Himalayan Permaculture Centre



[www.himalayanpermaculture.com](http://www.himalayanpermaculture.com)

***Building Livelihoods for Household and Community Resilience***

**6-month Report**

**Date of this report: May 2021**

**Introduction and background**

This reporting period continues to be dominated by the effects of the Covid pandemic. Having gone through lockdown 12 months ago, cases in Nepal remained relatively low. Government denial, political in-fighting and public intransigence combined to miss any opportunity to make preparations for a “second wave” that has now descended rapidly from India in April. At time of writing, Nepal is now in a critical situation of lockdown while trying to cope with exponential growth in infections and deaths throughout the country. Its health infrastructure has all but collapsed and the government continues to “fiddle” while showing little commitment nor capacity to be pro-active despite continuous advice from health experts over the past 15 months. The current lockdown has all but halted activities for the moment. Farmers are of course still farming and will continue to use techniques learned from HPC integrated with their traditional methods. For now, however, any activities involving significant travel and meetings of groups of people will not be allowed. HPC staff are in constant contact with village groups however, and will take any opportunity to implement programs within government guidelines for health and safety.

Meanwhile after a good monsoon last year this winter has been characterised by lack of rain (and snow at higher altitudes in Humla) and so the Autumn staple crop of wheat has been a poor harvest and Spring planting of corn has also had a shaky start.

Since the beginning of May HPC is adhering to local government’s request to halt activities along with lockdown, while staff have been able to gather information for monitoring and reporting purposes as reported below.

**Working Areas**

An updated summary of groups’ names, locations and demographics is given below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | **Households** | **Women** | **Men** | **Total** |
| **Surkhet** | 2 municipalities, 10 villages | **180** | **535** | **601** | **1136** |
| **Humla** | 2 municipalities, 18 villages | **597** | **1810** | **1868** | **3678** |
| **Total** | 4 municipalities, 28 villages | **777** | **2345** | **2469** | **4814** |

These figures represent the demographics of the villages that have been registered with HPC as participating villages. They do not include the new villages that have requested participation, where HPC staff visit for surveying, and barefoot consultants have started to work (usually on training). There are a further 2 new groups under formation in Surkhet that will be reported in the next period.

**Activities**

1. **FOOD SECURITY PROGRAM**

**1.1 Resource Centers**

HPC’s new resource centre (RC) at Tadhiket near Mavidada village is now fully functional and providing residential and short-visit training courses and farming demonstrations. The kitchen garden demonstrations have produced **55kg** of vegetables and young agro-forestry systems produced **20kg** of firewood and **50kg** of fodder grass. **161 new herbs** have been planted. A biogas plant has been installed that is being run of toilets and biomass (as there are no livestock yet). The RC has hosted a 5-day residential Integrated Farmers’ Training for farmers from the 10 villages working with HPC in Surkhet, as well as short technical trainings in Urine collection and use, compost making and hot-bed making. In April Mr Rage B.K., a technician from Humla travelled to Surkhet and at the RC hosted a training in making and using the traditional “Grabre” – a hand-held millet thresher used in Humla that Surkhet farmers have identified as worth trying. The RC has also hosted livelihoods training in bamboo furniture making and blacksmithing (see below 4.), while in the Women’s Health Program it has hosted a Gender training (see below 2.) and meetings of the Women’s Health Network.

Meanwhile in Humla the RC in Dapka village of Tanjakot Municipality has recorded **53.5kg** of vegetable production and **8.5kg** of vegetable seed production over the past 6 months, and planted and additional 31 perennial trees shrubs and herbs. It has hosted multiple trainings and meetings including 5-day residential Integrated Farmers’ Training and short technical trainings such as seed production, grafting, pruning and beehive construction. It has also been a venue for group leaders’ meetings.

**1.2 Farmers’ demonstrations**

Following demonstration of various diverse farming and household techniques and training in their establishment and management, HPC supplies various basic tools to farmers’ groups enabling them to implement activities in their villages. These include grafting knives, secateurs, irrigation pipe, sprinklers and plastic for hot beds and small polytunnels.

As a result of demonstrations at the RCs and in farmers’ fields, and various training opportunities at the RCs and in situ in the villages (see below 1.3), groups are involved in implementing various types of practical work in their houses and fields to increase household self-reliance. A summary of all practical work carried out in the groups over winter is as follows:

**Households making integrated demonstrations**

|  |  |
| --- | --- |
|  | **Dec 2020-May 2021** |
| **Practical Activities** | **Surkhet** | **Humla** | **Total** |
| **No: households implementing** | 180 | 595 | **775** |
| House hygiene | 176 | 585 | **761** |
| Stove | 101 | 584 | **685** |
| Toilet | 177 | 574 | **751** |
| Grinder | 176 | 581 | **757** |
| Water pot | 177 | 584 | **761** |
| Hay box | 0 | 24 | **24** |
| Sweepings | 160 | 565 | **725** |
| Waste water management | 129 | 574 | **703** |
| Plate/pot rack | 175 | 538 | **713** |
| Compost | 80 | 1 | **81** |
| Fodder trough | 18 | 12 | **30** |
| Salt lick | 41 | 26 | **67** |
| Kitchen garden/vegetables | 139 | 429 | **568** |
| Mulching | 8 | 1 | **9** |
| Liquid manure | 46 | 23 | **69** |
| hot bed | 10 | 28 | **38** |
| Leaf pots | 43 | 23 | **66** |
| Home nursery | 33 | 496 | **529** |
| Fruit nursery | 61 | 62 | **123** |
| Air nursery | 14 | 2 | **16** |
| Off season onions | 1 | 2 | **3** |
| Grafting | 18 | 77 | **95** |
| Budding | 1 | 0 | **1** |
| Top grafting | 5 | 18 | **23** |
| Air layering | 44 | 2 | **46** |
| Pot irrigation | 8 | 29 | **37** |
| Orchard | 62 | 107 | **169** |
| Agro-forestry | 63 | 8 | **71** |
| SRI | 0 | 5 | **5** |
| Green manures | 1 | 0 | **1** |
| No till | 1 | 0 | **1** |
| Bamboo cuttings | 2 | 0 | **2** |
| Improved plough | 180 | 131 | **311** |
| Fruit tree Pruning | 93 | 192 | **285** |
| Greenhouse | 1 | 29 | **30** |
| Biomas compost | 6 | 0 | **6** |
| Double digging | 8 | 1 | **9** |
| Urine collection & use | 5 | 43 | **48** |
| Seed production | 136 | 18 | **154** |
| Fruit planting | 57 | 72 | **129** |
| Water Filter | 155 | 208 | **363** |
| Jam/juice making | 0 | 0 | **0** |
| Solar Dryer | 9 | 12 | **21** |

Most of these activities are illustrated in the [Farmers’ Handbook](http://permaculturenews.org/2010/01/06/farmers-handbook/), a key training tool used by HPC.

**Demonstration farmers**

The key to spreading the methods and approaches demonstrated and trained by HPC is their fostering of innovative farming men and women who provide the lead not only in developing their own farms but also their communities. There are 3 levels of demonstration farmer. In the 1st level farmers have attained the following:

* Taken Farmers’ Training
* Competent at grafting and fruit nursery management
* Able to make smokeless stoves
* Have planted at least 15 fruit trees on their land, and be competent at pruning
* Have planted at least 60 multi-purpose trees and shrubs of at least 10 different varieties in an agro-forestry design on their land
* Are using SRI in paddy areas
* Are growing vegetables and saving vegetable seeds
* Are able to manage poly-tunnel and off-season production
* Are using at least 25 other techniques from the Farmers’ Handbook

The criteria for 2nd and 3rd levels are similar, but to a lesser degree. All farmers need to have passed through the basic farmers’ training and be implementing techniques on their own land. Some are just starting. The current distribution of the top 3 categories of demonstration farmer is as follows:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | A | B | C |  |  |  |
|  | f | m | f | m | f | m | Total f | Total m | **Total** |
| Surkhet | 2 | 9 | 2 | 15 | 2 | 6 | 6 | 30 | **36** |
| Humla | 11 | 18 | 14 | 22 | 8 | 22 | 33 | 62 | **95** |
| **Total** | **13** | **27** | **16** | **37** | **10** | **28** | **39** | **92** | **131** |

They are then selected and trained as trainers and innovators, (given a full Permaculture Design Course if not already taken, and a Trainers’ Training or ToT) and become “**barefoot consultants**” (BCs – see below under 5. Capacity-building) who are able to expand the approaches in villages around HPC’s working areas, as well as being employed in other projects in Nepal. These include earthquake-affected villages where they have gone to provide basic training in regenerative farming methods.

**Fruit and multi-purpose tree production**

Increase and diversification of trees on farmers’ land is an important part of resilience planning and general sustainability of farms. Trees provide multiple product benefits (fuel, food, timber, biomas, fodder etc.) as well as contribute significantly to soil and water conservation and improvement. They also provide habitat and food for a multitude of insects, birds and other forms of biodiversity. As such HPC has always promoted planting trees and other perennials, focussing on farmers’ private land. Fruit trees are always high on farmers’ requests, and HPC has trained hundreds of farmers in propagation, planting and after care (pruning).

**Grafting** and **top working** of fruit trees

Winter-time is **Grafting** season, and the following summary of achievements shows that a massive **37,872 fruit trees** have been grafted, mainly apple, in private village nurseries. These seedlings will generally be sold, distributed and/or planted out in the following winter, and occasionally in the monsoon. In addition over **30 fruit trees** have been top worked, involving grafting improved varieties on wild trees (wild apple, pear, walnut, almond, apricot and peach are all common especially in Humla) that do not require a nursery. Details are below:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Spp.** | Apple | Pear | Peach | Plum | Apricot | Walnut | Almond | Kiwi | Damson | Orange | Other | **Total** |
| Surkhet | 3 | 45 | 58 | 2 | 8 | 200 | 58 | 15 | 0 | 40 | 2 | **431** |
| Humla | 33,147 | 297 | 216 | 145 | 120 | 923 | 2568 | 0 | 25 | 0 | 0 | **37,441** |
| **Total** | **33,150** | **342** | **274** | **147** | **128** | **1123** | **2626** | **15** | **25** | **40** | **2** | **37,872** |

**Fruit Tree Planting**

Many trees that were grafted last year have been planted out this winter, together with other species that are grown from seed and cuttings. A summary of over **1,739 fruit trees planted** over the past 6 months is as follows:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Spp.** | Apple | Pear | Peach | Plum | Apricot | Walnut | Almond | Avocado | Kiwi | Strawberry | Banana | Pomegranate | Other | **Total** |
| Surkhet | 22 | 18 | 11 | 8 | 11 | 231 | 24 | 14 | 95 | 0 | 28 | 12 | 148 | **622** |
| Humla | 614 | 57 | 115 | 59 | 12 | 108 | 49 | 0 | 0 | 85 | 0 | 0 | 18 | **1117** |
| **Total** | **636** | **75** | **126** | **67** | **23** | **339** | **73** | **14** | **95** | **85** | **28** | **12** | **166** | **1739** |

**Multi-Purpose Tree, shrub and grass planting**

**I**n addition to fruit, HPC promotes trees shrubs and grasses providing a range of products to support food and farming, and local biodiversity. In this period **1,382 trees shrubs and grasses** have been established over the winter on farmers’ fields. Popular species include mulberry, Asian pepper (Timur), *Melia* azadirach (Bakaino), Napier grass, *Ficus* spp., cardamom, soapnut and broom grass.

**Pruning and after-care**

All farmers receiving or growing fruit trees are provided training in their after care. This usually involves winter and summer pruning. In this period **1,981 fruit trees** have been pruned in Surkhet (514) and Humla (1467), of which apple comprised 50% and others made up of peach, plum, pear, almond, pomegranate and citrus varieties.

**Community Funds**

HPC provides training and support for all groups to set up and manage micro-credit funds, involving collecting a monthly sum between 10-50NRs from all members and making this available for loans. These are used for activities such as buying food, medicines, school fees and investment into small businesses. In this period, loans totalling **1,281,863/-** (about £8,000, US$11,400) have been provided by the groups to **156 households**. Interest is charged at 1-2%, and loan repayment is currently 100%.

This reporting period's audit is is summarised below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Loans given** | **Expenses** | **Cash** | **Total NRs** | **GB£** |
| Humla | **308,500** | **18,510** | **89,144** | **416,154** | **£2,600** |
| Surkhet | **973,363** | **36,705** | **557** | **1,010,625** | **£6,300** |
| **Total** | **1,281,863** | **55,215** | **89,701** | **1,426,779** | **£8,900.00** |

**1.3 Farmers’ Training**

After demonstration, training to farming communities is HPC’s second strategy. With a diverse range of best-practice methods and approaches involving farming and growing, HPC offers a variety of trainings: 5-day residential (at the RCs), 3-day “mobile trainings in villages and 1-4 hour hour in situ technical trainings in all its villages. Many of these trainings are now provided by trained villagers themselves in the form of “barefoot consultants” (BCs) – motivated men and women that have led their community’s implementation of programs by first developing their own farms and lifestyles and are now supported to train others.

Technical trainings are usually for farming techniques such as grafting, compost making,

A training summary is below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Surkhet** | **No: Trainings** | **Days**  | **Participants** |
| **Women** | **Men** | **Total** |
| Residential farmers' training  | 1 | 5 | 10 | 7 | **17** |
| Technical Trainings | 30 | 9 | 164 | 144 | **308** |
| Mobile Farmers' Training | 9 | 24 | 68 | 67 | **135** |
| Stool, Timber (bamboo) | 1 | 5 | 6 | 15 | **21** |
| Blacksmith Training  | 1 | 5 | 0 | 4 | **4** |
| Grabri Making  | 1 | 1 | 0 | 8 | **8** |
| **Total** | **43** | **49** | **248** | **245** | **493** |
| **Humla** |  |  |  |
| Residential Farmers' Training | 1 | 5 | 15 | 5 | **20** |
| Mobile Farmers' Training | 6 | 20 | 53 | 30 | **92** |
| Technical Trainings | 37 | 31 | 139 | 141 | **280** |
| **Total** | **44** | **56** | **207** | **176** | **392** |
| **Total All areas** | **87** | **105** | **455** | **421** | **885** |

**Slide and Film shows**

A few socially-distanced slide shows have been held at the respective RCs in Humla and Surkhet and in Majpur village of Humla for a total of **92 villagers** (44 women and 48 men) in the topics of Agroforestry, Erosion and Women’s Health.

**1.4 Livestock**

**Livestock training**

Farmers spend a large proportion of their time and money on livestock, which form an important part of providing land fertility through compost, and domestic nutrition and income through dairy and meat products. However, traditional practice is characterised by high input-low output as livestock are mostly free-ranged, and poor diets leading to poor health and low productivity, with little or no access to veterinary support. HPC focuses on 3 main areas: breed improvement, stall management (diet and hygiene) and provision of basic veterinary support.

In this period 2 mobile trainings (3 days each) have been provided in Surkhet by trained BCs to 42 farmers (31 women and 11 men).

**Livestock health**

In Surkhet, **6 mobile livestock health camps** were held in 6 locations for 10 villages, where **1,865 livestock** were treated (see table below). In Humla, technicians treated **239 livestock** at farmers’ homes. A summary is given below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Village | **Castration** | **Worms** | **Skin parasites** | **Total** |
| Ox | Goat |  Ox/Cow | Sheep/goat | Pig | Chicken | Buffalo | Sheep/goat | Cow/Ox |
| Total Surkhet | 0 | 50 | 276 | 1249 | 17 | 138 | 107 | 22 | 6 | **1865** |
| Total Humla | 1 | 0 | 0 | 6 | 0 | 5 | 1 | 226 | 0 | **239** |
| **Total** | **1** | **50** | **276** | **1255** | **17** | **143** | **108** | **248** | **6** | **2104** |

**Improved breeds of livestock**

With an aim of improving productivity of livestock HPC supports communities to acquire quality breeding stock of cows, buffalo, goats and chickens. In this reporting period, an improved breeding buffalo bull calf has been provided to Jana Jyoti group of Pakhapani village in Surkhet.

**Livestock stall management**

One member from each group is supported to build an improved stall for trough feeding and easier manure and urine collection. To date, 4 stalls have been completed in Gurung Gaun, Pakhapani, Mavidanda and Salkharkha villages.

**1.5 Irrigation**

HPC provides support for small-scale irrigation systems that villagers build themselves. The systems usually involve building tanks lined with cement or heavy-duty plastic that are filled from local springs, and then piped to fields where sprinkler systems are often used. Some systems are also connected to drinking water systems and use excess and/or waste-water, usually for kitchen gardens and plant nurseries within the village.

During this period 3 systems have been completed in Humla and in Surkhet 6 new projects are in implementation stages with HPC supplying equipment, and village groups providing labour to construct. Systems are planned to irrigate over **22 hectares, benefitting 156 households (893 villagers).**

**1.6 Appropriate Technology**

In this program HPC is demonstrating and testing various technologies, firstly to assess their usefulness and effectiveness and then, if/when they are found to achieve aims of labour-saving and productivity increase, to support further acquisition. In this period 8 chaff cutters have been acquired of which 4 have been distributed in Surkhet. In Humla a smaller version is being trialled that can be forged by local blacksmiths, for which iron has been acquired and shipped. In addition 5 maize de-hullers have been provided in Humla.

1. **HEALTH PROGRAM**

**2.1 Women’s Health Program (WHP)**

HPC’s Women’s Health Program works around 3 main activities: training, health camps and networking. Women’s Health Trainings (WHT) include gender training, and take place through residential 5-7 day trainings at the resource centres and mobile 3-day courses run in the villages. Short half to 1 day trainings and workshops are also provided.

Women’s Health Camps (WHCs) have taken place each year in both districts and involve a trained team of specialists providing diagnosis, counselling, treatment and referral services as well as educational classes to attendees of the camps.

The Women’s Health Network (WHN) involves meetings between women active in the trainings and camps where they discuss issues, develop strategies and plan events including the WHTs and WHCs

**Women’s Health Training (WHT)**

In this period in Surkhet 3 mobile Women’s Health Trainings (each 3 days) have been held in Gurung Gaun, Sano Khaltakura and Salkharka-Bhalim villages, and a Gender training held at the RC in Tadakhet. Meanwhile in Humla a 5-day residential and 2, 5-day Gender trainings were held at the RC in Dapka as well as a 3-day capacity building training for the local Women’s Health Network. The trainings and workshops were led by Led by BC Hommaya Gurung and women’s health expert Mrs Januka Bhattarai. A total of **132 women** and **29 men** participated the trainings.

Three Gender trainings were provided for women (43) and men (29), and topics include:

* Gender differences between male and female – physical and habitual
* Gender-related violence & its effects on family, community & development
* History of development: roots of gender & caste discrimination and violence against women (VAW)
* Child marriage, caste influences,
* Discrimination against menstruating women & girls and pre-& post-natal women
* Conflict resolution in communities – routes of action at village/municipality level
* Laws and rights around gender discrimination and VAW
* Government strategies & programs to promote women’s rights and prevent gender discrimination and VAW at national, district & municipality level
* Roles of community in advocacy
* Workplan for action by the group to hold further discussion and develop programs to make the work effective

**Women’s Health Camp (WHC)**

An intensive month of Women’s Health trainings was capped off with a 2-day Women’s Health camp integrated with a dental camp at popular request, held at the Municipality Health Post in Madana.

|  |  |
| --- | --- |
| **Diagnosis** | **No: patients** |
|
| prolapse stage | **51** |
| white discharge | **17** |
| uterus pain | **10** |
| backache | **4** |
| vaginal itching | **6** |
| urinary tract infection | **14** |
| eye ache | **3** |
| wound on uterus | **5** |
| gastric ulcer | **10** |
| headache | **3** |
| Worms | **2** |
| Haemorrhage | **2** |
| pregnancy test | **1** |
| diarroeah | **2** |
| weak limbs | **4** |
| cough | **30** |
| irregular menstration | **3** |
| skin parasites | **3** |
| asthma | **5** |
| **Total** | **175** |

The camp was not just about diagnosis and treatment of women’s health issues but also focussed on wider education around women’s health. Aims of the education at the camp were:

* To provide information and awareness about gender discrimination, domestic violence, women’s rights and legal access
* To increase awareness of women’s health issues such as prolapse, menstrual problems and feminine hygiene
* To provide knowledge of women’s reproductive health physiology and biology
* To provide education about the use of herbs for preventative care and treating common women’s reproductive ailments
* To promote the principle of self help through self analysis, self diagnosis and self-treatment of women’s health problems
* To help facilitate and mobilise local government and civil organisations and individuals to be proactive in combating gender discrimination and supporting women’s health issues

Women attending the camp, hailing from Tanjakot and Adhanchuli local Municipalities in southern Humla (previously Madana, Maila, Kalika and Shrinagar) were registered in groups of 10 and each group went through an education program comprising:

* A display of herbs with information on their processing and use
* Poster displays of human physiology, centres of disease, causes of disease, ways of diagnosis; family planning methods
* Discussion on the value of cooperation and prevention of domestic violence and the importance of gender harmony

Following requests from local communities, HPC added a **dental clinic** to the health camp that was led by Dr Vajra Kishor Shahi with assistant Navin Babu Thapa, in collaboration with Madana/Maila Health Posts. A total of **144 villagers were treated (94 women and 50 men)** including 134 extractions and 4 fillings.

**Women’s Health Network (WHN)**

WHN network members continue to support activities in the WHP. Groups meet to review activities and plan new ones. They also provide support in trainings and health camps. As such, they remain active in supporting the activities of HPC, whilst also building their own capacity to lead in women’s health and rights issues, thus further benefiting the women in the region.

In Humla a workshop was held for **19 members** of the WHN aimed at increasing their capacity. Topics included reviewing activities, discussion on case studies of domestic violence and women’s reproductive health issues, legal systems and use of herbal remedies.

**2.2 Drinking Water**

HPC constructs small-scale drinking water systems for villages using its non-cement technique, tapping small local springs and bringing water to village tap stands. Where possible the policy is 1 house, 1 tap. Households can then use this water for irrigating kitchen gardens and plant nurseries either direct from the tap or using waste (grey) water runoff from the tap stands. It also repairs and maintains drinking water systems built by other agencies where requested.

In this period 6 systems have been completed in Humla, and 2 are in process of implementation, while in Surkhet there are 5 new systems are under construction including 1 at Gorkhana High school in Pakhapani. These are benefitting **56 households** comprising **369 adults and children**. In addition **459 livestock** are benefitting from having a drinking water source within the village.

1. **EDUCATION PROGRAM**

**3.1 Practical Literacy Classes**

This activity involves running practical literacy classes (PLCs). The PLCs combine Freirian literacy principles with HPCs unique collection of practical activities based on the Farmers’ Handbook (FHB), an easy-to-read compendium of over 40 farmer-friendly methods to increase domestic household and farm productivity. PLC participants learn letters and words, and later sentences, that form topics from the FHB such as smokeless stove, nursery, toilet, hygiene, diet, fruit tree grafting, etc. At the same time as developing their literacy skills, they also apply the methods practically in their own houses and fields.

**Two PLCs** in Humla are currently in process, with **36 villager**s enrolled (35 women and 1 man).

**3.2 Schools’ Program**

HPC also works directly with schools in its areas, through co-design and development of bare land with planting trees and gardens, which helps to provide pupils vocational training useful not only for school but that they can take home and apply there as well. It also supports schools with infrastructure such as for drinking water, furniture, roofing, painting etc. with an aim of creating a more comfortable learning environment.

There are currently 5 schools in Surkhet (1 secondary and 4 primary) and 2 in Humla (1 secondary and 1 primary) that HPC is collaborating with, benefitting a total of **459 students (216 girls and 243 boys)**.

In this period HPC has provided water tanks for drinking and hand-washing water at Gokharna Adharbhut School in Pakhapani village, Khalikhark School (Sagarmatha Primary) and Mavidada School (Laligurash Primary).

**3.3 Education materials**

HPC is continually developing training materials to help make its courses more effective and provide better resources for participants to take home after learning and demonstration.

In this period 100 Farmers’ Handbooks have been provided to participants and as prizes for innovative work. It has also produced new materials to use as training aids for women’s health trainings and farmers trainings. HPC has also printed its own custom exercise book that it uses for PLC classes, and various farmers trainings for participants to make their notes in.

1. **LIVELIHOODS PROGRAM**

**Beekeeping**

Beekeeping in framed hives increase the efficiency with which bees can store honey, as the frames are re-used after harvest and the bees don’t need to re-build the frame. In HPC villages in Surkhet, 120 traditional log and wall-hives have produced 169kg of honey, while 75 improved hives have produced 175kg of honey. These hives, and the top-bar version, are now made locally and the skills to manage them spread through trainings and farmer-farmer exchange.

In Surkhet, training has been provided to 27 farmers (25 men and 2 women) in hive making and beekeeping, while in Humla, hive-making training has been provided to 9 women. In addition, sets of beekeeping equipment (veil, gloves, knife, queen gate and queen box) have been distributed to 3 groups.

**Vegetable seed production**

In the past 6 months farmers have produced a further **137.5kg of seed** (102kg in Surkhet, 35.5kg in Humla, including 8.5kg from the RC), including beans, cucumber, pumpkin, various gourds, aubergine, coriander, onion, Swiss chard, coriander and carrot.

**Cotton Growing & Processing**

Cotton-growing season has just started, and **3kg seeds** saved from last year’s crop have been distributed and crops established.

**Mills**

This program supports construction, maintenance and/or retro-fitting of water-powered mills. In Surkhet 3 mills have been surveyed for work but due to lockdown implementation has not happened yet. In Salghadi village (Pragatshil group) a 60m pipe is needed to carry water to the mill head. In Gurung Gaun (also called Pragatshil group) 25m penstock pipe and iron mill wheel+shaft is needed, and in Ghatutol (Himal group) 15m penstock pipe and a new grinding stone is needed.

**Herbs development**

Farmers in HPC villages are continuing to establish plants for herbal use. In 18 villages, 866 herbs (366 Surkhet; 500 Humla) comprising 16 different varieties have been established in gardens and agro-forestry systems, including *Kaempferia rotunda* (Nep. Bhuichampha, Blackhorn), *Plectranthus tomentosa* (Nep. Viks jhar, Vicks plant)*, Paris polyphylla* (Nep. Satuwa, Herb Paris)*, Aloe vera, Menthus, Acorus calamus* (Nepl Bhojo, Sweet Flag)*, Dioscorea bulbiefer* (Nep. Rukh tarul, Aerial Yam/Potato), (Nep. Sugandhawal, Valerian)and *Lindera nessaina* (Nep Siltimur,Kurz fruit).

**Weaving & Fibre Processing**

Towards the end of winter wild nettle *Girardinia diversifolia* (Nep. *Allo*) was harvested from areas above Mavidanda, Ghatutol and Chaurgaun villages and is presently being spun into thread.

**Solar drier**

HPC has been manufacturing home-made versions of solar dryers reducing their cost to communities. They are being used for a variety of products including beans and pulses, chillies, Asian pepper (Timur), cardamom and mulberry. In Humla they are also being used for apple drying.

Currently **21 home made solar driers** have been constructed and are in use in Surkhet (9) and Humla (12). In this period a further drying room is being constructed for the new RC in Surkhet.

**Juice/Jam making**

This program is processing fruits during time of glut is juice and jam making. Communities have been learning the process of doing this and training is continuing, and HPC have been supplying simple technology to aid the process. In this period 10 hand-operated juicing machines have been acquired but distribution has been delayed due to lockdown.

**Biogas**

A cement biogas system has been constructed at HPC’s new resource centre in Tadakhet. It is connected to the toilets at the farm and also using plant biomass as a raw material. Two other biogas units have been constructed with HPC support for farmers in Sal Kharka and Bhalim villages (Shanti group).

**Sugarcane Processing Machine**

This project has acquired hand-operated mills for squeezing sugar cane juice. Many communities have been planting sugar cane as part of the agro-forestry planting activities so there is a plentiful supply of raw material. The aim is to be able to market the juice though in the short term it is a nourishing drink for local consumption. In this period a further machine has been acquired but distribution has been delayed due to lockdown.

**Cloth recycling machine/training**

The machine fitted in Surkhet is producing recycled cloth. A similar machine has been taken to Humla but has not been able to be commissioned due to lack of a technician, whose visit has been delayed due to lockdown.

**Community agro-vet centre operation**

This program has set up a village-based centre for livestock treatment, providing tools and equipment locally and run by local co-operatives. Farmers buy their services and materials to enable re-stocking and sustainable operation of the centre. In this period in Surkhet, **69 households** have benefitted, treating **303 livestock** (goats, sheep, chickens, buffalo and cow), while in Humla **93 livestock** have been treated benefitting 6 households using medicines and veterinary equipment from this program.

**Farm tools community sales centre**

Farm tools have been purchased and sales/distribution is from the centre in Gurung Gaun. The centre is opened 1 day per week, when farmers are able to purchase farm tools, such as picks, spades and other digging implements, pipe, sprinklers, pruning saws, secateurs, files, sharpening stones, raw iron, seed containers, nails, etc. Local blacksmiths that have taken HPC’s blacksmiths’ training are able to buy raw iron there to fashion into tools for sale. Tools and farming equipment have continued to be sold from these community centres, generating a fund that will be used to re-purchase more materials with a small profit to add to the fund. To date a total of **174 households** have benefitted from this (**65 in Humla and 109 in Surkhet**).

**Local chicken rearing partnership**

In Surkhet 5 low-income farmers that were provided support (coop building materials and breeding stock) to start raising chickens have been survey and found to have increased their stock from 14 adults and 24 chicks 12 months ago to 42 adults and 149 chicks currently.

**Sewing training**

Training has been completed in Surkhet after 12 women from 8 village groups were apprenticed for 3 months in Gurung Gaun. HPC has partnered with the local Municipality who have provided 5 out of 12 sewing machines and HPC are providing the remainder. HPC is also providing trainees with trainer’s fees and all training materials while participants each provide NRs 5000/- that is used to buy cloth that they will then use for sewing clothes. When these are sold they will then be repaid the initial investment, creating a fund that is used to buy more cloth.

**Blacksmith training**

This involves providing basic and advanced blacksmithing skills’ training and tools for farmers so they can learn the basic skills of tool manufacture and maintenance. Farmers taking this training are able to produce and maintain tools for their community while providing them with a significant proportion of income needs.

**I**n Surkhet a 5-day training was given to 4 men in basic blacksmithing. There are currently 5 blacksmiths from previous trainings active and have produced nearly **900 tools** and maintained/repaired a further **800 tools** including sickle, axe, plough tips (wooden plough, iron tip), chisel and other household and farming implements. This has earned them collectively over **NRs160,000/-** (about £1000).

**Leatherworking training**

This activity aims to train local farmers in leatherworking using livestock hides that are normally thrown away, instead processing them into useful and marketable products such as bags and shoes. In this period 5 farmers in Humla have received the 5-day training.

**Furniture making training**

In February a 5-day training was held at the Surkhet RC in Tadhiket. There were 21 participants (6 women and 16 men) and participants learned about working with bamboo and local timber. Outputs of the training were various items of furniture including 3 tables, 5 benches, 2 chairs and 2 racks (shelving units).

1. **CAPACITY BUILDING PROGRAM**

**Permaculture Design Course (PDC)**

This was planned to be delivered in early May but has been postponed due to the lockdown.

**PDC Follow-up**

In Humla a 1-day follow-up workshop for Permaculture Design Course participants was provided to 2 women and 6 men. They discussed application of design ethics, principles and process in running of their own farms and in the broader community.

**Organisational development:Business and Marketing Training**

**Organic Certification**

HPC is researching into methods of product certification with an aim of supporting farmers’ groups to gain and improve market access for their products grown and produced within its permaculture programs. It identified in particular the **Participatory Guarantee System** ([PGS](https://en.wikipedia.org/wiki/Participatory_Guarantee_Systems)) of certification They have now entered into partnership with the Social Work Institute in Kailali district. SWI is providing PGS training to implement a **community organic certification program** over 2020-2023, providing training and capacity building for HPC staff and groups, and enable certification of various farm produce under the PGS system.

In this period HPC hosted an SWI-organised PGS training at Gumi demonstration farm (home of CEO Bhuwan Khadka and BC Hommaya Gurung) for 18 members (2 women and 16 men) of their network in 8 districts (Surkhet, Kailali, Kanchanpur, Bardiya, Dailekh, Jumla, Rolpa and Mugu). Topics included registration, methods of crop record keeping (crop types, seeds, composting, yield measurement), certification (village, district and regional-wise). There were 4 representatives from HPC: 1 staff and 3 BCs. Previous to the PGS training HPC had provided the same 8-district participants with a 5-day farmers’ training (see below) entitled “How to Grow Organic”.

**Accounting training**

As part of the PGS program SWI have also provided accountancy training to 2 HPC staff to keep them updated on (ever-changing) government reporting regulations.

**Farmer-Farmer extension**

HPC continues to facilitate farmer-to-farmer meetings and exchange workshops. These usually also combine with barefoot consultants’ capacity building and also the Humla management commitee. In the current reporting period there have been 8 workshops in Surkhet (3) and Humla (5).

**Barefoot Consultants' Workshop**

In Humla a 1-day experience-sharing workshop was held at the RC for 10 barefoot consultants (BC) where they shared challenges, successes and future plans.

To date 70 BCs have been able to teach in HPC trainings both within its working areas and beyond. HPC has designated 3 categories according to their abilities:

*Category 1* – have lead/facilitated a 5-day farmers’ training, livestock health training, mobile training, mobile women’s health training and any technical training

*Category 2* – have supported a Category 1 trainer and co-facilitated similar trainings

*Category 3* – have taught a single-subject technical training e.g. grafting, stove making, etc.

**BCs provide Farmers’ Training for other Organisations**

As part of the agreement to learn and become PGS organic certified HPC has provided 5-day Farmers’ Training in “How to Grow Organic” which is covered in its basic 5-day integrated farmers’ training. The training was held at Gumi demonstration and training centre for 18 participants (2 women and 16 men) from 8 districts of Western Nepal.

Another 5-day integrated farmers training was provided at the Gumi farm for 6 members (2 women and 4 men) of “Nepalko Sathi” a grass roots NGO based in a remote region of Sankhuwasabha district in Eastern Nepal

In addition, the Gumi farm hosted a visit by 20 farmers (5 women and 14 men) from the “Hate Malo Cooperative” based in Dailekh district to the north of Surkhet.

**Agricultural Festival**

HPC’s annual Surkhet Farmers’ Agricultural Festival was held at Gurung Gaun across the river from the new RC at Tadikhet in March. About 400 local villagers attended. Groups made their own stalls for exhibitions of agricultural produce and handicrafts; prizes were distributed for demonstration farmers (see above); there was a grafting competition, inter-village sports competitions of shot-putt and volleyball, and cultural dance and singing competitions.

**Community contributions**

Community contributions to activities over the past 6 months in Surkhet and Humla are detailed in **Annex B (worksheet 4)**. They show a total contribution of **683 person days** with a monetary value of **NRs 341,500/-** **(GB£2,140).** Activities include building and maintaining community infrastructure (paths, bridges, water courses, mills, schools and community learning centres), and direct contributions to HPC programs such as porterage of equipment, construction of mills and schools’ drinking water systems.

**HPC Website**

HPC’s website, [www.himalayanpermaculture.com](http://www.himalayanpermaculture.com) was created February 2009. Up to the time of this report (May 2021), nearly **300,000 hits** have been recorded.