

Darwin Initiative Main and Post Project Annual Report

To be completed with reference to the “Writing a Darwin Report” guidance: (<http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms>). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2020

Darwin Project Information

| | |
|---|---|
| Project reference | 26-008 |
| Project title | Market-led Approach to Sustainable Management of Agrobiodiversity for Livelihood Outcomes |
| Country/ies | Nepal |
| Lead organisation | Local Initiatives for Biodiversity, Research and Development (LI-BIRD) |
| Partner institution(s) | Annapurna Rural Municipality; Rupa Rural Municipality; Pokhara Metropolitan City; Ministry of Land Management, Agriculture and Cooperative; Lekhnath Chamber of Commerce and Industry; Machhapuchhre Development Organization (MDO); Panchadham Agriculture Development Cooperative; Jaibikshrot Samrakchan Abhiyan (JSA); Rupa Lake Restoration and Fisheries Cooperative; Phewa Watershed Ecosystem Management Board; Ramsar Management Authority; Seed Change (formerly known as USC Canada); The Bazaar; and Bread for the World (BftW) |
| Darwin grant value | £ 240,223 (NRP 33,871,443) |
| Start/end dates of project | 1 June 2019 – 31 May 2022 |
| Reporting period (e.g. Apr 2019 – Mar 2020) and number (e.g. Annual Report 1, 2, 3) | Jun 2019 – Mar 2020 Annual Report 1 |
| Project Leader name | Ram Bahadur Rana |
| Project website/blog/social media | www.libird.org |
| Report author(s) and date | Tejaswee Shiwakoti, Indra Paudel and Ram Bahadur Rana 30 th April 2020 |

1. Project summary

The Lake Cluster of Pokhara Valley (LCPV) includes basins of nine lakes (Phewa, Kamalpokhari, Gunde, Khaste, Neureni, Dipang, Maldi, Begnas, and Rupa) of Pokhara valley, located at the central section of Lower Himalaya (28°08'02" N 84°59'18" E). The LCPV together has 261.6 km² of basin with 8.97 km² of water cover (Figure 1). The area was declared the 10th Ramsar Site of Nepal on 2 February 2016. It is endowed with rich agricultural, wild and aquatic biodiversity.

The project entitled "Market-led approach to Sustainable Management of Agrobiodiversity for Livelihood Outcomes" focuses on generating alternative livelihoods for wellbeing of smallholder farmers in a Ramsar site of the LCPV, through a scalable place-based marketing approach (Unified Landscape Branding – ULB) for agrobiodiversity-based products. The focus of the project is marketing of agrobiodiversity including fish products contributing to livelihood outcomes, which in turn assists wetland habitat conservation. Local agrobiodiversity offers various benefits to farmers, such as nutritious and safe food, resilience to bio-physical shocks and climate changes, and promotes local culture. Despite these benefits, loss of agrobiodiversity, fish species and wetland habitat, and pollution remain concerns in the LCPV. Low productivity of local agrobiodiversity crops and fish species, low consumer awareness regarding nutritive value of local agrobiodiversity, limited diversification of marketable agrobiodiversity products, and government policy favouring modern varieties are some of the underlying causes of loss of agrobiodiversity.

Having said the above, in recent years, there has been an increase in demand for certain agrobiodiversity products. For instance, historically valued products such as the aromatic rice Jethobudho, the medicinal rice Anadi and the delectable fish Sahar have become more lucrative with demand out-stripping supply. Nutritious grains such as finger millet, foxtail millet, and buckwheat can have a revival in a health conscious marketplace with investment in processing and supply chains. New fruit crops such as avocado and kiwi can be a good fit for the LCPV climate, low labour context, and the popularity of these fruits in urban markets.

During 7-11 July 2018, a series of consultation meetings were organized with local communities and cooperative members to identify interventions to address the above problems and to exploit new opportunities. There was overwhelming demand to link agrobiodiversity products to market to improve people's livelihoods. Hence, after analysing problems and opportunities, the project attempts to capitalize on increasing demand of agrobiodiversity products in regional market by sourcing products from local producers thus directly contributing to their livelihoods. The project aims to scale up the market-led approach of Unified Landscape Branding (ULB), where local fresh produce and processed products from the LCPV will be marketed under a unique place-based label – a Unified Landscape Brand – in local, regional, and national markets to generate income. A certain percentage of profit generated will be reinvested in watershed and biodiversity management in the region thus creating a self-sustaining mechanism for conservation of natural habitat of lakes, which is at the centre of wetland biodiversity.

The working sites include wards of Pokhara Metropolitan City, Rupa Rural Municipality and Annapurna Rural Municipality of Kaski district in Gandaki Province, Nepal (Figure 1). The project is working with 47 farmer groups and cooperatives covering an approximately 4050 households. Smallholder producers are encouraged to apply Good Agricultural Practices (GAP) while producing 'safe and locally produced' crops, vegetables, fruits, fish etc., which will attract premium price in the market.

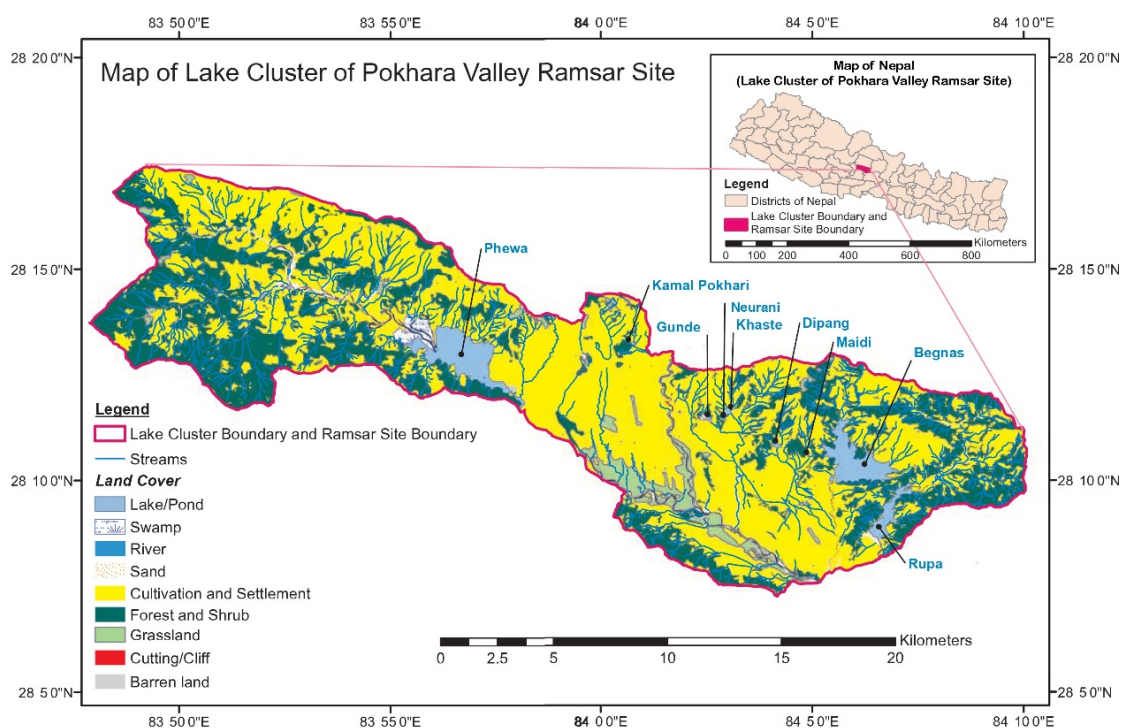


Figure 1. Map of Lake Cluster of Pokhara Valley (LCPV), Kaski.

2. Project partnerships

LI-BIRD as the lead organization, the project is partnering with a dozen organizations (Listed in Darwin Partner Institutions in Cover Page of the Annual Report) representing public, private, cooperative, civil society, and network-based organizations. All partners participated in the inception meeting (18 July 2019) followed by the project launching workshop (19 July 2019) (Annex 4.1). The project has the following mechanism to ensure active participation of partners in the project activities:

- Project Partners Meeting (PPM):** The project plans to hold three PPM per year. All listed partners are members and so far two partners meetings have been organized (18 July 2019 and 6 December 2019) and third was expected in the last week of March 2020, but that has been cancelled due to lockdown of the country to control COVID-19 pandemic. We expect to hold the next PPM as soon as the lockdown is relaxed, which might happen by the mid-May 2020 at the earliest.
- Annual Review and Planning Meeting (ARPM):** The ARPM is organized once a year towards the end of the year where all partners gather to review and reflect on the past achievements and shortcomings as well as to plan activities to be included in the plans and budget of the coming year. Since this was our first year, we were scheduled to organize the ARPM towards the end of March 2020, which has been postponed due to the COVID-19 pandemic.
- Project Steering Committee Meeting (PSC):** All partners' meeting that took place after the project launching workshop on 19 July 2019 agreed to form a 9-member PSC with the following members: Mayor of Pokhara Metropolitan City (Chair), Secretary of Ministry of Land Management, Agriculture and Co-operative (Vice-chair), Chairpersons of Rupa Rural Municipality and Annapurna Rural Municipality (members), Coordinator of Phewa Watershed Ecosystem Management Board (member), Executive Director from LI-BIRD (member) and Machhapuchhre Development Organizations (member), Chief of Agriculture Section of Pokhara Metropolitan City (member), and Chairperson of Rupa Lake Restoration and Fisheries Cooperative (member). We are pleased to report that the PSC has been formulated and the first PSC meeting was held on 7 December 2019 where the meeting approved the budget and activities for the fiscal year 2019/20. The next PSC meeting is scheduled for May/June 2020. This meeting is contingent on how the COVID-19 pandemic situation evolves and the Government of Nepal's guidance.

Since the number and types of partners involved in the project are diverse, not all partners equally participate in and contribute to all project events/activities. A brief description of strategic partnership arrangement for Year 1 is presented in Table 1.

Table 1. Examples of partnership arrangements in the project, 2019/20

| SN | Partners | Roles/Responsibilities | Duration |
|----|---|--|--|
| 1 | The Bazaar (Private Sector) | Responsible for market assessment study; Develop market linkage activities and implement them; Investor in Packaging House; Outlet for Packaging House | Nov 2019 – Feb 2020; Continuous |
| 2 | Pokhara Metropolitan City (Public Sector) | 350 Kiwi seedling distribution to Sidhane Organic Farmer Group; Vegetable composite packet and fruit saplings distribution in LCPV area; Co-finance activities | Throughout the project |
| 3 | Rupa Rural Municipality (Public Sector) | Foxtail millet promotion; Coffee, local rice and fruits promotion in LCPV area; Co-finance activities | Throughout the project |
| 4 | Annapurna Rural Municipality (Public Sector) | Foxtail millet promotion; Coffee, Shiitake mushroom and vegetables promotion in LCPV area; Operate Collection Centre; Establish Biodiversity Information Centre; Co-finance activities | Throughout the project |
| 5 | Jaibikshrot Samrakchan Abhiyan (JSA) – Kul Chandra Adhikari (Network) | Kul Chandra Adhikari is the local resource person hired for Good Agriculture Practice (GAP) promotion in coffee to identify groups, conduct training, supply healthy coffee seedling, field monitoring, and market linkage between groups and Packaging House | Nov 2019 – Mar 2020; Apr 2020 – Mar 2021 |
| 6 | Rupa Lake Rehabilitation and Fisheries Cooperative – Lekh Nath Dhakal (Cooperative) | Lekh Nath Dhakal is the local resource person hired for promoting Good Aquaculture Practice (GAqP) amongst Cooperatives in different lakes (business plans). He is also responsible for improving compliance, internal control system and good governance in co-operatives | Nov 2019 – Mar 2020; Apr 2020 – Mar 2021 |
| 7 | Machhapuchhre Development Organization (MDO) – (Civil Society) | MDO is responsible for social mobilization and coordination of farmers' groups and cooperatives for biodiversity conservation, increase production of agricultural products, and market linkages | Throughout the project |
| 8 | Begnas Fishery Research Centre (NARC – public sector) – Md. Akbal Husen, PhD | Md. Akbal Husen has been hired as an expert in aquaculture to develop Good Aquaculture Practice (GAqP) manual and advise project team on rolling out GAqP | Nov 2019 – Mar 2020 |

During the first year of the project implementation, we have been enormously successful in utilizing the strengths of partners in achieving specific project-related tasks as presented in Table 1. Since most of the partners are members of the PSC, they have been involved in all key project related decision making processes and deliverables, for instance, the Market Study report prepared by The Bazaar team (Web link to full report in Annex 4.2); the GAqP manual (draft under review process) prepared by Dr Husen; and Eight business plans (in Nepali language) of fishery cooperatives developed with support from Mr Dhakal.

As of yet, the project has not encountered any challenges or issues pertaining to partnership in the project. However, we would like to reiterate that equal engagement is neither feasible nor desirable and the project focuses on strategic engagement that fosters trust, builds synergies and improves efficiency of the partnership, which will remain the *modus operandi* for partnership arrangements for the project.

3. Project progress

3.1 Progress in carrying out project Activities

The overall impact of the project is to support the smallholder farmers of Kaski district to achieve secured livelihoods, improved well-being, and healthy environment through the sustainable management and utilization of agrobiodiversity of the LCPV area by the end of the project. The progress made in the first year is more about establishing benchmarks, building rapport with communities, understanding community's specific training and capacity building needs, building capacity of project staff and cooperatives, assessing market dynamics, strengthening multistakeholder mechanism/networks, garnering support from private sector investors, etc., which we have adequately done thereby laying a solid foundation for implementing the projects activities in full swing in second and third years.

Output 1: Increased income and employment opportunities to smallholder farmers through the production and sale of agricultural biodiversity-based products at local and regional markets

For the first year, the project worked on ascertaining the keystone crops through baseline survey (Web link in Annex 4.3). A household baseline survey was conducted among 355 respondents (122 male and 233 female decision-makers/managers). The keystone crops/items include: rice (varieties: Jethobudho and Anadi), foxtail millet, coffee, honey, shiitake mushroom, fish, fruits (kiwi, avocado, citrus, banana, and papaya), and fresh vegetables. The baseline study identified specific interventions for each of these keystone crops. The project team have revised second year plan and budget accordingly. The project is promoting Good Agriculture Practice (GAP) among farmers to produce safe food and market them through a Packaging House (to be established in first half of Year 2). Since fish comprise the most important commodity amongst the selected keystone commodities, the project has prepared Good Aquaculture Practice (GAqP) training manual (in finalization stage) to be extensively used by fishery cooperatives to advance their actions for the medium term interventions.

The project proposed Farmer's Field School (FFSs) as the primary medium to reach smallholder farmers to disseminate GAPs relevant to different keystone commodities. The project team is already working on producing GAP manual for vegetable crops, which will be used for training farmers on safe, healthy and organic-oriented fresh vegetables production in the project area, especially focusing mid to high hills. The project distributed necessary seeds and seedlings of vegetables and fruits to farmers. Exposure visits of farmers to different organic producing areas were organised so that they are sensitized and motivated to adopt such farming practices.

The project distributed 19,142 saplings of 10 fruits to 260 households from agriculture cooperatives and farmers groups of Pokhara Metropolitan City (PMC) in June 2019. The programme was led by PMC where the project co-financed NPR 300,000 (GBP 2,128) which is 20% of total cost, with farmers and PMC bearing 50% and 30% costs, respectively. The project distributed seeds of seasonal vegetables to 245 households in the project area.

Foxtail millet has been repatriated from Lamjung, an adjoining district, to the project area. The project has adopted the strategy to commercialize this nutritionally dense agrobiodiversity product and contribute to biodiversity conservation while equally contributing to household income. Hence, a holistic approach to promote the crop has been taken such as: identifying the most suitable variety (yield and other preferred traits) through on-farm trial (Annex 4.7; Figure 3); testing advanced huller machine to improve milling recovery (drudgery reducing technology for women who are primarily responsible for hulling); testing mechanical weeder to reduce drudgery and cost of production; and, testing different recipes to attract end users/consumers.

Some of the major activities conducted and the number of beneficiaries reached disaggregated by gender to achieve Objective 1 (increase income and employment through production and sale of agrobiodiversity products) are presented in Table 2.

Table 2. Major activities carried out for achieving Output 1

| SN | Activities | Date | Male | Female | Total |
|----|---|----------------------|------|--------|-------|
| 1 | Vegetable seed composite packet and fruit saplings distribution in LCPV area in collaboration with Pokhara Metropolitan | Jun 2019 | N/A | N/A | 437* |
| 2 | Value Chain Analysis study of five farmers' groups | 30 Jul-3 Aug 2019 | 59 | 89 | 148 |
| 3 | Vegetable Seed Distribution | 31 Aug 2019 | 11 | 13 | 24 |
| 4 | Vegetable composite packet distribution by CAS project in LCPV area (co-funding) | 10-28 Dec 2019 | 163 | 193 | 356 |
| 5 | Construction of 160 ft*40 ft greenhouse /plastic tunnel for fish hatchery (50% cost sharing) | 10-20 Jan 2020 | NA | NA | NA |
| 6 | 150 kg Local crop (Foxtail Millet) IRD distribution in LCPV area | 25 Feb-19 Mar 2020 | 59 | 58 | 117 |
| 7 | 3-day farmers exposure visit to HASERA Farm | 22-26 Feb 2020 | 18 | 8 | 26 |
| 8 | Kiwi seedling distribution to Sidhane Organic Farmer Group | 14 Jan 2020 | NA | NA | 350** |
| 9 | Bee keeping training | 13 and 22 Jan 2020 | 16 | 15 | 31 |
| 10 | Bee hive distribution (50% cost sharing) | 5 Mar 2020 | 24 | 21 | 45 |
| 11 | Business plan development of eight fishery cooperatives | 5-8 Feb 2020 | 64 | 21 | 85 |
| 12 | Milling recovery test and organoleptic test of local Jethobudho and Anadi rice | 10-17 Feb 2020 | 9 | 6 | 15 |
| 13 | 2-day training on Shiitake mushroom cultivation/farming | 3-4 Mar 2020 | 14 | 2 | 16 |
| 14 | Shiitake mushroom cultivation (10,344 logs) on cost-sharing basis | 3-24 Mar 2020 | 18 | 3 | 21 |
| 15 | On-farm varietal trial on foxtail millet to identify the most promising variety for cultivation | 18 Mar & 18 Apr 2020 | 1 | 1 | 2 |

* Pokhara Metropolitan City initiated the programme and the project co-funded, so they did not provide the detailed breakdown list of beneficiaries, only the total beneficiary number was provided.

** Sidhane Organic Farming Group will distribute kiwi seedlings on kiwi growing season (May/June 2020) to the group members. So, there was no detail for list of beneficiaries.

Informed by the baseline findings, the project team have prioritized (income potential, quick return, and conservation potential) the keystone commodities for production related interventions in descending order: fish, foxtail millet, shiitake mushroom, honey, fresh vegetables, coffee, fruits and rice.

The project has advanced considerably in developing fishery related interventions. The GAqP manual has been prepared and the business plan (BP) and detailed project reports (DPR) for all the cooperatives/group (n=8) managing different lakes have been prepared. The project team along with the executive committee members or board of directors of cooperatives have been instrumental in developing these detailed plans. A summary of the investment plan for different lakes has been presented in Table 3. As per the business plan, the current production will be increased threefold within two years, with a total investment of NPR. The final version of BP and DPR has been handed over to respective cooperatives for them to share amongst their shareholders and seek approval for loans.

Table 3. Summary of investment plans for fishery cooperatives in LCPV area

Note: 1 GBP = 150 NPR; Grant amount refers to already secured money from different sources

An approach paper on operationalization of Unified Landscape Branding (ULB) for marketing of agricultural and aquatic biodiversity-based products has been prepared (Web link in Annex 4.4). In the approach paper, the rationale and objective of the document is presented, which is followed by the conceptual framework and its operational modality. The framework was shared among stakeholders during Project Steering Committee (PSC) meeting (7 December 2019) and was approved. The operational mechanism is depicted in Figure 2.

LCPV- Unified Landscape Branding (ULB) Operational Mechanism

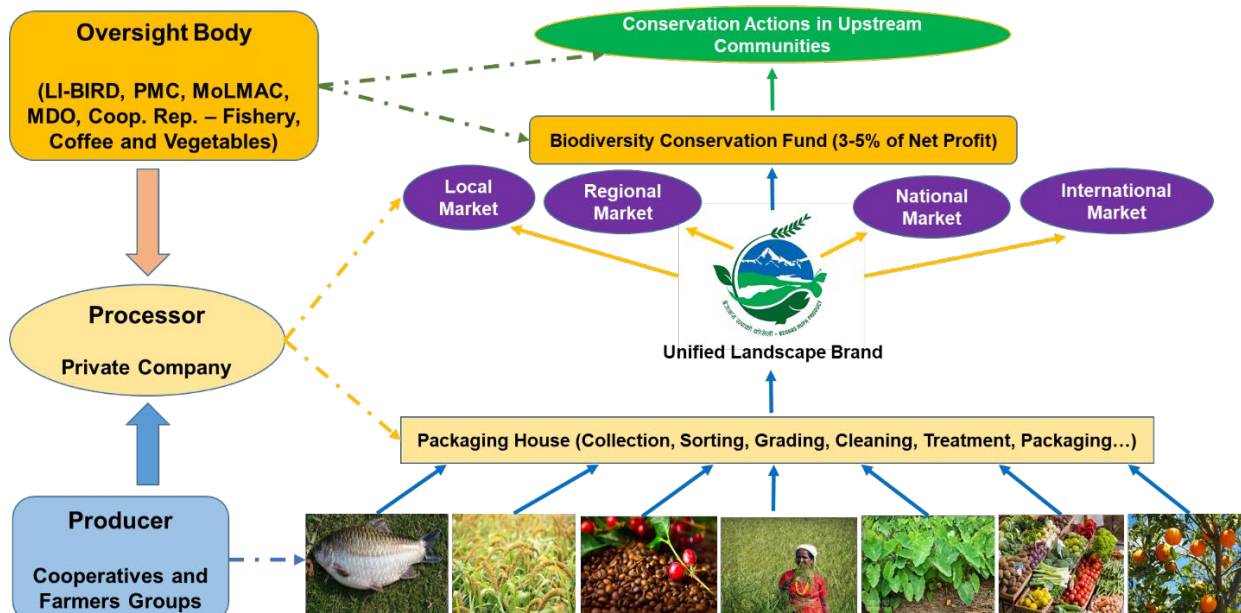


Figure 2. Operational mechanism of Unified Landscape Branding (ULB)

Immediately after approval from the PSC meeting, the project team initiated work on garnering support from private institutions, individual investors and producers towards establishing a Packaging House in Pokhara. Necessary background works such as business plan preparation, company registration (name, logo, Memorandum of Association, etc.), identifying potential investors (n=50+ investors; NPR committed, adequate as per preliminary estimate), land lease for packaging house setup (plot selected, formal contract to be signed), exploration of different machines, formal contract with producers, groups and cooperatives, etc. have been progressing as per the plan. The company is expected to be formally registered in July 2020 with operations starting from September 2020. The timeline could be pushed back if the lockdown situation in the country due to COVID-19 pandemic extends beyond May 2020.

Output 2: Increased consumers awareness and knowledge about the value of local biodiversity based food products

In order to increase consumer awareness and knowledge about the value of local agrobiodiversity-based food products, it is necessary to know if the hotels and restaurants are aware of and willing to pay for local products. To understand the situation, one of the project partners (The Bazaar) conducted a market study among 35 hotels and restaurants in Pokhara valley. The survey helped the project to understand the perception of the hotels and restaurants for accepting intermediary support structure like a packaging house and their commitment to work together with such support centre. The study revealed that there is an overwhelming support and enthusiasm to engage with a packaging house. In fact, half a dozen hotels have expressed their commitment to invest in shares of packaging house, while majority of hotels and restaurants are willing to work with packaging house to meet their daily demands of food products. The market study report can be found in Annex 4.2. The Bazaar team have also prepared action plans for engaging with additional hotels and restaurants to expand the market of agrobiodiversity products under Unified Landscape Brand (ULB) label.

The project proposed to engage with five schools in disseminating biodiversity conservation information to young minds. So far, four schools have been identified: Bhadaure Higher Secondary School from Annapurna Rural Municipality, Tara Kunj Higher Secondary School and Samata School from Pokhara Metropolitan City (PMC), Ananda Jyoti Higher Secondary School from Begnas (PMC). Students (17 male, 13 female) and teachers from Samata School participated in educational tour to Biodiversity Information Centre¹ at Sundaridanda (Annex 4.7, Figure 7). The centre has a rich collection of different local crops/varieties including wild rice, butterfly collection, mini-seed bank, and demonstration of indigenous tools used by farmers, and also serves as outlet for local agrobiodiversity products. Likewise, Panchadham Agriculture Development Cooperative members (11 male and 19 female) visited Biodiversity Information Centre and interacted with project staff (Annex 4.7, Figure 8). The main objective of the tour was to make the information centre concept clear to the members of the cooperative so they can replicate it in their area (Biodiversity Information Centre and View Tower is proposed in the proposal). The cooperative members were excited about the idea and agreed to discuss further the importance of having information centre to the ward chairperson and other ward members.

In order to disseminate information, a bi-lingual (English and Nepali) project brochure/flyer with information of Lake Cluster of Pokhara Valley–Darwin Initiatives (LCPV-DI) was developed. The introductory brochure/flyer provides background information of the LCPV region along with objective, duration, major interventions and stakeholders of the project (Annex 4.5). The project is widely sharing the flyer during workshops and other forums, and uploaded in LI-BIRD website.

The project supported two local farmers/entrepreneurs (1 male and 1 female) to display and sell their local products (local agrobiodiversity products and medicinal herbs) in Lekhnath Mahotsav (fair) by paying stall charges. Also, monetary support (NPR 40,000 as prize money) was given to the Lekhnath Mahotsav organizers to award prize to the best stall of the fair. This initiative encouraged farmers growing local agrobiodiversity products to come forth and demonstrate/sell their products as well as set an example for other farmers and visitors to understand the value of agricultural biodiversity and the need for conservation efforts.

To test incentive mechanism for promoting agrobiodiversity, the project felicitated and recognized the limited number of farmers (n=21) growing foxtail millet by awarding them with farm tools and material support (Annex 4.7, Figure 9). An immediate and robust response from farmers can be observed with more than 150 farmers willing to test and expand the area under foxtail millet. The project has supplied the foxtail millet seeds to these eager farmers.

The online marketing of agrobiodiversity products has not been initiated, which is intricately linked to establishment and functioning of Packaging House, expected to be operational from the first half of Year 2.

Output 3: Local stewardship and capacity for the conservation and management of biodiversity and lake ecosystem enhanced

Market study report identified several hotels and restaurants willing to collaborate with Packaging House. The private sector partner 'The Bazaar' will keep exploring other hotels and restaurants in Pokhara valley as end users. Likewise, the project team is also exploring private boarding schools in Pokhara and some retail outlets to sell local agrobiodiversity products. This action will be pursued more vigorously once Packaging House is up and running.

The first PSC meeting was held on 7 December 2019 where project activities and budget for 2019/20 was approved, and the Unified Landscape Brand operational guideline was also approved. The project has prepared and shared the Terms of Reference (ToR) with PSC members and their operation is guided by the agreed ToR (document can be shared upon request). The second PSC meeting is scheduled for May/June 2020 where the project progress will be shared, and the budget and activities for 2020/21 will be approved.

¹ Biodiversity Information Centre and View Tower at Sundaridanda has a dedicated room for agrobiodiversity, butterfly, and farm tools display, and also serves as an outlet for agrobiodiversity products from the local area. Last year, the centre was visited by more than 14,000 domestic and foreign tourists generating revenue worth NPR 330,000, with NPR 35,000 directly contributed to Biodiversity Conservation Fund (BCF).

Chairperson of the Annapurna Rural Municipality, ward representatives (n=3) and members of Panchadham Agriculture Development Cooperative have visited the Biodiversity Information Centre and View Tower at Sundaridanda and interacted with project staff to understand what it takes to run such structure (Refer activities in Output 2 above). The project team will follow up with local government bodies to set aside budget for construction of the building, and internal decoration, collection and display of biodiversity products (arboretum of orchids) will be co-financed by the project. In Year 2, Biodiversity Information Centre (also to function as a Collection Centre of fresh vegetables from producers) establishment will be the major thrust of the project in Annapurna Rural Municipality along with increased production of fresh vegetables.

The project organized two orientation workshops (Ramsar Convention and GAP/Organic Agriculture) to local leaders, policy makers and planners at provincial level, representatives of cooperatives, and project staff (Table 4). A total of 56 individuals participated in these orientation workshops, with female participation of 20%, which is extremely low. And, the project team have taken note of the situation and discussed within team to closely monitor and enhance women participation while organizing such events in Year 2 and 3.

Table 4. Orientation on international conventions to relevant stakeholders

| SN | Orientation Workshops | Date | Participants | | Total |
|----|---|-----------------|--------------|--------|-------|
| | | | Male | Female | |
| 1 | Ramsar Orientation | 20 July 2019 | 18 | 4 | 22 |
| 2 | Organic Workshop and Orientation on Good Agriculture Practice (GAP) | 24 January 2020 | 27 | 7 | 34 |

Begnas Fishery Research Centre (BFRC) under Nepal Agricultural Research Council (NARC) regularly monitors water quality and pollution in lakes. We have discussed with Chief of BFRC to produce a flyer for awareness raising purpose, however, no concrete step has been taken in this direction till date. This will be taken up in Year 2 activity.

Significant progress has been made in this activity. First, the project has conducted a study titled 'Organizational Status and Need Assessment Exercise of Agricultural Cooperatives and Farmers Groups Active in LCPV Area' (Web link to full report is provided in Annex 4.6). Based on the findings, capacity building interventions to cooperatives have been undertaken. For instance, two trainings (10-12 February 2020 and 13-15 February 2020) on internal control mechanism, good governance, and compliance management were organized for cooperative members where 41 (31 male and 9 female) executives from 14 cooperatives participated (Annex 4.7, Figure 10). After the training, five have already bought accounting software and others have committed to buy and install within this fiscal year. These cooperatives are willing to strengthen their governance and management system and computerize accounting system including preparation of essential cooperative policies. Second, with active participation of the lake management committee/lake cooperatives, the project team developed business plan and detailed project report for each lake, outlining the capacity of those lakes and what measures need to be taken to utilize the full potential. While preparing the business plan, the team have clearly envisioned a built-in mechanism (10% of net profit from the sale of fish to go in to the Biodiversity Conservation Fund) to support conservation efforts such as restocking of local fish, habitat restoration for wild rice area by delineation area, and setting aside wetland for migratory birds. Finally, direct support by the project to two lakes (Maidi Lake and Neurani Lake) were achieved for conservation of wild rice and biodiversity in wetlands (Annex 4.6, Figure 11).

Initial discussion held with the Phewa cooperative members indicated that they were not enthusiastic to utilize water hyacinth for handicraft and compost making because they tried the technology in the past and failed. Hence, the project team decided not to pursue this activity.

Output 4: Policy framework developed for scaling up market-led approaches for agrobiodiversity management for improved livelihood outcomes

The PSC meeting approved the ULB mechanism, which facilitated the initiation of Packaging House (Covered in activities related to Output 1 above). Most of the activities stated in output 4 will take place in the 2nd and 3rd years of the project.

3.2 Progress towards project Outputs

3.2.1 Increased income and employment opportunities to small holder farmers through the production and sale of agricultural biodiversity-based products at local and regional markets:

The project has established the baseline values (income generated from agrobiodiversity products) against which the increase in income directly attributed to project interventions in keystone crops/commodities will be measured (Table 5). Discussion with various farmers groups and cooperatives indicate that number of households, area and production of keystone crops can be substantially increased to have at least threefold increase in income from the baseline figures. Hence, achieving output indicators is not an issue at all.

Table 5. Income generated from agrobiodiversity products in LCPV area, 2019

| SN | Keystone Species | Households (n=355) | Average Quantity Sold (t)* | Average Income (NPR '000) |
|----|-----------------------------|--------------------|----------------------------|---------------------------|
| 1 | Rice (Jethobudho and Anadi) | 32 | 0.40±0.07 | 37.23±6.47 |
| 2 | Coffee | 65 | 0.10±0.03 | 9.47±2.41 |
| 3 | Foxtail Millet | 3 | 0.02±0.01 | 2.0±0.00 |
| 4 | Fresh vegetables | 213 | 0.66±0.11 | 32.66±6.46 |
| 5 | Fruits | 64 | 0.34±0.07 | 11.49±2.06 |
| 6 | Honey | 23 | 0.02±0.01 | 15.61±5.97 |
| 7 | Taro | 9 | 0.07±0.02 | 2.97±1.04 |
| 8 | Big cardamom | 2 | 0.003±0.0 | 1.95±1.05 |
| 9 | Goat (live animal) | 128 | 3.08±0.17 | 25.89±1.86 |
| 10 | Chicken and eggs | 20 | 20.45±9.13 | 21.34±7.89 |

Source: LCPV-DI household baseline study report, 2020

* Average quantity sold is presented in tons with standard error of the mean

Note: Fish has been dealt separately because fish production is done by cooperatives in lakes (Table 3)

Having said the above, the output indicator 1.1, i.e., at least 50% of the import substitution of food items by 50+ restaurants, hotels and home stays (Year 1=10%), has not been achieved because Packaging House (private initiative responsible for branding and marketing of LCPV products) is yet to be established and operationalized. Retrospective analysis suggests that first year target/indicator for the output was unrealistic. However, once the Packaging House is established, we expect the progress to be rapid and therefore the end of the project target still remains achievable. Likewise, output indicator 1.2, at least 500 individuals (60% women) increase income through sale of agrobiodiversity products to local hotels and restaurants (Year 1=100), will have to be modified because the project is working to ensure that 100% of the local produce except fish² pass through Packaging House for valid reasons: 1) ensure quality of products; 2) offer Unified Landscape Brand label/logo to the quality-assured products; and 3) collection of funds (3-7% of net profit) going to Biodiversity Conservation Fund can be monitored when transaction happen through one door system, i.e. Packaging House. For outcome indicator 1.2, 528 households have increased production of fresh vegetables and sold their produce

² Fishery Cooperatives already have a stall-based Collection and Sales Outlet adjacent to lakes, so they are not likely to bring fish to Packaging House in Year 2 but when production increases in Year 3 and beyond they will be supplying fish to Packaging House for sale in Pokhara market and beyond. The arrangement has already been discussed with and agreed by the cooperatives while preparing the business plans.

directly to the market. Additional 61 households have engaged in honey and shiitake mushroom production but they have yet to realize their production.

Indicators 1.3 and 1.4 are achieved with 589 and 856 households reached respectively. Currently, Rupa Lake Rehabilitation and Fisheries Cooperative (n=856) and Biodiversity Information Centre use Unified Landscape Brand (ULB) and set aside a portion of their income to Biodiversity Conservation Fund (BCF). The project is working to apply the ULB and BCF across 47 farmers' groups/cooperatives encompassing 4,000 plus HHs in the LCPV area.

3.2.2 Increased consumers awareness and knowledge about the value of local biodiversity based food products.

The indicator 2.1 (Year 1=5,000 individuals reached through FM radio) has not been achieved, as the radio message has not been prepared. Similarly, indicator 2.2 (Year 1=3 episodes of Unified Landscape Brand broadcasted) has not been achieved. However, the ground work has been completed and these indicators/targets will be achieved in Year 2. The indicator 2.3 has been partially achieved with identification of 4 out of 5 schools to participate in the programme. Students' exposure visit to Biodiversity Information Centre was organized to raise awareness on biodiversity conservation efforts. Such exposure visits for school children will be organized in 2nd and 3rd years as well, including lectures by project staff. The indicator 2.4 (consumers pay 10% premium to locally produced safe food) has been achieved in case of fish, e.g. Rahu (*Labeo rohita*) produced locally fetches higher price (NPR 480/kg) than imported (NPR 350/kg) from terai districts. Consumers are willing to pay premium price for locally produced safe foods.

3.2.3 Local stewardship and capacity for the conservation and management of biodiversity and lake ecosystem enhanced.

The indicator 3.1 states 'Community-managed Biodiversity Information Centre and sale of ULB products generates GBP 12,000 per annum for the conservation fund to support biodiversity conservation and lake pollution control in LCPV (Year 1=GBP). Approximate revenue for the fiscal year starting July 2019 till the end of the reporting period generated approximately NPR (GBP) for the Biodiversity Conservation Fund by the Rupa Lake Rehabilitation and Fisheries Cooperative (NPR) and Biodiversity Information Centre (NPR). Full year's data (15 July 2019 to 14 July 2020) will meet the stated target, and since all the fishery cooperatives have adopted Unified Landscape Brand (10% net profit allocated to Biodiversity Conservation Fund) in their business plan, the project can surely exceed the final year target.

The project was able to meet the numeric value of second indicator (3.2), i.e., at least 100 local leaders and stakeholders (50% women) are aware about the national and international policies provisions of Ramsar, ITPGRFA, CBD and SDG and are able to relate to their roles and responsibilities (Year 1 = 50). A total of 56 local leaders and relevant stakeholders were made aware about Ramsar convention and GAPs, but only 20% of the participants were women.

The project has exceeded the 3.3 indicator/target by more than 285%. The Year 1 indicator was to have 10 ha designated area protected as habitat for native and wild agricultural, aquatic species and native/migratory bird species in LCPV area. But, we managed to have 28.5 ha as designated protected area, which is 42.5% more than the set 3rd (final) year target. Strong internalization amongst the fishery cooperative members regarding the wetland conservation was the primary reason for extraordinary success. Encouraged by the result, the project team would like to set more ambitious target for coming years.

Finally, the fourth indicator 3.4, i.e. local government increased budget allocation and support for conservation of biodiversity by 50% from baseline figure (Year 1=10%) is achieved. In partnership with the project, Pokhara Metropolitan City (PMC) has for the first time disbursed NPR 800,000 (GBP 5,333) for promotion of local rice Jethobudho under incentive-based production mechanism. Additionally, the PMC has allocated NPR 6,000,000 (NPR 750,000 per village) for promotion of eight organic villages in the LCPV area. The project team is working closely with the PMC team to increase the number of villages and the amount in subsequent years.

3.2.4 Policy frameworks developed for scaling up market-led approaches for agrobiodiversity management for improved livelihood outcomes

The indicator 4.1 is not applicable for Year 1 reporting. For other two indicators (4.2 and 4.3), significant progress has been achieved for operationalizing Unified Landscape Brand (ULB). The ULB operational guideline was prepared and approved by the PSC. The concept has been made clear to the associated stakeholders like farmers, cooperatives, public and private organizations, government bodies etc.

3.3 Progress towards the project Outcome

Smallholder farmers have multiple sources of income (Table 6).

Table 6. Annual household income from different sources in the LCPV area, 2019

| SN | Items(Income Sources) | Household | Average Income (NPR) | Median Income (NPR) | Income Range (NPR) |
|----|-----------------------|-----------|----------------------|---------------------|--------------------|
| 1 | Cereals | 69 | 22,860±3,474 | 14,000 | 200-169,000 |
| 2 | Vegetables | 215 | 32,993±6,312 | 9,000 | 125-863,250 |
| 3 | Fruits | 100 | 13,387±2,189 | 5,050 | 140-142,600 |
| 4 | Live animals/Poultry | 176 | 45,715±6,561 | 22,000 | 2,000-800,000 |
| 5 | Animal Products | 132 | 62,601±7,606 | 32,400 | 2,000-480,000 |
| 6 | Salary/wages | 91 | 331,008±22,876 | 300,000 | 17,000-1,596,000 |
| 7 | Remittance | 117 | 627,299±52,577 | 480,000 | 20,000-3,500,000 |
| 8 | Business | 81 | 353,550±43,247 | 180,000 | 5,000-1,800,000 |
| 9 | Pension | 127 | 119,207±15,304 | 36,000 | 6,400-984,000 |
| 10 | Others | 60 | 104,953±25,132 | 17,600 | 200-1,200,000 |

Source: LCPV-DI household baseline study report, 2020

Analysis of the income range of cereals, vegetables and fruits vis-à-vis to other off-farm income sources give us a clear idea on income variation. As it stands, income from agriculture for majority of households is relatively small as compared to other sources. With project interventions, we intend to change that ratio. The income table provides the baseline figures for income, which will be compared against each year.

The Outcome indicator (0.1) states 'at least 70% increase in income of 3,000 smallholder farmers (50% women-managed households) from the sale of agrobiodiversity products by end of project (Year 1=400)'. At least 589 households have started production of fresh vegetables, honey and shiitake mushroom but they have yet to realize the income from these interventions. The income indicator data will be available in 2nd year's project reporting.

For Outcome indicator (0.2), i.e., 200 new jobs (60% women) created from the production and marketing of the local crops and species (Year 1=30), 11 new self-employment (full-time) have been created with shiitake mushroom cultivation in 10,300 logs. We envision new jobs to be created along the value chain with operationalization of Packaging House (Collection at village, Collection Centre, Transportation, Cleaning/grading/packaging at Packaging House, distribution etc.) in 2nd year. New employment will also be generated through the implementation of business plans of fishery cooperatives in 2nd year.

The final Outcome indicator (0.3) is 'local government establish mechanism for supporting conservation of biodiversity through their regular plans and programmes'. This indicator has already been achieved with government allocating budget for seed production of local landraces and testing incentive-based mechanism to production of local crops/varieties. Our efforts in the 2nd and 3rd year would be to fine tune the mechanism as well as to increase the budgetary support and increase scope of support.

3.4 Monitoring of assumptions

Most of the outcome and output level assumptions still hold true for the project. In fact, the operating environment has become more favourable with stable government entities at different levels. The most noticeable positive development has been the formalization of the Lake Conservation and Development Authority of the Gandaki Province with the appointment of Dr Anup Gurung as the Chief Executive Officer of the agency on 10 March 2020. We have already organized two rounds of meeting with him to jointly develop plans for the LCPV area.

One important assumption project made in the framework (Output assumption 1.1: Hotels and local business associations continue to cooperate in the conservation efforts) has severely been disrupted due to COVID-19 pandemic that is negatively impacting tourism business and the wider economy. We are closely monitoring the situation on the ground so that collective mitigation actions can be taken.

3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

Positive impact on biodiversity: There are two contributable impacts on biodiversity. First is related to conservation of local crop and fish diversity in the LCPV area. Specific efforts to promote local rice landraces – Jethobudho and Anadi – are having positive impact on their conservation with increase in the number of households cultivating these varieties. Second is repatriation of foxtail millet and promotion in the LCPV area. Consequently the number of farmers growing the crop has jumped from <40 households to almost 160 households within a year. Likewise, the project has released 500 fingerlings of fast declining local fish species Sahar (*Tor putitora*) in Kamalpokhari for their conservation.

Second important contribution is setting aside designated protected wetland area for conservation. For example, Kamalpokhari Lake (1.5 ha) carries religious-cultural values and has a designated area for lotus conservation. Similarly, Maidi Lake has designated area for wild rice conservation (2.5 ha) along with 22.5 ha as wetland for biodiversity including migratory birds. Neureni Lake has dedicated 2 ha of wetland area for conservation purpose. The total designated conservation area of 28.5 ha is 42.5% more than the set target for the project. With 2+ years of project time to go we would like to bring in additional wetland area under conservation purpose in other lakes. These efforts directly contribute to conserving and managing the wetlands which come under Ramsar Site and meets one of the objectives of National Ramsar Strategy of Nepal.

Positive impact in poverty alleviation: It would be presumptuous to state that the project is having positive impact on poverty alleviation at this stage because no concrete results have been achieved. However, the project has done ample ground work (business plan preparation; training on honey bee, shiitake mushroom, fresh vegetables, coffee, fruits; seed/saplings support) with cooperatives and farmers groups to help smallholder producers to increase their agrobiodiversity-based income by at least three-folds (compared to baseline figure in Tables 5 and 6) by the end of the project. Increased agrobiodiversity-based income (3,000+ HHs) and creation of new jobs (200) would contribute to poverty alleviation. Concrete results can be reported from 2nd year onward when producers start interacting with market via the Packaging House in Pokhara.

Since marketing is one of the major problems for smallholder producers, with operationalization of the Packaging House that problem will be resolved and producers can receive fair price for their produce. These are some of the pathways the project is pursuing to have lasting impact to alleviate poverty and achieve wellbeing.

4. Contribution to the Global Goals for Sustainable Development (SDGs)

Among the set of 17 sustainable goals, the goals relevant to the project are: No poverty (1), Zero hunger (2), Decent Work and Economic Growth (8), Responsible Consumption and Production (SDG 12), Life on land (15), and Partnership to achieve goals (17).

1. **No poverty:** As per SDG National Report (2016-2030), poverty in Nepal is linked with slow economic growth, underemployment, and social and geographical exclusion. While in case

of Kaski district, social and geographical exclusion and underemployment is not as big of an issue compared to the rest of Nepal. But the slow economic growth calls considerably for scaling up the productivity through high level of investments. Therefore, the project focuses on uplifting the livelihood of farmers through investments on value chain process that increases household income and creates decent jobs in agriculture value chain.

2. **End Hunger:** Agricultural transformation is needed for food security, sustainable economic growth and poverty reduction. The use of science, new technology and innovation will help to achieve SDG 2. The project is prioritizing the use of new and improved technologies for increasing agricultural productivity, and production of safe/healthy food. Supporting farmers with agricultural inputs, establishing value chain for agricultural products, working on high value crops, researching on local crops and providing need-based training are some of the contribution project is making to achieve SDG 2.
3. **Decent Work and Economic Growth:** By focusing on high value crops and increased productivity, the project is contributing to increase agricultural GDP, an important contributor to sustained economic growth of the country. The project is focusing on decent wage for farm workers and self-employed family members thereby contributing to SDG 8.
4. **Responsible Consumption and Production:** The project is promoting sustainable management and efficient use of natural resources, motivating farmers to move towards organic/conservation farming (safe food), reducing use of chemicals, and reducing waste in the processing sector and at consumer level thus contributing to SDG 12.
5. **Life on land:** SDG 15 is about conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services. In the Lake Cluster of Pokhara Valley (LCPV) area, the project is working together with fishery cooperatives for sustainable management of lake resources that also includes wetland delineation for biodiversity conservation and promotion of local fish species in lakes.
6. **Partnership to achieve goals:** SDG 17 clearly states forging multistakeholder partnership from global to local institutions to achieve SDGs. The project is a good example of with a dozen institutions representing public, public-private, cooperatives, and civil society partnership, building on the expertise and experience of each partner including resourcing strategies for achieving SDGs.

5. Project support to the Conventions, Treaties or Agreements

The LCPV-DI project directly contributes to three conventions: Ramsar Conventions on Wetlands, Conventions on Biological Diversity (CBD), and International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA).

Nepal has a long history of the wetland conservation. The Lake Cluster of Pokhara Valley (LCPV) is the largest Ramsar site in Nepal. According to the National Ramsar Strategy and Action Plan (2018-2024) of Nepal, the LCPV provides cultural wetland ecosystem services from Nepal. The LCPV have religious-cultural, aesthetic/ecotourism, spiritual, recreational, inspirational, socio-economic, and educational values.

According to the National Ramsar Strategy and Action Plan (2018-2024), the existing institutions including sectoral ministries, intergovernmental bodies, and research institutions are actively working in knowledge generation, dissemination and management of wetlands in Nepal. There also exist many strategies and policies that guide wetlands management. Likewise, some of the practices are important for Ramsar implementation: i) Integrated Watershed Management Approach, ii) Integrated Water Resource Management Approach, iii) Integrated Lake Basin Management Approach, iv) Cooperative Management of Lakes, and v) Payment for Ecosystem Services (PES).

Among these practices, the LCPV-DI project is supporting and advocating the importance of cooperative management of Lakes and Payment for Ecosystem Services as envisioned in National Ramsar Strategy and Action Plan (2018-2024). Lakes managed by cooperatives are seen to be successful than the ones without cooperatives. From the need assessment study (Annex 4.6), it was apparent that most of the cooperatives are not aware about the cooperative strategic plan. Therefore, the project provided training to the cooperatives of LCPV for capacity building of the board of directors and management committee (Annex 4.7, Figure 10). The project helped the cooperatives to internalize the importance of PES mechanism. The fishery

cooperatives have agreed to allocate 10% of their net profit to Biodiversity Conservation Fund, which will be used for conservation activities primarily in upstream communities (watershed).

Nepal's commitment to the CBD is for reduction in the rate of loss of biodiversity. Taking this into consideration, the LCPV-DI project is working on conserving the biodiversity through awareness programme, encouraging communities to allocate designated conservation sites, facilitating farmers to conserve local crop varieties and their wild relatives, conserve fish species diversity, and provide necessary technical support and facilitate access to financial support where needed. The main objectives of CBD are: i) Conservation of biological diversity; ii) Sustainable use of its components; and iii) Fair and equitable sharing of benefits derived from its use.

The National Biodiversity Strategy and Action Plan 2014-2020 (NBSAP) aims to provide a strategic framework for the conservation and management of Nepal's biodiversity. The NBSAP progress is assessed against 58 national indicators for meeting the 20 Aichi Biodiversity Targets (ABT), which falls under five strategic goals. While some progress has been made by the Government of Nepal, there is still a lot to be done. Some of the ABT in which LCPV-DI project is working include: i) Raising awareness on biodiversity conservation among community people and school children; ii) Promoting sustainable agricultural production using Low External Input Use technologies (Organic-oriented or conservation and ecological farming practices); iii) Conservation of local crops and fish diversity by popularizing their special traits (nutritional value, taste, cultural value, safe production technologies etc.) to general public, and iv) Establish market linkages to local crops and fish species so that producers derive equitable benefits from their production and sale; and v) Knowledge generation on biodiversity through action research in the field and publication of results for wider sharing.

Promotion of Pokhereli Jethobudho, Anadi rice and Foxtail Millet are linked to Article 6 of the ITPGRFA i.e. Conservation and Sustainable Use. There are many provisions but it can be linked to 6.2.e i.e. promoting, as appropriate, the expanded use of local and locally adapted crops, varieties and underutilized species.

6. Project support to poverty alleviation

All the project interventions mentioned in the preceding section (Section 3.1) are directly or indirectly supporting poverty alleviation and biodiversity conservation objectives in the LCPV area. The project is investing in providing hands-on skills, materials support, technical advice, and introducing new interventions (honeybee-keeping, shiitake mushroom, kiwi fruit, fresh vegetables, etc.) focusing smallholder farmers (youths) that would generate income at household level and self-employment in rural areas. Moreover, the project is revalorizing local crops (Jethobudho and Anadi rice and foxtail millet) and fish species (Sahar: *Tor putitora*, Rahu: *Labeo rohita*, and Katle: *Catla catla*) to generate high-end demand accompanied by premium price for these products, which will be passed onto the producers. To ensure quality production, the project team is promoting Good Agricultural Practices amongst the producers. Production interventions are adequately supported by buy-back guarantee/market assurance through Packaging House (one of the weakest links in most agriculture production programmes in the past), which motivates farmers to produce without having to worry about marketing aspects. These interventions and many others would lead to positive output indicators (sale of agrobiodiversity products, area and productivity increase of agrobiodiversity products) reflected in positive outcome indicators (income and employment), directly contributing to poverty alleviation in the LCPV area.

7. Consideration of gender equality issues

The project has made deliberate commitment to support gender equality issues through its actions. To being with, the project committed to have 50% women staff, which it has achieved with two out of four staff being women (Co-investigator and field technician). While hiring On-the-Job trainees (interns for six months) to support the project field staff, we ensured that gender and social inclusion was fully respected, so out of four interns hired three are women and one male represents Dalit community. Disaggregated data of the participants in different project activities indicate that 927 individuals (a few repeat cases can be expected) were reached, and of those 439 (47.4%) were women, which is close to what project committed (at least 50% participation). Closer scrutiny of the numbers reveal that cooperatives have extremely few women in decision-

making positions (Board of Directors and Managers), which is a real challenge from the perspective of gender equality. We have communicated this shortcoming to all the relevant stakeholders in the cooperatives and farmers groups, though one caveat for reformation is that these positions are elected positions (every three years) open for all shareholders. One ray of hope is that the government in recent past has directed all cooperatives to have 33% women in their board, which should give more opportunity for women to engage at the decision-making level. For the coming years, the project team agreed that we need to be more aggressive in including women in skill-oriented trainings so that their income potential and self-employment opportunities increase.

8. Monitoring and evaluation

The project mentioned several Monitoring and Evaluation tools in Q25 of Darwin Initiative Grant proposal. Some of the M&E tools used during Year 1 of the project include:

Baseline studies: The project conducted three baseline studies (sample household survey; need assessment of cooperatives; and market study – web link to the reports available in Annexes 4.3, 4.6 and 4.3).

Activity-to-output monitoring: Quarterly meeting of project staff was envisioned in the project to monitor activity-to-output progress. However, we organized monthly or more frequent staff meeting in initial months to ensure everyone was on the same page. The frequent meetings helped monitor the progress and enabled us to take immediate actions midway in case alternative course of action was required. Instead of organizing multi-disciplinary team visits, we conducted several thematic and more focused field visits, which were extremely productive. A two-day field visit by Executive Director of LI-BIRD to observe field activities and guide project staff was very timely and helpful in shaping our interventions. One multi-disciplinary team (PSC members) visit per year is planned for 2nd and 3rd years.

Farmer groups and cooperatives have prepared business plans for their organizations that include information on individual household/member plan (crop area and production), and these figures are monitored and reported by field staff on monthly basis. For trainings and events, field staff maintain register of participants and they are paid follow-on visit to ensure they practice what they learned during their trainings.

Output-to-outcome monitoring: Annual review and planning meeting (ARPM) is proposed as the main platform for assessing whether the project outputs are contributing to achieve anticipated outcomes of the project. However, this event could not be organized this year because of lockdown of the country due to the COVID-19 pandemic. We are planning to organize ARPM in June 2020 once if the lockdown is relaxed. Project staffs, collaborators and stakeholders will come together and discuss about projects progress and outcomes. Outcome monitoring survey on annual basis was proposed but we realize that this exercise may not be necessary because all the agrobiodiversity products will be routed through the Packaging House, which means the required data can be accessed at this point. Whatever additional data we might need to substantiate output-to-outcome links will be collected at cooperative or group level.

Budget-variance monitoring: The project closely followed monthly planning and expenditure pattern, which was discussed in project staff meeting that allowed the team to efficiently and effectively utilize the allocated budget (>99%) for the reporting period (June 2019 – March 2020). We will continue to follow this practice for the remaining period of the project. In addition, the project has developed a co-funding monitoring sheet that is religiously practiced for recording all the co-funding (cash, material or both) received by the project. Consequently, the project received (GBP) as co-funding amount against a target of GBP for 1st year, exceeding the target by 154.6%. The project team is also keeping tabs of fund flow to project beneficiaries disaggregated by gender and location.

Public Hearing and Social Audit (PHSA): The project staff conducted public hearings at local level during inception phase of the project targeting cooperatives and farmer groups. The Social Audit is conducted at the institutional level (LI-BIRD), so a separate Social Audit for the project will not be conducted.

Partners assigned for specific activities are responsible for monitoring quality and timely completion of activities. However, M&E is the prime responsibility of lead organization (LI-BIRD). The information is shared in partners meetings, annual review and planning meeting, and PSC meetings.

9. Lessons learnt

The past year was more about coordinating and building relationships with the relevant stakeholders, identifying interested beneficiaries, establishing baseline values, capacity need assessment of farmer groups/cooperatives, and planning of field activities and execution of season-bound agricultural activities. Overall, the whole process went smoothly in the first year, fully supported by partners, and local and regional government bodies. Proposed project interventions matched with farmer's expectations consequently community participation and co-funding from farming community have been exceptional. We realized that the start date of the project (June) coincides with onset of monsoon, which limits staff's field movement, and farmers become busy with rice transplanting, which means they cannot attend preliminary meetings organized by the project. Perhaps, it would be good to have project start date of April or November in case of Nepal to avoid monsoon and festival season.

It became obvious that the socio-economic indicators (income and employment) proposed for Year 1 were unrealistic for agricultural project because seasonal nature of agricultural activities limit such interventions if the right season is missed while at the same time due to longer gestation period output may take longer to realize. In fact, reviewers during the review process had suggested us to be less ambitious with indicators/targets. However, we are confident that the overall project targets can be achieved but there will be mismatch between yearly indicators/targets. This is a good lesson that would be communicated to LI-BIRD proposal development team and management to take into account in future projects of similar nature.

Ensuring gender equality in the project needs more careful monitoring and planning, and communicating to relevant stakeholders. Unless more concerted efforts are made by the project, especially in capacity building events (skills-oriented training, exposure and learning visits), it is less likely that we will make significant progress in this aspect. The project team have been communicated about our shortcoming and ways to mitigate the problem has been agreed upon (reporting and analysis in monthly meeting). However, ensuring gender equality in events organized by government or partners would be difficult to influence and monitor.

10. Actions taken in response to previous reviews (if applicable)

This is not applicable as this is the first year of the project.

11. Other comments on progress not covered elsewhere

The design of the project has enhanced considerably in terms of developing targeted interventions for specific keystone crops/species, which was critically informed by three baseline studies. So, conducting a comprehensive baseline study engaging project staff proved extremely beneficial for developing micro-level plans for different keystone crops/species, and the cooperatives and farmers groups. Based on these findings, the project team will be refining project activities and budget for 2nd year, which has been delayed due to lockdown of the country, but likely to be relaxed after mid-May 2020.

No difficulties were encountered in project activities implementation during the reporting period.

The COVID-19 pandemic and lockdown situation of the country will have negative short to medium term impact on the economy, which might percolate to project level interventions. However, no significant negative impact to project activities are foreseen because these agrobiodiversity products will have market no matter what; only the scale might be impacted. We will closely monitor the situation and inform the donor if situation changes drastically.

12. Sustainability and legacy

The project has been widely shared during project launching programme attended by minister from the Gandaki Province, high level government officials, academicians, and representatives from civil society organizations and private sectors (Annex 4.1). Similarly, we have extensively shared the project concept (Figure 2), i.e. market-led approach to agrobiodiversity conservation – Unified Landscape Branding (ULB) and Biodiversity Conservation Fund (BCF) – with Project Steering Committee members, and received overwhelming support and endorsement from the members including Mayor of Pokhara Metropolitan City and Ministry of Land Management, Agriculture and Cooperative. A component of the LCPV-DI project – Making Pokhara Self Reliant on Fish Products through Sustainable Management of Lake Resources – was presented to the Chief Minister of Gandaki Province and his team. Last but not the least, the project team organized two sharing meeting with CEO of Lake Conservation and Development Authority of Gandaki Province to develop a collaborative programme including joint field visit to the LCPV area and interaction with fishery cooperatives.

All fishery cooperatives have endorsed the BCF and included this fact in their business plan and developed an inbuilt mechanism to set aside 10% of their net profit for BCF, which will ensure sustainability of conservation efforts in the watershed area. The project will be developing a guideline to utilize the BCF in conservation related activities. Another important aspect of sustainability in this case is the operationalization of Packaging House, which has received enormous response from private investors including four institutions and several hoteliers and individual investors (50+). As per plan, the Packaging House will be up and running from September 2020 directly linking farmers' agrobiodiversity-based products to consumers in Pokhara market. Again, we have an inbuilt mechanism of Packaging House to set aside 3-7% of net profit to BCF thereby sustaining the conservation efforts.

The exit strategy proposed in the proposal is still valid, and we intend to continue as such. With proper functioning of ULB through Packaging House, sustaining legacy of project outcomes (socio-economic, ecological, technical etc.) post project will be ensured by inbuilt mechanism proposed in Figure 2. Third year will be to fine tune the operational mechanism for legacy.

13. Darwin identity

The LCPV-DI project team have been actively collaborating with governmental organizations, private sectors, agricultural cooperatives and communities in the LCPV area to advance project activities. While doing so, at every meeting with relevant stakeholders, the project funding partner, objective, aim and budget are earnestly shared. The project has always used the standard branding format. From left to right, the Government of Nepal seal, the Darwin Initiative logo, and LI-BIRD logo appear on top while all the partners' logos appear at the bottom of banners for trainings, visit programmes, or any other events. The same format is followed in all project related publications (refer LCPV-DI publications in Annex 4).

Relevant local and regional government bodies are involved in the project planning, coordinating, and implementing several activities in the project. These government bodies are made aware of the Darwin Initiative funding and are familiar with the donor partner.

The Darwin Initiative funded project is recognised as a distinct project 'Lake Cluster of Pokhara Valley-Darwin Initiative, in short LCPV-DI' within the organization. However, LI-BIRD always attempts to build synergy and leverage resources with other projects operating within the same geographic location.

The relevant government bodies at local (Pokhara Metropolitan City, Rupa Rural Municipality, Annapurna Rural Municipality) and provincial level (Ministry of Land Management, Agriculture and Cooperative; Begnas Fishery Research Centre – NARC; Lake Conservation and Development Authority at Gandaki Province) have good understanding of LCPV-DI project.

All of LI-BIRD's blogs, reports and publication, including those of the current project are shared on its website at www.libird.org. In this webpage, one of the blogs feature highlighted LCPV-DI project launch. The news can be found in Annex 4.1.

14. Safeguarding

LI-BIRD as the lead organization takes responsibility to ensure that safeguarding policies and practices are consistently applied to staff, partners and beneficiaries throughout its operations. The organization has several relevant policies and mechanism in place:

- LI-BIRD Personnel (Administrative) Service Rules 2064 (2007)
- Conflict of Interest Policy (2016)
- Whistle Blower Policy (2018)
- Child Protection Policy (2018)
- Safeguarding Policy of LI-BIRD (2019)

These documents are not available in LI-BIRD website but can be provided upon request.

The onus of consistently applying the above mentioned policies lies with LI-BIRD management, with Executive Board providing oversight. LI-BIRD has a robust system in place to translate those policies into practice, which include the following but not limited to: 1) new staff and interns orientation, where they are provided with the documents to study as well as Q&A sessions with Human Resource (HR) Manager; 2) orientation to partners on above subjects; 3) summary is attached as Annex to the contract (LoA) with partner organizations and consultants; 4) a separate forum for women staff to discuss their issues; 5) multi-rater feedback mechanism included in staff Annual Performance Appraisal Agreement (APAA); and 6) staff Job Description (JD) includes issues pertaining to Safeguarding Policies and Procedures.

All LI-BIRD staff and interns are obliged to sign Code of Conduct (CoC) at the time of signing their employment contracts. The CoC clearly highlights the DOs and DON'Ts and sets out clear expectations of behaviours for staff and interns at all times.

Within LI-BIRD, HR Manager is the focal person for reporting any safeguarding issues. That said, Executive Director can also be directly contacted/reported. Depending on the type of issues being reported, a small committee is formed to investigate the matter and report to Management Committee, which makes the decision on the matter.

The LCPV-DI project has not experienced any safeguarding issues in its first year of operation. Nevertheless, the policy will be reinforced during monthly staff meeting.

15. Project expenditure

The LCPV-DI project received a sum of GBP (Great Britain pound: Seventy two thousand five hundred and fifty one only) for conducting project related activities for a period of 10 months (1 June 2019 – 31 March 2020). The project team have diligently spent the grant money in accomplishing project related activities to the highest standard possible, completely adhering to procurement policies and any other relevant policies of the organization while conducting the activities. We have always respected and taken into consideration value for money in procuring services, materials and equipment.

By 31 March 2020, the project was able to spend GBP allocated budget with burn rate of 99.4% (variance of 0.6%) as presented in Table 7. During the same period, the project was able to generate GBP of co-funding from about half a dozen sources (detail recorded in co-funding recording format which can be provided upon request). For the later part of March 2020, all receipts have not been received because of lockdown of the country, so a marginal change in Operating Costs can be expected in final reporting.

Table 7: Project expenditure during the reporting period (1 June 2019 – 31 March 2020)

| Project spend (indicative) since last annual report | 2019/20 Grant (£) | 2019/20 | Variance % | Comments (please explain |
|---|-------------------|---------|------------|--------------------------|
|---|-------------------|---------|------------|--------------------------|

| | | Total Darwin Costs (£) | | significant variances) |
|-------------------------------|--|-------------------------------|--|-------------------------------|
| Staff costs (see below) | | | | NA |
| Consultancy costs | | | | NA |
| Overhead Costs | | | | NA |
| Travel and subsistence | | | | NA |
| Operating Costs | | | | Draft |
| Capital items (see below) | | | | NA |
| Monitoring & Evaluation (M&E) | | | | NA |
| Others (see below) | | | | NA |
| TOTAL | | | | |

There was no changes to the original budget. Also, as can be seen in the Table 7, the variation in expenditure for line items is well within the Darwin Initiative permissible limit of +/- 10%, with overall variance of 1%. Hence, prior discussion with and approval by Darwin was not sought.

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2019-2020

| Project summary | Measurable Indicators | Progress and Achievements June 2019 - March 2020 | Actions required/planned for next period |
|--|--|--|--|
| <p>Impact</p> <p>Smallholder farmers in Nepal have secured livelihoods, improved well-being, and healthy environment through the sustainable management and utilization of agrobiodiversity</p> | | <p>The project is completely in line with achieving the stated impact in the longer term given that project interventions for 1st year were completed, with outputs indicators already achieved in some cases, while for others a firm background has been set for speedy take off.</p> | |
| <p>Outcome Improved livelihoods of 3000 smallholder farmers through application of ecologically sound and scalable market-based solutions to agricultural and aquatic biodiversity management in Lake Cluster of Pokhara Valley</p> | <p>0.1) At least 70% increase in income of 3000 smallholder farmers (50% women-managed households) from the sale of agrobiodiversity products by end of project (Year 1 = 400; Year 2 = 1500; Year 3 = 3000)</p> <p>0.2) 200 new jobs (60% women) created from the production and marketing of the local crops and species (Year 1 = 30; Year 2 = 150; Year 3 = 200)</p> <p>0.3) Local government establish mechanism for supporting conservation of biodiversity through their regular plans and programmes</p> | <p>0.1) Major production related activities have initiated (shiitake mushroom, foxtail millet, honey, fish, vegetables, fruits, coffee) with provision of training, materials support, and follow up technical supervisions. The number of female farmers supported is about 439, and this number will be increased in 2nd and 3rd years.</p> <p>0.2) High value crops i.e. kiwi, shiitake mushroom, coffee, fresh vegetables, honey, fish etc. will generate new self-employment. From shiitake mushroom cultivation 11 new employment has been recorded for 1st year. 158 female and 295 male are supported for high value crops production.</p> <p>0.3) Mechanism institutionalized; first trench of support money for conservation disbursed (incentive-based production of local crops – Jethobudho, and organic village).</p> | <p>0.1) For the next year, these women managed households will increase their income by selling their products to Packaging House; additional HHs will be covered in the scheme as per plan. HH sales record and Packaging House purchase and sales record will verify the income.</p> <p>0.2) Operationalization of Packaging House will generate new jobs; implementation of business plans by Fishery Cooperatives will generate new jobs; and expansion of high value crops will generate self-employment thus meeting new job targets.</p> <p>0.3) Closely work with local and provincial governments to increase the scope of support, amount of support, and geographic coverage.</p> |
| <p>Output 1. Increased income and employment opportunities to smallholder farmers through the production and sale of agricultural</p> | <p>1.1) At least 50% of the import (from outside LCPV) substitution of food items (vegetables – leafy vegetables, chilies; local rice – Jethobudho, Jhinuwa, Anadi; Coffee; foxtail millet;</p> | <p>For the first year, the project worked on verifying the keystone crops (aromatic fine type rice – Jethobudho and Anadi, coffee, foxtail millet, shiitake mushroom, honey, fresh vegetables, fruits and fish) through household baseline survey (Annex 4.3). Necessary training to farmers and material support on cost sharing basis provided in case of shiitake mushroom, honey, foxtail millet, fresh vegetables, fruits, and fish</p> | |

| | | | |
|--|--|--|--|
| <p>biodiversity-based products at local and regional markets</p> | <p>taro & yam; honey; citrus; mushroom; local fish – Katle, Sahar, Asala; local poultry; local goat) by 50+ restaurants, hotels and home stays (Year 1 = 10%; Year 2 = 25%; Year 3 = 50%)</p> <p>1.2) At least 500 individuals (60% women) increase income through sale of agrobiodiversity products to local hotels and restaurants (Year 1 = 100; Year 2 = 350; Year 3 = 500)</p> <p>1.3) At least 3000 households increase area under, and productivity of local crops and varieties (Year 1 = 300; Year 2 = 2000; Year 3 = 3000)</p> <p>1.4) At least 3000 households use 'unified landscape brand' to access regional and national markets (Year 1 = 400; Year 2 = 2000; Year 3 = 3,000), with annual business of £ 800,000 /year by project end</p> | <p>production. Market study of 35 hotels and restaurants completed to assess market demand and scope for supplying local agrobiodiversity products through Packaging House (Annex 4.2). A very positive and encouraging response was received from hotels and restaurants in Pokhara Lake Side. Packaging House will initiate contracts with selected parties for supply of local products by middle of 2nd year operation. The indicator is valid and can be achieved by project end.</p> <p>Indicator 1.2 may have to be modified because the project will work towards ensuring that 100% of the produce pass through Packaging House, which makes this indicator redundant because monitoring of sales record and payment to Biodiversity Conservation Fund (BCF), which is a cornerstone of sustainable management of lake ecosystem, cannot be achieved when individuals are allowed to interact with markets independently. At the time of designing the proposal, it was assumed that about 20% of the beneficiaries will remain outside the Unified Landscape Brand (ULB) and BCF but through field implementation of project activities and interaction with cooperatives and farmers' group, we realized that having dual mechanism confuses everyone, and enforcing ULB and BCF becomes a problem.</p> <p>Indicators 1.3 and 1.4 are relevant and achievable and interventions are well underway to achieve those indicators/targets.</p> | |
| <p>Activity 1.1 Review, identify and, develop Good Agriculture Practice (GAP) and prepare training manual for targeted commodities</p> | <p>Good Aquaculture practice (GAqP) is prepared; draft training manual is prepared which will be used further among fishery cooperatives.</p> | <p>GAP manuals on vegetable production, coffee, honey bee, and fruits will be prepared and training provided to farmers in coming year.</p> | |
| <p>Activity 1.2 Organize Farmer's Field Schools (FFSs) to develop and promote GAPs and build capacity of farming communities to produce safe and healthy foods</p> | <p>Targeted short hands-on skill oriented training to farmers are provided along with material support where needed, followed by regular monitoring and supervision.</p> | <p>Similar approach will be applied for all keystone crops for GAP promotion with increased scale of operation to reach about 3,500 households.</p> | |
| <p>Activity 1.3 Produce and distribute quality seeds and planting materials and establishment of multipurpose nursery to increase local access to quality planting materials</p> | <p>The project distributed 19,142 fruit saplings of 10 different fruit types to 260 households from agriculture cooperatives and farmers groups of Pokhara Metropolitan City (PMC). The project distributed seasonal vegetables to 245 households in the project area.</p> | <p>Distribution of quality seeds and planting materials will continue only for new farmers; old farmers are expected to cover 100% of their material costs though technical advice will be provided free of cost.</p> | |
| <p>Activity 1.4 Pilot and promote output based incentive mechanism for commercialization of agrobiodiversity products in partnership with local government</p> | <p>21 farmers growing foxtail millet were awarded with tools and material support. The event encouraged farmers to increase area and motivated</p> | <p>The focus will be to support organic village; increase amount of support provided; and encourage local government to support in market</p> | |

| | | | |
|---|---|--|---|
| | | additional farmers, so 150 plus farmers are growing foxtail millet. | promotion activities to support commercialization of agrobiodiversity products. |
| Activity 1.5 Establish and operationalize ULB mechanism including quality control by engaging local and provincial governments, communities and other relevant stakeholders | | An approach paper on operationalization of Unified Landscape Branding (ULB) was prepared. Groundwork for establishment of Packaging House underway. | The ULB mechanism will be fully operationalized through Packaging House by engaging relevant stakeholders. By 2 nd year reporting we should have firm evidence of ULB mechanism in action. |
| Activity 1.6 Support private entrepreneurs and cooperatives to establish a pack-house for collection, sorting, grading, packaging, labelling, and marketing of ULB certified products in local, regional and national markets | | The project is supporting Packaging House by encouraging farmers to engage in quality and safe food production by adopting GAP and link the products to Packaging House. | Private sector investors are ready to invest in Packaging House, expected to be operational by August 2020 for business (products coming from farmers will be processed, packed and sold to regional and national markets). |
| Output 2. Increased consumers awareness and knowledge about the value of local biodiversity based food products | <p>2.1) Level of pollution and eutrophication to the lake ecosystem in LCPV watershed monitored and communicated to 30,000 users and general people through various means such as school programmes, local FM radio programmes, fairs, flyers and relevant networks (Year 1 = 5,000; Year 2 = 15,000; Year 2 = 30,000)</p> <p>2.2) 12 episodes of 'unified landscape branding' broadcasted through local FM radios for consumer awareness in local and regional markets (Year 1 = 3; Year 2 = 5; and Year 3 = 4)</p> <p>2.3) 5 schools implement conservation education and uses agrobiodiversity products produced from project communities linking with hostels/canteens</p> <p>2.4) Consumers pay at least 10% higher price for the products with 'unified landscape branding' in market place</p> | <p>Not much progress was made in case of achieving output indicator 2.1 in 1st year as the project team members were busy with season-bound activities. We have realized that this activity will be completed through consultant in 2nd and 3rd years of the project.</p> <p>The PSC has approved the working modality of ULB, so we will prepare introductory materials for broadcasting through FM radios and other media including print and digital.</p> <p>Out of five schools four have been selected and some preliminary exercises done (exposure visit and interaction). Second year will focus on inducting additional schools and organizing lectures on biodiversity conservation, participation in fairs, and exposure visits to Biodiversity Information Centre.</p> <p>The market study was done among 35 hotels and restaurants (Annex 4.2). The survey helped the project to understand the perception of hotels and restaurants for accepting intermediary support structure like Packaging House and their commitment to work together with such support centre. Large majority of hotels and restaurants are in fact very supportive of the concept and a few of them have also shown interest to invest in Packaging House. In 2nd year, private partner (The Bazaar team) will further explore hotels and restaurants for agrobiodiversity-based products in Pokhara valley.</p> | |
| Activity 2.1. Provide training and support to local hotels, restaurants and home stays to promote local food recipes and menu | | The market study was done among 35 hotels and restaurants, and based on | The focus will be to supply hotels and restaurants with agrobiodiversity |

| | | | |
|---|---|--|---|
| | | study The Bazaar team have prepared action for 2 nd year. | products as per their demand. Also, the project will prepare new recipes for inclusion in menus of hotels and restaurants. |
| Activity 2.2. Conduct school programmes in LCPV areas to increase conservation awareness; engage with school hostels and canteens to promote agrobiodiversity products | | Four schools have been selected, and students and teacher from one school was given a tour to Biodiversity Information Centre. Also, Panchadham cooperative was given tour to clear the concept of Biodiversity Information Centre so they can replicate it in their community. | Other 4 schools will be given tour to the information centre. The project staff will conduct guest lectures in schools/colleges on biodiversity conservation. Packaging House will contact several schools as potential buyers for agrobiodiversity products. |
| Activity 2.3. Develop and disseminate information and communication materials (FM Radio advertisement, information boards, flyers, and social media) for general people and consumers for promoting 'unified landscape brand' | | Flyer holding information of LCPV-DI project was developed. Unified Landscape Brand (ULB) operational guideline approved by PSC meeting. Area delineated for wild rice conservation in Maida Lake. | The information board in Maida lake for wild rice conservation will be prepared and put in place. Other consumer awareness for promoting ULB will be disseminated in the community and for general public. |
| Activity 2.4. Organize/participate in the local food campaigns (Fairs, Street Food Festivals) and consumer awareness programme to promote agrobiodiversity base products and 'unified landscape brand' | | The project supported two entrepreneurs from the LCPV area to demonstrate and sell their local products and medicinal herbs in Lekhnath Mahotsav (fair). The project also supported prize money for best stall in the Mahotsav. | The project will support Packaging House to have a stall in street festival and other fairs promoting local food for consumer awareness. |
| Activity 2.5. Online marketing system for LCPV branded food products | | There are no LCPV branded food products yet, so it will be done in coming years. | Packaging House will start online marketing for selling LCPV branded products in 2 nd year. |
| Output 3. Local stewardship and capacity for the conservation and management of biodiversity and lake ecosystem enhanced | <p>3.1) Community managed biodiversity information centre and sale of ULB products generates GBP 12,000 per annum for the conservation fund to support biodiversity conservation and lake pollution control in LCPV (Year 1 = GBP 3,500; Year 2 = GBP 7,000; Year 3 = GBP 12,000)</p> <p>3.2) At least 100 local leaders and stakeholders (50% women) are aware about the national and international policies provisions of Ramsar,</p> | <p>Rupa Lake Rehabilitation and Fisheries Cooperative and Biodiversity Information Centre collectively generated GBP 2,233 for Biodiversity Conservation Fund (BCF). All fishery cooperatives have endorsed Unified Landscape Brand, and have agreed to allocate 10% net profit to BCF in their business plan, which surely will exceed the final year target. Additionally, the Packaging House will also contribute to BCF thus the fund will be sizable for undertaking biodiversity conservation activities in the LCPV area.</p> <p>Local leaders and policymakers are well aware on conservation of biodiversity and sustainable use of natural resources. They are ready to co-fund credible projects on conservation, so we see a good scope to leverage resources there, which we have already done and will continue to do so.</p> | |

| | | | |
|--|---|---|--|
| | <p>ITPGRFA, CBD and SDG and are able to relate to their roles and responsibilities (Year 1 = 50; Year 2 = 100; Year 3 = 100)</p> <p>3.3) Designated area protected as habitat increased from 5 ha to 20 ha for native and wild agricultural, aquatic species and native/migratory bird species in LCPV area (Year 1 = 10 ha; Year 2 = 20 ha; Year 3 = 20 ha)</p> <p>3.4) Local government increased budget allocation and support for conservation of biodiversity by 50% from baseline figure (Year 1 = 10%; Year 2 = 30%; Year 3 = 50%)</p> | <p>A total of 28.5 hectare (Kamalpokhari=1.5 ha; Neurani=2 ha; Maidi=25 ha) of area already allocated for the conservation purpose. We would like to explore additional conservation area in remaining lakes in 2nd and 3rd years.</p> <p>Pokhara Metropolitan City (PMC) for the first time allocated NPR 800,000 (GBP 5,333) to reward farmers cultivating local rice – Jethobudho under incentive based production mechanism, and to support quality seed of local crop varieties. The PMC also supported eight farmers’ groups for establishing organic village, each with NPR 750,000. We will work closely with the PMC to broaden the scope of incentive based production mechanism and include foxtail millet under the scheme because cost of production data show negative return on this crop. Area of technical collaboration and synergy in programmes will be explored with PMC, Rupa Rural Municipality and Annapurna Rural Municipality for realizing impact at scale and project legacy.</p> | |
| <p>3.1. Collaborate with local, regional and national market-outlets for increasing availability of LCPV branded products to consumers</p> | <p>Collaborated with local and regional market outlet for increasing the availability of LCPV branded products. The project is making sure to collaborate with hotels, restaurants and other marketing platform like “The Bazaar” and other outlets.</p> | <p>Look out for more market outlets in local, regional and national markets to make LCPV branded product available. Packaging House will lead the process and the project sill support.</p> | |
| <p>3.2. Form and operationalize multi-stakeholder Project Advisory Committee (PAC)</p> | <p>A multi stakeholder Project Steering Committee (PSC) was formed and operationalized.</p> | <p>The PSC meeting will be done to review the work progress of previous year and plan for the coming year 2020-2021, after lockdown is eased.</p> | |
| <p>3.3. Establish and strengthen Collection Centres or Biodiversity Information Centres in LCPV area for conservation awareness, and serving as outlets for selling agrobiodiversity products</p> | <p>Organized meetings in community level to establish collection centre where necessary. Also, time to time communication is done with the farmers cooperatives to strengthen collection centres which are not functioning.</p> | <p>Provide needed support from the project level to establish information centre in Panchadham area.</p> | |
| <p>3.4. Conduct training/workshops for local leaders and stakeholders on national and international policies provisions particularly on Ramsar convention, CBD, ITPGRFA and SDGs</p> | <p>Two trainings (Ramsar Convention and Good Agricultural Practice) was organized for local leaders/stakeholders.</p> | <p>More orientations on international conventions will be organized for local leaders/stakeholders in 2nd and 3rd years.</p> | |
| <p>3.5. Monitor the level of pollution (eutrophication, toxicity, sedimentation, and invasive species) in selected lakes in LCPV and utilize the findings to inform public to galvanise support for conservation efforts in Ramsar areas</p> | <p>We initiated discussion with Begnas Fishery Research Centre to initiate</p> | <p>In 2nd year, the dissemination materials will be used to inform local communities and wider public to</p> | |

| | | | |
|---|--|--|---|
| | | work on this aspect, but no concrete action taken. | support conservation efforts in Ramsar area. |
| 3.6. Support lake management committees, women groups and lake cooperatives to conserve the habitat of local fish, wild rice and wetland/migratory birds | | The project supported in preparing business plan for all the lakes, and provided financial support to two lakes - Maldi lake for wild rice conservation plus habitat conservation for migratory birds, and Neureni lake for wetland and migratory birds. | For next year, other lakes will be supported for local fish conservation, and explore area allocation for migratory birds. |
| 3.7. Support local initiative for control and management of lake pollutions, and utilize water hyacinth for handicraft and compost making thereby generating income for women groups | | After discussion with local stakeholders this action has been dropped because of least interest from community members. | Activity dropped. |
| Output 4. Policy framework developed for scaling up market-led approaches for agrobiodiversity management for improved livelihood outcomes | <p>4.1) Feasibility study of expanding 'unified landscape branding' conducted in 2 lake ecosystems (Year 1 = 0; Year 2 = 0; Year 3 = 2)</p> <p>4.2) Evidence from 'agro-ecotourism' and 'unified landscape branding' generated and shared with at least 200 key local, provincial and national policy makers, researchers and other stakeholders through policy briefs, fact-sheets, video clips and travelling seminars (Year 1 = 25; Year 2 = 100; Year 3 = 200)</p> <p>4.3) Government endorses the guideline for 'unified landscape branding' (Year 3)</p> | <p>For operationalizing and implementation of Unified Landscape Branding (ULB), operational guideline is prepared and shared with PSC members. The concept is made clear to the associated stakeholders like farmers, cooperatives, public and private organizations, whenever possible. Most of the activities stated in output 4 will take place in 2nd and 3rd year report when the project will have evidences to show that ULB and BCF is a workable model worth replicating.</p> <p>The project will adopt government promoted GAP while producing quality safe food in the LCPV area.</p> | |
| Activity 4.1. Support multi-stakeholder working group to identify institutional mechanisms (independent clearing house) and develop operational guideline to implement ULB | | Stakeholders for oversight role and implementation of ULB identified in the approach paper. | Packaging House establishment and operationalization; regulating body formed and operational. |
| Activity 4.2. Produce and disseminate policy brief, fact-sheets, video and journal paper from the outcome of the piloting work of market led agrobiodiversity conservation and its integration in government policies, plans and programmes | | Groundwork has been conducted for generating evidences to write these articles. | The policy brief, reports, journals and videos will be produced from the outcome of the piloting work in 2 nd and 3 rd years. |
| Activity 4.3. Organize travelling seminars for the political leaders, policy makers, academicians and other stakeholders | | Same as above – groundwork is done. | This activity will be done at the end of 2 nd and 3 rd Years. |

| | | |
|--|---|---|
| <p>Activity 4.4. Liaise with Ramsar focal unit of the government and support to establish mechanism and implementation of Lake Cluster of Pokhara Valley (LCPV) plan</p> | <p>Two meetings organized with Lake Conservation and Development Authority (LCDA) of the Gandaki Province. Agreed to jointly work in LCPV area and beyond. One of the project partners - Machhapuchhre Development Organization (MDO) - is taking lead on work in wetland conservation.</p> | <p>Collaborative work with LCDA expected in 2nd and 3rd years. We will also liaise with Ramsar focal unit at federal level government body.</p> |
| <p>Activity 4.5. Conduct a feasibility study of 'unified landscape branding' in other 2 biodiversity rich ecosystems</p> | <p>Not applicable for 1st year.</p> | <p>This activity will be conducted after the establishment and functioning of ULB in LCPV area. This work will be done in 3rd year of the project.</p> |

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

| Project summary | Measurable Indicators | Means of verification | Important Assumptions |
|--|---|---|--|
| Impact: Smallholder farmers in Nepal have secured livelihoods, improved well-being, and healthy environment through the sustainable management and utilization of agrobiodiversity. | | | |
| Outcome: Improved livelihoods of 3000 smallholder farmers through application of ecologically sound and scalable market-based solutions to agricultural and aquatic biodiversity management in Lake Cluster of Pokhara Valley | <p>0.1) At least 70% increase in income of 3000 smallholder farmers (50% women-managed households) from the sale of agrobiodiversity products by end of project (Year 1 = 400; Year 2 = 1500; Year 3 = 3000)</p> <p>0.2) 200 new jobs (60% women) created from the production and marketing of the local crops and species (Year 1 = 30; Year 2 = 150; Year 3 = 200)</p> <p>0.3) Local government establish mechanism for supporting conservation of biodiversity through their regular plans and programmes</p> | <p>0.1) Baseline and end-line survey; annual outcome monitoring survey (OMS)</p> <p>0.2) Project records, records of chambers of commerce, progress report of metropolitan</p> <p>0.3) Local government /Metropolitan annual plan and budget</p> | <p>0.1) Newly elected council of metropolitan continues to prioritize 'Agrobiodiversity Heritage Area' programme initiated by previous council</p> |
| Output 1 Increased income and employment opportunities to smallholder farmers through the production and sale of agricultural biodiversity-based products at local and regional markets | <p>1.1) At least 50% of the import (from outside LCPV) substitution of food items (vegetables – leafy vegetables, chillies; local rice – Jethobudho, Jhinuwa, Anadi; Coffee; foxtail millet; taro & yam; honey; citrus; mushroom; local fish – Katle, Sahar, Asala; local poultry; local goat) by 50+ restaurants, hotels and home stays (Year 1 = 10%; Year 2 = 25%; Year 3 = 50%)</p> <p>1.2) At least 500 individuals (60% women) increase income through sale of agrobiodiversity products to local hotels and restaurants (Year 1 = 100; Year 2 = 350; Year 3 = 500)</p> | <p>1.1) Baseline and end-line surveys of targeted hotels, restaurants and home stays</p> <p>1.2) Project M&E database; OMS done annually at sampled HHs; Sales records at HH level</p> <p>1.3) Baseline and endline surveys; OMS report; Project annual reports</p> <p>1.4) Baseline and endline surveys; OMS report; Pack-house sales record</p> | <p>1.1) Hotels and local business associations continue to cooperate in the conservation efforts</p> <p>1.2) There is no unexpected high inflation affecting the procurement of project's goods and services</p> |

| | | | |
|---|---|---|--|
| | <p>1.3) At least 3000 households increase area under, and productivity of local crops and varieties (Year 1 = 300; Year 2 = 2000; Year 3 = 3000)</p> <p>1.4) At least 3000 households use 'unified landscape brand' to access regional and national markets (Year 1 = 400; Year 2 = 2000; Year 3 = 3,000), with annual business of £ 800,000 /year by project end</p> | | |
| <p>Output 2</p> <p>Increased consumers awareness and knowledge about the value of local biodiversity based food products</p> | <p>2.1) Level of pollution and eutrophication to the lake ecosystem in LCPV watershed monitored and communicated to 30,000 users and general people through various means such as school programmes, local FM radio programmes, fairs, flyers and relevant networks (Year 1 = 5,000; Year 2 = 15,000; Year 2 = 30,000)</p> <p>2.2) 12 episodes of 'unified landscape branding' broadcasted through local FM radios for consumer awareness in local and regional markets (Year 1 = 3; Year 2 = 5; and Year 3 = 4)</p> <p>2.3) 5 schools implement conservation education and uses agrobiodiversity products produced from project communities linking with hostels/canteens</p> <p>2.4) Consumers pay at least 10% higher price for the products with 'unified landscape branding' in market place</p> | <p>.1) Fishery Research Station lake water monitoring report; Project reports about school programmes, food fairs conducted; FM radio programmes developed and broadcast logbook; Number of publicity materials produced and distributed list; Social network likes/hits</p> <p>2.2) Number of episodes broadcasted; snapshot consumer survey reports</p> <p>2.3) Project reports; Interviews with teachers and students, and observation of school conservation education classes; purchase records of hostels and canteens; school reports</p> <p>2.4) Market outlet price monitoring and snapshot consumer survey report</p> | <p>2.1) Awareness campaigns are able to influence consumers behaviour and decision</p> <p>2.2) Agrobiodiversity products which are ULB quality-assured are readily available in local and regional markets</p> |
| <p>Output 3</p> | <p>3.1) Community managed biodiversity information centre and</p> | <p>3.1) Financial statement of Biodiversity Information Centre;</p> | <p>3.1) Project is able to secure strong buy-in for project supported</p> |

| | | | |
|--|---|--|--|
| <p>Local stewardship and capacity for the conservation and management of biodiversity and lake ecosystem enhanced</p> | <p>sale of ULB products generates GBP 12,000 per annum for the conservation fund to support biodiversity conservation and lake pollution control in LCPV (Year 1 = GBP 3,500; Year 2 = GBP 7,000; Year 3 = GBP 12,000)</p> <p>3.2) At least 100 local leaders and stakeholders (50% women) are aware about the national and international policies provisions of Ramsar, ITPGRFA, CBD and SDG and are able to relate to their roles and responsibilities (Year 1 = 50; Year 2 = 100; Year 3 = 100)</p> <p>3.3) Designated area protected as habitat increased from 5 ha to 20 ha for native and wild agricultural, aquatic species and native/migratory bird species in LCPV area (Year 1 = 10 ha; Year 2 = 20 ha; Year 3 = 20 ha)</p> <p>3.4) Local government increased budget allocation and support for conservation of biodiversity by 50% from baseline figure (Year 1 = 10%; Year 2 = 30%; Year 3 = 50%)</p> | <p>Conservation fund and its mobilization records of Unified Landscape Brand management committee and user's groups; Project M&E report;</p> <p>3.2) Training and orientation, and Travelling Seminar reports; Number of dialogue and Interaction programmes organized and reported</p> <p>3.3) LCPV management committee report and records; Project Annual Report; Baseline and end line reports</p> <p>3.4) Budget statement of the metropolitan and provincial government bodies (baseline and end-line data); Government's Annual Reports</p> | <p>interventions from local and national government bodies and policy makers</p> |
| <p>Output 4</p> <p>Policy framework developed for scaling up market-led approaches for agrobiodiversity management for improved livelihood outcomes</p> | <p>4.1) Feasibility study of expanding 'unified landscape branding' conducted in 2 lake ecosystems (Year 1 = 0; Year 2 = 0; Year 3 = 2)</p> <p>4.2) Evidence from 'agro-ecotourism' and 'unified landscape branding' generated and shared with at least 200 key local, provincial and national policy makers, researchers and other</p> | <p>4.1) Feasibility study reports</p> <p>4.2) Published policy /research briefs, fact-sheets and distribution records; Participants attendance record in travelling seminars</p> <p>4.3) Endorsed/approved unified landscape branding guideline</p> | <p>4.1) Government policy makers, local leaders, planners and advisors learn and apply new evidences for revision of existing and/or formulation of new policies</p> <p>4.2) Project attracts additional similar initiatives in and around LCPV creating greater opportunities for programme synergies, resource</p> |

| | | | |
|---|---|--|---|
| | <p>stakeholders through policy briefs, fact-sheets, video clips and travelling seminars (Year 1 = 25; Year 2 = 100; Year 3 = 200)</p> <p>4.3) Government endorses the guideline for 'unified landscape branding' (Year 3)</p> | | <p>leveraging, learning, influencing and achieving impacts at scale</p> |
| <p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p> | | | |
| <p>Output 1: Increased income and employment opportunities to smallholder farmers through the production and sale of agricultural and aquatic biodiversity-based products at local and regional markets</p> | | | |
| <p>1.1) Review, identify and, develop Good Agriculture Practice (GAP) and prepare training manual for targeted commodities 1.2) Organize Farmer's Field Schools (FFSs) to develop and promote GAPs and build capacity of farming communities to produce safe and healthy foods 1.3) Produce and distribute quality seeds and planting materials and establishment of multipurpose nursery to increase local access to quality planting materials 1.4) Pilot and promote output based incentive mechanism for commercialization of agrobiodiversity products in partnership with local government 1.5) Establish and operationalize ULB mechanism including quality control by engaging local and provincial governments, communities and other relevant stakeholders 1.6) Support private entrepreneurs and cooperatives to establish a pack-house for collection, sorting, grading, packaging, labelling, and marketing of ULB certified products in local, regional and national markets</p> | | | |
| <p>Output 2: Increased consumers awareness and knowledge about the value of local biodiversity-based food products</p> | | | |
| <p>2.1) Provide training and support to local hotels, restaurants and home stays to promote local food recipes and menu 2.2) Conduct school programmes in LCPV areas to increase conservation awareness; engage with school hostels and canteens to promote agrobiodiversity products 2.3) Develop and disseminate information and communication materials (FM Radio advertisement, information boards, flyers, and social media) for general people and consumers for promoting 'unified landscape brand' 2.4) Organize/participate in the local food campaigns (Fairs, Street Food Festivals) and consumer awareness programme to promote agrobiodiversity base products and 'unified landscape brand' 2.5) Online marketing system for LCPV branded food products</p> | | | |
| <p>Output 3: Local stewardship and capacity for the conservation and management of biodiversity and lake ecosystem enhanced that directly support for implementation of LCPV Ramsar site plan and contribute to realize ITPGRFA and SDG outcomes</p> | | | |
| <p>3.1) Collaborate with local, regional and national market-outlets for increasing availability of LCPV branded products to consumers 3.2 Form and operationalize multi-stakeholder Project Advisory Committee (PAC) 3.3) Establish and strengthen Collection Centres or Biodiversity Information Centres in LCPV area for conservation awareness, and serving as outlets for selling agrobiodiversity products 3.4) Conduct training/workshops for local leaders and stakeholders on national and international policies provisions particularly on Ramsar convention, CBD, ITPGRFA and SDGs</p> | | | |

- 3.5) Monitor the level of pollution (eutrophication, toxicity, sedimentation, and invasive species) in selected lakes in LCPV and utilize the findings to inform public to galvanise support for conservation efforts in Ramsar areas
- 3.6) Support lake management committees, women groups and lake cooperatives to conserve the habitat of local fish, wild rice and wetland/migratory birds
- 3.7) Support local initiative for control and management of lake pollutions, and utilize water hyacinth for handicraft and compost making thereby generating income for women groups

Output 4: Policy framework developed for scaling up market-led approaches for agrobiodiversity management for improved livelihood outcomes

- 4.1) Support multi-stakeholder working group to identify institutional mechanisms (independent clearing house) and develop operational guideline to implement ULB
- 4.2) Produce and disseminate policy brief, fact-sheets, video and journal paper from the outcome of the piloting work of market led agrobiodiversity conservation and its integration in government policies, plans and programmes
- 4.3) Organize travelling seminars for the political leaders, policy makers, academicians and other stakeholders
- 4.4) Liaise with Ramsar focal unit of the government and support to establish mechanism and implementation of Lake Cluster of Pokhara Valley (LCPV) plan
- 4.5) Conduct a feasibility study of 'unified landscape branding' in other 2 biodiversity rich ecosystems

Annex 3: Standard Measures

Table 1 Project Standard Output Measures

| Code No. | Description | Gender of people (if relevant) | Nationality of people (if relevant) | Year 1 Total | Year 2 Total | Year 3 Total | Total to date | Total planned during the project |
|----------|--|--------------------------------|-------------------------------------|--------------|--------------|--------------|---------------|----------------------------------|
| 6A | On the Job Training (OJT) provide to 4 students for 6 months coming from Agriculture Institute as a part of their curriculum | Female-3, Male-1 | Nepalese | £ 885 | | | | £ 885 |
| 23 | Funding raised from other source different organizations 1. Cooperatives (£4,100) 2. Farmers (£6,833) 3. PMC (£14,927) 4. SeedChange (formerly USC Canada) (£747) 5. JSA (£100) | | | | | | | |

Table 2 Publications

| Title | Type (e.g. journals, manual, CDs) | Detail (authors, year) | Gender of Lead Author | Nationality of Lead Author | Publishers (name, city) | Available from* (e.g. weblink or publisher if not available online) |
|-------------------------|-----------------------------------|---|-----------------------|----------------------------|-------------------------|---|
| LCPV-DI Baseline Report | Report | Ram Bahadur Rana, Rita Gurung, Indra Poudel, Tejaswee shiwakoti, 2020 | Male | Nepalese | LI-BIRD, Pokhra | http://libird.org/app/publication/view.aspx?record_id=379 |
| Need assessment Report | Report | Shashi Bhusan Pradhan, Mira Dhakal, 2019 | Male | Nepalese | LI-BIRD, Pokhra | http://libird.org/app/publication/view.aspx?record_id=372 |
| Market Study Report | Report | Basanta Baral, Subash Bhattarai, Tulsi Giri, 2020 | Male | Nepalese | LI-BIRD, Pokhra | http://libird.org/app/publication/view.aspx?record_id=380 |

* All the above publications are included in the Annual Report (Weblink provided).

Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

Annex 4.1: Inception meeting news

http://www.libird.org/app/news/view.aspx?record_id=83

Annex 4.2: Market Study Report

http://libird.org/app/publication/view.aspx?record_id=380

Annex 4.3: Baseline Study Report.

http://libird.org/app/publication/view.aspx?record_id=379

Annex 4.4; Approach paper on Operationalization of Unified Landscape Branding (ULB)

http://libird.org/app/publication/view.aspx?record_id=378

Annex 4.5: Project Brochure

http://libird.org/app/publication/view.aspx?record_id=340

Annex 4.6: Need Assessment Report

http://libird.org/app/publication/view.aspx?record_id=372

Annex 4.7: Some relevant pictures from the LCPV-DI project



Figure 3: On-farm trial on foxtail millet in LCPV-DI project area, Rupa-7.



Figure 4: Construction of 160 ft*40 ft greenhouse /plastic tunnel at Rupa Fish Hatchery, Chaur.



Figure 5: Beehive support to farmers in LCPV-DI project area.



Figure 6: Shiitake mushroom practical given to farmers of LCPV-DI project area.



Figure 7: Students and teachers from Samata School participating in educational tour to Biodiversity Information Centre at Sundaridanda.



Figure 8: Visit of Panchadham Agriculture Development Cooperative members to Biodiversity Information Centre.



Figure 9: Farmers growing foxtail millet awarded with farm tools and material support.



Figure 10: 3-day cooperative management training given to agriculture and fishery cooperatives



Figure 11: Direct support by the project to Maida Lake for conservation of wild rice.

Checklist for submission

| | Check |
|---|-------|
| Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line. | Yes |
| Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line. | No |
| Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report. | Yes |
| Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic. | No |
| Have you involved your partners in preparation of the report and named the main contributors | Yes |
| Have you completed the Project Expenditure table fully? | Yes |
| Do not include claim forms or other communications with this report. | |