

Himalayan Permaculture Centre

<http://www.himalayanpermaculture.com>

Building Household and Community Resilience

Phase 2, End of year 2

Date of this report: November 2014



Introduction and background

This report summarises activities carried out by the Himalayan Permaculture Centre (HPC) in its working areas of Surkhet and Humla districts during the period March to September 2014, and includes data from the previous 6 months to provide an annual overview of achievements. This ends the second year of HPC's 3-year "Building Household and Community Resilience" program, and activities are reported below. This project is currently being supported by KCF (82%) and Lush Cosmetics (18%).

Highlights

- Women in HPC's areas in Humla celebrate Teej festival for the first time (see 2.1)
- Villages outside of HPC areas continue to make smokeless stoves (see 1.2).
Stoves' video available on [You-tube](#) (see below 1.3, p.6)
- HPC again delivers clean drinking water at a cost of only **£40 per household or just over £5 per person** (see 2.2)

Working Areas

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

		Households	Women	Men	Total
Surkhet	2 VDCs, 10 villages	171	514	589	1103
Humla	3 VDCs, 11 villages	269	755	829	1584
Total	5 VDCs, 21 villages	440	1269	1418	2687

Activities

1. FOOD SECURITY PROGRAM

1.1 Resource Centers

HPC's 2 resource centres (RCs) have continued to develop and provide multiple benefits of food production, demonstrations, training facilities and supply of vegetables, fruit and multi-purpose seedlings to local groups. Section 1.3 below also details increasing use of the RCs' facilities for training purposes. Much of the seedling production has now been handed over to village groups from fruit and kitchen garden nurseries. The RCs also provide a function of research into new species, varieties and cropping patterns, especially if success is unsure, as farmers cannot afford the risk of failure of a crop.

Over **108kg** vegetables were produced from Baragaun's 0.4 acre Resource Centre farm over the past 6 months bringing the 12-month total to **237kg**. Fodder grass,

mainly from Napier, has been 210kg making a total for the year **962kg** (including tree fodder, which is cut mainly over the winter).

At Baragaun RC diversification into agro-forestry systems has continued and a further **258 trees and shrubs** have been planted over the monsoon, including mulberry, comfrey, lemon grass and sugar cane. From the RC nurseries a total of **33 multi-purpose trees and shrubs** have been planted at the school. In addition the RC has produced **313 grafted fruit trees** for distribution that will happen over winter.

Also at Baragaun RC an extra **400W of solar panels** have been added to the existing 220W system to provide extra power for slide and film shows and running the centre's laptops and printer. A new **bamboo training hall** has also been added to cater for larger groups.

At Dapka RC in Humla, over the past 6 months **1140kg of vegetables** have been harvested from **15 varieties**, making a total of **3070kg** for the year, while over **2500kg of fruits** have been harvested from apple, peach, plum, pear and walnut trees. Hazelnut trees brought from UK 4 years ago have also produced their first nuts. A further 38 trees and shrubs have been planted on the RC (a total for the 12 months of **277**), and **510 seedlings** distributed to the local community (total for the year **769**).

1.2 Farmers' demonstrations

Purchase of tools, seed and other materials from this budget line have now ceased, although other activities have continued as below.

Farmers making integrated demonstrations

HPC has been carefully cataloguing the number of households enacting the various techniques demonstrated and taught and these are recorded in the table below, which is a summary of all practical work carried out in the groups from April to September, and total for year 2. Figures represent no: households practicing each technique.

Most of these activities are illustrated in the Farmers' Handbook.

Practical Activities	April-Sept 2014			Previous 6 months	Total year 2
	Surkhet	Humla	Total		
No: households implementing	170	272	442	432	442
House hygiene	167	197	364	256	364
Stove	50	16	66	62	128
Toilet	31	12	43	47	90
Grinder	167	142	309	181	330
Water pot	167	205	372	241	372
Hay box	0	0	0	0	0
Sweepings	74	55	129	129	258
Waste water management	17	204	221	185	267
Plate/pot rack	65	15	80	90	170
Compost	85	1	86	48	134
Fodder trough	15	1	16	21	37

Salt lick	18	21	39	77	116
Kitchen garden/vegetables	165	241	406	173	406
Mulching	7	0	7	8	15
Liquid manure	19	8	27	34	61
hot bed	0	0	0	32	32
Leaf pots	32	52	84	38	122
Home nursery	0	0	0	0	0
Fruit nursery	17	1	18	139	157
Air nursery	8	0	8	39	47
Off season onions	0	4	4	11	15
Grafting	25	47	72	100	172
Budding	3	11	14	16	30
Top grafting	0	1	1	8	9
Air layering	55	19	74	40	114
Pot irrigation	4	3	7	17	24
Orchard	13	41	54	27	81
Agro-forestry	3	1	4	7	11
SRI	31	17	48	0	48
Green manures	0	2	1	1	2
No till	0	0	0	0	0
Bamboo cuttings	0	0	0	2	2
Improved plough	0	18	18	191	211
Fruit tree Pruning	2	14	16	60	76
Greenhouse	1	2	3	13	16

HPC is starting to assess which of these households constitute integrated demonstrations. Some households are only practicing a few techniques in and around the house and not so much in the fields, some have started to apply most of the techniques all around their farms. From this assessment will emerge a ranking of farmers in 3 grades: those applying most/all of the techniques, those applying many, and those applying just some/few. Beyond just the techniques HPC will be looking at the farmers' role in facilitating the spread of the techniques amongst their community and beyond. These are chiefly the **barefoot consultants**, who have received the Permaculture Design Course, Trainers' Training, and have enacted most of the techniques on their own land.

Fruit and multi-purpose tree production

There are 2 main seasons for tree raising and planting: the winter, when most fruit tree grafting is done, and fruit trees grafted the previous winter are planted, and the summer, during the monsoon, when most other types of tree and shrub are planted. Some grafted fruit trees are also planted in the summer, especially where water may be a limiting factor if planted in the winter, affecting the survival of the young plants.

The table below summarises the number of fruit trees grafted over winter, the number of grafted seedlings distributed/planted (both sets of figures reported in the previous report which covered the winter grafting and planting period), the number of grafted stock in nurseries awaiting distribution this coming winter, and the number of non-grafted fruit and multi-purpose seedlings planted/distributed over the past 6 months.

	Grafted Jan-Feb 14	Grafted seedlings planted	Successful, ready for distribution	Non- grafted planted
Surkhet	800	145	257	6443
Humla	2526	1368	2251	132
Total	3326	1513	2508	6575

Grafted species include apple, pear, peach, walnut, plum, apricot and almond. Details are given in Annex C. A total of **6575 seedlings** comprising **35 species** of non-grafted fruit and multi-purpose trees and shrubs have been planted in both areas over the summer. Non-grafted fruit includes orange, lemon, lime (and several other types of citrus), banana, guava and pomegranate. Other species planted for fodder, fuelwood and other useful products include soapnut, cardamom, tree cotton, mulberry, bamboo, Moringa, comfrey, alder and pepper tree. Planting is also done for windbreak, soil erosion control and establishment of living fences/hedges.

SRI Rice Farming

Numbers of farmers practicing SRI rice growing principles are steadily increasing. This year 48 farmers are documented. Usually they are trying it out on a small plot of land – the total under SRI is only 0.4Ha (1 acre) though some farmers, who have been practicing for a number of years, are increasing the proportion of their paddies as they get used to the technique. Rice harvest figures are not available for this report as the harvest is still being gathered, and will be presented in the next report.

Community Funds

Each of HPC's village groups maintain a community micro-finance fund where they collect a monthly deposit from each member and use the funds collected to provide loans for various income generating activities or emergency needs. This reporting period's audit is summarised below:

	Loans given	Expenses	Cash	Total NRs	GB£
Humla	97,800	0	46,000	1,43,800	915
Surkhet	6,67,111	1,16,485	45,699	8,29,295	5,283
Total	7,64,911	1,16,485	91,699	9,73,095	6,198

Examples of loans given are for livestock purchase, small business investments, school fees, medical expenses and food purchase. Examples of “expenses” include paying grain fees for a community owned breeding bull or goat, stationary and general running costs for the fund, and community feasts.

Stoves Evaluation

As described in the previous report, HPC has achieved 100% coverage of its smokeless stove building program in Humla, with all households having built 1, sometimes 2 stoves over the past 3 years. At present HPC is evaluating the use and benefits of the stoves, for which a consultant from *Sarkari Samaj* Mr Punaram Panthi has been facilitating participatory evaluation methods in Humla. The full report will be summarised in the next reporting period.

As well as achieving 100% coverage in its own area (total 269 stoves) HPC has recorded over 100 other stoves built in Kalika VDC where it has 1 group in Barigaun

(i.e. in addition to the stoves of its own group). In Kalika and other surrounding VDCs there are known to be other unrecorded stoves as well, but the number is not sure.

HPC is also observing that some householders are starting to modify the stoves, which is possible because a) they have understood the main need of smoke control and firewood saving, and b) because they are built with local resources, skills and tools. This ability to modify of an introduced technology is an indicator that the technique is becoming sustainably embedded in the society. Villagers can then adapt the basic principles to other designs that better fit their needs.

In this case, stove modifications include:

- having a dual mouth making 2 stoves with one chimney (to be able to cook a large pot independently on the second stove)
- having a slit for cooking *roti* (chapati)
- having an extra plug for cleaning out ash

In total HPC has built **378 stoves** in its working area.

It has spent **NRs 37000/- (£235)** to build **185** of these using its **barefoot consultants** to train villagers.

If the iron stoves are provided, costing NRs 10000/- (£64) a piece, as advocated by some development programs, 185 stoves would be **NRs 1,850,000/- (£11,783)**.

378 iron stoves would cost **NRs 37,80,000/- (£24,076)**

1.3 Farmers' Training

Different formats of farmers' training have continued since the last reporting period. There are 3 main formats: residential 5-day farmers training held at the Resource Centres (RCs); mobile 3-day trainings held in the villages, and short single-topic trainings of 30 minutes to a few hours, which may be held at the RC or in the villages. Topics are decided depending on season and stakeholder needs. Mobile trainings may be general or for specific topics such as livestock health (see below 1.4) or women's health (see below 2.1). In this period technical trainings have included stove making, budding, seedlings planting, mushroom growing, air layering, leaf pots, SRI rice cultivation and beekeeping.

A training summary is below.

Surkhet	No: Trainings	Days	Participants		
			Women	Men	Total
Residential Farmers' Training	1	5	2	13	15
Organisational Capacity building training	1	4	2	13	15
Mobile Farmers' Training	4	12	23	31	54
Technical Trainings	29	19	94	149	243
Total	35	40	121	206	327

Humla

Residential Farmers' Training	1	5	9	12	21
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Mobile Farmers' Training	6	14	63	72	135
Livestock MT	2	6	19	17	36
Technical Trainings	34	23	209	136	345
Total	43	48	300	237	537
Total All Areas	78	88	421	443	864
Last reporting period	69	100.5	382	398	780
Total for the year Oct 13-Sept 14	147	188.5	803	841	1644

Slide and Film shows

In Surkhet and Humla staff have been showing slides and films in the villages using solar-powered pico-projectors. In this reporting period **11 slide and film shows** have been shown in villages and HPC Resource Centres, to a total of **300 villagers (104 women and 196 men)**. Thus the total for the past 12 months is **34 slide/film shows to 1041 people (479 women and 562 men)**. Slide shows have included erosion (environmental, social and economic), green manures, orchard management, vegetable growing, toilet construction, soil conservation and regeneration, agro-forestry and integrated pest management. Films have included Child marriage, and HPC's very own video about construction, maintenance and use of its smokeless stoves (see below).

Stoves Video

The stoves' video produced by HPC staff as described in the previous report is available on You-Tube, for the Nepali version see <https://www.youtube.com/watch?v=lhzOK5GjqIA>. **To see the video with English subtitles, click on the subtitles icon in the bottom right hand corner and select English.**

1.4 Livestock

HPC's Livestock program encompasses 3 main areas: farmers' training, stock treatment and provision of improved breeds.

In this period, mobile Livestock Health Training has been provided in **2 villages** in Humla to a total of **36 farmers (19 women and 17 men)**. Details are provided in **Annex E** under Mobile Farmers' Training (see also above 1.3). Topics in the training include:

Topic	Issues
Balanced diet	Grain, fodder (raised off the ground/fed in troughs, chopped), salt lick, mixing with grain husk (otherwise a waste resource)
Breed improvement	Selection of good livestock and introduction of improved varieties and maintaining genetic diversity
Shed Hygiene	Keeping shed clean; maintaining air flow (windows)
Treatment	Importance of timely treatment; use of local herbs

For treatment of livestock, trained technicians have been providing clinics in each village. A summary is given below:

Livestock treatment: Combined summary for this reporting period

	Cow	Buffalo	Goat/sheep	Horse	Chicken	Total
Humla	262	16	272	3	4	557
Surkhet	0	0	198	0	0	198
Total	262	16	470	3	4	755

Treatment	Humla	Surkhet	Total
Internal parasite	430	171	601
Castration	54	27	81
External parasite	71	0	71
Colic	2	0	2
Total	557	198	755

Over the past **12 months** the combined summary of livestock treatment is as follows (including health camps held in the previous reporting period, and village visits) :

	Cow	Buffalo	Goat/sheep	Pig	Horse	Chicken	Total
Humla	272	16	333	0	3	4	628
Surkhet	42	26	556	3	0	0	627
Total	314	42	691	3	3	4	1255

Treatment	Humla	Surkhet	Total
Internal parasite	430	600	1030
External parasite	121	0	121
Castration	75	27	102
Colic	2	0	2
Total	628	627	1255

Breed Improvement

In Humla **2 male goats** have been provided to 2 groups (in Chihi and Dapka villages) for breeding purposes.

In Humla, **Livestock fodder seed** has been distributed to 14 households in 8 villages: White clover 2kg, Grazing Rye 1kg and Alfalfa 1kg.

1.5 Irrigation

Irrigation systems implemented in this period are part of drinking water systems (see below 2.2) where tapstands are designed to feed sprinkler systems for home gardens and nurseries.

2. HEALTH PROGRAM

2.1 Women's Health Program (WHP)

Women's Health Training (WHT)

In the previous reporting period a WHT for **17 women and 2 men** was held in Surkhet (see previous report. During this reporting period a similar training was held in Humla, followed by the Women's Health Camp (WHC – see below). In this 5-day training **15 women** received training in a range of topics as described below:

Topic	Issues
Gender	Effects of cultural practice and effects on health e.g. education, taboos
Physiology	Differences between external and internal female and male reproductive organs
Adolescence and puberty	Physical and psychological changes in girls, and importance of health issues at this time
Menstrual cycle	Health, hygiene, workloads and cultural issues (taboos, discrimination, etc.)
Common reproductive system-related ailments	Symptoms, importance of health, hygiene, diet as preventative and curative measures; treatment using simple techniques and local herbs
Family planning	Temporary family planning methods used by men and women; effectiveness; side-effects on women; need for gender-participation
Pregnancy and childbirth	Growth stages/process and the importance of health, diet; dangers
Women in the economy	Role of women; access and control of finance; means of production
Herbs for women's health	Reliance on allopathic drugs, their side-effects and correct use; examples of local herbs and their use; empowerment through use of local resources

Mobile Women's Health Training

An abridged version of the WHT is provided in the Mobile WHT that is delivered directly in separate villages, allowing more women to attend compared to a residential course. In Humla **3 mobile WHTs** have been provided to a total of **71 women and 5 men**.

Over the past 12 months a total of **18 Mobile Trainings (WHMT)** have been facilitated by HPC staff in Humla and Surkhet for a total of **389 women** throughout the reporting period.

Humla Women's Health Camp (WHC)

In August HPC collaborated with the local VDC Health Post in Madana to run a 2-day women's education and health camp at the local Health post in Lotpata village of Madana VDC. As the title suggests, 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 3 local VDCs in southern Humla (Madana, Maila and Kalika) 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

In total **263 women** and **10 men** received treatment and counselling for a variety of ailments, summarised in the table below.

Diagnosis	No. patients	Herbal Treatment (if used)
Prolapsed uterus	32	Ring fitted, counseling, yoga
Uterine cramps	5	Counseling, heat treatment
White discharge	41	Counseling, hygiene, neem oil (<i>Azardirachta indica</i>), katuko (<i>Neopicrorhiza scrophulariiflora</i>), chiraito (<i>Swertia chirayita</i>), tito
Backache	6	Rest, posture, counseling
Vaginal itching	12	Neem oil, counseling, <i>katuko</i> , <i>tito</i> , <i>chiraito</i>
Urinary tract infection	7	Bathe with neem water
Eye ache	13	Re-hydration, willow bark, reduce smoke in kitchen
Wound on uterus	14	Rest, posture, counseling, <i>katuko</i> , <i>tito</i> , <i>chiraito</i>
Gastric ulcer	10	Herbs (<i>dhubo</i> , <i>Cynodon dactylon</i>), fenugreek, milk
Headache	12	Re-hydration, reduce smoke in kitchen
Worms	89	<i>Shiru</i> root, hygiene
Irregular menstruation	5	
Pregnancy test	4	
Infertility	4	Counseling
Diarrhoea	7	Neem oil
Weakness/lack of energy	4	Rest, yoga, diet
Cough	7	Rest, reduce smoke in kitchen

No menstruation	1	Counseling
Total	273	

A similar health camp was provided in Surkhet in March and was detailed in the previous report. The table below combines results from the two Women's Health Camps

12 months	Diagnosis & Treatment		Referral		total
	f	m	f	m	
Surkhet	62	9	0	0	71
Humla	263	10	8	0	281
Total	325	19	8	0	352

HPC has also provided an autoclave for the VDC health post to be used at its health camps and for use at other times.

Women's Health Network (WHN)

The WHNs have continued to meet every 3 months in Humla and Surkhet. They discuss a range of topics including preparing for training programs and health camps, hear stories from the villages of violence against women, and how to increase cooperation with government line agencies and NGOs.

Teej Women's festival held for the first time in Humla

In Humla the Women's Health Network (WHN) organised a Teej festival women's dance program. Teej is a traditional festival for women held throughout Nepal, where women gather together to share stories, sing and dance. In Humla, however, this festival is not traditionally held because of the patriarchal concept that women are not allowed to dance (read: enjoy themselves!) in public. Mainly due to HPC's work in awareness raising and health education for women over the past years' women have been empowered to agree to hold the festival for the first time in southern area of Humla (and the men, similarly empowered, have agreed). At the festival, held in August, women from all HPC villages in Humla gathered at Madana High School and sang songs about religion, and how the culture of violence against women must be changed, and how men must support women in this change. This is an important step for women in Humla to have taken, and an indicator that the women's empowerment programs of HPC are having a positive effect.

2.2 Drinking Water

HPC has used its traditional method of non-cement tanks to capture springs before piping water through break tanks to tap stands in the villages.

In Surkhet 2 **systems** providing **20 taps** have been built in addition to the 2 reported up to March. The new drinking water systems, for Ghatutol and Salghadi villages (Himal and Pragatshil groups respectively) are integrated with sprinkler irrigation for kitchen gardens and nurseries. In total **22 households** comprising **145 people (67 women and 78 men)** have been provided drinking water, which also benefits **658 livestock**.

As an example of the low cost of the systems HPC constructs, the following table illustrates costs for Salghadi system:

Salghadi	NRs	GB£
Cost	63359	403.56
Cost per h-hold	6336	40.36
Cost per person	812	5.17

Local community labour contribution to these 2 systems totalled **329 person days**, valued at **NRs 98,700/- (GB£630)**.

EDUCATION PROGRAM

3.1 Practical Literacy Classes

This activity involves running practical literacy classes in Humla and Surkhet. 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 stove, nursery, toilet, hygiene, diet, fruit tree grafting, etc. At the same time as developing their literacy skills, they also apply the methods in their own houses and fields.

Four PLCs (2 in Surkhet and 2 in Humla) have run for 9 months and are now complete. In total **80** villagers were enrolled in the PLCs (**77 women and 3 men**).

3.2 Schools' Program

In Humla 62 exercise books and 54 pens have been distributed to the children that have successfully grown seedlings distributed in the previous report (that's 116 out of 130 seedlings distributed).

In Surkhet classes have continued to be provided at **Sidheswori Primary School** in Baragaun. Details are below:

Topic	Hours	Girls	Boys	Total	Outputs
Planting seedlings	1	5	5	10	12 Asian pepper trees planted in school fence
Compost making	1	7	4	11	3 compost heaps made
Mulching, companion planting	1	10	8	18	6 seedlings planted, mulched and companion planted
Kitchen gardening	1	10	12	22	Beans, pumpkin & cucumber planted at school
Using local medicinal herbs	1	4	4	8	Use of <i>Artemisia</i> as antiseptic on fresh wounds
Weeding	1	4	7	11	Fruit nursery weeded
Making teaching posters	10	3	3	6	6 posters made
Games playing	1	10	12	22	rules of games & discipline explained
Total	17	53	55	108	

In total **169 seedlings** have been planted by pupils at the school, including Asian pepper tree (timur), mulberry, comfrey, lemon grass and broom grass.

As well as leading vocational classes, the HPC staff responsible for its school programs Mr Milan Khadka would step in to classes if teachers were absent to make sure there was an adult present, and would facilitate regular classes as well.

3.3 Education materials

This activity involves purchase and distribution of the Farmers' Handbook (FHB) to groups in HPC working areas. The first edition of the FHB was printed in 2001 (7500 copies), and a second edition has now been printed (1500 copies). This includes new chapters on **Hay Box Stove, Urine Collection and Use** and **SRI Rice Farming** as well as introductory chapters on **Climate Change** and **Value Chain Marketing**. In this reporting period **100 sets** of the FHB have been distributed to groups in Humla and Surkhet. In addition 500 copies of the **Livestock Health and Management** chapter have been separately printed and distributed, with additional information on herbal remedies for livestock included. Finally a video is being produced based on the Livestock Health chapter which will be completed during the next reporting period and shown to village groups.

LIVELIHOODS PROGRAM

4.1 Beekeeping

Training has continued in various aspects of beekeeping, in total **32 farmers (4 women and 28 men)** from 6 villages have received training in a range of topics including hive management, wax processing and top-bar hive making. Details of training are given in Annex E (worksheet 3). In Surkhet as a result of training over the past 2 years there are **27 hives** (26 Newton and 1 top bar) belonging to **12 farmers in 4 villages** recorded as containing bees. Details of honey production are currently being recorded and will be presented in the next report.

4.2 Vegetable seed production

Following cooperation with the District Agriculture Office (DAO), in May a training in vegetable seed production was provided by the Chief Horticultural Officer Mr Padam Subedi. A total of **18 farmers (4 women, 14 men)** received the 3-day training at Baragaun RC. Topics on the training included:

- importance of seed saving
- development of seed
- seed saving location
- types of vegetable
- pollination
- crossing in varieties
- maintaining purity
- methods of seed saving
- selecting seed plants
- caring for seed plants
- harvesting seed
- maintaining purity

In Surkhet farmers that have received seed production training have produced **2.6kg Broadleaf mustard, 2.8kg Daikon radish, 1.0kg Broad bean, and 0.5kg Fenugreek**. Of this, they have sown some themselves and exchanged most for other seeds produced in the community. Some have been sold, and some HPC has purchased to send to Humla.

4.3 Sewing

Following last year's training for apprentices in Surkhet, during this reporting period 5 apprentices comprising 2 women and 3 men from 5 groups in Humla were trained by sewing master Ganesh Nepali from Dalitbada (*Lokesh Janajoti* Group). Apprentices were each provided with a foot pedalled sewing machine on which they learned to cut

and sew the traditional kurta suruwal (men's trousers and cross-over top), choli (women's cross-over top), shirts, trousers, pettycoat and other items. The training lasted for 3 months.

Nettle Cloth

In addition to the 3 spinning wheels reported previously, the District Handicrafts Office in Surkhet has provided another 2 wheels at 40% reduced cost. Villagers have started to produce yarn and samples were sent to Kathmandu for assessment. This has led to the first order for yarn, which is currently being produced.

4.4 Herbs development

Four farmers in Surkhet have continued to plant various medicinal herbs as demonstrations on their land, in kitchen gardens and agro-forestry/forest garden plots. To date **102 plants** comprising **18 species** of medicinal plants have been established. Examples are mint, wild basil (*Ocimum tenuiflorum*), Bakaino (*Melia azadirach*), wild asparagus (*Asparagus racemosus*), and Asuro (*Adhatoda vasica*). HPC is now researching into the viability of establishing a herbs processing plant in Surkhet, and possible 1 in Humla, as part of Phase 3 of its program, starting in October 2015.

4.5 Cardamom

The training in Cardamom cultivation and propagation was completed and detailed in the previous report. Farmers are continuing to propagate and plant cardamom as part of agro-forestry development on their farms.

4.6 Mills

Construction is complete of a multi output hydro Mill in between Chaurgaun and Pakhapani villages in Rajena VDC of Surkhet. The mill currently produces flour and de-husks rice, and can be further adapted to extract vegetable oil and even plank timber. Because the total cost of the mill was greater than HPC's budget, HPC groups in the area have paid 64% of the cost of this project with HPC contributing the balance of 36%. There are **362 beneficiaries (170 women and 192 male)** of mill from **60 households** in 6 villages: Ghatutol, Chaurgaun, Subbatol, Pakhapani, and including 2 villages (Gurung Gaun and Haraldada) outside of HPC's working area. Community labour contributions for the mill totalled **221 person-days** (3 women and 14 men for 13 days), valued at **NRs 66,300/- (GB£422)**.

In Humla **5 mills** (iron shaft with wheel) have been donated to HPC by Mr Krishna Dhakal of KP Enterprises Pvt., Surkhet, and have been distributed to groups in Madana VDC either to replace aging wooden mills or construct new ones. KP Enterprises have previously supplied HPC with mill equipment and fitted the solar system at Baragaun RC.

CAPACITY BUILDING PROGRAM

5.1 Permaculture Design Course

No activities this year

5.2 Trainers' Training

No activities this year

5.3 Organisational development

A capacity building workshop for HPC has been held in Surkhet in September, with staff members from both districts attending. This has been an on-going training provided by specialist capacity building NGO *Sahakarmi Samaj* (meaning "Co-operative Society"). In this latest training held in September topics were:

- Review of activities
- SWOC analysis (strengths, weaknesses, opportunities, constraints) of organisation
- Staff management structure and policy
- Finance management policy
- networking opportunities

From HPC, 2 staff from Humla and 6 from Surkhet attended, together with 6 board members and 1 village group representative, total **15 participants**.

Sahakarmi Samaj has played a key role in the organisational development of HPC over the past 3 years and continues to provide bespoke support both formally and informally.

5.4 Farmers Field trips

as detailed in previous report

5.5 Farmer-Farmer extension

HPC continues to facilitate on-going gatherings of farmers in both working areas (aside from all the farmers' trainings, see above 1.3) where they have an opportunity to review activities, sharing their experiences and discussing successes and challenges as well as giving their hopes and expectations of the overall program and planned activities.

Farmers from HPC groups in Madana VDC (Sirupata, Seri, Lotpata, Dapka, Satthi, Dalaitbada, Bhadauda and Chihi) on their way to a farmers exchange visit to "*Shipti*" Farm in Srinagar VDC. There they saw a cold store that could be adapted to their own area, vegetable seed production, medicinal herbs cultivation, and interestingly, mulberry agro-forestry using plants and ideas from Madana several years ago, when HPC staff were working for a different grass roots organisation partnered to a UK charity Appropriate Technology Asia.

In Surkhet Farmers representing 10 groups meet every 3 months. In the 4 meetings over the year **22 women and 92 men total 114 farmers** have met. This sector includes the HPC farmers' festival, held in March and detailed in the previous report.

Review and Evaluation Meetings

Two review and evaluation meetings were held in Humla and Surkhet where group representatives and staff met to review activities over the past 12 months. Three questions were asked: what has gone well, what has been challenging, and what suggestions for improvement are there.

Community contributions

Community contributions to activities in Surkhet and Humla are detailed in **Annex B (worksheet 4)**. They show a total contribution of **1410 person days** with a monetary value of **NRs 423,150/- (GB£2695)**. In addition to the previous reporting period of **NRs 625,800/-** make a total for the year of **NRs 1,048,950/- (GB£6,680)**. Activities include maintaining community infrastructure (paths, bridges, water courses, mills, schools), providing emergency relief in the case of fire and flood damage, and direct contributions to HPC programs such as drinking water by portering of pipe and other equipment, and systems' construction.

HPC AGM

In April HPC held its AGM. The past year's activities and financial reports were presented to the 90 members present - out of a total membership of **106 (33 women and 73 men)** - and passed. Those board members at the end of their tenure resigned, and new members voted in. The current board comprises 5 men and 2 women.

HPC Website

HPC's website, www.himalayanpermaculture.com was created February 2009. By March 2012, **27000** hits were recorded. Up to the time of this report (Oct 2014), over **87,000** hits have been recorded.

Major problems that have restricted the progress of the project, and methods adopted or to be adopted to overcome them:

The presence of a large NGO in HPC's Humla area (Water Resources NGO, funded from Finland) is still challenging - they are debating whether to introduce iron stoves into the area. This would require each household to raise 3000/- of the 10000/- cost as own contributions as well as porter the stoves themselves from the nearest road head (4 days round trip). HPC is lobbying to get this debated by stakeholders, who are saying that they home-made stoves they have are good enough and will not be prepared to raise extra cash for a technology they don't need.

Other than the usual disruptions to travel caused by the monsoon, there have been no other significant problems for staff. Surkhet was one of the worse hit districts in the monsoon, with landslides more common and frequent catastrophic floods that have wiped fields clean of crops and soil. The government's response has been pathetic: NRs 5000/- (less than £90) for a farming family that may have lost their entire crop *and* land.

Activities planned for the 6 months:

All sectors have on-going activities continued from the first 2 years as follows:

Sector	Activity
1. Food Security:	Resource Centre operation, farmers' trainings, farmers' demonstrations, livestock, irrigation
2. Health	WHC, WHT, WHN, Drinking water
3. Education	PLCs, schools program, educational publications
4. Livelihoods	Beekeeping, vegetable seed production, herbs development, and mills
5. Capacity building	NGO/groups capacity building, farmers' field trip, farmer-farmer extension