

Doon university (School of Environment and Natural Resources)

Doubling Farmers Income Through Integrated and Collective Farming

Approach in Uttarakhand

Quarterly Report

[Third] Quarter – 1st January 2020–31st March, 2021

Submission Date: 29th July 2021

Activity Start Date and End Date: 1st Januaryer 2021 – 31st March 2021.

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Program Overview:

Program Name:	Doubling farmer's income through integrated and collective farming approach in Uttarakhand
Activity Start Date And End Date: (from first allocation of funds)	1 st July'2020 to 31 st March 2023
Name of Joint Implementing Partner: (if any, this is an org. that may be helping you implement)	Department of Horticulture, Department of Agriculture Uttarakhand Government
Geographic Coverage (State, Districts, Villages)	State – Uttarakhand District – Tehri-Garhwal, Almora, Pithoraghar, Champawat Block – Narendranagar,Bhilangana,Sult, Dwarahaat, Syeldey, Munakot, Didihaat, kanalicheena, Lohaghaat Villages (Nos.) – 95
Reporting Period:	January 2021 to March 2021
Total Program Cost	INR 2,01,52,356
Total amount received from THF/FIRST	INR nil



1. Brief of Work Done in 3rd Quarter:

During the Third quarter of the approved project entitled "Doubling of Farmers Income through Integrated and Collective Farming in Uttarakhand". The month of January and February was kept for meetings in villages where the nursery locations were identified. In these villages public



meetings were arranged for evaluation of the resources and expences which will be required for prepration of nursery beds.

A micro-plan was developed for each site in which following details were recorded. The main objective of the training programs was to enable the participants to have a better understanding of:

- Concept of micro level planning
- Steps and tools of micro level planning
- Field application of the tools of micro level planning
- Analysis of resources and the socio- economic condition of the village

Different Participatory Rural Appraisal tools were used during this program. The list of tools are as following:

- Water resource mapping.
- Transect mapping of nursery location.
- Manpower availability mapping.
- Daily diary mapping of identified man-power for better use of time in nursery preparation and monitoring.
- Pair wise ranking (Prioritization) of work.

SWOT Analysis

Strength, Weakness, Opportunities and treats were evaluated in each of 26 villages where these nurseries have been proposed. As the quality seedlings are most important for healthy seedlings hence this exercise was done so that we can predict the expenses, interest of

farmers, availability of man power, resources required, availability of resources at each village, arrangement of logistics, machinery and liaising with *Krishi Vigyan Kendras*.

Following are the results of this exercise in village clusters where mass scale vegetable and spice production was being proposed.

Strength

- Awareness and interest in farmers for vegetable and spice cultivation.
- Land is available for production of vegetable and spice cultivation.
- Local markets are also available for sale of produce.
- Farmers are united under the umbrella of Farmer Producer Companies.
- Man power is available.
- Relation of Farmer Producer Companies with horticulture department is already established.
- Some selected farmers in each cluster have experience of vegetable and spice production.
- People are willing to forbid the open grazing system inside the area targeted for vegetable and spice cultivation, especially in areas which were abandoned previously.
- Relationship with regional Gramin bank is already developed.
- Manure for the field is available frequently.

Weakness

- At present in some targeted areas problem of monkey and wild boar attack on crops.
- Lack of communication and coordination between different hamlets with in a gram Panchayat.
- Lack of weather forecast systems.
- Middleman.
- Members of Farmer producer companies do not have any experience of large scale trade.

- Non existing profit sharing structure.
- No institutional support in case of mass failure of crop due to natural disaster.
- Good quality seeds especially developed for hills are not easily available.
- Cost of establishing individual farmers nursery is too high.
- Lack of technical knowledge for establishing nurseries for providing planting material for large scale cultivation.
- Links with market for the sale of crop has not been fully established yet.

Opportunities

- Favorable climatic conditions.
- Private land availability for vegetable and spices production.
- High Market demand.
- Farmers are interested for cultivation of spices and vegetables in private farm land.
- Opportunity of increase in annual income of the family by propagation of spices and vegetable is existent.
- Opportunities of strengthening of village based organization through the project are very high.
- Opportunity of establishing cluster's identity as the vegetable and spice production area is quite high.
- Opportunity of developing village based entrepreneurs.
- Opportunity of lessen the trend of migration in search of livelihood.
- Good opportunity of doubling the existing farm income by integrated and collective farming approach.

Threat

- Crop raising by wild animals in many clusters.
- No idea of weather trends during different seasons.

- Natural calamities such as scanty or excessive and erratic rainfall as well as drought like situations.
- Lack of technical knowledge in many dimensions of the project in the field based executing agency.



Our team visited the villages for selection of farmers in twenty six (26) village for distribution of seeds which were given to the farmers in selected villages for prepration of nursery beds. Manure was arranged at nursery sites in each village. Nursery beds were prepared by taking proper measurements. The rise of the nursery bed was kept abuot 12 cm

from the ground lavel. Width of the nursery bed was kept 3 feet and length was kept aroud 12 to 15 feet, depending on avaibality of area selected villages for prepration of nursery beds. Manure was arranged at nursery sites in each village.







S.No	District	Block Covered / Sachal Dal Kedra Officies	No. of Villages	Support from HMNEH 2020-21	Support Given to Farmers
1	Pithoragarh	Munakot, Didihaat, Kanalichena	42	Fruit Plants , Hybrid Vegetable Seeds	Fruits :Mango, Guava and Pomegranate Hyb. Vegetables: Cabbage, Cauliflower, Bell pepper, Tomato, Chilly, Brocelli
2	Almnora	Syeldey, Dwarahaat, Sult	34	Hybrid Vegetable seeds	Hyb. Vegetables: Tomato, Turmeric, Cabbage, cauliflower, Bell pepper
3	Tehri- Garhwal	Laser, Bachelikhal	21	Fruit Plants, Hybrid Vegetable Seeds and Seeds of Vegetable and Spices in Subsidy	Fruit Plants: Guava, Mango Hyb. Vegetables: Tomato, Bell Pepper, Cabbage, cauliflower, Reddish, Ginger, Turmeric

S.No	District	Nurseries Established Block Wise	Total No. of Nurseries =26	Spices grown with the support of HMNEH	Total No. of Farmers Benifited
1	Pithoragarh	1.Munakot= 3 Villages 2. Didihaat = 5 Villages 3.Kanalichena= 6 Villages	14	Fruits :Mango, Guava and Pomegranate Hyb. Vegetables: Cabbage, Cauliflower, Bell pepper, Tomato, Chilly, Brocelli	1400+
2	Almora	1.Syeldey = 1 Village2. Dwarahaat=7Villages	8	Hyb. Vegetables: Tomato, Turmeric, Cabbage, cauliflower,	1745

				Bell pepper	
3	Tehri- Garhwal	1. Laser =4 Villages	4	Fruit Plants: Guava, Mango Hyb. Vegetables: Tomato, Bell Pepper, Cabbage, cauliflower, Reddish, Ginger, Turmeric	358
4	Total no. of farmers benefitted			ir coordination with Distric	

Monitoring and Physical Auditing of the Farmer Producer Companies

The functioning's of entire program; farmer producer groups under the farmer producer companies are being monitored by the project team as well as the monitoring committee at each village. The farmers have elected the members of this social audit committee.

Rights and Duty of monitoring committee

- The monitoring committee will be doing meeting every three months to present the field data to the farmer producer group or any individual member of FPC.
- The committee will look after the seedling of vegetables and spices in each Gram Panchayat area.
- The committee will also do social auditing of the work and will present the detailed report in regular meetings of farmer producer compeny.

Almora District : In almora district Two blocks were covered for preparing nurseries Almora district

1. Shyeldey Block

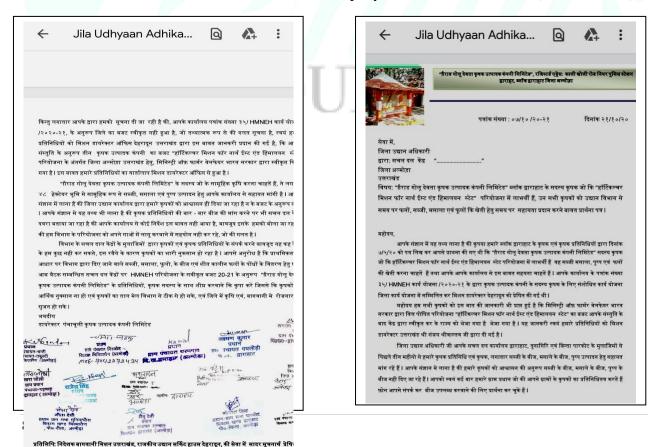
2. Dwarahaat Block

In shyeldey block records of farmers were collected 7 villages. In Dwarahaat block documents of farmers were collected from 25 villages. In Sult block documents of farmers were collected

from 7 villages. In total 39 Villages were covered in district almora in these documents were segregated according to the juridiction of the horticulture unit office which is known as *Sachal Dal Kendra*. In total documents of 2234 were submitted to the *Sachal Dal Kendra* in District Almora. Even after that horticulture department was not willing to support the farmers hence the joint request letters to support the farmes as desired were send to the headquartes of horticulture in Almora at District Horticulture Office.

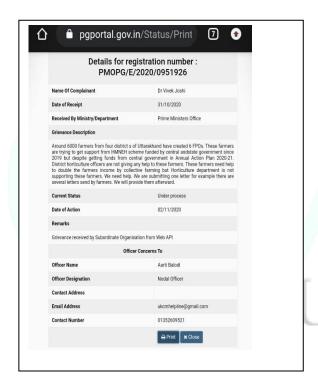
District horticulture office was not willing to support he farmers hence meeting were done with the District Horticulture Officer, by our team members and the representatives of farmers from all the villages. When the District Horticulture Officer did not supported the farmers as desiured, a complaint was launched against the District Horticulture Officer, to the office of Prime Minister in October 2020. The PMO redirected our grevance letter to the Chief Minister Grevance Cell at Uttarakhand. Our team continiously followed the Chief Minister Grevance Cell, and finally the District Horticulture Officer was forced to provide the seeds. Prioir to this because of the intervention of this project we were successful to make provision in Annual Action Plan Budget for supporting the farmers which were enlisted in following Farmer Producer Companies:

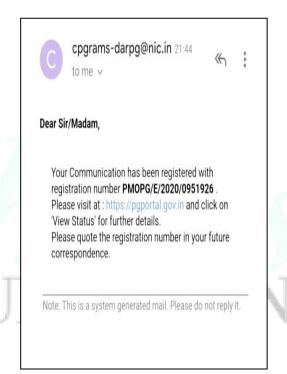
• Maa Chamrada Devi Farmer Producer Company District Tehri-Garhwal (1156 member)



- Geraad Golu Devta Farmer Producer Company District Almora (2006 members)
- Bheraw Baba Farmer Producer Company District Almora (1141 members)
- Panchachuli Farmer Producer Company District Pithoragarh (3007 members)
- Ma Kanayi Farmer Producer Company District Champawat (456 members)

Due to the provision made in Annual Action Plan of Horticulture Department in these four districts our farmers finally started receiving the seeds of hybrid vegetables from the respective *Sachal Dal Kendra* in all the districts where our project is being implimented.



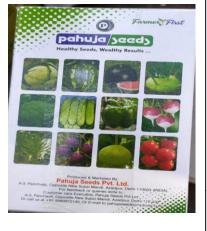


Our team members and representatives of the Farmer Producer Companies received the seeds of spices such as :

- Turmeric
- Ginger

We also received the seeds of following vegetables:

- Cabbage
- Cauliflower
- Broccoli



- Reddish
- Bell pepper
- French beans
- Tomato
- Coriander
- Chilly
- 2. Goal













As This project is aimed to support to farmer members of six farmer producer companies which have been formed in Uttarakhand. This project is working to resolve the issues involved in horticulture, agriculture Map & NTFP sector through a holistic approach which is aimed on conserving the natural resources our team finally went to all the nine blocks in four districts, to receive the support for farmers which were members of the Farmer Producer Company.

These seeds were then properly documented in the record books of farmer Producer Companies. All the packets of these seeds were segregated the in record books according to the farmers data collected from each village. According to the government rule each farmer was entitled to receive 10 gm seed of the vegetables enlisted above.



After receiving the seeds meetings were arranged in village clusters in all four districts in nine different blocks so that the location of nurseries could be decided.



The main purpose of such meeting was to identify the suitable location in each cluster where the village must have following facilities:

- 1. The village must be connected with road and vehicles could directly reach till the nursery beds.
- 2. The village must have ample supply of water throughout the nursery season so that water could be provided as and when required to the seedlings.
- 3. The village must have the work force to look after the nursery beds, so that volunteers could be utilized to raise the seedlings.
- 4. The village should have the willing farmers to raise the nursery in there private farm lands.
- 5. The village should have proper farm equipments which were provided by us through farm machinery bank scheme.

6. The village were chosen keeping in mind the distance and proximity of other villages in cluster in such a way that the nursery village was more or less at central location in the identified clusters.

After the extensive ground survey 26 villages were chosen for nursery development, which were distributed as following:

- **District Pitrhoragarh**: Nurseries were developed in all three blocks namely:
- Munakot, Kanalichinna and Didihaat
- In total 14 nurseries were established.
- **District Almora**: Nurseries were developed in two block namely:
- Dwarahaat and Syeldey.
- In total 8 Nurseries were established in eight villages.
- **District Tehri- Garhwal :** Nurseries were developed at two location in one block.
- In total nurseries were established in 4 villages.

3. Trainings & Establishment of Nurseries

Doon University contacted *Krishi Vigyan Kendras* in district Almora, Pithoragarh and Tehri-Garhwal. Letters were send to Senior Agriculture scientists, head of *Krishi Vigyan Kendras* in for supporting the farmers to establish the nurseries. In the 2nd quarter of the project our team and the representatives of the farmers were busy visiting villages for identification of location, communication with *Sachal Dal Kendra* and district horticulture offices.

By the time we started receiving seeds winter season started. In the western Himalayas after autumn season all the plants go to dormancy state due to decreasing temperatures. Hence in the 2^{nd} and 3^{rd} quarts of the project our team was engaged in receiving plant material from government.

4. Summary of Results to Present

Deliverables / Indicators	Baseline	Annual Target	Q1	Q2	Q3	On Target?	Remark
	FY	. u. get	FY (July- October)20	FY (Octber- December20)	FY (January- March 20)	Y or N	
Orientation Training of Farmer Producer Company at cluster		1	N	Y		Y	Activity completed in second

level							quarter
Training on internal management (Business plan, record keeping, legal accounting documentation & taxation, stock, etc.		3	N	Y	Y	Y	Activity completed in second quarter
Training on Good Agri/horti practices e.g. field preparation, manuring, pruning, irrigation, pest & disease management, etc.		3	N	Y	Y	Υ	Activity planned in 3 rd Quarter
Prepration of Fruit Orchards, and cultivation of aromatic plants (oregano, guava, pomegranate, citrus etc.)		N	Y	N	N	N	No activity was done in 2 nd quarter
Citrus spp.	556 plants		Y	7			Plantation activity was effected by
Pomegranate	1334 Plants		Υ			70/	covid pandemic
Guava	3330 plants 300		Y	1111			/_ \
Mango	plants	THI	4, 77	H/H	11/11	7 /	7 JE D
Meetings in villages for identification, preparation of land for cultivation of horticulture crops		64 Villages		ere conducted /illages	A	II	Activity completed in second quarter.
Nursery Preparation		26 Nurseries		Y	Y	Υ	Activity planned in 3 rd and fourth Quarter
Plantation of horticulture crops		190 hectare		Y	Y	Υ	As seeds have be demanded by farmers and nursery will be operational by mid October all work seems be in time.
Training of farmers for Nursery development		26			Y	Υ	Activity planned in 3 rd and 4 th

techniques						Quarter
Cultivation of oregano	7.8 hectare		Y	Υ	Y	Activity completed in 2 nd quarter
Organizing interface with line departments for dovetailing of govt. development schemes & for other convergences	Round the year	Y	Υ	Υ	Y	This activity will be done round the year.
Organizing market follow-up / buy back arrangements visit for strengthening forward market linkage	2		Υ		У	Two meetings were arranged for buyer seller meet in 2 nd quarter
Exposure Visit on processing and packaging of value added products (production scheduling, manpower management, job role defining etc.)	1				Y	Activity planned in 3 rd quarter

Changes to Deliverable / Indicators

Deliverable / Indicator	Change	Why change was made	Approved by
Trainings & Establishment of Nurseries Cultivation of culinery, herb development of orchards in Private Land and plantation, fruit trees in Van Panchayat	Changes were done in work plan	Due to pandemic situation and lack of funds	N