

USC CANADA- Narrative Report

Name of Partner: Self Help Initiative Promotion Center (**SHIP-Nepal**)

Title of Program: Biodiversity Conservation and Agro-economy Security (**BASE**)

Reporting Period: 2012-013 (May to April)

1. Introduction

Organizational factors:

Staffing structure is the major component to achieve good result in the program; arrangement of staff is good in SHIP Nepal. No problem and issue are created by any staff till now. Everyone staffs are responsible on their right and duty. Monitoring and supervision of each staff is going in good manner from office to field. Regular staff meeting, orientation, feedback, interaction and personal review within the staffs are the tools for monitoring. Regarding **governance**, SHIP Nepal board, management committee and program executive officer and other program staffs are the governance structure. **Administration** and personnel policy are up dated time to time as necessary according to government policy. Every system is ruled under policy and management committee. If there are any problems created with in the staffs and other organizational system that will be solved through quick coordination and discussion meeting with in board and staffs. In case of **administration**, every system is managed in the admin policy and personal policy. Some are follow Nepal government rule and regulation, local level rule which as declare by district development committee (DDC) Humla.

Programmatic factors:

Social structure is good in relation during program implementation. Majority of cast are chhetri, thakuri, ethnic and dalit and all of their social, cultural, religious system and language are similar. These component supports to implement planned activities in well comportment and no such big problem created during planning and program implementation. **Economic** status of the SHIP Nepal program communities is very poor and their occupation is agriculture and livestock and their major income source is agriculture based. Most of time expensed in farm and income of farming communities is very low. People of working area are happy relating food security activities -biodiversity home gardening, hotel gardening, participatory varietal selection (PVS) -seed selection and improvement in farmers field with farmers and other income generating activities through farmers organization. Farming communities are very hopeful to increase their economic status through **BASE** program. **Political**: In these days, political issue are not in problem. SHIP Nepal has built strong local level partnership through community development committee (CDC), cooperatives and groups in each village and VDC. These partners are directly involved in program planning, implementation and supervision in direct coordination with SHIP Nepal. Regarding **environmental** situation overall SHIP Nepal program are environmentally friendly. No such environmental degradation activities are planned and implemented. All program activities are naturally supportive. Establishing biodiversity home garden, hotel gardening, toilet construction, ICS installing will support to conserve natural environment. In toilet construction, no environment destruction, stones are taken from agricultural land and old wooden are taken from their community jungle. Regarding sloppy land structure in SHIP Nepal working area, this organization always supports small irrigation (sprinkler and pipe irrigation).

2. Program Reach

Please see in appendix 1, about participants and beneficiaries involved in SHIP Nepal program over three years 2010/011 to 2012/013.

3. Phase in and Phase Out

No any communities are in *phase in and phase out* in SHIP Nepal program area. All communities are benefited from the program activities till end of 2015. From next year SHIP Nepal will start phase in and phase out in some communities for their sustainability. This year too, all 16 communities of 4 program VDCs are benefited from the activities.

4. Major activities for the period (including Table 1)

18 major activities are completed this year in which 5 under theme 1, 4 under theme 2, 3, 3 under theme 3 and 4, 1 under youth, 2 under SoS. Summary of each major/sub-activities of 4 VDCs are mentioned in annex 1 and 2 from table 1 to 18. Only highlight including objectives and process of major activities are mentioned under each theme.

Please see all the details of household, participants, beneficiaries, location in summary table-1 and annex-1, table 1 to 19, and annex- 2, table 1 to 18 (output supportive data) for major and sub-activities.

4.1. Seed supply systems and diversification of plant genetic resources

4.1.1. Deployment of crop diversity (PVS)

To increase the crop diversity, production, productivity of the area for food security, deployment of crop diversity is the major activity. Under this activities, 2 sub-activities, mother baby trial in finger millet and PVS for post harvest analysis in wheat and paddy. In both sub-activities, 105 household benefited and got seed 130 kg of foundation seed and technical support.

2 mother trails established at 2 locations and 23 baby trials at 7 locations in finger millet by 23 households. 4 kg of three varieties (what are these varieties?? Kabre-1, dalle and okhle-but seem same and name is given Kabre-1 brought from Kabre of dolakha) of finger millet seed were brought from Hill Crop Research Center, Kabre Dolakha district of Nepal. Each household received 0.1 to 0.2 kg of seed. However, farmer preferred good biomass and head type of improved varieties?? Which one ?? all are seem same the name is given Kabre-1 compared to local varieties at Raya and Pyusa of Lali VDC it was found delayed in ripening at Kharpelgaun of Kharpunaht and Gopka, Lali and Pyusa of Lali VDC. The trials succeed in Raya of Raya and Unapani of Sarkideu VDCs. In this year too, the seed were exchanged with in farmers for better performance in coming year.

Participatory varietal selection (PVS) is done in wheat and paddy crops for selecting farmer's preferred varieties after, mother baby trial completed in previous year. 97 households involved in this work. 103 kg of foundation seed of paddy (what are the varieties mention here-Lumle-2, Machhapuchhre-3, -completed and chandanath-1, chandanath-2, NR10482, NR 10479, NR 10682, NR 10695 distributed in this season) were distributed to those household at all four VDC. 23 kg of improved 6 lines of wheat (wk 1905, wk 1733, wk 1481, wk 936, wk 1204, wk 1712) seed distributed to 23 households. 4 mother trial for further improvement were done at Durpa (very high altitude), Lali and Raya middle altitude and Ripa of Sarkideu VDC very low altitude of the program areas. Wheat harvesting is under process. 103 kg of 4 certified varieties and 4 improved lines of paddy brought from LIBIRD organization Pokhara, NARC, Khumaltar Lalitpur, Jumla were distributed to 73 selected household. Out of these, two certified varieties (chandanath-1 and chandanath-2) and 4 lines (NR10482, NR 10479, NR 10682, NR 10695) of paddy seed distributed to additional 14 household at 7 location of the program VDCs in this season for high mountain rice research according to farmers demand.

Last year wheat baby trial harvesting and data collection work completed during this year. And the report was submitted to NARC-government wheat research center, Khumaltar, Nepal. After reporting, they also provided some additional wheat line to establish farmer field trial and previous year mother baby trial improvement.

Farmers' selection is done after cooperative/groups meeting. SHIP staffs facilitated to select the farmers in groups. Paddy and wheat foundation and improved line were brought from government sector NARC-National Agriculture Research council, Khumaltar, Lalitpur of Nepal and foundation seed of two varieties paddy seed were brought from INGO-LIBIRD Pokhara, Nepal. Paddy seed were distributed in two

seasons at begging of program implementation and at the end of program. Wheat harvesting is under process during reporting time. This distributed paddy seed under transplanting.

Summary of report is included as follows.

In preference ranking, characteristics of germination, growth, panicle formation, maturity, overall perception of farmer and technician; line wk 1481 found best (I rank) as compare to other four line and local varieties (pabai and bhabri) and line wk 1675 found II rank in Kharpunath, Lali and Sarkideu aula and this line found III rank in Sarkideu-4, Gusha in lekh bari. Line wk 936 and wk 1204 is found second II rank in Kharpunath-chhipra jiula aula in irrigated land and Sarkideu-4 Gusha lekhbari with rain fed land where as these line are found third best line in Sarkideu-7, Unapani aula irrigated land and line wk 936 is found III and line wk 1204 are found II rank in Lali-5, lali in rain fed cultivation. Line 1905 found in rank III in Kharpunath and Lali where as it is found in rank IV in Sarkideu-4 and 7 at Lekh bari rain fed cultivation and aula irrigated land. Local varieties pabai permanently growing in high altitude variety were placed in mother trial at two location and this variety found in rank II at Sarkideu-4, Gusa lekh bari rain fed area, in rank IV at Kharpunath-6, Chhipra jiula and in rank VI at Sarkideu-7, aula unapani jiula and local variety bhabri was cultivated at one location-Kharpunath-6, chhipra jiula found in III rank comparing other local variety and improved line.

Although the wk1481 preference ranking found best one out of 5 line in out look express characters however the productivity of these line is found lower than wk 1204, wk1905 and wk936. The productivity of wk1481 is 2.10 ton per hectare with 12.9% moisture content where as wk1905 has 2.64 ton per hectare with 12.8% moisture content. wk 936 line has found 3.52 ton per hectare with 14.3% moisture content and wk1204 has found 2.52 ton per hectare with 13.7% moisture content. WK 1675 line has found 1.91 ton per hectare with 12% of moisture content. Out of 5 line although moisture content is slightly high, per unit are productivity is better than other 4 line.

Local variety pabai growing in high altitude has found good productivity of grain and biomass than other improved line. Farmer are mostly preferred the wk 1481 line looking its out look express characters. 18 farmers have involved baby trial and result of production, other external characters and post harvest assess still remained with those farmers. In coming year, out of five line wk 1481, wk 936, wk 1204 and wk 1905 line still need to distribute for PVS for post harvest analysis.

Beside above, further information was taken about insect pest, lodging, grain shrinking. Black spot (kalo poke) in panicle and stem borer problem seen in wk 1675 at Lali-5, Lali and in all trial location such information did not found.

Grain yield of wheat in mother trial (established in previous year)

SN	Varieties used in mother trial	Total weight from 4 location in kg		Total area in ms	Combined production in hector (kg)		Productivity ton/hector		Seed moisture%	
		Fresh	Dried		Fresh	Dried	Fresh	Dried	Fresh	Dried
1	Pabai (local)	7	5.9	12	5833.33	4916.67	5.83	4.92	12.0	7.9
2	WK 1675	5.2	4.575	24	2166.67	1906.25	2.17	1.91	13.4	12.0
3	WK 936	9.35	8.44	24	3895.83	3516.67	3.90	3.52	19.4	14.3
4	Bhabri (local)	1.5	1	6	2500.00	1666.67	2.50	1.67	2.3	2.3
5	WK 1204	7.9	6.05	24	3291.67	2520.83	3.29	2.52	17.8	13.7
6	WK 1905	7.07	6.34	24	2945.83	2641.67	2.95	2.64	16.9	12.8
7	WK 1481	6.4	5.03	24	2666.67	2095.83	2.67	2.10	16.8	12.9

Biomass production of wheat in mother trial

SN	Varieties used in mother trial	Total weight from 3 location in kg		Total area in ms	Combined production in hector (kg)		Productivity ton/hector	
		Fresh	Dried		Fresh	Dried	Fresh	Dried
1	Pabai (local)	12.5	6.98	12	10416.7	5816.7	10.4	5.8
2	WK 1675	8.6	5.36	24	3583.3	2233.3	3.6	2.2
3	WK 936	10.1	7.27	24	4208.3	3029.2	4.2	3.0
4	Bhabri	2	1.75	6	3333.3	2916.7	3.3	2.9
5	WK 1204	9.2	7.4	24	3833.3	3083.3	3.8	3.1
6	WK 1905	12.1	8.3	24	5041.7	3458.3	5.0	3.5
7	WK 1481	11.8	8.03	24	4916.7	3345.8	4.9	3.3

Summary of finger millet and wheat farmer field trial established in the year 2012-013

Crop	Number of varieties included in mother trial		Location	Altitude in meter	Name of farmers involved in mother trial establishment
	Local	Improved/line			
1. Summer crops					
Finger millet	Riule (tinmase), dalle (mudule)	Kabre-1, okhle, dalle	Raya-3, Raya	2347	Bancha rokaya, Raya-3, Raya,
	Dalle, lapche	Kabre-1, okhle, dalle	Lali-8, Pyusa	2343	Manshara shahi, Lali-8, Pyusa
Winter crops (the production data is under recording)					
Wheat	Pabai	wk-1733, 1204, 1905, 936	Kharpunath-7, durpa	2810	Berma rokaya
	Auli, pabai	5(wk-1733, 1204, 936, 1481, 1712)	Lali-5, Lali	2115	Dharmajit hamal, Lali-5,
	not included	5 same as above+wk1905	Raya-3, Raya	2347	Bancha rokaya, Raya-3, Raya,
	not included	wk-1733, 1905, 1204, 936, 1481, 1712	Sarkideu-1, ripa	1805	Chandramati Nepali

Preference ranking in finger millet varieties

Plot number	Varieties	Soil fertility	Germination	Growth	Panicle formation	Ripening	Drop down	Scattering grain	Insect pest problem	Farmers preference	Technician preference	Average score	Overall preference
1	Kabre-1	4	5	5	2	2	2	2	2	5	5	3.40	II
2	Dalle local (mudule)	3	5	5	5	5	5	4	4	4	4	4.40	I
3	Lapche local	2	1	1	2	2	3	3	3	2	2	2.10	IV
4	Riule(tinmase)	1	3	3	3	3	2	3	2	3	3	2.60	III

Ranking done in 1-5; 5=most preferred, 1=least preferred

Production record of finger fillet in farmer field trial (FFT)

Grain yield record

Crops in diversity block	Total area in sq meter	Yield in kg		Yield in kg in hector		Productivity ton/hector		Moisture %	
		Fresh	Dried	Fresh	Dried	Fresh	Dried	Fresh	Dried
Kabre-1	12	6.127	5.118	5105.8	4265.0	5.11	4.27	14.41	11.9
Dalle local	12	5	4	4166.7	3333.3	4.17	3.33	14	11.8
Tinmase (riule)	6	0.685	0.682	1141.7	1136.7	1.14	1.14	12.19	12.2
Lapche local	6	5	4	8333.3	6666.7	8.33	6.67	14	12

Biomass yield record

Varieties	Total area in sq meter	Yield in kg		Yield in kg in hector		Productivity ton/hector	
		Fresh	Dried	Fresh	Dried	Fresh	Dried
Kabre-1	12	31	12.98	25833.3	10816.7	25.83	10.82
Dalle local	12	20	8	16666.7	6666.7	16.67	6.67
Tinmase (riule)	6	0.987	0.9	1645.0	1500.0	1.65	1.50
Lapche local	6	15	6	25000.0	10000.0	25.00	10.00

4.1.2.Home garden promotion

The main objective of home garden promotion is to establish and arrange daily requirement items for home and hotel (vegetables, fruit and egg/meat) for income and nutrition security of the farming communities. Two fulfill this objective; home and hotel garden are two sub-activities under taken in home garden promotion.

5 one day orientation organized with home and hotel owners in 5 different locations. 144 household with 13 hotel participated in the orientation. After orientation, 54.19 kg seasonal/off seasonal vegetable seed distributed in 2 season winter and end of this year to 315 HHs and support 597 meters of simple green house construction material to 50 HHs and 18 set (*polymer sheet, black plastic, net, seed other door fixing materials*) of improved model green house to 18 household. Out of this, 4 were in hotels.

The participants/beneficiaries are involved from organic agriculture cooperatives and groups members who are already practicing growing vegetables, fruit and keeping local chickens. They were taught to manage their home and hotel in professional way developing good garden in periphery of their home and hotel.

Importance of growing fruit and vegetables, growing practices/techniques, management idea after growing fruit and vegetables, seed collection/saving, dry item preparation to consume in dry season, practices of growing off-season vegetables farming in green house are the subject matter in discussion. After orientation, they were aware to establish home and hotel garden in proper way growing and managing in their home and hotels. Due to open land grazing after harvesting of their crops and minimum temperature, growing of vegetable throughout the year is not possible in the region. Similarly, clustered household arrangement (all households are combined to each other) and their fragmented farming land which is far from their house are the major challenges and problem to promote home garden.

SHIP Nepal aware the farming communities to grow seasonal and off season vegetables growing near around their home if possible and emphasise to establish agro-forestry (growing fruit, fodder plant) garden. Stress were given in hotel owner to grow fruit, vegetables and keeping local poultry and regular seasonal and off season vegetable farming as example. Similarly they were also encouraged to keep the possible crop seed in their home from coming year.

Diversity kits that consist of diverse vegetable seed (local and improved seed received from other district of Nepal) and government sectors vegetable research and development center, Khumaltar Nepal distributed to the participants household including green house construction materials.

4.1.3. Identification and promotion of local innovation and appropriate technologies

The main objective of planning identification and promotion of local innovation and appropriate technologies is to improve the local innovators profession those who are involved making agriculture tools, equipment and household utensil traditionally from generation to generation. This communities are iron smith (making iron work), tamata (making copper work). However they are working in iron and copper work from generation to generation, they have not sufficient and well managed tools to prepare agriculture and household utensil. From previous year SHIP Nepal supporting them a set of tools (iron base, hammer-big/small, sharpener, fire machine, and yank etc.).

Presently, as mentioned above, marginalized community Dalit (kami and tamata) are the local innovators who are involved generation to generation to make agriculture tools, equipment and household utensil. This year too, according to plan, four set of iron smith tools (iron base, hammer-big/small, sharpener, fire machine, and yank etc) were supported to 4 household at durpa, Kharpelgaun, pyusa and Raya. Beneficiaries were selected from cooperatives and CDCs.

Durpa community of Kharpunth VDC is non dalit -janajati and they are practicing from this generation to work in iron smith work. There is no dalit household in the durpa. However they have no required tools for the work. According to their demand (Organic agriculture cooperative-Durpa) one set of iron smith tools supported to them.

4.1.4. Documentation and assessment of PGRs, seed saver/ exchanger and custodians

Main objective of documentation and assessment of PGRs, seed saver/exchanger and custodian is to identify those seed saver/exchanger custodian with in farming community and work with them for get good result of the implemented activities. FGD and identification of those seed saver/exchanger custodian farmer and documentation of their plant genetic resources (PGRs) are the sub-activities completed 210 household directly benefited from this major activity.

SHIP N has aim to publish a booklet regarding core crop of Humla. This will do in coordinating with USC Asia Pokhara. Information collection work is continuing in this. Next year a draft will publish. This year, information collection for cultivation practices of core crop of Humla is been done.

One day focus group discussion were organized at 13 different location of the four program VDCs to identify seed savers/exchanger custodian farmers and four cell analysis of diversity status of the program area. Organic agriculture group/cooperatives members involved in the focus group discussion. 210 household were involved in FGD. During the FGD, 111 seed saver/exchanger custodian identified who are conserving actively the plant genetic resources within their community. **Out of total 111, most active custodian (seed savers/exchangers) diversity is documented according the format provided from USC Asia, Pokhara. Sidewise list of those custodian numbers is included in the remarks**

Custodian summary list is included as given below

VDC	Community/village	Number of Seed savers/exchangers		Remarks
		Man	Women	
Kharpunath	Takla/bamta	8	3	Parbal Bohora, Bhakta bahadur Shahi
	Kharpel gaun	5	7	Jayakaura Shahi, Mothilal Shahi
	Durpa	5	3	Devikanya Aidi
	Yangchu	2	1	Janaki Shahi
Total		20	14	6 (3 woman)

Lali	Deukhuri	1	1	Titu Jaisi
	Gopka	3	5	Matiu bista , Balchandra budha
	Lali	3	2	Lila kumara malli
	Pyusa	1	2	Manshra Shahi, Man bahadur Shahi
Total		8	10	6 (4 woman)
Raya	Karanga	4	5	Tara Shahi
	Raya	4	5	Bancha Rokaya, Jalkisara Budha
	Gumba/gumbadhara	3	0	Jasu Rawal, Gyami Kami
	Thali	5	1	Jadeni Rawal, Anga Bahadur Rawal
Total		16	11	7(4 woman)
Sarkideu	Lower Ripa	8	2	Jyapu Mahatara
	Upper Ripa	4	2	Tople BK, Prem Bdr Mahatara, Dhanrup Budathoki
	Unapani-Lekha	5	3	Shiddakali Phadera, a
	Unapani-Aula	8	0	Rangamal Phadera, Goide Phader
Total		25	7	7(2 woman)
Grand total		69	42	26 (13 woman)

4.1.5. Strengthen community seed system

Farmers are exchanging seed within their community, neighboring village, relatives what they see and experience from generation to generation. 4 coordination meeting organized with custodian farmers 110 household and 136 kg foundations and improved seed supported to 32 custodians/seed saver/exchangers for seed multiplication in wheat and paddy. To strengthen this seed supply system within farming community in systemic way 110 household directly benefited from orientation and seed support for the strengthen community seed supply system. During meeting, the most active custodian, seed saver/exchanger identified. Altogether 26 most active custodians' household identified. The diversity with all participants recorded. After meeting, 26 active custodians PGRs documented and sent to USC Asia Pokhara. The formatted was developed from USC Asia Pokhara. Some custodians are involved in PVS, mother baby trail, seed multiplication from this year. From coming year, rest of agro-biodiversity related activity will implement, monitor in coordination with these custodian.

12 hoarding board is prepared regarding seed exchange and diversity conservation by the custodians at 7 location. This is done for to encourage the custodians/seed saver and exchangers.

SHIP Nepal was started mother baby trial in some core cereal crops since last two years. From the good result of new crop varieties preferred by the farming communities in coordination with National Agriculture Research Centre Khumaltar in wheat crop, this year NARC suggested to multiply wheat crop seed with in farming community and 30 kg of 6 varieties of wheat foundation seed distributed to 6 household in 6 different location of wheat growing area in four program VDCs. After production, this seed will exchange and spread through the custodian farmers within their community from next year. Similarly, the end of this year, 106 kg of paddy foundation/improved seed distributed to 26 household for seed production. It is expected about 2 ton of improve wheat and paddy seed will be produced and will distribute to 300 household to increase food production. The harvesting of wheat is under process and paddy under transplanting.

4.1.6. Assessment and improvement of traditional crop varieties and landraces

Assessment and improvement of traditional crop varieties and landraces are regular major activities. This activity is started to verify the traditional crop varieties recorded from base line survey. In last 2 years back, buckwheat, Panicum millet, maize and bean in summer crop and wheat, naked barley and barley in winter crop diversity block were established. In this year finger millet the first core cereal crops, paddy and bean diversity block established in 5 locations. 51 households involved in assessment and improvement of traditional crop varieties and land races. Out of total household, 27 household in diversity block establishment at 4 locations, 26 in adding diversity of traditional landraces (Panicum millet) at 1 location and 4 household in local land race improvement at 4 location. Diversity block establishment work is incomplete at Ripa of Sarkideu VDC.

Details of diversity blocks established in various program VDC and communities. *We did not use the improved varieties in diversity block. In bean, we use only previous year major identified varieties of bean for production record.*

SN	Crop	Site	Total varieties(set) included	Local varieties	verified varieties
1	Finger millet	Raya-3, Raya Lali-8, Pyusa	set included 11 in pyusa, 13 in Raya	mudulle, mundale, riule, tinmase, rimale, karangeli, latte, lapche, dalle, dalya, collection from different location	latte, riule (tinmase), dalya (dalle, mundale, mudulle), lapche and latte
2	Bean	Lali-5, Lali	7 varieties	Rato, Seto malya, Kalo malya, Rato malya, Kalo sano, Kalo thulo, Pahelo golo thulo (selected from previous year diversity block establishment)	Rato, Seto malya, Kalo malya, Rato malya, Kalo sano, Kalo thulo, Pahelo golo thulo
3	Paddy	Kharpunath-6, Kharpelgaun-Kharpu	23 set	Khetalo, Kalo dhan, Bhuwadhan, Bikashe, Lamsero, khetalo, krishidhan, Palsale, Lasmado, Basmati chhomrong, nani dhan, jaudhan, churena, ratanpuro. Khachhya, Kalo marshi, budhale, geyime	chhomrong, nani dhan, jaudhan, churena, ratanpuro. Khachhya, Kalo marshi, budhale, geyime

Prepared 11-23 set of 100 gram paddy seed and raised nursery bed and transplanted in one square meter of land at Kharpelgaun. Similarly, 11 to 13 set of 50 grams of finger millet, 50 gram of 7 set bean varieties included in the block. Finger millet diversity was done in pyusa of Lali and Raya of Raya VDCs and bean diversity was done at Lali. 1 square meter of area was given to each set and seed collection from four program VDCs. Bean re-diversity block was done again for production and productivity.

Diversity assessment in Rice was done in presence of senior agriculture officer (Bharat Bhandari) Pokhara, SHIP Nepal agriculture officer and agriculture assistant.

Result showed out of 23 set of paddy, 9 paddy varieties identified, out of 11 to 13 set (different name) 5 finger millet varieties identified. Out of total identified varieties, 3 varieties are most preferred varieties paddy by the community of Kharpunath VDC, 2 varieties of finger millet most preferred by community of Pyusa of Lali and 3 varieties are most preferred by community of Raya of Raya VDC.

Traits analysis and variety verification in Paddy crop

SN	Variety name	Duplicating name	Traits
1	Kalo Marsi	Khetalo, Kalo dhan	Medium in maturity, black kernel, red rice, short awn, medium grain, highly susceptible to Blast and BLB
2	Chhomrong	Bhuwadhan, Bikashe, Lamsero, khetalo, krishidhan, Palsale, Lasmado	Late in maturity, high yield potential, tall, red kernel, Bold grain, high tolerance to Blast and BLB

3	Churena		Early maturity, short plant height, reddish straw colored grain, red kernel, bold grain, highly susceptible to BLB and blast
4	Khachya		Early maturity, short, bold, red rice, , highly susceptible to BLB and blast
5	Jau Dhan		Medium maturity, long awn, tall, medium grain, tolerant to Blast and BLB
6	Geyime		Early maturity, tall, Bold grain, awn less, red rice, tolerant to BLB and Blast
7	Ratanpuro	Basmati	Early maturity, bold grain, tall, red kernel with black lines, short awn, red rice, tolerant to blast and BLB
8	Budhale		Very similar to Chhomrong, mixed, medium maturity, short awn, red rice,
9	Nani Dhan		Simialr to Chhomrong, small grain, short, red rice,

It was noticed that there are many duplications with the same or different names particularly in Chhomrong and Kalo Marsi in diversity block collections. Budhale and Nani dhan seemed to be mixture of varieties that further needs to confirm at source. We discussed and oriented field staff to record some data of these nine varieties from the diversity bock plots.



Figure 1. Observation and assessment of rice varieties in diversity blocks at Kharpu

Traits analysis and variety verification in finger millet crop

<i>Finger millet verified varieties</i>	<i>Duplicating name</i>	<i>Traits</i>
Latte		Sweet in taste, grain scatter, low yield potential, flat panicle type, coffee color grain
Riule	Tinmase	Early maturing varieties, small grain and panicle, reddish color grain, low yield potential
Dalya	mudule	More yield potential, reddish brown color grain with more husk
Lapche	aangule	Sweet in taste, lodging, with flatten panicle type and dark red grain color
Rimale	karangel	drought resistant, lodging, low yield potential, medium panicle type with whitish color grain

Crop: Paddy

Characteristics	Preference ranking in paddy varieties								
	Chhomrong	Geyime	Nani	Jau	Ratanpuro	Budhale	Churena	Khacchya	Kalo marsi
Good in taste	2	2	3	2	3	2	2	2	3
Yield potential	3	3	1	2	1	1	2	1	2
Easy to threshing	3	3	2	3	3	2	2	1	1
Adapted to drought	2	1	3	2	1	2	2	3	2
Tolerant to pest and diseases	3	3	2	2	2	2	3	3	3
Tolerant to lodging	3	2	2	3	3	2	2	1	3
Adapted to marginal soil	2	3	2	3	3	3	2	3	1
Flavoring	2	1	1	1	3	1	1	1	1
Volume expansion after cooking	2	3	2	1	2	2	2	2	3
Other qualities (nutritious and medicinal values)	2	1	2	1	1	2	2	3	3
Total score	24	22	20	20	22	19	20	20	22
Average score	2.4	2.2	2	2	2.2	1.9	2	2	2.2
Overall preference	I	II	III	III	II	IV	III	III	II

Ranking done in 1-3; 3=most preferred, 1=least preferred

Crop: Finger millet

Characteristics	Preference ranking of finger millet varieties				
	Latte	Riule	Dalle	Lapche	Rimale
Good in taste	1	1	2	3	1
Yield potential	2	2	3	1	1
Easy to threshing	2	1	1	3	1
Adapted to drought	2	1	2	2	3
Tolerant to pest and diseases	2	3	2	1	1
Tolerant to lodging	2	3	3	1	2
Adapted to marginal soil	2	1	3	2	1
Volume expansion after cooking	2	2	2	3	1
Average score	1.88	1.75	2.25	2.00	1.38
Overall preference	III	V	I	II	IV

Ranking done in 1-3; 3=most preferred, 1=least preferred

Crop: Bean

Characteristics	Preference ranking of bean varieties						
	Seto male	kalo male	Kalo	kalo ghusimi	Sumalya	Rato male	Rato
Good in taste	2	3	3	2	1	3	2
Yield potential	3	2	3	1	1	2	1
Easy to threshing	1	1	1	2	2	3	2
Adapted to drought	2	3	3	2	1	3	2
Tolerant to pest and diseases	2	1	3	2	2	3	3
Adapted to marginal soil	3	3	2	2	1	3	1
Volume expansion after cooking	3	2	1	2	3	3	3
Other qualities (nutritious and medicinal values)	2	3	3	2	1	1	1
Total rank score	18	18	19	15	12	21	15
Average score	2.25	2.25	2.38	1.88	1.50	2.63	1.88
Overall preference	III	III	II	V	IV	I	V

Ranking done in 1-3; 3=most preferred, 1=least preferred

Production record of paddy, finger millet and bean from biodiversity block establishment

Grain yield record

Crops in diversity block	Total area in sq meter	Grain yield in kg		Grain yield in kg in hector		Productivity ton/hector	
		Fresh	Dried	Fresh	Dried	Fresh	Dried
Paddy	9	4.95	1.46	5500	1622.22	5.50	1.62
Finger millet	10	2.633	2.081	2633	2081.00	2.63	2.08
Bean	7	2.7	2.512	3857.14	3588.57	3.86	3.59

Bio-mass record

Crops in diversity block	Total area in sq meter	Yield in kg		Yield in kg in hector		Productivity ton/hector	
		Fresh	Dried	Fresh	Dried	Fresh	Dried
Paddy	9	5.71	2.99	6344.44	3322.22	6.34	3.32
Finger millet	10	17.69	9.68	17690.00	9680.00	17.69	9.68
Bean	7	1.88	1.54	2685.71	2200.00	2.69	2.20

4.1.7. Population improvement in local Maize (Tinmase), Finger millet and Paddy

After USC Asia Pokhara from Senior Agriculture Officer advice during his field visit, we started traditional crop varieties improvement after assessment of local crop in establishing biodiversity block.

In diversity assessment in maize crop in previous year, we found less diversity in maize crop and delay maturing of improved varieties and low productivity in local maize crop. Maize growing area is gradually increasing in SHIP Nepal working area. Farmers are growing different types of maize they got from exchanging within their community, relatives, neighboring and seed getting from different non government organization and government organization. The maize is open pollinated crop and crossing is seen as degenerating varietal traits in local varieties of maize and makes it susceptible diseases and pest problems thereby causing less productive (very short cob with mixed disorder grain and more disease seen). Similarly maize growing practices is very poor in the working area. For this reason SHIP Nepal started new initiation to improve maize crop to increase crop production for food security.

In previous year, Pyusa of Lali VDC selected for improving maize crop varieties and crop cut and better types of maize plant selected 20 kg of seed and distributed to 3 household for further seed improvement in the running year. They have grown in 0.1 hectare of land. They used their own traditional maize growing practices (broad casted and plough the land after harvest of wheat). Due to after harvesting of wheat, maize farming was delayed 10 days than usual. Out of total household, one maize growing household land is selected for seed production. Due to less care of cooperative members, household owner and the program staff's follow up, at the time of critical crop stages, thinning, de-teaselng, and selection that are crucial for gaining positive result in improvement. It has delayed and selection cycle one year back r. However, for further improvement in next year, 18 kg of seed is collected from selected plant and cob. Beside this, 325 kg of food grain of maize produced from the distributed seed selected in last year. In this, year, we added cross type Panicum millet variety (local name is kapitade) in Kharpelgaun, We purchase 72 kg of seed from Gopka and distributed to 26 household of cooperative member. We also started to

improve paddy in 2 varieties at Raya and Unapani and Finger millet at Gopka. We collected and distributed to prepare nursery bed in Chhomrong rice at Raya and in Lasmado at Unapani-Aula and finger millet at Gopka. We continue in maize improvement in same variety at Pyusa of Lali VDC and community strengthening is being done to take ownership to improve their traditional crop varieties. For details please see in the given table.

Progress in improvement of traditional crop varieties

	Kharpunath	Lali	Raya	Sarkideu	Total
1. Addition of diversity					
Location	Khapelgaun	0	0	0	1
Crop	Panicum millet	0	0	0	1
Variety	<i>kapitade</i>	0	0	0	1
Seed amount kg	72	0	0	0	72
Number of household	26	0	0	0	26
2.Crop improvement (maize, paddy, finger millet)					
Number of household involved	0	2	1	1	4
Adult	0	2	1	2	5
Female household	0	1	0	1	2
Male household	0	1	1	1	3
Young	0	2	1	0	3
Female household	0	1	1	0	2
Male household	0	1	0	0	1
Crop improvement location					
Maize	0	Pyusa	0	0	1
Finger millet	0	Gopka	0	0	1
Paddy	0	0			2
Chhomrong			Raya		
Lasmado				Unapani	
In progress					
Area in hall	0	2	1	1	4
Desired seed selected kg in maize and under cultivation	0	18	0	0	18
Seed collection and bed prepared in finger millet and paddy for mass selection in coming year	0	2	14	14	30

4.2. Climate change adaptation and mitigation

Under climate change, adaptation and mitigation, 4 major and 7 sub-activities are implemented and benefited all together 689 households including 400 female households. Vulnerability assessment, identification and promotion of cooping, promotion of organic farming, bio-intensive and eco-friendly agricultural practices, livestock keeping system and manure management practice, improve in health and sanitation status of the target household are the major activities accomplished. Under these major activities; discussion on climate change effect and adaptation, community orientation on agro forestry (fruit plantation and management), Support to establish 3 (3F) -fruit, fodder and forest community nursery, support to establish agro-forestry diversity garden, Assessment on livestock keeping system and manure management practices, support to construct safe family toilets, support to install ICS are the implemented sub-activities.

4.2.1. Vulnerability assessment, identification and promotion of coping

The main objective of vulnerability assessment, identification and promotion of coping is to aware and encouraging farming communities about climate change effect in agriculture, livestock and forest diversity, one day discussion meeting were conducted at 5 locations (Takla, Yangchu, Lali, Karanga and Unapani/Ripa-Lipne) of the four program VDCs. 121 household directly benefited from the meeting. Information collection about major effect of climate change in agriculture, livestock and forest diversity were recorded. Farming community were Encourage and advised to farming community to identify and develop climate change resistant crop varieties, follow up integrated farming system and conservation and sustainable use of forest product during the discussion.

4.2.2. Promotion of organic farming, bio-intensive and eco-friendly agricultural practices

Promotion of organic farming, bio-intensive and eco-friendly agriculture practices is the major activity to promote the biodiversity against climate change events on farm. To minimize climate change event, organic farming system play major role when promote this practices with farming communities. Community orientation and support to establish agro-forestry nursery and agro-forestry gardening (plantation of fruit and fodder/fuel related plants) is the important to promote organic farming, bio-intensive and eco-friendly agriculture practices. Altogether, 160 including 79 women household directly benefited from this major activity.

109 including 52 women household participated in community orientation on agro-forestry (fruit, fodder/fuel plant plantation and management) garden establishment and 160 including 46 women household transplanted 978 (678 apple and 300 walnut) fruit sapling in their farming land. 40 set of orchard management materials (pruning knife, hand saw) were purchased/transported in Simikot and 20 fruit farming farmer already taken and remaining are taking this tools as they need.

8 set of nursery establishment and management materials and 1 kg of wild apple seed (edimail) for apple rootstock supported to 8 selective innovative farmers at 6 locations. Apple and peach grafting done at Durpa school nursery and 1 private nursery at Gopka and expect more than 490 apple/peach sapling will be succeed and this will distribute in coming winter. 2 fodder nurseries with 2500 cutting prepared in nursery bed at Gusha of Unapani-Sarkideu and will expect to success more than 2000 cutting of fodder/fuel trees.

4.2.3. Livestock keeping system and manure management practices

To improve livestock keeping system and manure management practices, 8 assessments were done at 8 location of program VDCs. 210 including 58 women households were participated in the assessment work. Livestock number keeping by participants, total household, major challenges and problem are identified. During the assessment, farmers were aware to improve their livestock keeping system regarding fodder and food management, pasture land management, traditional system of breed improvement, animal health improvement, identification and minimization of livestock parasite/diseases. Similarly, they were encouraged to improve open grazing system, animal manure management practices to increase food production.

Observation after assessments

Average milk production

Juma	: 3 liters /time
Tolbini	: 2.5 liters /time
Boktini	: 2 liters /time
Thoktini	: 1.5 liters /time
Cow	: 1 liter/time.

The milk production of buffalo is high compared to cows but family, the number of buffalo keeping households is very minimal due to geographical condition of the district. Average milk production of the buffalo is 4 liter per time. Buffaloes are kept at lower altitudes near Karnali River because it is warmer suitable location for buffalo.

Few households keep sheep and goats. Mostly, those household who are involved in business and they keep large numbers of sheep and goat for the transportation of the goods. Out of 210 households, 94 households keep goats and 62 households' sheep. The average annual wool production from sheep is 4 kg and goat is 2 kg per head.

For details please in

4.2.4. Improve in health and sanitation status of the target household

Health and sanitation situation of the Humla people is very poor due to small window and dense household structure. No toilet facility in this type of household and more smoke will form arising more eyes born contaminated diseases resulting poor health mainly to mother and child. Seeing this type of problem, SHIP Nepal supporting in continues to construct safe family toilet and installation of improve cook stoves are two sub-activities under this improve in health and sanitation status of the target household. 204 including 55 women headed household directly benefited from this major activity. Safe family toilet construction and ICS installation are the two sub-activities implemented under improve in health and sanitation status of the target household.

Due to more household and expensive material cost, from last year, SHIP Nepal started to construct toilet in selective village/VDC with VDC matching fund. In last year, SHIP Nepal coordinated with district drinking water supply and VDC matching fund and constructed toile in total household of Takla/bamta and Kharpelgaun VDC. In this year too, Unapani aula and lekha of Sarkideu VDC shared matching fund of Rupees 5, 00,000.00 to construct safe family toilet. Community people shared to transport materials from head quarter to the program area, structure construction (house, pit preparation work). Supporter organization support in technical and 17 kg of cement, 2 meters out let pipe, toilet pan etc.

SHIP Nepal coordinated in material purchasing, transportation and community mobilization. All the toilet construction work will be completed before August 2013 due to late in material transportation from Nepalgunj.

To minimize different eye born disease of child and women through installation of ICS, SHIP Nepal supporting ICS installation work from beginning. Annually 50 to 60 household were installed ICS. This year too, installed 50 ICS in 50 households. Out of total, 20 are installed in 20 dalit households. In total cost with transportation, 25% of ISC cost paid by dalit community and 45% of by other community. Out of 50 household 39 were male headed household with 21 young male household and 11 were female headed household with 5 young female household received ICS from SHIP Nepal office. 3.94% household (50 household out of 1268 base line household) installed ICS.

4.3. Rural economy and support to farmer organizations

Orientation meeting about value addition and marketing of crops and crop product, District level coop micro-enterprise development networking workshop; Support for solar drier are the three sub-activities under major activities ***Support to develop entrepreneurship skills and promote enterprises***. All these major and sub-activities are organized to identify entrepreneurs and promote small scale enterprises of agro-based product. Hotel management inter action meeting for value adding their production is the unplanned activity. From all sub-activities, 229 including 96 women household got benefited from all sub-activities.

4 orientations organized at center of each VDC selecting those participants who are involved in small scale enterprises selling food materials (noodles, sweet, biscuit, soap etc) and those who are involved in hotel business. 153 including 65 women households were involved in the discussion.

A two days district level coop micro-enterprise development networking workshop was organized at Simkot and involved 23 micro-entrepreneurs including 14 women headed household.

During the orientation and workshop present situation of micro-enterprises analysis were done and further improvement of their micro enterprise through including agro-product collection and sale in their enterprises. Participants are aware to include their agro-product in their business from near future. They

need support in bean and chilly processing including more solar drier to make dry food mainly vegetables and fruits in coming year for off-season use.

One additional unplanned sub-activity, hotel management inter action meeting for value adding their hotel production and management were organized with hotel owner of Karnali river sides. 24 hotels owners including 13 women hoteliers were participated in the meeting. Discussion and commitment were made to sell local product and minimize imported goods in their hotels and keeping the hotel environment neat and clean. More focus was made to establish hotel diversity garden. One hotel management committees formed to follow up the each hotel commitment.

24 mini portable solar drier purchased and transported at Simkot and 19 are distributed to the selective farmers. The drier is distributed in 30% of total paid cost. Cooperatives selected and certified the beneficiaries.

4.3.1. Capacity building and organizational management of coop/groups

Follow up meeting with cooperatives stationary support and exposure visit are the two sub-activities completed under capacity building and organizational management of coop/groups. This major/sub-activities organized to activate the cooperative and group activities in proper way of organization management, saving credit, meeting, accounting system, loan disbursement and other biodiversity related work.171 including 41 women household directly benefited from capacity building and organizational management of coop/groups major activity.

Organized follow up meeting with 7 organic agriculture cooperatives in four programs VDCs. 171 including 41 women cooperatives member household involved in the meeting. Situation of each cooperative activities, other improvement practices in cooperative meeting, saving credit, loan distribution, accounting system including other agro-based and gender related activities are the discussion subject matter in the follow up meeting. After the meeting all cooperative member are aware and realized to participate more women in cooperative member and leadership position. They also aware and realized to develop agro-based marketing channel with in village, hotel and district head quarter to increase and improve income for agro-based economy security

One exposure visit organized to CDC and Cooperative chairs/secretary and treasurer to manage their organization in proper way. The visit was 7 days from Simkot to Narayanghar of Chitwan and eastern part of Nepal Ilam where cooperatives organization is very active in Nepal. Total 17 candidate were participated in the visit out of which 12 were from program VDCs and remaining are field staffs and management level staffs (Chudamani pokharel, Kali Bdr Bhandari and 3 including 1 women from SHIP HDI field staffs were participated in the visit. After the visit, participants are aware and committed to manage their coop/CDC organization for their community value.

4.3.2. Support to establish/mobilize community Biodiversity Conservation Fund (CBCF)

Under this major activity, two sub-activities, district level workshop to prepare norm and guideline for community fund mobilization and support cooperative for community biodiversity conservation fund (CBCF) accomplished during the year 2012-013. All together 128 including 26 female household benefited from this major activities. To proper mobilization of community biodiversity conservation fund in proper way, these sub-activities are implemented.

During SHIP Nepal working period from 2007 to 2012, all together 7 organic agriculture cooperatives are registered in cooperative division. They have collected their own member saving amount and some cooperative got donation from district agriculture office. SHIP Nepal also provided agro biodiversity conservation fund since last year. This support helps to disburse loan to keep poultry, goat and other business supporting in agro-biodiversity conservation activities.

7 cooperatives and 2 groups collected NRs 1475,197.00 have collected member saving, share, grand and other income. Out of this, NRs 400,000.00 is supported as CBCF-*community biodiversity conservation fund*. SHIP Nepal organized 3 days district level workshop to prepare norm and guideline for community fund mobilization in proper way. 22 including 3 women cooperative chairs/secretary/treasurer and other active members were participated in the workshop.

Introduction and importance of fund collection, objective of the agro-biodiversity conservation fund support SHIP Nepal, its effectiveness distribution in previous year and what they are doing this fund in their cooperatives; further improvement in fund support from SHIP Nepal, fund mobilization and distribution process in cooperative and draft preparation of fund mobilization guideline are the activities done in the workshops.

Three cooperatives, youth up liftmen organic cooperative Gopka of Lali, Dudhedaha organic cooperatives Raya and Laligurans organic cooperatives Ripa of Sarkideu VDCs got support community biodiversity conservation fund. Each cooperative received Rs 50,000.00 of CBCB fund. This fund is found useful to loan disbursement adding in their monthly collected regular saving amount. Cooperatives member get loan and do agro-based business and adding their diversity in buying local chicken, goat/sheep, and seed and fruit plantation. By support this type of fund community people trust on SHIP Nepal biodiversity conservation work.

4.4. Gender equality

To quality check from gender view in above mention 3 major theme, gender equality is the cross cutting theme. Gender equality review (GER), increase awareness and support to adopt measures against Chhaupadi and support women led production are the 3 major activities under Gender equality theme to bring the women farming community in biodiversity conservation work. 498 including 208 women household directly benefited from this gender equality theme. 5 sub-activities are planned and completed under the three major activities.

4.4.1. Gender Equality Review (GER)

Under gender equality review (GER), training/workshop on gender equality review and gender review in CDC are two sub-activities implemented. One day district level workshop organized to cooperative members and SHIP Nepal staffs at Simkot. One day gender review meeting were conducted in each community development committee in four VDCs. Main objectives of GER is to aware staff, cooperative women member, and CDC to bring and increase women in member and leadership position in cooperatives and CDCs. 112 including 43 women household were participated in the workshop/review meeting.

In district level review meeting, review was done of GER workshop organized in Hetaunda Nepal. In this workshop, discussion and commitment were done to increase women and other marginalized community in SHIP Nepal biodiversity related activities in membership and leadership position. Participants and staffs are aware and committed to increase the women participation in member and leadership position.

11 including 2 female from SHIP N-BASE program areas and 12 SHIP and BASE staffs including 1 female and 1 female board member were participated in the workshop. 4 CDC gender review meeting were conducted one in each VDC. 112 including 43 women household from CDC and cooperatives were participated in the meeting. During meeting, discussion was done to bring women in leadership and membership in position. During meeting, women are brought in second position and increased in membership position in CDCs.

4.4.2. Increase awareness and support to adopt measures against *Chhaupadi*

To increase awareness level about *Chhaupadi* tradition, 4 one day education workshop organized at 4 locations where the problem is serious in the four programs VDCs. 129 including 70 household directly benefited from the activity.

During workshop, opinion of each participant both male and female received. Discussion was taken on hazardous effect of this tradition regarding women and child health. They got awareness about tradition of negative impact of *chhaupadi* in women and child health. All involved male and female guardian committed and started to give a place from inside their home.

Regarding participants' awareness and commitment SHIP Nepal support Rs. 60000.00 Rs amount at Paropakar organic agriculture cooperative kharpelgaun to establish women need necessary material needed during the period. This type of education is very effective to break negative tradition in the community.

4.4.3. Support for women led production

To engage more female headed household in biodiversity conservation work, support women led production is the major implemented activity. Review with women leader farmers and Panicum millet processing machine support are 2 completed sub-activities under this major activity. 318 including 22 women household directly benefited from the support for women led production. The 22 women household is participated in review meeting. In 318 household 300 household when Panicum millet processing and oil expelling machine is succeed, 318 all household is women led household benefit from the structure. Man household contributed to establish the machine for processing.

During review with women leader farmer, their activity they learn in last year what they did with their community, problem and challenges and further improvement of the agro-biodiversity activities. Emphases were given to increase active participation of women in leadership position to encourage other women in SHIP Nepal agro biodiversity conservation work.

According to the women leader more women needed activities should organize in community level and need more exposure, high yielding crop varieties-cereal, vegetables and other new crop varieties grown in other part of country. They need more machine for chiono (Panicum millet), wheat /paddy threshing and oil processing machine in all part of program VDCs. They also need more ICS facility in every household

Support to Panicum millet processing machine is another sub-activity to decrease women work load and use their time in agro-biodiversity conservation work. SHIP Nepal started to work with VDCs matching fund since last year in this type of activity. This year support is given to community of Lali VDC. Community need both chiono processing and oil expelling machine in combine. NRs. 5, 00,000.00 matching fund of this VDC is shared with SHIP Nepal for establishing both processing and expelling machine. Due to delay in VDC fund release, this activity is somewhat delay than plan.

Dual purpose machine is purchased and transported from Nepalgunj to Simkot and then program side One building constructed and skill labour brought from Nepalgunj and the machine is under fixing. Due to some technical problem in machine this is under process to final. The entire fund is utilized in machine purchasing, transportation from Nepalgunj to service area, building construction and other technical work.

From all these support women work load will decrease and get facility in their health improvement and save time and they will utilize their time in agro-biodiversity conservation activity including increase and improve their active participation and leadership position.

4.5. Young farmers

To engage the school youth for conservation and sustainable use of biodiversity, establish school biodiversity gardening is the major activity performed in this year. 138 including 65 girls household involved in meeting to share and learn biodiversity related knowledge. This types of sharing and learning will increase social relationship that support to maintain and increase biodiversity in their home.

4.5.1. Establish school biodiversity gardening

To develop school biodiversity garden and spread of agro-biodiversity related activity through school student, one day 4 orientation/meeting were conducted at Naudhara middle secondary school, Durpa, Mandhara secondary school kharpelgaun, Bhakunde Kharpunath; Laligurans secondary school, Lipne and Devkota middle secondary school Unapani, Sarkideu VDCs. Initially, classes were selected and orientations were given them and reactivation/formation of biodiversity conservation club was formed in each school. Important of biodiversity conservation activity, possible activity in school and group work were done for designing of garden in the school compound and in their home in group. During discussion, teachers and student shared the problem in designing school biodiversity garden in the school due to open grazing system and closing of school for 2 months of period during the winter. They demand school compounding and other agriculture tools and equipment to establish diversity garden for long time.

This year, toilet construction material supported at Laligurans secondary school, Lipne and Devkota middle secondary school, Unapani of Sarkideu VDC. A set of small agriculture tool/equipment were supported to Laligurnas secondary school Lipne and Mandhara secondary school Kharpelgaun of

Kharpunath VDCs. This support encourage to the student of the VDC to increase family relationship in agro-biodiversity conservation activity.

30 apple fruit plantation at Lipne and Humla secondary school, Raya and temporary vegetable nursery establishment and seedling taken in their home are the agro-biodiversity related work performed in all school where the orientation and meeting conducted.

This year too, SHIP Nepal is taken one student passed from Karnali Technical School, Jumla as under job training. He has mobilized in SHIP N working area for learning agro-biodiversity related activities.

4.6. Spread of SoS (linkages with other stakeholders including universities/colleges, research institutions, government, policymakers)

Spread (linkages with other stakeholders to spread, i.e. universities/colleges, research institutions, government, policy). Under this theme, review, planning and monitoring, and production of reports & publications (printed, audio visuals) are the two major activities. Under these activities, 4 sub-activities are planned and implemented. From all activities, 191 including 55 women household directly benefited.

SHIP Nepal coordinated with LIBIRD organization for cereal seed and with National Agriculture Research Centre for foundation seed of cereal (finger millet, wheat, and paddy) and vegetable seeds. Similarly, involved and share biodiversity related activities in different meeting held by government and non government organization in district head quarter, Simkot. Major activities summarized as given below.

4.6.1. Review, planning and monitoring

Review, planning and monitoring of the program is regular activity for improving SHIP Nepal work. Implemented activities are regularly review with in cooperative/CDC organized in each VDCs. SHIP Nepal responsible staffs and board member regularly review and follow up the implemented activities.

USC Canada Nepal program officer Kate Green from Canada and Mr Bharat Bhandari from USC Asia Pokhara monitored SHIP Nepal program area in Raya and Sarkideu VDCs. Kind necessary support and advise received from them for further improvement of SHIP Nepal future program. Community of Raya including Dalit child care center are very impressed with USC Canada support program and they are happy to all.

4.6.1.1. Mid-term survey, focus group discussion and report preparation

To monitor and evaluation for further improvement based on base line indicators, SHIP Nepal organized mid-term survey, focus group discussion and report preparation. 191 including 55 household involved in 16 focus group discussion for mid-term evaluation data collection and household survey were done in 366 household. Data entry work is done in excel sheet in coordination and support from USC Asia Pokhara. All data processing, analysis data extrapolated and tabulation work is completed by SHIP N responsible person (Agriculture program coordinator). The data arrangement according to base line indicator and report writing is under process.

To design and implement the mid-term evaluation necessary support received from USC Asia Pokhara. Dr Pratap K Shreshtha (Regional Representative and Scientific Advisor) and Mr. Bharat Bhandari (Senior Agriculture Officer) deeply support in initial stage of mid-term evaluation requirement preparation and data entry work.

Review and selection for assessment

Based on base line report 2010/011, after completion of base line, SHIP Nepal carried out several activities from the year 2010/011 to 2012 September. Based on the base line target, a field implementation plan was developed and implemented with time frame with community people. Reporting

and documentation of the implemented plan activities were done using different tools and method during this period. SHIP Nepal is going to its midterm review of the planned and implemented activities of targeted communities from December to January to assess the current status of SHIP Nepal achievements towards the target set for 5 years. For this senior agriculture officer, Mr Bharat Bhandari oriented to carry out the midterm evaluation. For this, we have to task to collect necessary information (household list getting support from SHIP Nepal, replicated household and not getting and doing household) for classification of high, medium, low and adaptor to derive sample for the household survey. Household list prepared from the field, classification of the household will calculated and formulated sample data. 30% of total benefited and adopter population will take in sample. Household questionnaires, FGD format and checklist will be developed with feedback and support from the USC Asia Pokhara and Canada.

Identification of program population for assessment:

During base line report for M and E plan preparation in 2010, total numbers of household were count without listing the name of household head. We have only 589 household head list received from the household survey in that time. For midterm evaluation, total population household identified. This was done with preparation of short serial questionnaires to get information in on table. Household list were prepared on the base of these questionnaires. Total number of beneficiaries' household from SHIP Nepal support, replicator household and non benefited household number identified from this list. From identifying household list from four program running VDCs, 1321 are total household, this was 1268 at baseline report preparation. Out of 1321 total households, 1212 households are direct /indirect benefited by SHIP Nepal program activities and 109 household are not benefited by any kind of activities.

According to household list, direct beneficiaries household are categorized in three strata- Direct beneficiaries household - **High, medium and low** and indirect beneficiaries' household- Replicator/adaptor.

High strata: Out of total 9 short questionnaires based on household benefited by SHIP Nepal support activities, those household who are benefited or got yes answer 5 or more than 5 placed in high strata. Out of total household in four program VDCs, **354** (29.20% out of 1212 total benefited households) **are in high strata.**

Medium strata: Out of total 9 short questionnaires, based on household benefited by SHIP Nepal support activities, those household who are benefited or got yes answer 3 to 4, placed in strata medium. Out of total household in four program VDCs, **391** (32.26% out of 1212 total benefited households) **are found in medium strata.**

Low strata: Out of total 9 short questionnaires, based on household benefited by SHIP Nepal support activities, those household who are benefited or got yes answer 1 to 2, placed in low strata. Out of total household in four program VDCs, **400**(33% out of 1212 total benefited households) **are found in low strata.**

Adaptor or replicator: Those household who are benefited by seeing/learning from direct benefited households are placed in category replicator. In household listing, 67 (5.52% out of 1212 total benefited households) household are found in this category.

Sample size and sampling techniques

After household list preparation, VDC wise total numbers of household were identified. Based on this, total benefited population identified in three categories and stratified in 3 category- High, medium and low and indirect benefited household-replicator. Out of total 1321, 1212 are activities benefited total population from four programs VDCs. 30% of household were taken in total population household to calculate the sample household. Out of total benefited 1212 population households, 364 households are sample households in four program VDCs. According to strata, following are the sample households.

High strata: Out of total benefited households in high strata -354, 106 (8.74% out of 1212 total benefited households) households are sample household for midterm evaluations.

Medium strata: Out of total benefited households in medium strata -391, 117 (9.65% out of 1212 total benefited households) households are sample household for midterm evaluations

Low strata: Out of total benefited households in low strata -400, 120 (9.90% out of 1212 total benefited households) households are sample household for midterm evaluations.

Adaptor or replicator: Out of total benefited households in replicator/adopter -67, 20 (1.65% out of 1212 total benefited households) households are sample household for midterm evaluations.

Randomize sample method used in above given sample household number including all wards/sites/community/village/ethnicity-dalit, janajati and all other cast in proportionate.

Data collection method:

SHIP N reviewed base line summary table and selected indicator to be measured as per the experience of baseline survey. Based on reviewed indicators, SHIP Nepal prepared draft questionnaire and FGD checklist and sent to USC Asia for necessary feedback and support. According to selected indicator, SHIP Nepal identified the data collection method as per baseline study, a combination of household interview, focus group discussion, document review, field/store observation and self assessment will be chosen based on the type of information looking for. In crop production and productivity, time period will be over at survey period due to crop harvesting. This will be done through household interview.

Responsible person and supporter:

SHIP Nepal field staffs will involve in data collection process. CDC and cooperatives chairs/secretaries will be mobilized for field work (data collection-household interview). These persons are within community and they know the exact figure told by the holds. Data entry work is done in support of USC Asia Pokhara. All the data processing, analysis and tabulation work is done by SHIP Nepal agriculture program coordinator. Arrangement of data according to base line indicator and summary report preparation work is under process.

Data collection, entry, analysis and report publication

Data collection work is done by two method, FGD and household survey. 16 focus group discussions with 191 including 55 women household at 16 sites of program VDCs. Out 1321 total household, interview were done in 366 household. Household selection is done according to total household in randomization. Household data collection is done local teachers, CDC/cooperatives chairs as they know the actual information given by the beneficiaries. After data collection recheck is done and sent to USC Asia, Pokhara, for entry. USC Asia was supported for household survey data entry. Data entry was done in excel sheet due to used of various units in the survey. After data entry, data processing, analysis, population extrapolation in table form is completed. Arrangement according to base line indicators and report writing is in process.

Plan for data collection, data synthesis and report publication

For details please see in the given table in next page

SN	Activities	Time line 2012/013 October to February					Responsible person and supporter
		October	November	December	January	February	
1	Review and selection for assessment	↔					SHIP Nepal whole staffs

2	Identification of program population for assessment	↔					SHIP Nepal whole staffs
3	Formulation of sample size and sampling	↔					SHIP Nepal staffs
	Preparation of checklist and questionnaire (draft and final)	↔	↔ ↔				SHIP Nepal staffs and USC Asia to finalize the checklist and questionnaires
4	Data collection and verification			↔ ↔			SHIP N responsible staffs, CDC/Cooperative 's chairs/secretary
5	Data entry and analysis				↔ ↔		SHIP N responsible staff, consultant, USC Asia to identify consultant
6	Preparation of draft report					↔ ↔	SHIP N responsible staff, USC Asia to edit final report and report preparation guideline

4.6.2. Production of reports and publication (printed, audio visuals)

Documentary preparation and broadcasting is the sub activity under major activity production of reports and publication (printed audio visuals).

This year SHIP Nepal started to produce visual documentary of its program achievement. Agreement is done with **Agora creation team** of Kathmandu. The member of this team is from Humla district. A 25 minutes draft is released and additional information is given to add and final the documentary. In coming year program, this documentary will broad cast through national TV channel.

4.7. Other (Following activities are implemented during the year in other)

4.7.1. Infrastructure support -last year additional fund

During reporting year, last year additional fund support to build organic agriculture resource building at Unapani of Sarkideu and child care center building and one tap drinking water supply construction work at Gumbadhara, Raya VDCs completed. 297 household benefited from this support. 28 child including 7 girls got easy study facility room and drinking water facility to 24 marginalized household. From support of organic agriculture resource building established at Unapani of Sarkideu VDC benefited 233 household of two community Unapani-aula and lekh of the VDC. Three room building will manage 1 room for cooperative office, 1 for establish cooperative shop and another one is for meeting/training hall in near future. Community of Unapani will take care to establish community seed center in this building. Improve seed will collect, process and will sell from coming year. It is found good learning center after well managed by furniture, cub board and seed. Community commitment on collection of all diversity of cultivated crop diversity and decorate it in the building.

4.7.2. Staff capacity building

To build staff capacity, field and management level staffs were participated in different training/workshop organized by USC Asia Pokhara and USC Canada. 3 technical staffs trained in Organic production and marketing training at patlekhet, HASERA agriculture and research institute, Kabre district of Nepal. 6 including 2 women board member/staffs/farmers were participated in GER workshop, held in PARIBARTAN Nepal, Hetaunda. The training and workshop was of 6/6 days organized by USC, Asia, Pokhara. SHIP Nepal executive officer participated in exposure visit in USC Canada for 15 days.

5. Organizational development

SHIP Nepal has two program, Biodiversity conservation and agro-economic security technical and financial support by USC Canada and USC Asia Pokhara. All together, 14 staffs including 4 female staffs

were at the beginning of the program implementation. Out of total, 7 staff with 2 female staffs was up to middle of the program implementing period. The two female staffs were in field base. One female staff resigned herself. In SHIP-HDI there were 7 staffs including 2 field base female staffs. Out of 2 females, 1 resigned and went to further study. In HDI- another one field base staff is appointed and in BASE, recently vacancy open and appointed from middle of June as gender supervisor. All together, there are 14 staffs including 3 female in SHIP Nepal (BASE-7 including 2 female).

Two field staffs (Kali Bdr Bhandari and Deepak phadera) are trained in report writing skill development training at Kathmandu and another one staff (Gitthe aidi) is trained in livestock health and management training in Pokhara organized by SHIP Nepal BASE and HDI program.

Improvement of financial and administrative procedures and strengthening of our organization' infrastructure materials and equipment are same as last year.

Organizational assessment is done in program and staff level in gender view. SHIP Nepal provided 1 day interaction workshop provided to SHIP Nepal (BASE and HDI staffs including community) and gender review is done in four CDCs.

6. Monitoring and Evaluation

Mid-term evaluation process, method and activities implemented as mentioned earlier in 4.6.1.1. For ongoing/regular monitoring of program implementation, field staffs organized cooperatives/group monthly meeting, appeared in trial location and meeting/advise is given to theme for further improvement. Community development committees and cooperatives main body monitor and evaluated the supported activities. Program coordinator, executive officer and administrative officer are responsible in program monitoring and evaluation.

Responsible program technician develop and circulate to field base staff to record the outcomes from the implemented activities. They direct interview with program beneficiaries and small group discussion and cross check the individual data for cross check.

Regarding to M&E system, this year, agriculture program coordinator involved two days data processing and analysis system that the data entry in excel sheet. He is now became skill man power to analysis excel sheet data processing.

Number of **households** with **increased sales** of agricultural products as a result of support for **post-harvest transformation** and Number of **households** where **women** have **improved access to means of production** (e.g. land, labor, tools, credit, seed) were not planned in base line and we did not use crop cut method in monitoring and evaluation practice as this was tedious and time consuming. For production record we developed household interview and average production ton per hectare is derived.

7. Analysis of Outcomes

A summary of the main highlights of our analysis of outcomes (most significant changed to data) and discussion over all implications for future programming is illustrated under mention box. During the reporting time some changes have been seen from support activities which are shortly described under each outcome. All evidence illustrated here are true and data base including field monitoring and discussion with beneficiaries communities.

Please see in annex 3 (outcomes supportive data) from table 1 to 14 for VDC wise distribution of household and other details information for your kind information

4.1. Seed supply systems and diversification of plant genetic resources

- 4.1.1. 135 (10.65% out of 1268 base line household) households sufficient food production from deployment of crops and home garden promotion out of these, 85 (6.70%) household food security status become medium from poor and remaining 50 (3.92%) household food security status become high from medium by the support of foundation seed in paddy, wheat and finger millet in cereal and improved vegetables seeds.
- 4.1.2. 105 households with **seed supply systems** that can respond to seasonal climate variations mainly in paddy crop. Out of 105 household got seed for PVS in paddy, wheat and finger millet, 3.23% (41 out of 1268 household) participated in PVS in paddy and finger millet. They have got 36.1 kg of these crops seed and cultivated in 0.32 hectares of land and produced 1.01 ton of paddy and finger millet. Out of total household involved in PVS, 8 household exchanged or gave 211 kg?seed of paddy and finger millet to other 64 household for crop production in coming year. Out of 32 household 13 household preferred in all characters of given crops and seed bed prepared of 78 kg in both crops (1 variety of finger millet and 1 variety of paddy) bed prepared for cultivation in about 0.81 hectare of land. Wheat is under harvesting and 6 varieties/line of paddy seed is distributed in this season as high hill paddy for PVS and farmer field trial as mention the total household 105. According to this event, these 105 **households** reporting an **increased in seed security** (there is enough of the required quantity, quality, and diversity of seed and planting materials for seasonal needs). 5.91% (75 in total base line 1268 household) started imported vegetable seed conservation and selection for next generation.
- 4.1.3. **285** households reported an **increase in inter-specific diversity (between crop species)** and in **intra-specific crop diversity (within crop species)** in cereal (paddy, finger millet and wheat) and vegetables crops at 14 communities/location.
- 4.1.4. Fourteen communities changed in **inter-specific diversity** and in **intra-specific crop diversity**. **Inter-specific & intra-specific diversity growing household increased by 8.28%** in variety level (new variety of wheat, finger millet and paddy grown by 105 household in total 1268 base line household) and 22.47% -285 in vegetables, 2.91%-37 in spice, 6.23%-79 in oil seed walnut, 12.61%-160 fruit out of 1268 base line household (additional 285 household in reported 315 household involved in home garden promotion are new to receive new different types of vegetable seed. Increased additional 3 certified varieties and 6 trial lines of wheat, finger millet and paddy and 5 varieties of vegetables, 1 variety in spice, 2 varieties of fruit in additional household than last years.

Participatory varietal selection (PVS) is the most important activities in SHIP Nepal program. Till now, farmers' preferred good variety of Lumle-1 variety of paddy, finger millet is still remaining to finalize. The biomass production and panicle type found good by 3 household and they have exchanged this seed to other 18 households for next year post harvest analysis for finalization and seed multiplication and go in production. Seed multiplication is gradually increasing in paddy and wheat crops in support and coordination with custodian farmer promoting in community level seed banking system (multiplication, improvement and exchange).

Home/hotel garden promotion is another good major activity and continues in each year. Seed of broad leaf mustard, tomato, cress seed, coriander, bean, broad bean are farmers themselves producing for coming generation. In an average 75 household are involved to select and keep the seed of vegetable for coming generation.

Due to climate change effect, more insect pest attraction is high as we follow the organic farming system, sometime this, those type of disease pest destroy the crop in unexpected result. Farmers are happy getting new high yielding varieties in cereal and more of them involved in seed selection practice from field in finger millet and maize. In some community seed exchange systems being improve with in community. Crop improvement of local land races in maize, paddy and finger millet is started at four location of 3 program VDCs.

All these mentioned achievement will be regular and including in remaining household and communities for future continuation of the program under the theme-1

4.2. Climate change adaptation and mitigation

4.2.1. Distribution of household involved in food crop production, agro-forestry garden, nursery establishment and family toilet construction and ICS installation by VDCs

- 7.64 % (60 household) participated in PVS increased in yield of key crops (Finger millet, paddy and wheat is last year cultivation) from support of foundation seed. This evidence is found out from data collection of the each household who have distributed the seed for PVS.
- 978 fruits (apple, walnut) planted by 160 including 46 female headed household.
- 2500 fodder/tree plant propagated through cutting method by 2 nursery man and 400 apple and peach through grafting method by another 2 nursery skill man at Durpa and Gopka
- Documentation of livestock keeping system and manure management practice from 8 sites of four program VDCs.
- 11,58% (153 household out of 1321 total household) construct safe family toilet at 2 sites/communities of Sarkideu VDC and becoming (open defecation free) area with in November 2013.
- 50(3.94%) additional household installed ICS among this 20(40%) distributed to the dalit household. This evidence is received from record keeping while distributing the ICS and field follow up.

Agro-forestry gardening (plantation of fruit and fodder is the greater achievement regarding food, fodder and fuel security and supporting in climate change effect. Farming community are getting idea/knowledge to develop climate change resistant varieties. Support in livestock keeping system and organic manure management is much demanded activities to improve and increase livestock production which share second major source of income for the beneficiaries' communities. ICS installation and safe family toilet construction work. Another greater achievement to win community trust in biodiversity conservation program. In last year, SHIP Nepal involved to mobilize community to collect matching fund for toilet construction and make the working VDCs to make the VDC as ODF (open defecation free) area in coordination with district drinking water supply and sanitation office.

All these mentioned achievement will be regular in remaining household and communities for future continuation of the program under the theme-2

4.3. Rural economy and support to farmer organizations

- 32.72% (415 household out of total 1268 base line household) engaged in farmer institution (organic agriculture groups/cooperatives) in total of 7 organic agriculture cooperatives and 2 groups. In total household, 210 are women households, it consists 48.72% women members in total 431 total members.
- 2 additional cooperatives registered with 60 including 9 women households
- 6.31% (80 household out of 1268 base line household) increased in cash income from agricultural biodiversity based activities (selling home garden, hotel garden, fruit, chicken, herbal business including in hotels, small shop etc) and these number of households able to spend money to meet their needs and aspirations *on purchasing agriculture tools/seed, education, health, cloth, household utensil* and found average per household annual income of the entrepreneur NRs 1901.00
- 7 organic agricultures cooperatives and 2 groups able to collect group savings of NRs 14,75,197 and disbursed loan amount Rs 13,06,500 to 44 including 10 women entrepreneurs for agro-based business and other small scale business including management of their hotels diversity garden.
- 4 cooperative and 1 groups become medium from poor status and 2 cooperative and 1 groups become good from medium.
- 3 hotels become good from medium and 5 become medium from poor.
- 4 ironsmiths improved their traditional iron work.
- 4.81 % (61 out of 1268 household) in leadership position in cooperatives in which 27.87% (17 are women in total 61 household) are women leaders.
- 7 cooperatives of 334 household with 131 female members trusted SHIP Nepal working strategy and modality to strengthen farmer institution in rural community.

Promotion of agro-base including other enterprises (hotel, small scale shop with in community, tailoring, ironsmith, herbal collection and selling) are increasing from taking loan in cooperatives. This business facilitate rural farming community to make their household environment good adding daily requirement materials, household utensil, supporting in school education, some time to treatment when they became serious ill. Involving in rural farming institution, they can share new knowledge about new knowledge on farming system including seed selection, improvement and conservation of their local landraces, making their household environment neat and clean, changing tradition unwanted opinion making their cultural situation in improve way and increasing social relationship in community, village and VDCs. Supporting community biodiversity conservation fund helped the farmers institution to make their fund strong by which they can disburse loan to more cooperatives member to change their attitude, living standard/life style adding and conservation/maintain their traditional landraces, improving in seed security and home garden/agro forestry-fruit farming and rearing livestock. More of supporting this fund built community people to trust (SHIP Nepal) USC Canada program. They trust this type of support to sustain the rural farming institution facilitating conservation and sustainable use of biodiversity.

All these outcomes related activities are implication for future programming.

4.4. Gender equality

- 1090 are participants/beneficiaries in all themes of 79.50% (1008 in 1268 base line household) households. In total participants 54.40% are female participants/beneficiaries.
- 3 staffs including 1 female and 11 including 2 female from program VDCs aware and committed to manage gender balance in their program areas.
- 10 women increased in leadership position after gender review in CDCs.
- 48 household women gave location to their Chhaupadi women at 4 locations. 1 women need material shop established at kharpelgaun and got support by 27 women.
- 15 women out of trained 22 leader women involved to advocate agro-biodiversity conservation work in their community.
- 300 household women of Lali VDC will get free of hard work in Panicum millet processing and peach/walnut oil processing after completion of the machine and decrease women work load by 2 hours than before.

Influenced of women has increased in leadership position and active participation in cooperative and groups including agro-biodiversity conservation work (PVS and biodiversity establishment) and home garden promotion than before. Responsible women and man encouraged to give a place inside their home when in monthly period of female. Shattered living group system during the period at Karanga of Raya and started to give a protection area inside or near their house. Women leader aware to participate during VDC council to take apart VDC budget for matching fund to add with SHIP Nepal budget for more work in crop processing and toilet construction.

Crop processing and oil expelling machine is the great work from SHIP Nepal to minimize women work load. They can learn or does agro biodiversity conservation work in that time. Demand is very high in crop processing and threshing in other program sites.

To increase influence of women in leadership position and member in groups/cooperatives, community development committees and minimize the Chhaupadi tradition, above mention outcomes level activities are implications for future planning.

4.5. Young farmers

SHIP Nepal strongly thought to encourage every young farmer to participate and benefit them from biodiversity conservation and organic agriculture group/coop promotion including learning climate change effect in farming system and way of minimization of its effect. This year, under young farmers theme, meeting and orientation organized in school students including responsible teachers. Students and those teachers involved. In total 1008 household, 667 household are youth/young farmers households involved in all themes. In total youth/young farmers' participation, 28.70% are youth male and 71.21% are female youth/young farmers involved in all themes.

In theme wise following are the young farmer participation

- In seed security out of total participants/beneficiaries involved 688 including 514 young females.
- In climate change, mitigation and adaptation, involved 489 including 339 young females.
- In rural economic security, involved 461 including 306 young females.
- In this young farmers theme, orientation/meeting and toilet including agriculture tools/materials and seed were supported and involved 138 students including 73 girls. This support/discussion facilitated to increase social and family relationship regarding seed selection, home garden preparation and to involve in organic agriculture cooperatives/groups.

4.6. Spread of SoS (linkages with other stakeholders including universities/colleges, research institutions, government, policymakers)

- Increased relationship with Government sector- NARC (National Agriculture Research Council) khumaltar, Lalitpur Nepal
- Increased coordination with district drinking water supply and sanitation office, and VDC-Lali, Sarkideu for matching fund to construct safe family toilet and establish Panicum millet and oil processing machine.
- Increased organizational relationship to bring foundation seed of cereal crops (paddy and wheat) with national NGO-Local Initiative for Biodiversity Research and Development (LI-BIRD).
- Institutional relationship increased with Karnali Technical School, Jumla for giving on the job training to the student product from KTS. One boy student trained on the job training about SHIP Nepal working modality.
- Participated and shared in SHIP Nepal working strategy, model in district government and non government organization organized meeting/workshop.
- Involved in different training/workshop organized by USC Asia Pokhara and received support for designing mid-term evaluation FGD, household questionnaire checklist and data entry.
- Involved and share SHIP Nepal progress in international forum organized by USC Canada

Lali and Sarkideu VDCs involved submitting matching fund for crop processing (oil expelling and Panicum millet processing) in Lali and toilet construction work in Unapani of Sarkideu VDCs.

This types of sharing meeting is important and implication for future programming to spread seed of survivable

5. Unintended outcomes

Minimization of use of more alcohol is seen in the program VDCs the cooperatives are involved to this work. ODF is possible in coordination with district drinking water supply and VDC of Sarkideu VDC and additional work oil processing machine establishment work is succeed in coordination with VDC matching fund of Lali VDC. Improved model of green house construction work is another unintended outcome. Tuti kala kami and dhauli bhandari at Kharpu hotel become succeed to sell the vegetable before season and they expend their money to their children for school education. NARCS suggested further improvement in wheat and do FFT (farmer field trial) in high hill rice after wheat mother baby trial last year report submitted in the division. One on the job training student trained from SHIP Nepal.

All these are the unplanned unintended outcome for SHIP N in the year 2012/013

6. Other comments

Toilet construction work and Panicum millet/oil processing machine installation is delayed due to delayed in material transportation and technical man power. In other hand, VDC matching fund released according to their time period and farming time and toilet construction time become same. Some material transportation for toilet construction is still remaining due to cargo crisis at material transportation period. Delaying in data compilation and report writing is due to spent some time to get project like LAPA, and during reporting time, more continue rainfall damaged the power structure and more continue cloudy do not heat the solar panel.

SHIP Nepal is selected as local NGO to work LAPA (Local Adaptation Plan for Climate change) with National NGO LIBIRD. All profile and previous progress is submitted till reporting time.

APPENDIX 1. Summary of program reach, 2010-2015 (to be updated annually)

1. Please explain how you define the following in the specific context of your program:

	Definition
Participating community	SHIP Nepal has 4 VDCs namely Kharpunath, Lali, Raya and Sarkideu. In each VDC the organization, separated 4 sites either bounded by hill or stream. Sites are small community and big one is VDC community. All cast groups stayed in one community or VDC.
Participating household	Those household who get support either technical or materials/tools/equipment, toilet, ICS, seed and processing machines and CBCF-community biodiversity conservation fund in that community is called participating household.
Direct participant/beneficiary	The person who directly involved in different orientation training, meeting, workshop, exposure and get support seed, materials, equipment, and benefit from infrastructure-Panicum millet/oil processing, ICS and toilet construction material support and involved in organic agriculture group/cooperatives are called direct participants/beneficiary
Indirect beneficiary	Those persons/households who received both knowledge and source and implement in their home from direct participant/beneficiaries is called indirect beneficiary. In SHIP Nepal every year, indirect beneficiary is called remaining of direct beneficiaries/household from total base line household
Youth/young farmer	The persons who are equal or below 45 years those either educated or non educated are called youth/young farmers

2. Cumulative list the districts (or other administrative unit) and communities participating in the program, 2010-2015. Add more lines as necessary

Name of District	Name of Community	Years involved in program				
		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Humla	Kharpunat-Takla/bamta, Kharpelgaun, Durpa, Yangchu	✓	✓	✓	✓	✓
	Lali-Deukhuri, Gopka, Lali, Pyusa	✓	✓	✓	✓	✓
	Raya-Karanga, Raya, Gumba/gumbadhara, Thali	✓	✓	✓	✓	✓
	Sarkideu-Lower Ripa, Upper Ripa, Unapani-Lekha, Unapani-Aula	✓	✓	✓	✓	✓
Total number of districts involved in the program		1	1	1	1	1
Total number of communities in these districts		4(16)	4(16)	4(16)	4(16)	4(16)
Total number of participating communities		4(16)	4(16)	4(16)	4(16)	4(16)
Estimated total population in participating communities (Extrapolated from sample size)						
Household		278	296	312	382	1268
Total population		1942	1984	2113	2319	8358
Male		1011	1021	1123	1181	4336
Female		931	963	990	1138	4022

Source: SHIP N base line survey 2010

3. Summary of direct participants/beneficiaries in your program

Details of HHs/participants	Number in your program				
	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Households	488	854	1008	+260	All
Men (adult)	89	123	305		
Women (adult)	79	115	118		
Youth (male)	210	194	192		
Youth (female)	139	205	475		
TOTAL direct participants/beneficiaries	517	637	1090		

4. Estimate of the indirect beneficiaries of your program (provide as much information as is available to you):

Details of HHs/participants	Number in your program				
	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Households	780	414	260		
Men (adult)	142	60	79		
Women (adult)	126	56	30		
Youth (male)	336	94	50		
Youth (female)	222	99	123		
TOTAL indirect beneficiaries	826	309	282		

Note: Estimation is done in base of direct beneficiaries and base line household

5. Overall comments on program reach

Collaboration with district water supply and sanitation office, village development committee for matching fund in toilet construction to make the VDC as ODF (Open defecation free) area in unapani-aula and lekh of Sarkideu VDC and oil processing machine establishment in Lali VDC are the good achievement in SHIP Nepal. Only Panicum millet processing machine was planned in program. Every communities working in SHIP Nepal of four VDCs is still need to strengthen cooperative/groups and local landrace improvement work takes more than 5 years. It is just in starting phase. Crop processing and threshing is very difficult (wheat/barley/naked barley). These entire events still need more of year work in the area. After 5 years of the period, local land race improvement and crop processing/threshing and livestock related work is need to continue in collaboration with local NGOs (CDCs, Coops) and SHIP Nepal will phase out in the area and phase in other southern VDCs.

We are still blooming stage regarding PVS work and need a lot of technical support. Agriculture is the major natural gift started by human being. We all know this business for human being never end. The result under this business is in micro lever like micro organism. We should continue support to achieve the desired result however unforeseen evidence destroy our effort. All technical, seed, infrastructure, support and social harmony are the integral part to attain our expected goal.

During Nepal program officer USC Canada and agriculture program officer USC Asia Pokhara visit, we are saying regretful about community visit at Unapani, Sarkideu due to information giving with the community unfortunately became mistake. Accordingly, we are very sad about Kate at the visit. She was become ill due to season; we could not manage suitable food materials during the visit. However, we are very glad and grateful with USC Canada including the Nepal program officer and USC Asia Pokhara team for continue fund support including valuable time, technical and personal advise to improve, upgrade and continuation of our SHIP Nepal program.

The end