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# AGRICULTURE TODAY

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# AIF

*Energizing Entrepreneurship*



# GLOBAL EXPERIENCE



**BOLOGNA 9 -13  
NOVEMBER 2022**



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## Energizing entrepreneurs..

Infrastructure plays a vital role in agriculture at every single step, from the supply of input to post-harvest management. Planned investment in agriculture infrastructure sector is important to enhance productivity and reduce post-harvest losses. This also results in capacity building and higher income generation. India suffers high post-harvest losses because of serious gaps in basic agricultural infrastructure facilities like storage houses, pack houses, farm level processing units and the absence of a prompt supply chain.

**Agriculture Infrastructure Fund was launched by the Hon'ble Prime Minister on August 9, 2020** for creating the required pre and post-harvest management infrastructure. AIF aims at providing medium/long term debt financing facility till 2025-2026 through 3% interest subvention and credit guarantee support on loans for creation of post-harvest management infrastructure and community farming assets.

Community farming assets eligible under Agri Infra Fund include: (i) Organic inputs production (ii) Bio stimulant production units (iii) Infrastructure for smart and precision agriculture (iv) Projects identified for providing supply chain infrastructure for clusters of crops including export clusters (v) Projects promoted by Central/State/Local Governments or their agencies under PPP for building community farming assets or post-harvest management projects.

Farmer communities such as PACS, FPOs, SHGs, JLGs, Multipurpose Co-op societies, Marketing Co-op societies and their federations are eligible for benefit under AIF for creation of the following post-harvest management infrastructures: (i) Supply chain services including e-marketing platforms (ii) Warehouses (iii) Silos (iv) Pack houses (v) Assaying units (vi) Sorting & grading units (vii) Cold chains (viii) Logistics facilities (ix) Primary processing centres (x) Ripening Chambers.

Since the inception of the scheme, **loans amounting to more than Rs 11,000 crores have been sanctioned for projects across the country.** The scheme has generated direct and indirect employment to numerous beneficiaries including farmers.

This edition of Agriculture Today showcases the contribution of key stakeholders, states and financial institutions in the successful implementation of the colossal AIF initiative. We also feature interesting success stories that have become role models for all potential and budding agripreneurs in India.

**Celebrating AZADI KA AMRIT MAHOTSAV, we feel delighted in presenting two progressive farmer MASCOTS of Agriculture Today Group – PRITHVI & BHOOMI.**

Happy Reading

*Maula*



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WAY TO GROW  
ASHWANI KUMAR MITTAL

I also grow Pulses  
in a small piece of  
land like you do, but how  
come you EARN more ?

Bought this with  
Easy AIF Loan to  
process my Produce and  
sell at higher Price.  
Extra Income by way of  
processing others'  
Produce..



**Adding value to Farm produce through Primary processing now made Easy !**



DR. M.J. KHAN

## INFRASTRUCTURE THE BACKBONE OF AGRICULTURE

**T**he overall income of the farmers is dependent on the infrastructural facilities available for farming operations. Unfortunately, there are critical gaps in agriculture that have decreased farm profitability. Absence of post harvest infrastructure, longer supply chains, presence of intermediaries and lack of institutional funding have contributed to lesser profit margins and sometimes even losses.

GOI's intervention through institution of 'Agriculture Infrastructure Fund (AIF) scheme' rightfully addresses the woes of the farmers. Launched with an objective to mobilize a medium-long term debt financing facility for investment in viable projects for post-harvest management Infrastructure and community farming assets through incentives and financial support, the scheme is set to improve agriculture infrastructure in the country. So far, the AIF portal has received 19000+ applications seeking subsidized loan worth Rs 13,400 crore under the Agriculture Infrastructure Fund (AIF) scheme. Out of this, a total of 10394 projects have been sanctioned under the scheme worth loan of Rs 7677 crore which includes in principle sanction by NABARD.

It is heartening to note that many states have enthusiastically come forward in utilising this scheme. Many success stories are emanating from the states of Andhra Pradesh, Madhya Pradesh, Uttar Pradesh, Karnataka and Rajasthan. While most of these states are leveraging their strong cooperatives network to take the lead, Madhya Pradesh stands out with the highest non-PACS applications.

The Department of Agriculture Cooperation and Farmers Welfare (DAC&FW) has evinced their special interest and with a host of initiatives is accelerating on-ground investments. Reaching out to FPOs and livelihood organisations, along with IFFCO, HAFED, NAFED & others, the department is keenly spreading awareness about AIF. The department has been regularly conducting reviews of states to monitor progress and promote cross learnings.

Building infrastructure under AIF through partnership with farmers, farmer groups and local entrepreneurs can be the next big step for India. Agriculture Infrastructure Fund will bring together the collective power of all stakeholders in the agriculture ecosystem. It will give India the much needed impetus to create an environment conducive for seamless functioning of agricultural activities. Our farmers should no longer suffer for lack of basic facilities for storing or transporting their produce. They should no longer undergo the torment of distress selling. Farmers have played their part by producing agricultural produce abundantly. Now it is time to back them up with suitable infrastructure.



## TO COMBAT MALNUTRITION, CENTRE, STATES MUST SUPPORT REARING OF MILK ANIMALS

**A**t the recently-concluded Commonwealth Games held in Birmingham, the sports persons from Haryana again outshone all others in the Indian contingent. Nearly 35 per cent of the total medals won by India were bagged by the Haryana athletes.

One of the major factors for the success of the sports persons from Haryana is their diet – primarily the consumption of milk and milk products. Dairy continues to be low-cost activity that can make a significant difference to family diet. The state governments must lay renewed thrust on dairy as a rural activity. One, the rural children – who benefit from growing up in clean air and healthy environs – shall be able to build more stamina with a milk-rich diet. Second, dairy activity shall also augment the income of the rural families.

Amongst the various welfare measures adopted by the state, facilitating each family to keep at least one milk animal can be encouraged. Smart families shall utilize this opportunity to increase the number of productive animals in their care. The welfare scheme to encourage each family to keep at least one cow or buffalo can be streamlined so that government assistance can be given in an organized manner.

The Ujjwala scheme of the Central government has been instrumental in reaching LPG to rural and under-privileged households. Similarly, the scheme to promote the rearing of milk animals can help rural families to earn more. This shall be effective utilization of the taxpayers' money to benefit the under-privileged children of our nation.



**RAJNI SHALEEN CHOPRA**



Pic Courtesy: NDDB



# WORLD HAS SEEN NEW INDIA RISING AFTER COVID OUTBREAK

HON'BLE PRESIDENT OF INDIA  
SMT DROUPADI MURMU

**P**resident Smt Droupadi Murmu addressed the nation on the eve of Independence Day. President Murmu is the youngest and first tribal to hold the top constitutional post.

Her ten top quotes from her address:

1) The day of 14th August is being celebrated as Partition Horrors Remembrance Day. The purpose of celebrating this day is to promote social harmony, human empowerment and unity.

2) On 15 August 1947, we cut the shackles of colonial rule and decided to reshape our destiny. While celebrating the anniversary of that auspicious day, we salute all the freedom fighters. They sacrificed everything so that we can all breathe in a free India.

3) We Indians proved skeptics wrong. Democracy not only grew roots in this soil, it was enriched too. India can be credited with having helped the world discover the true potential of democracy,

4) In most other well-established democracies, women had to wage long-drawn struggles to get the right to vote. But India adopted universal adult franchise right since the beginning of the Republic. India can be credited to have helped the world discover the true potential of democracy.

5) The Indian tricolours are fluttering in every nook and corner of the country. Great martyrs would have been thrilled to see the spirit of the Independence Movement coming alive again on such a massive scale.

6) Many great freedom fighters did their duty and passed on the torch of awakening leaving little trace of their heroic deeds. Forgotten for long were many heroes and their struggles, especially among the peasant and tribal populations. The government's decision last year to observe 15th November as 'Janajatiya Gaurav Divas' is welcome because our tribal heroes are not merely local or

regional icons but they inspire the entire nation.

7) By the year 2047, we will have fully realised the dreams of our freedom fighters.

8) The keyword for India today is compassion; for the downtrodden, for the needy and for those on the margins.

9) India's new-found confidence stems from the spirit of its youth, its farmers, and above all, its women. Gender inequalities are reducing and women are moving ahead, breaking many glass ceilings.

10) The world has seen a new India rising in recent years, more so after the outbreak of Covid. Economic success is leading to an ease in living too. Economic reforms are rightly accompanied by innovative welfare initiatives.

Incidentally, President Murmu is the first president to be born after independence.



# INDIA MUST BE A DEVELOPED NATION IN 25 YEARS

HON'BLE PRIME MINISTER OF INDIA  
SHRI NARENDRA MODI



## PM lays ground for next decade in 1-Day speech

Prime Minister Shri Narendra Modi addressed the nation from the ramparts of Red Fort for the 9th consecutive time on August 15, marking 75 years of India's Independence. He talked about the forgotten heroes of the country, panchpran, naari shakti, corruption and family dynasty, among other things.

PM Shri Modi said that India will be a developed nation in the next 25 years. The PM said, "The citizens are thankful to Mahatma Gandhi, Netaji Subhash Chandra Bose, Babasaheb Ambedkar and Veer Savarkar who gave their lives on the path of duty."

### PM'S PANCHPRAN PLEDGE

During the speech, which he started after unfurling the Tricolour, PM Modi talked about the five pledges calling it 'Panchpran' to help India become a developed

nation in the coming years. "In the coming years, we have to focus on Panchpran (5 promises). First, to move forward with bigger resolves and a resolve of developed India, second, to erase all traces of servitude, third, to be proud of our legacy, fourth, to focus on our strength of unity and fifth, to fulfill the duties of citizens with honesty, which should be done by the Prime Minister and Chief Ministers as well."

"I urge youth to dedicate the next 25 years of their lives for the nation's development. We will work towards the development of entire humanity," he added.

### INDIA IS THE MOTHER OF DEMOCRACY: PM MODI

Asserting that India is the mother of democracy and diversity is its strength, PM Modi said, "Despite challenges faced post independence, nothing could hamper the zeal of Indian citizens. This soil

has power; despite many challenges, India did not stop, did not bow down and kept moving forward. Our nation has proved we have inherent strength coming from our diversity, common thread of patriotism makes India unshakeable. I have dedicated myself to fulfilling Mahatma Gandhi's vision of empowering the last man in the queue."

He also said that the way the world is viewing India is changing.

### PM PRAISES 'HAR GHAR TIRANGA' CAMPAIGN

Talking about the 'Har Ghar Tiranga' campaign, the PM said the nation's enthusiasm for 'Tiranga' seen in the last three days could not have been imagined by many experts and that it symbolises the nation's reawakening. "'Har Ghar Tiranga' is an example of an entire nation coming together to celebrate the spirit of our glorious country," he added.

# AIF WILL BE A GAME CHANGER

— SHRI NARENDRA SINGH TOMAR

Hon'ble Minister For Agriculture and Farmers Welfare, Govt Of India



\* Union Agriculture Minister Shri Tomar says Agriculture Infrastructure Fund (AIF) a good opportunity for states to make agriculture prosperous

\* Continuous efforts being made for the last eight years under the leadership of PM Modi to upgrade the Agriculture sector, Shri Tomar adds

\* Shri Tomar Presents Agri Infra Fund awards



“Continuous efforts are being made for the last eight years under the leadership of PM Shri Modi to upgrade the Agriculture sector. KCC has been increased from Rs 7 lakh crore to Rs 16.5 lakh crore. Banks are offering simple loan facility. Work is being done to form 10,00 FPOs...”

LEFT: Union Agriculture Minister Shri Narendra Singh Tomar lights the ceremonial lamp

BELOW: Shri Tomar presenting the award at the AIF Award Ceremony



Union Minister for Agriculture and Farmers Welfare, Shri Narendra Singh Tomar, has said the Agriculture Infrastructure Fund (AIF), launched by the Prime Minister Shri Narendra Modi under the AatmNirbhar Bharat campaign, is scaling new milestones. Underlining the role of AIF in bridging the Agri Infra gap by empowering agriculture and villages and boosting private investment, Shri Tomar said the Agri Infra Fund has been brought to increase agricultural productivity, increase agricultural

exports, make agriculture sector employable and attract the new generation. Shri Tomar was addressing the Agri Infra Fund Awards ceremony in New Delhi on July 30.

“In the AatmaNirbhar Bharat campaign, more than Rs. 1.5 lakh crore are being invested in Agriculture and allied sectors. This should be used by the state governments and banks together in the

**SIGNIFICANCE OF AGRI INFRA FUND**

Agri Infra Fund, under the ambitious AatmaNirbhar Bharat Package as a dedicated central scheme providing medium-long term credit facility for creation of post-harvest management infrastructure and community farming assets, will celebrate its second foundation day in August. This facility comes with financial support by way of three percent Interest subvention from Government and credit guarantee by CGTMSE up to Rs 2 crore. This scheme can be converged with most of the existing Central schemes in terms of combination of benefits of different schemes. This has immensely benefitted stakeholders in the agricultural ecosystem - Farmers, Agri-entrepreneur, FPO, SHG, JLG, PACS, APMC, Startups, Central Marketing Cooperative Societies and State Agencies.

As of now, there has been sanction of 13,700 projects, costing investment of around Rs.17,500 crore with a sanction of Rs 10,131 crore loans. On an average 30 agriculture infrastructure projects per day are being sanctioned under the scheme all over the country in shape of warehouses, assaying units, primary processing units, custom hiring centres, sorting & grading units, cold store and cold chain projects, bio-stimulant manufacturing facilities, seed processing units, etc. which will have huge impact in changing the agriculture landscape of the country.

development of the Agriculture sector. This is a great opportunity for the States to fill the gaps in funding agricultural infrastructure. State governments should use it to make Agriculture strong and prosperous, which will make the country develop at a faster pace," he said.

Shri Tomar said that agriculture sector is important for India. "The primacy of Agriculture has proved itself from time to time. Agriculture helped India come out of the Covid crisis and made a significant contribution to the economy at a time when other sectors were badly affected. Today India is one of the leading countries in the world in terms of agricultural produce," said Shri Tomar.

"If you want to move forward in this field, then you have to identify the challenges and overcome them. There are 86 percent small farmers in the country, who own less than two hectares of land, while 55 to 60 percent of the country's population is dependent on Agriculture. In such a situation, continuous efforts are being made for the last eight years under the leadership of the Prime Minister Shri Narendra Modi to upgrade the Agriculture sector. KCC has been increased from Rs 7 lakh crore to Rs 16.5 lakh crore. Banks are offering simple loan facility. Along with this, work is being done to form 10,00 FPOs so that the area under cultivation is increased, the quality of production is improved and the farmers can get good price for their produce," he added.

Speaking on the occasion, Minister of State for Agriculture and Farmers Wel-



**Shri Kailash Choudhary, Minister of State For Agriculture and Farmers Welfare, GOI**

fare, Shri Kailash Choudhary dwelled on the role of banks and government agencies in empowering farmers and making the nation self-sufficient. Prime Minister Modi took a bold step by paving easy farm loans as he scrapped the need for collateral, and said that Government of India will stand guarantee, highlighted Shri Choudhary.

In his address, Secretary, DA&FW,

Shri Manoj Ahuja, called for improved monitoring to make the loan process faster in line with the promptness of the portal based loan approval mechanism.

Joint Secretary, DA&FW, Shri Samuel Praveen Kumar made a detailed presentation on the two year-journey of AIF. While showering accolades on the bankers and state governments for their contribution, he urged them to reinvigorate their teams to make the on-going NOBOL (Nationwide One Branch One Loan) Campaign a grand success.

On the occasion, Shri Tomar gave away the awards under various categories to honour Banks and State Governments for their valuable contribution in financing under the Central Sector Scheme of 'Agriculture Infrastructure Fund'.

Among the Best Performing Banks, State Bank of India was awarded as numero uno followed by Punjab National Bank and Bank of India. In the second category where banks were awarded for their valuable contribution, Bank of Baroda followed by Central Bank of India, Canara Bank and Kotak Mahindra Bank were honoured. In the Target Achievers Category during the Campaign, awarded banks were Punjab National Bank, Ca-

**In the State category, Madhya Pradesh was adjudged the best performing state, whereas Andhra Pradesh was recognised as best performer in sanction of PACS applications. As the best performer in faster disposal of PACS applications, Karnataka was awarded and Rajasthan was declared the Rising State under AIF.**



**Shri Manoj Ahuja, IAS, Secretary, Ministry of Agriculture and Farmers Welfare, GOI**

nara Bank, HDFC Bank, Bank of Maharashtra, Punjab & Sind Bank and Karnataka Bank. Among the Best Performing Regional Rural Banks, Madhya Pradesh Gramin Bank followed by Madhyanchal Gramin Bank, Maharashtra Gramin Bank, Baroda Rajasthan Kshetriya Gramin Bank were awarded.

In the State category, Madhya Pradesh was adjudged the best performing state, whereas Andhra Pradesh was recognised as best performer in sanction of PACS applications. As the best performer in faster disposal of PACS applications, Karnataka was awarded and Rajasthan was declared the Rising State under AIF. NABARD Consultancy services, the

Knowledge Partner for this Scheme was honoured for the laudable contribution in carrying forward the Scheme.

Shri Tomar and General Manager, Bank of India also handed over the sanction letter to one of the Beneficiaries of Drone project. Later, the award-winning bankers and states and successful beneficiaries shared their experience with the audience.

Additional Secretary Sri Abhilaksh Likhi, senior officials from the Ministry and government officials from various States, top executives and senior officials from banks, NABARD, NABCONS and beneficiaries of AIF scheme and others participants joined the event.



## **AIF AWARD CEREMONY**

**Date: Saturday, 30 July 2022**

Venue: A.P. Shinde Hall, NASC Complex, PUSA, Dev Prakash Shastri Marg, New Delhi

### **1. Award to Best Performing Banks**

1. State Bank of India
2. Punjab National Bank
3. Bank of India

### **2. Award for valuable contribution by Banks**

1. Bank of Baroda
2. Central Bank of India
3. Canara Bank
4. Kotak Mahindra Bank

### **3. Award for Campaign period Target Achievers**

1. Punjab National Bank
2. Canara Bank
3. HDFC Bank
4. Bank of Maharashtra
5. Punjab & Sind Bank
6. Karnataka Bank

### **4. Award for Best Performing Regional Rural Banks**

1. Madhya Pradesh Gramin Bank
2. Madhyanchal Gramin Bank
3. Maharashtra Gramin Bank
4. Baroda Rajasthan Kshetriya Gramin Bank

### **5. Awards for States**

1. Best performing state- Madhya Pradesh
2. Best Performance in sanction of PACS applications- Andhra Pradesh
3. Best Performance for faster disposal of PACS applications - Karnataka
4. Rising State- Rajasthan

### **6. Contribution for Scheme Implementation- NABARD Consultancy services**

# AIF IS EMPOWERING FARMERS

The days are gone when the photo of the Indian farmer was projected to the world in torn clothes sitting in a parched land looking up to the sky. We have made rapid strides in agriculture. Our whole thrust is now focussed on our Prime Minister's vision to build an AtmaNirbhar Bharat by empowering our farmers.

Many initiatives related to food processing industry, agriculture machinery, solar power for agriculture are being undertaken. Banks can help to change the picture of the villages. Today when the country is working so hard on financial inclusion, it is very important to unlock the productive potential of the citizens. We have seen the time when banks had a complex system of loans and advances that borrowers used to leave the project mid-way out of vexation. Our Government under the dynamic leadership of the Prime Minister has

undertaken historical reforms during the self-reliant India campaign which have opened the doors of new possibilities in the country.

Today the banks of India can play a big role in giving new energy and a big push to the country's economy in making India self-reliant. I consider this phase to be a major milestone in the banking sector of India. The concept of zero balance accounts is not alien anymore. Bank procedures have been simplified. Earlier bank borrowers were greying their hair with the complex system and searching for a guarantor or collaterals for securing loans. This is being taken over by Government itself in shape of guarantee cover for Banks.

For enhancing farmers' income, the emphasis is on adopting a multi-dimensional strategy, which includes increase in production through creation of resources for improving irrigation; effective use of inputs; reduction of post-harvest losses; value addition; reforms in agriculture marketing; minimizing risk and providing security and assistance, and promotion of allied activities. The Government has initiated several developmental programmes, schemes, reforms and policies that focus on higher incomes for the farmers like Formation and Promotion of 10,000 FPOs along with necessary financial support under AtmaNirbhar Package (Agriculture).

Farmers need to be made the monarchs of their own decisions regarding when to sell their hard earned produce, machinery required to sort and grade the produce, storage requirements and preventing the post-harvest decay.

As an answer to all these issues, Hon'ble Prime Minister launched this laudable initiative of AIF two years ago, that intends

to strengthen the foundations of Indian agriculture with a huge investment of Rupees One lakh crore. Banks and Financial Institutions need to take this initiative to greater heights in mission mode to transform Indian agriculture. As a cushion to farmers, interest burden will be reduced by three per cent Interest subvention and lenders need not bother as loans would be given CGTMSE cover, such fees to be borne by the Government itself.

Apart from creation of various infrastructural units, this scheme embraces hi-tech initiatives like use of Drones for the crop-protection, variable rate technology for pesticide and liquid fertilizer applications, mapping of water spread area, water sampling etc. Artificial Intelligence can be used for timely monitoring of crop growth, health and managing it with enhanced input use efficiency. Drone and AI technology can be used to monitor near real-time crop health.

Such an innovative scheme needs to be promoted in the larger interest of the country. This would enable small farmers and start-ups, PACs, FPOs to build more infrastructure near the farm gates which in turn will strengthen Indian agriculture and villages. Agriculture will be more profitable and attractive for the new Generation who fiddle with their handsets, looking for hi-tech opportunities.

While observing the Amrit Mahotsav of Independence, it is the bounden duty of bankers in the country to empower the rural youth and motivate the urban youth to reach to the villages and set up new start-ups and build affordable infrastructure.

My best wishes to all of you!

Jai Hind

Kailash  
Choudhary

Kailash



**Shri Kailash Choudhary**

Minister of State for Agriculture and Farmers' Welfare, GOI

## AIF Boost

# Next-Gen Innovations

It is a matter of immense joy to know that the celebrated monthly Agriculture Today is bringing out a special issue on the flagship national scheme, Agri Infra Fund. The occasion cannot have been more apt than the second anniversary of this epoch making programme, launched by our visionary Prime Minister in 2020.

I extend my sincere good wishes to all those stakeholders and everyone involved in this nation building success story in strengthening the agriculture infrastructure of our economy. The dynamic leadership of our Government has conceptualised so many out of box thought products that are shaping Indian agriculture in a big way and making India's enviable stand in the comity of nations. One such concept was this creation of the state of the art agri-infrastructure in rural areas that has the potential of obliterating the considerable Losses arising due to inadequate post-harvest infrastructure.

Other innovative programmes have helped our country double the organic cultivation area in recent years, and farmers have encouragingly reduced reliance on chemical inputs. This area also has a bearing on Agri Infra Fund in so far as this scheme emphasises setting up of organic inputs production and bio stimulant production units under viable community farming assets build up to support smart and precision agriculture. This is bound to positively impact the agriculture vista of India to compete with other advanced nations.

Agri Infra Fund will create business opportunities in agriculture by encouraging innovation, entrepreneurship and start-ups and will generate sustainable employment in agriculture and other related sectors. It is on record that large parts of employment from the relatively unorganised construction sector and the unorganised manufacturing sector moved into agriculture. As per estimate, nearly 60% of the employment in manufacturing industries is in the unorganised sector and labour from here migrated into agriculture in times of distress like the pandemic that we encountered. To implement smart farming in India, our government has been actively encouraging the adoption of cutting-edge technology and supporting innovation in agriculture. Farming has been transformed and now is suffused with Artificial Intelligence and Machine Learning, the Internet of Things.

The advent of AIF in agriculture will definitely push next-Gen innovation in technologies like drones and IoT. This will go a long way in disrupting the agriculture space with lots of employment

generation opportunities for the youth of our country.

The transformative state of India's agriculture is aptly demonstrated with the growth of Agri exports as International markets have been accessible to farmers, and exports of Agri products are encouraged with the appropriate facilities. It is heartening to note that India's coffee exports have increased twelvefold since 1960-61 and exports surpassed USD 1 billion in 2021-22. The remarkable jump in volume and value is the outcome of export-oriented policies effected by the Government of India.

In this transformative time of New India, prosperous agriculture is going to set a new dimension of business for the farmers across the country. Could anyone think that the Indian farmers would avail of affordable air transportation facilities and logistics support to ferry perishable agri-produce and access national markets? This is the new India. Again, our government has started the Digital Mandi, e-NAM so that farmers have enough options to get the right price for their produce to sell.

I am sure that the admirable initiative taken by the Agriculture Today magazine in promoting the ambitious AIF programme will create widespread awareness amongst the people of the country. Let's use this opportunity to resolve to work together and put our efforts, be it big or small to change the world of our Annadaata-the Farmers of new India.

**Smt Shobha Karandlaje**

Minister of State for Agriculture and  
Farmers' Welfare, GOI



# AIF FOR FAST, STEADY GROWTH

**A**vailability of modern agri-infrastructure and tiding over the crisis of its deficit is crucial to attaining and sustaining fast and steady growth that can transform Indian agriculture which is the need of the hour. In this regard, it is gratifying to note that there is much demand for Agri Infra Fund (AIF), which more objectively demonstrates the rational and thought process that went into developing this ambitious scheme.

Agriculture Infrastructure Fund scheme's advancement to newer heights is enormously aided by bankers at the ground level in coordination with the officials from state governments. From last two years' experience, we can see how much effort has been put to make the portal a platform for seamless operation. The number of registrations at around 38000 clearly vouches for it. The application

process is extremely user-friendly and easy to utilise. CPMU has been making efforts to assist banks, states and beneficiaries in hand holding and in clarifying queries both in terms of scheme guidelines and portal operational issues.

Since we have attained self-sufficiency in food production through technology-driven agricultural methods, there is no longer a food shortage in India. But taking this forward, we must create a sustainable infrastructure to curtail post-harvest losses.

In the absence of enough post-harvest infrastructure, our accompanying losses are colossal. Estimated losses in India due to poor connection between infrastructure and farmers range from 15-20% of yield. We ought to build robust value chains which will enhance farm income and create adequate job opportunities. Hence there was an imperative need for post-harvest infrastructure all over the country to address these issues.

It is an undisputable fact that the rate of agricultural and economic growth is accelerated by fast-expanding infrastructure, which increases farm output and decreases farming costs. Infrastructure is known to play a crucial role in generating stronger economic multipliers when agricultural growth occurs.

We have to set up and strengthen the PMUs in States, which can host conclaves and other stakeholder interaction programmes at the district and block levels in order to raise knowledge of the scheme, attract new beneficiaries and make this

initiative widespread.

Banks need to put efforts at simplifying monitoring process of loans in consultation with state governments and SLBC so that the time span of getting various clearances gets reduced, making the loan process simpler and sanction process faster.

AIF has tremendous potential for generating employment while opening up income opportunities in rural and semi-urban areas. Beginning from the production of organic inputs and bio-stimulants to actual farming under smart and precision agriculture and processing to development marketing value chain and access to advanced markets, there are manifold employment opportunities. The promotion of state-of-the-art technology like drones and IoT in agriculture by AIF will further boost the growth of Indian agriculture.

By adopting intensive techniques, employment can be generated directly during the building and upkeep of such infrastructure. Additionally, a greater reliance on local resources like labour and agricultural products will have backward and forward connections that will further boost the regional economy. Indirectly, sustainable assets thus created will provide perennial access to opportunities for work and income.

Private participation as a supplementary initiative for creating agriculture infrastructure in India will go a long way to accelerate growth and to meet the future challenges.

Centre and state governments and banks need to come together in a big way with futuristic initiatives to transform Indian villages through more agri-finance, infrastructure development, technology-driven innovations and encouraging rural entrepreneurship to solve emerging challenges in agriculture and generation of employment avenues.



**Shri Manoj Ahuja**

IAS, Secretary, Ministry of Agriculture & Farmers Welfare, GOI



# KOTAK MAHINDRA BANK'S AIF JOURNEY

**W**e can track India's progress as a country through the eyes of the Agricultural Sector. After the Green Revolution, India transformed itself from a food deficient country to a food surplus nation.

Indian agriculture has developed by leaps and bounds and so has the supply chain stakeholders who are engaged with the system. Indian agriculture covers a gamut of produce right from staples like wheat, rice, maize, corn to specialized horticulture crops, i.e., mango, mushroom, cashew, etc. The advances in Indian agricultural infrastructure are largely responsible for the large scale production of these items.

But there are some areas in the agricultural domain which are lacking in infrastructure, due to which there has been a significant loss in the value realization of agricultural produce that adversely affects the small and marginal farmers.

Our Honorable Prime Minister Shri Narendra Modi and Honorable Minister of Agriculture Shri Narendra Singh Tomar, analysed these losses and formulated a scheme in August 2020 to develop infrastructure for Post-Harvest Management. This is called the Agriculture Infrastructure Fund (AIF). The major objective of this plan is to develop an infrastructure at the farm level – for the farmers and by the farmers. With the help of these schemes, farmers will be empowered to turn into Agripreneurs.

The objectives of the AIF are to mobilize a medium & long term debt financing facility, for investment in



viable projects relating to Post Harvest management infrastructure and community farming assets, through incentive and financial support.

Under this scheme, the beneficiary is eligible for availing 3 % interest subvention, up to Rs 200 lacs of term loan facility. These projects are also backed by Govt. Guarantee through CGTMSE Trust.

## Our Efforts For The Success Of AIF

As we celebrate #AzadikaAmritMahotsav, we look back at Kotak Mahindra Bank's contribution to this project. To ensure a timely and effective contribution to this emerging phase of Indian Agriculture, Kotak Mahindra Bank Ltd (KMBL) proactively launched this scheme across the country. In the span of a year, we have trained our designated team regarding the scheme benefits, analysed the market needs for this Scheme, and

showcased the benefits to the target market that can be availed.

It has been a year since KMBL operationalised this Scheme across India. Today the Bank has disbursed more than Rs 425 crore of limits to various Agripreneurs and farmers under this Scheme. It makes us proud to say that more than 26% of beneficiaries are women agripreneurs. As a banking institution, we thank the Ministry of Agriculture (DAC & FW) to have given us an opportunity to partner with them, and help evolve this new and bright phase of Indian Agriculture. KMBL is looking forward to contributing more to this Scheme and playing a significant role in further development of Indian Agriculture and Farmers.



## About the AUTHOR

**Mr Rushabh Gadhi is Product Manager, Kotak Mahindra Bank Ltd**

VISION AND SUPPORT

# AIF

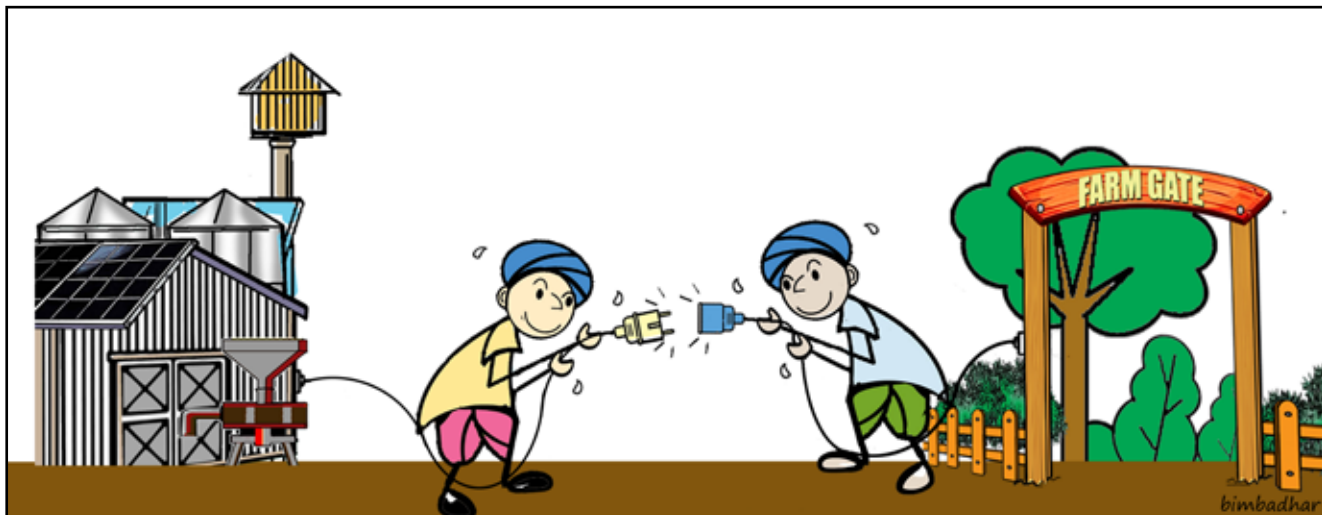
# A GROWTH DRIVER



## About the **AUTHOR**

Mr Samuel Praveen Kumar is Joint Secretary (AIF), Department of Agriculture And Farmers Welfare, GOI. At the ministry, he holds the portfolios of Agricultural Extension, Agri Infra Fund, Investments, and Market Price Support. Prior to his current role, he has worked for nearly 2.5 decades on post-harvest management of food grains at the Central Warehousing Corporation (CWC)





**A**griculture and allied sectors house 70% of the rural population, 86% of which are small and marginal farmers. This makes more than 3/4th of the population dependent on agriculture for livelihood which is disrupted and constrained by multiple challenges such as fragile, non-sturdy growth, high rate of borrowing, macro-economic risks, and climatic uncertainties. And this unyielding situation essentially necessitates that infrastructure plays its vital role to serve as a sustaining linkage to “build back better”.


Infrastructure need not be construed as an economic ambrosia, but ought to be an integral part of strategy. Strategic investment in infrastructure lays the groundwork for sustained growth through economic development, employment generation, enhanced productivity, which, in turn, improves income and standard of living. The returns from infrastructure development far transcends these tangibles to translate into institutional growth.

**Access to finance and infrastructure**

- enables farmers to diversify into high value crops,
- enhances access to developed domestic and international markets,
- augments investments, and



**fun FACT**



I listen to Illayaraja Tamil songs or watch tennis matches to bust my stress. If I get time, I play Badminton with my daughters

- strengthens functioning of the value chains
- guarantees gainful employment to rural youth

Agriculture Infrastructure Fund (AIF) is designed as a building block for agriculture infrastructure financing with a focus on enhancing the livelihood of the farmers by transforming the rural infrastructure landscape. It was introduced with a vision to transform the agri-infra architecture, curtail burgeoning post-harvest losses and a mission to provide



holistic support, and upgrade the rural ecosystem and finally to improve quality of life of farmers.

### Plugging Infrastructure Gaps

AIF is a one stop solution for all existing infrastructure gaps for promoting investments in the agriculture sector. It envisages a medium-long term debt financing facility of INR 1 lakh crore launched under the Aatm Nirbhar Bharat Package in 2020 for creation and development of farm-gate infrastructure.

This user-friendly portal based solution is a transparent procedure that is entirely digitized involving minimal approval period. This reduces the hassle of being at the mercy of financial institutions and exploitation of unorganised usurious money lenders.

The credit guarantee for loans up to INR 2 crore under Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) and interest subvention of 3% for 7 years gives ample opportunity time to farmers to utilise the funds and ensure a cyclical capital availability, while providing comfort to Banker in collateral-free lending.

### Benefits For Farmers

The benefits under the scheme are extended beyond individual farmers to

- Agricultural Produce Market

Provision for smart and precision agriculture and innovations like AI and IOT, Remote sensing, Drone technology and production of Organic inputs and Bio stimulants under this scheme adds wings to agriculture to scale newer pinnacles of excellence.

- |                                     |                        |                |
|-------------------------------------|------------------------|----------------|
| Committee                           | • State sponsored      | Public-Private |
| • JLGs, SHGs, and State Agencies    | • Partnership Projects |                |
| • State Federations of Cooperatives | • Agri-Entrepreneur,   | FPOs and       |



Federation of Farmer Produce Organisations (FPOs)

- Joint Liability Groups, Self Help Group and federation
- Centrally and Local Body sponsored Public-Private Partnership Project
- Marketing and multipurpose Cooperative Society
- National Federations of Cooperatives,
- Primary Agricultural Credit Society and Start-Ups.

Availability and Accessibility to modern infrastructure reduces drudgery and standardizes quality of produce. It also assures future cashflows and provides entrepreneurial opportunities for the farmers. This makes them competitive and enhances the value and demand of the produce in international markets.

With investments in logistics infrastructure, farmers will be able to sell in the market with reduced post-harvest losses and a smaller number of intermediaries. This will make them more independent to decide on the time to sell and improve their access to the market.

### Provision For Precision Agriculture

Provision for smart and precision agriculture and innovations like AI and IOT, Remote sensing, Drone technology and production of Organic inputs and Bio stimulants under this scheme adds wings to agriculture to scale newer pinnacles of excellence.

The most interesting feature of AIF Scheme is its convergence with other central and state schemes to enhance the support and disbursements. Multiple states have performed exceptionally well, with Madhya Pradesh and Andhra Pradesh ruling the charts, closely followed by Maharashtra, UP and Rajasthan.

Leveraging the convergence feature of the scheme, recently a SoP has been developed for integrating AIF with PMFME and PMKSY schemes of MoF-PI which will give a further push to AIF scheme. Additionally, the scheme has enhanced the disbursements under pri-



## The credit guarantee for loans gives ample time to farmers to utilise the funds and ensure cyclical capital availability, while providing comfort to bankers in collateral-free lending

ority sector lending, the funds under which were previously underutilized as banks can now lend at lower risk.

### Multiple Benefits For Farmers

Outlay under the scheme will promote formation and financial support to FPOs, JLGs, SHGs and promote entrepreneurship amongst women helping them benefit from aggregation. Consequently, it will encourage access to input, technology, and marketing of their produce.

With a dedicated funding source,

entrepreneurship and representation of women would increase significantly. Women who were hitherto discouraged from borrowing due to lack of land ownership would push for innovation and access new technology. AIF will help bring their contribution to agriculture to the forefront. This, in turn, will be the next step towards promoting Women empowerment, gender parity, taking the government a step closer to achieving Sustainable Development Goals such as no poverty and zero hunger amongst others.

This broad-based supportive ecosystem would make agriculture more sustainable and lucrative for private partnerships. The government is also consistently engaging in dissemination activities like conducting statewide roadshows and conclaves in spreading the word about the scheme and clubbing this with various extension initiatives to handhold the farmers and other stakeholders for encouraging them to avail of this opportunity of affordable financing facility which will definitely bring about a transformative change in the agriculture landscape of our country.

# Working for Rural Development



**A** career spanning three decades in a finance centric world, Dr Harsh Kumar Bhanwala has brought about momentous changes in the rural hinterlands of India. The former Chairman of NABARD is currently the Executive Chairman, Capital India Finance Limited (CIFL) since August 2020 where he has initiated a key shift in business focus areas of the organization to SME, Retail and other priority sectors. He played a quintessential role in development of digital platforms for online lending and improving digital outreach through domestic remittance facilities and forex remittance from India and building tie up with entities providing facilities for inward remittances.

## **A Keen Student**

Born on 27th November 1961 in Kasandhi, a village in Sonipat district of Haryana to Smt. Priyamwada and Shri Bhaader Sen Shashtri, Harsh Kumar Bhanwala completed his schooling from Moti Lal Nehru School of Sports, Sonipat, Haryana.



With both parents being teachers, education was high on Harsh's agenda and securing a job was important. "Dairy Technology was a job-oriented programme and for a middle-class family, this mattered

**Dr  
Harsh Kumar  
Bhanwala**



## tête-à-tête with *Anjana*



a lot. Further, it was part of agriculture and rural economy which was close to my heart,” reminisces Dr Bhanwala. Graduating from NDRI, Karnal, thus became a natural choice for him. In 1985, he did his Masters from IIM Ahmedabad. He also secured his Ph.D. in management from MDU, Rohtak in 2010.

### **An Illustrious Career**

Dr Bhanwala had occupied several positions of repute in his long and eventful professional life. He was CMD/Executive Director of India Infrastructure Finance Company Ltd (IIFCL); Senior Vice Presi-

### **Accolades and Recognitions**

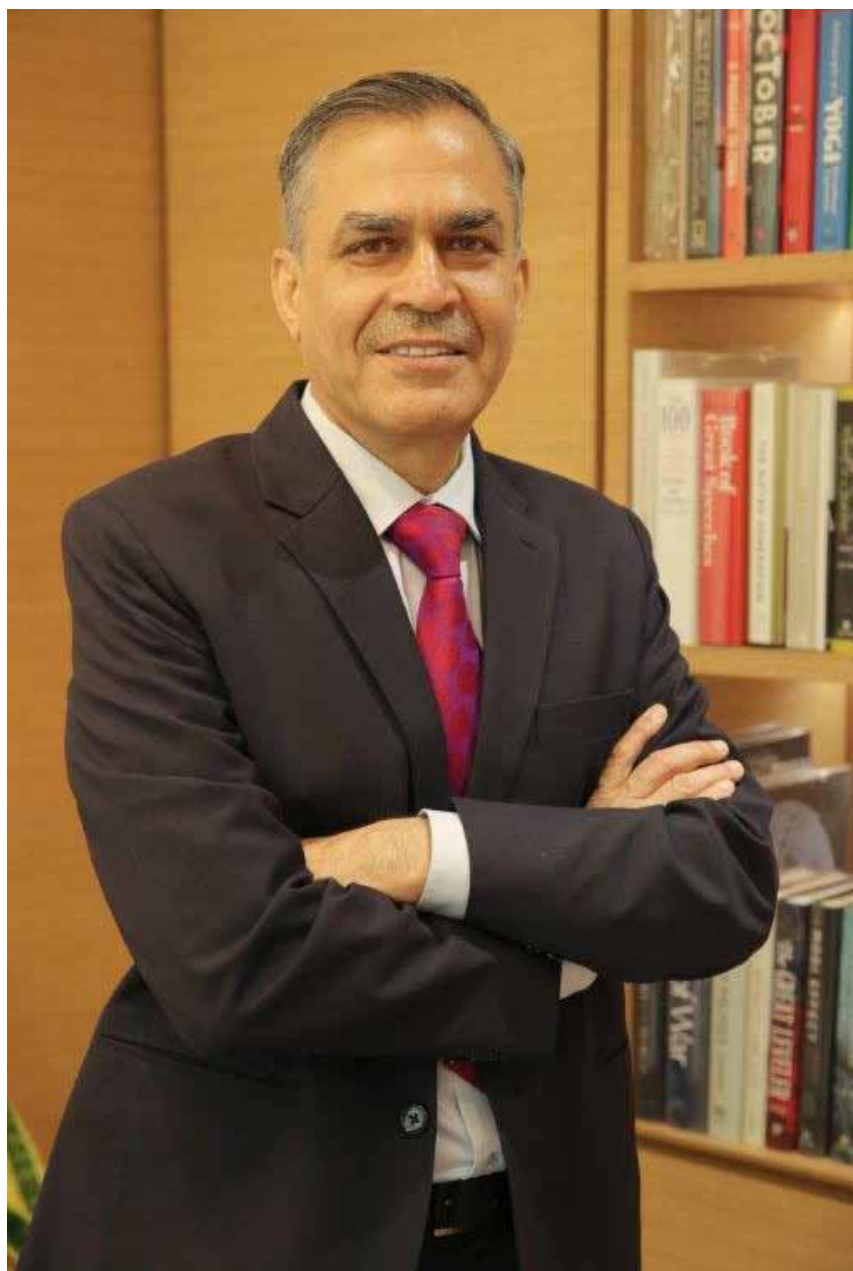
- Honorary Degree of Doctor of Science was awarded by Tamil Nadu Agricultural University, Coimbatore as well as by Indian Council of Agricultural Research Central Institute of Fisheries Education (ICAR-CIFE), Mumbai.
- Featured in a book titled “Shine Bright” by well-known author Rashmi Bansal – featuring narrative relating to six leaders who have transformed organisations for making social impact while acting as Entrepreneurs.
- Since October 2017 elected as Vice-Chairman of Asia-Pacific Rural and Agricultural Credit Association (APRACA) steering and aggressively advocating for inclusive finance that focuses on small farmers in the Asia Pacific region. APRACA has a membership of 80 member institutions in more than 20 countries comprising mainly of central banks, agricultural banks, development banks, commercial banks, apex organizations and federations of financial institutions, rural development institutions, institutes, and non-government institutions in the Asia Pacific region. Co-hosted the 6th World Congress on Rural and Agricultural Finance held at New Delhi on 12 & 13 November 2019.
- Panelist during the ‘Conference on Financial Inclusion’ organised by Reserve Bank of India.
- Panelist in the Session on ‘Rural Productivity, Raising the Human Development Index’ of 3rd SBI Banking & Economic Conclave.
- Keynote speaker at the panel discussion on “Transforming Economies” organized by “Chicago Council on Global Affairs” in Washington, USA.
- Chaired the session on ‘Supporting Implementation of State Action Plan of Climate Change’ at Conference of Parties (COP 21), Paris, France. CoP is the top policy-making forum of the United Nations Framework Convention on Climate Change (UNFCCC). NABARD is the only National Implementing Entity (NIE) in India for Green Climate Fund (GCF).
- Invited Speaker in the ‘24th World Congress’ organized by the World Savings and Retail Banking Institute (WSBI) which is a global association of Banks on ‘Digitization and Financial Inclusion: The 5th Element’ with a focus on SHG Digitization at Washington, D.C., USA.
- Invited by IoT Next to deliver Inaugural address, “Reimagining Agriculture with disruptive IoT – NABARD Innovation and Start-ups” at TiE IoT Forum at Bangalore for Agri entrepreneurs.
- NABARD was crowned with “Best PSU Issuer on Electronic Bidding Platform” award by National Stock Exchange of India and was awarded for “Outstanding performer on BSEBOND platform” by Bombay Stock Exchange of India for its outstanding performance in issuance of debt securities through electronic bidding platform.

dent of IL&FS Water Ltd.; MD of Delhi State Cooperative Bank Ltd. and Sr, Officer in NABARD & CGM, IIFCL.

He recently headed the Technical Group appointed by SEBI on the Social Stock Exchange. He was also a member of the Expert Committee on the Primary (Urban) Cooperative Banks of the Reserve Bank of India constituted post the amendment in the Banking Regulation act 1949. This will further impact financing for development initiatives.

Dr Bhanwala was also the Chair-

**Dr Bhanwala took up various initiatives with the Centre and with the state governments for solving problems of rural India and enhancing the income of the farmers**



man of NABARD Consultancy Services (NABCONS) and NABVENTURES Limited. He had also been the Chairman of Governing Council, Bankers Institute of Rural Development (BIRD), Lucknow. He was Member of Board of Management, Deposit Insurance & Credit Guarantee Corporation (DICGC); Governing Board, Institute of Rural Management, Anand; Governing Board, National Institute of Bank Management (NIBM), Pune and Board of Management, National Cooperative Development Corporation (NCDC), New Delhi. He was also elected as the Vice Chairman, Asia-Pacific Rural and Agricultural Credit Association (APRACA) and Chairman of India Infrastructure Finance Company (UK) Ltd. (IIFC-UK)

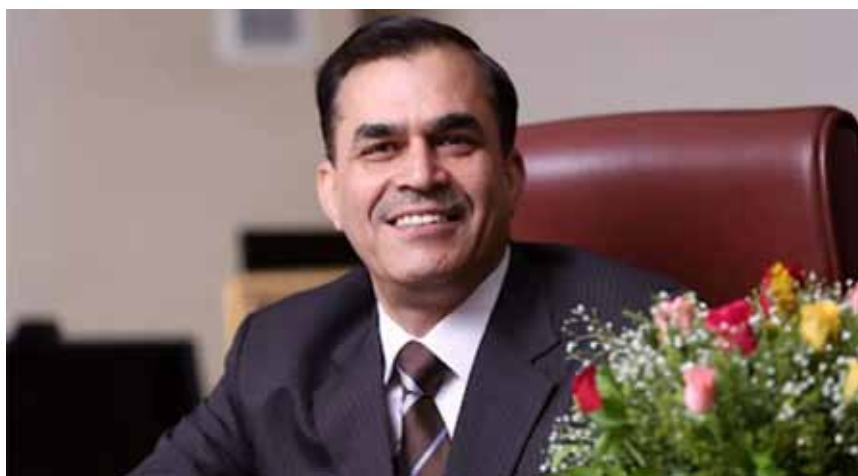
### **Areas of Expertise**

Competent in envisaging the holistic and sustainable development of an area/organisation, Mr Bhanwala is an expert in conceptualising, developing, upscaling and grounding ideas to solve problems confronting rural areas/ organisations. Besides providing unwavering leadership for organisational transformation, he has been instrumental in inculcating strategic thinking and institution building within the organisation by adopting and





**During Dr Bhanwala's tenure as Chairman, NABARD, the largest development and financial institution of the country, the total assets more than doubled from Rs. 2.32 lakh crore as at the end of Dec 2013 to Rs. 5.32 lakh crore as at the end of March 2020**



problems related to rural development and rural infrastructure. While being the Chairman and Managing Director/Executive Director of IIFCL, Dr Bhanwala was actively engaged in the development of a product on Credit Enhancement for Infrastructure Projects which aimed at enhanced investment to these projects thereby building the Bond Market. While involved with IL&FS Water Ltd. (IWL), he specifically initiated and led the initial development of the two water/wastewater projects in Paradip and Ludhiana respectively.

### **Family Life**

Happily married, Dr Bhanwala has two daughters and a son. His wife Mrs. Poonam Bhanwala is the Principal of the largest postgraduate college for women in Haryana, i.e. the Government College of Women, Rohtak. A family man, Mr Bhawala has always been interested to work for changes in rural life/ economy and being part of a team engaged in the same. His childhood days in the village are still fresh in his memories. "Living close to rural population and going for a walk or playing in agriculture fields was a treat in itself. Remembering those care-free community life days are refreshing even now," he smiles.

leveraging IT. With a sound knowledge of working of rural financial institutions, he has always expressed his keenness in creating organisational ability to team up with innovators and start-ups in the Agtech Space.

During Dr Bhanwala's tenure as Chairman, NABARD, the largest development and financial institution of the country, its total assets more than doubled from Rs. 2.32 lakh crore as at the end of Dec 2013 to Rs. 5.32 lakh crore as at the end of March 2020. This resulted in enhanced on-farm and off-farm investments in rural areas and brought the organization to limelight.

This instilled renewed vigor within

NABARD and resulted in high employee morale and a sense of confidence in the workforce. He took up various initiatives with GOI and the state governments in solving problems of rural India and enhancing income of the farmers.

Dr Bhanwala conceived, guided, and got completed a first of its kind large sample survey of 44,000 rural households that dovetailed aspects of financial inclusion and livelihoods in the country - NABARD Financial Inclusion Survey (NAFIS). The survey resulted in filling the empirics-based policy making space.

Dr Bhanwala's tenure resulted in positioning NABARD as a premier go to organization to work out solutions for



AN EXTRA EFFORT TOWARDS BRIDGING THE INFRA GAP

# THE U.P. INITIATIVE

- ⇒ U.P. ranks first in the percentage of loans disbursed out of sanctioned projects among PACS
- ⇒ U.P. provides 3% additional interest subvention to the beneficiaries of the A.I.F. scheme
- ⇒ U.P. ranks second in the country in distribution of loans to PACS
- ⇒ U.P. ranks second in the approved projects category
- ⇒ 100+ PACS godowns constructed in U.P. under A.I.F. scheme
- ⇒ Wide coverage of 75 districts under A.I.F. scheme
- ⇒ PACS provided margin money under Uttar Pradesh Atma Nirbhar Krishak Samanvit Vikas Yojana

The Agriculture Infrastructure Fund has arrived on the socio-economic scene of India's development as a much needed catalyst of growth. It is here to ensure that India's underexplored agrarian sector witnesses a spike in the number of agri-entrepreneurs, thus capitalizing on the potential of the sector as well as providing an impetus to India's employment scenario.

Uttar Pradesh stands tall in its performance under the AIF scheme. Although, like most states we have a long way to go

before we accomplish all our targets in this post-COVID economy, Uttar Pradesh has been targeting the 'micro beneficiaries'. They are at the last rung of the economic food chain. In this way, we hand out loans to the truly needy. The state government has also added another feather to its cap by adding customized innovations to the scheme.

### UP Atma Nirbhar Krishak Samanvit Yojana

In order to make the AIF scheme more effective, the Agriculture Department of

the Government of Uttar Pradesh implemented the Uttar Pradesh Atma Nirbhar Krishak Samanvit Yojana on December 7, 2021. Under this scheme, agricultural entrepreneurs, FPOs, PACS, market committees, state agencies such as FCI, SWC, PCF, and CWC etc. are included.

Under the scheme, 3 percent additional interest subvention is being provided by the state government to the eligible beneficiaries mentioned above. Rs 50 lakh has already been allotted to SLBC for the additional 3 percent interest subvention. Refinance to Primary Co-

operative Credit Societies is permissible at 4 percent interest rate, which will be made available to the societies through District Co-operative Banks, which in turn are reimbursed. Under the GOI scheme, there is a provision of 03 percent interest subsidy through NABARD. Thus, loan is available to PACS at only 01 percent interest.

A loan of Rs 16 lakhs is being given to PACS for 100 MT godowns. The remaining 4 lakh will have to be arranged by the societies themselves as margin money. Due to poor economic condition of the PACS, the Agriculture Department, Uttar Pradesh has also provided an amount of Rs.14.32 crores to 358 PACS as margin money in the year 2021-22 through Uttar Pradesh Atma Nirbhar Krishak Samanvit Yojana.

Under the Agriculture Infrastructure Fund scheme, a total of 3064 applications worth Rs 1416 crore were received in the state. Out of 3064 applications received, 572 applications worth Rs 416 crore were rejected by Central PMU. PACS has received applications on the portal of about 1249 PACS under the Multi Service Center Scheme of NABARD. Proposals for 688 PACS, costing around 109 crores, have been approved. Out of this, Rs 37.91 crore have been distributed to 530 PACS. In the distribution of loans to PACS, Uttar Pradesh ranks second in the country.

### Second Highest Performing State In Approved Project Category

With a total of 682 applications received by Scheduled Commercial Banks under the State Agricultural Infrastructure Fund in the Non- PACS category, which collectively cost Rs 720 crores. Out of these, 320 projects with an amount of Rs 271.70 crores has already been sanctioned; and 239 crores for 272 projects has already been disbursed. This makes Uttar Pradesh the second highest performing state in the approved project category.

Another interesting feat under AIF is the development of PACS as Multi Service Centers (with extensions including Packaging Unit, Custom Hiring Centre,



#### About the AUTHOR

**Mr BL Meena, IAS, is Principal Secretary, Department of Cooperatives, Govt of UP; Registrar of Cooperative Societies (Department of Cooperatives, Govt of UP & State Nodal Officer, Agriculture Infrastructure Fund Scheme, UP**

Ripping Centre, Sorting and Grading Unit, Primary Processing Unit and Oil Spillers Unit are being installed in the PACS) to ensure diversification and increased via-

bility of the PACS in the current economic sector.

### The Road Ahead

Looking ahead, Uttar Pradesh is looking at further innovations in its own approach as well as the extended cooperation with all stakeholders including NABARD, Central government, and Scheduled Banks. Along with the development of the AIF portal in Hindi and the increased dovetailing of schemes especially in the agriculture and horticulture departments, AIF in Uttar Pradesh has much to look forward to.

We must understand that there is an inherent need to cultivate and then applaud the increased sensitization in scheduled banks needed for the success of projects like AIF. It must be noted that it is not enough to entertain and encourage the entrepreneurs that are coming to the banks, but it is also necessary to reach out to the farmers and the youth in the Indian hinterland and motivate them to set up agri-businesses. It is through these collective efforts that the potential of agrarian sector in India shall be fully realized.

# HE SEEDS IT RIGHT

FROM A YOUNG BOY IN A FARMING FAMILY IN A SMALL VILLAGE IN TELANGANA STATE TO BECOMING A GLOBAL SEED LEADER

Rajni Shaleen Chopra, Group Executive Editor, Agriculture Today Group writes about the inspirational story of Indian Seed Scientist Dr Keshavulu Kunusoth



**D**r Keshavulu from India has taken charge as the President of the International Seed Testing Association (ISTA) for the period 2019-22 at the 33rd ISTA Congress-2022 in May 2022 in the historic Egyptian city of Cairo. It is a significant milestone in the history of ISTA. Dr Keshavulu is the first person from the Asian region to be elected as President of the international organization on seed science and technology.

## ABOUT ISTA

ISTA is an intergovernmental organisation, established in 1924 in Zurich, Switzerland. It is recognised as a key organisation for seed and food security worldwide working with a mission to support global agriculture and sustainable food production for food and nutritional security worldwide. ISTA has more than 400 personal/associate members, who are competent and energetic seed scientists and analysts from 83 countries/distinct economies.

ISTA is working with a vision of 'uniformity in seed testing worldwide' and with the objectives of developing, adopting, and publishing standard procedures for sampling and testing of seeds; promoting the uniform application of these procedures for the evaluation of seeds moving in international trade, and promotion of Seed Science research & education across the globe, thereby making a valuable contribution to the global food

security towards achieving Zero Hunger by 2030 (SDG Goal #2 of UN).

### First Person From Asia To Head ISTA

It is a matter of pride and honour that Dr Keshavulu is the first ever person from the Asia region – that too from India – to become the President of an internationally acclaimed seed organisation with a mission to disseminate seed knowledge through modern technologies and innovative approaches toward sustainable seed as well as food production systems. Dr Keshavulu is a highly reputable leader in the seed sector and agricultural development. His career accomplishments have made him a sought leader in the field.

**Dr Keshavulu wishes to accomplish the mission of ISTA and spread the knowledge of quality assurances for seed sector development and access of quality seed to the farmers in the world in general and Asia region in particular**

### Farmer's Son Becomes Global Seed Sector Icon

Dr Keshavulu's story, from being a young boy in a farming family in a small village in the Warangal district of Telangana State of India to becoming a global seed sector icon, is indeed inspirational. Belonging to a small farming family, he was well acquainted with the challenges in the farming sector right from his childhood.

With a passion and intention to serve the farming community, Dr Keshavulu chose agriculture as a career choice. He acquired Bachelor's and Master's degrees in Agricultural Sciences from Acharya N G Agriculture University, Hyderabad and a Doctorate degree in Agriculture with a specialisation of seed technology in Agricultural Sciences from Tamil Nadu Agricultural University, Coimbatore. He also



Dr. K. Keshavulu taking over charge as the President of the ISTA, Switzerland in the presence of Hon'ble Minister for Agriculture, Telangana State Sri S. Niranjan Reddy in Egypt

### STERLING ACHIEVEMENTS

For the first time in India, Dr Keshavulu introduced a completely digitised seed certification system in order to ensure transparency, accountability, and timely services to the seed growers as well as the seed industry for making timely placement of seeds in the market and expanded to other states as well. In addition, he also introduced a seed traceability system to ensure the genuinity of seed tags to farmers, law enforcement authorities, and seed traders by enabling real-time verification through QR codes on seed certification tags.

Dr Keshavulu has provided strategic vision and leadership to the Telangana State Seed Certification Authority for domestic and OECD seed certification and Telangana State Seeds Corporation, both the organizations resulted in exemplary growth in seed production, certification and marketing, and supplying for more than 10 states of India and also exporting to other countries. He is instrumental in initiating the International OECD Seed Certification for the first time in India and facilitated the seed exports under OECD seed schemes to different countries from India, which is notable progress in the history of the Indian Seed Industry.

Dr Keshavulu played a key role in establishing State-of-the-Art Seed Testing Laboratory with international (ISTA) accreditation in Hyderabad, India to support domestic and international seed business. It is the second of its kind in India under the public sector. This is one of the largest seed testing laboratories and has obtained international (ISTA) accreditation with the objective to cater to the needs of the seed industry for domestic and promote international seed trade to support agricultural food production all over the world.

undertook post-doctoral research at the University of California, Davis, USA on Advanced Genetic and Molecular Basis of Seed Quality with the Young Scientist fellowship (BOYSCAST) of GOI.

Dr Keshavulu's professional career began as a seed scientist. He contributed extensively to seed research and other aspects including seed biology, seed

production, storage technology, and plant protection technologies, and also established an exclusive Department of Seed Technology at the University, Hyderabad, Telangana, India. As a Professor/Principal Scientist and University Head at the State Agricultural University, Dr Keshavulu made significant contributions in the areas of seed biology, plant genetic re-

*Effective, inclusive, and resilient seed systems are indispensable for transferring modern plant breeding breakthroughs to the farmers' fields towards achieving sustainability in agriculture production*



**Dr Keshavulu Kunusoth is Director, Telangana State Seed & Organic Certification Authority, Department of Agriculture & Cooperation, Government of Telangana and President, International Seed Testing Association (ISTA)**

sources, production, certification, quality control, varietal identification, and storage technologies towards enhancing food production, besides the teaching of various courses in Agricultural Sciences. He also mentored several postgraduate students specializing in seed science and technology and executed several special seed technology assignments at the national and international levels.

In addition, Dr Keshavulu has carried out several advanced researches and operated international projects in India and abroad as a strategic member partner of the USAID for the Development of Seed Systems in the East African and South Asian Countries on seed sector development. He has been supporting FAO's efforts towards the development of effective seed systems in developing nations as one of the members of the FAO Scientific Advisory Panel. He was instrumental in initiating Indo-African seed platform by organising capacity building cum seed industry interaction meetings in collaboration with FAO under the South-South Cooperation for seed professionals from African and Southeast Asian countries.

**Globally Admired Seed Scientist**

Dr Keshavulu is a globally admired seed scientist, known for his distinct services towards sustainable agriculture and seed systems development. He has over 25 years of professional experience and expertise in agriculture development, seed systems, management, research, policy



**Dr. Keshavulu taking over charge as the Vice-President of ISTA (2019-22) in Hyderabad, India.**

support, regulations, and building capacities and capabilities for enhancing agricultural food production. He had worked in various capacities in the Government of Telangana, State Agriculture University, and ISTA. He made significant contributions to seed research and production, formulation of seed regulatory policies, and international seed cooperation and was also involved in policy decision-making at the government level.

Dr Keshavulu is currently holding the position of Director, Telangana State Seed & Organic Certification Authority and additional responsibility as the Managing Director, Telangana State Seeds Development Corporation, Hyderabad, and contributing to sustainable agriculture development and food production by making available high-quality seeds to the farmers. Dr Keshavulu has taken sev-

eral initiatives towards strengthening the organisation with innovative approaches that have led to the exemplary growth of the organisation in terms of volume of seed certification both qualitatively and quantitatively, revenue growth and improved infrastructure and capabilities of the human resource resulting in modal certification authority in the country.

**National, International Capacity-Building Programs**

Dr Keshavulu has organised several national and international capacity-building programmes in collaboration with OECD, ISTA, USAID, and Indo-German Project on Seed Sector Development for both public and private seed industries. He is a member of several national and international seed committees and renders advisory services on seed policy-related as-



His Excellency the Governor of Tamil Nadu, Shri R.N. Ravi, presents the Prof. M. S. Swaminathan Award to Keshavulu for the year 2022.

pects. He has published more than 100 research articles and abstracts, books, technical bulletins/ descriptors, reports, training manuals, etc., in nationally and internationally reputed publications.

Dr Keshavulu has been associated with ISTA since 2007 and actively involved in ISTA activities, organized and attended several ISTA workshops/meetings, he was a member at large in the ISTA Executive Committee for the year 2016-19 and the Vice-President for the year 2019-22.

It is noteworthy to mention that as a Chair, Dr Keshavulu was instrumental in the successful organization of the 32nd ISTA Congress-2019 in Hyderabad, India for the first time in Asia. He has been recognized as a successful seed scientist and received several awards including Global CEO Award for the year 2018, the Seed Policy Leadership Award in 2020, and Dr M S Swaminathan Award for Environment Protection in 2022 in recognition of his outstanding contributions to the field agriculture in general and seed industry in particular.

India has emerged as the fastest-growing seed market in the world which has estimated to be reached about 5.5 billion USD in 2021 and is expected to reach 11.3 billion USD by 2027, exhibiting a growth rate (CAGR) of 12.5% during 2022-2027. The seed industry in the country is expected to develop a signifi-

**Dr Keshavulu's vision is to further strengthen the Indian seed industry in terms of the development of adequate infrastructure for seed multiplication and testing, improving capacities and reinforcement of seed quality assurance systems, and increasing quality seed access to small holder farmers**

cant rate due to the growing demand for food and feed, and as farmers begin to purchase commercially produced seeds because of all-year-round availability and more consistent quality, in addition to using farmer-saved seed. The driving factors of seed trade in the country are favourable climatic conditions, increased demand for seeds from other countries, the presence of major players, and adaptation of the latest technologies.

**Contribution To Sustained Growth Of Indian Seed Industry**

Dr Keshavulu has made a significant contribution to the sustained growth of the Indian seed industry besides enhancing farmers' timely access to high-quality seeds, enhancing seed trade opportunities, strengthening seed quality assurance systems, and connecting In-

dian seed enterprises worldwide through OECD, ISF, UPOV, FAO, SAARC, and other regional seed associations all around the world.

Dr Keshavulu strongly believes that sustainable and inclusive food systems are critical to achieving a hunger-free and well-nourished world. Focus on ensuring sustainability in agriculture is very important, as that meets the needs of existing and future generations, while also ensuring profitability, social equity, and environmental protection. In ensuring sustainability in agriculture, access to quality seeds of improved varieties plays an important role. In this regard, the development of effective, inclusive, and resilient seed systems is central to achieving sustainable food production with the promise of ending hunger, improving nutrition, and increasing farmers' livelihood security. His endeavours in the last two and half decades have helped in bringing several policy reforms at global and national levels that have facilitated sustainable agriculture development and greatly contributed to the cause of food security.

Dr Keshavulu has more than 25 years of extraordinary work experience and expertise in management, seed sector development, strategy, seed production, and quality assurances, policy support and regulations, organic certification and research experience in seed quality and plant genetic resources, and also building capacities and capabilities for agriculture development.

As a President of ISTA, Dr Keshavulu wishes to accomplish the mission of ISTA and spread the knowledge of quality assurances for seed sector development and access of quality seed to the farmers in the world in general and Asia region in particular. His vision is to further strengthen the Indian seed industry in terms of the development of adequate infrastructure for seed multiplication and testing, improving capacities and reinforcement of seed quality assurance systems, and increasing quality seed access to small holder farmers towards ensuring sustainable agriculture development to meet the challenge of food security and fight for #ZeroHunger (SDG Goal 2).

## EDIBLE OILS

# POLICY IMPERATIVES FOR INDIA

**E**ver since our Honorable Prime minister gave the clarification call few years back, the buzzword in policy making circles is Atmanirbharta. No wonder we see action on war footing for reducing dependence on imported fossil fuels. Renewable energy, via Ethanol blending thrust in petrol as well as policy intervention in promoting EV vehicles under the leadership of Nitin Gadkari ji are having the desired impact.

Unfortunately, in spite of massive lip service over the years for promoting oilseed cultivation in our country nothing much seems to have been done which can be talked about. However, the recent

run up in Imported Edible Oil Inflation has shaken the decision makers. It should galvanize them into action before things once again spin out of control.

### Current scenario: The lost decades

It would come as a surprise to many that India was reasonably self sufficient in edible oil till the 1990s. Our import of edible oil was a minuscule 3 lakh mts. However, our obsession with Wheat and Rice after the launch of Green Revolution has resulted in India becoming massively surplus in these commodities at the cost of Oilseeds.

A notion gained currency among policy makers that Food Security only means Wheat /Rice security. No wonder edible oils remained largely neglected. Further, years of low edible oil prices coupled with low

import duties ensured our consumption of edible oils grew but oilseed production continued to stagnate and created huge demand-supply mismatch.

Lack of policy support and intervention for oilseed in the last few decades has seriously compromised our Edible Oil security. This has been fuelled by unbridled inflation, giving sleepless nights to decision makers. It would not be out of place to pencil the current scenario of edible oils in our country to highlight the enormity of the problem confronting our nation.

\* We estimate our edible oil requirement around 225-230 lakh mts or 22.5 - 23 million tons at per capital consumption level of around 16.5 kgs.

\* We import about 130 lakh mts or 13 mln tons of various oils. Import dependence ranges between 55 to 60% of our consumption.



### About the AUTHOR

As an Agri Professional, Mr Atul Chaturvedi is the Executive Chairman of Renuka Sugars and the president of the apex association of the oil industry - Solvent Extractors Association (SEA of India). He has handled a diverse range of Agri commodities and Agri infrastructure, both domestically and internationally. Mr Chaturvedi's longest stint has been with Adani Group as the CEO of Agri Business (Including Adani Wilmar)





\* Domestic availability of edible oils hovers around 100 lakh mts or 10 million tons.

\* At 2.5% annual growth in consumption we estimate our requirement by 2025-26 would be 260-265 lakh mts. which would widen the demand supply gap if local production continues to stagnate.

It would be interesting to note that our import bill for edible oils in 2019 was only Rs 65000 cr. for about 150 Lakh mts of edible oils. This figure has now ballooned to 1.5 Lakh cr. even though our imports have come down to 130 lakh mts. In other words we are paying Rs 85000 crore more for 20 lakh ton less imports. Sky-rocketing edible oil import bill is something which cannot be wished away as it is affecting the common man.

### Geo Political Risks

To make matters worse for import-dependent countries like India, the ongoing war between Russia and Ukraine has disrupted edible oil supply chain big time. No wonder every country has become more and more 'inward looking' and globalization seems to be taking a

back seat.

With energy supplies and prices disrupted, the ongoing debate of Food versus Fuel is getting reignited and Fuel seems to be winning. Indonesia with a view to securitize its energy security is blending 30% palm oil in diesel. This has resulted in palm oil getting sucked out from food basket. We also understand that Indonesia may increase the mandate for blending from current 30% to 40% shortly. Edible oil exporting countries like Malaysia, Brazil, Argentina etc are all aggressively diverting edible oils to fuel and further queering the pitch for our fragile edible oil situation.

**fun  
FACT**



**I love playing with grand kids.  
Also watching sports, in particular  
Cricket and Badminton. Annual  
holidays during summers are a  
permanent feature**

**The time for debates is long over. It's time for concrete action at the ground level which can have a game-changing impact on oilseed production in our country. From being a nation of Price Taker, we have to move to becoming a Price Maker in Edible Oils in the world market**

In my humble opinion we need a multifold approach to achieve a semblance of Atmanirbharta in edible oils.

### Targeted Approach

First and foremost we need to appoint a champion to spearhead this noble project on mission mode. The only time Oilseed production in our country showed significant improvement was when Sam Pitroda spearheaded the 'Technology Mission in Oilseed in late 80s. There is a lesson in this as focused approach with adequate funding is bound to bring results. We should only concentrate on Soya, GN, Mustard, Sunflower and Palm and target a production level of minimum 180 lakh mts of domestic edible oils by 2025-26 from current level of around 100 lakh mts. This would help bring down our import requirement to around 8.5 to 9 million tons. This is achievable.

Secondly, the definition of Food Security needs to be enlarged to include edible oils as well. This would help bring edible oils in mainstream of policy making.

### Crop Diversification

This subject has been discussed ad nauseam but with practically nothing to show at the ground level. We understand it is easier said than done but with required thrust it is possible. No point in continuing to produce wheat and rice much beyond our requirement and straining our storage system as well as Food Subsidy Bill.

As children we were taught Punjab is not only famous for Golden Temple but also for 'Makke di roti and Sarson da saag'. Tragedy is we see golden mustard fields only in films and hardly on the ground in this strong frontline agrarian state. We feel time has come to give full



throttle encouragement to oilseed crops in Punjab and Haryana. If we ensure higher returns to farmers compared to wheat/rice, there is no reason why they would not shift. Besides remunerative prices we will also have to guarantee assured off take. The edible oil industry would be more than happy to join hands with government initiatives in this noble task.

### Technological Push

Productivity in oilseed sector is woefully low and needs serious attention and intervention. Doubling and improving farmers income would always be a pipe dream if we continue to produce less than 1.0 ton per hectare of Soya beans on almost 120 lakh hectares of sown area.

Technological support – even if it requires GM technology to improve productivity – should be encouraged and permitted on commercial basis. To counter the strident criticism from a small group of persons, we can make GM adoption optional to start with. The shining example of BT cotton in Gujarat which changed the face of Rural Gujarat under the stewardship of our Hon.PM needs to be repli-

cated in Oilseeds as well.

### Keep Import Duties High

For far too long we have pampered the urban consumer at the cost of our rural folk. We feel time has come for a little tweaking in this thinking. Edible oil duties should be kept relatively high to ensure farmers are sufficiently enthused. Further, high import duties would ensure govt need not defend MSP by buying the produce. Market forces as a result of high import duties would ensure prices of oilseed rule above MSP. High edible oil prices would also help regulate increase in per capita consumption and indirectly help achieve Atmanirbharta in edible oil consumption.

The time for debates is long over. It's time for concrete action at the ground level which can have a game-changing impact on oilseed production in our country. If we continue to dither we will always be at the mercy of 'Exporting Nations' and our bargaining capacity would continue to be seriously compromised. From being a Nation of Price Taker, we have to move to becoming a Price Maker in Edible Oils in the world market.

ENABLED BY AIF

# FARMER TURNS AGRI-ENTREPRENEUR



To minimize post harvest losses for kinnow and to create value for fellow farmers, I decided to set up a Sorting, Grading and Waxing unit for the fruit in Khuian Sarwar village, Fazilka district, Punjab. I have been engaged in farming for 20 years. I own a Kinnow orchard and hold about 40 acres of land.

## The Problem, The Solution

Fazilka, Sri Muksar Sahib and Bathinda are major Kinnow growing districts of Punjab. Losses occur due to improper handling during harvesting, handling, packaging, storage and transportation. Lack of storage facilities, good connectivity and unawareness among farmers towards post-harvest

## About the AUTHOR

**Shri Gurmangat Kumar set up a Sorting, Grading & Waxing Plant for Kinnow, with Punjab Gramin Bank as the Lending Institution. The project cost was Rs 32.70 lakh. The approved loan amount was Rs 29.43 lakh with Effective Interest Rate at 5.5%**



**Punjab Gramin Bank**

management are the additional factors leading to the losses. These losses can be reduced with technological interventions and systematic management.

Due to less market rate of the produce and to raise my income both from domestic sales and export, I decided to set up a Sorting, Grading and Waxing Plant for Kinnow. It was very difficult for me to find long-term financial support. Where there is will there is a way. I came to know about the convergence of PM-FME and AIF schemes through the team of AIF state PMU, which inspired me to undertake this project.

## Present Status, Vision

The project has helped me to move up the value chain from being a producer to entrepreneur cum processor. The project became operational in October 2021. Better remuneration of output was reported from the first season. I am now looking at expansion of operations

and Investment into delivering a high quality product from Punjab to various international markets.

## Impact

I helped fellow farmers and producers in increasing the value of their produce. I also motivated others to learn scientific practices for improving their livelihood. I am an example of the fact that farming is not a low profit sector. It can rather be a highly profitable sector if new methods and technologies are embraced and implemented.

## Helping Hand of AIF

The implementation & monitoring mechanism of AIF scheme has been thoughtfully designed. I would have never had the motivation to pursue my dream had it not been for the support of the government through various schemes like Agri Infrastructure Fund. A lot of effort and support is being provided at the Central Government Level (AIF team & Central PMU team) to promote the scheme. The youth must take benefit of AIF to accelerate the nation's economic growth.

## AIF IMPLEMENTATION

# Madhya Pradesh

# STRIDING AHEAD



**A**griculture in Madhya Pradesh has witnessed a remarkable turnaround. From negative growth over 15 years ago, the sector has been achieving over 10 per cent growth over the past decade. For some years, it was more than 20 per cent. Agriculture's contribution to the state's Gross Value Added (GVA) jumped from 33.85 per cent in 2011-12 to 46.98 per cent in 2020-21. MP is now lauded for its excellent agricultural performance. The state's agricultural GDP increased at 7.5% per annum during 2005-06 to 2018-19. The last three years have been even more remarkable. Agricultural GDP grew at 11.5% per annum as compared to the national average of 4.7%.

Physical infrastructure such as irrigation, power and roads play an important role in stimulating investment in agriculture and agricultural growth. Several studies have shown that investment in rural infrastructure has the potential to



Wheat milling plant with grading sorting unit

### About the **AUTHORS**



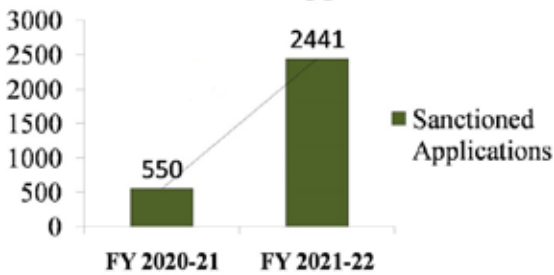
**Sh. Ajit Kesari (IAS),**  
Additional Chief Secretary,  
Farmer Welfare and  
Agriculture Development  
Department  
Govt. of M.P.



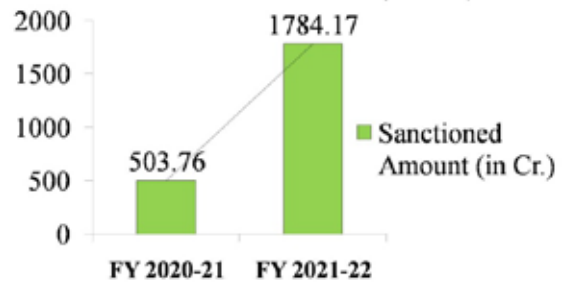
**Smt. G.V. Rashmi (IAS),**  
State Nodal Officer AIF  
cum Commissioner Mandi  
Board & CEO AIGGPA  
Govt. of M.P.



Sanctioned Applications



Sanctioned Amount (in Cr.)



increase a farmer's access to input and output markets, stimulate the rural non-farm economy and vitalise rural towns and increase consumer demand in rural areas. Expanded irrigation, backed by reliable power supplies for groundwater irrigation, strong procurement system for wheat along with bonus on minimum support price, and expanded network of all-weather roads to connect farmers to the markets are the interventions credited for MP's improvement in agriculture.

Despite all this, a critical gap in private investment in agriculture has arisen. Despite agriculture being a priority sector lending area, bank loans have mostly focused on crop loans.

**Why AIF Stands Out**

AIF is one of the first schemes to bring

| MP State Vs All India | Sanctioned Applications | Sanctioned Amount (Cr.) | Disbursed Applications | Disbursed Amount (Cr.) |
|-----------------------|-------------------------|-------------------------|------------------------|------------------------|
| Madhya Pradesh        | 3609                    | 2882.18                 | 3383                   | 2176.27                |
| All India             | 12639                   | 8364.93                 | 9758                   | 6090.73                |
|                       |                         |                         |                        | 35.73%                 |

back focus on private agricultural investment especially in the post harvest infra. MP realized the criticality of tapping into this large reservoir of resources, especially since this scheme allows convergence across various government schemes and has very specific focus on post harvest infra.

**Dedicated Project Management Unit**

MP was amongst the earliest states to

set up a dedicated state level Project Management Unit (PMU) AIF. The main task of the AIF team is to coordinate between various stake holders at the state level; between states and district or block level functionaries; coordination with central PMU and beneficiaries.

The PMU has been successful in reaching out to all the stakeholders through weekly meetings, video conferences, seminars, workshops and several IEC activities like social media



Biofuel production plant at Vidisha

campaigns, facebook page creation, branding and publicity activities etc. A separate toll free number has been generated so that individual beneficiaries can reach the AIF team any time. The state has taken due care to publicize the scheme far and wide.

The team also provides hand holding support to each and every applicant by addressing issues in their DPRs, completing documentation and so on.

State level Monitoring Committee (SLMC) under the chairmanship of Chief Secretary and District Level Monitoring Committee (DLMC) under the chairmanship of District Collector undertake rigorous monitoring as well as progress evaluation of the scheme. PMU team coordinates with all the beneficiary departments and help in convergence with other schemes eligible under AIF.

### Value Chain Analysis

Along with that PMU team has done value chain analysis of many crops. On the basis of gap analysis, it is trying to focus on agriculture infrastructure development in different districts. All these activities and measures have helped MP become the leading state in the country. It is a matter of great pride that MP has highest number of sanctioned applications and disbursed amount in the country. Approximately 36 % of the total disbursed amount in the country came from Madhya Pradesh.

If we see the trend of sanctioned application and sanctioned amount under AIF scheme in MP, from the commencement of project in FY 2020-21, it was 550 and 503.76 Cr. respectively which reached upto 2441 and 1784.17 Cr respectively in FY 2021-22.

MP has been consistently perform-

ing well right from the initial days of the project.

In MP, the AIF scheme has improved the lives of countless beneficiaries. Among all the beneficiaries benefitted from AIF Scheme, one such beneficiary is Mr Vipin Tripathi who established one bio-diesel production plant at Vidisha district, under AIF. He is creating fuel from wheat and rice stubble.

### Production Of Bio Fuel

Vidisha is a centrally located district with good agro climatic conditions, ideal for cultivation of wheat and rice. As per the old practice farmers of Vidisha were burning stubble, which was creating environmental pollution. Vipin realized that how fire is badly affecting our environment. To overcome this, he designed one distillation and pyrolysis unit for the production of biofuel from agriculture waste. The cost of bio fuel generated from the process is much lower than the traditional crude oil, and costs 10-15% lower rate than the market price. Now the farmers of Vidisha are getting additional income by selling the stubble and cleaner form of fuel. For this project loan Sanctioned under AIF was 60 lakhs with an effective Rate of Interest of 5.95%.

### Wheat Milling Plant, Sorting And Grading Facility

Another such story is of Mr Subhansh Jain. He established a wheat milling plant along with sorting and grading facility by taking the financial help of interest subvention from AIF scheme. Under AIF 1.21 Cr. of loan was sanctioned, with an indicative interest rate of 4.95% after 3% of interest subvention. By creation of this infrastructure, local farmers are getting better price of their produce. The establishment of this unit generated employment.

These are just few examples; list of success stories of Madhya Pradesh under AIF is pretty long. AIF is creating impact on the lives of many new age entrepreneurs and progressive farmers by incorporating mechanization in the state agriculture.

# AIF IMPLEMENTATION

# Andhra Pradesh

# EMPOWERING FARMER GROUPS



**A**griculture is the main economic growth driver in Andhra Pradesh contributing to 24% of the GSDP with about 70% of the population depending on Agriculture and allied activities directly and indirectly. The state's total geographical area is 114.84 lakh hectares, out of which 40.5% is the net cultivated area. Agriculture and allied activities are the primary income sources for 62% of the total population of Andhra Pradesh. The annual income of the majority of the farmers is low.

Andhra Pradesh has limited pre-harvest and post-harvest infrastructure, hence compelling farmers to dispose of produce immediately after harvesting with less or no value addition. This immediate disposal of products and that too with less or no value addition is yielding lesser prices to produce and hence, low income to farmers.

In Andhra Pradesh, there are 2051 Primary Agricultural Cooperative Societies (PACS) with nearly 66 lakh

## About the AUTHOR

**Shri Pradyumna PS, IAS, is  
Commissioner And Director of  
Agricultural Marketing, GoAP &  
MD, AP MARKFED**

**Current Status of Projects:**



farmer members. The major source of revenue is the interest generated from loans to member farmers. For the period 2021-2022, 65%+ PACS are in profit and there is a strong requirement for increasing the profits for the PACS, especially for the ones with negative income. It was identified that business

diversification is one of the solutions to revive the PACS with low income.

**Empowering Farmer Groups**

As per the vision of the Hon'ble Chief Minister of Andhra Pradesh Shri YS Jagan Mohan Reddy, GoAP has come up with many initiatives to increase

farmers' income. A few revolutionary ideas that are taken up in the Agri value chain are as follows.

1. Farm-gate infrastructure investment using AIF
2. Continuous Monitoring of Agriculture Price and Procurement (CM APP)
3. MarkRay – Markfed's e-Auction Platform
4. Continuous Monitoring of Agri Input Distribution
5. eFarmmarket – online portal to connect farmers directly with traders across the nation.

**Farm-gate Infrastructure Investment**

To improve the income of farmers in the state, the Government of Andhra Pradesh has come up with the concept of the Multipurpose Facility Center (MPFC) for the development of farm-gate infrastructure in the state. Multipurpose Facility Centers (MPFC) are being created in coterminous with Rythu Bharosa Kendrams in each vil-







lage. These MPFCs consist of pre-harvest and post-harvest infrastructure for agriculture and allied sector activities. All these infrastructures are intended to provide services to the farming community at the farm-gate level. Helping the farmers of the state to enhance their income not only from agriculture but also from Agri allied activities.

### Support For AIF Implementation

This investment is planned to be developed in co-terminus with Rythu Bharosa Kendram (RBK) across the state. This is in line with the vision of the Hon'ble Chief Minister of Andhra Pradesh. These infrastructures were proposed for creation through PACS. This is to revive PACS with low income and provide them with a steady source of income for the long term. The GoAP is supporting PACS towards implementation of this infrastructure, key points to note are:

- GoAP is supporting PACS towards the establishment of this infrastructure by providing 10% margin money
- GoAP is handing over the required land (0.5 acres to 1 acre) in every village free of cost for the establishment of the infrastructure

GoAP after in detail need identification, thorough analysis, and multiple

rounds of consultation has identified and proposed the following farm-gate infrastructure for investment under AIF. Infrastructure with a total financial outlay of Rs. 2,705 Cr. was proposed to NABARD by all state PACS.

- RBK Godowns
- Multicrop Threshers
- Cleaners
- Drying Platform
- Paddy Dryers
- Turmeric Boilers
- Turmeric Polishers
- Horticultural Collection Centers
- Cold Rooms for horticultural produce
- Quality Assaying equipment
- Infrastructure for procurement operations

**To improve the income of farmers in the state, the Government of Andhra Pradesh has come up with the concept of the Multipurpose Facility Center (MPFC) for the development of farm-gate infrastructure in the state**

- Projects worth Rs.1,584.6 Cr. were sanctioned for 1,305 PACS across AP with a 1% effective rate of interest

- GoAP is helping the PACS in the construction and purchasing of sanctioned infrastructure to bring in economies of scale in purchasing

### CM APP

Continuous Monitoring of Agriculture Price and Procurement (CM APP), the state-of-the-art in-house procurement software. CM APP is an end-to-end software solution covering the entire procurement process, with an online Dashboard and MIS monitoring system with real-time data.

### Salient features of CM APP

- Price data and related analytics for real-time decision support
- User-friendly & real-time Dashboards
- Preference for small and marginal farmers in scheduling
- Integration of data with e-Crop to cross-check only a predefined percentage of produce is bought
- Aadhar authentication to make sure produce is bought only from registered farmers.
- Geo-fencing ensures loading and truck sheet generation only in the geo-fenced area
- Aadhar linked bank accounts to establish a tracking mechanism to ensure timely payments
- Dedicated farmers app to track payment status, nearby procurement center details and centre MSP rates in hand

### AI-Based Quality Assaying

Some identified startups are running a pilot at different locations and will present the solutions implemented, the impact of the solution on the procurement process, the value the solution has created and the rollout plan at the end of the pilot. One successful pilot would be declared the winner post which they will be called upon to discuss the full-scale rollout starting from rabi procurement.



### MarkRay – Markfed's e-Auction Platform

**Pre-MarkRay:** AP Markfed has been using various private e-auction platforms for the liquidation of the produce.

**Challenges Faced:** In the process of automating the entire process, Markfed tried integrating the auction platforms with CM APP, which hit a roadblock due to a lack of support from auction agencies.

**Fair Price Discovery:** Markray creates healthy competition, hence resulting in fair price discovery.

**Benefits of buyers:** Markray benefits the buyers by enhancing transparency and speeding up the auction process without any intermediaries

**Benefits to AP Markfed:** Markfed will benefit by getting additional income through user charges.

### Continuous Monitoring of Agri-Input Distribution

**AP Markfed as Nodal agency:** Markfed was chosen as Nodal Agency for buffer maintenance of 1.50 lakh MT of fertilizers viz., DAP, NPKs, PACs UREA and MOP. Markfed has also entrusted the responsibility to supply fertilizers, micronutrients and bulk feeds

to RBKs and PACS for distribution to farmers at their doorstep with assured quality and at highly competitive prices

### Fertilizer distribution through RBKs:

In 2020, the Government established 10,758 (RBKs) and 170 Urban RBKs to provide farmers with quality inputs and allied services. This is the only initiative in India, that makes quality inputs available at the doorstep of the Farmers

### Introduction to CM AID

AP Markfed has developed a completely integrated system for managing the fertilizer distribution business. With closed monitoring of the Fertilizer supply chain through CM AID, Markfed aims to serve the farming community by supplying quality fertilizers at their doorsteps well below the MRP rates through RBKs saving a lot of time and money for the farming community

### eFarmmarket Platform

eFarmmarket Introduction:

□ First electronic trading portal connecting farmers, buyers, traders, and processors (end to end)

□ The platform networks the entire State of Andhra Pradesh and intends to create a Unified marketplace

□ The platform intends to connect the farmers to the Intrastate, National, and international traders

□ The platform is an E2E Agri Mkt place which also integrates services such as logistics, quality assaying, warehousing, and financing thus enabling complete hassle-free trade transactions

### Objectives of eFarmmarket Platform

\* **Farm gate Model:** E-marketing will utilize the farmgate infrastructure being created in the state to enable farmers to trade directly from their villages.

\***Price Discovery:** It will provide informed pricing inputs to the farmer to negotiate a better price for his produce through its price discovery module.

\***Integrated Model:** The platform allows the functionality of integrating all service providers (aggregators, quality assayers, & logistics agencies) on a common platform.

\***Alternate Channel:** E-marketing serves as an alternate channel for mandis to give more marketing opportunities to farmers.

# HELPING FARMERS

## Custom Hiring Centre: Journey of PAC towards Farm Mechanization



**PROJECT COST:** Rs 7.05 lakh

**LENDING INSTITUTION:**  
Hanumangarh Kendriya Sahakari  
Bank Ltd

**INTEREST RATE:** 1%

**T**he adoption of new technology is always a challenge for individual farmers and even for groups. We are continuously looking for new technologies and methods that can increase our income, productivity and ultimately improve our socio economic status. However, it is difficult for farmer groups like us to find long term financial support.

details, we thought of purchasing the boom sprayer. Generally farmers in our area were using hand sprayers, which consume time and money.

For taking loan through AIF, we went through the portal and everything was so simple. I on the behalf of society did the registration on the portal with my mobile and aadhar number. The whole process was online. I received messages on my registered mobile number at every step. Within a day, our application was verified by the Ministry. Then within a very short time span, our loan was sanctioned by the bank.

The sprayer is now functional. We provide this facility to farmers on rent of Rs 100 per bigha, which includes diesel, maintenance and labour cost. The society is saving Rs 6,500 per day.

### Our History

We are a Primary Agricultural Credit Society (PAC) of 960 members, which was registered in 1948. Till 2012, our activities were limited to credit related work. From 2012, we started diversifying our activities. We started providing fertilizers, pesticide and seeds to the farmers. As the saying goes, Change is the law of life. We learned with time that only by changing and adopting new technologies we can increase our income. But the challenge was still there with us – How and where to find the financial facility.

### Future Vision for Growth

We have become more confident and our economic condition is improving. We have shared our experience with other PACS. We are looking forward that many more farmers will come to join us.

Since mustard is majorly grown in this area, so in future we are planning to establish an oil mill. We will again take advantage of AIF scheme which aids in development of infrastructure for betterment of farming community.



### About the AUTHOR

**Mr Sukhdev is the Secretary of Goluwala Gram Seva Sahakari Samiti Limited, Hanumangarh, Rajasthan**

### Present Status

One fine day from the DDM of NABARD, we got to know about the AIF scheme. As per our knowledge, this is the first scheme that is providing long term financial support. After going through the scheme

# BUILDING ENTERPRISING AGRICULTURE

MANAGE to Shape Agripreneurs to Lead the Change

**N**ational Institute of Agricultural Extension Management (MANAGE) is envisioned as a pioneering agricultural management institution in the world.

## Capacity Development

MANAGE has trained and sensitised 5,88,270 stakeholders in Agriculture viz., extension functionaries, FPOs, Agri Startups, Agripreneurs,

Input Dealers, Rural Youth (STRY) since its inception through training programs, Govt. of India Schemes, and educational programs. MANAGE reaches more than 50,000 stakeholders through different activities. The details are given below:

## National Training Programs

MANAGE has established a strong network of agricultural institutions like State Agricultural Universities, ICAR Institutions, State Agricultural Management Extension Training Institutions (SAMETIs), Extension Education Institutions (EELs), leading Institutions of Indian Council of Agricultural Research Council (ICAR), State Agricultural Universities (SAUs) and pioneering Organisations in the area of agricultural development in the to organise collaborative training programs.

## International Training Programs

MANAGE undertakes capacity building of agricultural extension professionals from several

developing countries and supports the mission of Govt. of India under bilateral agreements with 40 countries. During 2016 – 2020, it organised 44 Feed-the-Future International Triangular Training (FTF-ITT) Program with the support of USAID in collaboration with ICAR on different themes covering 1144 senior executives from African and Asian countries.

## Agri-Business Education in India

MANAGE has started the Post-Graduate Diploma in Agri-Business Management (PGDM (ABM) - a two-year Master's Degree) in 1996, first of its kind in India to create a cadre of techno-managers for the agri-business industry in the country. MANAGE ensures 100% placement for all students in the reputed agri-business companies. MANAGE is rated as the 3rd Best B-School in Agri-Business Education Sector in India.

## Agripreneurship For Rural Youth

The Agri-Clinics and Agri-Business Centres (AC&ABC) is the flagship scheme of the Ministry of Agriculture and Farmers Welfare, GOI, implemented by MANAGE in association with NABARD since April 2002. It is aimed at training agriculture and allied subjects graduate



## About the AUTHOR

**Dr P Chandra Shekara is Director General, National Institute of Agricultural Extension Management (MANAGE), Hyderabad**



to start their own Agri-ventures and offer extension services to farmers. MANAGE, Hyderabad is the nodal agency for providing training to eligible candidates, through its 126 Nodal Training Institutes (NTIs) spread across the country.

Till date, a total of 82,597 candidates have been trained and 35,347 have established their venture in different categories across India. 3255 agripreneurs have received bank loan of worth Rs.29, 974.97 lakh and a subsidy amount of Rs. 12,678.86 lakh from NABARD, under the scheme.

### Transforming Agri Input Dealers into Para-Extension Workers

The input dealers, those who sell seed, fertilizer, pesticide and other services to farmers, not only sell inputs but they also provide knowledge and advisory services to farmers on day-to-day basis. MANAGE has been implementing the Diploma in Agricultural Extension Services for Input Dealers (DAESI) since 2002 to educate input dealers on agricultural and allied subjects, pest management, government Acts, business ethics including practical sessions on site-specific farming activities. So far, 56,448 input dealers successfully completed programs and received DAESI Diploma and 21,920 candidates are undergoing the program.

### Skill Training of Rural Youth

Skill Training of Rural Youth (STRY) is a component implemented under Sub-Mission on Agricultural Extension

(SMAE) of National Mission on Agriculture Extension and Technology (NMAET). The component was launched by the Ministry during 2015-16 and aims at imparting 7-days skill based training to rural youths on agri-based vocational areas for ensuring sustainability and income generation. MANAGE is implementing the component in different states in association with SAMETIs. STRY has achieved reasonable success in number of rural youths trained and success stories created. A total of 38,902 rural youths have so far been trained under STRY.

### Agri Startups

MANAGE is identified as a knowledge partner for RKVY-RAFTAAR program at the national level. MANAGE is responsible for providing handholding support to four RKVY-RAFTAAR Agri-Business Incubation (R-ABIs) ICAR-Indian Institute of Millets Research (ICAR-IIMR), Tamil Nadu Agricultural University (TNAU), Kerala Agricultural University (KAU) and Acharya N.G. Ranga Agricultural University (ANGRAU), Tirupati. MANAGE has also been given the responsibility of evaluating Startups, all its R-ABIs and granting funds to Agri Startups.

MANAGE Incubation Centre offers two flagship programs viz., Startup Agribusiness Incubation Program (SAIP) – a two-month comprehensive training & mentoring program plus one-on-one mentoring with professionals and matured Startups with a grant support

of up to Rs 25 lakh and Agripreneurship Orientation Program (AOP) - a two-month mentoring cum hands-on internship with other Startups with a provision for grant-in-aid of up to Rs 5 Lakhs. So far, 304 Agri Startups were incubated and 503 Agri Startups were mentored. MANAGE funded 106 Agri Startups with Rs. 10.72 Crores under RKVY RAFTAAR.

### Promoting Natural Farming

GOI is promoting natural farming to encourage sustainable production system. MANAGE has been identified as the Nodal Organization and Knowledge Repository on Natural Farming in the country. Under this, MANAGE develops Master Trainers, document success stories and best practices and develop a knowledge portal on Natural Farming. MANAGE has completed a Study on Natural Farming in India covering five states in Andhra Pradesh, Himachal Pradesh, Odisha and Sikkim and trained more than 360 Master Trainers on Natural Farming.

### Agriculture Infrastructure Fund

To facilitate the central government scheme - Ministry of Agriculture and Farmers Welfare, Govt. of India, MANAGE and TSAGROS organised a State level Conclave in July 2022 at NI-MSME, Hyderabad to pitch in Agriculture Infrastructure Fund opportunities for developing post-harvest management infrastructure and Community Farming Assets in Telangana with more than 400 potential beneficiaries.

# REVIEW OF 5 YEARS OF GST% IN INDIA



## About the AUTHOR

**Dr Deepak Jain is an Economic Policies Advisor and Industrialist with more than 4 decades of experience. He is the Director-General of Federation of Indian Industry. His vision is centred around revolutionising the Indian economy to push for a self-reliant and strong India**

**G**ST has turned 5. It is an occasion of celebration. Although GST implementation went through some teething problems, but by and large it is successful.

At this time, we are fondly missing our friend late Sh. Arun Jaitely Ji. He was a man of immense calibre. Along with loving guidance of Honourable Modi ji, Arun Jaitely Ji united all states and union territories on this topic. Trust me this was a tough job like weighing a bunch of live frogs (as frogs can't sit stable and keep jumping to and fro.)

This is due to Arun ji's tall persona that this difficult task could be achieved. Unfortunately, he is not amongst us today. Our sincere homage to him.

## About Federation of Indian Industry

Most of you might not have heard

about it as it's not a very old institution. It was started in 2013, and began active functioning in early 2015. We felt that there is a need to build a chamber that can give strength and economic growth to the nation. Hence FII was launched. We at FII wish to be the growth partners of the nation and bring about an economic revolution.

Our team is very strong and calibrated. Profoundly, we claim our presence in 42 countries on global map and have a strong team of 5000 members.

## BJP Economic Advisory Committee

I have been privileged to be a part of BJP Economic Advisory Committee and we have taken some great policy initiatives like economic vision documents, CSR Schemes for public toilets, Gold Bond Schemes, Health Care Scheme, Cancer Care



Scheme for poor, Yamuna Action Plan, Policy Documents, Voluntary Disclosure Scheme, Demonetisation scheme. Couple of these schemes were announced by Hon'ble Modi ji too.

We are proud of the fact that during Covid, we came forward with many Initiatives, which were also implemented by the Government. People have hugely benefited from those schemes.

Even in case of GST, after initial hiccups, businesses are relieved now. No one is bothered about unnecessary unorganised tax deductions formerly known as Octroi.

All business operations are with bills now. Businessmen know that the benefits will flow with bill transactions only. There is lesser headache. All these harassments and tax evasion are things of the past now. There is positive shift of mindset towards GST. We have achieved that within the last five years only.

I must say that it's a welcome change. With GST, our businesses are going global and there is no domestic tax impediment. It is pertinent to add that almost all sectors of industries are gaining from GST except a few.

**GST Review Every 5 Years**

**We are a hugely populated country. This mindset of 'everything free' is a worrisome affair. For instance, 80 crore people are getting free ration but my question is for how long?**

FI is in favour of an exercise to review GST every 5 years. All amendments and discussions should be reviewed and implemented. We should be vocal about our suggestions from all eminent platforms.

**fun FACT**



**Dr Jain loves to listen to the ghazals of Pankaj Udhas and enjoys watching action thrillers. He is an avid reader and writes in his leisure time. He is fond of nature, travel, photography and loves connecting with people**

Currently, India's economy is at USD 3.50 trillion. The policy makers for India's economic growth have huge plans to take it to USD 30 trillion economy soon. To make that happen, old conventional methods, tax, policies, rules and regulations won't work.

With GST implementation, there is Ease of Doing Business. With that, ease of foreign investment will flow in.

Please note that for any business, most valuable asset is the owners' time. The time of the owner must be well utilized in product enhancement rather than paper work, which is very complicated and time consuming. Government will have to value time wastage sooner or later. We have done a lot, yet a lot has to be done.

During the last five years, we have put forth various valuable suggestions to the government. Many of these were taken up for implementation. The government is proactive in implementing nation-building suggestions.

**High GST Collection**

During the last 11 months, GST collection is above Rs one lakh crore per month.

This is enough to gauge mood, direction and mind set of businesses here. One can guess what kind of opportunities are available in near future.

There is huge positive shift in mind set for GST. Annual GST collection of INR 20/25 lakh crores is normal and hopefully other tax collections too shall improve. Income tax collection shall also improve from the present levels of INR Rs. 14/15 lakh crores, as these are our positive points and assets.

The government was able to successfully implement these huge plans because of Chartered Accountant fraternity only. Officially, they are formally known as CA but for me they all are Economic Warriors – The Arth Yodha.

**Stop The Free Doles Culture**

Chartered Accountants are not only tax payers. They are also answerable and responsible for our nation's growth. Same for tax payers. We are not only the



tax assesseees but we are also building blocks of growth. Entrepreneurs too are the real assets and heroes of the nation. They deserve a big applause. They all deserve due respect.

There is one worrisome topic too. 'The mind set of free' is a matter of worry. We are a hugely populated country. This mindset of everything free is a worrisome affair. For instance, 80 crore people are getting free ration but my question is for how long?

In my opinion whosoever is concerned for our nation must be equally worried on this "free mind set". It is worrisome that people want everything for free. Free water, free electricity, subsidy for crop (approx. Rs. 6000 per acre) etc. My question is - what will be the end result of this mind set?

I can very well quote example of our neighbouring country. They have doomed their economy, as everything was free over there. They have made Income tax exemptions up to income of 30 lakhs, corporate tax was reduced to 14%. All this for the sake of votes only. We should not tread on that path, I suggest. We should think of pressing the brake button now.

**My vision for 30 trillion economy makes me wish for higher ease of doing business, more productivity, more contribution. The most expensive asset is the entrepreneur's time. It should be consumed in constructive ways of growth rather than paper work**

#### **The Kind Of Industry That Will Survive**

In our nation, there are only 11 crore MSME. Out of these, three crores closed during covid. It is a topic of consideration for me that for how long our MSME shoulder the economic growth?

In my opinion, in coming future only skill based, knowledge based, ideas based and technology based industries will grow and survive. All these will take our economy from 3.50 trillion to 30 trillion. During this gradual transformation the compliance burden shall be reduced.

Form filling shall be lesser complicated and lesser time consuming. In fact, a common person should be able to fill it easily.

#### **Keep GST Simple**

GST officers should not devise ways to make things harsh for business persons.

Basically there are two types of officers. One, the old school graduates who believe in making things harsh for business persons. And there are others who believes in making things smooth, fast and uncomplicated. Unfortunately, we can't change much with the old school graduates and we will have to bear with them till they retire.

My vision for 30 trillion economy makes me wish for higher ease of doing business, more productivity, more contribution. The most expensive asset is the entrepreneur's time. It should be consumed in constructive ways of growth rather than paper work

Entrepreneurs are the most valuable assets of growth. My dream BHARAT will give them due and well deserved accolades. And same for taxpayers and all growth partners like the Chartered Accountant fraternity.

Everyone in our nation is hopeful of new Shining Bharat. We must do whatever it takes to be one. With Best Wishes and gratitude towards all involved in Nation Building.



AIF



# ADEQUATE INVESTMENT OPPORTUNITY FOR RAJASTHAN



**R**ajasthan, the largest state of India, is famous for its rich culture and diverse agro-climatic conditions. The state is richly endowed in the cultivation of a variety of crops and around 2/3rd of its population is connected with the agricultural sector.

In recent times, significant agricultural investments have been done in the state of Rajasthan due to its strategic location between India's northern and western states. Also the state is having a larger consumer base where it shares its borders with five other major states of India. The state also has a strong industrial infrastructure with four Agro Food Parks



(Kota, Jodhpur, Sriganganagar and Alwar) and 2 Agri Export Zones covering five districts.

There exists an immense scope for investment in farm mechanization. Moreover we can say that the state offers numerous opportunities for development of

## About the **AUTHOR**

**Shri Muktanand Agrawal, IAS, is Registrar, Cooperative Societies, Rajasthan and State Nodal Officer, Agri Infrastructure Fund (AIF)**

agro-based industries.

## AIF Journey

Understanding the importance of development of agricultural infrastructure, specially at the post-harvest stage, GOI announced on Rs 1 lakh crore Agri Infrastructure Fund for farm-gate infrastructure for farmers as a component of Aatmanirbhar Bharat. This was done to enhance the post-harvest infrastructure and facilitate value chain addition in the agriculture sector. Seeing the potential of Rajasthan state an allocation of Rs 9015 crores was fixed for the under the scheme.

Since the beginning, Rajasthan aimed at maximum utilization of this opportunity to develop its agricultural infrastructure. The Cooperative Department was designated as the nodal department for the scheme. The State Level Monitoring Committee (SLMC) and District Level Monitoring Committees (DLMCs) were constituted at a very early stage to ensure proper monitoring of the scheme.

After more than two years of launch of the AIF scheme, Rajasthan is proud to have performed outstandingly in its implementation. In a ceremony held on July 30, 2022, Rajasthan was awarded as a "Rising State" under AIF.

As on today, Rajasthan ranks second in the country in terms of the amount of approved projects (Rs.798 crores for total 943 projects) under the scheme. The State also ranks second in the country in terms of the loan amount disbursed (Rs. 569.42 crore for total 729 projects) under AIF.

## Multi-Pronged Strategy

This remarkable performance by the state can be attributed to a variety of factors. The state has ensured proper monitoring and supervision of the scheme on a regular basis. The State team and the district teams have worked in a sync to make the scheme a success. There has been a constant dialogue between the state machinery and various stakeholders of this scheme such as the farmers, agri-entrepreneurs, cooperative socie-



**AIF has proved to be a milestone in the development of agricultural infrastructure in Rajasthan. The scheme is expected to accelerate the growth of the rural economy**

ties, banks, Chartered Accountants etc. Hon'ble CM Shri Ashok Gehlot has interacted directly with farmers and agri-entrepreneurs on multiple occasions to know their concerns. Monitoring of progress of AIF has been a regular agenda point of all the State Level Bankers' Committee meetings.

## Convergence

One of the major reasons behind the successful implementation of AIF scheme in the State has been its effective convergence with other similar schemes. Taking advantage of the fact that the AIF guidelines allows for its convergence with any present or future Central/ State scheme, the AIF scheme has been converged with the Agro Processing, Agribusiness and Agri Export Promotion Policy 2019 of the State Government.

This policy was launched by the state government in Dec 2019 with an aim to accelerate the development of agro-based industries and associated supply chain and value addition infrastructure in the state. The policy encourages and supports creation of area and sub-sector specific infrastructure like warehouses, cold storages, pack houses, agro-processing units, export facilitation centres, aggregation centres etc. in public as well as private sector.

The scheme provides for capital subsidy up to 50%, interest subsidy up to 6% and various other benefits such as electricity tariff subsidy. Individual farmers, group of farmers, FPOs/ FPCs, Partnership/ Proprietary firms, LLP, Companies, Corporations, Self Help Groups (SHGs), Cooperatives, Cooperative Marketing Federations engaged in Agro & Food processing are eligible for financial assistance. As a result of the convergence of the AIF with the abovementioned policy of the State, the applicant/beneficiary becomes eligible for a capital subsidy up to 50%, interest subsidy up to 6% and electricity tariff subsidy in addition to the AIF benefits. So far, 218 applicants in the State have benefitted from this convergence.

PACS as MSC is another scheme of NABARD, with which the AIF scheme has been dovetailed. The PACS as MSC scheme intends to develop potential PACS as Multi Service Centres (MSCs)



over a period of three years commencing from the year 2020-by providing concessional refinance to StCBs at 3% to support PACS to create quality infrastructure (capital assets) and increase their business portfolio in tune with needs of members. So far, a total of 215 PACS have got a variety of projects sanctioned which include large warehouses, agro-processing units, custom hiring centers etc.

### Awareness Programs

For ensuring the success of the AIF scheme in the state, various associated departments of the State government such as Agriculture, Agri-marketing, Co-operatives and also organizations such as NABARD have worked in collaboration. The benefits of the scheme have been widely publicized at the level of NABARD and Agriculture Department. Publicity is being done for farmers and agricultural entrepreneurs through KVK, R.SETI and various training institutes. Presently, the scheme is being promoted among the beneficiaries along with the promotion of Rajasthan Agro Processing, Agribusiness and Agri Export Promotion Policy 2019.

### Some Success Stories

The Ujoli PACS in Kotkasim of Alwar District in Rajasthan has established an agricultural implementation bank at a cost

of Rs. 32 lakhs under the PACS as MSC scheme, of which Rs. 25 lakhs has been obtained as loan from Alwar Central Co-operative Bank at an interest rate of 4%. However, as a result of interest subvention of 3% under the AIF scheme, this loan is effectively only at an interest rate of 1%.

The Custom Hiring Centre (CHC) has purchased 25 different types of agricultural implements and two tractors. Ujoli PACS makes available spray machines and agricultural implements to farmers at low rates. Last year, Ujoli PACS catered to the sowing, tillage and harvesting needs of 125 farmers, thereby earning a rent amount of Rs. 11.80 lakhs and a net profit of Rs. 3.54 lakhs. The PACS has fixed a target of Rs. 15 lakhs as earnings from rent in the current financial year.

Ujoli PACS has also constructed a godown with a capacity of 250 MT by obtaining a loan of Rs. 13.29 lakhs at an effective interest rate of 1% under the abovementioned model of PACS as MSC scheme converged with the AIF.

Similarly, Bansri GSS and Dhanatri GSS in Bundi District have obtained a loan of about Rs. 70 lakhs each from Bundi Central Cooperative Bank to set up seed processing and grading units, Bhagwanpura GSS of Kota District has availed a loan of Rs. 50 lakhs from

Kota Central Cooperative Bank to set up a grading, cleaning, packaging and godown infrastructure facility under the AIF.

### Successful Individual Agri-Entrepreneurs

Among individual agri-entrepreneurs, Shri Om Maheshwari, an entrepreneur from Kotahas set up a solvent extraction plant with an installed capacity of 100 TPD per day by obtaining a loan of Rs. 25 crores under the AIF. Shri Rakesh Mantri from Bhilwara District has started distillation manufacturing of biodiesel and glycerin by availing a loan of Rs. 17 crores under the scheme.

Other PACS projects under AIF in Rajasthan range from cumin/wheat/soya-bean grading plants, sheds, boom spray machines etc.. Similarly, individual projects in the State under AIF range from the setting up of rice mills, cotton ginning and pressing units, multipurpose cold stores for storage of fruits and vegetables, spice grinding units etc..

Thus, AIF scheme has proved to be a milestone in the development of agricultural infrastructure in the State of Rajasthan. The scheme is expected to accelerate the growth of the rural economy further in the coming years and put the State in the forefront of the developed States of the country.

# FARM ENTERPRISES SHOW THE WAY

## Importance of Value Addition at Farm Gate Level and the Role of Government and Financial Institutions

India has been trying to upgrade the lives of farmers through increasing realisation from the farm production activities through measures like minimum support prices (MSP), better crop varieties, better genetics, better irrigation, and marketing facilities amongst several other interventions. The government has succeeded in achieving this objective to a great extent. This is confirmed by the Union Minister for Agriculture and Farmers Welfare, Shri Narendra Singh Tomar on the 94th Foundation Day ceremony of the Indian Council of Agricultural Research.

The government has indeed succeeded in increasing the farmer's income more than 200% in some states like Uttarakhand, West Bengal, Chhattisgarh and Puducherry. These are



excellent results, though the ICAR report talks about select few thousands of farmers and may not be the true picture of average Indian farmer. They show focused efforts and are the result of the state and central governments working together for achieving the main goal.

We need structural changes the way farmers think about themselves apart from what government, corporate and consumers think about what to expect from the farmers. We need to analyse what a farmer can and cannot do to serve the final consumer

in an economically remunerative manner for both the parties.

### Some critical questions for brainstorming

- 1 What activities can empower farmers to achieve better returns on the farm activity without depending on external support (Ex: MSP, market access, procurement by

### About the AUTHOR

Mr Gopinath Koneti is currently a Partner with KPMG India in their Food and Agriculture division. He has over 20 years of experience in the domain and has worked in the seed industry, agricultural and weather insurance sector and food and agriculture consulting





**fun  
FACT**



**Mr Koneti is a trained and gifted photographer. Some of his works have been used for product packaging and branding of the company**

govt agencies, subsidies on inputs etc)  
2 What organizational structures (FPCs, LLPs, Pvt/Public Ltd, Societies etc) are better suited for farmers to join hands and develop post-harvest economic activities like primary/ secondary/ tertiary processing, warehousing, retailing, exports etc.

3 With the kind of diversity of produce that India produces from long shelf life to highly perishable crops and produce, how can farmers connect with end consumers by getting more share of consumer Rupee and create a win-win scenario?

Farmers in their individual capacity are not empowered to develop strategies to enhance their farm incomes beyond a point. External facilitation from govt, academia, financial institutions, the corporate sector is required to show them a path to walk for self-sustainability. This is achieved through economic illustrations of such strategies and how it suits them.

Here are some examples of farmers taking things into their own hand without or very little external support. Primary value addition of the agri and allied produce is one of the most basic intervention in the Indian context for the

resource poor smallholder farmers that can do wonders.

### Case Study

Farmers upgrading themselves with primary value addition:

**Value addition in Turmeric:** A turmeric based FPO in the state of Andhra Pradesh distributed high yielding & high curcumin content Turmeric variety to its associated farmers. With the help of Horticulture department, the FPO conducted trainings on cultivation practices and post-harvest management to the farmers. In addition to this, the FPO rented a tractor mounter boiler and polisher to farmers at affordable rates. As a result, the farmers' earnings have increased.

### Case Study

Farmers upgrading themselves with

secondary processing and exports:  
**Value Addition in Paddy:** A farmer cooperative society near Warangal, Telangana installed 6 seed processing units and 4 parboiled rice mills to facilitate processing and marketing. It has also erected 52 warehouses in the villages for storing the produce of farmers. Its products are sold across the country and are being exported as well.

### Government Role

There are several initiatives launched by both state and central govt to facilitate upgrading farmers from production to processing activity. Specifically, Central govt has launched schemes like PMFME (Pradhan Mantri Formalisation of Micro food processing Enterprises- with both state and central govt sponsorship) and PMKSY (Pradhan Mantri Kisan SAMPADA Yojana) to benefit small and large farmer led



**Finding easy finance for farm enterprises is still tough in India. Things are changing thanks to renewed thrust on the sector, start-up culture and use of technology**



**A self-sustainable farmer led enterprise is required for our country for creating decentralised prosperity and happy consumers**

interventions towards value addition at the farm level. Often farmers do not get these benefits since the information flow is scarce and the eligibility criteria set by the govt may not be easy to pass through. There is a need for providing easy access to the farmers and farmer groups on the nature of these schemes and how they can leverage for their benefit.

### Corporate Role

From the author's experience, corporate sector can work effectively with the farmers if there are no complex state and central govt rules and regulations on procurement, market prices etc. Govts should accept their role only as a facilitator and leave the execution to the market dynamics. It is a win-win for all.

### Bank Role

Financial institutions are the invisible power behind the success of any industry and enterprise. It is thus very important for the farmer led enterprises as well. Traditional banking approach looks at farm enterprises with high risk and high cost to service lens. Except the established corporate sector, finding easy finance for farm enterprises is still tough in this country. But things are changing and thanks to renewed thrust on the sector, start-up culture and use of technology. Financial institutions should develop internal knowledge base on the sector for prudent and quick risk

assessment and deliver the required services for these enterprises. Promotion of Govt sponsored schemes through internal training for staff, loan melas and road shows will help in making the farmer promoters use this low cost finance (than unorganised money lending) for using the Govt schemes effectively to move up in the value chain.

### Crucial Factors In Moving Up The Value Chain

- This activity of primary/ secondary value addition should match with established industry norms of price, quality, and availability. Remember, just because farmers are marketing the produce, consumers do not buy. May be once due to emotional reasons and may be twice. But no more. A product should stand

on its own merits. Govt and other responsible corporate sector need to facilitate this.

- Value addition of crops and produce should not be done through low cost and low yield infrastructure as it will not make the finished product competitive in the market and will lead to failure of such enterprise. For ex: An INR 50,000 spice grinding mill may not give the same desirable quality of an industrial scale spice mill. So, farmers should come together through any of the organized forms like FPC, LLP etc to set up modern infrastructure and realise the same quality output in finished products.
- Matching the quality of packaging and creating a strong brand to reach consumer minds is crucial. This is easier said than done as it calls for investments and patience over long term to reap the benefits. Govts have created some assistance towards this aspect and farmer enterprises should access these funds.

In conclusion, a self-sustainable farmer led enterprise is required for our country for creating decentralised prosperity and happy consumers. Keeping in mind the changed nutrition requirements and changing food pyramid, we need more such farm enterprises upgrading themselves by moving up in the value chain and to serve the consumers and in the process help themselves with better economics. We will continue the series to learn how farmers can achieve this upgradation and set up enterprises for sectors like field crops, horticulture, livestock, fisheries etc.



# AIF: STRENGTHENING FOOD SYSTEMS

**C**ovid exposed food systems to challenges never faced before. Production and consumption centers needed to stay connected for access and availability of food, with least disruptive supply chains. Every challenge opens a world of opportunities. The Prime Minister gave the clarion call for Atmanirbhar Bharat to make our country more competitive, efficient and resilient in all ways, in all sectors.

In July 2020, for strengthening Agriculture logistics and infrastructure, GOI approved Rs one lakh crore for Agri-Infrastructure Fund (establishing National Agriculture Infrastructure Financing Facility) for farmers at farm-gate and aggregation points (Primary Agricultural Cooperative Societies, Farmers Producer Organizations, Agriculture entrepreneurs, Start-ups, etc.). What followed was an aggressive strategy to strengthen India's food systems across pre-production, production and post-production stages.

## Need and Features of AIF

Being an agrarian economy, India's growth is guided by the growth in primary or agriculture and allied activities. Post-harvest losses in agriculture across crop categories are approximately 20-25 per cent. This loss is also of the resources used to produce the commodity, including natural resources like fossil fuel and water. The losses contribute to green house gases.

Suitable infrastructure that can arrest post-harvest losses and create community farming assets is crucial. AIF offers the following.

- \* Interest subvention of 3%, credit guarantee up to Rs 2 crores for maximum period of 7 years
- \* Convergence with all schemes across ministries and state governments
- \* Multiple eligible projects (across Post Harvest Management and Community Farming Assets)
- \* Availability of loans to FPOs, MSME,

Agribusinesses etc, with cap of one project per beneficiary

27 public and private sector banks are on board for priority sector lending under the scheme. MoU has been signed with Small Finance Banks, Regional Rural Banks, State Cooperative Banks, Non-Banking Financial Companies, Scheduled Cooperative Banks and Multi State Scheduled Cooperative Banks. In May 2022, the scheme was revised with the provision of sanction of multiple projects in APMCs designated area to augment their infrastructure facilities. The financing facility and interest subvention in such cases is available for a loan up to Rs 2 crore.

## Activities Covered, Intended Beneficiaries

Post-Harvest Management activities covered under AIF are supply chain services including e-marketing platforms, warehouses, silos, packhouses, assaying units, sorting and grading units, cold chains, logistics facilities, primary processing centres, ripening chambers etc. The projects for building community farming assets include organic input

production, bio-stimulant production units and infrastructure for smart and precision agriculture.

The intended beneficiaries of the schemes are farmers at the forefront and other stakeholders involving APMC's, FPOs, Joint Liability Groups, Agripreneurs, PACS etc. District, State and National Level Monitoring Committees ensure real time monitoring and effective feed-back about the implementation of the scheme.

## Progress So Far, Benefits To Farmers

The scheme is operational from 2020-21 to 2032-33. According to the scheme guidelines, the loan will be disbursed in six years. In 2020-21, Rs 4000 crore have been sanctioned under the scheme. Logistics and infrastructure are the backbone of marketing. The scheme is expected to bring higher value realisation to farmers via direct sales and therefore improve their incomes.

Better post-harvest infrastructure will help in reducing losses, increasing marketed surpluses, and stabilizing product quality. Better infrastructure also aids in strengthening food security in terms of access, and availability of food. Producers enjoy improved market access and can take decisions related to when and where to sell at right time in presence of packaging units, cold chain and warehouses.

The investment in community farming assets aids in bringing the state-of-the-art technology on small farms, improving resource use efficiencies, minimizing costs and enhances yields. Investment in bio-inputs units and bio-stimulants production units will also promote bio-economy and encourage circular economy and self-sustained village economy models. AIF is a great way to revolutionize food systems and the farm economy of India. It has a major role in moving India from Green Revolution to Income Revolution.



About the **AUTHOR**

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## FOOD SECURITY, AN EMINENT GLOBAL CHALLENGE

# Indian Technology Interventions To The Fore

**T**he increase in the impact of climate change is visible to one and all. Today, 3.2 billion people live in agricultural areas with high or very high water shortages or scarcity. Of these, 1.2 billion people live in areas with very high water constraints. Without immediate action, these people and many more will be affected.

The need of the hour is to shift from high-input, resource-intensive farming systems, which have caused massive deforestation, water scarcity, soil depletion, and high levels of greenhouse gas emissions, to sustainable food and



agricultural production. We need large-scale implementation of successful models from India of innovative systems that protect and enhance the

natural resource base while increasing productivity.

### Technologies for Present and

#### About the AUTHOR

Mr Deepak Pareek is the CEO of Indian Agribusiness Systems Limited, known as AgriWatch and Technology Pioneer, World Economic Forum. AgriWatch is a consulting firm that provides market intelligence, research, and advisory services across the agribusiness value chain. It has more than 20 years of experience working with one of the largest networks of farmers, traders, and intermediaries (more than half a million). AgriWatch has one of the biggest data sets of agri-commodities in the private sector, second only to the government with time-series data for more than 15 years in some commodities. <https://www.linkedin.com/in/dpareek>





## Future of Agriculture

Technology-centric intervention by Indian research institutions, the public sector, the private sector, and startups are helping and can further help the world solve some of the chronic problems faced by agriculture for decades. These technological advances have contributed to increased productivity, more efficient resource use, and improved food safety however much more is required. The new focus needs to be to ensure physical and digital infrastructure to make these advances reach the grass route level.

Indian technology ecosystem is working extensively in three key areas that are pivotal in solving long-standing challenges of agriculture, Informatics (including Data Science, Artificial Intelligence, and Machine Learning), Plant Science (including Bio-Technology and Nano Technology), and Farm Automation (including Internet of Things and Precision Agriculture using Autonomous Arial and Ground Vehicles).

## Informatics

AI and Machine Learning-based platforms are vastly helping the farmers to make better decisions about the activities being done by them during cultivation. Collected ground-level real-time data is getting used with technology algorithms to provide farmers with data insights about what to do when to do and how to do it in the form of recommendations.

Geo-informatics is enabling traceability as well as easy-to-understand data visualization for all stakeholders like agriculture input/output companies, Government/NGOs, and Extension

## Plant Science

Plant science techniques like Plant Breeding, Genetic Editing, Tissue Culture, Aquaponics & Hydroponics, and Bio-Technology (Bio Fertilizers, Bio Pesticides, etc.) not only increase the yield & productivity of the crops in India but also ensure farming is done in a sustainable manner reducing residue of harmful chemicals in the harvested output. These practices are reducing dependence on harmful chemicals on one hand and reducing the use of water on the other.

The application of Nanoparticle technology in plant pathology targets specific agricultural problems in plant-pathogen interactions and provides new ways for crop protection.

Indian organizations including IFFCO, Absolute Foods, National Institute for Plant Biotechnology, National Agri-Food Biotechnology Institute, Jain Irrigation, and UPL are at forefront of this segment.



equipment is very effective in reducing human efforts and precise ways of doing various activities like land preparation, sowing, weeding, harvesting, spraying, etc.

Internet of Things (IoT) is bringing to the table many advantages, its ability to innovate the landscape of current farming methods is absolutely groundbreaking. IoT sensors capable of providing farmers with information about crop yields, rainfall, pest infestation, and soil nutrition are invaluable to production and offer precise data which is used to improve farming techniques.

Unmanned Arial (Drones) and Ground Vehicles (Bots) are changing the way farming is being done as they are helping farmers to use minimal labor to execute tasks as well as see the activities being done on the ground by them for counting plants, spraying fertilizers or pesticides, taking real-time plant growth images, etc. Further, the data they collect is useful for analysis and to pass on real-time information to the farmers from the farm level without going to the farm.

Indian players are making a mark on the global stage in this sector including but not limited to Fasal, Aarav Unmanned Systems, Intello Labs, and TartanSense.

Today's world needs the adoption of technology faster than ever, not just to feed the inhabitants of this planet but to save the planet itself and Indian organizations are showing the path for the world to follow.

service providers. Such GPS-based techniques are also enabling precision agriculture at scales where low land holding farmers can also get benefited from technology. Geo-informatics and Blockchain are also playing a key role in enabling Farm to Fork mapping.

Indian companies like CropIn, Satsure, Dehaat, and Stellapps are at the forefront of global leadership in the segment.

## Farm Automation

Farm Automation with the latest



# WHEN A FARMER NEEDS DHAN

Farmer Producers Organization (FPO) as a solution to access credit by smallholder farmers

It is estimated that around 58% of India's population earn their livelihood from agriculture and allied services. In accordance with the estimates of National Income FY22, the percentage share of Gross Value Added (GVA) of agriculture and allied sectors (at current prices) is 18.8% of the total GVA.

Over the years it has also been observed that the agriculture and allied sectors are facing a plethora of

challenges which are mainly small and fragmented land holdings, high cost of quality seeds, manures, fertilizers and biocides, lack of mechanisation and inadequate agricultural marketing infrastructure, logistics, and access to capital.

The small and fragmented land holdings with the average landholding in India today around 1 hectare and smallholders cultivate 42% of operated land and constitute 83% of total landholdings. This particular issue

The FPOs scheme has emerged as one of the best solutions for smallholder farmers in India. FPO provides smallholders a collective voice and power to negotiate, thereby opening up an opportunity to earn higher profits from farming

## About the AUTHOR

Mr Naresh Kumar heads Kissandhan Agri Financial Services Private Limited. He has over 25 years of experience in rural and agri banking space





**Business Scope/Potential for FPOs**

Farmer Producer Organizations (FPOs) have been monumental in helping Small Holder Farmers with shared interests to negotiate for better input aggregation, market linkages and extension services.

FPO's can link smallholder's farmers to Local, Regional, National and International markets effectively. FPOs allow its member to access financial and other input services. To surpass this effective and viable profit making, FPCs needs to be competent with other companies and rivals in the market and has a huge business potential to capture the future food retails not only in India but in the world.

Kissnadhan works in close association with FPOs to build Customised Solutions that help them thrive in the agricultural ecosystem.

needs argent attention and to mitigate this Farmer Producer Organizations (FPOs) scheme has emerged as one of the best solutions for smallholder farmers in India. FPO provides smallholders a collective voice and power to negotiate thereby opening up an opportunity to earn higher profits from farming.

The paybacks to farmers accumulate on multiple fronts like ability to negotiate better prices for quality agri inputs due to bulk purchases, collectively; realize higher profits through the sale of output in bulk and last but not the least a quicker technical assistance on problems being faced by the members from the other expert members in the FPO. Other benefits to FPO members emerges from optimum utilization of resources while allowing conservation of the resources being used.

**Access To Credit**

Credit remains to be a major challenge for the FPOs, i.e., inadequate access to institutional credit due to low capital base, absence of vintage and non-availability of collateral. Easy access to finance for

both input and output procurement to the FPOs will be a growth driver. Key parameters for selection of FPO and the quantum of finance include total farmer base of the FPO; number of years in operations and profile of the CEO, and BODs.

With a target of 10,000 FPOs by 2027-28, corporates to public service organizations are committing towards

promotion of FPOs. And key constituents in the value chain are confident that FPOs will play an important role in making Indian agriculture globally competitive while being remunerative to the small farmers. As the segment grows, it may also become a probable answer to problems in Indian Agriculture like non-diversified cropping patterns causing scarcity/glut in a few Agricultural commodities.



**fun FACT**

**I love gardening. It has a deeply positive influence and is a great stress reliever**

**About Kissandhan**

Kissandhan is actively engaged with Farmer Producer Organisations (FPOs) and till date on-boarded more than 30 FPOs across 8 States and impacted 30K plus smallholder farmers. At Kissandhan we have plans to partner with 100 plus FPOs in a Cluster-based approach, to disburse INR 20 crore and accordingly impact more than 75K smallholder farmers by March 2023.

## S4S TECHNOLOGIES

# NURTURING WOMEN ENTREPRENEURSHIP THROUGH AIF

\* 500+ Loans Sanctioned Under AIF

\* Market-Linked Solar-Powered Food Processing Solution for Farmers

**S**4S Technologies is a full-stack agri-processing platform providing convenience food ingredients to the F&B (Food & Beverage) industry, saving energy, time, and cost for the customers. These ingredients are processed by women farmers at the farm-gate using sustainable solar-powered technology. This doubles household income for the farmers and prevents food wastage.

At the heart of the S4S business model is the village-level sourcing and



## About the AUTHOR

**Dr Vaibhav Tidke is CEO & Co-Founder, S4S Technologies**

processing operated by women farmers-turned-village entrepreneurs (VLEs). S4S works with VLEs to convert produce into non-perishable items by providing them with the right combination of technology, finance, and market. The processing through a solar-powered dehydration system can process 45+ different food categories – F&V, Pulses and Grains, Nuts, Spices, Tea, Coffee, Milk and alternate proteins.

The processed produce is made fit for the customer at the central facility and supplied as food ingredients to the F&B Industry. Serving over 1100 B2B customers, S4S works with 800 VLEs in 80 villages in Maharashtra, Tamil Nadu and Odisha. It processed 40,000 tons of agri-produce last year.

S4S works with VLEs who use the drying system to convert the agriculture produce into non-perishables. S4S encourages rural women to turn into VLEs by providing them with the right combination of technology and finance. Since the agriculture produce is supplied and taken by S4S, the rural women do not have any marketing responsibilities.

S4S has patented the Solar Drying System that includes dryer and cutter. These machines are used by identified rural women to dehydrate vegetables, improve the quality and preserve them for a longer time and better price realization.

Raw Material Procurement and Supply: S4S procures fresh vegetables such as Onion, Turmeric, Ginger, Tomato and Garlic from more than

25,550 farmers/markets. The produce is packaged in 50 kg bags and provided to women VLEs having the Solar Drying System to process and return the processed goods to S4S.

Currently, S4S is working with over 800 women in India who use the machinery supplied by S4S and process the vegetables, and return it back to S4S. For their efforts, S4S pays charges on how much they process on a per kg basis.

**Training and Capacity Building:** These women are trained to process the material by cleaning, cutting it into appropriate sizes, primary drying it, and then dehydrating using solar conduction dryers.

**Financing:** VLEs can get bank finance to buy the equipment. S4S facilitates the financing from SBI and regional rural banks at 6% for 5 years, making it easy for women to access the equipment with no upfront investment.

**Collection of the Non-Perishable goods:** S4S collects the dehydrated goods. The non-perishable produce is made fit for the customer at the central facility and supplied as food ingredients to F&B Industry.

## Market Linkages

India's \$240 billion food processing sector is outdated, inefficient, and untapped. S4S is transforming the sector, building the agri-food sector's "middle layer," a full-stack food processing platform producing convenience food ingredients and driving



the impact through tech-driven farm-gate sourcing and processing.

S4S Technologies now provides convenience foods to industrial kitchens and packaged food companies. S4S's clean label, one year shelf life, lightweight, ready-to-use products replace fresh and processed supplies in these industrial applications. In doing so, S4S saves customers' time, cost, purchase hurdles, and daily processing efforts while still delivering products always at a competitive price than the market price.

### Impact

The company achieved its impact target

### Impact Created by S4S

- \* S4S sells processed and/or dehydrated vegetables to over 800 customers like Nestle, Sodexo, Marico, IRCTC, Taj Stats.
- \* Reduces 10-30% post-harvest losses in vegetables/spices and horticulture. Crop saved is crop produced, hence S4S increases agricultural production in the country
- \* Encourages farmers to take up vegetable and spices cultivation, which will add to their income by switching from cotton or soybean
- \* Produce preservative-free nutrition-rich vegetables for improved nutrition for the country
- \* Ensure gender equality and livelihoods for women farmers as the money directly goes into their hands
- \* Employment generation at the village level
- \* Climate change mitigation with the use of solar energy



by focusing on social, economical and environmental parameters.

1. 1000 Women Farmers as Micro Entrepreneurs and VLEs by December 2022 and growing to 2000 by March 2023
2. 30,000 Farmers in Direct networks for Access through Village Level Collection Centres in 140 Villages
3. Working Relation with 6 FPOs and 3 leading NGOs for sourcing
4. Saving a cumulative of 320,000 tons of CO2 from entering the environment
5. Working in 140 Villages in India & Impacting 21,000 lives directly

## AGRI INFRA FUND

## A BANKER'S PERSPECTIVE

The Agriculture Infrastructure Fund (AIF) is a unique user-friendly portal based platform that we built two years ago, to facilitate an interface between the Banks and other Lending Institutions on one hand and the beneficiaries on the other involving a mechanism of handholding operational support by Ministry of Agriculture & Farmers Welfare (MoA&FW) through its Central Project Management Unit (CPMU). Under the scheme, Rs. 1 Lakh Crore will be provided by lenders as term loans with interest subvention of 3% per annum and credit guarantee coverage under CGTMSE for loans up to Rs. 2 Crores for creation of viable projects for post-harvest infrastructure management and community farming assets.

**Challenges, Resolutions**

During this two years' rewarding albeit arduous journey, we had to traverse through a tough terrain encountering many ups and downs but it culminated in satisfying results which is displayed in the bouquets being showered on us time and again from various corners for the easy accessibility and user-friendly simple application of the Portal.



Bankers will definitely agree with the fact that AIF is definitely an innovative package of term loan in the farming space that is coupled with interest subvention plus CGTMSE cover. This flexible mechanism of the scheme proves to be a boon as far as its easy convergence

with other State and Central schemes offering subsidies and subventions is concerned.

As we have experienced in banks, customers have either not the patience or time to fill a customised account opening form, not to speak of a loan application. Even many staff members fight shy of taking up the advance portfolio on account of the credit jargons involved. Under such a backdrop, a simple portal-based mechanism involving less paperwork with the ready availability of intelligible 7-page non-technical sounding DPR will be undeniably beneficial aid to such

**About the AUTHOR**

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credit-phobic people. Moreover, our effort in presenting more than thirty readily-built lucid DPR templates in flexible format in this portal, that can be customised as per the requirement of the beneficiaries, will lessen the hassle of looking for a technical assistance.

We have been relentlessly working on the Portal to make it more and more acceptable and the next significant change that is being worked out is automation of claim process which should be completed in near future and ensure process seamless and fast and the outcome more accurate.

### The Road Ahead

We firmly believe that the next level of growth in the agri-economy will have to come through agri-infra in a big way which can propel India's growth. This sector needs to develop its capabilities to compete at a global scale. India's demographic advantage is in our favour and the concern of right kind of affordable finance was taken care of by AIF. Since Bank is the pivot around which the whole financial system revolves, no schemes can fructify without the vibrant and energetic mind-set of bankers. So, now is the turn of the enthusiastic warriors – the bankers at the grassroots, who can make a change to the life of farmers.

### Empathy and compassion for customers and more significantly politeness in handholding them with utmost sincerity will carry forward this scheme to its logical conclusion

The nation is witness to the unparalleled dedication and intense efforts of Bankers in making the various campaigns, be it PMJDY or Mudra or various mass insurance schemes enormous success.

Empathy and compassion for customers and more significantly politeness in handholding them with utmost sincerity will carry forward this scheme to its logical conclusion.

We come across a very few complaints about bankers' insistence on collateral and in some cases of aversion in financing under AIF. In this connection, the good proverb comes to mind is that, in banking or finance, trust is the only thing we have to sell. So bankers need to have their own independent and discreet appraisal and take a final call in taking calculated risk. And we are fortunate to have the element of Trust being shared by CGTMSE cover with its fees being borne by Government.

We have embarked on a series of outreach programmes to spread awareness about AIF among the field functionaries, both existing as well as potential

beneficiaries. State conclaves were organised recently in Kerala, Karnataka, Telangana, Punjab and Tamil Nadu. Webinars and Workshops in virtual mode are being conducted with various Banks and State Government Officials/ State PMUs at regular intervals to sensitise officials on various aspects of AIF. The month-long NOBOL (Nationwide One Branch One Loan) Campaign under AIF for a noble cause of empowering farmers has picked up momentum and we expect to garner substantial investment in Agriculture Infrastructure.

The hard-hitting last two years cannot be erased from the records of human history, but as a nation, we have displayed resolute strength and exemplar resilience to tide over the crisis. We must work as a proactive Team in carrying forward financial system that is robust and sustainable as we gradually transition into the post-pandemic era. Let us ponder over this thought of legendary icon, Steve Jobs: "Great things in business are never done by one person, they are done by a team of people".

# AIF AND STATE BANK OF INDIA

**A**IF scheme has created the enabling environment for investment in post-harvest and farm gate infrastructure. Under this, lending institutions provide loans with an interest subvention of 3% per annum. The scheme also entails providing credit guarantee coverage under Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) for loans up to Rs. 2 Crore. The unique feature of the scheme of providing interest subvention and Credit Guarantee upto Rs. 2 Crs has enabled the lending institutions to proactively finance under the scheme.

## Scheme Beneficiaries

Primary Agricultural Credit Society (PACS), FPOs, Marketing Cooperative Societies, Joint Liability Groups (JLG), Self-Help Groups, Multipurpose Cooperative Societies, Start-ups, agri-entrepreneurs, Central/State agency or Local Body sponsored Public-Private Partnership Projects.

In July 2021, the government approved extending the scheme to APMCs/ State Agencies, National & State Federations of Cooperatives, Federations of Farmers Producers Organizations (FPOs) and Federations of Self Help Groups (SHGs).

## AIF Objectives

The primary objective of the scheme is to provide financial support for agriculture entrepreneurs to improve agriculture infrastructure in India. This will benefit the farmers in the following:

- \* Reduced post-harvest losses and a smaller number of intermediaries be-



cause of investment in logistics infrastructure. This will make farmers more independent and give them better access to markets.

- \* Improved realisation because of modern packaging and cold storage system access since farmers would be able to decide when to sell.

- \* Community farming assets for improved productivity and optimization of



inputs will result in substantial savings.

## Objectives for Government

Direct priority sector lending in the currently unviable projects by supporting through interest subvention, incentive and credit guarantee. This will boost innovation and private sector investment in agriculture.

With improvements in post-harvest infrastructure, the government will further be able to reduce national food wastage percentage thereby enabling the agriculture sector to become competitive with current global levels.

## Objectives for Agri Entrepreneurs and Start-ups

- \* Push for innovation in the agriculture sector using new technologies such as AI, IoT, etc.

- \* Improve avenues for collaboration between entrepreneurs and farmers.

## Objectives for the Banking Ecosystem

- \* With Credit Guarantee, incentive and interest subvention, lending institutions

## About the AUTHOR

Mr Shantanu Pendsey is Chief General Manager, ABU & GSS, State Bank of India Corporate Centre, Mumbai



will be able to lend with a lower risk.

\* Greater role for cooperative banks, regional rural banks (RRBs) through refinance facilities.

### Objectives for Consumers

A larger share of the produce will reach the market and therefore, consumers will be able to benefit from better quality and prices.

### AIF Benefits-

\* Interest subvention: All loans under this financing facility will have an interest subvention of 3% per annum up to a limit of Rs. 2 crores. This subvention will be available for a maximum period of seven years.

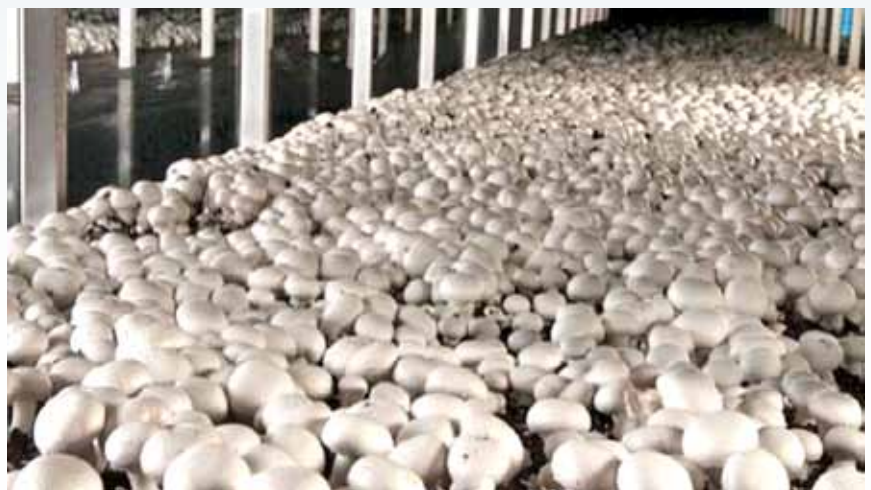
\* Credit guarantee: Credit guarantee coverage will be available for eligible borrowers under Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) scheme for a loan up to Rs. 2 crores. The fee for this coverage is paid by the Government.

\* Moratorium for repayment: Moratorium for repayment under this financing facility may vary subject to a minimum of 6 months and a maximum of 2 years.

### Contribution of SBI

SBI has been at the forefront in implementing the AIF scheme since it was launched. The Bank has put in place a structure for promotion of the scheme. The structure includes a Nodal Officer at Corporate Centre and at Local Head Offices, for supporting and handling the operating staff on various issues relating to the scheme. Bank has believed that capacity building of the operating staff plays a pivotal role in successful implementation of the scheme. All our staff handling agriculture credit is provided inputs on AIF regularly.

SBI has sanctioned 1824 of applications amounting Rs. 1271 Crs under the AIF schemes, which is one of the highest amongst all the Banks. The Bank was felicitated at the AIF Conclave at New Delhi as one of the best performing Banks on 30th July 2022, at the hands of Shri Narendra Singh Tomar, Hon'ble Minister of



**The present upper limit of Rs 2 crore for interest subvention and CGTMSE may be revisited and revised upward. This will facilitate more investment under agriculture infrastructure**

Agriculture & Farmers Welfare.

Ministry of Agriculture and Farmers Welfare has launched NOBOL (Nationwide One Branch One Loan) campaign for Agriculture Infrastructure Fund Scheme from 15th July to 14th Aug, 2022. We have sanctioned highest number of applications so far during the said campaign.

Our Bank has started a new initiative of "Ratri Shibir" for connecting with farmers by our operating staff which is

conducted twice every month. In the said initiative we are marketing AIF scheme to the farmers and also handholding them for submitting their applications on the portal.

### Way Forward

AIF scheme has created the awareness about the need of agriculture infrastructure. The scheme has also enabled farmers to undertake various primary processing projects which is ensuring better price realization. Going forward we anticipate more demand for the scheme. We are of the opinion that the present upper limit of Rs 2 crore for interest subvention and CGTMSE may be revisited and revised upward. This will facilitate more investment under agriculture infrastructure. The scheme will have huge impact in changing the agriculture infrastructure landscape in the country.

# Journey of BANK OF BARODA IN AIF

Our Hon'ble Prime Minister had announced on May 15, 2020, the Agriculture Infrastructure Fund scheme under Atmanirbhar Bharat Abhiyan. Accordingly, Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW) formulated new Central Sector Scheme for financing facilities under Agriculture Infrastructure Fund (AIF Scheme). This scheme provides a medium, long term debt financing facility for investment in viable projects for post-harvest management infrastructure and community farming assets through interest subvention incentives and financial support. Based on broad guidelines issued by Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW) our Bank of Baroda has issued scheme guidelines to all our operating units.

## The Progress

Our Bank is extending finance under the AIF scheme to farmers, FPOs, SHG/JLGs, Startups and other Entrepreneurs etc. As on today Bank of Baroda has sanctioned 672 projects with a loan amount of Rs.723.80 Crores. Major share of Bank finance is to post harvesting activities like Dry warehouses & Cold Storages, followed by primary processing units. These projects also include fruit ripening chambers, organic input production and precision agriculture projects etc.

With the development of Agriculture Infrastructure units, farmers get the opportunity to store their produce in those warehouses/cold storage units and sell the produce when they get



good price. Apart from providing direct advantage to the farmers and agri entrepreneurs in the form of good returns, it also adds supplementary income to farmers who construct warehouses and provide employment to many. Each activity financed under AIF provides both direct and indirect employment opportunities.



## About the AUTHOR

**Mr Nityananda Behera is General Manager & Head, Rural & Agri Banking Department, Bank of Baroda Head office**

### AIF Project in Pollachi, Tamilnadu

One of our branches i.e. Pollachi in Tamilnadu has financed a project under precision agriculture “Autonomous Precision Farming Technology” in which AI is capable of maintaining perfect and healthy air and water balance in soil at all times by using sensors.

Mr Balamurali Krishna from Pollachi is a new generation farmer who shifted from a long career in IT sector for more than 20 years in software development, designing and supporting activities. In his new found interest for agriculture, he has been entirely into farming and maintaining ten acres of coconut plantation.

As a new generation farmer, he faced the problem of maintaining optimum water requirement in the soil for his crops and provide apt nutrient availability at the root zone and operate the generator and pumps in his field. It was difficult for him to manage the field, especially when he is out of station.

Mr Krishna is a smart farmer and knows the use of technology. He inquired in the market and got to know about the precision tools named as GroTron manufactured by Farmagain Agro Private Ltd from Coimbatore. GroTron is an IoT and uses AI&ML to solve the challenges faced in regular farming activities by the



**One of our branches at Pollachi in Tamilnadu has financed a project under precision agriculture Autonomous Precision Farming Technology, in which AI is capable of maintaining a perfect and healthy air and water balance in soil at all times by using sensors**

farmers like Mr.Balamurali Krishna. With Installation of this IoT, this smart farmer of our bank is now able to maintain appropriate moisture and nutrients at the root zone as well. He is able to control and operate irrigation pump set and the generator without even visiting field. He is now able to control his farm operations from the comfort of his home through a mobile app and has got more time to concentrate other business activities.

Besides, he is expecting to get a benefit of growing crops using 50% less water, reduction of fertilizer usage by 20% and increase of productivity by 20%. It is the AIF scheme for which farmers like Mr Balamurali Krishna are able to explore the use of technology and improve their lifestyle.

### Details of the automation project

\* It has 6 different containers installed next to the pumping unit where major nutrients like N,P,K and micro nutrients like zinc, magnesium etc. can be stored in liquid formulation as per the monthly requirements.

\* There is provision for ease in application of nutrients by fixation of amount for application and preset timings at the control unit along with water at the time of irrigation.

\* The application is also having provision for quantifying the water requirement of the coconut trees based on their age and accordingly the exact amount of required water is allowed for irrigation.

\* The entire process can be controlled remotely from anywhere.

\* The application of right nutrients at the right time with proper quantity increases the productivity and at the same time protects the soil health.



# BANK OF INDIA MOVING AHEAD IN AIF SCHEME



**B**ank of India, one of the major Public Sector Banks in our country, has a strong national presence with over 5000 Branches spread across the length and breadth of the nation. True to the Bank's punch line of Relationship beyond Banking, Bank has been a forerunner in implementation of various services and schemes.

Atmanirbhar Schemes were envisaged under the exemplary vision of Prime Minister Shri Narendra Modi under Atmanirbhar Bharat Vision. Our Bank has taken the Atmanirbhar Schemes with utmost importance for empowering farmers and enable them to become self-sufficient. Agriculture Infrastructure Fund Scheme, one among the Atmanirbhar scheme has given wings to the dreams of farming community to become self-reliant. The scheme provides support of 3% interest subvention and CGTMSE fee reimbursement for a period of seven years for all the medium and long term up to Rs 2 Crores for facilities financed under Post harvest management Infra-



structure and Community Development Assets creation.

### Robust Mechanism at BOI

Bank of India has performed in tandem to the scheme objective of AIF in developing Post Harvest Management Infrastructure and Community farming assets Farming community. Our Bank has a robust mechanism of handling the proposals and disposing the proposals in timely manner. We get in touch with the beneficiary from the day the application is received at Branch and the necessary formalities are discussed. The projects taken under AIF have enabled the beneficiaries to increase their income to many folds which otherwise they were deprived off. Every loan account opened in the scheme has a success story of empowerment within. These created a confidence among the customers and approach Bank



### About the AUTHOR

Mr Nitin Deshpande is General Manager, Bank of India, Head Priority Sector and Rural Business



for taking up various projects and share the experience with kith and kin. Besides, Bank organize sensitization program, awareness camps, customer meets at regular intervals for educating the staff as well as customers at regular intervals regarding the scheme.

### High Customer Confidence

The various sensitization camps, outreach programs, customer meets have yielded in gaining customer confidence with the Bank. With the customer support and positive responses, Bank could reach the customers in AIF scheme in almost all states including the less privileged locations of Assam, Jharkhand, Orissa etc.

Besides, the bank can partner with Government in development of various infrastructures in the scheme as Warehouses, cold storages, Primary processing units, Post-Harvest Management as ripening chambers, Tissue culture units, organic input production, Custom Hiring Centre, Financing Drones under smart and precision agriculture etc. promot-

### Beneficiaries of our bank from Maharashtra on mango ripening chambers and from Uttar Pradesh for the cold storage unit got the opportunity for direct interaction with Hon'ble PM Shri Narendra Modi during the PM Kisan event on completion of one year of launch of the scheme

ing entrepreneurship among individuals, SHGs, FPOs, Startups etc.

### Diverse Success Stories

Beneficiaries of our bank from Maharashtra on Mango Ripening Chambers and Uttar Pradesh on Cold storage unit got the opportunity for a direct interaction with Hon'ble PM Shri Narendra Modi during the PM Kisan event on completion of one year of launch of the scheme. Also, project from Bengaluru on procurement of exotic fruits and vegetables, preserving in cold storage financed under AIF and selling in own brand name after sorting, grading and packaging by a lady entrepreneur was showcased as a success story in DD Kisan event of Doordarshan.

Our Bank has so far sanctioned 984 applications amounting to Rs 685 Cr in a short span of two years in Agriculture Infra Structure Fund Scheme and it is more overwhelming to note that 45% of sanctions were done for female beneficiaries. This reflects the confidence gained by customers in Banking with our Bank and availing finance under Agriculture Infrastructure Fund Scheme. Bank of India has been recently ranked as one among the top three best performing Banks under the scheme which is true tribute to our customers for having faith in our Bank in partnering with us for their growth. We at Bank of India are committed towards developing Atmanirbhar Bharat true to its spirit.

# BANK OF MAHARASHTRA

## UPLIFTING RURAL INDIA WITH AIF

Infrastructure plays a vital role in agriculture at every single step like for the supply of input, sowing of crops and for the post-harvest management.

Planned investment in agriculture infrastructure sector is important to enhance the productivity and to reduce the post-harvest losses this will also result in capacity building and higher income generation. In India post-harvest losses are relatively higher because of gap of basic agriculture infrastructures like storage houses, pack houses, absence of proper supply chain etc.

In view of above, Government of India has formulated a Central Sector Scheme of financing facility under Agriculture Infrastructure Fund for creating required pre and post-harvest management infrastructures in the agriculture sector.

AIF aims at providing a medium/long term debt financing facility till 2025-2026 through 3% interest subvention and credit guarantee support on loans for creation of post-harvest management infrastructure and community farming assets.

Community farming assets eligible under Agri Infra Fund includes: (i) Organic inputs production (ii) Bio stimulant production units (iii) Infrastructure for smart and precision agriculture. (iv) Projects identified for providing supply chain infrastructure for clusters of crops including export clusters. (v) Projects promoted by Central/State/Local Governments or their agencies under PPP for building community farming assets or post-harvest management projects.

In addition to the aforementioned community farming assets, farmer communities such as PACS, FPOs, SHGs, JLGs, Multipurpose Co-op societies, Marketing Co-op societies and their federations are also eligible to get the ben-



efit under Agri Infra Fund for creation of following post-harvest management infrastructures: (i) Supply chain services including e-marketing platforms (ii) Warehouses (iii) Silos (iv) Pack houses (v) Assaying units (vi) Sorting & grading units (vii) Cold chains (viii) Logistics facilities (ix) Primary processing centres (x) Ripening Chambers.

Bank of Maharashtra (BOM) is a Public sector bank under the control and supervision of GOI having the objective for extension of banking facilities on a large scale to public at large, corporates, industries etc. and also to the rural and semi-urban areas, and for diverse other public purpose. Being Lead Bank of the Maharashtra State, BOM is effectively shouldering responsibility as State Level Bankers' Committee, since 1976 and always pro-active & supportive in terms of guiding the Member Banks in the State, to focus on Agriculture lending



### About the AUTHOR

**Mr Vijay Kumar N. Kamble is General Manager, Credit Priority-Agriculture, Financial Inclusion & Convenor, SLBC, Maharashtra**

BOM is responding in a progressively liberal manner the financial requirements of cooperative institutions, small scale industries and agriculturists by extending rural credit through its wide network of 2029 Branches as of 30.06.2022 in more than 34 States across the India. BOM is having 1126 (56%) Branches in Rural and Semi Urban areas cater to the needs of farmers by providing sufficient & timely financial support.

BOM has joined the noble mission of GOI for Uplifting Rural India by Bridging the Agri Infra Gap through AIF by signing the MoU with Ministry of Agriculture and Farmer Welfare, GOI on 5th Aug,2020 for financing under AIF Scheme.

BOM is financing the Infrastructural project with concessional Rate of Interest (6 month MLCR+100 Basic points Max-9%) up to Rs.2 Crore, as per MOU. Bank has sensitized all the Zonal Offices and Branches for quick sanction of projects under AIF scheme. As a result, BOM could sanctioned 235 Agri Infrastructural Projects for project cost Rs.551 Crores by providing financial assistant of Rs.316 Crores. BOM is having strong bond with government officials & PMU team of AIF. Bank has observed the Agri Infra Fund fortnight campaign from 1st to 31st October 2021 and surpassed the allocated



target by Govt. of India for sanctioning the Agriculture Infrastructure Projects. BOM has been felicitated by Hon'ble Union Minister Agriculture Shri. Narendra Singh Tomar under 'Target Achievers Category' on occasion of Agri Infra Fund Award Ceremony on 30th July 2022.

BOM has financed maximum AIF projects in Madhya Pradesh Maharashtra State.

Major activities such as warehouses, Primary Processing Centers & Cold Storage Units were financed by BOM under AIF.

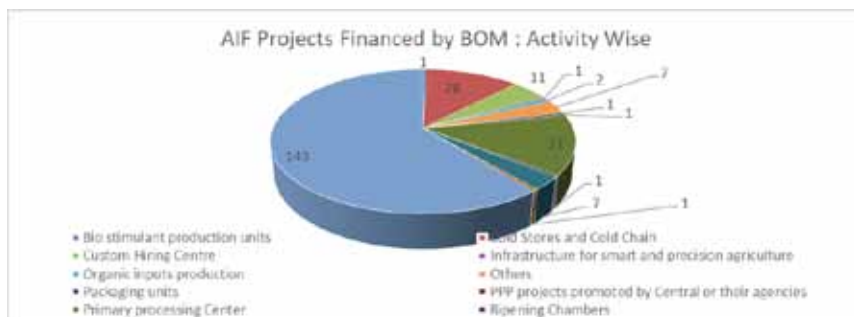
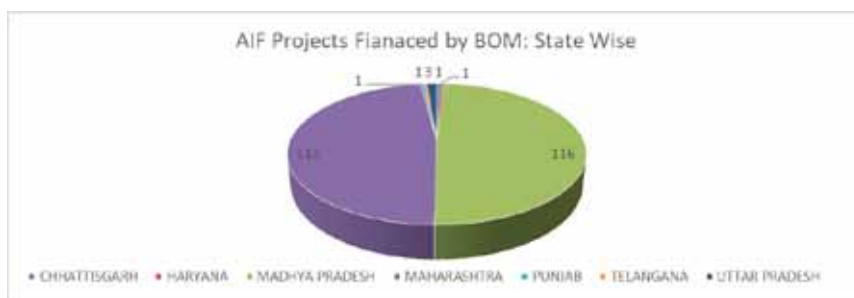
The concessional rate of interest is applicable for loan amount of Rs.2 Crore under AIF and banks are free to charge the rate of Interest above the amount of Rs.2 crores as per their extant guidelines. which is increasing the cost to the farmers for loans above Rs.2 Cr.

Hence, to bridge the Agri Infra Gap and provide incentives to large farmers' community for availing the loan beyond Rs.2 crores for Agriculture infrastructure with the same Interest rate, BOM had taken proactive step and introduced a Maha Krishi Samrudhi Yojana – Food and Agro Based industries along with Infrastructure Development Scheme - Cluster Approach. It has been implemented through all our branches across India since February 2022.

Unique features of the "Maha Krishi Samrudhi Yojana" Scheme

- Implemented with cluster based approach throughout the India.
- Concessional ROI & Nil Processing Fee.
- Maximum Loan amount is up to Rs.100 Cr
- Repayment period up to 120 months
- Convergence with various Central / State Govt. Schemes.

Under leadership of Hon'ble MD & CEO, Shri A.S. Rajeev Sir, BOM is always forefront to help the farmers' community for uplifting rural India as per the directions of GOI and Reserve Bank of India.

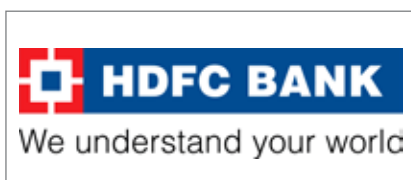


# AIF JOURNEY OF HDFC BANK

## — TEAM HDFC Bank Ltd

**H**DFC bank is proud to support the Agriculture Infrastructure Fund (AIF) scheme of GOI. The scheme was launched with an objective to mobilize a medium-long term debt financing facility for investment in viable projects for post-harvest management infrastructure and community farming assets through incentives and financial support. The objective of the scheme is to improve agriculture infrastructure in the country.

AIF scheme has attractive benefits viz; Interest Subvention Credit Guarantee, and convergence of different Govt. schemes.



### Core Group Driving The Initiative

Acknowledging the importance of the Agriculture Infrastructure Fund scheme in Nation building, HDFC Bank has created a Core Group to drive this initiative, which is focussed on creating awareness for internal as well as external stakeholders. This core group has taken various steps which include conducting training programmes for staff, webinars

and customer meetings for awareness of the scheme, installation of standees and posters etc. at potential branches, and placement of marketing banners on the Bank's website. AIF Scheme is discussed actively with potential customers by senior management team that visits at locations across the country to create awareness and momentum

### Progress Made

Under this scheme, till July 2022, HDFC Bank has approved 515 proposals amounting to Rs 717 crore. Of 515 proposals, 216 proposals (equivalent to 42 per cent) amounting to Rs 247 crore are from women entrepreneurs, a demonstration of the fact that the Bank is also promoting women Agri-entrepreneurs.

AIF portfolio of HDFC Bank is concentrated among warehouses (57%) and Primary processing centres (13%).

As part of the Agriculture Infrastructure Fund scheme, the Bank is focused on lending to Agri-infra assets such as cutting-edge infrastructure, including agricultural machinery, custom hiring facilities; and infrastructure for precision and smart agriculture thereby contributing to development of Agri economy, while addressing the root cause of post-harvest losses and inadequate realisation for the farmers.

### Novel Collaboration Models

The bank is creating novel collaboration models to strengthen agri value chains,



Warehouse financed to Shree Bhairavnath Feeds Private Limited, Shirur Pune





**Ginning Mill Financed to M/s Anand Sagar Industries, Amravati Maharashtra**



**Group Head with HDFC Bank staff, creating awareness about AIF campaign - Lalganj Ajhara, UP**

bringing together farmers and agri-business and thereby building a holistic ecosystem by leveraging the strengths of government schemes and channelizing the benefits to the end customers.

In this journey, HDFC Bank has reached out to potential agri-corporates and created an alliance for funding their customers under the scheme.

To promote the AIF scheme, the Ministry of Agriculture & Farmers' Welfare had organised special campaigns in 2021. As part of the campaigns, banks were given targets to extend credit to Agriculture Infrastructure projects.

In the first campaign in the year 2021, HDFC Bank achieved 114% of the assigned target of Rs 80 crore by sanctioning loans worth Rs 91 crore.

In the second campaign in the year 2022, the bank again achieved 111% of the assigned target of Rs 150 crore by sanctioning loans worth Rs 167 crore.

These performances can be attributed to the vast network of around 6,300 branches, with 3,188 Semi-Urban and Rural branches having approximately 4,500 dedicated Agri officials for a focused approach towards Agri business schemes.

### **Pushing AIF In Rural Areas**

The Ministry of Agriculture & Farmers' Welfare is running a month-long Nationwide One Branch One Loan (NOBOL)

**The bank is creating novel collaboration models to strengthen agri value chains, bringing together farmers and agri-business and thereby building a holistic ecosystem by leveraging the strengths of government schemes and channelizing the benefits to the end customers**

special campaign to promote AIF. As part of this campaign, bank branches are being encouraged to actively participate and sanction at least one loan per branch during the campaign period, to bolster the agricultural infrastructure in rural areas.

The Agriculture Infrastructure Fund is strengthening the Agri Value chain in rural and agricultural sector, which is one of the backbones of Indian Economy.

Today, HDFC Bank proudly touches approximately 5 lakh lives in rural India in close to 1.3 lakh villages. With its nationwide branch network, HDFC Bank is working extensively in this sector to take affordable banking services to the last mile and to improve their livelihood.

### **Success story of Shree Bhairavnath Feeds Private Limited**

Mrs Vrushali Baban Walke and Mr Abhinav Baban Walke are the directors of Shree Bhairavnath Feeds Private Limited, based out of Karde Gat in Shirur, Pune District. In 2018, they commenced their entrepreneurial journey and incorpo-

rated Shree Bhairavnath Feeds Private Limited to carry out business in manufacturing of animal & poultry feeds. Over the years, they expanded their business operations in preparation of sugar/glucose and starch fattening, artificial sweeteners, and fertilizers etc.

Due to the seasonal nature of agri business and price volatility, the business had inherent risks which they wanted to minimise.

After careful consideration they thought of setting up a warehouse, but the setup would require a huge capital investment. Under AIF scheme, HDFC Bank was able to sanction major portion of the project cost at attractive pricing along with the credit guarantee with reduced TAT. Based on the rich knowledge and years of experience in the business, Mr. Walke was able to take a business decision, and thus availed a credit facility of Rs 1.46 crore for building a warehouse shed with a capacity of 45,000 sq. ft.

According to Mr. Walke, HDFC Bank has been a constant support to them, and AIF scheme has proved to be a boon for their business expansion.

# PUNJAB NATIONAL BANK WORKING DEDICATEDLY WITH AIF

## BUILDING ROBUST POST HARVEST INFRASTRUCTURE IN INDIA

**T**he next green revolution in India has to come from post-harvest management. In the face of the monumental post-harvest losses in our nation, it is an exigency to reinforce and strengthen our post-harvest management infrastructure. Building warehouses, cold storages, robust supply chains, sorting and grading units is a pressing priority in Indian agriculture arena. Opportunity to accomplish this presented itself when GOI launched the AIF scheme providing medium to long term financing facilities to establish post-harvest management infrastructure and community farming assets. As one of the lending institutions affiliated with this scheme, Punjab National Bank is among the top performing banks.

### **Our Modus Operandi For Implementation Of The Scheme**

Our Bank implemented this scheme in August, 2020 and formed team of nodal officers for effective execution and follow up to garner good business. One Nodal Officer for liaison with GOI and field team, similarly for smooth implementation and good business growth, nodal officers have been appointed at Zonal office and Circle Offices. These officers work as a well-oiled machine towards establishing communication with GOI & AIF PMU by providing feedback and constant reviews. Not only this but nodal officers at zonal and circle offices who are in touch



**Our bank has started a Gram Sampark Abhiyan. As part of this campaign, several camps will be organized in villages at rural/ semi urban centres for the purpose of raising awareness and disseminating information about the scheme. We expect that through this direct, ground level communication approach, we shall be able to reach a wider audience and many people would come forward to avail benefits of AIF**



with beneficiaries, provide start to end assistance to them. Beneficiaries, be it a small farmer or a big entrepreneur, find it much easier to go through the process with the guidance of these officers.

### **About the AUTHOR**

**Mr Kuldeep Sign Rana is Deputy General Manager, Punjab National Bank Head Office**



### **Our Taskforce For Implementation Of AIF Scheme**

Currently, the bank has 1600 Agriculture officers, 113 LDMs, 6 SLBCs, 12 farmers training centres which are being used for effective implementation of the scheme. Our field functionaries are making village to village visits to disseminate and educate the farmer about this scheme. We have also conducted training in collaboration with the AIF Project Monitoring Units and allotted targets to SLBCs and all LDMs.

### **Our Achievements**

To make AIF successful, Ministry of Agriculture and Farmers welfare has launched two campaigns until now. The first campaign was launched in October 2021. The second campaign was launched from February 1, 2022 to March 15, 2022. Our bank had gained the top position in this campaign and

**Punjab National bank (PNB) felicitated by Shri Narendra Singh Tomar, Minister of Agriculture & Farmers Welfare, at the AIF awards ceremony**

was felicitated by Ministry of Agriculture for our efforts at the recent AIF awards ceremony.

### **We Are Working Hard To Achieve The NOBOL Target**

Presently, the Ministry of Agriculture and Farmers Welfare has launched NOBOL (Nationwide One Branch One Loan) campaign under Agriculture Infrastructure Fund Scheme from 15th July to 14th Aug, 2022. We are working hard achieve our target under this scheme and we are sure that this time also we will succeed.

### **The Gram Sampark Abhiyan**

In light of this NOBOL campaign, our bank has started a Gram Sampark Abhiyan under which several camps will be organized in villages at rural/ semi urban centre for the purpose of raising awareness and disseminating information about the scheme. We expect that through this direct, ground level communication approach we shall be able to reach a wider audience and many people would come forward to avail benefits of AIF and thus, subsequently helping us achieve the target of one branch one loan of the campaign.

# AGRIBUSINESS MANAGEMENT FOR AGRIPRENEURSHIP

**A**griculture education is evolving to meet the growing and diversified needs of the stakeholders in agriculture sector. However, there is a palpable dearth of professional managers and business leaders in the segment. Keeping this in view, Agriculture Today Group organized third VCs Symposium on the topic, 'Agribusiness Management For Agripreneurship' on August 18, 2022, in virtual mode.

The webinar was well attended by eminent personalities who shared their views with assembled participants who included a good number of students from various agricultural institutions. The session was moderated by Mr. Saurabh KR Pandey - Director, Imperial School of Agri Business, Greater Noida. Ms Mamta Jain, Group editor and CEO, Agriculture Today welcomed the panellists.



**Dr P Chandra Shekara, Director General, MANAGE, Hyderabad**

- Agribusiness has evolved into an interesting dimension among its stakeholders and agribusiness management is the new favourite of the agri graduates
- A series of programmes by the government such as RKVY Raftaar,

Agriculture Infrastructure Fund, National honey and bee keeping mission, SFURTI etc are opening up a plethora of opportunities in agribusiness

- The students should leverage these opportunities and they require guidance which can only be provided through structured curriculum in agri education institutions
- Opportunities for agri business management students are increasing in areas of consultancy, food system management and secondary agriculture



**Dr Ramesh Mittal, Director, National Institute Of Agricultural Marketing**

- There is a paradigm shift from agriculture livelihood to agri entrepreneurship
- Agri startups are emerging in India. They must be innovative, sustainable and socially relevant to be successful.
- New technologies such as block chain technology, IoT, IT are being increasingly utilised in agriculture. Such advanced technologies need to be introduced in the agri education curriculum
- Entrepreneurship is a bouquet of

management and the entrepreneurs need to get trained through a structured curriculum



**Dr. RS Verma, Director, MNNIT, Allahabad**

- Educating farmers is important
- In a country like India, patenting crops is important
- India should promote GM crops and herb cultivation which can increase farmers' profitability
- Logistics and storage should be accorded importance



**Dr Kalpana Sastry, Managing Director, AgHub, PJTSAU**

- A new generation of agri student thinkers should be developed
- We should relook at our education system
- New technologies like block chain, AI etc., should be added to the curriculum
- A trans disciplinary approach in

- agriculture education should be developed
- Glamourising agriculture is an important approach to attract youngsters
  - Building local businesses in local places with global technology should be considered



**Mr Debabrata Sarkar, Vice President-Asia Pacific, AlgaEnergy, S.A.**

- Encourage students to create ideas and follow successful business models
- Agri businesses are potential areas as there are investors and multiple organizations offering educational support



**Mr Pradipta Sahoo, Chief Strategy Officer & Head Exports, Mother Dairy**

- Today we have moved from 'managing shortage' to 'managing surplus'
- Earlier government jobs and banks were the primary job sources for agriculture graduates. Today there are alternate avenues especially the private sector
- Now agriculture is looked up as a business. Students should be geared up to utilise this opportunity
- Students from rural background should shun their introvert personality and be assertive with their ideas

- In procurement, transportation, processing, value addition, distribution and marketing, agri professionals are highly sought after
- New ideas and perspectives can propel agribusiness to higher levels



**Dr RC Agarwal, Deputy Director General (Agricultural Education), ICAR**

- Best platform for agribusiness is through agri-education
- One year practical experience (READY Programme) in agriculture education gives an edge to agri graduates
- Earn while Learn Program is an important programme for agri graduates where they not only learn how to make a product but also learn to sell and get some revenue from it
- Number of girl students in agri education sector is increasing. Most students want to agricultural entrepreneurs
- For agribusiness management the best institution is agricultural universities
- At the universities, besides UG program, several diploma courses have being introduced. Students of class 10 are also being absorbed into polytechnique institutions. They are being prepared to take up enterprises



**Dr MJ Khan, Chairman, ICFA**

- In agriculture many job opportunities

- are presenting from the services sector
- Innovative models/disruptions are creating opportunities for agriculture students
  - Opportunities are emerging in supply chain, value addition, processing, production management, precision and digital agriculture
  - All agribusiness should eventually benefit the farmer



**Dr Neerja Prabhakar, VC, SKLTSHU**

- India will witness a sea change in agriculture education
- Only few students with agriculture background are choosing to develop startups
- Protected cultivation and value addition are two important areas
- Interaction between successful agripreneurs with agriculture students can help instil confidence in the young generation



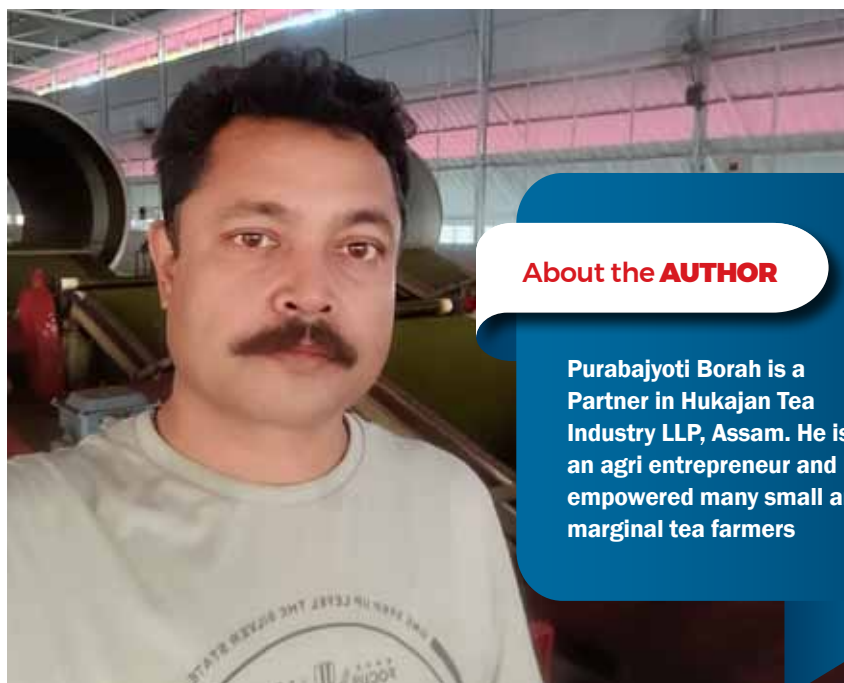
**Mr Ramesh Deshpande, CEO, IAG International**

- There are many business opportunities in agriculture supply chain
- Input supply, post harvest, marketing etc., present many opportunities for potential agripreneurs
- Risk management is an important aspect that needs to be considered.

## SUCCESS STORY FROM ASSAM

## MAXIMIZING AIF

How Hukajan Tea Industry is transforming lives of tea planters in Assam, courtesy Agriculture Infrastructure Fund



## About the AUTHOR

Purabajyoti Borah is a Partner in Hukajan Tea Industry LLP, Assam. He is an agri entrepreneur and has empowered many small and marginal tea farmers

As a citizen of this beautiful country, I was always fascinated by the beauty and the natural resources present here and especially the north-east region which is my birth place also. This unmatched natural abundance offers lot of opportunities to agri entrepreneurs and other start-ups with its unexplored and untapped resources.

Born and brought up in a traditional Indian family at Assam, I grew up drinking tea, be it morning tea with the elder members of the family or an evening get together or tea party with friends. Tea was almost like a part of our being. It was tea all over –

and not just in my family. I gradually observed that the love and fascination for tea was like everywhere and in all parts of the country.

### Diving Into Tea Plantation

During my post-graduation, I was introduced to 'Tea Plantation' as a part of an On Field Academic and Research Project. I got introduced to the basics of plantation. It sowed the seeds of turning my love for tea in to my livelihood. In 1999, I bought some land and took a dip into the vast area of 'Tea Plantation'.

I have been engaged with my passion for tea plantation for over two decades. I have tried to study in detail the problems faced by the local tea farmers face in terms of inadequate basic infrastructure, lack of adequate logistics and marketing facilities, huge post-harvest losses etc. People will be amazed to know that a lot of farmers actually destroy their green tea leaves as they are not able to find suitable buyers for their produce.

### The Idea, The Team

I decided to work towards improving the lives of these local small farmers.



**We have grown in an era where getting any support from the government used to be considered a long term plan with many hiccups and delays. It was astounding for us to receive prompt and timely support. Our application got processed in no time**

This was possible by making efforts to maximize the potential of the market for Assam tea. I started my own tea company. I was aware of the hurdles and challenges. Fortunately, there was something in the region – my own birth place – which gave me the strength and willpower to move ahead.

To begin with, I needed a team of like-minded and determined people who I felt must be equally passionate and mad about the business solutions I was trying to work on. I found my team in Bijay Kumar Saraf and Deepak Kumar Murarkaisa, who willingly expressed their willingness to be a part of this dream. In





March 2019, we formed Hukajan Tea Industry LLP. Our first objective was to set up a primary processing unit for tea at Hukajan, Post Office Barangabari, District Biswanath in the state of Assam.

### Ray of Hope: AIF

With all preliminary planning done, we need funds to set the project rolling. What we wanted to create required a sizeable investment. Our project cost was Rs 7 crore approximately. We started approaching the funding agencies, investors, banks etc but met with little success.

Destiny has its own plans. When the entire world was going through one of the toughest globally challenges in contemporary times, our government came up with a beautiful scheme titled Agriculture Infrastructure Fund (AIF) under its AatmNirbhar Package.

AIF provides funding support for the primary processing activities, post-harvest infrastructure and other activities at maximum rate of interest of 9% with an interest subvention of 3%. It also provides for Credit Guarantee Support up to loan of Rs 2 crores.

Unfortunately, we learned about this scheme only in late 2021. We decided to apply for funds under this scheme

instantly.

### Superfast, Timely Support

We submitted our application on 18 February, 2022. To our surprise, our application was reviewed and approved within seven days. Our loan for Rs 4.6 crore was sanctioned through State Bank of India on 25 February, 2022. We received our first disbursement on 4 March, 2022.

We have grown in an era where getting any support from the government used to be considered a long term plan with many hiccups and delays. It was astounding for us to receive prompt and timely support. Our application got processed in no time.

Since the last two years, we had been struggling to get funds for our dream project. The support and appreciation that we received courtesy AIF energized our team significantly. Our motivation level grew manifold. We started working on our project with new zeal and energy.

### The Journey Begins

By May 2022, our project was completed. In the first week of June, the trial runs began. Our commercial production started in the first week of July 2022. Within a month, we have touched the

production figure of about 2000-2600 Kgs of tea per day. It was our dream to help small-scale tea farmers flourish. It is highly gratifying that we are now able to achieve our dream.

We are expanding our boundaries. Our products have reached Delhi, Rajasthan, Punjab and West Bengal. Soon we shall be reaching other parts of the country as well.

Our unit has so far successfully benefited 364 local small farmers directly and other 600 farmers indirectly from whom we purchase tea leaves. We have also been able to provide direct employment to about 50 local people and further to about 100 people who have associated with us in other capacities.

### Way Forward

This is just a beginning. We are working rigorously to expand our reach both domestically and internationally and engage more and more small farmers and tea growers with us.

Our heartfelt thanks to the Government of India for the immense support that we have received. I am sure that the scheme of Agriculture Infrastructure Fund must have already given wings to the dreams of many entrepreneurs like me. Many Thanks.





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The dedicated hardworking farmers of India deserve recognition. Year after year our farmers who battle great odds and adversities to make India self-sufficient deserve our salute.

For the last 4 decades, Dhanuka Agritech Limited is working with farmers and moving forward together. During this journey, Dhanuka took a pledge to bring prosperity in the lives of these farmers using advanced tools and technology. Dhanuka's trained field force is empowering farmers with new age ways of increasing farm yields and crop production.

Dhanuka is committed to bringing a positive transformation to the lives of farmers. At Dhanuka, we believe every citizen of India will salute the farmers for their dedication, determination and grit.



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