

Backdrop of the Project

Project Name: Doubling Farmer's Income through Integrated and collective farming approach".

Date of Approval: The HANS Foundation; 1st July 2020.

Date of Signing MoU: Amid **Mr. Sudeep Sinha** (Director – P&E, The Hans Foundation) and **Prof. Kusum Arunachalam** (head School of Environment and Natural Resources). **Dated: 28/09/2020.**

Date of implementation of new **Foreign Contribution (Regulation) Act, 2020:**
1st October 2020.

Date of Initiation of ED Process: 17th December 2020.

Date of Signing of Online Grant Agreement: 17th April 2021.

Date of Approval of Disbursement Schedule: 16th June 2021.

Date of Transfer of Funds in Doon University Project Account:
24/06/2021.

Total Transferred Amount: Rs. 5,375,847.

Date of Approval from Vice Chancellor Doon University to the Project:
18/09/2021.

Post Facto Approval Date: 17th April 2021.

Achievements in the project (September 2020 till December 2020)

1. Creation Farm Machinery Bank in Almora, Tehri and Champawat District:

Total Amount dovetailed from Farm Machinery Bank Scheme: Rs. 12,200,000.

During this quarter (Sept. 2020 till December 2020) our team formed 12 farm machinery groups in 12 villages in three districts Almora, Champawat and Pithoragarh. In Tehri-

Garhwal five farm machinery banks have been created, in district Champawat six farm machinery bank have been created and in Almora two farm machinery banks have been created in the project, in total contribution of Rs. 12,200,000 was dovetailed from Agriculture department. For creation of farm machinery groups with ten farmers in each group meetings were conducted in 13 villages for explaining the objectives and activities of the farmers group. These farmer groups were linked with the central government scheme known as "Farm Machinery Bank" in which farm machinery was provided worth Rs. Ten Lakh (1,000,000) to each farmers group. In Tehri-Garhwal farm machinery of worth Rs. Five Lakh (500,000) was provided to each farmer group. Following machines were provided to the farmers:

- (1) Power weeders
- (2) Power tillers
- (3) Sprayers
- (4) Chaff cutters
- (5) Water pumps
- (6) Wheat grinding machines
- (7) Paddy husk removers
- (8) Water Pipes
- (9) And other agriculture tools

Our team in field facilitated all the work necessary for dovetailing the funds to support the members of Farmer Producer Company. Subsidy forms were filled for each group and the details of land record name of group name of village were filled and the form was verified by *Gram Panchayat Vikash Adikari* at block office. A supporting letter of the group was issued to the Chief Agriculture officer for providing subsidy for purchase of farm machinery under the central government funded "Farm Machinery Bank Scheme".

Details of bank account and passbook were presented to the office of Chief Agriculture officer in Pithoragarh and Champawat, and a copy of documents was also submitted to the office of *Bhumi Sanrakshan Adikari* office of the respective villages falling in the blocks under the jurisdiction of *Bhumi Sanrakshan Adikari* in Champawat and Pithoragarh. Photocopy of minute of the meeting of all months of the Self Help Group / Farmers group

which was being benefitted was also presented to the office of *Bhumi Sanrakshan Adikari* as it was mandatory in guidelines.

Our team also facilitated the farmers group by taking mandatory approval of cooperative department on files of each file of farmer group; so that finally subsidy amount could be released to the service provide (Supplier Company of farm machinery) in the name of each farmers group.

Finally in the month of November 2020 Farm machinery worth **Rs. Sixty Lakh (Rs. 6,000,000)** was distributed to farmer groups in district Champawat.

For this Application fees was deposited in the chief agriculture officer's office at Champawat and to *Bhumi Sanrakshan Adikari* of Lohagaht block in district Champawat. which is a mandatory step of identification of group by agriculture department for considering the group to provide the subsidy.

Attested details of land record of each farmer in the group were attached with the file for proof as mentioned in the Subsidy form of agriculture department. There after affidavits of each group were prepared on a non-judicial stamp paper affirming that the farmer group is part of a registered farmer producer limited company, and the machinery will be used for collective farming. It was mentioned that the group will not sale out the farm machinery and will abide to all rules and regulations of government for the use of machinery which shall be provided to the farmer self help group. Name and signatures of all group members were also mentioned in the affidavits. Delivery challan was issued by the service provider to the self-help group with details of machinery, it make type quantity and prices including GST. The machinery was recived by the farmer self help group and was verified by the officer of agriculture department in each block where the machinery was delivered.

- 2. Providing seeds of hybrid vegetables and spices to the members of Farmer Producer Company "Maa Chamrada Devi FPC & Bheraw Baba FPC in Tehri-Garhwal and Almora District:** During the period the team members in Tehri- Garhwal and Almora district collected the records of farmers such as copy of Aadhaar card, Copy of Bank Pass Book and a verified copy of land record form the office of *Tehsildaar* of more than 2200 farmers in three blocks of district Almora and about 467 farmers in one Block of Tehri-

Garhwal. In this exercise records of farmers duly attested by the *Gram Pradhan* were submitted in the block office known as *Sachal Dal Kendra* by our team members.

Apart from above explained document other details of farmers such as fathers name, husband's name, total area of cultivation used for hybrid crops, species proposed for cultivation was also submitted to *Sachal Dal Kendra* in Almora and Tehri-Garhwal.

A copy of these documents was also submitted to the district horticulture office. Finally in the month of November and December 2020, the members of above mentioned Farmer producer Companies got seeds of hybrid vegetables in batches such as:

- (1) Broccoli
- (2) Bell Pepper
- (3) Coriander
- (4) Reddish
- (5) Cauliflower
- (6) Cabbage
- (7) French Beans
- (8) Chilly
- (9) Turmeric & Ginger

3. Achievements in the project (January 2020 till March 2021) Pithoragarh District :

Our team started the meetings in villages of district Pithoragarh and in three blocks:

(A) Munakot (Total Villages Covered =7)

(B) Kanalicheena (Total Villages Covered =17)

(C) Dedihaat (Total Villages Covered =18)

Our team conducted meetings for identification of farmers who were interested in cultivation of hybrid vegetables crops, as many of the farmers still practice traditional cropping patterns in Uttarakhand Himalayas, and there is no tradition of cultivation of cash crops. Our team conducted meetings in all the villages from January 2021 till February 2021 in all the villages to develop a work plan for promotion of cash crops in the villages.

It was decided that after receiving seeds of hybrid vegetables from Horticulture Department, villages must be identified where nurseries could be developed at mass scale to supply the ready seedlings, to members of Farmer Producer Company entitled

“Panchachuli Farmer Producer Company”. Our team did ground survey of all possible locations where essential requirements for a nursery are easily fulfilled, such as:

- (1) Proximity from nearest motorable road is less than 200 meters.
- (2) Farmers are motivated for establishment of nurseries of cash crops.
- (3) Water sources are near-by to the nursery sites.
- (4) Volunteers are available for preparing nursery beds.
- (5) Distance from the other villages of the cluster is not more than 15 km.
- (6) Farmers are ready to pool up, farm lands for raising nursery.

After identification and physical verification of all nursery sites in the month of February 2021, receiving of hybrid seeds was done from the department of Horticulture by the representatives of “Panchachuli Farmer Producer Company”. Head of Departments of regional *Krishi Vigyan Kendras* were contacted and a training schedule was developed for establishment of nurseries.

Finally in the month of March and early April after the weather conditions were perfect for seed sowing, a series of trainings were arranged in 2021 14 villages in Pithoragarh district.

Nursery preparation was done to sow seeds of cabbage, cauliflower, chilly, bell pepper and two different varieties of tomatoes.

Travel, food and logistic arrangements were done by financial contribution of field team and project manager.

In total nurseries were established in 14 villages in different clusters following all parameters identified for nursery development mentioned above.

In total nurseries were developed in more than 174 nali of land which makes 3.48 hectares. Counting of seedlings emerged was done using quadrature method, “a scientific technique to count herb population”. This data collection was done for all crops to estimate the viability seeds provided by the horticulture department.

For this following method was used:

- 1) Seeds were counted in every 10 gm packet of different hybrid vegetable.

- 2) Area of nursery beds was measured.
- 3) Lines in each bed were counted.
- 4) Seeds sown in each bed were also noted by women farmers.
- 5) Germination percentage of each bed was evaluated.
- 6) Standard Quadrate method was used for estimation of seedling germination per bed.

After following all these parameters and continuous weeding of the nursery beds for about 45 days seedlings of hybrid vegetable were distributed to the farmers for cultivation in their agriculture fields.

4. Achievements in the project (January 2020 till March 2021) Almora and Tehri-Garhwal District :

Similar exercise was done by our field team in 98 villages in three districts. Forty two villages were covered in Tehri-Garhwal and Almora combined for nursery establishment. Out of these forty two after due consultation with farmers nurseries were established in twenty two (N=22 Villages) in these two districts.

Krishi Vigyan Kendras and individual experts were hired for these trainings in the villages. Similar procedure which has already been explained was followed in these two districts for estimation / documentation of:

- 1) Area of nursery beds
- 2) Survival of seedlings in each nursery beds
- 3) Time consumed in weeding operations
- 4) Distribution of seedling from each location to beneficiaries
- 5) Area of cultivation of hybrid vegetable seeds of each species by individual farmer
- 6) Use of farm machinery by farmers to prepare nursery beds
- 7) Expenses involved in preparation of nursery and distribution of planting material
- 8) Man-power used in these ground operations
- 9) Damage to crop by pest and climatic reasons

5. Achievements in the project (April 2020 till June 2021) in Pithoragarh, Almora and Tehri-Garhwal District :

After the establishment of nurseries of hybrid vegetable species with an aim to promote cash crops in identified villages, such as spices and hybrid variety of vegetables, data was collected from nurseries sites for distribution of crops.

As the seedlings take around 45 days to get mature enough to be transferred to the agriculture fields, for commercial production of vegetables, all precautions were taken by our volunteers, field teams in all three districts, according to the expert opinion of scientists of *Krishi Vigyan Kendras* and experts from other organisations.

Our farmers reported a very good survival rate of seedlings of vegetables and spices in nurseries but due to unexpected hail storms in the month of May 2021, continuously for 3-4 days about half of our seedling got damaged in Almora and Tehri-Garhwal. This was the time when strict lock down was imposed in Uttarakhand. Hence our team could not do enough to support the farmers.

Due to the lock down situation a travel ban in hill districts of Uttarakhand, our team was unable to distribute the seedlings in all 98 villages as planned. But still our team, managed to distribute the seedlings in nearby villages in radii of 5 km from nursery sites. In total we distributed the seedlings in more than 42 villages in three districts.

6. Achievements in the project (April 2020 till June 2021) in Pithoragarh, Almora and Tehri-Garhwal District :

After planting the vegetable, spices seedlings grown in our nursery sites we distributed the seedlings to farmers for commercial cultivation from May 2021 onwards. All necessary documents were recorded properly such as:

- 1) Name of Farmer / beneficiary
- 2) Name of species distributed to individual farmer
- 3) Details of no. of seedlings provided to each beneficiary
- 4) Details of land area of each farmer in which cash crop / vegetables have been introduced

- 5) Details of weeding cycle and data of volunteers used in the entire exercise
- 6) Details of geo-location of each site in villages
- 7) Details of weeding/ irrigation cycle etc.

7. Challenges faced during field work:

Due to lack of funds our field operations suffered severely, during entire period since July 2010 till 31st June 2021. Our field staff did expenses from their own limited resources, including the program manager. We faced challenge due to unexpected lock down, and travel restrictions during entire session of project July 2020 till June 2021. Due to Lack of funds we also faced challenges in proper documentation of entire efforts being made by the members of Farmer Producer companies and our team members.

Despite these challenge we are expecting our fist harvest from crops in the month of August 2021. We expect that our Farmer Producer companies will be able to do a collective turn-over of about 10 to 15 lakh in our fist harvest cycle. Data will be shared with The HANS Foundation on quarterly basis as and work will be smooth ahead as funds have been received by the Doon University for the said project.

★ **As the approval to the project have been provide from 17th April 2021 Doon university cannot claim the money which was spent in field from 1 July 2020 till 16th April 2021, due to some technical reasons, hence we request to carry forward the same amount at the end of the project so that approved budget can be utilized in totality for benifiting the farmers in Uttarakhand.**

Achievements in the project (1st July 2021 till September 2021)

8. Liaising with Horticulture department

We submitted the details of our filed operations such as development of nurseries, transplantation of hybrid vegetables, cultivation of spices etc., to director horticulture office Uttarakhand. We also provided farmer details such as name, Aadhar no. mobile number to the department of farmers which were involved in the project. Director horticulture was impressed with our efforts and have issued a letter

to deputy director horticulture of Kumaon and Garhwal regions to support our farmer groups with the departmental schemes run by the funds of state government as well as central government. And have instructed them to also inform the director horticulture office Uttarakhand about the action taken.

9. Creation of Five New Farm Machinery Groups in Tehri-Garhwal:

Five new farm machinery groups have been created this year in Tehri-Garhwal for linking farmers with central government scheme “Farm Machinery Bank”. For this our team completed the process as has been described in page no. 2 of this report.

10. Linking Farmers with Drip Irrigation Scheme:

We have linked our farmers with a central government supported scheme of drip irrigation. We will link about 2000 farmers with this scheme for laying drip irrigation system in their farm lands. The beneficiary must be the owner of 1 Acre land equivalent to 20 nali for getting benefit from this scheme. Documents are being collected for same.

11. Providing horticulture vegetable seeds to farmers.

We are also collecting data of farmers to be submitted to block offices in 10 blocks of four districts to provide best quality seeds to farmers. For this farmers can suggest the variety and species of seeds. For this our team have done several meetings with the best seed providing companies, so that high quality seeds and training can be provided in time to farmers.

12. Recruitment of new staff

As mentioned in the project after approval of project last month we have advertised the positions and all staff will be recruited by last week of October 2021. After which speed of the project will increase and activities will be done in full swing.

13. Way Forward

We will organise following trainings in November and December 2021:

1. Orientation Training
2. Training on Management and Information System
3. Training of Record Keeping
4. Training of Nursery raising
5. Mass Scale Cultivation
6. Training of Good Agriculture and Cultivation practices.

7. Training of NAGOYA Protocol
8. Arrangement of buyer seller meet.
9. Linking farmers with Herbal Research and Development Institute.

We will be submitting a detailed quarterly report of 2nd quarter (July 2021 till September 2021) with audited UC to RIST, USA by the last week of October 2021.

We also expect that The HANS Foundation Uttarakhand team will help us to develop a work plan for next quarter so that tangible objectives and aims could be laid for quarter and, evaluation of achievements can be done as per schedule of the project.