

CELEBRATING farmer-centric SUCCESSES

Across the nation, a slew of Farmer Producer Organizations are sowing the seeds of sustainable success

Agriculture has always been a lifeline of millions of farmers, and FPOs have the potential to give farmers better bargaining power and create a more transparent agri-market. With this in mind, the inaugural edition of Samunnati and The Economic Times Farmer Producer Organisations Summit & Awards brought India's agrarian heroes to the fore at a day-long event held in New Delhi on 18th October 2019.

This unique initiative saw experts from government and industry bodies delve into the many policy changes and innovations needed to attain sustainability and reap optimal benefits for farmer shareholders, in addition to analyzing existing industry FPO models, and providing financial solutions to farmers and arbitrators.



'Credit linkages are essential'

Neelkamal Darbari, MD, Small Farmers' Agribusiness Consortium, details why credit linkages are essential for FPOs everywhere

The lack of credit linkages are a major concern for FPOs, and it is vital we address it for the well-being of the ecosystem at large.

The government's intent to incubate 10000 FPOs across the nation, a major rise from the approx. 5000 FPOs in operation presently. If we see the infrastructure and ecosystem currently in place, the system is a tad incomplete. The lack of credit linkages are a major concern for FPOs, and it is vital we address it for the well-being of the ecosystem at large.

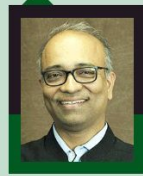
Doing so will ease credit flows for FPOs, and NBFCs and banks of all types should increase the ease of access to credit for FPOs for a variety of activities, not just crop loans. Until this happens, it will be difficult for an FPO to convert itself into a business enterprise. Every business has working capital requirements for their day-to-day business, so this is a missing link we need to create.

Team ET Edge

The Government has set a target of doubling of farmers' income by the year 2022, and farmers aggregations are an effective way of ensuring equitable, sustainable growth of livelihoods. Through Samunnati and The Economic Times FPO Summit and Awards, the stakeholders of the ecosystem have come together to ensure that Indian agriculture prospers, with its benefits reaped by all.

Approaching agriculture holistically

Anil Kumar SG, Founder and CEO, Samunnati takes us through how the organisation is making markets work for Small Holder Farmers



It is imperative to look at Agriculture in a holistic manner than trying to have quick-fix solutions.

Agriculture as we all know has uncertainties and seasonalities. In addition to monsoon, pest and disease incidence, paucity of credit as well as market fluctuations leave farmers vulnerable. Agricultural contribution towards the GDP of the country is also falling gradually. The policy strives to bring about a balance between price received by farmers vis-a-vis that paid by the consumers.

It is imperative to look at Agriculture in a holistic manner than trying to have quick-fix solutions. This is a sector that needs not just access to financial solutions but a combination of policy level interventions coupled with Market Link-

ages and advisory services. In other words all of us including the Government should focus on how to make "Markets work for Small Holder farmers"

Diversification of livelihoods of rural households in terms of farm, off farm and non-farm sectors is need of the hour. Cultivation of millets, which are climate resilient crops which can withstand the vagaries of weather and have great demand in the market as super foods could be promoted. Though aggregation of farm produce through Farmer Producer Organisations is a logical solution towards addressing the problem of fragmented land holding, one of the key issues in Indian

order to identify and plug inefficiencies at every node of the chain. The inefficiencies of the value chain could be addressed through Agritech innovations and platforms bringing various players of value chain together for accessing inputs, innovative financial services, governmentschemes, agricultural equipment on rental basis and so on.

Samunnati being an ecosystem player, was looking forward to a platform to bring all the players in the ecosystem. Our vision for this Summit was to showcase the power of collectivization - and this is not just at the FPO level, but at an ecosystem level by bringing in various stakeholders together to discuss what can be done to build better, stronger and sustainable FPOs to create an enabling environment for the farmers.

Creating an enabling ecosystem

Padmanand V., Partner, Grant Thornton India reflects on the challenges and growth enablers facing modern-day Farmer Producer Organisations



The challenges facing FPOs may be broadly considered in two contexts: first at the pre-formation stage, and subsequently at the post-formation incubation stage. At the pre-formation stage, the challenges are in mobilising like-minded farmers and bringing them into the fold of one legal entity which is usually a company or a society. Thereafter, the challenge is of mobilising equity contribution from farmer members. At the post-formation phase, the critical concerns are with regard to inadequate guidance from the concerned agencies to help establish an input shop, adopt good agricultural practices, set up a common service centre to undertake primary and secondary processing, and create storage to help them undertake price and risk hedging through the NCDEX platform.

The challenge at this stage is also to prevent distress sale, by establishing credit linkage, undertaking seed production activity, meeting statutory and legal and quality compliance requirements, establishing direct market connectivity, etc. Another critical constraint in the case of many FPOs is the absence of an enabling environment in terms of related state-level Act.

In order to address these challenges, there is a need for deployment of experienced service-providing professional insti-

"Agriculture needs to be seen as a principal economic activity"



Dr. Ashok Dalwai, Chairperson & CEO, Committee for Doubling Farmer's Income & National Rainfed Area Authority, delves into the growth of Indian agriculture

CI am personally very happy that this initiative has been taken because we are convinced that the march forward towards better life for the farmers of this country would rest a lot on the shoulders of Farmer Producer Organisations. We are all aware that agriculture over the last 70 years in India has done well in terms of growth, but has enabled the country to cross the hump of food deficiency.

However, farmers, the principal stakeholders of agriculture, are obviously not happy because their incomes are not enough to lead a dignified human life. India is one of seven hot spots around the world where agriculture began 10,000 years ago, and until we believe that food security is our prime concern, we will not be able to improve the lives of our farmers.

What we need today is to change the mindset and say that agriculture is an economic sector. It is not an addendum to the manufacturing sector, or an appendix to the services sector, but a principal economic activity. Only then will we be able to bring in farmers with passion and commitment to agriculture.

The collective cream of the crop

The inaugural edition of The Samunnati and The Economic Times FPO Awards saw India's agrarian heroes offer a chance for others to take a leaf out of their playbook

During the last couple of years, there has been a growing interest in promoting an enabling environment for FPOs so that they emerge as successful business enterprises in their own right. This is because the success of farmer organizations will virtually ensure the success of smallholder and marginal farmers in India, and FPOs will continue to blossom as an aggregator of aspirations for millions of farmers across the country.

This first-of-its-kind Summit and Awards sought to recognize enabling entities laying the foundations of future growth, and in the process create a gold standard of excellence that all can aspire to emulate. India's agrarian heroes were lauded in a grand ceremony, with a clutch of brands taking top honours as decided by an eminent jury.

North Region

- Best FPO Leader - Samridhi Mahila Crop Producer Company
- Best Governance Mechanism - Sakhi Mahila Milk Producer Company

West Region

- Best FPO Leader - Neshkala Crop Producer Company
- Best Governance Mechanism - Vikas Agro Producer Company

- Best Impact - Navjyoti Kishan Producer Company
- Best Performance - Vikash Path Farmer Producer Company
- Best FPO Leader - Holur Horticulture Farmers Producer Company
- Best Governance Mechanism - Shanti Sagara Horticulture Farmers Producer Company
- Best Impact - Ramanar Millets Farmers Producer Company
- Best Performance - Kumarreddy Progressive Farmers Producer Company

- Best Impact - Maikal Women Poultry Producer Company
- Best Performance - Avantika Aam Nirbher Krashak Producer Company
- Best FPO Leader - Bhangar Vegetable Producer Company
- Best Governance Mechanism - Nabajagan Global Farmer Producer Company
- Best Impact - Harit Kranti Aadiwasi Sahkari Samiti Maryadit Bagicha
- Best Performance - Damodar Agro Producer Company
- Best FPO Friendly Private Sector Company - ADM Agro Industries India
- Best FPO Friendly Private Sector Company - National Commodity and Derivatives Exchange

- Best NGO and Research Institute Supporting FPOs - Trutti Livelihood Partners
- Best NGO and Research Institute Supporting FPOs - Indian Gramenee Services
- Contributing to Outstanding Farmers' Skill Development Recognizes Social Education Economical Development Society
- Contributing to Outstanding Farmers' Skill Development Recognizes Krushak Mitra Agro Services
- Best Agritech Start-up - Dehaat
- Jury Special Award - Lamatan Ting-moo Organic Grower's Cooperative Society
- Special Award for Outstanding Contribution in Agri Value Chain (International) - Olam Agro India



Sameer Goel, MD, Coromandel International, tells us about the agri-tech advances that will shape the future of agriculture

“The 2nd green revolution will be driven by Agri tech”

With the government committed to doubling farmer incomes by 2022, what role will farm inputs play in the agriculture ecosystem?

>> As per a paper published by Niti Aayog in 2017, improvement in agricultural productivity, resource use efficiency, increase in cropping intensity and crop diversification were identified as the critical factors for doubling the farmer's income, that will contribute close to two-thirds of the increase. To attain these objectives, farm inputs will have to play a key role.

With the changing agriculture landscape, evolving consumer preferences and digital accessibility, the Indian agriculture is swiftly transforming. The farms input segment can contribute significantly towards promoting integrated crop management, improving soil health through balanced nutrition, developing technologically superior products, improving water efficiency through micro irrigation, offering farm mechanization and promoting sustainable farming practices.

As a leading Agri solutions provider, we, at Coromandel, are combining local knowledge with new research and tech-

nologies to deliver Integrated Crop Management solutions to improve farming practices. Our retail stores and agronomists ensure the last mile advisory and delivery of superior crop management solutions.

In addition to the agrinput interventions, improving output realization through efficient price discovery mechanisms, remunerative pricing, and other income support measures and minimizing risks through crop insurance and crop diversification activities will significantly enhance the commercial ability of the farmers.

How can we help our farmers attain optimum yields?

>> Presently, India ranks quite low in crop yield parameters compared to major agricultural economies.

With 40%-50% of the Indian soils deficient in essential plant nutrients including secondary and micro nutrients, there is a significant opportunity to improve farm health through customized solutions and delivery mechanisms.

Resource use efficiency will be another major factor that will shape future

farming practices. The pressure on resources like water and labour are giving way for efficient practices such as micro-irrigation and farm mechanization in the areas of transplanting, harvesting and spraying services.

In Crop Protection, India's per capita usage is amongst the lowest globally. With increased quality consciousness among the customers, we expect that the organized and R&D focused players with the ability to develop unique farming solutions to capture this space.

Biologicals like plant extract, microbial, organic manure and green triangle products are gaining increased attention among the consumers due to preference for sustainable and clean solutions.

With the increasing number of small and marginal landholdings, Corporate farming and Farmer Producer Organization (FPO) will support in land consolidation and improve access to technology and markets.

Coromandel, through its diversified portfolio of products and services, is working towards improving the farm yields. We are providing customized nutrient recommendations based on soil fertility & crop requirements, farm

monitoring advisory and farm mechanization services.

What are the innovations in Indian agriculture that excite you?

>> The futuristic digital farms will play at the intersection of different technologies. This will be based on swift digital penetration enabling 'Sense (Generating the data)-Infer (Analyzing the algorithms)-Act (Implementing through smart equipment)'. With the increased internet penetration in rural India, the data revolution is likely to bring transformative changes in the farming practices. In the past couple of years, we have experienced the power of digitization in case of Direct Benefit Transfer in Fertiliser, wherein 2.25 lakh point of sales machines were installed across the fertiliser value chain, improving the transparency and traceability. Further, the linkage of soil health cards with the DBT system is likely to promote the balanced nutrition, thereby improving farm productivity.

The Technology is beginning to play a significant role in shaping the way we operate. 'Product as a Service' will be

the future theme in times to come, and Coromandel is preparing to take the next step forward in this direction. We are using agri technology interventions in Crop and soil diagnostics, nutrient recommendations, farm mechanization services, knowledge dissemination and delivery mechanisms to improve the customer value proposition.

R&D is acting as a key enabler for creating unique product solutions to meet the farmer expectations. The first green revolution adopted in 1965 was driven by adoption of modern techniques and superior agri inputs and helped in quadrupling the food grain output to 284 million tons, making India self-sufficient for its food needs. I believe that the second green revolution is not far off, and data analytics and technology dissemination will have a big influence in nurturing the farms of the future.

As a leading agri solution provider, Coromandel is actively working towards drive farm productivity by developing technologically superior agri solutions and will continue to bring prosperity and smiles to millions of farmers.

Smart storage solutions for the Future



P.K. Wilson Purty, Chief, Marketing Integration & Innovation, Tata Steel, sheds light on innovative solutions that will impact India's agricultural landscape

The Innovent team of Tata Steel, which focuses on new business development, started work on a concept to prolong the shelf-life of onion during storage and to promote the trend of community storage by Farmer Producer Organizations (FPOs).

The team conducted extensive studies on the existing onion storage infrastructure. While the Onion crop contributes to only 2.5% of the total crop output, it accounts for 20% of all crop wastage in India. There is already a storage gap of 500,000 tons in the onion value chain and the storage losses are typically in the range of 35-40%. This led to the genesis of a Smart Warehouse with unique modular design that serves storage

needs from 400 to 4000 tons, maximizes natural air circulation, has automated environment control and reduces spoilage through an early warning system. The structural design uses Tata Structure hollow sections that give significant weight and cost advantages as compared to conventional structural solutions.

We will be partnering with GoDaam Innovations, which has developed the early warning system based on an algorithm built on trend analysis of gas patterns. The first smart warehouse will be set up by December 19 in Nashik for Sahyadri Farms, which is one of India's leading FPOs with more than 8,000 farmers registered with them.

Numerous start-ups and firms in India have begun to explore and enter India's agricultural landscape by coming up with new business models, which place utmost importance to the usage of technology like satellite imagery, weather prediction and improved infrastructure. These firms are also tapping government, insurers, banks, farming cooperatives, development agencies and even corporate social responsibility programs to create a viable business and help farmers.

Through the Smart Warehouse venture, Tata Steel has embarked upon the journey to transform the agri-infra segment and will continue to come up with innovative solutions in the rural frame.

NURTURING farmer value

Unupom Kausik, Deputy CEO, NCMIL takes us through the ways in which we can ensure food security and farmer prosperity



How can IT enabled storage and preservation services benefit the agricultural value chain?

>> The objective of storage and preservation services is to preserve the value which farmer has produced after 9 months of toil in the farm. It has been observed farmer incur losses when handling, transporting and storing their produce which leads to a failure to meet nation's need for the food.

These post-harvest losses can be minimized with improved food security through technology driven silo/warehouse storage facility. Through this initiative, NCMIL has been able to retain the high quality of stored grain and wards off attack from insects by monitoring the produce every point of time from end to end. At NCMIL warehouses, we offer modern, scientific, IT enabled, 24x7 digitally monitored Storage and Preservation services to farmers, traders, exporters & importers, food processors & manufacturers, commodity exchanges and financial institutions including banks.

Today, our footprint spreads across 18 states with approx. 175 warehousing locations while dealing with wide range of agri commodities. Warehouses are scientific storage structures especially constructed for the protection of the quantity and quality of stored products.

We at NCMIL have 750 dry storage warehouses operational at 175 locations with an aggregate capacity of more than 15 million mt. All the locations offer one stop solutions for all the stakeholders in the Post-Harvest value chain of Agricultural Produce.

India: A water-stressed nation

Kaushal Jaiswal, MD, Rivulis Irrigation India brings our attention to water scarcity, India's ticking time bomb



A UN report on water conservation published in March 2017 reveals that due to its unique geographical position in South Asia, the Indian sub-continent will face the brunt of the water crisis and India would be worst affected. By 2025, the report predicts, nearly 3.4 billion people worldwide will be living in 'water-scarce' countries and that the situation will become even more dire over the next 25 years. High quality seeds, good nutrition and best of crop protection techniques will fail to achieve their full potential if plants are not optimally watered. India accounts for about 10.5% of the world's arable land and 17% of world population but only 4% of the world's fresh water is available in India. Due to absence of integrated water resource management system and climate change India faces a persistent water shortage.

As per the international norms, a country is classified as water stressed and water scarce if per capita water availability goes below 1700m³ and 1000m³, respectively. With 1544 m³ per capita water availability, India is already a water-stressed country and is moving towards turning into water scarce. India has about 161 million ha of arable land. About 40% of the country's cultivable land lies in drought-prone areas/districts. The population of India is likely to be 1.6 billion by 2050, resulting in increased demand for water, food and energy.

This calls for infrastructure expansion and improved resource utilization. Agriculture is the biggest cause of water use and misuse of water. If we really want to correct the situation we need to address the irrigation first because this one sector alone consumes more than 80% of water. Here comes the role of water efficient irrigation methods. The challenge is to educate farmers about judicious use of water and equip them with micro irrigation systems and do it in a sustainable manner. The government of India along with various state governments trying it hard to increase the adoption of micro irrigation.

The study of NMMI was conducted by Global Agri. System and their Impact Evaluation Study report (June 2014) brings forth that the benefits have accrued on adoption of micro irrigation. Saving of irrigation water from 20 to 48%. Energy saving from 10 to 17%. Saving of labour cost from 30 to 40%. Saving of fertilizers from 11 to 19%. Increase in crop production from 20 to 38%. If water use efficiency does not improve, the country could suffer under water scarcity in the next 1 to 2 decades. Water situation in India need to be looked at more holistic manner. Apart from pushing the adoption of micro irrigation we must also review current trend of producing water intensive crops, such as sugarcane and rice in water scarce areas.

Enhancing Indian AGRICULTURE

Gurinder Singh Sehmbey, CEO, Staragri Finance expounds on the role the private sector can play in empowering the agri value chain



Take us through some of the ways in which we can empower our farmers to protect their produce and eliminate losses

>> Farmers need to move from immediate selling of agri produce to storage model. They could store their produce for a shorter duration in an agri warehouse, and for immediate cash needs avail commodity finance from banks.

Secondly, farmer procurement centers need to be established at key locations, which would engage with farmers in procurement of agri commodities. These centers would help ease the pressure on APMC mandis as well. Also, the traditional dysfunctional model in which mandis operate, leads to immense food wastage and losses.

Thirdly, with the advent of digitalization, farmers should directly connect with buyers. This can be done through a digital marketplace model. We have developed a digital marketplace mobile app, called Agribazaar which helps in connecting sellers with large number of buyers. Farmers can list their commodity on the app by stating certain specifications like quality, quantity, delivery location etc. The platform ensures end-to-end trade management including logistics,

payments and trade settlement.

Food security is a matter of national importance. How can we help ensure this?

>> We need adequate and high quality storage facilities in order to secure food and ensure zero wastage. Agri-infrastructure including agricultural markets, cold storage, warehouses etc. have not been developed, corresponding to the rising agricultural production. The pace of agri-infrastructure is far behind what is needed to improve the overall food system.

Lastly, by virtue of all these efforts of storage & infrastructure development, if we could ensure that each grain of food which is grown in the farmland is either stored properly or feeds someone, we shall be able to achieve our targets of food security.

INDUSTRY VIEW



DR. RAJEEV AHAL, Director, Natural Resource Management, GZ

"Climate smart agriculture that responds to recent climate dynamics can be better taken up through FPOs. By developing contingency plans and implementing crop water budgeting to tackle climate related shocks, different climate smart agri-business models among farmers should be demonstrated and scaled up in a cluster-based approach. Technical, institutional and financial innovations would have to be at the heart of such an approach."

Innovatively enabling agriculture

What are the innovations in Indian agriculture that excite you?

>> The digital intervention in commodity trading through e-portal facility is some of the competitiveness of the crop in commodity space. Now the farmers can take part and offer counterbids via an order-matching e-auction, a pioneering feature launched by NCMIL. MHA Yrd.com, which ensures clean, anonymous, online price discovery. Settlement will be online so that farmers receive their payment on time and in full, and all transactions are fully traceable. Price information of various grades across the country will be displayed for respective commodities by the respective auction agencies, helping the farmer make an informed choice. The objective is to improve the competitiveness of the crop in terms of its productivity, quality, sustainability and price to maximize value and ensure better returns for the farmer.

Financing has played an important enabler in growth of any industry and agriculture is no exception. Innovation in finance means alternate means of customer reach out through technology interventions, understanding the need and customizing the lending solutions. NCMIL Finance has equipped itself through its products & services by innovative ways even in traditional loans like WHR financing and multipurpose secured loans that will benefit sector at large.



Aryendra Kumar, MD & CEO, NCMIL Finance, speaks of the lending solutions that will benefit the agri sector at large