Quarterly Progress Report

Project title: Mandan Deupur Agro Forestry Resource Centre (M-D AFRC) Centre	**Project code:**
Report by: EcoHimal Nepal	**Month: April**
Date: January to March	**Year: 2020**

A. ACTIVITIES

The following **activities** have been conducted within the reporting period, 1st January to 31 March 2020.

1. Coordination with Local Government and Local Communities

The established close coordination with local government, concerned line agencies and local communities continues, and regular communication and cooperation is on-going, as documented below.

- Regular communication and cooperation with the offices and personnel of Ward 10 and Ward 3, particularly in regard to the preparation for the establishment of 2 satellite nurseries; the outputs of these meetings are as follows -
  - ✓ at the meeting with the Ward 10 office, it was decided to appoint Mr. Shyam Kumar Tamang as a nursery caretaker, with the nursery being established on his farmland;
  - ✓ at the meeting with the Ward 3 office, it was decided to appoint Mr. Chatur Bahadur Tamang as a nursery caretaker, a resident of Hele, Lakuridanda, with the nursery being established on his farmland;
  - ✓ approval for the establishment of both nurseries was provided by both Ward offices.
- A plant pathology clinic was organized jointly with the local government and the Nepal Plant Disease Associates Pvt. Ltd, to identify and undertake diagnosis of disease and insect problems in cereal crops, fruits, and vegetables in the area. The programme was inaugurated by the Mayor, Mr. Tok Bahadur Waiba. A formal closing ceremony of the pathology clinic was facilitated by the Deputy Mayor Ms. Nirmala Shahi in the presence of respective Ward chairpersons, farmers, and other stakeholders.
- Cooperation with the agriculture department of the local government is good, and most of the activities such as the above plant pathology clinic, soil testing, and nursery establishment etc., are undertaken in close coordination with the local government.
- Sampling soils and testing of the soil pH has been carried out at 7 locations, and necessary recommendations have been provided to the farmers for further action in terms of soil treatment. The project has contributed some materials to the local government agricultural laboratory, such as an LPG cylinder, in order to improve its functionality - the lab is quite well equipped, but before the project's contributions, was not functional – farmers are now directly benefiting from the services of this lab.
- A farmer's exposure visit to the Deusa Agroforestry Resource Center in Solukhumbu was organized under the leadership of the Chairperson of Ward no. 11, Mr. Madav Neupane, who managed the exposure visit successfully. The M-D AFRC management committee members and local farmers also participated in the visit, the cost of which was partially

shared by the Ward no.11 office. The experiences of Mr. Mahendra Sapkota, the Chairperson of M-D AFRC, during this visit is shared in Annex 1.

- Local government has distributed 5 drip irrigation sets, providing them to the recipients at a 50% subsidy. The project took the opportunity to simultaneously purchase 5 similar drip irrigation sets, 3 of which have been established at the MD-AFRC, while 2 have been set up at the satellite nurseries.
- Monitoring by local government staff has been observed to be quite frequent – for example, the Ward 11 Chairperson and his team have visited the Center frequently to monitor progress and provide valuable feedback.
- The Deputy Mayor of MDM, Mrs. Nirmala Shahi also carried out a monitoring and supervision visit of the MD-AFRC and provided valuable feedback, while appreciating our work and progress to date.

The project will continue to be implemented in close coordination with the local government and its Ward offices.

2. The Establishment and Management of the AFRC Nursery

Due to the acidic nature of the soil at the AFRC, better quality nursery soil was brought in from the outside.

The water recharge pond remains dry and bare from Autumn to Spring (October to May), and it is thus possible to utilize this area during the dry season. To demonstrate how to use bare land productively, the following have been planted in this recharge pond: 205 cauliflower plants, 50 cabbage, 300 of each of garlic and onion, and 300 radish.

1,500 poly bags have been filled with a soil and organic fertilizer mix for banana seedling hardening. In coordination with the Nepal Biotech Nursery Pvt. Ltd., 1,500 banana seedlings will be planted.

10 rhododendron seedlings and 3 seedlings of peepal (Ficus religiosa, sometimes known as the *sacred fig* or *bodhi tree* in English) have been planted for demonstration proposes.

A flower nursery has been established, currently, with different seasonal and perennial flowers for decoration and distribution.

The nurseries within a plastic tunnel, where different types of fodder, forest, medicinal, fruit and vegetable saplings are grown, are well managed.

A coffee nursery has also been established, currently with 300 coffee seedlings, and a Dragon fruit nursery has been started to grow mother plants.

The bio-intensive method of farming is applied for all nurseries and seedling production to meet the local need and demand for forest trees, fruits, and vegetables. Full details of the seedlings growing in the nurseries are documented in Annex 2.

In addition to the above, the following food grains and vegetables were produced and harvested during the reporting period at the AFRC.

Table 1: Produce Harvested from Demo Plots

#	Plant name	Production (kg)
1	Rice	10
2	Maize	15
3	Sesame	1
4	Bean	10
5	Battleground	20
6	Pumpkin	5
7	Tomato	3
8	Cucumber	18
9	Spinach	5
10	Bean (long)	8

These products were grown for demonstration purposes and were consumed by the project staff members and guests/trainees working at the AFRC.

3. Plantation and Demo Plot Status

Many different varieties of tropical and sub-tropical plant saplings were planted at the MD-AFRC premises, using bio-intensive plantation farming techniques. In addition to the previous records, an additional 14 seedlings were planted in this reporting period, which brings the total planted to date to 1,670 plants as detailed in Table 2 below.

Table 2: Details of Planted Seedlings at the AFRC

#	Plants species	Number of plants
1	Fruits	60
2	Herbs	29
3	Spices	37
4	Forest plants	208
5	Nuts	7
6	Ornamental plants	20
7	Cash crops	16
8	Fodder	93
9	Forage	1,200
	Total	**1,670**

Further details of individual plants are provided in Annex 3.

The demonstration plots of different varieties of plants and using different methodologies/ technologies have been properly managed, with regular weeding and irrigation being undertaken. In the last reporting period, there were 18 demonstration plots; one plot has been added in the first 3 months of 202, and the total is now 19 plots - details of the plots and survival rates are listed in Annex 4.

4. Establishment of the Satellite Nurseries

In coordination with the Ward offices, a feasibility study was carried out resulting in the selection of two sites for the establishment of satellite nurseries, one at Hele in Ward no. 3, and one at Chendeni in ward no. 10. The nursery owners (lead farmers) have been selected and trained.

Both the satellite nurseries are now established on the private land of the two lead farmers, following planning, designing, land leveling, and installation/construction of a plastic tunnel. Mother plants of different fruits have been planted through application of bio-intensive plantation techniques. Each nursery owner has also been provided with some basic tools and nursery materials as follows:

- ✓ 1 x hajari (watering can)
- ✓ 20 kg of poly bags of different sizes
- ✓ 1 x pruning saw
- ✓ 1 x secateurs for pruning
- ✓ 1 x hammer
- ✓ 1 x drip irrigation set
- ✓ 1 x shovel

The following planting materials have also been provided to both nurseries:

vegetable seeds: cucumber, tomato, chilly, cauliflower, cabbage, asparagus, spinach, etc.
fruit tree saplings: plum, apple, pear, grapes, etc.
fodder plant materials: bakaeno, masal tree etc.
ornamental plants: rudrakshya (*Elaeocarpus ganitrus roxb.*), camphor tree (kapur or dalachini; *Cinnamomum camphora*) etc..

All the above have already been planted at the nurseries.

5. Establishment of an Outlet for Organic Produce

On the suggestion of 58% of respondents during the baseline survey, an organic products display outlet is planned to be established at Zero Kilo. Motivating farmers and changing the local practice is not easy, but in this area, where many farmers use and over-use commercial pesticides and chemical fertilizers, this will be a particular challenge. Sensitization of farmers on organic farming, its benefits to our health and the environment, is a priority and much training and awareness campaigns will be focused on this issue.

In addition, demonstrations of organic vegetable production will be undertaken to educate the local farmers and show them the possibilities of organic farming, and to orient local farmers towards organic farming, hopefully persuading them that organic production is both possible and highly profitable.

During the reporting period, 25 kg of organic cauliflower were harvested and bought by EcoHimal staff members to provide encouragement and promotion. There was a plan to display organic produce at the local government office but due to nationwide lockdown, due to CORVID-19 risks, this was not possible, and significant amounts of organic produce (eg. cauliflower, cabbage, tomato, and green leaf vegetable) were wasted.

6. Establishment of an Outlet Centre for Seeds and Seedlings

The seeds and seedlings outlet has been established at the MD-AFRC center, and local farmers now have the option to purchase seeds and seedlings nearby.

The establishment of an organic village is on-going. An organic agriculture group (Sunaulokot Organic Agriculture and Livestock Group) comprising 20 farming families has been formed in Chandani, MDM Ward 10. Articles of association for the group have been drafted and the group is now registered in the Agriculture Division of the MD Municipality. Each farmer of the group has been provided with vegetable seed and fruit seedlings, and all of them have been trained in bio-intensive and organic farming techniques. Farmers are now cultivating cauliflower, cabbage, bean, spinach, chilly, broccoli, etc. applying the techniques they have learnt. Further details on the farmers and progress to date is provided in Annex 5.

7. The Training Workshops

In total, 265 farmers have been trained to date on agro-forestry and agricultural options – such as bio-intensive plantations, organic farming, nursery establishment, fruit farming, and improved potato farming. The details are tabulated below.

#	Trainings/ Workshop	Training Focus	Venue	Number of participants
1	Community based organic fruits farming & nursery management technology	• introduction to fruit farming, its importance, profitability & marketing opportunities • Nepali bio-intensive plantation • weeding, cutting and orchard management • production of fruits seedling and nurseries management • organic fertilizers and preparation • brodo pest and mixture preparation methods	MDM-10 Shree Chaur	34
2	Improved farming technology	• physical properties of soil • chemical properties of soil • organic fertilizers • chemical fertilizers and its impacts • organic fertilizer application and its management • method of taking a soil sample for a pH test	MDM 11	20
3	Improved farming technology		MDM 11	30
4	Improved farming technology		MDM 3	22
5	Improved farming technology		MDM 10	22
6	Creeping vegetable farming technology	• introduction of creeping vegetables • improved practices of cultivation of creeping vegetables • orchard management and care of vegetables	MDM-7	34
7	Improved farming technology and soil management	• physical properties of soil • chemical properties of soil • organic fertilizers • chemical fertilizers and their impacts • organic fertilizer application and its management • method of taking a soil sample for a pH test	MDM-7 Lamsaltar	35

Details of the trainee local farmers are recorded in Annex 6; and a training report on the sessions on improved farming technology and soil management is included as Annex 7.

8. Post-training Promotion of High-value Tree Crops and Alternative Farming Systems and Technologies

a. Organic Fertilizer Trail in Potato

The project has conducted a trial and demonstration on organic fertilizer called *Black Wonder*, imported from Thailand – 10 kg of this organic fertilizer was provided free of cost by Aarati Agritech Pvt. Ltd. for promotion, and the selected crop for the demo /trial was potato.

3 fields were selected, each field divided into four plots, two with the organic fertilizer, and two without. Each treatment was replicated two times in each plot; overall there were 12 different plots, 6 with organic fertilizer and 6 without fertilizer, to minimize error and variation. An improved variety of potato was used for the demo-trial in which 504 tubers (weight 5 kg) were cultivated.

Details of the field layout are given below:

- Total no of plot for trial: 12
- Number of rows in each plot: 3 (in total 36)
- Number of replicas in each plot of each treatment: 2 (one with fertilizer, the other without)
- Number of treatments in each field: 2
- Plant to plant spacing: 20 cm
- Number of tubers in each row: 14
- Length of each row: 2.8 m
- Row to line spacing: 60
- Total number in one replica: 3
- Spacing between each replica: 50 cm
- Rows with *Black Wonder* application in one plot: 6
- Ros without *Black Wonder* application in one plot: 6
- Length of each field: 6.40 m
- Width of plot: 2.8 m
- The total area of field: 11.52 m^2

The demo-trial is ongoing and results will be reported on in future progress reports.

b. Production of improved potato seed

Improved potato seed (IPS) production has also been started at the MD-AFRC. A total of 20 kg of the Cardinal variety have been sown. This demo of IPS production has been established to show useful agronomic and socio-cultural practices to the local farmers, and to ensure that an improved seed and variety, more resistant to major diseases, insect and pests, is available locally for next season.

Planned future training of the local lead farmers will be undertaken in sustainable soil management technologies, appropriate agro-techniques for potato seed production, and pre- and post-harvest storage techniques.

c. Utilization of Local Resources

The use of local resources along with innovative technologies is prioritized in the training sessions. To minimize the use of plastics and polybags, the leaves of the Saal tree (Shorea Robusta) have been used to make seedling containers for use in the nursery, and 84 seeds of bitter gourd have been sown in the leaf bags as a trial; at the time of writing, germination of

the bitter gourd has started. Observations to date show that the tree leaf bags are quite stable and strong enough for use over one season.

d. Soil Testing and Results Sharing with Local Farmers

Before the initiation of soil sample collection, the local farmers were oriented about techniques for soil sample collection through a field-based practical demonstration.

Five farmers from Ward no. 11 collected soil samples from their farms in line with the guidance from the project's technical staff, who coordinated the sampling and analysis process with the local government's Agriculture Division. The laboratory of the municipality was used for the analysis of the soil pH.

Once the results were obtained from the lab., the concerned local farmers were provided with technical recommendations and suggestions on soil improvement. As the soils were moderately acid, most of the farmers were requested to use agriculture lime to improve the quality of the soil.

The testing of pH on 6 soil samples of the following 5 local farmers along with 7 soil samples from the MD-AFRC was undertaken:

- Jagat Shrestha
- Ram Maya Shrestha
- Parbati Shrestha
- Bed Maya Bhattrai
- Saraswati Shrestha (2 soil samples)

The soil test report of all 13 soil samples is documented in Annex 8.

e. Drip irrigation

In cooperation with the local government, drip irrigation technology has been introduced in MD-AFRC and the two satellite nurseries. A total of 5 sets of drip irrigation were purchased from the MD Municipality with a 50% subsidy, 3 sets were established at the MD-AFRC and 2 sets were set up at the 2 nurseries.

At the MD-AFRC, 2 sets of drip irrigation are currently in use; one set is used for the irrigation of 100 seedlings of tomato, and another set is for the bitter gourd plantation plot.

f. Provision of seedlings and seeds along with technology transfer

Trained farmers have been provided with improved and new species of fruit, nuts, and vegetables for the promotion of high-value tree crops. Knowledge, skills, alternative farming technologies and seedlings/seeds of these high-value tree crops and vegetables are provided for cultivation in the farmer's fields.

9. Provision of Monthly Farmers Training at the AFRC

The MD-AFRC is conducting monthly trainings to bring farmers together to carry out collective and collaborative action to address agriculture and tree cropping problems and opportunities. The local farmers are receiving technical knowledge on improved farming techniques along with day to day practical knowledge about different topics of farming and climate change.

Knowledge and associated practices in relation to on-farm management and diversified production of tree crops, vegetables and fruits have been disseminated at these monthly farmers' training programmes, which are organized on the 16th day of each month.

3 such monthly trainings were provided in 2019, and a further 2 trainings have been conducted during the current reporting period between January and March 2020. A total of 5 monthly trainings, therefore, have been organized to date.

The monthly training conducted by the project staff in January 2020 was about collective organic vegetable farming, and focused on the importance of collective vegetable farming, improved vegetable farming practices, and appropriate preparation and use of manure and compost. It was attended by 11 local farmers.

The monthly training conducted in February 2020 was about the use of agriculture lime and organic fertilizers for soil improvement, and included topics such as on the methodology of use of agriculture lime in the soil, remedies after the use of agriculture lime, the recommendation of agriculture lime as per the pH level, and the use of organic fertilizers for soil improvement. 25 local farmers attended this training.

One more monthly training was planned for March 2020, but this had to be postponed due to the COVID-19 outbreak.

Details of the participants at the January training are recorded in Annex 9.

The Center is being promoted as the place for discussion and interaction about forestry, agriculture, and the environment, as well as a focal place for visual learning, practical training and hands-on practice.

10. Organic Certification

Coordination with Organic Certification of Nepal (OCN) has been carried out for the planning of the organic certification process. This process was about to start in the last week of March but has had to be postponed due to the COVID-9 outbreak.

11. Monthly Training Provided to Students at 5 Secondary Schools

- **Conduction of Monthly training**
  As part of this programme, children studying in the secondary school grades are trained on climate change and agricultural practices. In this reporting period, only one training was conducted at Chendeni Secondary School; 16 students participated, see Annex 10 for details. This training was on the organic farming situation in Nepal, its potential, importance and benefits, along with the impacts of chemical fertilizers on soil and human health.

- **Selection of key teachers to supervise the school-based activities**
  Key teachers in 7 schools have been selected to ensure proper facilitation and effectiveness of the school programmes. The teachers will monitor, guide and supervise the students' activities, and encourage them to maintain and manage an agro-forestry school garden. The selected key teachers are;
  1. Mr. Dinesh Nepal : Dedithumka Secondary School
  2. Mr. Santosh Ghimire : Chandeni Secondary School
  3. Mr. Dirgha Raj Tamang : Bagdevi Secondary School
  4. Mr. Prakash Nepal : Indrawati Secondary School
  5. Mr. Lilanath Neupane : Uma Saha Secondary School
  6. Mr. Arjun Nepal : Bindabasini Secondary School
  7. Mr. Jaya Singh Saud : Mahakali Secondary School

- **Conduction of recreational activities**
  A speech competition on the organic farming situation in Nepal, its importance and probabilities was organized at the Chandeni Secondary School in January 2020. 16 students participated in the competition, and the winners were:
  1st position Ms. Rajani Tamang from Grade 10
  2nd position Ms. Puja Shrestha from Grade 9
  3rd position Mr. Rajan Shrestha from Grade 10
  4th position Mr. Rajiv Shrestha from Grade 10

  The above winners were awarded with prizes.

- **Students' exposure visit to MD-AFRC**
  An exposure visit for 14 students studying at Grade 9 level from Dedithumka Secondary School, MDM Ward 9, was organized by the school under the leadership of a teacher Mr. Bijaya Kumar Lamichhane. A short formal session was organized by the MD-AFRC staff for the students focusing on agroforestry systems and organic farming practices.
  Project staff members and the MD-AFRC Management Committee described the project activities for the students, who observed all the demonstration sites, nurseries and innovations. They were also trained practically on a number of aspects, including how to fill the poly bags for seedlings, and which plants to grow where and which are suitable for temperate, sub-tropical, and tropical zones, and the risks and management of erosion.
  Overall, it was a very good opportunity for the students to observe organic farming practices, including the organic fertilizer potato demonstration trial.
  The student participants are listed in Annex 11.

12. Awareness Campaigns to Reduce Local Reliance and Use of Pesticides

The following have been communicated to the local community via radio programmes and training: the use of pesticides, a comparison between bio-pesticides and chemical pesticides, and their advantage and disadvantages.

Farmer field visits, person to person discussions, as well as sensitization talks by the AFRC management committee have been continued in this reporting period. An exposure visit of committee members, local government representative and lead farmers to the Deusa

AgroForestry Resource Centre in Deusa, Solukhumbu District, was successfully organized so the participants could see and experience the organic farming practice in Deusa at a similar Center to the one in Kavre. According to the committee members who participated, it provided excellent exposure for them, helping them to change their own mindsets as well as those of the participating farmers.

For wider public awareness in Kavre, radio programmes are being produced and broadcast on FM radio – see below.

13. Broadcast Monthly Local Radio Programmes on Environmental Issues

In this reporting period, 3 episodes covering project and MD-AFRC issues have been produced and broadcast in cooperation with Radio Namobuddha. The radio programmes have focused on aspects of the AFRC promotional activities to raise awareness of organic farming, agroforestry, sustainable insect, pest, and disease control, as well as climate change. The radio programmes have also covered current emerging issues of farming through contributions from experts and other stakeholders. The overview of the radio programmes is documented in Annex 12.

14. Verification of Baseline Data and Report Finalization

This project-specific baseline study was carried out in 2019 to gather quantitative and qualitative data to obtain the necessary baseline information, against which project progress will be measured and evaluated. The survey was carried out with the participation and involvement of the local communities, school students and local stakeholders. Data collection was undertaken through taking samples of each of 3 wards, covering poor, middle- and better-income level elements of the society. The baseline survey report was prepared based on the acquired data and information.

In this reporting period, the baseline data was verified to re-check data consistency. After verification, the baseline report was updated and finalized, and is documented in full in Annex 13.

15. The Plant Clinics

A one-day Plant Pathology Clinic was organized jointly with the local government and Nepal Plant Disease Associates Pvt. Ltd., for the purpose of diagnosing disease, pest and insect problems of cereal crops, fruits, and vegetables in the area, to raise awareness of the challenges, and to provide immediate suggestions to farmers.

Four experts in different subjects setup 4 field labs and checked the problems in the plants. The result of the diagnosis were provided to the farmers immediately on the spot. In addition, farmers were oriented on precautions, causes, and correct treatments for a number of common problems and challenges. There were only a few cases that were not diagnosed on the spot, and these were brought to the experts' laboratories for subsequent diagnosis and recommendations. A technical report from the NPDA on this plant clinic is provided in Annex 14.

Media coverage on this plant clinic can be found here:
https://www.facebook.com/100040903457092/posts/1701287276939 08/?d=n

16. Alliance with King's College and Other Likeminded Partners

To bring the issues facing farmers and rural development workers to an academic forum, EcoHimal has begun an informal alliance with King's College in Kathmandu, which is the first college in Nepal to introduce an MBA focused on agribusiness.

The Alliance envisages action in various fields, as described below.

I. Stimulating a talk programme

This idea is a platform for different students and interested development actors to share and learn different emerging issues and ideas. The first programme in what is envisaged as a series, was on *Agri-Talk on Sixth Industrialization*.

There is much recent and stimulated talk in Nepal on Agriculture and Technology, and more and more people are interested to invest time, effort and money in this sector. But is it really worth it, or is it just a fad? What are the policies that alleviate the problems related to this sector? The "sixth industrialization" is the convergence of the primary industry (agriculture production), a secondary industry (processing and manufacturing) and a tertiary industry (service sector). The sixth industrialization process encourages the utilization of locally available natural resources, traditional technologies, people's talents, and incorporation of history and culture.

This bi-monthly programme aims to ensure rich discussions between experts on a panel and interested youth about the contemporary challenges and opportunities in Nepal's agriculture sector, providing everyone with an opportunity to learn and explore the potential of the nation's myriad agricultural ecosystems.

This first Agri-Talk Programme was organized by King's College in collaboration with EcoHimal, Krishak ra Prabidhi, and ISAP (the Institution for Suitable Actions for Prosperity) on 8th December, 2019.

Mr Arun G.C, an Agriculture Extension Officer with the Nepal's Ministry of Agricultural Development presented an introduction to the "Sixth Industrialization Model" during the programme, and the subsequent programme placed emphasis on how the profitability of the farmers can be maximized, how pride can be brought back to farming, and what are the associated challenges and the government's roles in the promotion of this sixth industrialization.

The 2nd Agri-talk was scheduled for March 6 but was postponed due to the COVID-19 lockdown. Details of the plan for this 2nd Agri-Talk are provided in Annex 15. It is hoped that it will be possible to hold Agri-Talk 2, which is to focus on agribusiness career opportunities for young professionals, later in 2020.

II. Do Camp for Agripreneurs

A three day workshop on "Do Camp for Agripreneurs" was successfully conducted at King's College between 17-19 February 2020; this event was focused on the need for an entrepreneurial mindset for stakeholders working in the agriculture domain. The entire 3

days was designed to help the participants create and test human-centered solutions to everyday problems around us through the process of design thinking. The workshop report from the organizing committee is included in Annex 16.

B. DIFFICULTIES

All difficulties during this reporting period were overshadowed by the major event of the COVID-19 pandemic. The Government of Nepal efficiently and quickly introduced a nation-wide lockdown on 24 March 2020, and this has been very largely effective to date in terms of controlling the spread of the virus. However, as the number of cases slowly rises, the country remains in lockdown mode at the time of writing, and this is likely to remain the case until at least the end of April 2020. Measures to limit the spread of the virus are likely to continue to the end of 2020, thus delays in project implementation can be expected to continue. Every effort however will be made to overcome potential bottlenecks in delivery.

C. SUCCESS STORIES

a) A plant clinic camp was undertaken in coordination with the local government and with technical support of NPDA and highly experienced experts. Despite the difficulties of coordinating with busy local government officials and much-in-demand specialists, the plant clinic was considered a great success.

b) Related to the success of the plant clinic, the Project was also able to functionalize the lab at the MD Municipality agriculture section; the lab was equipped but had not been properly set up for operation. Due to the project's encouragement and some minor support, the lab is now in operation and serving the local farmers.

c) The Project management team succeeded in obtaining 5 drip irrigation sets at 50% cost due to a subsidy provided by the local government. The five sets are now established at the AFRC and the two satellite nurseries, which is considered a real project success.

d) At minimal cost and with excellent local support, the project management team and the AFRC management committee members have achieved much in one year – for example, within a year of establishment, the MD-AFRC has already successfully produced organic vegetables, demonstrating the feasibility of organic agriculture to the local communities.

e) Soil testing in collaboration with the local government has been conducted successfully – this is another example of the sound collaboration and cooperation established with the Agriculture Division of the local government, a real achievement of the project.

D. DEVIATION FROM THE WORKING PLAN

The monthly training planned for March 2020 has had to be postponed due to the lockdown introduced to control the spread of COVID-19. Unfortunately, it is expected that this will be the first of several planned events that will be postponed over the coming months.

E. NEXT STEPS

- Purchase of nursery and poly-tunnel tools and equipment and planting materials.
- Quality training to the farmers at the AFRC along with plantation of seedlings and saplings.
- Raising awareness amongst the farmers on the rational use of pesticides and promoting organic agriculture.
- Coordination with schools in relation to the student training and practical workshops.
- Management, supervision, support and promotion of the satellite nurseries.
- Establishment of the outlet center for organic products.
- Continuation of monthly training days at the MD-AFRC.
- Begin the process of organic certification for a number of farms in the municipality.
- Education and awareness-raising on the impacts of pesticides and chemical fertilizers, and the importance of organic fertilizers through training, talks and radio broadcasts.
- The establishment and management of agro-forestry gardens at the schools.

F. REMARKS

The COVID-19 outbreak, and the subsequent lockdown, introduced effectively, efficiently and quickly by the Government of Nepal on 24 March 2020, and on-going at the time of writing, has already delayed project activities and progress in the latter part of this reporting period.

The project team will maintain the MD-AFRC to its best ability, but trainings and the school programme is likely to be significantly delayed during the coming quarter. It is hoped that from July 2020 onwards, good progress can be made in catching up for lost time but this cannot be in any way guaranteed at this point in time.
