

Report on

Training on Existing Transformative Agriculture Tech, Mobile-based Applications, Innovations and Smart Farming

Hiriyur, Chitradurga
Saturday, February 19, 2022

Organised by



PUBLIC AFFAIRS FOUNDATION
Partnership for Better Governance

Sponsored by



NABARD

National Bank For Agriculture And Rural Development

CONTENTS

Chitradurga

Introductory Session	07
Welcome Address	07
Inaugural Address	07
Introductory Remarks	08
Technical Session	10
Module 1: Existing Transformative Technology in Agriculture	10
Module 2: Smart farming for improving output	11
Module 4: Innovations in Transformative Technology	14
Q & A and Summing Up	16
Valedictory Address	18
Brainstorming & Interaction Sessions	19
Interview Sessions	20
Vote of Thanks	24
Feedback	26
Anexures	28
Annexure 1: Agenda	28
Annexure 2: Participation Certificate	29
Annexure 3: Sample Feedback Form	30
Annexure 4: Select Photographs	34

Chitradurga

District Agriculture Training Centre,
Babbur Farm, Hiriyr, Chitradurga

Saturday, February 19, 2022



Background

The Public Affairs Foundation (PAF) was provided funding support by National Bank for Agriculture and Rural Development (NABARD) to conduct a series of training programmes in six districts in Karnataka. The topic for the same is “Training on Existing Transformative Agriculture Tech, Mobile-based Applications, Innovations and Smart Farming”.

The training programmes aims to bring together farmers, Farmer Producers Organisations (FPOs) and Experts (scientists & researchers) on a unified platform. This may increase the farming yield and farmers can market value-added products instead of mere raw produce and learn how the latest developments in agri-tech can enable them to enhance their profitability. While FPOs in the state have been constantly conducting similar programmes, the current endeavour is to scale up the initiatives to include branding, marketing techniques by using Artificial Intelligence and Machine Learning techniques.

The main objectives of the training programme are to explore, discuss and proliferate modern transformative, technology, mobile App-based, innovative and Smart Farming techniques among farmers using traditional farming techniques. This is expected to help traditional farmers make a paradigm shift to adopt modern farming techniques. Primarily, the training programme is focused on sharing experiences, active interactions, and providing solutions offered by smart farming. Farmer Producer Organisations (FPOs) have not only been providing farmers with seeds and manure but also training them in the latest farming methods for a few years.

The 1st training was held in Chitradurga on Saturday, February 19, 2022 at the District Agriculture Training Centre, Babbur Farm, Hiriyr. (Refer to Annexure 1 for the Agenda).

This report provides an overview of the key deliberations from the programme held at Chitradurga.

Introductory Session

Welcome Address

Dr. Annapoorna, Executive Director, Public Affairs Foundation (PAF), Bengaluru delivered the welcome address.



Inaugural Address

Mr. Gurucharan G, Director, Public Affairs Centre, who was the chief guest at the event said in his inaugural address that the workshop that was being held was more of a platform for the exchange of information and experiences rather than a training programme per se.



He mentioned that many exciting changes were taking place in modern agri-technology and efforts are being made by the state, Centre governments and agriculture universities to bring into practice many of these techniques in a bid to enhance both production and productivity.

NABARD's intention, according to Gurucharan, is to accelerate the adoption of emerging technologies like Artificial Intelligence (AI) and Machine Learning (ML) in agriculture. For this to be successful, there needs to be a 'buy-in' from farmers. Hence the need for a consultative platform where agriculturists participate and learn how to use technological advancements to improve their profitability. The program is specifically focused on small and marginal farmers.

NABARD's vision is to ensure greater involvement of FPOs in this endeavor and build capacity and employ FPO functionaries to conduct such programs themselves. The way forward is for FPOs

to actively promote and proliferate tech-based Smart Farming among their members. The task before the FPOs singularly is to enable farmers to create value-added products so that they fetch better prices for the produce.

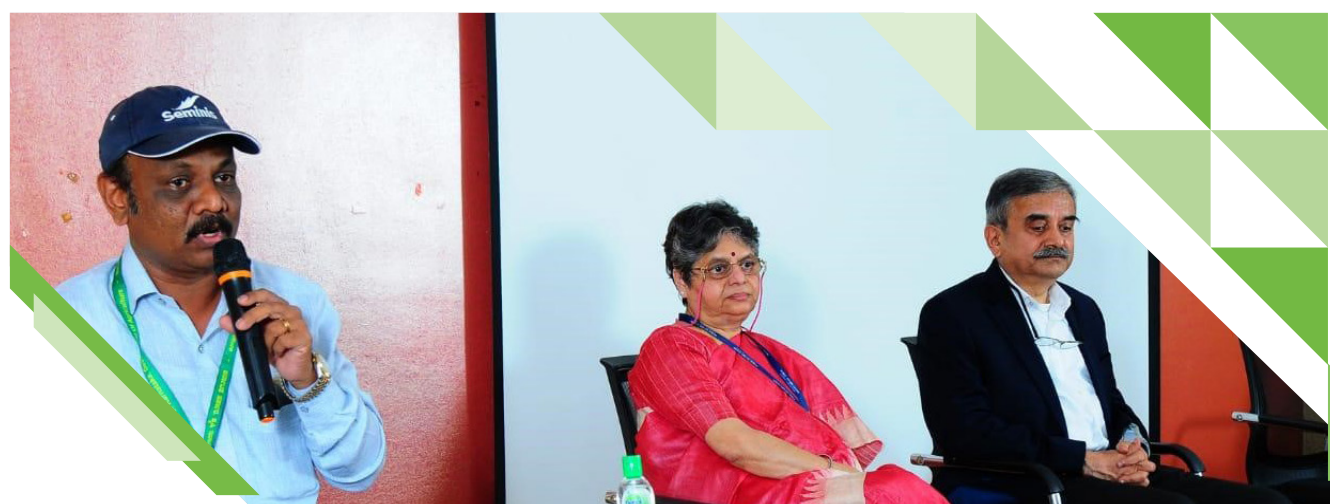
Mr. Gurucharan noted that it was rather easy to adopt such techniques in controlled environments such as demonstration farms. But it is difficult to implement them in real-time conditions where the vagaries of weather affect crops. He said that the purpose of the different sessions being conducted at the program was to explore and discover how these effective techniques can be replicated in actual scenarios by farmers who wish to adopt them to better their production and productivity.

He mentioned that the sessions would be conducted by experts like Srinivas Patil, Sangeetha, and Venkatesh of Mandya. He requested the farmers to take active part in the deliberations and clear their doubts and apprehensions about agri-tech and its uses.

The Director pointed out that the state government had identified agricultural universities situated in Raichur, Dharwad, Shivamogga and Chamarajanagar to experiment on how Artificial Intelligence (AI), Machine Learning (ML) and Robotics can be used in agriculture.

This grand project would be funded by NABARD and most of the administrative approvals are in place he revealed. Five-acre lands had been acquired in each of these districts to carry out research he added. The director signed off his address by stating that going forward, such workshops would be organized by the FPOs themselves.

Introductory Remarks



Shri. Ramesh Kumar, Joint Director, Agriculture Department, Chitradurga, gave the introductory remarks. He began by stating that Chitradurga was among the driest districts in the state and falls under the Central Dry Zone listing.

The major crops of the district are groundnut, maize and millets. The district has a kharif area of 3.4 lakh hectares of which nearly 1.5 lakh hectares are used for groundnut cultivation. Another 90,000 hectares are used to grow maize and nearly 15,000 hectares to 20,000 hectares are used for millet cultivation.

Sri Ramesh Kumar mentioned a very interesting fact—that Chitradurga was literally the ‘millet bowl’ of the state because over half of the state’s millet production happens in Hosadurga taluk in the district. He said that the district has the potential to become a major centre for the production of groundnut oil.

The Joint Director pointed out that the major challenge faced by farmers in the district was a lack of knowledge and expertise in food processing which, when given to them through training, will enable them to produce value-added products that fetch up to three to five times the price of the raw product.

For example, he mentioned that if one kilogram of raw millets fetches Rs 20, processed and packaged millet products sell at Rs 140/kg. Ramesh Kumar lamented that middlemen sometimes take undue advantage of the farmers, and this can be prevented if the farmer takes his produce to the market himself.

“Farmers are in dire need of training that will reduce their time-to-market, and help them in processing, packaging and marketing their products,” he added. He also recollected that the department was assisting 23 FPOs in the district by offering such training programmes.

The JD said that it was interesting to note that though Chitradurga district receives an average of 540 mm (nearly 140 TMC) rain each year, only ‘short stature’ crops are viable.

This is because the wind speeds in the district are among the highest in the country and this robs the soil of its latent moisture. “The crops that we grow should be in the character of the soil,” he stated adding, that because of this inherent limitation in the climate of the district only groundnut, maize and millets are viable crops.

The JD also observed that the term ‘organic farming’ and ‘organic product’ had become fashionable, and everybody claims to be an organic farmer producing organic products. He observed that India’s share of the international organic product market was no more than 0.3%.

Technical Session

Module 1: Existing Transformative Technology in Agriculture



Delivered by agripreneur **Sangeetha K.B.** Business Transformation Manager for a large ITE, manages Navaneetam Organic Farms and **Srinivasa Patil**, Research Engineer, Agripreneur

IT professional, agripreneur and organic farming evangelist Sangeetha kickstarted the program by sharing her own experiences in organic farming. She started by recollecting how she was inspired in her endeavors when she volunteered to work in an organic farm. She rightly pointed out that though we eat food each day, we don't make any effort to find out how the food is produced.

Urban people do not attempt to find out anything about seeds, tending to crops and harvesting them. Sangeetha shared that she teamed up with Mandya farmer Venkatesh to grow organic crops like paddy, sugarcane and vegetables on a plot of land near Mandya with an intention to experiment with 100% organic farming. Sangeetha and Venkatesh now run a wholesome farming ecosystem by adopting animal husbandry, beekeeping and agri-pond construction and are farming on their two-acre land for the last 10 years.

"We want to connect cities with the villages by showing city people our farm and spreading the good that comes out of organic farming", she adds. To this end, she wants to grow crop varieties that were grown by our ancestors but with modern techniques.

Sangeetha enlightened the participants about how almost anything under the Sun was marketable if it is rendered online in marketplaces like Big Basket and Amazon. She noted that among thousands of other products, cow-dung cakes, neem sticks, sheep manure and homemade tomato puree were being sold on Amazon for hundreds of rupees.

Sangeetha added that the farm she runs with Venkatesh has desi cows, sheep, chicken, organic gobar gas pit, and a make-shift greenhouse made of damaged pipes. The duo grows tomatoes during the monsoon in the greenhouse and sells them at Rs 120 per kg in Bangalore. Sangeetha also pointed out that the farmhouse was built by recycling the mud and debris that came out of the ground when the agri-pond was dug.

Module 2: Smart farming for improving output



Delivered by **Kavitha DDM**, NABARD Chitradurga

Farmers pro-actively need to adopt modern mobile-based agri-technology to take apps from lab to field noted Kavitha, DDM, NABARD, Chitradurga. In her address, she said women self-help groups in underdeveloped states like Bihar, Uttar Pradesh, Madhya Pradesh and Rajasthan had made tremendous progress in becoming self-reliant by manufacturing and marketing of organic value-added food products.

Technical Session

She shared that these women SHGs had joined to form co-farming federations called Mahashakti Farmer Producer Companies to finance agricultural and non-agricultural income-generating activities.

Kavitha said that these federations were digitally highly advanced and use most of the apps made for them in their daily work. The thing is that most of these SHGs were registered as recently as 2015. She pointed out that none of these women had been to college, but they were directors of boards. She questioned why the same sort of performance cannot be repeated in Karnataka? She indicated that most of these women had been homemakers all their lives.

Kavitha said that these women entrepreneurs were actively practicing dairy farming. They manufacture processed and packaged chili powder, turmeric, and other value-added products for local and national markets. Kavitha informed that even one level of value-addition is enough for effective marketing.

Kavitha shared her experience in working with women of a remote village in Chitradurga district called Chikkathekallavatti where Hosadurga taluk women trained by Pranati NGO without any sort of government support, are making value-added snacks and other agricultural by-products out of groundnut and millets.

She added that she found women eager to learn and make VA products in their kitchens. She noted that she ordered snacks in bulk from an SHG on a Friday, and it was delivered to her on Monday. *“Rural women of the district are my foot soldiers who make my dreams come true,”* she observed.

SHG member Ambuja proudly shared that the products made by her SHG were tasted by former CM B S Yeddyurappa, RDPR Minister K S Eshwarappa, Agriculture Minister B C Patil, and local MLAs. She said her self-help group was also making packaged products like upma, vangibath, laddoo, holige, chakli, murukku, nippat out of millets. *“All we need is marketing assistance,”* Ambuja pleaded. She added that they had obtained FSSAI license to market the products.

Kavitha also requested the farmers at the program to grow more trees so that the moisture in the soil is retained. She pointed out that less than 10% of the total area of Chitradurga district had forest cover. She said that men farmers should take a leaf out of the women SHGs’ book and find their own markets and not just complain that the government is doing nothing for them.

Kavitha informed that these SHGs were successful in repaying the loans they had taken from banks. She advised FPOs to adopt at least one level of processing and

value-addition with simple activities like sorting and grading onion before taking it to Bangalore markets.

She advised FPOs to set up a partner eco-system where they and SHGs can collaborate to produce high-quality processed and packaged food and sell them in far-off markets.

Kavitha asked farmers to produce their own seeds and organic mulching fertilizers to save cultivation costs—because these are the two major input costs. She asked farmers to manufacture their vermi-compost at home. She implored farmers who are using carcinogenic chemical fertilizers and pesticides to make the shift to organic farming for the sake of their children.

Kavitha suggested that farmers should make the shift to zero-budget natural farming. She described how the Rs 2 lakh-worth solar dehydrators given as grants to SHGs can be used to dehydrate vegetables like tomato and onion and extend their shelf life; make pickles. She added that such machines can also be used to make papads, kasuri methi and coriander powder that can be packed and sold.

She observed that the food grain stored in cold storage and Food Corporation of India (FCI) warehouses was one and half times more than what is consumed and precious food was going to waste.

She suggested that farmers should make value-added products like fruit mix and sell them on trains and at railway stations after entering an agreement with the Indian Railway Catering and Tourism Corporation (IRCTC). As a parting note,

Kavitha encouraged farmers to make efforts to make value-added products and come to NABARD with sustainable solutions, not just problems.



Technical Session

Module 3: Innovations in Transformative Technology



Delivered by **Venkatesh**, Farmer & Partner for Navaneetam Organic Farms

Venkatesh, a progressive farmer from Srirangapatna taluk, Mandya District, shared his experiences in organic farming with the participants. He recollected how he teamed up with agripreneur Sangeetha a decade ago and the challenges he faced in the first three to four years of his journey.

“Other farmers called me a madman,” he recounted. Venkatesh persisted and even received the Yuva Raitha award in 2015 for his amazing feat. He adopts 100% organic farming on his two-acre land.

He grows paddy, fruits, vegetables, greens, teak, silver oak, pepper, sugarcane-- totally 40 different crops in the same piece of land through multi-farming. He proudly expressed to the gathering

that after suffering losses for the first year with only 450 kg of rice production on 20 guntas of land, he is now selling several quintals of rice priced at Rs 60 per kg.

Venkatesh is also promoting eco-tourism on their land. At Rs 500 per head, they provide food and wifi to people who come from the cities to get a taste of rural life. Visitors stay in tents and sleep in sleeping bags.

To a question from the audience on how to prepare and apply organic pesticides, Venkatesh explained that he uses a 10 ml mix (per 1 litre of water) extracted from pepper, garlic, cow's urine, and sour buttermilk to kill pests without hurting the crop. He said that this natural pesticide mix is only effective when it is sprayed in three to four installments and not all at once (which makes the pests immune to it).

To question how to organically grow greens (soppu in Kannada), Venkatesh said that he uses drip irrigation and natural manure made from cow, sheep dung, solid and wet waste generated on the farm. He sometimes used green chilli and ginger in his pesticide mix he averred.

However, he admits the natural weedkillers have not been as effective as expected and is searching for a breakthrough. Sangeetha also mentioned that desi cow ghee was their most profitable product because it sells at Rs 2,000 per kg. The duo has customers who have promised them Rs 10,000 worth of business a week for their greens.

He grows Rajamudi and local varieties of rice. School children come to the farm to participate in farming activities like sowing, watering, de-weeding, and harvesting. Nearby hotels have come forward to buy their fresh vegetables for the salads they serve to customers.

Venkatesh also mentioned that he makes earthen idols and lamps with the slurry that comes out of the gober gas pit. Now Venkatesh and Sangeetha are preparing the land for sowing of onion, garlic, ginger and millets. They have also planted red sandalwood and silver oak as a long-term investment.

He grows 20 different types of fruits including sapota, pomegranate, and mango. Pepper creepers grow in the shade of trees.

To a question on how to combat black spot disease in pomegranates, Venkatesh replied that if the trees are planted with ample space in between then the disease won't affect the pomegranate crop.

He explained how he makes natural uric acid mix. He said that he buries a pot full of boiled rice in the ground and uses the fermented rice to fertilize crops after a week. They also manufacture natural manure with the cowshed waste and sell it at Rs 100 per kg while the input cost is a mere Rs 15 per kg.

Venkatesh shared an anecdote wherein an Italian citizen has been residing and working in his organic farm for the last one month for no salary at all. This person who eats ragi balls with ghee and sugar has been toiling at the farm for the sheer joy of organic farming. He suggested that many city people like to visit his farm, and this had created avenues for eco-tourism. Eco-tourism can sustain farmers when crops fail, he noted.

Q & A AND SUMMING UP



By **Srinivasa Patil**, Research Engineer, Agripreneur

The technical session on mobile apps for agriculture was presented by Srinivas Patil, Research Engineer, farmer and agripreneur. Patil disclosed that he hails from a family of farmers and is farming on an eight-acre plot with two main objectives - -to 1) save costs and 2) find the right market and prices for his yield.

He stressed the need for adopting measures to process the raw produce and manufacture value-added products that fetch better prices. He took the example of Fab India a company valued at Rs 1,000 crore, which makes garments out of khadi yarn produced by village industries and exports the material all over the world. He said that similarly, farmers should think seriously in terms of making finished products out of food grain to maintain profitability.

He stressed that the farmer, the producer of the food grain should determine the price for his produce and not the market. He added that the farmer must build in his 'salary' into the pricing of the product because he works so hard to produce it.

Patil said that FPOs should become upstream suppliers to women self-help groups (SHGs) who should then involve themselves in making, packaging, labeling, branding and marketing value-added goods. He gave the example of ragi cookies that he is selling. Ragi grown in his farm is processed into biscuits and sold as a value-added product at Rs 600 per kg.

"Find a market for your product first and then begin farming" he warned adding that it helps to

consider the end-customer as the real owner of the land. This introduction was followed by brief insights into the various mobile apps available to farmers on their smartphones. Among the apps that were discussed were—Smart Farm, Meghdoot, weather.com, Kisan Diary, Courseware, Videokheti, KisanBuddy, Arka Bagwani, PapayaCultivation, BeleDarshaka, udyami.com and Bhoomi. Patil said that farmers should reserve at least 10% of their produce for the export market and advised them to look beyond Bangalore. He encouraged them to adopt mixed (multi) farming where they can grow three to four kinds of vegetables on the same plot of land. He gave an example from personal experience where he is growing tomatoes, green chili and brinjal on the same plot of land.

Srinivas Patil suggested that the government should seriously consider establishing a marketing complex for organic value-added products in the district on special economic zone land to sell processed agri-products. He also suggested that farmers should set up stalls along the highways in a bid to find a local market for their finished products (where travelers can stop and shop).

A lady farmer shared that of the 30 women who were trained in value-added product making, 25 of them were actively manufacturing and selling their products.

Patil offered marketing assistance to all farmers present through his organization Organic Options based in Bangalore. He offered free assistance in labeling, branding, marketing assistance through his company. He stressed the need for home delivery services for the products.

He noted that post-pandemic people had become very aware of the food they eat and a shift to organic products was evident. Innovative products like rose chikki (chikki mixed with rose petals), were instant hits in the market, he observed. Patil even shared his mobile number so that FPO and SHG members could get in touch with him post the programme.



Valedictory Address

Dr. K Nandini Devi, IAS, CEO ZP, Chitradurga



Dr Nandini Devi, IAS, Chief Executive Officer, Zilla Panchayat, Chitradurga, in her address said that it was very encouraging to note that the district had already got six FPOs registered against a target of 14 FPOs.

She urged the FPO members to approach the government with their concerns and added that enough funding was available under various government schemes to finance farming activities in the district and upgrade to modern methods of cultivation. She noted that the government was in talks with corporates who were enthusiastic to purchase value-added products made by SHGs of the district.

She appreciated the way in which FPOs were trying to connect small and marginal farmers to markets. She also stated that as and when farmers improve the quality of their produce, the government would step in and connect them to export markets.

“FPOs should function like business units,” she advised. She urged that FPOs approach the government for funds to modernize agriculture by using (or renting) cultivators and other machinery. She asked the farmers to make value-added products from pomegranate, tomato and potato (juice, ketchup and chips). She invited proposals from SHGs for funding of value addition activities.

At this point, PAF Executive Director Dr. Annapoorna informed the ZP CEO that PAF was planning a peer-training (train-the-trainer) programme at the district level where FPO members would be enabled to hold agri-modernization training sessions themselves. She expressed hope that Chitradurga farmers will become the “go-to-market” for value-added groundnut and other products.

Brainstorming & Interaction Sessions

In the interaction with the participants, local farmers raised several concerns mainly regarding crop failure due to vagaries of climate and the absence of markets for their yield.

One Chitradurga farmer leader said that in the last decade, a ‘millet revolution’ had occurred in the district. He observed that hundreds of farmers had taken up millet cultivation and this had led to a glut in the market and farmers were suffering losses due to a lack of market and low prices.



He pointed out that while assistance is provided by the government and FPOs for growing crops, very little assistance and training in converting to value-added (VA) products) was given. He proposed that such assistance is needed at the hobli level. He pointed out that the groundnut crop that is grown in Challakere, Mallur and Yelakanur in the district was famous for its taste and quality. But due to a lack of marketing assistance, the value-added product is being neglected.

Another farmer participant mentioned that coconut cultivation was also indigenous to the district but for the last three years, it had become unviable as the competition in the market was ruthless and farmers were not getting the right prices for their yield.

A small brainstorming session on –“*How to make my FPO world-class?*” was held at this juncture. Farmers came out with suggestions. One farmer said that making groundnut-based value-added products should become the mainstay of Chitradurga district. Another farmer said that he needs to know what new crops can be grown in the district’s climate besides groundnuts. He stressed that information and marketing assistance was what he needed for this venture.

Yet another farmer said that people who grow areca should also grow pepper and vegetables in between the trees. One FPO member said that organic farming can be taken up in stages if it cannot be implemented all at once. Another FPO member said that farmers can grow herbs that can be processed and sold as medicine.

Inspired Farmers

At the end of the workshop, a farmer leader and FPO member aptly summed up the proceedings by urging his fellow FPO members to adopt organic farming and manufacture of value-added products. He stressed that it was the farmer's responsibility to restore the lost fertility of the land. He explained that organic farming is explained as maximizing locally available resources and not using chemicals to grow and protect crops.

He pointed out that bio-fencing can be done using 'yekka' plants and natural fertilizers can be



manufactured at Rs 300 per bag using plants that have micronutrients. He made an inspiring pitch to farmers to shift to organic farming and produce value-added products. His submission drew appreciative applause from the participants. Venkatesh invited FPO members to visit his village to observe how millet cleaning and oil making can be mechanized.

To a specific question from a farmer participant posed to Srinivas Patil, the latter explained how farmers can apply for, and obtain a Geographical Index (GI) tag and Import-Export Code (IE Code) for as less as Rs 6,500. This would help individual farmers to export their value-added products like Challakere groundnut chikki, he pointed out.



Interview Sessions

As part of the programme some key participants/resource persons were interviewed.

G Gurucharan, Director, Public Affairs Centre



At the very beginning of the programme, Agripreneur Sangeetha K B interviewed G Gurucharan, Director, Public Affairs Centre, Bengaluru.

In response to a question, Gurucharan said that the purpose of the programme was to accelerate the adoption of emerging technologies like Artificial Intelligence (AI) and Machine Learning (ML) in agriculture. This was NABARD'S intent in hosting the programme, he added.

For this to be successful, there needs to be a 'buy-in' from farmers. Hence the need for a consultative platform where agriculturists participate and learn how to use technological advancements to improve their profitability. The programme is specifically focused on small and marginal farmers.

NABARD's vision is to ensure greater involvement of FPOs in this endeavor and build capacity and employ FPO functionaries to conduct such programs themselves Gurucharan noted.

The way forward is for FPOs to actively promote and proliferate tech-based Smart Farming among their members. The task before the FPOs singularly, is to enable farmers to create value-added products so that they fetch better prices for the produce, Gurucharan observed.

Kantharaju, President and Siddeshwara, FPO



The farmer leader, who was interviewed at the beginning of the Hiriyrur consultation forum said that his FPO had 600 registered members.

These farmers sell their produce to the Agriculture Produce Marketing Committee (APMC) and to other private food grain traders. Kantharaju is not alone in pointing out that agriculture had become a risky proposition. Crops often fail due to deficient monsoons or due to excessive rain (like it happened in 2021). The scourge of pests and disease also lead to crop losses.

Given this scenario, farmers of the state are in dire need of training and assistance in the latest scientific methods of farming to prevent crop losses. New methods and alternative farming can help them retain their profitability.

However, the way forward is to adopt the production of value-added products made from raw produce and market them scientifically while maintaining quality and hygiene. Hence the need for workshops such as this where farmers can be exposed to success stories of people who have achieved breakthroughs in making value-added products from their produce and marketing them.

Sumathi, founder of the Sri Rama Aahara Atma Nirbar Bhadratha women's self-help group

Sumathi, founder of the Sri Rama Aahara Atma Nirbar Bhadratha women's self-help group hails from Vanivilas gram panchayat, Hiriyrur taluk, Chitradurga district. She was interviewed at the beginning of the programmeme. Sumathi is one among several rural women who have a success story to narrate.



With the assistance of the Agriculture Department and the local deputy commissioner, Sumathi and her group of brave women are earning up to Rs 33,000 a month as income by processing, packaging, branding and marketing value-added products from locally grown produce.

According to Sumathi, their products branded 'Atma', is being sold at a stall located in the premises of the Department of Women and Child Welfare, in 'Sanjeevini Sheds' and online.

The group has obtained a license for manufacture and marketing 'Atma' brand of edible value-added products from the Food Safety and Standards Authority of India (FSSAI) and adopts quality control methods in the manufacture of the products. What is remarkable about these rural women is that they have managed to build, brand and market successful products without availing of bank loans.

The 'Atma' group of rural women make value-added products like groundnut chikki with organic jaggery shipped from Gokak in northern Karnataka. They make other sweets with organic cow ghee, dosa mix, chakli, kodbele, nippat from millets, ragi malt and hurihittu (from locally grown ragi). They use oil sourced from local oil mills and not packaged refined oil. They also make organic laddoos and snacks without maida or dalda.

Vote of Thanks

Prakash K.N Field Research Officer, Public Affairs Centre proposed the vote of thanks at the end of the programme.



Key Takeaways



What the Government must do?

- Explore new and suitable national and international markets for VA products like 'Challakere chikki'
- Provide end-to-end funding, training, and marketing assistance to small and marginal farmers in obtaining FSSAI license, Geographical Index (GI) tag, and Import-Export Code (IE Code) by establishing a single window agency for these purposes
- Drive accelerated adoption of mobile apps developed for the agri-sector through awareness programs intended specifically for this purpose
- Launch new financing schemes for small and marginal farmers to take the leap of faith from traditional farming to mechanised farming by offering soft loans for machinery purchases
- Provide land, funding, and marketing assistance to women SHG's to sell their VA products at stalls situated beside highways
- Parley with online marketplaces like Amazon and Big Basket to market agri/dairy produce online
- Coonect with IRCTC to sell SHG VA products on trains and at railway stations.



What FPOs must do?

- Promote at least one to two-level value addition to farm products of the district to optimize farmer incomes
- Appoint exclusive marketing managers whose sole aim is to explore and discover new markets for VA agricultural products
- Promote eco-tourism in small farmers' lands to provide a sustainable and alternative source of income for farmers
- Attend peer-training programs at the district level to acquire the capability to cascade training to fellow FPO farmer members.

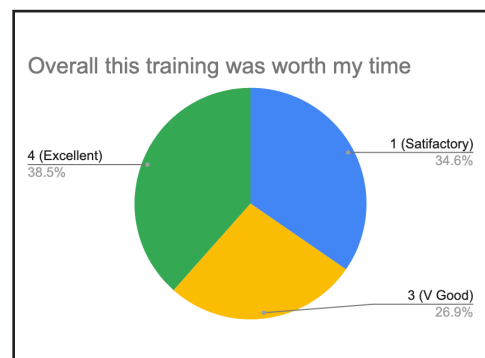
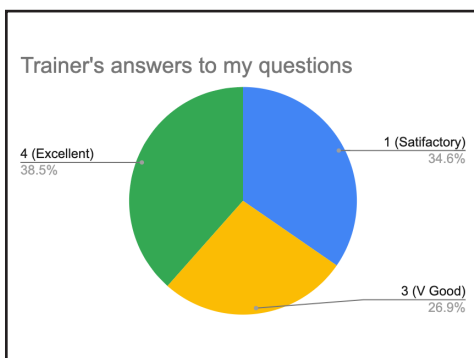
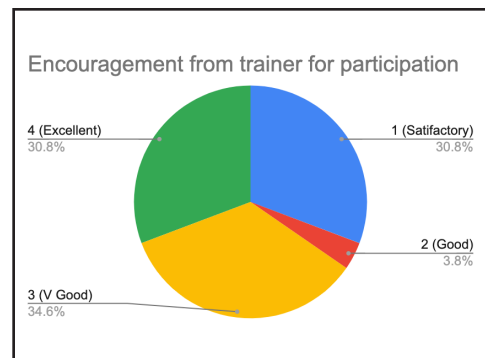
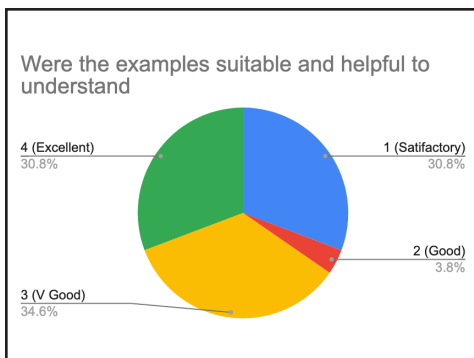
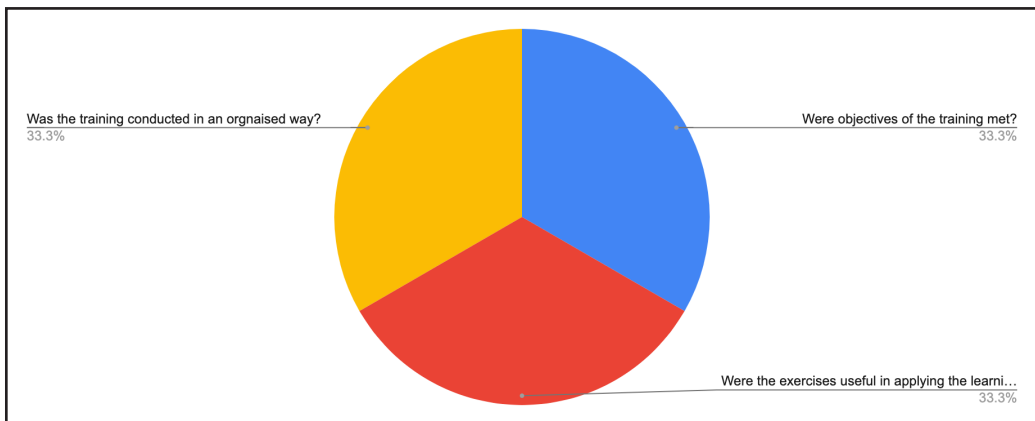
Feedback

Total Number of Participants

34

Number of Feedback

27



What did you like most about this programme?

1. I liked the session, i learnt how to sell from amazon, how to grow agriculture
2. It talked about good business and marketing
3. I learnt how to sell, leant and branding and agriculture and how to use Mobile app
4. F.P.O, Output Marketing, value Addition is what i liked from the session
5. In this session they taught us about organic Fertilisers and how to use them
6. I learnt how to find a market on a mobile app
7. Sangeetha taught how to use agriculture on mobile app which was useful
8. I learnt how to find a market on a mobile app
9. I've learnt good things from this session, Few companies do organic products, We were given an idea or taught to do this on our own
10. F.P.O, Product, and how to do Marketing was taught, Mobile App helped me a lot

What did you not like about this programme?

1. I liked the session but there were less female attenders
2. There were less Females, even though there was support from the government, females did not show up
3. I needed one more day of the training

Annexures

Annexure 1: Agenda



Training on Existing Transformative Agri Technology, Mobile-based Applications, Innovations & Smart Farming		
Day & Date: Saturday, February 19, 2022		
Venue: District Agriculture Training Centre, Babbur Farm, Hiriyyur Chitradurga		
10.45 to 11.00 a.m. Registration and Coffee/Tea		
11.00-11.10 a.m.	Welcome Address	Dr. Annapoorna Ravichander Executive Director, Public Affairs Foundation, Bengaluru
11.10-11.20 a.m.	Inaugural Address by Chief Guest	Gurucharan G, Director, Public Affairs Centre, Bengaluru
11.20-11.30 a.m.	Introductory Remarks	Ramesh Kumar, Joint Director, Agriculture, Chitradurga
11.30-11.45 a.m.	Coffee/Tea Break	
11.45-12.45 p.m.	Module 1: Existing Transformative Technology	Sangeetha K.B. Business Transformation Manager for a large ITE, manages Navaneetam Organic Farms
12.45-1.30 p.m.	Lunch Break	
1.30-2.15 p.m.	Module 2: Smart farming for improving output, quality of produce and for market access	Smt Kavitha DDM, NABARD Chitradurga
2.15-2.45 p.m.	Module 3: Importance of Cooperatives in Organic Farming.	Dr. Amaresh, Associate Prof & Head, Agricultural Extension, KVK Hiriyyur
2.45-3.00 p.m.	Coffee/Tea Break	
3.00-3.30 p.m.	Module 4: Innovations in Transformative Technology	Venkatesh Farmer & Partner for Navaneetam Organic Farms
3.30-4.00 p.m.	Q & A and Summing Up	Moderator -Srinivasa Patil R Research Engineer, farmer, Agripreneur
4.00-4.45 p.m.	Valedictory Speech	Dr. K. Nandini Devi, I.A.S, CEO Zilla Panchayat, Chitradurga
4.45-4.50 p.m.	Vote of Thanks	Prakash K.N Field Research Officer, Public Affairs Centre

Advisor and Mentor: Dr. Lalith Achoth, Consultant at leading Management schools, Government agencies and Premier Research Institutes across the country and is an Agricultural Economist

Sponsored by



National Bank for Agriculture and Rural Development

www.pagflobal.org

Annexure 2: Participation Certificate

Organised by



CERTIFICATE OF PARTICIPATION

ಭಾಗವಹಿಸುವಿಕೆಯ ಪ್ರಮಾಣ ಪತ್ರ

This certificate is presented to

for participating in a training programme on

**Training on Transformative Agriculture Technology,
Mobile Based Applications, Innovations and Smart Farming**

ಅಸ್ತಿತ್ವವಿರುವ ಪರಿವರ್ತಕ ಕೃಷಿ ತಂತ್ರಜ್ಞಾನ, ಮೊಬೈಲ್ ಆಧಾರಿತ ಅಪ್ಲಿಕೇಶನ್ಗಳು,
ನಾವೀನ್ಯತೆಗಳು ಮತ್ತು ಸ್ಮಾರ್ಟ್ ಕೃಷಿ ಎಂಬ ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮ

**Saturday, February 19, 2022
Chitradurga**

Sponsored by



NABARD
National Bank for Agriculture and
Rural Development

Dr. Annapoorna Ravichander
Executive Director
Public Affairs Foundation, Bangalore

Date: _____

Annexure 3: Sample Feedback Form English & Kannada

Organised by



Feedback Form: Chitradurga
ಶೀರ್ಷಿಕೆ: ಚಿತ್ರದುರ್ಗ

Training on Transformative Agriculture Technology, Mobile Based Applications, Innovations and Smart Farming

ಅಸ್ತಿತ್ವದಲ್ಲಿರುವ ಪರಿವರ್ತಕ ಕೃಷಿ ತಂತ್ರಜ್ಞಾನ, ಮೊಬೈಲ್ ಆಧಾರಿತ ಅಪ್ಲಿಕೇಶನ್‌ಗಳು, ನಾವೀನ್ಯತೆಗಳು ಮತ್ತು ಸ್ಮಾರ್ಟ್ ಕೃಷಿ ಎಂಬ ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮ

Name: SACHIN PRASAD H.E
ಹೆಸರು

Phone Number: 8151929733
ದೂರವಾಣಿ ಸಂಖ್ಯೆ

1. Were the objectives of the training met?

- Yes
 No

ತರಬೇತಿಯ ಉದ್ದೇಶಗಳನ್ನು ಪೂರೈಸಲಾಗಿದೆಯೇ?

- ಹೌದು
 ಇಲ್ಲ

2. Were the exercises useful in applying the learning?

- Yes
 No

ಕಲಿಕೆಯಲ್ಲಿ ಅನ್ವಯಿಸಿದ ಚಟುವಟಿಕೆಗಳು ಉಪಯುಕ್ತವಾಗಿವೆಯೇ?

- ಹೌದು
 ಇಲ್ಲ

3. Was the training conducted in an organised way?

- Yes

www.pafglobal.org

Sponsored by



National Bank of Agriculture and Development

1

Annexure 4: Select Photographs



View of District Agriculture Training Centre, Babur Farm, Hirayur, Chitradurga



Participants filling feedback form



Participants filling feedback form



Organisers collecting feedback form



Resource people interacting with Ramesh Kumar, JD, Agriculture, Chitradurga and participants



Indira, Training Coordinator, PAF presenting memento Dr. K. Nandini Devi, to the CEO, Chitradurga



Group Photo of PAF team and Participants with Ramesh Kumar, JD Agriculture, Chitradurga



Group Photo of PAF team and Participants with Dr. K. Nandini Devi, to the CEO, Chitradurga

‘ಬೆಳೆ ಮೌಲ್ಯವರ್ಧನೆ ಮಾಹಿತಿ ಪಡೆಯಿರಿ’

2022.2.22 08:17

ಪ್ರಜಾವಾಣಿ ವಾರ್ತೆ

ಹಿರಿಯೂರು: ‘ಮಾರುಕಟ್ಟೆಯಲ್ಲಿ ಯಾವ ಉತ್ಪನ್ನಗಳಿಗೆ ಬೇಡಿಕೆ ಇದೆ, ಬೆಳೆಯ ಮೌಲ್ಯವರ್ಧನೆ ಮಾಡುವುದು ಹೇಗೆ ಎಂಬ ಬೆಳೆ ಪೂರ್ವ ಮಾಹಿತಿಯನ್ನು ರೈತರು ಹೊಂದಿದ್ದರೆ ಕೃಷಿ ಮತ್ತು ತೋಟಗಾರಿಕೆಯಲ್ಲಿ ಎದುರಾಗಬಹುದಾದ ನಷ್ಟವನ್ನು ತಪ್ಪಿಸಬಹುದು’ ಎಂದು ಸಾರ್ವಜನಿಕ ವ್ಯವಹಾರ ಕೇಂದ್ರಗಳ ನಿರ್ದೇಶಕ ಜಿ. ಗುರುಚರಣ್ ಹೇಳಿದರು.

ತಾಲ್ಲೂಕಿನ ಬಬ್ಬೂರು ಫಾರಂನಲ್ಲಿರುವ ಕೃಷಿ ತರಬೇತಿ ಕೇಂದ್ರದಲ್ಲಿ ಈಚೆಗೆ ‘ಕೃಷಿ ಪರಿವರ್ತಕ ತಂತ್ರಜ್ಞಾನ ಮತ್ತು ಮೊಬೈಲ್ ಆಧಾರಿತ ಅಪ್ಲಿಕೇಷನ್’ ಕುರಿತು ರೈತರಿಗೆ ಏರ್ಪಡಿಸಿದ್ದ ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮ ಉದ್ಘಾಟಿಸಿ ಅವರು ಮಾತನಾಡಿದರು.

‘ಮೊಬೈಲ್ ಅಪ್ಲಿಕೇಷನ್ ಮೂಲಕ ರಾಜ್ಯದ ಬೇರೆ ಬೇರೆ ಮಾರುಕಟ್ಟೆಗಳಲ್ಲಿ ಹಣ್ಣು-ತರಕಾರಿ, ದವಸಗಳಿಗೆ ಇರುವ ಬೆಲೆಯನ್ನು ತಿಳಿದುಕೊಳ್ಳಬಹುದು. ಬೆಳೆ ಬೆಳೆಯುವಲ್ಲಿ ತೋರಿಸುವ ಆಸಕ್ತಿ, ತಂತ್ರಜ್ಞಾನವನ್ನು ಮಾರಾಟ

ಮಾಡುವಾಗಲೂ ಹೊಂದಿರಬೇಕು’ ಎಂದು ಸಲಹೆ ನೀಡಿದರು.

ಕೃಷಿ ಇಲಾಖೆ ಜಂಟಿ ಕೃಷಿ ನಿರ್ದೇಶಕ ಡಾ. ರಮೇಶ್ ಕುಮಾರ್, ‘ಚಿತ್ರದುರ್ಗ ಜಿಲ್ಲೆ ಸಿರಿಧಾನ್ಯಗಳಿಗೆ ಹೆಸರಾಗಿದೆ. ಶೇಂಗಾ ಪ್ರಮುಖ ವಾಣಿಜ್ಯ ಬೆಳೆಯಾಗಿದ್ದು, ಅಡುಗೆ ಎಣ್ಣೆ, ಚಿಕ್ಕೆ ಮತ್ತಿತರ ಉತ್ಪನ್ನಗಳ ತಯಾರಿಕೆಯತ್ತ ರೈತರು ಗಮನ ಹರಿಸಬೇಕು. ಇದಕ್ಕೆ ನಬಾರ್ಡ್ ಮತ್ತು ಪಿಎಎಫ್ ನೆರವು ದೊರೆಯಲಿದೆ.

ಬ್ರಾಂಡಿಂಗ್, ಲೇಬಲಿಂಗ್ ಕಡೆಯೂ ಗಮನವಿರಬೇಕು’ ಎಂದರು.

ನವನೀತಮ್ ಸಾವಯವ ಫಾರಂನ ವ್ಯವಸ್ಥಾಪಕಿ ಕೆ.ವಿ. ಸಂಗೀತಾ, ರೂಪಾಂತರಿ ತಂತ್ರಜ್ಞಾನದ ಬಗ್ಗೆ ಮಾಹಿತಿ ನೀಡಿದರು. ನಬಾರ್ಡ್ ವ್ಯವಸ್ಥಾಪಕಿ ಕವಿತಾ, ಸ್ಟಾರ್ಟ್ ಕೃಷಿ, ಮಾರುಕಟ್ಟೆ ಬಗ್ಗೆ ವಿವರಿಸಿದರು.

ಪಿಎಎಫ್‌ನ ಅನ್ವಯದಲ್ಲಿ ಇಂದಿರಾ, ಕೃಷಿ ತರಬೇತಿ ಕೇಂದ್ರ ಮುಖ್ಯಸ್ಥ ಡಾ. ಪ್ರವೀಣ್ ಬೆಂಧರಿ ಇದ್ದಾರೆ.

REDMI POWER



Video Link of the Training Programme:

https://youtu.be/4_JQFpP7dck



Web : www.pafglobal.org



Phone : +91 80278 39918/19/20



Address
#15, KIADB Industrial Area,
Jigani-Bommasandra Link Road,
Jigani Post, Anekal Taluk,
Bangalore -560105
Karnataka, India

Conceptualised & Designed By

