safety in the dairy and poultry value chain, boosting start-ups in the dairy and goatry sectors, ICT application in monitoring, breed and disease management, infertility management, traceability systems in milk supply, green fodder production, animal waste
management and several other major issues of this sector.

The first technical session on Business and Trade was moderated by Mr. Vijay Sardana, Chairman, ICFA Working Group on Agro Trade. The distinguished members of the panel included Dr GS Rajorhia, President, Indian Dairy Association; Mr. RS Dixit, Chairman, Ananda Dairy; Dr Arun Atrey, President & Head, Animal Health Business at Cadila Healthcare Ltd, Zydus; Dr RS Khanna, Chairman, Kwality Group; Mr MJ Saxena, MD, Ayurved Limited; Dr (Capt) Tanweer Alam, Marketing Director, Kemin Industries South Asia Pvt Ltd. and Mr Atul Mehra, Chairman, Tasty Dairy Specialties Ltd.

The second technical session on Policies and Technologies was moderated by Dr. KML Pathak, Chairman, ICFA Working Group on Animal Health. The distinguished members of the panel included Dr. MJ Khan, President Agriculture Today Group; Dr. Purvi Mehta, Head of agriculture for Asia, Bill & Melinda Gates Foundation, Dr AK Srivastava, Member, ASRB and former Director, NDRI, Dr. Sunil Gulati, Additional Chief Secretary, Government of Haryana, Sh Tarun Shridhar, Former Secretary – ADF, Government of India and Dr. Rameshwar Singh, Vice Chancellor, Bihar University of Animal Sciences, Patna.

SESSION 1
Policy and Technology: Policy Challenges and Innovations in Dairy Sector

Mr. Vijay Sardana, Chairman, ICFA Working Group on Agro Trade moderated the session and began with an introductory note on the theme. The dairy sector, he said, is not just business. “For a large section of the rural populace, it is social security and can be the source of income twice a day. Cattle ownership and milk production was like an ATM machine for a poor family, he stated. He observed that when we talk of competitiveness and quality, the world must be the reference point for the industry. Mr. Sardana said that India was the highest producer of milk in the world, but it is essential to focus on quality if we want to make space for India in the global market. He said he was raising a provocative question, but asked the audience whether milk production in the country should be scaled down. The focus, said Mr Sardana, should be quality and not just quantity.

Dr. GS Rajorhia, President, Indian Dairy Association (IDA) commented on the larger trends in the dairy sector which caused panic among stakeholders from time to time. Dr. Rajorhia gave the example of the panic being felt by ice cream manufacturers this season because there were no stocks of skimmed milk powder. He said that it was essential for the government to create buffer stock during flush season, so that panic is not faced by any stakeholder at any time. Dr. Rajorhia said that the rise in milk prices is being resented by consumers. He pointed out that there was no study by any university or research centre on the cost incurred by farmers on producing milk. Dr. Rajorhia also spoke about quality of milk, and safety of consumers. He said that IDA had formed policy groups that were focused on many aspects of the growth and development of the dairy sector.

Mr. RS Dixit, Chairman, Ananda Dairy said that 95 per cent of paneer (cottage cheese) is sold through the unorganized sector. He said that packed paneer ensures hygiene and quality assurance for the customer. He
opined that levying GST on packed paneer amounted to taxing hygiene and quality assurance. According to Mr. Dixit, traceability is the most vital certification of quality, and government must make good quality affordable to the common man. He pointed out that desi ghee was eaten by the common man. While GST at the rate of 12 per cent is levied on desi ghee, the mithai made using desi ghee as an input was levied with GST at the rate of 5 per cent only. Mr Dixit also made the vital point of glamorizing the dairy sector so that youth were encouraged to adopt dairy as a means of making a livelihood. Mr Dixit said that dairy offers both backward and forward integration, and can be a vital driver to take India to a 5 trillion US dollar economy.

Dr. Arun Atrey, President & Head, Animal Health Business at Cadila Healthcare Ltd, Zydus, said that about ten years ago, their organization realized that scientific management of animal health had very low penetration in India. The learning was also that the government alone cannot solve all problems. Dairy extension and education through the corporate sector is essential to emphasize on the significance of quality and animal nutrition. “Milk is a source of daily income for small and marginal farmers. Dairy farming must be encouraged for greater rural employment. This objective shall be achieved by ensuring more value added products in milk sector. There was also need to give farmers access to qualified veterinarians and para-veterinarians. Strengthening the animal health sector is important to secure higher milk yield,” said Dr. Atrey. He also mentioned that with mechanization, physical input cost for milk has reduced.

Mr. Atul Mehra, Chairman, Tasty Dairy Specialities Ltd. noted that despite being the largest producer of milk in the world, only 18 per cent of the total milk supply in the country reaches the dairy industry for packaging, circulation and creation of value added products. Mr. Mehra said it is a matter of concern that the average milk supplied in the country lacks quality and does not meet several parameters. “Due to systemic failures at various levels, milk produced by Indian cattle is not of exportable quality. Two years ago, we were saying that we have too much milk. At that time, buffer stocks of essential milk products were not created. Now, some sectors that use dairy products as components are facing shortages,” he observed. Mr. Mehra noticed that many affluent urban consumers do not want to buy locally produced milk, and are ready to pay Rs 250 a liter for packaged Swiss milk.

Dr. (Capt) Tanweer Alam, Marketing Director, Kemin Industries South Asia Pvt Ltd. observed that for the bottom of the pyramid of dairy farming in India, milk production happens by default. “There is no significant desire to increase or ensure animal nutrition. The dairy industry must strive hard to sell milk as wholesome food. Quality milk must be seen as an essential part of our daily food needs infancy onwards. Both productivity and quality are essential factors for the dairy industry. India faces the problem of young mothers and also children facing malnutrition. We need more high quality milk to serve this large segment of the population,” he said. He also observed that the urban consumer is highly concerned about needs like protein and fiber in food content. Hence quality milk and value-added milk products must be a focus area. He said that doubling of farmer income is the need of the day, and dairy can play a major role in achieving this objective.

Mr. MJ Saxena, Managing Director of Ayurved Limited said milk quality is directly linked to credibility. “It is regrettable, that a section of paediatricians were urging parents not to feed milk to children because it may be adulterated,” he noted. Mr. Saxena spoke of the challenges before dairy, and the areas where it needs a targeted focus. He said that our dairy industry lags in terms of nutrition management for the animal. “The consumer wants assurance of milk produced from a certified disease-free animal. This presents a huge opportunity to the dairy sector. It was important for the government to ensure that sufficient credit was available to the dairy farmer so that he can focus on better animal nutrition and health management, and also expansion of his operations” he observed. He also said that hygiene, disease control, quality milk, animal nutrition and health – all these areas need investment by the farmer.

Dr. RS Khanna, Chairman of Kwality Group said that competition in the dairy sector is being guided by the cooperatives, who are the real masters of this segment. The days of cheating dairy farmers are gone, he said. If there are cooperatives, the market and also milk prices get stable. Dr. Khanna said that the Indian dairy sector is scared of entering the international market in terms of competition. He expressed regret that we are compromising with quality in India, and in order to justify non-performance, we are redefining adulteration. Dr. Khanna said our cows and buffaloes are genetically endowed to produce good quality
milk. “It is wrong human intervention that makes our milk quality poor,” he said. Dr. Khanna stressed that policy interventions by the government are required for better management of market needs and challenges. He urged NDDB to create buffer stock of SMP to meet market shortages.

**SESSIoN 2**

**Business and Trade: Increasing the competitiveness and trade performance of India’s Dairy Industry**

The second panel on Business and Trade was moderated by Dr. KML Pathak, Chairman, ICFA Working Group on Animal Health. Other distinguished members of the panel included Dr. MJ Khan, Chairman ICFA; Mr. Tarun Shridhar, Former Secretary ADF, Government of India; Dr. Sunil Kumar Gulati, formerly Additional Chief Secretary, Animal Husbandry, Dairying and Fisheries, Haryana government; Dr. Rameshwar Singh, Vice Chancellor, Bihar University of Animal Sciences, Patna; Dr. Purvi Mehta, Head of Agriculture for Asia, Bill & Melinda Gates Foundation and Dr. AK Srivastava, Member ASRB and former Director, NDRI.

Opening the discussion, Dr. Pathak said that it was essential for India to efficiently deal with the challenges faced by the dairy sector and ensure robust growth. Dr. Pathak said the major thrust areas for India in the dairy sector are ensuring quality while increasing milk productivity, ensuring milk safety and dealing with the excess number of unproductive animals.

Mr. Tarun Shridhar, formerly Union Secretary, Department of Animal Husbandry, Fisheries and Dairying said scientific planning and management at farmer level is essential for the growth and development of the dairy sector. Mr. Shridhar said India had launched an ambitious program to import germplasm of the indigenous Gir cow from Brazil, where it went through the process of rigorous scientific breed improvement. He said that sex sorted semen is a priority area for the government for the dairy sector and shall be a game changer. Mr. Shridhar further stated that breed improvement must be in focus in all states in the country. He also brought to notice that the government has launched a high priority project to control FMD in the dairy sector. “Dairy doesn’t refer to cattle alone, but also to goats, camels and donkeys. It was time to capitalize on the demand for buffalo milk,” he added.

Chairman ICFA Dr. MJ Khan said that the Indian dairy sector in India is projected to grow at the rate of 15% annually in the next five years. Milk cooperatives, private players and MNCs have played seminal roles in the sector, creating value addition, incomes and employment. “Inclusion of technologies and value addition has increased the scope and opportunities. In this journey of transformation from a backyard activity to a global leadership position, the role models of the dairy sector need to be admired and recognized,” he said. Dr. Khan highlighted that the Agriculture Today Group as the media and policy catalyst has always been on the forefront in providing information, influencing policies, creating business networks and recognizing performers. “Envisioning exemplary success stories with a sectoral focus, the institution of...
India Dairy Awards 2020 was a step towards bringing the enormous contribution of Indian dairy sector under the spotlight“, said Dr. Khan.

Dr. Sunil Kumar Gulati, formerly Additional Chief Secretary, Animal Husbandry, Dairying and Fisheries, Haryana government, said the dairy sector was facing multiple challenges. He expressed regret that most veterinarians focussed only on the animal’s treatment and not equally on the important issues of animal hygiene and nutrition. He also highlighted that animal waste (gobar) management has now become a critical issue for farmers. “Every small or large farmer must have equipment to deal with animal waste,” he suggested. Dr. Gulati also expressed regret that India did not have a robust breed development movement. For making farmers proud of their animals, progeny testing was essential. It was regrettable, he said, that policy makers were not looking at these issues, and there were serious gaps in thinking and implementation. Dr. Gulati called for the strengthening of dairy extension education. “Dairy is capable of doubling farmers income, and policy initiatives of the government can achieve this objective,” he concluded.

Dr. Rameshwar Singh, Vice Chancellor, Bihar University of Animal Sciences, Patna, said that India needed a robust National Plan for Buffalo Improvement and similar initiatives for other milk-yielding animals. Training of veterinarians and para-vets was essential to give a boost to the dairy sector. He expressed regret that veterinary hospitals are in a poor shape and need immediate attention of the government. The emergent areas in the dairy sector, he said, are the enhanced role of AI in reducing calving period, and the traceability factor. Dr. Singh emphasized that good processes must be incorporated in the dairy segment for higher productivity and quality. Dr. Singh said that the government must boost start-ups to play a catalytic role in the dairy sector. “We are underestimating our buffaloes, whose milk has high fat, protein and calcium content. Goats are a source of anytime milk, anytime meat and anytime money for farmers, and their rearing should be encouraged,” he said.

Dr. Purvi Mehta, Head of Agriculture for Asia, Bill & Melinda Gates Foundation said dairy has been the most important factor in the growth of agricultural GDP in India. She said that 83 pc of India’s milk comes from crop farmers who are also dairy farmers, and policy integration is required for their welfare. Dr Mehta noted that farmers depend on crop residue for 70 per cent of animal feed. She stressed upon the need for dual purpose crop varieties to ensure better animal health. Dr. Mehta said that if India focused on livestock development, it would lead to more affluent farmers and better agricultural production. It would also lead to women and child development in India’s rural heartland. Dr. Mehta agreed that the dairy sector raises issues of methane production. “Climate is an important issue but India needs its own data on climate debate. It is not advisable to get bogged down by international data,” she opined.

Dr. AK Srivastava, Member ASRB and former Director, NDRI said that despite limited investment from the private or public sector, dairy grew substantially in the country and has an impressive contribution to the agriculture GDP. He said that in terms of the labour involved, milk production is more difficult than milk processing. But milk processing can substantially add to the income of the farmer. Hence it must receive higher attention of the government. Dr. Srivastava pointed out that 70 per cent of milk supply comes from small farmers. Hence policy and technology must be oriented towards them. “Front yard dairy also provides nutritional security to families in the lower rung of the social pyramid. Breed improvement is essential and inter-calving periods must reduce. For these objectives, farmers cannot rely on untrained people carrying out AI in cattle. The resource persons trained to carry out AI are a major requirement in the rural area”, he said.
InDIa DaIl awarDs 2020

1. Lifetime Achievement Award – Dr. Rameshwar Singh, VC, Bihar Animal Sciences University, Patna

A veteran academician, an able administrator and an astute researcher, Shri Rameshwar Singh has elegantly donned many hats throughout his illustrious career of more than four decades. Currently the Vice Chancellor of Bihar Animal Sciences University, he had paved the way for industrial production of fermented milks in India through development of indigenous dairy starter cultures in collaboration with National Dairy Development Board. He was also instrumental in strengthening the National Collection of Dairy Cultures (NCDC) – a unique repository of dairy organisms in India through coordination of ICAR Network Project on Dairy Microbes. He played major role in administration of Academic activities, expansion of academic programmes and research in Dairy Sciences, development of new curricula, examination reforms, academic regulations and infrastructure at National Dairy Research Institute, Karnal during his stint as Registrar. He steered the Foundation of new University in the field of Animal Sciences with Sanjay Gandhi Institute of Dairy Technology, prestigious Bihar Veterinary College and newly established College of Fisheries as Constituent colleges. Shri Singh also established all the statutory bodies of the University, conducted regular meetings and reorganized and energized the teaching, research and extension activities through offering transparency in administration, implementing e-governance and attracting external research funding to the tune of Rs. 36 crores from different agencies. Shri Rameshwar Singh has immensely contributed towards the country’ dairy development by research and academic contributions.

2. Development Leadership Award – Dr. GS Rajorhia, President, IDA

The President of the Indian Dairy association, Dr. GS Rajorhia has adorned several prestigious positions in the dairy sector. A Ph. D in Dairy Technology, Dr. Rajorhia, is also the Chairman of Scientific Panel on Milk and Milk Products, Food Safety and Standards Authority of India. Member of Scientific Committee of Food Safety and Standards Authority of India and Chief Editor, Asian Journal of Dairy and Food Research, he has about 250 research and technical articles, to his credit. He was instrumental in developing many new products in the dairy segment such as Mango milk powder, Gulabjamun mix powder, Rasogolla mix powder, Khoa powder, Kulfı mix powder, Long life kheer, Dried carrot halwa mix and long life dahi. He also perfected technologies for industrial production of Ghee, Khoa, Burfi, Peda, Mishti Dahi, Chhana, Paneer, Rasogolla, Sandesh and Chhanakheer and numerous milk food delicacies. He was also recipient of several awards and recognitions throughout his professional career. UNDP/FAO Fellowship for advanced research in Food Science and Technology at Cornell University, CSIRO Dairy Research, Jubilee Award for Outstanding Dairy Scientist, Rishabh-Shree Award of the Bhartiya Cattle Resource Development Foundation for perfecting technologies for traditional milk products are a few to mention. An academician, administrator, author and innovator, Dr. Rajorhia has contributed immensely to the development of dairy sector.

The leader in Indian animal health, Virbac Animal Health India Pvt Ltd has more than five decades of presence in animal healthcare spread over more than 100 countries. Providing veterinarians, farmers and pet owners with innovative solutions to fight animal diseases, Virbac has played an illustrious role in shaping the future of animal health with practical and comprehensive products and services. The health company has many landmark innovations to its credit such as 1st Flunixin Meglumine injection in India, 1st Antibiotic with Sulbactam, 1st Metabolic for pregnancy in dairy cattle, 1st Anabolic to maintain energy balance in dairy cattle. Innovation as a key to evolve, Vibrac has R&D centers located on five continents. A unit dedicated to India for new products development, registration of new products from global R&D centers has helped the health company major to evolve and expand its presence in India. With 3000 distributors and 25000 retailers to reach the farmers, the company has maintained a close and fruitful relationship with its customers. Through farmer engagements via CSR activities, knowledge sharing, seminars and scientific demonstrations, Virbac has played an exemplary role in furthering the animal health of the country through unparalleled excellence and innovations, and thereby guaranteeing the expression of full productive potential of the animal wealth of the country.

4. Best Brand in Dairy Sector – Ananda (Gopaljee Dairy Foods)

Established with the vision to positively contribute to a healthy and happy nation, Ananda is an unmistakable identity in the dairy segment of the country with a vast array of dairy products in its portfolio. Offering a diverse range of milk and milk-based products across categories i.e., Family Milk, T 20 Milk, Paneer, Ghee, Supream Milk, Masala Chaach, Rabri, Panchamrit etc., the Dairy group has built on India’s inherent strength in milk production. Their vast product portfolio caters to nutrition requirements as well as taste preferences, offering something for everyone who is seeking quality in their everyday consumption. Their slogan “Anand Karo” defines everything that the brand stands for – Health, goodness and unbridled joy; brought to life through a basket of fresh, pure and nutritious dairy products directly from farm to fork. Gopaljee Ananda Brand has an inbuilt processing capacity of 12 lac litres milk in a day, of which an average of 8 lac litres of milk is collected from dairy farmers. With a consistent growth rate of 20%, the group has plans to double its revenue by generating a turnover of INR 3,230 crore in the next five years. Over 200 Company Owned, Company Operated (COCO) stores across Delhi and the National Capital Region (NCR), Uttarakhand and Uttar Pradesh have strengthened the presence of this brand and made it a familiar name among the customers. Determined to give its consumers a holistic experience, the company has been persistently building a brand offering innovative, healthy consumer oriented products.


Maahi Milk Producer Company Ltd., is a glaring example in dairy space of operational excellence in dairy space with commitment to society at large. Owned by the farmers and managed by the professionals, MMPCL is formed under the underlying concept of “New Generation Cooperatives” (NGC) based on mutual assistance principles having Structure of Cooperatives and Corporate both. India’s largest Milk Producer Company with over one lakh farmer members, the milk producer company has been in the forefront in creating employment opportunities and providing financial, social, technological and economic development of the people associated with the dairy from village to the kitchen. Having its presence in 11 districts of Saurashtra and Kutch, MMPCL is renowned for its commitment to values. Quality as its core attribute, the company has secured ISO and GMP implementation at its 30 Bulk Milk Chilling Centers. Besides their technological and financial excellence, MMPCL has made some resounding imprints on the social front as well. The company has played a significant role in fortification campaigns by becoming the first company in Gujarat to have Fortified Milk with Vitamin A & D. They were recognized by “Dandi se Handi” award by FSSAI for participating and making valuable contribution in Fortification Campaign. For their women empowerment campaigns, they were rewarded by National Dairy Development Board. MMPCL has made tremendous contributions towards the development of dairy segment with long lasting societal impact.
6. Best Dairy Professional – Sh. Ramesh Chugh, Ex Chief General Manager (Technical), HDDCF

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hri Ramesh Chugh, a veteran dairy professional, has been in the dairy segment in various capacities for more than three decades. The former Chief General Manager of Haryana Dairy Development Cooperative Federation has played a major role in formulating and implementing policies which turned the Federation from a loss-making organisation to a profit-making organisation. Under his guidance, inter Plants/Milk Unions Transfer of Raw Milk/Liquid Milk/Milk Products were optimized to achieve availability of the same and also to achieve the optimum efficiency to take care of regional and seasonal demand and supply. He has been instrumental in expansion, modification, renovation of all the existing milk plants/Chilling Centres of HDDCF. A post graduate in Dairy engineering from National Dairy Research Institute from, Karnal, Mr. Chugh has handled innumerable dairy Projects starting from planning, design, erection and Commissioning throughout his splendid career. Currently helming his own consultancy, Reliable Dairy and Food Consultants, he has been extending technical Consultancy to Cooperative and Private Entrepreneurs in the field of Dairy and Food to set up new plants/expansion and renovation of existing plants. Conferred with “Life Time Achievement Award” by Indian Dairy Engineering Association (IDEA), ShriChugh continues to spur excellence and quality in the dairy segment.

7. Best Large Sized Company – Mehsana Distt Coop. Milk Producer’s Union Ltd, Mehsana

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ith a modest beginning in 1960, Dudhsagar Dairy, today is a cooperation of about 1341 milk cooperative societies involving over 6.11 lakh milk producer members and having turn over of Rs.4186 crores. Dudhsagar dairy with a capacity of 25 LLPD is equipped with five milk chilling centers and two milk processing plants. One of their subunits, Dudhmansagar Dairy in Manesar has become the first dairy cooperative of the country to receive FSSC-22000 certification. Their semen collection center is ranked three in India. Dudhsagar research and development association and Mansinhbhai institute of dairy and food science technology also add quality and competence to this ace organization. Established with the vision to provide remunerative returns to milk producers Dudhsagar dairy has played an ever increasing role in the rural economy, providing gainful employment to large numbers of producers in the district and to raise producers awareness. The cooperative has assured income to the producers leading to better life standards as against agriculture to farmer, overall development in Infrastructure of village and Changes in Social Customs. Their presence in the dairy segment has brought about a holistic rural development.

8. Best Medium Sized Company - Karimnagar Milk Producer Company

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he leading dairy company in Telangana, Karimnagar Milk Producer Company, has been trudging a growth path since its inception. With a turnover of Rs. 312.00 Crores during 2018-19, the milk procurement of the company has shot up to 2.00 LLPD and milk sales to 1.8 LLPD during the same period. Practicing value-based production system for dairy farmers, Karimnagar Dairy has been witnessing a double-digit growth rate ever since its inception in 1997 under AP Cooperative Act. The milk procurement rose over 19 per cent in 2019 as a total of 550.08 lakh litres of milk was procured during the year as against 461.79 lakh litres in the previous year. Animal Welfare Activities, Breed Development Programmes and Feed and Fodder development programmes are some of the allied activities undertaken by the company to support its members. Financial assistance to its members through Loans, Milch Animal Transportation Subsidy, Milch Animal Insurance Subsidy, subsidy on mineral mixtures etc., have guaranteed a growth trajectory unseen in the segment. Several Farmer Welfare Activities such as Kalyanamasthu, Scholarships, Pension schemes for Milk Producers and Group Insurance Scheme have been progressively and consistently undertaken by the organization. Farmer induction programme and awareness camps are also conducted regularly to further its production goals. Karimnagar Milk Producer Company has strived hard in achieving its goals and has made tremendous impacts on the life of dairy farmers in Telangana.
9. Best Small Sized Company - Lakshya Food (I) Limited

Lakshya Food (India) Limited, has achieved phenomenal growth in the past seventeen years attaining an annual turnover of over Rs. 1000 Million. Lakshya Milk Plant, the processing unit of Lakshya Food India Limited, has an installed capacity of processing 1.5 lac litres of milk per day with technological inputs from ‘TETRA’, a multinational firm based out of Sweden. The milk plant presently processes 9 different products namely Milk, Flavored Milk, Dahi (Curd), Butter, Ghee, Ice Cream, Buttermilk (Lassi), Paneer and Sweets under sixteen product and twenty volume variants under the brand ‘LAKSHYA’. Lakshya stands out among other milk plants owing to its strong backward and forward linkage. With its own dairy farms, which are fully equipped and modernized with a contribution of about 25% of the total milk collected per day, they also collect milk from its village level collection centres (VLCs) and from other organized farms spread all over the state of Haryana. The company has a strong marketing network under Lakshya Milk Booths, across Haryana state. Within a year, the number of these outlets has grown from a modest 30 in 2010, to an impressive 100 plus in 2019. The milk booths have transformed into a reasonable source of income for the unemployed youth in as many as 45 cities and towns of the state. Lakshya has enabled the poor of the region to realize their potential and improve their standards of health and living.

10. Best State Dairy Federation - State Milk Federation, COMFED Bihar

Continuously on the path of growth, the Bihar State Milk Co-operative Federation Ltd. (COMFED) has its activities spread across Bihar covering all its 38 districts. With 23788 dairy co-operatives societies having a membership of 12.22 lakh, the state has seen a palpable appreciation in the per capita availability of milk from 195 to 239 gms per day. There has been a cumulative growth of 24.5% in milk procurement, 29.03% in milk products sale, 11.98% growth in pouch milk marketing and 29.33% growth in retail marketing network. With 22 dairy plants across the state with a total handling capacity of 34 lakh litres of milk per day, the federation represents a widely distributed dairy network. Ascribing significance to milk quality, 470 Bulk Milk Coolers having capacity of 20.39 lakh litres provides field level chilling. Other plants of COMFED include Powder Plant, Tetrapack, Eclester, Icecream and other indigenous product manufacturing facilities. Further 6 milk plants of capacity 22 lakh litres per day are in pipeline which is expected to enhance its capacity to over 50 lakh litres by 2022. All major plants of COMFED are FSMS ISO 22000:2005 certified and their dairies have initiated certification of “Quality Mark” as given by NDDB. The strength of COMFED is its technical input program comprising of artificial insemination, cattle feed, deworming, vaccination and trainings.

11. Best Technology Company - Ayurvet Limited

Ayurvet Limited, one of India’s leading animal care organisation specialising in providing 360 degree integrated and innovative solution to the farming community for improving animal health & farm profits, specializes in 100% natural and safe herbal specialities. With the unique distinction to have the world class ISO manufacturing unit approved by EU, it has many firsts to its credit, including providing innovative solutions for control of mastitis, improving the reproductive efficiency and stress management in livestock. Ayurvet has also diversified its business of providing green energy solution and has offered technologies which are sustainable and can save water, time and land. Their unique 5F programme - Integrated unit of food, feed, fodder, fuel and fertiliser-has received accolades from the policy planners and stake holders alike. Innovative products like Ruchamax and Exapar have reduced Green House gas Emission by improving the digestive function of the animals. Ayurvet Pro green hydroponics technology for developing nutritious fodder for animals and crop nurseries has been disseminated to around 5000 farmers. Ayurvet business and sustainable initiatives in India and abroad have earned appreciations and recognition from premier organizations likeTERI, Quality council of India, CII-ITC, Assocham, Agriculture Today, and RMAI etc. Ayurvet, through its innovative and sustainable technologies have provided pertinent solutions for improving farm profits and rural development.
12. **CEO of the Year Award – Mr Atul Mehra, Chairman, Tasty Dairy Specialties Limited**

A veteran entrepreneur with a passion for growth, perfection and excellence, Mr. Atul Mehra, is the founder of many companies in India and abroad working in food & dairy sector which include India based Tasty Dairy Specialties Limited. He is known for his immense knowledge in dairy sector which has contributed to continual profits for the companies, he manages and consults. Under his leadership, INDUCED - Indo Dutch Centre of Excellence on Dairying – was created, which works for growth of agriculture and dairying sectors through international partnerships. Currently the co-chairman in the CII National Committee on allied sectors in agriculture (Dairy, Poultry & Fisheries) and CII Northern Regional Committee on Food & Agriculture, Mr. Mehra, has chaired many important positions in various prominent trade bodies & social platforms. At social service front too, Mr. Mehra is a familiar face. Through his foundation, PRYAAS (Projects Requiring Your Association & Support), he works for Women Empowerment, Drinking Water, and Child Education etc. For his contribution in the growth of dairy & food industry and social services, he has been awarded many times with prestigious awards like National MSME Award, Leaders of Tomorrow Award, Udyog Patra Award, Business Leadership Award, CSR Leadership Award, Paul Harris Fellowship etc. A learned scholar, a consultant, a passionate entrepreneur, a social worker, Mr. Mehra has excelled remarkably in all the fields.

13. **Dairy Extension Award - Punjab Dairy Development Board**

The Punjab Dairy Development Board is a pioneer organization engaged in creating awareness, imparting training and capacity building of the dairy farmers of the Northern India. The board was established in the year 2000 through Punjab Dairy Development Board Act 2000, with the objective of developing dairy on modern and scientific lines, securing cooperation among different functionaries and safeguarding the interests of milk producers, milk processors, dairy marketers and consumers. The dairy development board has marked presence across the state through nine Dairy Training and Extension Centers at different locations. These Centers are well equipped for training farmers and also equipped with other facilities like hostel, library, Mess, Lecture hall etc. About 7000 dairy farmers from Punjab, Haryana, Rajasthan and Himachal Pradesh are trained on latest dairy techniques every year. The board has also been instrumental in creating general public awareness about dairying through Melas, Exhibitions and other innovative extension activities. Block, District and State level Awareness Camps are held every year to spread awareness among both the producers and the consumers about best quality and clean milk production and consumption. Modern ICT technologies, social media platforms such as Facebook, Dairy Farm App Group, Websites and Contact Programmes through TV channels and Radio are relentlessly carried out. Punjab Dairy Development Board has thus been in the forefront of engendering a positive change in the dairy segment of the state through extension campaigns and reach out programmes.

14. **Dairy Policy Leadership Award – Shri Tarun Shridhar, IAS**

Shri Tarun Shridhar, IAS, Secretary, Dept. of Animal Husbandry, Dairying and Fisheries, Govt. of India, has made several impactful policies for the development of the country’s dairy segment. Shri Shridhar, has served in different capacities in the Animal Husbandry, Dairying and Fisheries departments in the state and central governments. He was instrumental in reviving shrimp aquaculture in the country. His interventions led to the establishment of the first and only aquatic quarantine in India and he also introduced one health programme. The fully automated 20th livestock census was developed under the guidance of Shri Shridhar. The census was available online and that became one of its unique features. The much needed National Dairy Plan was also the result of his involvements. FMD, Brucellosis and PPR elimination national programme, sex sorted semen for cattle breeding, breed improvement programme for indigenous cattle, quality milk programme and programme for genetic improvement of sheep were some of his much acclaimed policy interventions that gave a new direction to the livestock sector of the country. With visionary policies and long sighted programmes, Shri Tarun Shridhar was able to evolve a strategic development plan for the development of country’s dairy segment.
Sakhi Mahila Milk Producer Company Limited, was incorporated with the noble aim of creating a system of regular income generation. The company has exhibited exemplar growth from its modest beginning to an organization supporting 18,000 women milk producers with milk procurement to the tune of 100,000 KG Per Day. Out of the total 18000 members, 87% account for marginal farmers who have less than 3 animals. With an impressive turnover of around Rs.50 crores last year, the organization has registered good financial gains and has been able to distribute 8% dividend to the members for two consecutive years. With more than eighty percent of the total revenue of the company being directly transferred to the accounts of the milk producer members, Sakhi has created a benchmark in itself for a producer company. Despite being a fledgling company, Sakhi has created an extensive and well connected dairy network. Sakhi has established its 320 Milk pooling points in 300 villages. Based on quality based remunerative pricing, Sakhi has paid around Rs. 121 crores to its 18000 members since inception. Cost optimization through effective use of automation and information technology has led to decreased overhead per Kg of milk sold, enabling the MPCs to pass on 88% of the consumer rupee to member producers. The presence of Sakhi has prompted its competitors to pay better price to the producers thereby benefiting not only the member producers but also other milk producers in the operational villages/area thereby bringing about the holistic development of the society.

One of the leading players in the Indian veterinary formulations market, Zydus Animal Health provides total healthcare solutions ranging from formulations, active pharmaceutical ingredients and animal healthcare products to wellness products. Zydus maintains highest standards in its product offerings and ensures innovative solutions through continued improvement in its operations. With market leadership in many therapeutic segments, the company has constantly explored newer opportunities to expand its market reach year after year. In 2018, Zydus AH has posted a turnover in excess of INR 5000 million with a growth of 18% over the previous year. The contribution of livestock (Dairy) division was around 65%. Zydus’ Haridwar plant, compliant with the WHO-GMP norm, is an exclusive plant for animal healthcare products. Zydus AH was the first animal health company in India to put up its own dedicated probiotic plant in mid 90s. Zydus AH currently markets around 190 Brands, out of which more than 100 brands are for dairy animals. Till date, Zydus AH has an incomparable and unrivalled record of introducing highest number of new products for the first time in India, to serve the unmet needs of the animal healthcare. Thirty Seven years on, Zydus sprints with an unmatched entrepreneurial spirit, adaptability to change and culture of originality bringing about changes in the dairy segment.

With the firm conviction that technology enabled grass to glass supply chain is essential to strengthen the milk supply chain, Heritage Foods Ltd has infused technology liberally in its operations. Heritage Foods is the first dairy to implement SAP ERP to the granular level. Integrated milk procurement solution has been implemented by the company right from village level to the manufacturing station. This has helped the organisation to test and monitor the milk quality, transport through cold chain by implementing GPS enabled solution helping in instant acknowledgement to the procurement representatives. Heritage Integrated Milk Procurement System is a complete software solution used for transparency in payment, optimisation of routes, maintaining high standards of milk quality & forecasting analysis. Integrated Milk Procurement System has helped the organisation to improve & modernise its entire value chain system from farm till the end. Company has adopted technology enabled marketing, and has given a competitive edge by helping gain better customer and farmer insights through leveraging IT & Analytics. The entire logistics and cold chain system is also technology enabled so as to facilitate online monitoring. The company has also implemented digitisation process across the distribution chain that has enabled the customer to order the required products online and to monitor the assured supply of the products.
Indian poultry sector has undergone a paradigm shift in structure and operations in the last few decades. From being a mere backyard activity, the poultry sector has metamorphosed into a major commercial agri-based industry. Poultry is one of the fastest growing segments of the agricultural sector in India with around eight per cent growth rate per annum. The constant efforts in upgradation, modification, and application of new technologies paved the way for the multifold and multifaceted growth in poultry and allied sectors. India ranks 3rd in egg production and 7th in chicken meat production in the world. The Poultry Industry is contributing about Rs. 90,000 crores to the national GDP and providing employment to more than 5 million people either directly or indirectly.

The Indian Poultry Industry has grown largely due to the initiative of private enterprises, minimal government intervention, and very considerable indigenous poultry genetics capabilities, and support from the complementary veterinary health, poultry feed, poultry equipment, and poultry processing sectors. Several individuals and institutions have played seminal roles in the development of the poultry industry. They need to be admired and recognized. Agriculture Today Group as the media and policy catalyst has always been on the forefront in providing information, influencing policies, creating business networks, and recognizing performers. The institution of India Poultry Awards is a small step in this direction to further the cause of Indian poultry sector and spur innovation and productivity.

### Awards Category
- Best Technology Company Award
- Best Innovation Company Award
- Fastest Growing Company Award
- Best Poultry Feed Company Award
- Best Poultry Health Company Award
- Best Poultry Equipment Company Award
- Most Integrated Company Award
- Best Poultry Processing Company
- Best Poultry Brand Award
- Social Impact Award
- Poultry Startup Award
- Poultry R&D Award
- Poultry Exports Award
- Best Poultry State Award
- Poultry Farmer Award
- Poultry Professional Award
- CEO of the Year Award
- Lifetime Achievement Award

### Sessions on

**Session 1: Policy and Technology**
Policy Challenges and Innovations in Poultry Sector

**Session 2: Business and Trade**
Increasing the trade performance of India’s Poultry Industry

Last Date for Nominations 04 February 2020

Awaiting to assist your participation and nominations

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Maahi Milk Producer Company Ltd (MMPCL), Gujarat, has successfully enumerated its niche presence in the area of dairy business by creating and converting sustainable livelihood opportunities for farmer milk producers, especially women. It is remarkable that the company has been able to impact their life socially, financially, economically and technologically within a short span of seven years since its inception.

The company was formed under the underlying concept “New Generation Cooperatives” (NGC) on mutual assistance principles owned by the farmers and managed by the professionals. The company has continuously achieved various pinnacles in the dairy sector and successfully created an ecosystem of livelihood for its milk producer members in Saurashtra and Kutch region.

Maahi is India’s largest Milk Producer Company in terms of member base. With 1,11,967 members and providing sustainable income opportunities to more than 5 lakh households, Maahi has played an instrumental role in the economic development of milk producers of Saurashtra and Kutch region of Gujarat, starting from village to the kitchen.

The unprecedented and challenging journey of Maahi began in 2012. Saurashtra and Kutch cover more than one lakh square kilometers, and form challenging areas for dairy activities, with wide socio-geographical disparities. Maahi successfully overcame these challenges and became a proud choice of farmer milk producers in the region.

Maahi has consistently operated on the trust and mutual assistance principle. Each milk producer member of Maahi has to enroll through shareholding patterns and fulfill the patronage criteria of the company to continue yielding benefits of returnable incomes. Maahi transfers 87% returns to its members in the form of milk payments, bonuses, dividends and incentives.

Some of the historical milestones achieved by MMPCL in last 7 Years:

- India’s Largest Milk Producer Company in Terms of Milk Producer Members i.e. 1, 11,967.
- Collecting milk from more than 2800 villages by its Milk Pooling Points with 50 ISO/GMP accredited milk chilling centres, procuring nearly 8.5 lakh litres of milk per day.
- Fully Integrated SAP environment in all its business verticals within three years of inception.
- 100% automation in milk collection, weighing and testing of milk for complete fairness and transparency in operations.
- 100% payment to milk producers through bank accounts by brining transparency in payment system and terminating pilferage, a prime example of DBT (Direct Benefit Transfer).
- Strong financial performance – a 100% debt free company with “AA” financial rating by CARE (Credit Analysis & Research rating).
- First company in Gujarat to supply Fortified Milk with Vitamin A & D
- Successful implementation of NDP (National Dairy Plan)
- Rapid expansion of market infrastructure and network presently selling nearly 3.5 lakh litres of fortified poly pack milk per day through nine dairy plants making it available to more than 5 lakh consumers through more than 1,000 distributors and 14,500 retailers with variety of dairy products like buttermilk, curd, ghee (cow & buffalo), paneer, flavoured milk, sweets, SMP, white butter.
- Recognition by various national and international bodies for its ethnical work in dairy development
- Farmers Producer Organization (FPO) impact award by ACCESS & RABO BANK
- Fastest growing Indian Company Excellence Award by IEDRA
- Asia’s Greatest Brand by URA Asia
- Adopting Digital Initiative in Public Sector by SAP ACE
- Quality Excellence Award by International Achievers Conference
- Appreciation by FSSAI New Delhi for launching fortified milk
- Madhupur village MPP (Milk Pooling Point) rewarded by NDDB for Women Empowerment
- Dandi Se Handi award given by FSSAI, Gandhinagar (GoG) for outstanding participation and valuable contribution in Fortification Campaign.

Way Ahead

In the years to come, Maahi will aim to explore and provide countless opportunities for its milk producer members by maximizing their returns through dairy as well as providing quality milk to its consumers using state of the art technologies in animal health care and productivity, quality milk and by delivering faster services with an objective of consumer-centric approach.
Women in Alwar are deeply involved in tending to livestock and are associated with the income generated from milk production. They work with self-help groups and have gained a good understanding of maintaining books of account of their own earnings through sale of milk. With greater involvement in livestock care, the women were educated about superior practices of cattle rearing, but did not have access to good markets. As a result, these women were forced to sell milk to private milk vendors, who did not give them a competitive price as per the quality of milk. These problems came to an end with the inception of SAKHI.

In the Mewat region (Alwar & Bharatpur districts) which is known for its cultural isolation and underdeveloped livelihood systems, it was observed that while aid and development fund were reaching the area, it was not creating any sustainable livelihood system for the local populace. Tata Trust started working in the field of livelihoods by creating SHGs (Self-Help Groups) in the area, and as a support livelihood activity, a Milk Producer Company named Sakhi was registered by few SHG members. The idea was to support the members of this region by creating a system of regular income generation. Milk being a daily produce in almost every household of the region, dairy business was identified as the activity which could generate regular income for women.

Also, it has been observed that if the economic condition of women improves, the overall socio-economic condition of household also improves. The Producer Company that came into existence strictly had women membership criteria. It was ensured that the milk payments are transferred directly into the members’ bank accounts. The dairy industry considered this area a tough region to operate in. But with firm determination of the women of this area and the support from DHANII (Dairy Health And Nutrition Initiative India) Foundation and NDS (NDDB Dairy Services), a strong sustainable company was built bringing regular income to the bank accounts of women members.

As further extension of the operations, They have expanded to Jhunjhunu district of Sekhawati region. Sakhi Mahila Milk Producer Company Limited has been set up with the financial support of DHANII (a not-for-profit organization of Tata Trusts) and technical support of NDB Dairy Services (NDS), Delhi. Only women can become its members and supply milk to the Company.

On the first day of its operations, Nov 12 2016, the company collected 536 Kg milk from 137 women milk producer members. Within three years of operations, they have reached the level of around 1,10,000 Kg milk per day from about 18,000 women milk producer members. This is an indicator of the goodwill enjoyed by the company. Out of the total 18000 members, 87% are marginal farmers who have less than three animals. The paid-up share capital stands at 210 lakh rupees and is increasing as they connect with more and more women members in the area. In the previous year, turnover stood at around Rs. 50 crore. They were able to give 8 per cent dividend to the members for two consecutive years. 87% of the total revenue the company generated is directly transferred to the accounts of the women milk producer members, which is a benchmark in itself for a Producer Company.
Following Operation Flood (also known as the “white revolution”) in 1970, India transformed into one of the largest milk producers in the world. The program was given the government and policy push by the National Dairy Development Board to increase the country’s milk production – create a ‘flood of milk’. It involved the creation of a national ‘milk grid’ that connected rural milk producers with consumers throughout more than 700 cities.

The system not only empowered dairy farmers. It also reduced malpractice by milk traders and aided in reducing poverty. It was during this era that Ananda Dairy established its position in the dairy market. Founder and Chairman Mr Radhey Shyam Dixit opened the company’s first milk procurement factory in Bulandshahr, Uttar Pradesh in 1989. He had developed strong business acumen from his days working at a shop before school. In the mid-1980s, Mr Dixit decided to start a distribution company. Subsequently, he branched out and established another business – the now Ananda Dairy.

Today, Ananda Dairy has four factories in Uttar Pradesh, which process 1.8 million litres of milk per day, and a 5,000-strong workforce. Ananda Dairy manufactures more than 50 dairy products including milk, cream, butter, ghee and yoghurt. To keep the company thriving, Mr Dixit ensures that consumers have regular and easy access to Ananda products. We procure milk only from farmers – no contractors or mediators. The same thing goes for our sales. Our company is a complete end-to-end chain.”

With this business model in place, Ananda Dairy also plans to extend its home delivery network. “Amazon does a lot of direct distribution, so why can’t we do that too?” questions Mr Dixit. Ananda Dairy has teamed up with Piaggio Vehicles to bring in one of the biggest bulk vehicle delivery deals in the SCV industry. There are 1,500 special application vehicles made of insulated material customised for Ananda Dairy. This enables the dairy giant to deliver its products effectively.

Farmers are integral to Ananda’s operations. “In our industry, 75 per cent of our raw material is milk, so we work closely with farmers,” says Mr Dixit. “We oversee their feed management, cattle management, research and design so that they grow and the yield is efficient.”

Ananda started its cattle feed factory which produces 200 tonnes per day. The company employs a team of genetics scientists to focus on agriculture and feed quality. There is additional support of 20 veterinary doctors, a research and design team, 200 AI workers and a company-owned call centre.

India’s high protein deficiency rate is a cause of concern for Mr Dixit. Dairy – along with poultry, fish and lean meat – is a good source of protein, and Dixit wants to promote its benefits in India. “We have made it our mission to work on dairy-based protein. There is huge opportunity for it here.”

Mr Dixit says that Ananda paneer is the best in the country and has won awards. Awards have also been won by Ananda toned milk and dahi. To supply paneer, the company implemented a unique distribution system. “We are supplying paneer using 800 bikes in order to access buildings in narrow streets,” Mr Dixit says. Ananda distributes paneer throughout the northern, western and southern parts of India. It also has distributors in Canada, the US and the UAE.

With the success of Ananda paneer nationally and internationally, Ananda has implemented plans for new production lines. “We will implement a German line for 100 per cent paneer manufacturing. It will produce 20 tonnes of paneer. My mission is to produce 100 tonnes of paneer per day,” says Mr Dixit.

The company currently produces 200 tonnes of curd and butter-milk daily, and 1000 tonnes of ghee each month. Mr Dixit has undertaken broader expansion initiatives and wants the company’s distribution to be pan-India in 2020. His mantra for success: “In business, the first motivation should be your thought process, your vision. Then it should be shared with your organisation. If you don’t share your vision with the organisation, you cannot grow,” he states.
DUDHSAGAR DAIRY, MEHSANA, TAKES LEAD IN MILK PRODUCTION AND PROCESSING THROUGH PURSUIT OF EXCELLENCE

Mehsana District Co-operative Milk Producers’ Union Limited, Mehsana (MDCMPU Ltd) popularly known as Dudhsagar Dairy, Mehsana, Gujarat is one of the largest co-operative dairies in India. It was established in 1960 in order to ensuring remunerative returns to milk producers and serve consumers by providing quality and safe milk and milk products. Dudhsagar Dairy now has seven milk processing Plants, 28 milk chilling centers, two cattle feed plants, a semen collection plant and one Dairy Science College. Dudhsagar Dairy manufactures pouch milk, dahi, buttermilk, ghee, table butter, milk powder, sweetened condensed milk, ice cream, flavoured milk and long shelf life (UHT) milk. The product range is sold under the brand name of Amul and Sagar. It has a turnover of around Rs 4700 crores (FY 2018-19) with its broad base of more than 10 lakh farmer members in Gujarat, Rajasthan and Haryana.

The founder Late Shri Mansingbhai P Patel established the union in 1960 with milk collection of 3300 LPD from 11 milk societies. He played a key role in bringing revolutionary changes in the economic, social and literacy standards of more than six lakh rural milk producers belonging to more than 1200 villages in Mehsana, Patan and Gandhinagar districts of Gujarat. With a meagre collection of 3300 LPD, Dudhsagar has now surpassed the average milk collection of 28 LLPD of milk (FY 2018-19). In 1966, the dairy started supplying milk powder to the Army. In 1972, the Union started the marketing of milk and milk products under SAGAR brand in Bombay and other cities. The foundation stone of this dairy was laid in 1963, while the first chilling centre was started in 1964.

In the decades that followed, the organization witnessed a steady rise.

Milk Procurement
MDCMPU Limited’s average milk procurement per day in Gujarat is 20.68 lakh kg per day. Outside Gujarat, the figure stood at 7.71 LKPD in 2018-19.

Breeding Programs
MDCMPU Ltd started Animal Husbandry services in 1979 at Jagudan. This centre started semen collection from high breeds and carried out Artificial Insemination across the district. The Semen Station certified with ISO 9001:2008 was awarded A Grade by Gujarat government. This semen Station was ranked first in the Gujarat Government Audit Report third at all-India level. In 2017-18, more than 11 lakh semen doses were produced by this station.

ISO Certification
MDCMPU Ltd. has ensured quality and food safety at all levels of its operation. Dudhsagar Dairy Plant along with newly established dairy plants located at Vihar, Patan, Kadi and Harij are certified with ISO 22000:2005 and ISO 9001:2015. All village-level societies are certified with ISO-9001:2015.

Other Plants
MDCMPU Ltd has established two state-of-the-art Milk & Milk Products plants in Haryana near Delhi NCR. These are Dudhmansagar Dairy at Manesar, established in 2005 and Dudhmotisagar Dairy, Dharuhera established in 2012. A 12 MT fully automated Paneer Plant will be operational by end of 2020.

Both DMD & DHD are certified with FSSC 22000, ISO 9001:2015. DMD was the first dairy in India among co-operative sector to get FSSC 22000 certification in June 2015.

Milk Collection Centres
Presently more than 10 lakh litre milk is being collected from these two states with the help of 28 Milk Chilling Centres and further processed at Dudhmotisagar and Dudhmansagar Dairy.

MIDFT College of Dairy & Food Technology
MIDFT College was started in 2011 under Kamdhenu University with the aim to train the children of farmers associated with Dudhsagar Dairy as technocrats.

Awards & Recognition
MDCMPU Ltd has been honoured with many awards by many forums for its technological innovations, food safety, quality products, Best Maintained Dairy Plant, etc.
The Karimnagar Dairy was initially registered as a Union in 1997 under the Andhra Pradesh Cooperative Societies Act 1964. In 2012, it was converted into a Producer Company with the sole objective of benefitting milk producers. Since then, the Karimnagar Milk Producer Company Limited (KMPCL) has taken immense strides in milk procurement and the welfare of milk producers, resulting in the establishment of a leading dairy industry in Telangana.

Karimnagar Dairy started with a procurement of 12,000 litres per day (LPD) and the sale of 4,000 LPD with an annual turnover of Rs 8.5 crore in the year 1997. Due to the extraordinary efforts of Mr. Ch. Rajeshwar Rao, Founder & Chairman, KMPCL gained impressive achievements in the dairy segment. Within a span of 21 years, milk procurement increased to 1,50,773 LPD, sales to the tune of 1,49,196 LPD and annual turnover to Rs 312.44 crore from Rs 8.5 crore.

Karimnagar Dairy now enjoys the top position in Telangana state in the dairy sector. It has played a vital role in the improvement of economic status of 70,000 milk producer families by providing remunerative price for milk, in addition to various welfare schemes for the upliftment of farmers. High quality milk and milk products are being marketed in about 10 districts of Telangana state through 720 milk booths and 36 Dairy Parlours in prime locations.

Major welfare schemes offered by KMPCL

- Kalyanamasthu: Providing Mangalasuthras and Mattelu worth Rs 10,000 to Rs 12,000 to the daughters of milk producers on the day of marriage.
- Scholarships: These are regularly awarded to encourage the education of milk producer’s children.
- Pala Nidhi Scheme (Pension to Milk Producers) – Milk producers, on crossing 60 years of age, are provided monthly pension basing on the total milk supplied to the company.
- Padi Raithu Bharosa Scheme (Group Insurance Scheme) – An amount of Rs 50,000 is paid to the enrolled milk producers on account of accidental or natural death.
- Sankranti Celebrations: Every year Sankranti Celebrations (Pongal) are conducted, in which Rangoli competitions are held and the winners are awarded. The highest milk-producing societies are felicitated.
- Farmer induction programmes and awareness camps are conducted regularly.
- Subsidy of 50% is provided for vaccines, medicines and de-worming drugs for milch animals.
- Subsidy of 50% is provided for artificial insemination, supply of breeding bulls, transportation and milch animal insurance towards breed development.
- To encourage Fodder development, fodder seeds, mineral mixtures and chaff cutters are supplied on 50% subsidy. An amount of Rs 3,000 is given to encourage producers who raise perennial in 10 guntas.
Heritage Foods Limited is one of the fastest growing dairy companies in India. Through its journey of 27 years, the brand has delighted consumers with innovative and value-driven products. Heritage Foods is an integrated dairy player with all its processes well defined and efficiently executed at each level of operation. It is committed to provide fresh and healthy products to its consumers through an extensive network of 26 leading modern retail chains and e-com platforms, 999 exclusive Heritage Parlours, 42 Heritage distribution centres and 1.30 lakh general outlets.

Heritage Foods is firmly committed to provide Nutrition to the Nation built on the pillars of Quality & Safety, People, Business Ethics, Responsible Farming & Procurement, Environment friendly methods and building communities.

At Heritage, purest milk is procured from over 3 lakh farmers via Digitally Automated Procurement Systems that send SMS alerts to representatives, and Procurement & Inputs (P&I) teams focused on quality and quantity, fortnightly payments and milk tanker acknowledgments.

Technology helps to test and monitor the milk quality transported through cold chain and temperature monitoring by implementing GPS-enabled solution which is vital to the dairy industry. Heritage Foods is the first dairy to implement SAP ERP to the granular level. Latest SAP S/4 Hana technology implemented to integrate all latest applications to have the best business benefits. Integrated mobile app, Fiori is implemented to have the work flows and other reports made available in all devices (Mobiles & Tablets) anywhere, anytime.

The system generates SMS alerts at each stage of the value chain. The entire logistics and supply chain is digitally enabled. Heritage takes care of its entire dispatch monitoring through GPS. This ensures that milk quality is monitored through its entire cycle starting from procurement till it reaches consumer homes.

With the vision of delighting every home with fresh and healthy products, Heritage Foods ensures that its goodness reaches its consumers through a wide range of nutritious dairy products. With foresight on innovation, Heritage is developing and bringing to the consumers value-added products like curd, lassi, buttermilk, flavoured milk, paneer, ice-creams etc., which are high on nutritional values and rich in taste.

Heritage Foods started in Chittoor in 1992. Today, it has market presence in Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu, Maharashtra, Odisha, NCR Delhi, Haryana, Rajasthan, Punjab, Uttarakhand, Uttar Pradesh & Madhya Pradesh. Heritage has become a pan-India presence through its state-of-the-art infrastructure, the technology enabled value chain and its close association with over 3 lakh dairy farmers. With 18 production plants under its belt that processes pure & hygienic milk every day catering to the nutritional needs of about 15 lakh households, Heritage Foods is synonymous to purity and good health today.

With an unmatched commitment to quality & consistency, Heritage Foods is on a mission to provide #NutritionToNation through its wide range of dairy products, thereby fortifying India’s health and wellness with the goodness of dairy. At the very core of our pursuit lies the technology enabled value chain that ensures highest standard of hygiene and efficiency, right from milk procurement to the delivery of finished products to our consumers. It’s firmly believed by our management that the technology-enabled supply chain is instrumental in strengthening the milk supply chain in India, while democratizing dairy industry for all associated stakeholders including farmers, distributors, retailers and franchise owners.

Mrs. Brahmani Nara, ED, Heritage Foods Limited said, “Our emphasis is to delight every home with fresh and healthy products of Heritage and empower the farmers. We want to be a nationally recognised brand for healthy and fresh products.”

It’s through a cumulative effort of harnessing technology effectively, winning the trust of the farmers through a mutually profitable relationship and keeping consumer satisfaction at the very top of the organization’s priority that Heritage Foods Limited has taken a top position in the dairy sector.
Maruthi Dairy Farm
SUCCESS STORY OF A DAIRY FARM LED BY A WOMEN ENTREPRENEUR

The Entrepreneurs
Maruthi Dairy Farm is a pro-environment venture of three professional individuals with widely different backgrounds. Two of them, Mr. Gopi Easwaran & Mr. Kasturi Raju are qualified Mechanical Engineers with MBA, and with varied industrial working as well as services background of more than 20 years. The third partner, Mrs. K.B. Pratibha of Jyothi Mallapura in Arsikere taluk has already made her mark in her chosen field. Mrs Pratibha was heading the quality wing in a private pharmaceutical firm, which she left and took up dairying in her ancestral land in Arsikere taluk. She started with five cows, and the herd has now expanded to 100 cows. With good management practices of a modern dairy, milk production on the farm has touched 400 litres per day. Mrs Pratibha says this is indeed a proud achievement for the dairy farm, since earlier, she did not know anything about animal husbandry. She now plans to venture into milk by-products when milk production at the farm touches 1,000 litres a day.

While learning about dairy farming, Mrs Pratibha realised that the feed given to the cattle had low energy component. As a challenge, she started home production of cattle feed to suit her requirements. She now sells it under the brand name Akshaya Dhaarini. There is a huge demand for it from farmers around the village. “I sell about 10 tonnes of cattle feed a month,” says Mrs Pratibha. She has also set up a biogas unit that generates 15 kilowatts of power to take care of her dairy’s power requirements. She uses the bio-slurry for growing various horticultural crops. What she does not need, she sells at a rate of 60 paise a litre.

The Farm
The team was passionate and dedicated about starting a green field venture which would be eco-friendly and rural/agricultural community oriented. Hence the team chose to set up a Model Integrated Dairy Farm incorporating modern dairy farming concepts. The dairy farm was set up on February 15, 2011 at Mrs. Pratibha’s coconut grove located at Jyothimallapura - a tiny village in T-kodihalli-post, Arasikere Taluk, Hassan District, Karnataka State. The dairy farm is now hailed as a modern, model and integrated unit, and is one of its kind in the state of Karnataka. The dairy is equipped with modern, forward looking sheds which house adult animals, heifers and calves. The dairy currently houses 110 animals, majorly HF and a few Jersey cows.

The Machinery
The farm houses a range of machines - milking machines, automatic drinking water arrangement for the animals, chaff cutter, pressure washing machines etc.

The unprecedented shortage of green fodder prompted the entrepreneurs to look for alternatives. After an exhaustive search, they located a state-of-the-art hydroponic fodder growing machine manufactured in India in association with an Australian company. The machine helps grow fodder using hydroponic technology, where nature is simulated under controlled conditions but without soil, and using minimal water and labour.

The farm generates about 1.5 MT of cow dung and about 5,000 to 6,000 litres of bio-slurry which is a mixture of digested dung, cow urine, wash water etc. To make the best use of resources like bio-slurry and to make the dairy a financially viable and self sustaining venture,
entrepreneurs set up a 15KVA biogas based electric generator which powers all the equipment at the farm, giving relief from the severe unscheduled power cuts, often stretching up to 16-20 hours.

Facilities
1. State-of-the-art cow sheds for easy handling, management as well as providing the cows with comfortable housing
2. Green fodder storage by making silage of around 200 MT during harvest season, adequate to meet four months requirement of the animals
3. Exclusive area for storage of various dry fodder meeting one full year’s requirement of dry fodder
4. Innovative alternate soil-less green fodder growing machine using hydroponics technology, to meet sudden green fodder requirements
5. Separate free stalls area for cows, heifers and calves to reduce the lameness in the animals by leaving them free, safe in day time within safe boundaries
6. Our own feed preparation as well as stocking with locally available grains residues and ration by adding necessary nutrients
7. To maintain hygiene of the animals, the labourers are segregated for the dairy section and manure producing sections. Separate and individual quarters are provided to them so that high level of hygiene is maintained
8. Separate sheds/housing for calves, heifers, dry and milking cows
9. Semi-automatic milking machine for a pure & hygienic milk production
10. Installation of pressure washing machines for thorough cleaning and bathing of animals as well maintaining cleanliness inside the sheds
11. Biogas unit for producing cooking gas and power
12. Reliable and fool proof power back up to answer the frequent power shut down. Grid power, biogas based generator, diesel generator and UPS back up, minimum solar lighting
13. Good office management/administration systems for maintaining good animal health care, well equipped with all basic and emergency drugs, daily visit of experienced veterinarian for health management, cold storage system for storing of critical drugs and proven semen, automatic computation and records maintenance at the farm
14. Production of organic manure - vermicompost, compost, enriched compost, vermiwash and packing/marketing according to the local farmers’ needs
15. Rain water harvesting to recharge the available bore well in the farm as well as a well networked drainage for feeding the same to the surrounding coconut grove
16. Stocking of bio-slurry – 300 KL capacity underground cement tank. The slurry is pre-digested & pathogen free and is an excellent organic manure, very beneficial to crops, improving productivity, soil fertility and micronutrients

Bankers and subsidy support
Corporation Bank, Arsikere branch values Ms. Pratibha as a top notch customer. Corporation Bank has helped her by extending credit for carrying out various activities in her farm. She has also received subsidy of Rs. 7.45 lakh (July 2013) for heifer calves, vermi-compost, milking machine, bulk milk coolers and veterinary clinic from NABARD under Dairy Entrepreneurship Development Scheme of the Department of Animal Husbandry, Dairying and Fisheries, GoI.

Ms. Pratibha has no regrets of quitting her job to move to her village.

Accolades
The farm has been recognised and supported by state-government owned organisations - GVKV, UAS, District Commissioner offices, Animal Husbandry Dept. and other private institutions and organisations. Some of the awards which the farm has received are Arasikere Sahithya Sammelana Taluk Progressive Dairy Farmer Award 2011, Hassan District Kannada Rajyotsava Progressive Dairy Farmer Award 2012 and State Level Corp Award for Progressive Dairy Farmer Award 2012. The entrepreneurs have been appointed as Directors to GVKV, Bangalore, as recognized agro-industrialists for two years.
Yeoti Agro Producer Company Ltd, Yeoti village, Mohol Taluka, District Solapur, Maharashtra operates in nine villages of the area. The objective of the company is to enable marginalized and disadvantaged farmers with no productive assets to undertake cow milk farming business with commercial approach through adequate knowledge dissemination and awareness generation. The FPO helps in their endeavour through intervention of affordable technology in dairy milk farming along with adopting sophisticated marketing activities to provide fair market linkages to the members.

Nabkisan Support
Yeoti Agro Producer Company Ltd availed its first working capital loan in 2018. NABKISAN Finance sanctioned working capital loan of Rs 20 lakh for milk collection and marketing. Its present activities are dairy milk collection and marketing, and selling of cattle feed. The FPO was set up in May 2015 with a capital of Rs 8.69 lakh and 545 shareholders. On March 31 2017, it recorded a turnover of Rs 15.21 lakh. The figure went up to Rs 17.25 lakh as on March 31, 2018. On March 31, 2019, the turnover of the FPO stood at Rs 1.24 crore.

The major cow and buffalo breeds owned by the FPO are Jersey, Holstein, HF and Murrah, Pandharpuri. There are a total of 510 dairy farmers in the FPO, with about 710 milch animals. The milk collection per day is 5000 liters. Compost production is a new initiative taken up by the FPO.

The FPO also has five milk collection centers. Its operations are spread over nine villages in the Mohol and Padharpur block of Solapur district. In the villages where Yeoti Agro was implementing the program, milk production and collection was earlier a highly unorganized activity. As a result, farmers were not able to earn much from it. The FPO was formed in order to provide better returns to the dairy farmers and increase their income.

Yeoti Agro Producer Company Ltd got financial support from NABARD (JLG) Joint Liability Group Scheme. The FPO signed the JLG agreement with NABARD and VKGB for milk collection and marketing. As per the agreement, Yeoti Agro PCL took up the work of JLG promotion in the area of operation of the RRB with the support of VKGB and NABARD. Initially, the farmers were organized into village level joint liability groups. Then they became members of the company.

Services offered by the FPO to its members
The FPO is currently providing the following services to its members.

Cow/buffalo’s Insurance: The
FPO provides cow insurance services to its members by linking them to suitable insurance services to provide cushion in case of sudden death of a cow. Members have been oriented on insurance and its benefits, and majority of the members have availed this facility.

Milk Marketing: The FPO has been actively engaged in the milk collection and marketing of milk. The marketing of milk has been undertaken by the FPO through linkages with branded milk companies. These include Sonai milk of Indapur.

Knowledge Support: Members are made aware of better fodder management with available resources. Farmers are oriented on correct feeding practices and fodder development through demonstration of fodder crop cultivation and its economics, vermi-compost preparation, preparing concentrate feed using agriculture waste.

**Impact on income generation of the shareholders**

At village level, there isn’t much demand or organized market for cow milk. But urban consumers are willing to pay a premium for quality milk. The milk production per cow ranges from two to three liters per day. Earlier, dairy farmers were getting prices in the range of Rs 20-25 per liter. With a view to ensure better price for pure cow milk, the FPO has started the marketing of its products. The FPO also procures and supplies goat milk to Sonai Milk Pvt Ltd on a large scale, which fetches Rs 32 per liter.

An employee of the company collects the milk from each village and brings it to the milk collection centre. Here, the milk is tested and then transported to Sonai Milk Processing Center. Yeoti Agro Producer Company also plays a major role in the provision of cattle feed to farmers in all seasons. It is the sole channel for collecting and selling milk from farmers to manufacturers.

To cater to its large member base, the FPO established five milk collection centers in its operational area with the financial help of Rs 20 lakh from NABKISAN Finance Ltd for milk marketing and cattle feed. NABKISAN Finance Ltd recently sanctioned the second loan of Rs 30 lakh for milk and cattle feed marketing.

Vermicompost and other products: The FPO is also engaged in the preparation of vermi-compost and vermi-wash from cow manure. With financial help from ATMA, Solapur, each farmer has been given Rs 10,000 for the preparation of vermi-compost. Farmer members use this vermi-compost for agricultural purposes. Yeoti Agro Producer Company Ltd is setting an example of how an FPO can bring a change in the lives of the marginalized farmers through organized sale of milk and a robust milk marketing business.

Yeoti Agro Producer Company Ltd availed its first working capital loan in 2018. NABKISAN Finance sanctioned working capital loan of Rs 20 lakh for milk collection and marketing. Its present activities are dairy milk collection and marketing, and selling of cattle feed.
Dhanuka Agritech Limited, one of India’s leading agrochemical company, felicitated farmers at the first edition of the Dhanuka Innovative Agriculture Award (DIAA). The award ceremony and seminar was organized at the National Agricultural Science Complex (NASC) in New Delhi. The Chief Guests were Mr. Gajendra Singh Shekhawat, Union Cabinet Minister, Ministry of Jal Shakti and Mr. Kailash Choudhary, Union Minister of State, Ministry of Agriculture and Farmer Welfare.

On the occasion, 32 awards were given to farmers in various categories for adopting and practising innovative farming techniques. Twelve farmers received Innovative Farmers Award and one farmer received Farmer of the Year Award with cash prize of Rs 1 lakh for his outstanding contribution to agriculture. Eight awards were given in the water and rainwater harvesting categories to farmers and institutions. Two awards were given for best working innovative technology in agriculture to both KVK’s and agriculture universities (national and state level). Four awards were given for innovation in extension service to dealers and distributors.

Speaking on the occasion, Shri R.G. Agarwal, Chairman, Dhanuka Agritech Limited said, “We have instituted these awards to felicitate the innovative farming community. Our effort is to encourage farmers and the agricultural community to share their practices to enhance crop productivity and their income.”

Shri Ashok Dalwai, CEO, National Rainfed Area Authority (NRAA), Ministry of Agriculture and Farmers’ Welfare, also spoke on the occasion. He said, “We must emphasize on income security of farmers friends. Unless they are secured, our aim of food and nutrition security, feed and fodder security and ecology security will not be fulfilled. After income security, our next step would be to make farmers businessmen who work for profit, which will be done through policy and other changes.”

Jal Shakti Minister Shri Gajendra Singh Shekhawat and Minister of State for Agriculture Kailash Choudhary gave away the first edition of Dhanuka Innovative Agriculture Award (DIAA) with cash amount totalling Rs 22 lakh to 32 farmers, KVKs and universities in various categories for adopting and practising innovative farming techniques.

The five-member jury consisted of eminent agricultural scientists representing the National Agricultural Research System who ensured independent evaluation of the winners. A total of 4,466 applications were received from all over the country, and 2,558 were accepted for final review.

On January 8, Dhanuka Agritech also organized a roundtable on “How agriculture can support in making India a $5 trillion economy’ in Delhi to highlight the role of agriculture in overall GDP growth.

Shri Gajendra Singh Shekhawat, Union Cabinet Minister, Ministry of Jal Shakti and Shri. Kailash Choudhary, Union Minister of State, Ministry of Agriculture and Farmer Welfare inaugurated the discussion which brought forth many thought-provoking insights. The session was attended by senior officials/scientists...
and heads of the agrochemical industry, academicians, technocrats, corporates, policymakers and farmers, media, scientists, students of agricultural sciences.

Speaking on the occasion, Shri Kailash Choudhary said, “We appreciate Dhanuka Agritech’s efforts of creating a platform which will inspire farmers and motivate them towards innovative farming. All the farmers should learn from them to become sole owner of their crops. The farmer should be able to fix the price of his crop. Going forward, our farmers should be rich and should be in the position to give loan rather than taking it”.

**Dhanuka Agritech Limited**

Dhanuka Agritech Limited manufactures a wide range of farm input products to support the farmer in his pursuit for better crop, better farming and better life. The Company has a pan-India presence through its marketing offices in all major states in India, with a network of more than 8,000 distributors and dealers selling to over 75,000 retailers across India and reaching out to more than 10 million farmers. The Company has technical tie-ups with four American and six Japanese companies.

Dhanuka Agritech is among the top five companies in India, in brand sales. With more than 200 registrations and 500 active SKUs, the company has one of the largest market penetrations. Dhanuka Agritech currently has 30 offices across India and 45 warehouses.

Dhanuka Agritech Limited has been listed as among ‘200 Best Under A Billion Companies in Asia Pacific’ for the third time by FORBES magazine in the year 2010, 2011 & in 2013. The company was awarded the INC. India Innovative 100 Award: 2013 in recognition of smart innovation for the newly launched product – Lustre and the ‘Inc India 500 India’s fastest growing Companies under INR 1,500 Cr.’ for two years in succession: FY 2010-11 and FY 2011-12.

The company has recently bagged a place in the prestigious list of India’s exemplary Companies: INC. INDIA - HALL OF FAME – 2014 & also received FICCI Chemicals and Petrochemicals Award for BEST CONTRIBUTION TO ACADEMIA in October 2014.

The Company has also been awarded Inc. India’s Award for Innovation in Product: Mortar and Innovative Logistics Management.

According to Shri R.G. Agarwal, Chairman, Dhanuka Agritech Limited, knowledge plays the most important role. Our former Prime Minister Shri Lal Bahadur Shastri gave the slogan of ‘Jai Jawan, Jai Kisan’ to which ‘Jai Vigyan’ was added in 2002 by Shri Atal Bihari Vajpayee. Prime Minister Shri Narendra Modi added the slogans of Jai Anusandhan in 2019. He rightly realized the importance of Anusandhan to give focus on Innovation.

Shri Agarwal pointed out that Dhanuka also visualized this. Today, its dealers play the most crucial role in transferring the technology to farmers. Shri Agarwal added that in 2006, Dhanuka undertook the first project under Public Private Partnership (PPP) in Madhya Pradesh in Hoshangabad district, which was inaugurated by the former Chief Minister of Madhya Pradesh, Shri Dig Vijay Singh in the presence of five other ministers with more than 5000 farmers. This increased the yield of farmers by 30-40 per cent.

Shri Agarwal revealed that Dhanuka was the first company to take the initiative to start training programme of Diploma in Agricultural Extension Services for Input Dealers (DAESI) with Anand Agri University, Gujarat and then followed by Navsari Agri University, Gujarat and then Junagadh Agri University, Gujarat and Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola. The first batch which was sponsored by Dhanuka by paying 50% fee has become a regular course in all the universities.
Achieving the Goal of a Malnutrition Free India

When India became independent, we were unable in meeting the food demands of our growing population. We had to import most of our food requirement including from our neighbours like Myanmar. Also, much dependence was placed on wheat imports under the PL 480 programme of the United States. We used to be referred to as a nation depending upon the food produced in other countries for our own survival. This position has now changed and the goal of achieving a malnutrition free India is not any more just a wishful desire. I would like to suggest a five-point package for ensuring nutrition security in all parts of the country.

1. The first requirement for human being is the adequate quantity of food, sufficient in calories. The difference between need and supply had to be met by imports. This is why we were referred to as a country leading a ship to mouth existence. The green revolution of the 1960s changed this situation and India was regarded as a country characterized by sustainable food security. Also, an Act of Parliament titled “National Food Security Bill of India, 2013” was enacted to convert the concept of right to food as a constitutional right. This Bill has been passed and many state governments have also introduced Food Security Acts. Therefore, with efficient and faithful implementation of the Food Security Act, we can ensure that no one in the country suffers from inadequacy of food. Every Panchayat should have a Nutrition Security Committee to monitor the progress in accomplishing “Zero Hunger”.

2. The second area which needs attention is the elimination of protein hunger. This can be done by increasing the production and consumption of pulses. Also, poultry products like egg and both inland and marine fishery can help us to address the protein deficiency problem. Our farmers have shown that if they get remunerative and assured marketing facilities, they will grow more pulses nearly as much as we need.

3. The third aspect is an important one and deals with hidden hunger or deficiency in micronutrient like vitamin A, vitamin B12, iron, iodine, etc. For addressing the malnutrition issue, a location specific approach like the establishment of genetic gardens characterized by biofortified food grains can be adopted. Such gardens can be established in peri-urban areas leading to a peri-urban horticulture revolution designed to eliminate hidden hunger.

4. The fourth area that needs careful attention relates to food safety aspects. It is important that food safety is ensured by safeguarding the grains from post-harvest infection as well as microtoxins. Unfortunately, the storage aspect as well as distribution of micronutrient rich food grains has not received the attention they deserve.

5. The fifth aspect is the proportion of nutrition literacy. For this purpose, we may promote a cadre of community hunger fighters consisting of both women and men. Women particularly need to be equipped with knowledge of micronutrient deficiency for they need to ensure that new born children do not suffer from access to balanced nutrition. Deficiency of micronutrients like vitamin A leads to blindness in children. The first thousand days are very important in a child’s life from the point of view of nutrition.

The above five-point programme can be developed by local communities in each Panchayat. The Panchayat Nutrition Sammiti should monitor closely the status of nutrition in their Panchayat. We need to expand the scope of the National Nutrition Act by addressing the issues of calorie hunger, protein hunger, hidden hunger and post-harvest management in an integrated manner.

I hope 2020 will be the beginning of a serious community – led effort to achieve the goal of nutrition security of the country. If this is not done, we will not be providing the opportunity for a young baby to achieve its full genetic endowment for physical and mental development. The green revolution began in 1960. We have achieved much during the last sixty years and the final step is within our reach. It can be done by integrating agriculture, nutrition and health into an interactive action programme.
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AGRICULTURAL MECHANIZATION IS GOING TO BE INSTRUMENTAL IN DOUBLING THE FARMERS INCOME

Agricultural Mechanization is one of the key drivers for sustainable development of agriculture sector which helps in increasing production by timely farm operations, reduce losses, reduce the cost of operations by ensuring better management of costly inputs, enhance the productivity of natural resources and reduce drudgery associated various farm operations.

The degree of farm mechanization is expressed as a ratio of mechanical power to cultivable unit area, which in India has increased from 1.66 kW/ha during 2009-10 to 1.73kW/ha 2013-14 (increased only by 0.07 kW/ha during four years) and it has further increased considerably to 2.02 kW/ha during 2017-18 (increased by 0.29 kW/ha during four years) due to lot of efforts and farm mechanization interventions at Government level. For achieving higher degree in mechanization, the farm power availability on the farm needs to be increased with a higher pace to at least 2.5 kW/ha by the end of 2022.

The agriculture mechanization sector has some challenges ahead and the Government through various initiatives and systematic approach is addressing the challenges by way of focusing on development of labour saving technologies; Identification & development of machine harvestable crops; Inclusive farm mechanization program especially for women and youth; Integration of farm and non-farm activities in rural areas; and promoting the mechanization for Conservation Agriculture. It has been estimated that through these initiatives, the mechanization of agriculture has the potential for 5-20% savings in seeds and fertilizer; 5-20% increase in cropping intensity; 20-30% savings in time; reduction in manual labour by 20-30% and overall increasing in farm productivity by 10-15%.

To make the cost of machinery affordable and to make them available to all farmers, Govt. of India under Sub-Mission on Agricultural Mechanization (SMAM) is promoting establishment of ‘Custom Hiring Centres’ and Hi-tech High Productive Equipment Hub for custom hiring with the objectives of offsetting the adverse economies of scale arising due to small landholding and high cost of individual ownership of machines.

Under this scheme since 2014-15, an amount of Rs. 3377.07 crores has been allocated and out of these funds besides the activities of training, demonstration and testing of agricultural machinery for quality improvement, the State Governments have established 8466 Custom Hiring Centres, 223 Hi-tech hubs and 6841 Farm Machinery Banks.

SHRI PARSHOTTAM RUPALA
Minister of State for Agriculture & Farmers Welfare
Government of India
at the village level.

The mobile app-based aggregator platform ‘CHC Farm Machinery’ which facilitates hiring and renting of farm machinery from and by the Custom Hiring Centres/owners of the farm machinery which encompasses a fair and transparent rental process while focusing on quality, dependability and timely delivery of the services, has also been launched in Public domain.

Availability of adequate skilled manpower for carrying out various agricultural operations is being ensured through the existing Farm Machinery Training & Testing Institutes with the target to train more than 50,000 persons over next 5 years for various job roles such as Agriculture Machinery Operator, Agriculture Machinery Repair and Maintenance Entrepreneur, Agro Service Centre/Custom Hiring Entrepreneur, Irrigation Service Technician, Reaper Thresher and Crop Residue Machinery Operator, Farm Machinery Service and Maintenance Technician, Agriculture Machinery Demonstrator, Tractor Mechanic, Farm Workshop Foreman/Supervisor, Farm Workshop/Service Manager, Tractor Operator, Harvesting Machine Operator.

To address air pollution and to subsidize machinery required for in-situ management of crop residue, a Central Sector Scheme on ‘Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi’ for the period from 2018-19 to 2019-20 has been implemented and funds amounting to Rs.1178 crores have been provided to the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi and ICAR & other central agencies for promotion of in-situ crop residue management machinery and undertaking Information, Education and Communication (IEC) activities on a massive scale for creating awareness among farmers.

With the efforts of the Government through the above stated schemes, overall, about 15% and 41% reduction in burning events were observed in 2018 as compared to that in 2017 and 2016, respectively. During 2019-20, the total burning events recorded in the three states were 18.8% less than in 2018. UP recorded 36.1% reduction, Haryana recorded 31.0% reduction, and Punjab recorded 15.0% reduction, respectively, in 2019 than in 2018.

Therefore, in present scenario, agricultural mechanization is going to be instrumental in doubling the farmers’ income and sustainable developments of Agriculture by making judicious use of inputs like; seeds, fertilizers, pesticides, water etc; to maximize the productivity of available cultivable area and make agriculture more profitable and attractive profession for rural youth. The consumption of farm power in India stands at an average of 2.02 kW/ha in 2017-18 and compares very poorly even with Asia-Pacific countries. A target of at least 2.5 kW/ha has been aimed by 2022 which will be achievable by additional, Custom Hiring Centres, Farm Machinery Banks to facilitate the Small & Marginal farmers with an easy access to mechanization and related services on rent in preference to owning the same. Mobile App, “CHC-Farm Machinery” is being proved an optimal solution to meet the demand of the farmers in real time at competitive rates. The Scheme on “in-situ management of crop residue through agricultural mechanization in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi” has been recognized as the major solution to check the burning of rice straw. The availability of skilled man power through Farm Machinery Training & Testing Institutes for different job roles in the area of farm mechanization and availability of quality machinery through testing of farm machinery at FMTTIS and other 35 approved Test Centres of DAC&FW will be the pivotal elements in sustainable development of agriculture in the country.

Since 2014-15, Ministry of Agriculture and Farmers Welfare has established more than 49,500 Custom Hiring Centres/Farm Machinery Banks/Hi tech Hubs to facilitate small & marginal farmers with easy access to mechanization and related services on rent in preference to owning the same. To take this initiative forward, MoA&FW is targeting to establish ‘Custom Hiring Centres’ (CHCs)/ Farm Machinery Banks at the rate of a minimum of 1 (one) per village (when large) and 1 (one) per Gram Panchayat. Further, the networking of individual owners, CHCs, FMBs and State Service Centres through the Mobile App, “CHC Farm Machinery” will facilitate to meet the demand of the farmers in real time at competitive rates. So far, more than 44300 CHCs have been registered on this mobile app to rent out more than 1.38 lakhs of agricultural machinery. A SMS Message has already been sent to more than 4.2 crores of farmers on their mobile numbers available with this Ministry to bring awareness among the farmers about this mobile App.

The trained man power and availability of quality farm machinery are the essential elements for development of Farm Mechanization. MoA&FW has trained more than 1.9 lakhs farmers / rural youth/technicians and other professionals engaged in farm mechanization & allied sectors through their Farm Machinery Training and Testing Institutes.

The Scheme on “In situ Management of Crop Residue” is being reviewed by this Ministry after a series of meeting with authorities concerned from other Ministries, State Agricultural Departments, and ICAR etc; by keeping strategy of “Doubling farmers’ income”, by generating additional farm incomes through gainful use of all straw products/biological products to make the scheme more effective and sustainable.
India’s fisheries sector has consistently recorded a growth rate of six to seven percent during the last four decades. Further, looking at the available resources and also the potential, we can also foresee the robust performance of this sector envisioned for in coming years. The sector has contributed not just towards growth and meeting domestic demand, but has also contributed significantly towards export earnings. Today, India earns foreign exchange of more than 7 billion USD or Rs 47 crore from the export of fish and fishery products. This amount contributes to about 19 per cent of the country’s total agricultural export. This has been possible largely due to the growth in aquaculture, especially coastal shrimp aquaculture. In quantity terms, the big jump has come in from fish farming, largely comprising of freshwater aquaculture. India now produces about 8 million tonnes of fish from freshwater aquaculture. When India began fish farming in the 1950s, the production was mainly limited to carps. Today, we have breeding protocol for controlled seed production for more than 60 finfish and shellfish species. In an interview with Rajni Shaleen Chopra, Executive Editor, Agriculture Today, Dr J.K. Jena, ICAR Deputy Director General (Fisheries Science and Animal Science) talks about the research and development measures taken to boost fish production in the country.

What steps have been undertaken to improve the nutrition given to fish to ensure better health and higher productivity, and also tackle disease?

Considering that feed constitutes over 60 per cent of the input cost of fish farming, focus has been given for development of several feed formulations for different finfish and shellfish species, and again for their different life stages, based on the study of their nutritional requirements. Today, the country possesses several commercial feed plants, which have been able to meet the requirements of the aquaculture sector in providing formulated feed, especially in the form of floating feed for finfish farming irrespective of the environments, and sinking feed for shrimps and freshwater prawns. For small holders farming, focus is given for use of farm-made feeds with use of local feed ingredients to make farming more remunerative and bringing resource use efficiency.

Effective disease management in aquaculture has been a major issue for us. We have developed several formulations as curative and preventive measures. Development of CIFAX as a curative formulation for a dreaded disease like EUS – Epizootic Ulcerative Syndrome is an example. The formulation, which has been commercialized, are produced in large scale and been able to tackle the disease to a large
extent. The development of molecular diagnostics have helped our efforts to take corrective measures. The National Surveillance Program for Aquatic Animal Diseases (NSPAAD) undertaken during the last seven years in as many as 17 states by involving more than 25 organizations with the financial support of National Fisheries Development Board (NFDB) has helped greatly in understanding the disease status, emergence of new diseases and taking necessary corrective measures. Under this program, we have got emergency response system in place to tackle any new disease outbreak. The program also helped in enriching the quarterly disease reporting of the country to OIE and Network of Aquaculture Centres in Asia Pacific (NACA) as an international obligation.

**What are the targets set for future production?**

The country is aiming to achieve the targeted potential of 22 million tonnes of fish by 2030 and out of which about 16 million tonnes has to come from aquaculture. Further, the country has set a target of increasing exports to about Rs.100,000 crore from the current export of Rs.47,000 crore by 2025. Therefore, it is necessary for us to focus on both horizontal and vertical expansion, viz. area expansion and intensification. We need to adopt several new technologies including re-circulatory aquaculture system (RAS) for high value species, bio-floc technology etc. on a large-scale. We need to see that as much as the unutilized potential areas are brought under farming.

Considering the increasing shortage of freshwater, we have been focusing on research programs for increasing water productivity and minimizing the use of water. The country must give greater focus to the use of open water bodies like reservoirs, lakes and open sea for cage aquaculture. The potential of such technologies for increasing the harvest from small water areas have already been demonstrated in several reservoirs and both coasts of the country. The demonstrated technology of shrimp farming in inland saline areas in northern Indian states like Punjab, Haryana and Rajasthan needs greater expansion. This will not only help in increasing production but also lead to effective utilization of these unused resources.

**Which sectors have seen the maximum growth?**

In terms of production, the maximum growth comes from the fresh water aquaculture sector. In terms of export, the bulk, however, comprises of the production from brackish water shrimp farming in coastal states, which stands at about 7 lakh tonnes. The production is concentrated mainly in the states of Andhra Pradesh, Orissa, Tamil Nadu, Gujarat and West Bengal. Andhra Pradesh takes the lead in aquaculture both for freshwater aquaculture production and coastal shrimp production. It is envisaged that similar trend would also continue to exist in future production too.

**What is the contribution of aquaculture in doubling farmer income?**

The aspect of doubling the farmers’ income is being deliberated in different platforms during these days. It is largely agreed by all that without the inclusion of animal husbandry and fisheries, it shall probably be difficult to fulfill the objective of doubling farmers’ income. Net profit from freshwater aquaculture can be Rs.1.0-3.0 lakh per year depending on the technology adoption and investments. With shrimp farming, the profit can be Rs.3.0-5.0 lakh per hectare within a culture period of four months. I sincerely believe such level of income assurance is probably not common in any other agricultural avenues. Great potential exists for adoption of integrated fish farming with livestock, poultry and/or horticulture. Adoption of such farming practice has not only demonstrated in resulting higher income, but also reducing the risks. Paddy-cum-fish culture is another potential practice for adoption in coastal regions and other places where water retention in paddy fields is for a longer period.

**What is your view on the sustainability of aquaculture and fisheries in years to come?**

Considering growth trends registered over last three to four decades, I am highly optimistic on the sustainability of the sector. Further, there remains unlimited scope for adoption of varied scientific technologies with greater production potential. However, system and species diversification need to be given greater focus through assured seed supply and technological back-up. In capture fisheries too we have to strategize for harvesting the potential of the deep sea resources. For effective utilization of vast resources of over 3.0 million ha of reservoirs, specific stock enhancement programmes need to be intensified, besides adoption of large-scale cage aquaculture. I am sure that with the efforts of all of us, including the research scientists, development personnel, financial institutions, and above all the farmers and entrepreneurs, it would not only be possible for the country to keep the growth trend in fish production, but also assuring the quality and safe fish for both domestic consumers and also the export market.

**What steps have been taken for increased connectivity with farmers?**

For dissemination of technologies, eight of our fisheries research institutes have undertaken several approaches. Training of farmers and also the officials of the state fisheries departments has been given greater attention over these years. Every year, over 10,000 fish farmers are trained on various aspects of aquaculture and fisheries through our institutes. Information regarding new technologies is disseminated through the KVK network of ICAR. We have 715 KVKs operational across the country. We also undertake several lab-to-land programs including demonstration of different farming technologies under various developmental projects, tribal sub-plan schemes etc. Further, focus is given for the development of aquaculture in north-eastern states through separate budgetary provisions. Publication of technology brochures has been undertaken in local languages and disseminated for their effective outreach.
World agriculture is undergoing a tremendous transformation from conventional farming to environment-friendly farming i.e., eco agriculture. Time now is to move from Green Revolution to Eco Agri Revolution or Ever Green Revolution.

The Sustainable Development Goals endorsed by the United Nations put great emphasis on moving away from heavy input agricultural system to more eco-friendly and balanced farming. Eco Agriculture or Agro Ecology is the approach capable of producing enough food and accessible food without harming the environment. In the last few decades, our awareness and knowledge base for new generation agri bio inputs has considerably increased. At the same time, almost at all world forums, the urgency of converting the lab and factory scale information to actual practices and demonstrated applications has been emphasized.

In the new Eco Agriculture Revolution, the development of alternative and eco-friendly inputs like bio-fertilizers, bio-pesticides, bio-stimulants, bio-composts etc., will play key role as alternative eco-friendly and effective inputs. The bio-input market is set to receive major boost and will grow at 16 to 20 per cent in next two decades. The bio-input industries have initially been in the small and medium scale sector, but, they are receiving increasing interest and involvement of large-scale chemical companies, often through collaborative ways. The Bio-Ag sector has even greater importance for the Asian countries which face a greater challenge of food and nutrition security, coupled with environmental sustainability. Also, with more than 835,000 certified producers, India has the largest number of organic producers in the world. China has around 50% and India has 30% organic cultivable land in Asia. Admittedly, it is not practical to suddenly stop all chemical inputs. The emerging trend is likely to be the middle path, now popularly known as the 20:20 Model of increasing use of agri-bio inputs.

There are promising developments of new generation, eco-friendly agri-bio inputs. The Bio Ag Industries are growing at a very rapid pace and will play a decisive role in bringing eco-agri revolution, which is particularly significant for Asian countries.

To give a major boost to bio-agriculture sector in India and Asian countries, the Agriculture Today Group is organizing BioAg Asia 2020 from April 22-24 in New Delhi to:

- Bring together Bio Ag Companies in Asia and other continents, and the eminent individuals in this sector
- Discuss new opportunities for collaboration, explore market opportunities and forge business linkages
- Prepare a roadmap for future
- Prepare recommendation for government policies including registration and transfer procedures
- Familiarize leaders and farmers with the eco-agri revolution and the role of bio inputs.
HIGHLIGHTS
BioAg Asia Expo 2020 | BioAg Asia Awards 2020
Launch of BioAg Asia 2020 Outlook Report

Bio-Agriculture | Bio-Stimulants | Bio-Fertilizers | Bio-Controls | Bio-Pesticides | Amino-Acids
Sea-Weeds | Biologicals | PGR

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Access to Right Information and Due Diligence by Farmers Hold the Key

Real knowledge is to know the extent of one’s ignorance—Confucius’. Today, artificial intelligence (AI) is projected to increasingly assist human intellect in all fields of life, including precision agriculture. It is becoming important for agro-businesses, enterprisers and supply chains to increasingly bank upon tools of AI to meet the precise input supply, commodity procurement and other services needs of farmers. But farmers’ welfare continues to rely more upon their own, traditional wisdom than several new, generous help schemes.

A rapid drift in agricultural input dependence and practices under the growing regulatory complexity is constraining the farmers in right and quick decision making; despite many new safeguards assured under the new government schemes launched recently. If we won’t get our agriculture right, then the threatening crisis of climate change as well as that of conserving the on-farm agro-biodiversity, even in the diversity-rich niche, for sustainable use will loom larger than ever before.

Patently speaking, agriculture was the first collective human intellectual achievement about 10 millennia B.C., which caused advancement of civilization process on a scale. Natural ecosystems and resources were harnessed and reshaped into crop and animal husbandry systems by apt human intervention and conscious selections. Diversity of such farming systems co-evolved with the socio-cultural diversity and prosperity across the world centres of crop origin and evolution vis-à-vis the geographical regions, pockets and niche. So much so that till date, despite many technological and management advances reshaping agriculture, the niche-specific, peculiar yet diminishing diversity is still the hope for new genes (alleles) to count upon for continuous improvement in new crop varieties, including to meet the challenges of climate change.

We must foster conservation of niche-specific on-farm diversity, in spite of the despairing web of ‘trade-environment- sustainable development regime complex’ looming large. For this to happen, farmers would require due awareness and do-how tactics. Agro-biodiversity conservation practices could be mobilized and mainstreamed within the ‘conservative farming vertical’ by all means including, for example, government support under schemes aimed at farmers’ empowerment and welfare, their hand-holding by private sector under contract farming and buy backs as well as corporate social responsibility initiatives or the participatory assistance and knowledge support extended to them by interested, donor-driven, non-governmental stakeholders.

It is not necessary for the farmers from niche-specific agro-biodiversity rich areas who receive such benefits, to continue cultivating their entire land-holdings under low yielding landraces, folk varieties and native animal breeds in the name of conserving primitive agro-biodiversity for sustainable use. Instead, they may practice integrated, mixed farming or grow some suitable crop-variety mosaics, which may fetch better incomes to them. Nevertheless, all beneficiary farmers should be allowed their own decision-making in the path to envisage synergistic development overall, and their own economic prosperity in the long term.

Seed is one of the critical inputs to help farmers increase their incomes. Use of proven, quality seeds ensure bonus crop yields and thus higher monetary returns to farmers. Here, ‘quality’ is not implied with regard to per se higher yield potential of the crop variety used or its resistance/tolerance to diseases and insect pests or its ability to deliver produce having better table purpose qualities or tastes. But, in fact, ‘quality’ of seed is manifested in its potential for good germination, rapid emergence, and vigorous growth thereby giving better crop yields vis-à-vis higher monetary value of crop produce.
Indian law allows farmers to choose crops, varieties and seeds that they may wish to grow in their holdings. Commercial production and sales of quality seeds, including their certification and labeling is regulated under the Seeds Act, 1966. National and state seed corporations, mainly responsible until 1987 for quality seed production and sales of seeds of new varieties developed in the public sector, gave way to private seed sector to also do business in such varieties under the new seed policy (NSP-1987).

Private seed industry thus developed their own R&D and brought out new plant varieties and hybrids in the market. It was a farmer friendly step as they would get seeds of their choice in a competitive market. The private sector pushed their seed sales advocating that seed replacement rate is an important determinant of enhanced agricultural production. Despite all this, the formal seed sector could not exceed one-third of the total seed market representation in the country. On the other hand, some kind of formal support or hand-holding of farmers to ensure the seed quality standards of their farm saved seed is lacking despite that the informal seed sector is still dominating in the country.

Under the PPV&FR Act, 2001 farmers cannot label and commercialize their farm saved seeds but they would enjoy the right to use them on their own farms or barter or locally sell them for sowing by other farmers. This, indeed, provides a legitimate means of conserving niche-specific agro-biodiversity under the conservative farming vertical by all means. Therefore, support schemes for farmers should also have a built-in element of quality seed production and maintenance of their local landraces and folk varieties as well.

There is a progressive build up of new varieties protected under the PPV&FR Act, 2001. Registration of such varieties under the Act protects intellectual property of the plant breeders, public R&D agencies and seed companies and allows them to set the commercial terms and conditions with other seed producers and traders interested in doing business with such varieties. It does not, however, provide them a free ride under the seed quality, genetic modification, biosafety or other trade regulations. It is the concern and obligation of the seed businesses to get due clearances and certification, and do additional labeling as and where needed before pushing their seed sales. Here, farmers’ concern and legitimate right is to be provided with quality seeds on demand, and such seeds also must have their varietal integrity.

Recently, the PPV&FR Authority <plantauthority.gov.in> has issued a public awareness notice (1 of 2002) as per the regulatory provisions made in section 28 (read with rule 45) of the Act/Rules. This is about mode of producing and selling seeds of registered varieties by the registered breeder; through authorized person, agent or licensee, to take benefit of the intellectual property right granted to him under the Act. Although the texts of section 28 and rule 45 are self-explanatory yet this initiative by the Authority is a welcome step in providing further awareness or clarification.

This public notice clarifies in simple terms (in a tabulated format) that if a registered breeder directly multiplies, produces, distributes and sells seed of his protected variety, then it is to be sold as ‘product of the registered breeder’. The label on such consignments must also display the registered denomination (name of variety) with its registration number. It may also display applicable trade mark or trade name, if any, under prior information with the Authority.

As per the public notice, registered breeder may also authorize farmers to produce or multiply the seed on a buy back arrangement or sell. In such cases also, it is to be sold as ‘product of the registered breeder’, and all other labeling requirements have to be identically fulfilled.

Further, registered breeder may appoint agent(s) permitting them to issue license to other companies to multiply the seed directly on their own or produce through authorized seed producing farmers and sell the seed. In such cases, seed is to be sold as ‘product of xyz company (each licensee company to give its name separately)’ who may also use its (licensee’s) own trade mark, trade name or other similar indication as agreed upon with the registered breeder/agent and under prior information with the Authority. Labeling requirements have to be accordingly fulfilled but the registered denomination and registration number of the variety must be prominently shown on the label. Licensees registered by the agent of the registered breeder must also comply with similar requirements under prior information with the Authority.

It is indeed an important development in view of a recent legal conflict between contract farmers and registered breeder of a proprietary potato variety used for manufacturing chips of specifically claimed quality. The clarification on mandatory labeling requirement for seed produced under contract farming in this notice confirms that there is no scope for free ride by contract farmers. Yet the spirit of the sui generis plant variety and farmers’ rights law is favourable to farmers towards use of farm saved seed (including from contract farming) for their own re-sowing purposes or so. The benign step taken by the PPV&FR Authority on this new year day will duly educate the law abiding stakeholders. Let’s also hope that more light will be thrown soon on new welfare schemes vis-à-vis actions contemplated to ensure seed quality of farm saved seeds for achieving higher production and enhanced farmers’ incomes from niche-specific heritage seeds.

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Corrigendum: “Please read “PPV&FR” instead of “PPF&FR” at line 19 of last column on page 55 in January 2020 issue of Agriculture Today, and further read “Act on” instead of “Action” at line 21 of same column.”
“Our government believes artificial intelligence, in different forms, can help us achieve the $5 trillion benchmark over the next five years, but also help us do it effectively and efficiently”

PIYUSH GOYAL
Commerce and Industry Minister

“Cluster based agriculture and effective system of certification of organic produces are essential for augmenting the income of farmers”

TRIVENDRA SINGH RAWAT
Chief Minister of Uttarakhand

“Agriculture has a key role to play in helping the country achieve its goal of becoming a USD five trillion economy”

TAMILISAI SOUNDARARAJN
Telangana Governor

“Higher share of retail prices going to farmers augurs well for the rural economy, which in turn, could help sustain domestic demand. Initiatives towards wider rural roads network, better communication facilities for faster exchange of information, and easier access to micro credit will contribute to better price realisation for farmers. This ongoing process needs to be sustained alongside further agricultural market reforms”

SHAKTIKANTA DAS
RBI Governor
India’s Largest Cooperative Dairy-Dudhsagar reflects the spirit of cooperation and global aspiration in its every activity. It is also a significant fact that this organisation, which is built on the foundation of cooperation is personifying the doctrine “Together for All, Progress for All.”

**Magnificent Achievements of Dudhsagar**

- India’s Largest Cooperative Dairy
- Making mornings healthier for millions of Indians
- Following international standards for purity, safety, quality and excellence
- 1300+ Cooperative Societies
- 6 Lakh+ Milk Producers
- Daily capacity of 50 Lakh Litres, planning to extend the same to 70 Lakh Litres
- Aiming to take the annual turnover to 15,000 crores
- Completely computerised Milk Collection Centres
- Supplying Milk to the markets of Delhi through Dudhmitisagar and Dudhansagar Dairies
- Jagudan cattle feed plant having a capacity of manufacturing 10 Lakh kg of Sagardan per day
- Commendable efforts for Women Empowerment
- MIDFT - transforming milk collecting women into Dairy Technocrats
- 3 advanced and efficient dairy plants
- Beyond milk production and distribution, plans for the socio-economic development of milk producers
- Various innovative Social Welfare initiatives by Dudhsagar Research and Development Association (DURDA)
- Kankuba Pashupalan Vidyapith - enriching the Dairy industry with scientific and commercial knowledge

**Mehsana District Co-operative Milk Producers' Union Ltd.**
- Post Box No.1, Mehsana, Gujarat 384 002, India.
- Phone:(02762) 253201
- Fax:(02762) 253422
- Website: www.dudhsargardairy.coop
- Email: sagar@mehsanaunion.coop
An Untold Saga of Redefining Bihar’s Dairy Landscape over 3 Decades

Founded in 1983, Bihar State MilkCo-Operative Federation Ltd. (COMFED), established as an implementing agency of the Operation Flood program has aimed at reinventing processes and value-chain passed on from dairy producers to consumers. This has not only ensured the availability of quality milk and milk products to customers but also the creation of a self-reliant and vibrant rural economy in Bihar. COMFED ranks 6th among Milk Co-Operatives in India, on the basis of average procurement of 20 lakh Kgs per annum of milk per day through 12 lakh milk producers from 22971 village level Dairy Co-Operative societies.

COMFED’s success is derived from its strong technical input programme aimed at reducing cost of milk production through quality feed, Artificial insemination and Productivity Enhancement, and Better Health of Cattle.

Under the brand name “SUDHA”, COMFED has developed market in Bihar, Jharkhand, North East, UP, West Bengal and Delhi-NCR. It has 36 products in its basket with 102 pack sizes.

35 Lakhs children get milk through ICDS

22971 Dairy Co-Operative Societies
15000 Members trained per Year

12 lakh Milk Producers
Around 20 lakh litres of Milk Procured per Day

Over 46 different Milk & Milk Products with 114 SKU’s
Around 19,000 retail network

Bihar State Milk Co-operative Federation Ltd.
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