



# KARNATAKA VETERINARY, ANIMAL AND FISHERIES SCIENCES UNIVERSITY, BIDAR



## WORK DONE REPORT

### OF Pingara Horticulture Farmer Producer Company Ltd., Bantwala



ICAR- KRISHI VIGYAN KENDRA (D.K.),  
MANGALURU – 575002  
2019-20

The FPO was started during in the year 2017 and was assigned to involve in implementing and achieving the following objectives.

1. To impart training and handholding assistance to FPOs for their development and evolution into effective enterprises working especially for economic benefit of smallholder members.
2. To become an institution of pre-eminence for research, learning and knowledge dissemination on Producer Enterprises in general and Farmer Producer Organizations in particular
3. To act as an think-tank for guiding policy and developmental interventions aimed at Producer Enterprises in general and Farmer Producer Organizations in particular
4. To demonstrate an effective institutional model that promotes economic sustainability and self-reliance while serving the cause of disadvantaged entities such as Producer Enterprises and small holders.
5. Promote partnerships between the government and civil society inclusive of various stakeholders of horticulture and allied sectors.

Pingara Horticulture Farmers Producer Company Ltd, had been established during 2017-18 with fifteen members as Board of Directors, Sri. Ramakrishna K. is the President who is an Agriculture graduate and Mr. Pradeep K. is the Chief executive officer (CEO) .

The FPO has established with an aim to utilize surplus production of jackfruit and Banana through preparation of value added products. The programme aims at **“Lowering the cost of production and opening up avenues for direct market linkages for higher returns to the farmers**. The **1150 farmers** within a 15 km radius of Vitla are enrolled as members of the Pingara Horticulture Farmers Producer Company Ltd. Each of these farmers is engaged in areca nut Coconut and Pepper cultivation and have jackfruit trees growing naturally across their plantations. Besides providing the company with the produce, they have also invested Rs. 1,000 each as their share capital in the company.

The Jackfruit is a traditional vegetable mostly seen in the kitchens. Often, Jackfruit grown in the backyard goes waste and not much attention is paid for its cultivation by most of

the farmers as it is not the main crop. Only a few small or micro units in the private sector manufacture of value added products from it in coastal Karnataka. Unlike other trees which require intensive nurturing and care, the jackfruit tree hardly requires any attention work. It grows on its own without too much of a fuss and produces fruits throughout the year. Pingara FPO produces value added products such as Jack papad, Jack halwa, Jackfruit pulp, Jack bar, Jack chips, Brined jack from Jackfruit.

The FPO procures raw jackfruit from farmer's doorsteps. Some also deliver the fruit to the FPO. The farmers are offered Rs.2 per kg if the jackfruit is collected. Those who deliver the jackfruit to the FPO are paid Rs.4 per kg. The FPO has the capacity to process around 400 kg of raw jackfruit a day. This can go up to 600-700 kg a day, though sustaining it in the off season is difficult as the FPO employs 18 people, mostly women. Pingara also takes up the manufacture of value added banana products (Banana halwa , Banana sukeli, Banana chips and Banana chips) in the during off season to sustain its activities.

Production is limited to the period between April and September, keeping the requirements of jackfruit during the offseason in mind, some raw jackfruits are kept in brine to prepare products such as Papads. Pingara HFPCL individual farmer's produce has been collected and marketed through FPO for better price, thereby **reducing the burden of marketing on farmers.** The venture **employs about 20 workers, mostly women,** providing them with a sustainable source of employment throughout the year, as these jackfruit-based products are manufactured even during the off-season period.

In addition, also provides agro implements on hire to farmers such as Tractor, Arecanut Climbing Machine (2), Arecanut Peeler, Ladder, Power Cono Weeder, Digger, Power Tiller, Power Sprayer with gun, Bush Cutter and tree cutter. The Karnataka Horticulture Department has provided 90 percent subsidy on the cost of the equipment to produce value-added jackfruit products. The FPO was assigned to take up Arecanut procurement and other Fruits and Vegetables for marketing linkage. Since from 2017-18 FPO is actively engaged in procurement of Arecanut and other Horticulture Produce for its member farmers.





**Director of Extension, KVAFSU interacting with Board of Directors: Planning on technology backstopping for Pingara FPO**



**Scientists interacting with President and CEO of Pingara HFPCL about value addition of jackfruit and other products**

**A). FPO trainings, demonstrations and other activities organised****1. Demonstrations on good practices in plantation crops cultivation**

<b>Sl no</b>	<b>Crop</b>	<b>Village</b>	<b>Demos</b>
1	ICM in Arecanut	Kepu	1
2	ICM in Coconut	Vittal	1
3	ICM in Blackpepper	Alike	1

**2. Trainings on good practices in plantation crops cultivation**

<b>Sl. No</b>	<b>Title</b>	<b>Date</b>	<b>No. of participants</b>	<b>Place/Village</b>
1	Scientific cultivation of Arecanut, Coconut & Black Pepper	15-02-2019	33	Vittal, Bantwala
2	Scientific cultivation of Arecanut, Coconut & Black Pepper	15-03-2019	25	Vittal, Bantwala
3	Scientific cultivation of Arecanut, Coconut & Black Pepper	22-03-2019	25	Vittal, Bantwala

**3. Group discussions and visits organised**

<b>Sl. No.</b>	<b>Title</b>	<b>Date</b>	<b>Place/Village</b>	<b>No. of Participants</b>
1	Planning on technology backstopping for Pingara FPO	23-08-2019	ICAR-KVK, (D.K.)	10
2	Group meeting with PINGARA FPO presidents & CEO about Interstate tour	12-09-2019	ICAR-KVK, (D.K.)	12
3	Visit to Pingara HFPCL to discuss about the ongoing activities & marketing of products produced by FPO with president CEO of FPO	10-10-2019	Vittal, Bantwala	08
3	Visit to Pingara HFPCL to discuss about the activities of FPO with president	22-11-2019	Vittal, Bantwala	08
4	Group Discussion & training with Pingara FPO farmers regarding implementing demonstrations on ICM in Coconut, Arecanut and Blackpepper	26-05-2020	Vittal, Bantwala	10





#### **4. Interstate Exposure tour organised**

The study tour was organised under the technical guidance of Dr. T. J. Ramesha, Senior Scientist & Head ICAR-KVK, Dakshina Kannada from 04-11-2019 to 09-11-2019 for 39 farmer members of the FPO. The tour was led by Dr. Rashmi R. Scientist (Horticulture) and Dr. Kedarnath (Plant Protection). As a part of this programme, visited National Research Centre (NRC) for Pomegranate, Solapur, KVK at Barmati, Anna Hazare Model Village, Ralegan Siddhi, Sahyadri Farms, Mohadi, MPKV, Rahuri and UHS, Bagalkot to get acquaint with the innovative activities.



**Interstate exposure tour for Pingara HFPCCL farmers from ICAR-KVK, DK, Mangalore to Maharashtra on 4-11-2019**

##### **1. ICAR-National Research Centre on Pomegranate, Solapur (Maharashtra)**

Visited National Research Centre (NRC) for Pomegranate at Solapur on 05-11-2019. Mr. Dinakar Chowdary Extension officer briefed about the experiments carried out at the institute as well as explained that the ICAR-National Research Centre on Pomegranate, Solapur (Maharashtra), was established on June 16, 2005 by the Indian Council of Agricultural Research, New Delhi, as a step to strengthen research and infrastructure development for pomegranate crop. Though Universities and institutes all over the world are having research programmes on pomegranate, this is the only institution working primely on pomegranate. The centre was established to fulfill the growing demand for pomegranate both in domestic and export market through tapping the immense production potential prevailing in the country.



He briefed about the importance of Pomegranate crop which is a high value crop. Entire tree of pomegranate is of great economic importance. Apart from its demand for fresh fruits and juice, the processed products like pomegranate wine, pomegranate tea and candy are also gaining importance in world trade. All parts of pomegranate tree have great therapeutic value and have high potentiality for their use in leather and dying industry. Demand in the international market has widened the scope for earning higher dividends from this crop. Profits upto 1.5 lakhs/ha/annum have been obtained by some growers. It is an ideal crop for the sustainability of small holdings, as pomegranate is well suited to the topography and agro-climate of arid and semi-arid regions. In addition, it provides ample opportunity for livelihood security, as it has high potentials to utilize wastelands widely available in the region and an ideal crop for diversification. Moreover, it can make sizeable contribution to GDP with a small area.

He also explained about the varieties developed by NRC 'Solapur-Lal' variety in comparison with ruling variety Bhagwa during the 3<sup>rd</sup> year of planting in *Mrig Bahar* recorded fifteen days early maturity, 3.4 t/ha higher yield over Bhagwa besides better fruit colour with bolder arils. High TSS (17° B), Anthocyanin and Vitamin C. evaluation of pomegranate under different training systems on 5<sup>th</sup> year of planting fruit set percent was highest under single stem (58.6%). The yield was highest in four stem training system (18.1 kg/plant).



**Visited ICAR-National Research Centre on Pomegranate, Solapur (Maharashtra) on  
05-11-2019**



## **2. Krishi Vigyan Kendra (Farmers Science Centre), Baramati**

Krishi Vigyan Kendra (Farmers Science centre), Baramati was established on 1<sup>st</sup> August 1992 under the affiliation of ICAR. From 1992 to 2008, the operational area of KVK was entire Pune district, but after the establishment of new KVK in the Pune district, the operational area is reduced to the 7 tehsils of Pune district. Krishi Vigyan Kendra, Baramati is a Model, Hi-tech & National Award winning KVK of India working for farming community since 24 years for the development of sustainable agriculture. The team visited Krishi Vigyan Kendra (Farmers Science center), Baramati on 06-11-2019. Mr. Aslam Techinal Officer briefed about the major activities of institute with Video and field visits.

KVK with 53.9 acre farm land was maintained for various agricultural activities including an Indo-Dutch project on Centre of Excellence for Vegetables. KVK with the facilities of computerized irrigation & fertigation system is installed at the KVK farm. This includes a controller, computer, motor pump, fertigation machine, sand filter & disk filter, automatic back flush technique for cleaning sand filter and automatic valve at the field. This system is used for training & demonstration to the farmers. This system saves water, electricity & manpower.

KVK also had a facility of Bio control laboratory produces & provides different biological products such as bio fertilizers, bio pesticides on no profit & no loss basis. Farmers comes with pest affected plants & after identification of those affected plants eco- friendly agro advisory services are provided through Plant Health Clinic.

The main purpose of the farm is to demonstrate the latest agricultural practices for farming communities. It also acts as a tool to perform applied research on agricultural technologies & undertake trials before transferring to farmers. Farm has the mother plants of horticulture crops such as Mango, Sapota, Guava, Aonla, custard apple, pomegranate etc. Agronomical crops like soybean, onion, cotton, rice, sugarcane and wheat etc are also grown. In the farm during the year 2012, KVK has established Automation & Fertigation unit through which Water & fertilizers are provided to all crops on farm. The main advantages of hydroponics over soil culture are - more efficient nutrition regulation, availability in regions of the world having numerable land, efficient use of water and fertilizers, ease and low cost of sterilization of the medium, and higher density planting, leading to increased yields per acre.

The KVK Intervention is cultivation and demonstration of vegetables like cabbage, spinach & lettuce, Strawberry and Vertical farming of strawberry. We visited the polyhouse of Gerbera flowers covering 0.1ha area. Plastic lining, six water storage tanks having capacity of 5.75 crore liters of water constructed for protective irrigation through micro irrigation is demonstrated at KVK farm. 5hp solar power water lifting pump is installed over the pond. Further we visited centre of excellence on vegetables production facility with the use of highly advanced protected cultivation process and real time monitoring of each plant



**Visit to fish pond of Krishi Vigyan Kendra (Farmers Science center), Baramati by  
Pingara HFPCL farmers on 06-11-2019**



**Visit to Krishi Vigyan Kendra (Farmers Science center), Baramati by Pingara HFPCL farmers on 06-11-2019**



**Scientist at KVK, Baramati explaining about automated drip irrigation model to Pingara HFPCL farmers**



### **3. Ralegan Siddhi: A sustainable village model for the country**

Ralegan Siddhi is a village in Parner taluka of Ahmednagar District, Maharashtra state in western India. It is located at a distance of 87 kms from Pune. The village has an area of 982.31 ha (1991) and it is considered as a model of environmental conservation. The village has initiated several programme like tree planting, terracing to reduce soil erosion and digging canals to retain rainwater. For energy, the village uses solar power, biogas (some generated from the community toilet) and a windmill. The project is heralded as a sustainable model of a village republic. The team visited sustainable development model village Ralegan Siddhi, Ahmednagar on 06-11-2019. Mr. Satkar, Public Relations Officer explained about the people of Ralegan Siddhi has took their turn and maximized their involvement in community projects by investing thousands of hours in developmental activity. Further how the ways and means they are sustainable by adopting programme like tree planting, terracing to reduce soil erosion and digging canals to retain rainwater.

For energy, the village uses solar power, biogas (some generated from the community toilet) and a windmill. Further we met Mr. Annasaheb Hazare who not only transformed the village through his water conservation demonstration, but also empowered the villagers to lead the development. He had explained the importance of water conservation and planting of trees, this empowered the villagers to lead the development in agriculture and other activities. Annasaheb Hazare had explained how he encouraged the villagers to donate their labour to repair the embankment. Once this was fixed, the seven wells below filled with water in the summer for the first time in memory. Now the village has water year round, as well as a grain bank, a milk bank, and a school. There is no longer any poverty.





**Pingara HFPCL farmers met Anna Hazare at Ralegan Siddhi, Model village on 6-11-2019**

#### **4. Sahyadri farms, Mohadi, Nashik**

The Team visited Sahyadri Farms, Mohadi, Nashik on 7.11.2019 The Public Relation Officer (PRO) Mr. Suresh explained by showing the movie of Sahyadri Farms activities and how it is helping farmers. Dr. Rashmi R. and Dr. Kedaranth translated the information into Kannada to easily understand the farmers in more detail. Sahyadri farms has 8000 farmers producers organization in Nashik, Maharashtra, India are a group of farmers having that leads in growing fruits & vegetables in less than 1 Hectare of land.

He explained about the idea behind the entire movement to buy all the Fruits & Vegetables produce offered by them under the food safety standards. The primary objective is to provide the best of infrastructure and adequate production and processing facilities to the farmers who could not secure a good produce due to fragility of resource and operations. The movement is to develop first of its kinds branded traceable product-mix that would promote sustained growth and that could cater with the best to the Indian Consumers too, by offering them quality products at fair prices, to do so by achieving economies of scale and costs. This movement is driven on Farmer producer model that would play an ever increasing role in the rural economy, providing gainful employment to large numbers of farmers and allied.

Stakeholders structure, owned by farmers that would, with time, be the farmers “best friend”... and the intention was that the highest levels of consumer confidence would be reposed in the brand called Sahyadri by ‘Seeding Goodness’.

Later we also visited DDU-GKVK Tata Strive Skill Development Mrs. Riya explained about the activities of the institute that Tata STRIVE is the skill development initiative of the Tata Community Initiatives Trust under the aegis of Tata Trusts, addressing the pressing need of skilling India's youth for employment, entrepreneurship and community enterprise. It reaches to communities, develops skills of people from financially challenged backgrounds and acclimatizes them with the changing work environment. The core philosophy of institute is to create courses that would help in creating and supplying trained manpower across the entire industrial spectrum as well as develop entrepreneurial talent.



**Visit to Sahyadri Farms, Mohadi, Nashik by Pingara HFPCL farmers on 7-11-2019**



**Visit to DDU-GKVY Tata Strive training institute at Sahyadri Farms, Mohadi, Nashik by Pingara HFPCL farmers on 7-11-2019**



## **5. Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri**

The team of farmers along with scientists visited Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri, Ahmednagar on 08-11-2019. MPKV, Rahuri was established during the year 1968.

The main objective of university is through innovative research and Lab to Land extension of innovations leading to second Green Revolution. Extension technical officers of the Department made to accompany to exhibition hall where various products developed by MPKV, Further we visited to university nursery where Scientist (Fruit Science) explained about the grafting method in fruit crops such as Pomegranate, Custard Apple, Mango, Lemon, Orange and Sapota.

Further, we all visited demonstration plots of vegetables such as of onion, garlic, brinjal, (Pule Vimukuta, etc) and Scientist (Vegetable Science) explained about the varieties developed by Department of Horticulture, MPKV and also visited Crop improvement units, crossing techniques and germplasm collection units.



**Visit to Fruit Science Dept. at MPKV, Rahuri by Pingara HFPCL farmers on 8-11-2019**



**Scientist (Vegetable Science) interacting with Pingara HFPCL farmers at MPKV, Rahuri on 8-11-2019**

#### **6. University of Horticultural Sciences, Bagalkot**

The team visited **University of Horticultural Sciences**, Bagalkot, Karnataka on 09-11-2019.

Dr. Y.K. Kotikal, Director of Extension, explained briefly about the importance of Horticulture crops with special reference to coastal region, the suitability, selection of crops and use of water conservation by using drip irrigation techniques to improve crop yield, further explained the important activities of university and varieties developed by institute in various regions of Karnataka, He also advised farmers to visit Horticulture college, Kolar to know about jackfruit germplasm and various value added products prepared from Jackfruit.





**Dr. Y.K. Kotikal Director of Extension, University of Horticultural Sciences, Bagalkot addressing the Pingara HFPCL farmers on 9-11-2019 at Bagalkot**



**Visit to UHS, Bagalkot by Pingara HFPCL farmers on 9-11-2019**



**List of Pingara HFPCL farmers participated in interstate exposure visit  
(4-11-2019 to 9-11-2019 for 06 days)**

<b>Sl. No.</b>	<b>Name of the farmer</b>	<b>Address</b>	<b>Contact No.</b>	<b>Aadhar No.</b>
1	Mr.Sundara naik	S/o:Narayana Naik, Negalaguli, Darkasu House, adyanadka , Alike Village, Bantwala taluk,	9483904752	939402281465
2	Mr.Gopal Aachar	S/o:Narayana Achar Kolnadu Bantwala taluk,	9886579823	434758656914
3	Mr.Rohithashwa	S/o Mundappa Banga, Mudimaru house, Veerakamba	9448158805	307570025258
4	Mr.Lakshminarayana Adyantaya	S/o:K.Vittala Adyantaya, Kudriya House, Kolnadu, Bantwal taluk,D.K	9448626030	793251951411
5	Mr. P N Abdul Razak	S/o Ibrahim Byari, Nadaje house, Manchi	9972671171	950380648784
6	Mr.Abdhul Hameed	S/o Ibrahim Byari, Nadaje house, Manchi	9448548172	306946063640
7	Mr.Narasihma Ballal	S/o:Rangayya Ballal, Gangemoole House, Alike Village, Bantwal taluk, D.K	8762118044	491802830143
8	Mr.Gopala	S/o:GuruvappaNayk, Badekodi House,Kepu, Bantwal Taluk,D.K	9980134699	765032673834
9	Mr.Giriyappa Gowda	S/o: Manjapa Gowda , Adyayi House, Veerakamna	9880235860	980666753144
10	Mr.Vasantha.A	S/o:Pakira Moolya,Yerumbu House,,Sathyasaivihara, Alike, Bantwal taluk,	9481921751	935698756588
11	Mr.Chandrashekar K G	S/o: Giriyappa Gowda Girinivasa Kattathila , Vittal mudnuru Village	9481391088	395858376730
12	Mr.C H Naveen	S/o: Koosappa Gowda , Kattathila House	9481023765	573974123224
13	Mr.Rajesh	S/o:Sesappa Poojary, Kundadka Hoyge house, Vittlmudnuru Village, Bantwal taluk,	9686888755	812161799949
14	Mr.Gangadhara Chowta	S/o:Dhamodara Chowta, Devasya House, Bolanthuru, Bantwal taluk,D.K	9902471735	404716394726

15	Mr. Chandrashekara Chowta	S/o Damodhara Chowta, Devasya house, Bolanthuru	9902471735	416460094694
16	Mr.Yajneswar	S/o:Shrinivas Ukkuda Road, Vittalkasaba ,Bantwal	9901503211	367154791834
17	Mr.Vishnu Bhat.P	S/o:P.Narayana Bhat, Sandeepani House, Kodapadavu, Bantwal taluk,D.K	9449913408	376222313696
18	Mr.S.Raj Narayana	S/o:Gopalakrishna Bhat, Saravu House, Kodapadavu, Bantwal taluk,D.K	9448042690	502905500671
19	Mr. K Krishna Murthi	S/o K Nrayana Bhat, Katte house, Kepu	9480791780	645886770654
20	Mr.K. Vidhyadara rao	S/O K Vashudeeva rao. Kuntur house. Machi	9845155862	704264215431
21	Mr.A Udaya Kumar	S/o Ananda Nayak, Alangaru House Vittalkasaba	9449913388	222601106880
22	Mr. Ralf Dsouza	S/o Gabriyal , Anglakodi house, Peruvai	9845570480	250700674216
23	Mr.Rajendranath.Rai	S/o:Kochanna Rai, Peruvai Post and Village Bantwal Taluk,D.k,574260	9481959797	268787453939
24	Mr. Jinachandra	S/o Srinivasa, Kukkebettu house, Kepu	9008388345	654268498206
25	Mr. Rajiva Gowda	S/o Sesappa Gowda, Puttur road, Kayarmar vittal. Bantwala	8277190359	621305060553
26	Mr.Shyama Sundar N	S/o:Krishna Bhat, #5-382, Nethre kere House,Vittal Kasaba Village,Vittal Post, Bantwal taluk,	9964583072	970164664947
27	Mr.V Prakash	S/o Guddappa Mulya, Vittalkodi house, Bobbekeri,Vittalkasaba, Bantwala	9482251261	502321078130
28	Mr.N Anantha Nayak	S/o Ramappa Nayak, Nirbailu house, manchi	9482797204	610873955547

29	Mr.K. Udaya Shankar Rai	S/o: Late.K. Narayana Rai, 2-157, Bailuguthu House, Punachapost and Village,Bantwal taluk,	9481918541	6272 98605870
30	Mr Suresh	S/o: Gopalakrishna Nayak Kokkapuni House, Bolanturu Village	9449592640	234665237040
31	Mr. Bhaskar	S/o: Sesappa Gowda, Kayarmaru House, Vittalkasaba	8762118559	332076316294
32	Mr. Janardhan	S/o: Venkatesh Shettigar, Vittal kodi House, Vittal post and Village, Bantwal taluk,	9663892965	368416381730
33	Mr.Dinesh	S/o:Krishna Naik, Katte Kana House, Punacha Post and Village	9901867342	82 2472698255
34	Mr.Ganguranya	S/O Kummaraiya kokapuni house. Bolanthr	9483140918	392656845175
35	Mr.Krishnaraja Nayak	S/o: Ramappa Nayak, Nirbailu House, Manchi	9449768309	37407 7222812
36	Mrs. Sumithra	w/o U rama naik. Bonyakuku . Vittal	9449501982	483387067667
37	Mrs.Umavathi	W/o: Umesh Gowda Patnaje House Vittal mudnuru	9980211742	2152 7516 7889
38	Mrs. K.Savitha	W/o: Gopalakrishna Patnaje , Vittalmudnuru	9480960544	6867 1501 1413
39	Mrs. Lakshmi	W/o: Thimmappa Naik, Saadikukku House, Peraje Village, Budoli	9480681449	2839 7126 7581

**Staff details**

40	Dr. Rashmi R.	Scientist (Horticulture) ICAR-Krishi Vigyan Kendra Mangalore	8088131431	279647650493
41	Dr. Kedarnath	Scientist (Plant protection) ICAR-Krishi Vigyan Kendra Mangalore	7975133906	594599671492



