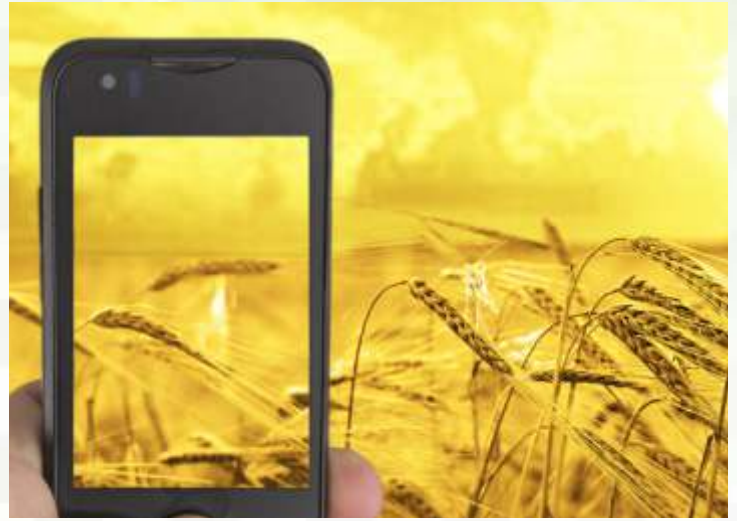




भारतीय कृषि एवं खाद्य परिषद्
INDIAN COUNCIL OF FOOD AND AGRICULTURE

AGRI STARTUPS IN INDIA





Agriculture is the largest private sector enterprise in India and millions of rural families earn their livelihood from agriculture. The sector contributes 18 percent to the GDP. At 157.35 million hectares, India cultivates in the second largest agricultural land in the world. With 20 agri-climatic regions, all 15 major climates in the world exist in India. India is the largest producer of spices, pulses, milk, tea, cashew and jute; and the second largest producer of wheat, rice, fruits and vegetables, sugarcane, cotton and oilseeds. Further, India is second in global production of fruits and vegetables, and is the largest producer of mango and banana. It also has the highest productivity of grapes in the world. India is among the 15 leading exporters of agricultural products in the world. Global exports in agricultural products were \$1,745 billion in 2013 (Source: WTO-International Trade Statistics 2014). India ranks the fifth largest exporter of agricultural products after the US, Brazil, China and Canada. While the US earned only \$30 billion from agricultural trade in 2013, India earned as high as \$23 billion, thanks to low imports.

Agriculture, has globally emerged as a big business having a significant social, economic and global footprint. The scenario is not different in India either. In fact Indian agriculture has emerged from the confines of rural set up to an enormous industry with market and price ramification so deep that it takes a while for an ordinary mind to sink into the nuances of the operation of the system. Agriculture is so entwined with the economy of the world's largest democracy, that a small dip or rise in the sector has far reaching consequences – economically and politically.

Agribusiness involves not one but many interlinked industries that complement and supplement each other's business making way for one of the biggest population in the world to survive. Agribusiness, a vast area from farm to fork is not as simple as it existed in the beginning of human civilization. A rather simple operation that involves raising food to selling them at markets or consuming at the farm gate has now flourished into multimillion enterprise where food from the farm travels across borders – district/state or international – to reach consumers diverse in ethnicity, culture or race. Such a wide coverage requires obviously a well connected and coordinated industry chain.

The canvas of agri business expanding, the situation is fertile for new ventures in agriculture. In the last two decades, powered by the Government policies and strong engagement of the industry and institutions, agriculture is rapidly evolving into agribusiness in terms of approach and structure. However, in the last one decade, the sector has been thronged by the stream of educated youth, fired by the ideas, passion and innovations to launch newer kinds of technology and business models to lift the face of agriculture from primitive to hi-tech one. These start-ups are providing missing links in the agri value chain and delivering efficient products, technologies and services to the farmers on one hand and the consumers on the other hand. According to Agfunder's AgTech Investing Report for 2016, around 53 Indian agritech startups raised Rs 313 million in funding. The report also reveals that India continues to be one of the top six geographies for agritech deals.

Opportunities Galore

With increasing mobile penetration and internet coverage, India is witnessing a slow but steady development of Start ups in the field of agriculture. As several sectors lay barren in agri segment crying for innovation, sky is the limit for agri start ups.

Agri-business counselling and guidance

This is envisaged to provide expert services and advice to farmers on cropping practices, technology dissemination, crop protection from pests & diseases, market trends, prices of various crops in the markets and also clinical services for animal health, which would enhance productivity of both crops and animals.



Agri-business counselling and guidance startups are equipped to provide information and guidance on availability of input and its supply, availability of farm equipment on hire and other services. Currently, Krishi Vigyan Kendras (KVKs) provide counselling and guidance at the farm level but the varieties and set of information required every day is difficult to come in the existing system. Disseminating farm information is an area capitalized by many new ventures. Startups like FreshWorld, Farmily, Awaaz De, Anulekh Agrotech and Sahaja Organics are disseminating farm information through mobile phones, bridging the gaps in agri retail supply chain, providing farmers with direct market access, besides weather, water and soil management services. Awaaz De offers a mobile voice service over mobile phones to small farmers in India, sharing sustainable agriculture practices. The team has initiated a mobile advisory service called Krishi Mobile, wherein agricultural experts send relevant and timely agricultural information covering topics like plant protection, agriculture extension, agronomy, horticulture and animal husbandry, enabling farmers to

access this information over the phone.

Production and marketing

Production and marketing of agriculture produce is another area where agri startups can concentrate. Indian supply chain is inefficient and inadequate. Farmers' share in the realized price is very less. Many startups have started to work in this area bringing the farmers closer to the consumers. For instance, Bengaluru-based startup Farmily provides micro-sites for farmers to display their farm produce and brings consumers and farmers on a single platform. It allows buyers to order or express interest in purchasing the farmer's produce on the Farmily platform, immediately upon which an SMS will be delivered to the farmer. Farmers can respond to the demand and will be able to negotiate and conclude deals online. Another Mumbai-based startup, Anulekh Agrotech, founded in 2012 by Sagar Bhansali, sells biochar-based (organic component) products.

Agriculture domain is constantly in need of high-quality inputs, fertilisers and agro-chemicals to improve productivity and yield. Startups could be planned to procure and arrange agri-inputs at the desired end user of this sector. Research shows that farmers are still not able to get agricultural inputs on time like seeds, pesticides, fertilisers and agro-chemicals. There is immense scope for agri-market environment analysis, segmentation of agricultural inputs, positioning of agri-products, designing of distribution channels and many other opportunities for startups.

Warehousing

Warehousing in India is a crucial segment in today's agriculture. Linked critically to food security and



agricultural growth, it has yet to develop fully commensurate with India's demand. Currently, the

country has a total agricultural warehousing capacity of around 91 million metric tonnes, to store and conserve large quantities with state agencies. They own 41 percent of the capacity and the balance distributed among private entrepreneurs, cooperative societies, farmers etc. Despite public sector warehousing and private players, including cold chains, millions in farm produce goes to waste every year. To prevent perishability, there is a strong need for startups at the local level to manage farm produce. Over the last two decades, the need for warehousing has also been felt in sectors other than agriculture, such as retail commerce. Warehousing is now seen as an integral part of the supply chain where goods are not only stored for safekeeping but also where other value processes are implemented, thereby, minimising wastage and costs. In fact, warehousing in agriculture is part of the larger agricultural ecosystem. However, just like agriculture, the warehousing market is local, unorganised and fragmented. Many small and medium landholding farmers use the services of public warehouses, also known as third party logistic companies. These warehouses help farmers by storing and, sometimes, in packing and shipping produce. Warehousing and cold chain co-operatives at the village level; cleaning, processing and packaging of vegetable and fruit by village women at the village level; collection, processing and packaging of milk in different quantities at the local level and building warehouses in co-operation with villagers can be developed within a public-private partnership model.

Agri-Tourism

Another unrecognized field that has immense potential is agri-tourism or eco-tourism. Agri-tourism captures multiple other business opportunities viz. handicrafts, food processing, hospitality and can have significant benefits for local rural areas. Few states in India like Rajasthan, Assam, Haryana, Uttar-Pradesh and Kerala have been trying to attract tourists to their villages and

agri-farms but there is still a lack of new entrants as business startups. Developing agri-tourism entrepreneurship in our country may improve economic backwardness in rural and agri-dominated areas. Future agri-tourism startups could provide customers with the opportunity to pick their own farm produce at a savings, to both the customer and the farmer who would normally have to pay for the labour involved. At the same time, this kind of start-up can offer visitors an education in agriculture including how crops are grown and which crops thrive the best in a given climate.

The rural technology business incubator in IIT Madras in Chennai has developed several startups that focus on things like recycling and waste management. Those include Kamal Kisan, a startup that provides farmers with low-cost, quality technology that fits into their existing supply chain, and RainStock, a startup that installs rainwater harvesting systems.

Other interesting startups include SkyMet, a firm that measures weather and the effect of climate changes on agriculture. Its services are affordably priced and they work with everyone from small farmers to the government. SkyMet is one of the few agtech startups that's raised funding in India, and its series b round of US\$4.5 million was one of the largest in the sector globally this year.

An increasing number of business startups are much needed to help farmers, across the agricultural cycle. The current union budget has very significant allocation of funds to develop the agriculture and allied sector. From ICT apps to farm automation and from weather forecasting to drones and from inputs retailing and equipment renting to online vegetable marketing, and from smart poultry and dairy ventures to smart agriculture and from protected cultivation to innovative food processing and packaging, innovations and technology driven startups are set to revolutionize the food and agriculture sector.





Policy Support

Realizing the potential of the startups in agriculture, the government has been actively supporting the movement through various schemes such as Skilled India, Start Up India, Stand Up India, MUDRA to ACABC scheme and Udaan.

Skill India

Skill India is a campaign launched by Prime Minister on 15 July 2015 which aims to train over 40 crore people in India in different skills by 2022. The main goal is to create opportunities, space and scope for the development of the talents of the Indian youth and to develop more of those sectors which have already been put under skill development for the last so many years and also to identify new sectors for skill development. It includes various initiatives of the government like "National Skill Development Mission", "National Policy for Skill Development and Entrepreneurship, 2015", "Pradhan Mantri Kaushal Vikas Yojana (PMKVY)" and the "Skill Loan scheme". The emphasis is to skill the youths in such a way so that they get employment and also improve entrepreneurship. The programme intends to provide training, support and guidance for all occupations that were of traditional type like carpenters, cobblers, welders, blacksmiths, masons, nurses, tailors, weavers etc. and on new areas like real estate, construction, transportation, textile, gem industry, jewellery designing, banking, tourism and various other sectors, where skill development is inadequate or nil.

The training programmes would be on the lines of international level so that the youths of our country can not only meet the domestic demands but also of other countries like the US, Japan, China, Germany, Russia and those in the West Asia. Another remarkable feature of the 'Skill India' programme would be to create a

hallmark called 'Rural India Skill', so as to standardise and certify the training process. Tailor-made, need-based programmes would be initiated for specific age groups which can be like language and communication skills, life and positive thinking skills, personality development skills, management skills, behavioural skills, including job and employability skills.

Udaan

Udaan is a Special Industry Initiative for Jammu & Kashmir in the nature of partnership between the corporates of India and Ministry of Home Affairs and implemented by National Skill Development Corporation. The programme aims to provide skills training and enhance the employability of unemployed youth of J&K. The Scheme covers graduates, post graduates and three year engineering diploma holders. The scheme is intended to provide an exposure to the unemployed graduates to the best of Corporate India and to provide Corporate India, an exposure to the rich talent pool available in the State. The Scheme aims to cover 40,000 youth of J&K over a period of five years and Rs. 750 crore has been earmarked for implementation of the scheme over a period of five years to cover other incidental expenses such as travel cost, boarding and lodging, stipend and travel and medical insurance cost for the trainees and administration cost. Further corporates are eligible for partial reimbursement of training expense incurred for the candidates who have been offered jobs.





Startup India

Startup India is a Government of India flagship initiative to build Startups and nurture innovation. Through this initiative, the Government plans to empower Startup ventures to boost entrepreneurship, economic growth and employment across India. The Government's Action Plan will help accelerate the growth of Startups throughout India, across all important sectors – in Tier 1, 2 and 3 cities, including semi-urban and rural areas – and includes promoting entrepreneurship among SCs/STs and women communities. Startup India will help boost entrepreneurship and economic development – by ensuring that people who have the potential to innovate and start their own business are encouraged – with proactive support and incentives at multiple levels. The tax exemptions, patent reforms, and incubation programmes under this scheme were aimed at encouraging budding entrepreneurs. A single point of contact, the Startup India hub, was also established for the entire ecosystem. As part of the Startup India Action Plan, the Indian government had set up a Fund of Funds with a total corpus of Rs 10,000 crore (\$1.6 billion) to support these companies over the next four years. This money is disbursed via the Small Industries Development Bank of India.

Start Up India is also an enabler and beneficiary, Government of India schemes, to support entrepreneurship among women and SC & ST communities. The scheme offers bank loans of between ₹10 lakh (US\$16,000) and ₹1 crore (US\$160,000) for scheduled castes and scheduled tribes and women setting up new enterprises. The scheme is expected to benefit atleast 2.5 lakh borrowers through 1.25 lakh bank branch network located across the country. The Stand-Up India portal provides a digital platform based on 3 pillars to support enterprises promotion among entrepreneurs from SC, ST and Women category through Handholding support, Providing Information on financing and Credit Guarantee.

Pradhan Mantri MUDRA Yojana (PMMY)

Providing finance is an important aspect of start ups. Pradhan Mantri MUDRA Yojana (PMMY) was a scheme launched for providing loans upto 10 lakh to the non-corporate, non-farm small/micro enterprises. These loans are classified as MUDRA loans under PMMY. These loans are given by Commercial Banks, RRBs, Small Finance Banks, Cooperative Banks,



MFIs and NBFCs. The borrower can approach any of the lending institutions mentioned above or can apply online through this portal. Under the aegis of PMMY, MUDRA has created three products namely 'Shishu', 'Kishore' and 'Tarun' to signify the stage of growth / development and funding needs of the beneficiary micro unit / entrepreneur and also provide a reference point for the next phase of graduation / growth.

The Ministry of Agriculture and farmers welfare, Government of India, in association with NABARD has launched a unique programme to take better methods of farming to each and every farmer across the country. This programme aims to tap the expertise available in the large pool of Agriculture Graduates. Committed to this programme, the Government is also providing start-up training to graduates in Agriculture, or any subject allied to Agriculture like Horticulture, Sericulture, Veterinary Sciences, Forestry, Dairy, Poultry Farming, and Fisheries, etc.

Those completing the training can apply for special start-up loans for venture. Agribusiness Centres would provide paid services for enhancement of agriculture production and income of farmers. Centres would need to advise farmers on crop selection, best farm practices, post-harvest value-added options, key agricultural information (including perhaps even Internet-based weather forecast), price trends, market news, risk mitigation and crop insurance, credit and input access, as well as critical sanitary and phyto-sanitary considerations, which the farmers have to keep in mind. As an integral part of this nationwide initiative, specialised training will be provided to Agriculture Graduates interested in setting up such a centre. Being provided free of cost, the 2-month training course will be offered by select institutes

across the country. Initiated by SFAC, and co-ordinated by MANAGE, the course comprises Entrepreneurship and Business Management, as well as skill improvement modules in your chosen areas of activity. Ceiling of project cost for subsidy has been enhanced to Rs.20 lakhs for an individual project (25 lakhs in case of extremely successful individual projects) and to Rs.100 lakhs for a group project. Depending on the type of venture you want to set up, and with a moratorium of up to 2 years, Agriclincs and Agribusiness Centre Loans can be repaid within 5 to 10 years as per easy installment plans. The rate of interest, margin and security on loans will be decided by the respective bank, as per RBI norms. Depending on your entitlement, you can even apply for margin money assistance.

CHALLENGES AHEAD

Startups inherently have a risk factor associated with it. Agriculture startups hence are more risk prone. Agricultural sector face additional challenges in terms of lack of awareness among startups about possible capital raising options, lack of understanding on part of the investor community as the sector does not have the glamour quotient associated with start-ups in sectors like technology, telecom, entertainment. Besides, the farmers who are the main customers for startups are also skeptical to new innovations. Selling products and technologies to farmers is a big challenge and it is one area where many startups have not figured out a successful model. Aligning with the farmers' needs and committing to improve productivity is not an easy task

Besides, regulations in this sector are complicated as agriculture is a state subject with a strong influence from the Central government. This sometimes creates confusion for various stakeholders. Though there is an increasing support from the government, there is limited consistency in the policies followed, which adds to the challenges.

But despite these challenges, entrepreneurs have been able to create innovative companies which are showing a significant traction. The companies are creating innovative solutions which will create a significant value to farmers, investors, entrepreneurs and all stake holders. Good thing about this sector is that the market size is very huge and the problems

faced can be solved. If any startup can solve even few of existing problems faced by the sector, it is possible to create multi-billion dollar opportunities.

Indian Council of Food and Agriculture (ICFA), the apex policy think tank, trade facilitation body and development enterprise for food and agriculture sector in India and serving as global platform for partnerships, once again has taken the lead in providing a platform to address the problem. ICFA's 1st All India Agri Startups Convention 2018 has been organized with the aim to bring all the startups in food and agri space on single platform for sharing of success stories and exploring business and marketing linkages, technology and financial tie-ups and partnership opportunities. The participation of Governments officials and institutions like NABARD, SIDBI, NSDC, SFAC, ICAR, CSIR, UNIDO, IFAD, banks and industry will help Startups and potential agri-entrepreneurs with desired policy changes, programs, business modelling and financial participation. The convention envisages to provide a platform for experience and knowledge sharing, synergies, connects and partnerships, collective and creative thinking to create pro-startups environment for ensuring success and sustainability of upcoming startups and attracting youth towards entrepreneurship in food and agri sectors.



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