

## **Layer farming for adaptation Project (LFAP)**

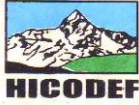
(Cultivating and marketing high value crops to improve food security enhance livelihoods and adapt to climate change in Nepal)

### **1<sup>st</sup> Quarterly Report of Second year**

(Oct 2022 – Dec 2022)



Submitted by: Himalayan Community Development Forum (HICODEF)  
Kawasoti, Nawalparasi, Nepal



## Background

Himalayan Community Development Forum (HICODEF) has partnered with The Glacier Trust (TGT) in south-central Nepal to enable climate change adaptation in the remote mountain villages of the Siwalik range since 2009. HICODEF's work in this region have enabled people to increase their resilience to the growing impacts of various climate change. From 15 Sept 2019 the Layer Farming for Adaptation (LFAP) project has been implemented by HICODEF in support of TGT and in close collaboration with farmers. The first phase of the five year project worked in three villages (Ripaha, Mathillo Baseni and Lahape) during the first two years. Now HICODEF and TGT have agreed to expand the project second phase in adjoining villages of Dhoubadi, Pokhari, Dulunga and Charghare. These villages fall under two adjoining Rural Municipalities namely Hupsekot and Boundikali of Nawalparasi (east) district. The second phase of the project is being implemented during 15 Sept 2021 to 14 Sept 2024.

Through this project we have reached further remote villages in the foothills of the Himalayas. This is an area of dangerously low food security. Climate change and inequality are exacerbating these problems significantly in this project area. Coffee can be grown with other high value crops, root vegetables and fruits across the Himalayan foothills as a climate change adaptation and livelihood improvement strategy. As the major thrust of the project, coffee is grown using the organic 'layer farming' method so that coffee is inter-cropped with fruits, vegetables and other high value crops to vastly improve income, diet and resilience to climate change. Through this project, we are on the way to enable farmers to grow coffee commercially for the first time in the locality. There were a few coffee trees in the area planted many years ago and neglected as the people did not know how to manage them or where to sell their products. In the last two years, a few of the farmers (a total of 230 KGs) could sell their coffee beans they produced while the coffee trainer himself facilitated the sale.

We know that most of the last two years were spent in a very critical situation due to the global pandemic called COVID-19. The socio- economic condition of the people was adversely affected by the COVID -19 pandemic. The rural setting and activities were also affected due to lack of transportation and financial activities and we were adversely affected in this project as well and could not do close support/monitoring as intended. Now the situation is getting better as most of the mobility and activities of the people have been normal. The communities have started to involve themselves in income generation activities, production, providing services; all educational institutions have started their classes. All the activities of project have been started smoothly. The project activities have also resumed its normalcy to deliver physically at field level with essential health precautions.

This report refers to the activities implemented in 1st quarter between October to December 2022 in the community of Dhoubadi, Pokhari, Dulunga, Baseni and Ripaha villages of Hupsekot Rural Municipality and Lahape village of Boudikali Rural Municipality.

### Major activities implemented during this period

1. School Engagement Program
2. Farmers Group Follow-up meeting
3. Regular Monitoring and Coaching of previous activities.
4. Project Monitoring and Evaluation visit



## Activities implementation and achievements

### 1. School engagement program

During this period we have conducted various school engagement activities in the schools of Dhoubadi and Charghare. The project team coordinated school teachers and the management committee of both schools to conduct these activities involving the students as an extra-curricular activity. Teachers and parents agreed to conduct one event around the school premises with due health precautions. We conducted one day coffee seedling weeding and litter picking event in the school compound in Shiksha Bodhani High School, Hupsekot 5 Dhoubadi. And an event of kitchen gardening practice was organized in Bal Jagaran Primary School of Hupsekot 4 Charghare.

In Shiksha Bodhani High School all students of grade 2-10, and some parents and teachers actively participated in the event. All the coffee plants planted in school compound are weeded, cleaned, fertilized and irrigated. Similarly, all the non-decomposed litters, plastics of school compound have been picked and collected by the students during this event. This not only made the school compound and surrounding area clean but also gave a practical message to the school students about environmental cleanliness. This event has given a message to the community to conduct this type of event at intervals to keep up the spirit. This will not only clean the area periodically but also control the disposal of litter in assigned area.



*Weeding of coffee plants and litter picking in school compound in Dhoubadi*

In Bal Jagaran Primary School, Hupsekot 4 Charghare, another school where we implemented the school engagement program, we have conducted a kitchen gardening management practice as an extracurricular activity. In this activity all students from grade 2-5, and some parents and teachers actively participated in the kitchen gardening practice in the school compound itself. They planted, fertilized, irrigated and weeded the cabbage, cauliflower, garlic, coriander, green leafy vegetables. All the students are very excited have practical knowledge from these activities. All vegetables of this garden are being used as food in regular school tiffin feeding program.



*Vegetable nursery caring by school student in Charghare*



*Practice of kitchen gardening in school compound in Charghare*



## 2. Farmers' Group Follow-up Meeting

Farmers' group meetings and follow-up is a continuous activity of the project. In this meeting we sit together, discuss and decide with farmers on new activities before its implementation in the project site. We also review and go through the implemented or conducted activities in these meetings. During this period we conducted 4 meeting of farmers groups where we discussed and reviewed the planted coffee saplings, weeding, watering and fertilizing, tunnel preparation and farming, coffee cherry picking, pulping, parchment preparation maintaining shade crops, cultivation of ground crops etc. We facilitated the farmers in picking and pulping coffee cherry and making parchment. Farmers have prepared tunnels for tomato farming. Newly planted coffee saplings are properly cared, watered and fertilized; shade maintained and weeding done in a timely manner.

## 3. Regular monitoring and revisiting earlier project activities

Last year we had conducted different types of project activities like coffee cultivation training, on project sites in Pokhari, Charghare, Dulunga and Dhoubadi. Distributed coffee seedling, silpaulin for tunnel making, water irrigation tank, and vegetable seeds. During this period we have regularly visited, monitored and advised the communities for betterment and effective uses to continue bringing improving the impact of activities. As a result all coffee plants in all nurseries of all sites are growing well, planted coffee seedling are growing well, all the farmers who got the silpaulin sheets and water tank have built tunnel and cultivated vegetables in it. Most of the farmers are cultivating vegetables from the project distributed vegetables seeds. Twenty one farmers started picking coffee cherries and have started to make coffee parchment. Most of the coffee plants are weeded. Twelve farmers have sold 625 KGs of tomato and earned Rs. 40625. Most of the farmers fulfill vegetable needs for personal consumption from their own kitchen garden.



*Weeded coffee plants in Ripaha (L) with cauliflower in the gap and Lahape*





*Tunnel Farming in Pokhari and Dhaubadi*



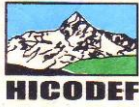
*Kitchen garden in Lahape and Ripaha*

#### **4. Project monitoring and evaluation visit**

A three day (15-17 November 2022) monitoring visit was conducted with the participation of TGT and HICODEF Team (Ruby Glasspool – TGT Director, Richard Allen – TGT Co- director, Krishna Ghimire – ED, HICODEF, Bidhya Gairhe – Board Member, HICODEF, Shukra Raj Ojha – PC, LFAP). During the visit, 5 sites namely Ripaha, Pokhari, Charghare, Dhaubadi and Lahape were visited and interactions were made with local farmers, teachers, students and lead farmers. Here is the detail of what was achieved during the monitoring visit;

On the first day, (15<sup>th</sup> Nov.), a brief interaction was organized among the TGT team, ED, PC and other available HICODEF staff. On this occasion, the HICODEF ED spoke about the organization, its history in Nawalparasi and its current projects and their progress. The sessions were very interactive with highly productive conversations.

On the second day (16<sup>th</sup> Nov.), the team visited Dhaubadi and Lahape village. In Dhaubadi the team observed the growing coffee plants planted around the school compound and interacted with the school children and teachers and gave some feedback regarding the coffee plantation, environmental sanitation and the role of School. The team observed various farmers on the field site and observed the newly growing and old coffee plants, kitchen garden and plastic tunnels.



After the observation and interaction of Dhaubadi, the team moved towards Lahape where the team observed various farmers on the field site and observed the newly growing and old coffee plants, kitchen garden and plastic tunnels. The team visited the impressive coffee orchard of Mr. Prem Thapa. There are various types of fruits and plants in his farm and everyone looks well cared for. Mr. Thapa is one of the sources of inspiration for the rest of the fellow villagers who are enthusiastic about planting coffee. The TGT team met with Prem and other coffee farmers where it was learnt that many coffee saplings planted this year died due to long lasting frost in the hills this year. However, people have not lost their hope and are committed to replace and plant more plants in the coming season.

On the third day (**17<sup>th</sup> Nov.**), the team went to Charghare where we met a women's cooperative gathered for regular saving and monthly meeting. The team had a few questions with these people about the growing concerns of coffee plantation in the village. Then the team observed the coffee yard with this year's plantation. The farmers here seemed very optimistic towards coffee as they used the best parts of available land for coffee plantation unlike elsewhere. The area seemed suitable with adequate light and shade for the newly planted coffee plants. The team observed many farmers' sites and found newly planted coffee plants growing satisfactorily. After that the team left for another village called Pokhari, where their source of water is scarce. The villagers are growing the coffee plants on the brims and sides of their mainland, otherwise wasted land. The coffee plants planted here this year are growing well, it was found. This has raised the interest of general people in the area and people are gradually showing their keenness towards coffee farming in this area as well. The final village on this visit was Ripaha where there are three years of plants supported by LFAP. The plants have begun giving fruits this year onwards and the farmers are hopeful in its future. The people in this area are planting the coffee plants on their best agricultural land as well. There is a growing trend of coffee plantation in the village and people are establishing their own private coffee nurseries as well.

Upon the completion of the field trip and after returning to the hotel in Kawasoti, we sat together over a cup of tea to discuss our findings and suggestions to the HICODEF team. In general, the TGT team found the project moving ahead in right direction with good pace and high potential.

After the monitoring visit the team observed that;

- Seeing the cash income of other growers, more and more people have a growing interest in coffee farming. The people who have trusted the process have started to plant coffee in their best agriculture land, suggesting they have confidence it will yield well for them. However, the shrinking arable land area due to landslides is the concern for many people.
- There is only one technical / field staff present in the project which is difficult as people do need regular support in these early phases. It is realized that deploying someone at the local level who can support on a daily basis would improve project effectiveness.
- Any pest invasion in the coffee plants needs to be diagnosed to retain the trust and growing concern of the farmers. This needs to be kept on prime concern (The team saw some strange insect larvae in Ripaha area coffee plants)
- This has made us hopeful and proud of the achievements to date despite the geographical difficulties. Due to time and transportation limitation, the team could not reach Dulunga and Baseni that require at least 5 hours walk to reach. The coffee cultivation there is also going well and people see a future on it.





*Meeting with school team at Dhoubadi*



*Interaction with Community in Lahape (L) and Charghare*



*Observation of Coffee Nursery Site in Lahape (L) and Dhaubadi*





*Observation of coffee plantation site in Charghare (L) and Ripaha*

## **Challenges and Recommendation**

The project is in its 3rd year of the 5 year project. Interest from local communities is building and plant growth is good. Though we are still far from completion, attention needs to be directed towards plans for the future of this project and how it may be continued and replicated longer term.

### **Plans for the next quarter**

- Observation Visit
- Farmers Groups Meetings
- Onsite technical support /Plant Clinic
- HD Plastic Tank and Tunnel Distribution
- School Engagement Program
- Coffee Cultivation Training