

UNDP GEF Small Grants Programme

**Community Development and Knowledge Management for
the Satoyama Initiative (COMDEKS)**

Project in Nepal

2011-2013

COMDEKS Baseline Assessment
for
West Makawanpur, Nepal



ABBREVIATIONS

ADB	Asian Development Bank
BCC	Behavior Change Communication
CBD	Convention on Biological Diversity
CBO	Community Based Organization
CBS	Central Bureau of Statistics
COMDEKS	Community Development and Knowledge Management for Satoyama Initiatives
COP	Conference of Party
DADO	District Agriculture Development Office
DDC	District Development Committee
DFO	District Forest Officer
ENA	Essential Nutrient Action
ERIP	East Rapti Irrigation Project
FCODE	Feature CODE
FFS	Farmer's Field School
GEF	Global Environment Facility
GIS	Geographical Information System
GO	Governmental Organization
ILO	International Labor Organization
IPM	Integrated Pest Management
LDO	Local Development Officer
MBT	Main Boundary Thrust
MD	Millennium Development
MDI	Manahari Development Institute
MUS	Multi-use Water System
NC	National Coordinator
NGO	Non- governmental Organization
NSC	National Steering Committee
OP	Operational Plan
SALT	Sloping Agriculture Land Technology
SCBD	Secretariat of the Convention on Biological Diversity
SD	Standard Deviation
SEPL	Socio-ecological Production Landscape
SEPL	Socio-ecological Production Landscape
SGP	Small Grants Programme
SI	Satoyama Initiatives
SI-PPP	Satoyama Initiative - Paurakhi Pakha Pakhera
SIS	Small Indigenous Species (fish)
UNDP	United Nations Development Programme
VDC	Village Development Committee

Table of Contents

MAP OF THE SEPL PROJECT AREA	4
1. Background.....	6
1.1 SATOYAMA Initiative	6
1.1.1 SI's perceived merits.....	6
1.1.2 SI Model Perceptions.....	7
1.1.3 Local Knowledge.....	7
1.2 Objectives of the Study	8
1.3 Methodology	8
1.3.1 Summary of Daman Pre-workshop	9
1.3.2 Presentation on Overview of Satoyama Initiatives in Nepal.....	9
1.3.3 Feedbacks and Way Forward	10
1.3.4 Baseline Survey in selected VDCs.....	10
2. VDC wise findings from the baseline survey.....	12
2.1 Radar Diagram Interpretation.....	12
2.2 Dandakharka VDC.....	12
2.3 Bharta VDC	14
2.4 Handikhola VDC.....	15
2.5 Khairang VDC.....	16
2.6 Kankada VDC	17
2.7 Kalikatar VDC.....	18
2.8 Manahari VDC	19
2.9 Raksirang VDC.....	20
2.10 Sarikhet VDC	21
2.11 Namtar VDC.....	22
2.12 Perceptions on the thematic areas by Gender	23
2.12.1 Women's only Perception.....	23
2.12.2 Men's only Perception	24
2.12.3 Perception on SI themes compared by gender	25
2.13 Sauraha Workshop.....	25
3. Overall findings of the baseline study	27
3.1 Ecosystem Protection	27
3.2 Agricultural Biodiversity	29
3.3 Knowledge, learning and innovation	31
3.4 Social equity and infrastructure	33
4. Post workshop in Sauraha, Chitwan:.....	34
4.1 Introduction	34
4.2 Presentation of Brief Overview of SI in Nepal.....	34
4.3 Workshop Facilitation and Exercise	34
4.4 Presentation of district status of agriculture and forestry of Makawanpur	35
4.5 Results presentation and discussion	35
4.6 Feedbacks and Endorsement of the COMDEKS Baseline Assessment	37
5. Local Terminology for SI in Nepal.....	38

List of Figures, Tables and Annexes

Figure 1: SEPL Performance of Dandakharka VDC.....	13
Figure 2: SEPL Performance of Bharta VDC	14
Figure 3: SEPL Performance of Handikhola VDC.....	15
Figure 4: SEPL Performance of Khairang VDC.....	16
Figure 5: SEPL Performance of Kankada VDC	17
Figure 6: SEPL Performance of Kalikatar VDC.....	18
Figure 7: SEPL Performance of Manahari VDC.....	19
Figure 8: SEPL Performance of Raksirang VDC.....	20
Figure 9: SEPL Performance of Sarikhet VDC.....	21
Figure 10: SEPL Performance of Namtar VDC	22
Figure 11: SEPL Performance of Women’s only Perception	23
Figure 12: SEPL Performance of Men’s only Perception	24
Figure 13: SEPL Performance Scores from Sauraha Workshop	26

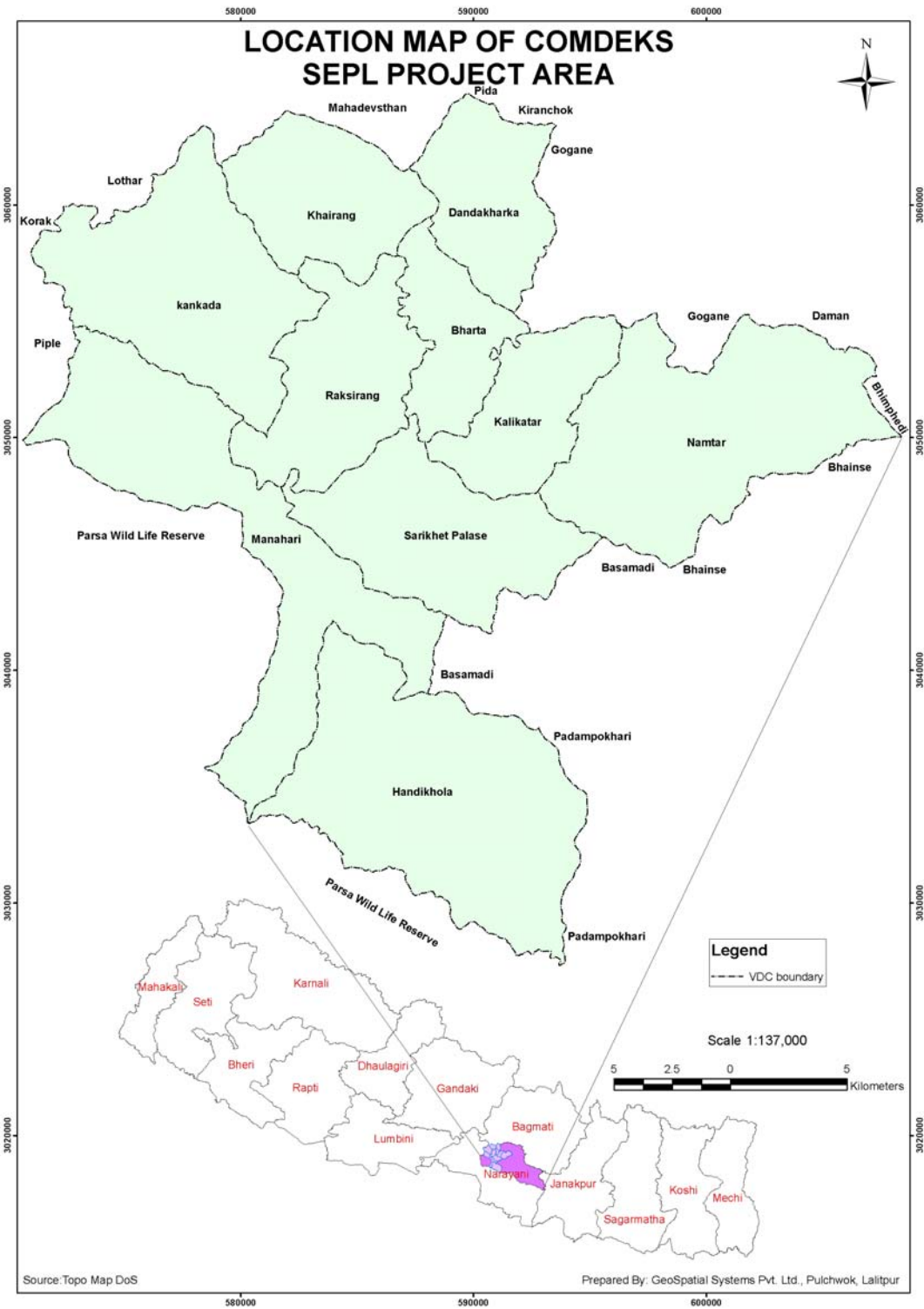
Tables

Table 1: Average scores on COMDEKS themes disaggregated by gender	25
Table.2: Land Use Trend 1992-2012	36

Annexes

Annex 1: Pre-workshop Schedule – Daman.....	39
Annex 2: List of Pre-workshop Participants - Daman	40
Annex 3: Questionnaire used in Baseline Survey	42
Annex 4: Post-Workshop Programme Schedule	49
Annex 5: List of Participants in Post-workshop – Sauraha, Chitwan	50

MAP OF THE SEPL PROJECT AREA



Country Program Landscape Strategy for Community Development and Knowledge Management

2011-2013 Nepal

1. Background

1.1 SATOYAMA Initiative

SATO in Japanese language means arable and livable landscape, and YAMA means hill/mountain land. It refers to the management of forests by local agricultural communities. More recently, SATOYAMA has been defined not only as the mixed community forest but also as the entire landscapes that are used for agriculture. Any activity done in the spirit of SATOYAMA is called the SATOYAMA Initiative (SI). SATOYUMI is another term which refers to water landscape in the same above spirit.

Now this concept has been widely recognized throughout the globe and internationally famous institutions like UN and other agencies have endorsed the concept and allocated funding.

SI is considered to be a useful tool to better understand and support human-influenced natural environments for the benefit of biodiversity and human well-being” (CBD COP10)

SI-based Community Development and Knowledge Management (COMDEKS) project has been planned to be implemented in 11 countries of the world including Nepal. Nepal was selected for piloting the SI-based COMDEKS project in 10 VDCs of the North Western part of Makawanpur district. The 10 selected VDCs are Dandakharka, Bharta, Handikhola, Kankada, Kalikatar, Manahari, Khairang, Raksirang, Sarikhet and Namtar. Therefore, all these 10 VDCs were selected for carrying out the baseline survey.

1.1.1 SI's perceived merits

SI's perceived merits will be in the areas specified below:

- Poverty Reduction / Millennium Development Goals (MDG) achievement
- Climate change adaptation
- Achievement of biodiversity goals
- Human betterment
- Social inclusion and equity

The threats to SI are noted as high rural population, high dependent population, high population growth, overexploitation of natural resources, unplanned urbanization, industrialization, and natural disasters. The COMDEKS strategy to be formulated under this study will take account of these threats.

1.1.2 SI Model Perceptions

SI perceives following to be ideal:

- Diversity is more important than specialization;
- Local and traditional practices are considered more desirable by SI;
- SI insists on documenting and disseminating local and traditional knowledge to subsequent generations
- SI considers it important to preserve local crop seeds
- SI accords importance to women's participation in decision making
- SI aims at a self-sustaining society – local communities producing all their requirements

There are few contradictory statements within SI, which are listed as follows:

- Specialization vs. diversification (In diversification, there is less efficiency).
- SI aims to bring about convergence between the traditional practices and modern new knowledge for the welfare of human beings.
- Traditional cropping pattern could be unsustainable (e.g. slash and burn agriculture)
- Question of women's participation in decision making; it could be contradictory to the traditional practice of limiting the women's participation in the social and community affairs.

1.1.3 Local Knowledge

Local knowledge is generally based on the coincidences between two or more events often with or without verifiable scientific evidences. Nevertheless, these have been found to be true in several instances. The common local knowledge observed in the surveyed VDCs is as follows:

- There will be heavy rainfall when the snakes rush down the slope
- There will be heavy flood when frogs start climbing uphill
- There will be earthquake incidence when the cattle run wildly
- When bat population decreases, there will be the higher infestations of crop pests.
- When pesticides are used, the bee population starts decreasing.
- When chemical fertilizers are used, the yields of pulses will reduce considerably.
- *Gittha* (*dioscorea bulbifera*) *Bhyakur* (*dioscorea deltoidea*) is only found in forests where there is human habitation near-by.
- Wild fruits and tubers (*Gittha*, *bhyakur*) to be used when food stock is finished
- As land provides food year round, the land is worshipped at the end of the agricultural season.
- Women should not be involved in animal slaughter.
- After the food is produced, it should not be eaten without praying the god first and setting aside some part to the gods.

- If there is long spell of drought, god must be prayed in the temple with fountain of water.
- The sun's image must be covered with different coloured lines just like the rainbow to avoid landslide and flood.
- The rice yield will decline if stars are seen in the sky in the month of Shrawan (July).
- If a common sand piper - (*hutityau*) (*tringa hypoleucos*) cries in the village, some person/s in the village will die.
- If the ants move in flock from one place to other, there is an indication of heavy rain.
- If the forest makes whistling noise in the daytime, it may result into an untoward event.
- If snakes come out of the ground hastily, there is a possibility of the earthquake.
- If women till the land with plough, then there will be heavy flood and landslide.
- If the rain starts from Tuesday, there will be chances of long spell drought.
- If a pair of rainbow are seen dwarfed, there will be a rainfall.
- If the clouds move west-ward, there will be fair chances of rainfall
- If the eagle and birds shout, there will be a possibility of earthquake.
- If mango (*mangifera indica*) and sal trees (*shorea robusta*) flower heavily, then there will be high probability of hailstorms
- If the crabs come out of the river and move upwards, there could be heavy rainfall.

The local communities have been using the above local knowledge to take precautionary initiatives indicated by the knowledge to adapt to the related predictions and events. However, these conventional wisdoms are transmitted through generations only through hearsay method. There is no formal documentation of these wisdoms and several such wisdoms may have been missed out. Henceforth, there is a need to put in place the formal documentation system of the local knowledge.

1.2 Objectives of the Study

The objective of the study is to prepare COMDEKS strategy for Nepal based on the baseline study conducted in the targeted 10 project VDCs of Makawanpur district.

1.3 Methodology

Following steps were followed while carrying out baseline survey:

For accomplishing this task, Manahari Development Institute, Nepal (MDI- Nepal) was selected on a competitive basis. After signing the project agreement, MDI- Nepal organized a one-day Pre-workshop in Daman, Makawanpur on June 20, 2012 involving the concerned government officers, representatives from non- governmental organizations, journalists and selected community members from targeted VDCs. A short summary of Daman pre-workshop is presented below:

1.3.1 Summary of Daman Pre-workshop

In June 20, 2012, the pre-workshop commenced with the registration of participants. In presence of all 32 participants from GO, NGO, Media and community members of selected VDCs, Ms. Dip Maya Gurung, Monitoring Officer of MDI-Nepal gave welcome remarks to all the participants. Mr. Bhuwan Prakash Bista, Local Development Officer, DDC, Makawanpur gleefully chaired the full-day session. After this, participants introduced themselves and the discussion on pre-workshop theme began. During the pre-workshop session, Mr. Khop Narayan Shrestha, Executive Director of MDI-Nepal, briefed on the objective of the workshop. He explained that the workshop's major objective is to familiarize the concerned stakeholders about the *SI* in Nepal. Further, Mr. Shrestha expected to have full support from all concerned stakeholders for accomplishing the tasks at hand - now as well in the future.

The detailed pre-workshop schedule is presented in **Annex I**.

1.3.2 Presentation on Overview of *Satoyama* Initiatives in Nepal

Mr. Vivek Sharma, National Programme Assistant from UNDP GEF Small Grants Programme (SGP), presented the scope of *SI* in Nepal. He explained to the participants that the *SI*, originated from Japan and endorsed by several reputed institutions including UNDP, is planned to be implemented in Nepal beginning with the 10 VDCs of North western Makawanpur through the COMDEKS Programme. Mr. Sharma highlighted the UNDP GEF-SGP's further strategy in Nepal being based on the fundamental principle of the communities living in full harmony with the nature, a notion of honoring the Local level Knowledge and Innovation. He also emphasized on the need and rationale of the baseline survey to uncover the ground truth and design programme activities accordingly.

After that, Mr. Roshan Subedi, Agriculture Coordinator, MDI-Nepal explained about 20 Socio-Ecological Production Landscape (SEPL) indicators among the participants. Dr. Govind Koirala, Research Specialist and Team Leader of the baseline study also helped to interpret the SEPL radar to be produced as a final outcome of the baseline study. Since these 20 SEPL indicators were the major content of the entire study, a rigorous exercise was done making syndicate groups of four focusing on each thematic content of the questionnaire. Group-1 dealt on ecosystem protection and the maintenance of biodiversity, Group-2 on agricultural biodiversity, Group-3 on knowledge learning and innovations and Group-4 on social equity and infrastructure.

Each group discussed on the respective topics and simplified the languages by seeking local examples. The method of SEPL matrix and data processing was also done together with the four groups so that all the participants could understand the method of data collection as well as its processing.

1.3.3 Feedbacks and Way Forward

After the exercise session, the participants, including the representatives from community organization, provided feedbacks on various themes and contents. Dr. Govind Koirala, Team Leader, detailed about how COMDEKS baseline would support in developing Nepal's COMDEKS strategy paper. He also detailed about the expert team going immediately after the Pre-Workshop meeting for COMDEKS baseline survey in most parts of the selected 10 VDCs.

Mr. Bhuwan Prakash Bista, LDO, DDC appreciated the SI in Nepal adding on the rationale for baseline assessment. He committed to support the programme on behalf of DDC in the days to come. He also thanked all the participants for active participation during the workshop including UNDP GEF SGP for their grants and support useful, both for poverty reduction and nature conservation.

As a way forward, a study team was formed in the leadership of Dr. Govind Koirala including Mr. Khop Narayan Shrestha, Agro-forestry Expert, MDI-Nepal; Mr. Pramod Lamsal, GIS expert, GeoSpatial Pvt. Ltd; Mr. Kumar Adhikari, Expert, APDN; Mr. Binod Shrestha, Engineer, MDI-Nepal; Ms. Dip Maya Gurung, Monitoring Officer, Regional Office MDI-Nepal, Nepalgunj; Mr. Navin Subedi, Field Officer, MDI-Nepal; Mr. Shiva Kumar Kashi, Reporter, Hetaunda Today who preferred to involve himself to conduct COMDEKS Baseline Survey and gather SEPL Baseline data in the selected VDCs.

The meeting was highly appreciated by the community members, representatives from District line agencies, representatives from Non-Government Organizations and media persons.

*List of pre-workshop participants is provided in **Annex-2**.*

1.3.4 Baseline Survey in selected VDCs

After organizing Daman Pre-workshop, study team carried out the field survey following tools as mentioned below:

Tools Used

Questionnaires: The standard questionnaire developed by SI and modified by UNDP to suit Nepali context was used after translating them into simple Nepali language. *The questionnaire used is presented in **Annex-3**.*

There were twenty questions organized into 4 thematic components such as Ecosystem Protection; Agricultural bio-diversity; Knowledge learning and innovations; and Social equity and infrastructure. In each thematic head, there were four, two, eight and six questions respectively. The first 3 thematic heads referred to the process while last thematic head is mostly related to the impact. The translated questionnaire was thoroughly discussed in the Daman pre-workshop. After the Daman pre-workshop, the study team members discussed the questions more elaborately in order to develop local

examples and cases that could help the participating respondents understand the questions more thoroughly and provide reasonable scores based on their respective perceptions. All 10 target VDCs of north-west Makawanpur were selected for the study as mentioned in the project. In each VDC, about 20 representative respondents were invited from five to 9 wards of the VDCs. Participants were selected on a random basis from the list prepared for each ward. More importantly, Women, Janajati, Dalit and Marginalized households were sufficiently represented in each of the VDC level meetings.

First, the participants were oriented on the objectives of the study and methodology to provide scores to the questions. All participants were fully apprised in all twenty questions with several ground level examples presented by facilitators, study team members and local enumerators. After understanding the questions, the participants gave independent scores to each question on a scale of integers 1 to 5. The respective scores indicated the following:

- 5 -- Steep Upward Trend
- 4--Slow/some Increasing Trend
- 3-- No Change
- 2-- Slow/Some Decreasing Trend
- 1-- Steep Downward Trend.

Landscape boundary was based on each VDC boundary.

The scores provided by the participants were entered into the computer for each VDC separately followed by sorting the scores on an ascending scale. For each VDC, three means and one standard deviation were computed using MS excel package. The first mean was the overall average of the VDC while the two means were represented from first three low scores and the other one represented from first three high scores. The purpose was to observe the difference between highest and lowest scores awarded by the participants for each question.

The scores were compiled using standard format provided by GEF-SGP to prepare the spider diagram/ Radar.

The findings were interpreted by the experts of the study team based on the average perception scores. The lower mean value indicated that there is enough room for further work on the theme whereas the higher mean value indicated that there was already considerable upward trend on the theme and local people can carry them forward on their own. Further, the SEPL indicators helped them realize the current status of accomplishment in each theme. The standard deviation (SD) showed the level of difference across the perceptions on different themes, which is due to differences in respective landscape features and also due to the level of understanding of the spirit of the questions. In general, a lower SD value on a theme meant that there was common perception. Similarly, higher SD value meant different perceptions on the theme.

At the last, a meeting was organized in Nagarkot participated by the study team, Local Development Officer of the Makawanpur district Mr. Bhuwan Prakash Bista and Raja Ram Thapa, Praja Development Programme of the DDC. The DDC officials provided inputs for the preparation of the COMDEKS strategy for Nepal, particularly in areas of institutional arrangements, M & E and identification of hotspots.

2. VDC wise findings from the baseline survey

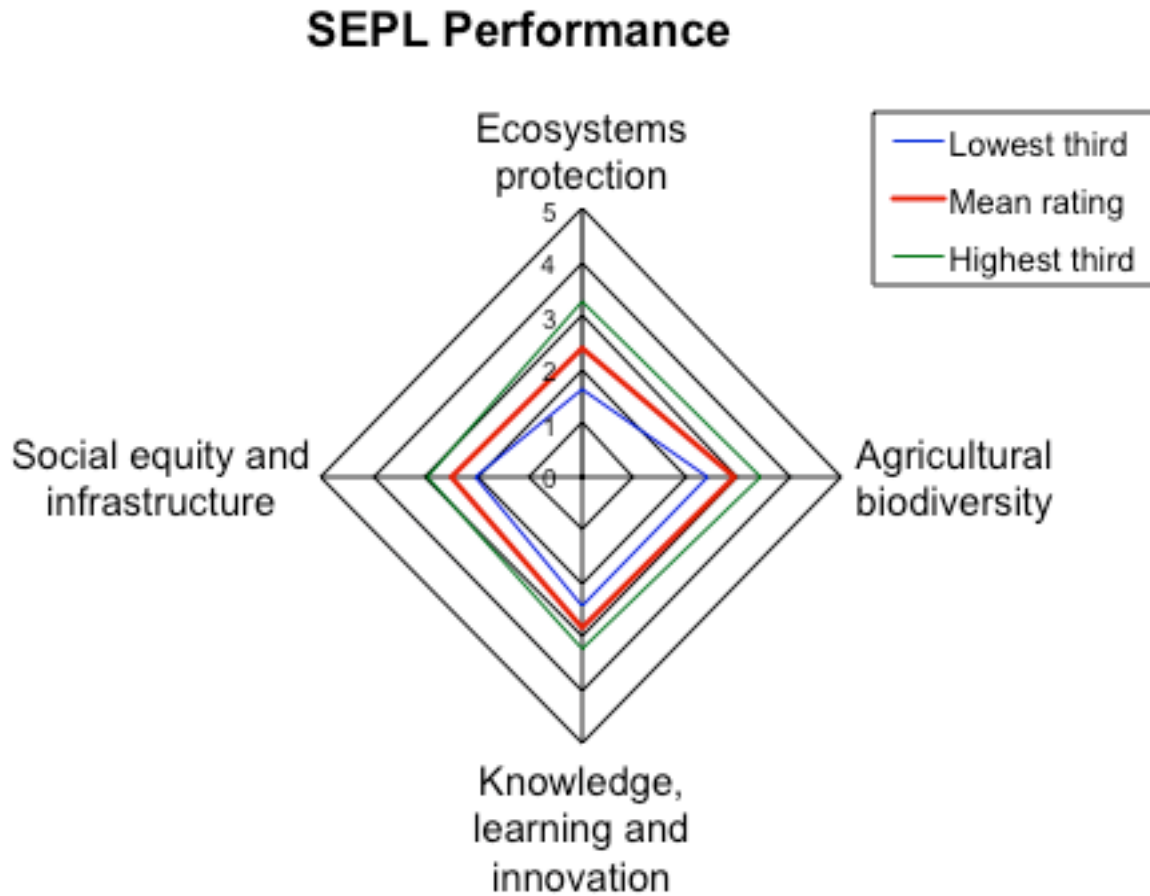
2.1 *Radar Diagram Interpretation*

Interlinks from the findings of the baseline survey by VDCs is presented in the form of radar diagrams with accompanying data in the tables underneath each radar diagram. The red rectangle in the radar diagram represents the simple arithmetical average (mean) of the perception. Lower its area relative to the total radar area, the overall perception on development status on the themes is weaker meaning gaps thus implying scope for further actions on the themes. Other 2 parameters – mean of lowest 3 scores and mean of highest 3 scores represent variations in perception among people of different wards within the VDC. These are marked as blue and green rectangles within the radar diagram respectively. The standard deviation (SD), which is not mapped within the radar diagram, also represents the variations in responses within each theme. The last 3 parameters together show the degree of effort needed in consensus building and institutional development within a landscape boundary. Higher values would implicate the need for larger efforts to consensus building.

2.2 *Dandakharka VDC*

The SEPL performance of Dandakharka VDC is presented in the radar diagram (Figure 1). According to the diagram, mean on the themes are low - 2.39, 2.95, 2.84 and 2.52 on Ecosystem protection, Agriculture biodiversity, Knowledge, learning and innovation and social equity and infrastructure respectively. A lot of work is required to reach the acceptable level of development under the SI themes in this VDC. People of Dandakharka have only relatively have perceived higher development status on agricultural bio-diversity. The diversity in perception is even bigger meaning that the achievements in COMDEKS themes are unequally distributed with strong pessimistic notion.

Figure 1: SEPL Performance of Dandakharka VDC



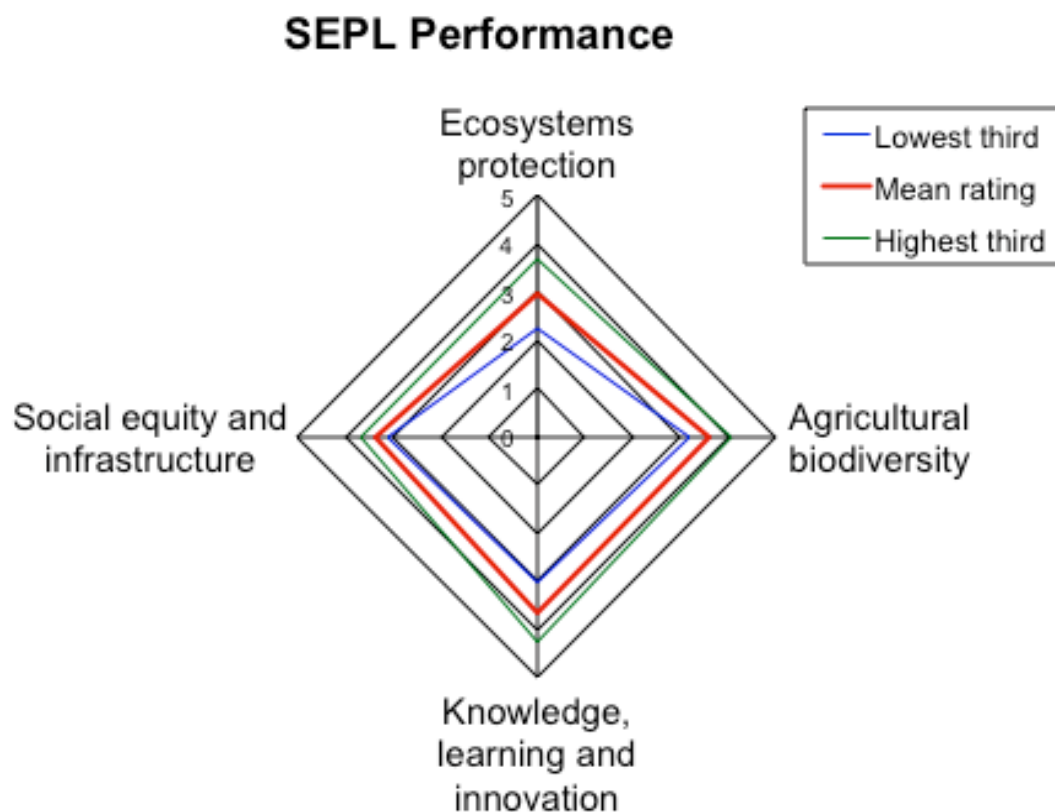
Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	1.63	2.44	2.44	2.06
Mean rating	2.39	2.95	2.84	2.52
Highest third	3.25	3.44	3.23	2.98
Standard dev.	0.83	0.60	0.42	0.47

Source: MDI Baseline Survey, 2012

2.3 Bharta VDC

The SEPL performance of Bharta VDC is presented in the radar diagram (Figure 2). According to the diagram, mean on the themes are above average - 2.98, 3.60, 3.66 and 3.39 for Ecosystem protection, Agriculture biodiversity, Knowledge, learning and innovation and social equity and infrastructure respectively. Major gap in this VDC is in the theme of ecosystem protection. The diversity in perception is high. A lot of work is required to reach the acceptable level of development under the SI themes in this VDC. People of Bharta have only relatively favorable perception on agricultural bio-diversity. The diversity in perception is even higher meaning that the status of achievement in COMDEKS themes is unequally perceived by different members.

Figure 2: SEPL Performance of Bharta VDC



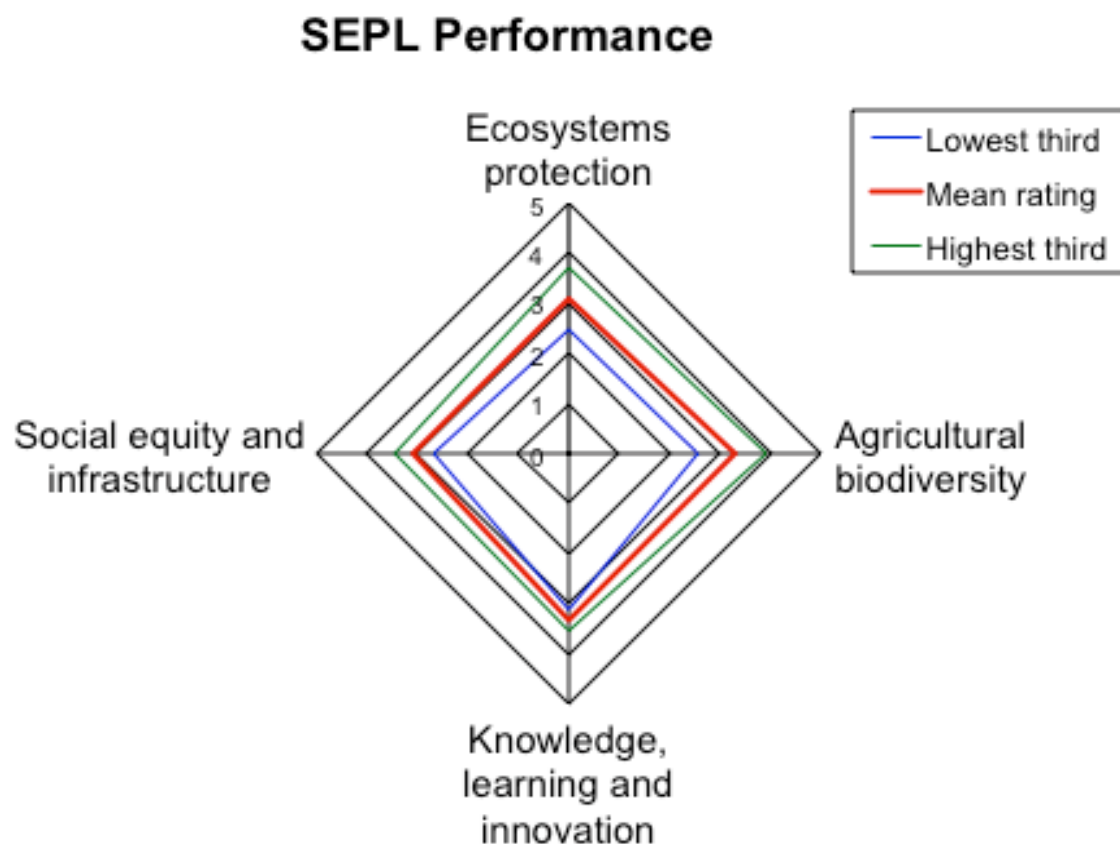
Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	2.22	3.19	3.03	3.13
Mean rating	2.98	3.60	3.66	3.39
Highest third	3.66	4.06	4.27	3.67
Standard dev.	0.71	0.50	0.67	0.32

Source: MDI Baseline Survey, 2012

2.4 Handikhola VDC

The SEPL performance of Handikhola VDC is presented in the radar diagram (Figure 3). According to the diagram, mean on the themes are relatively high - 3.10, 3.30, 3.32 and 3.10 for Ecosystem protection, Agriculture biodiversity, Knowledge, learning and innovation and social equity and infrastructure respectively. Some gaps are found in ecosystem protection and social equity & infrastructure. The diversity in perception is also lesser meaning higher level of social capital in the VDC. Some diverse perceptions in the themes of agricultural biodiversity and the Ecosystem protection were noticed.

Figure 3: SEPL Performance of Handikhola VDC



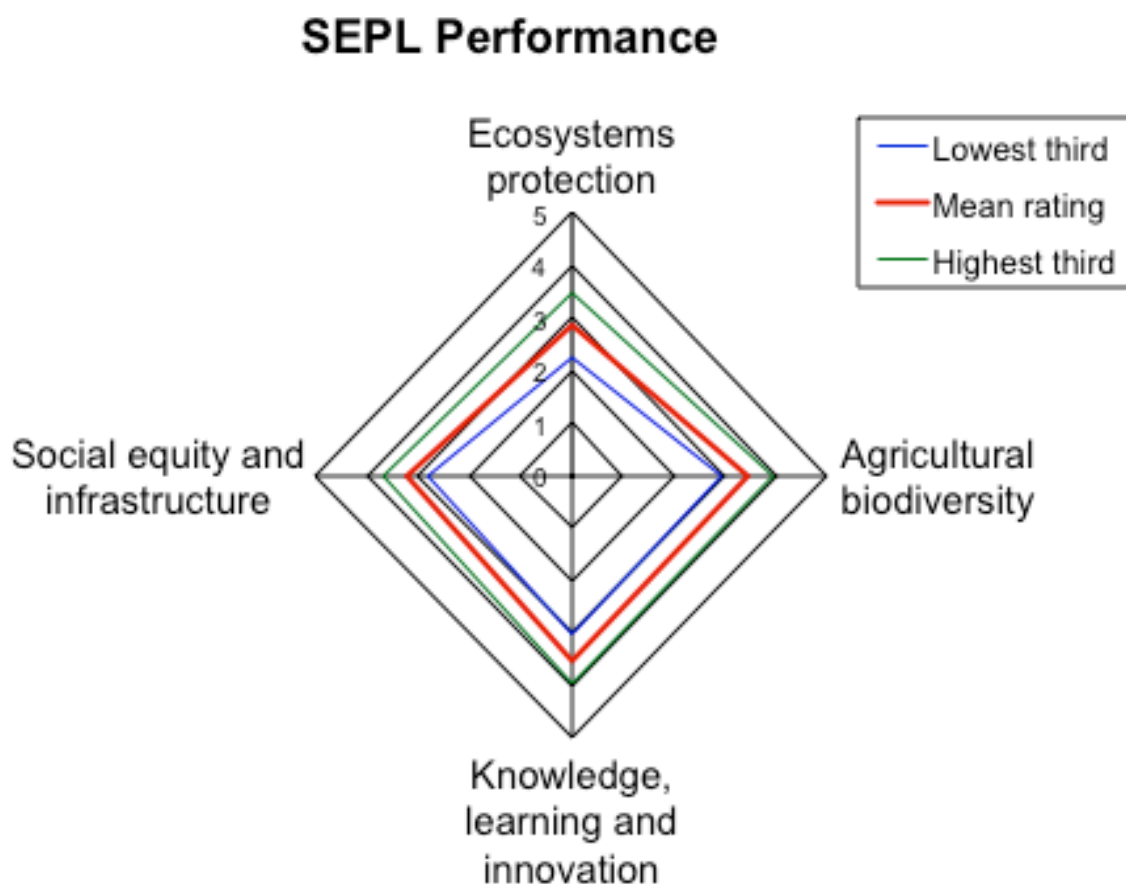
Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	2.47	2.56	3.11	2.67
Mean rating	3.10	3.30	3.32	3.10
Highest third	3.72	3.94	3.53	3.46
Standard dev.	0.62	0.78	0.21	0.40

Source: MDI Baseline Survey, 2012

2.5 Khairang VDC

The SEPL performance of Khairang VDC is presented in the radar diagram (Figure 4). According to the diagram, mean on the themes are low - 2.84, 3.45, 3.54 and 3.23 on Ecosystem protection, Agriculture biodiversity, Knowledge, learning and innovation and social equity and infrastructure respectively. Major gap in this VDC is in the theme of ecosystem protection where more intervention is needed. The diversity in perception is also high. There were more diverse views on Ecosystem protection and Agriculture biodiversity indicators. People of Khairang had only relatively favourable perception on agricultural bio-diversity.

Figure 4: SEPL Performance of Khairang VDC



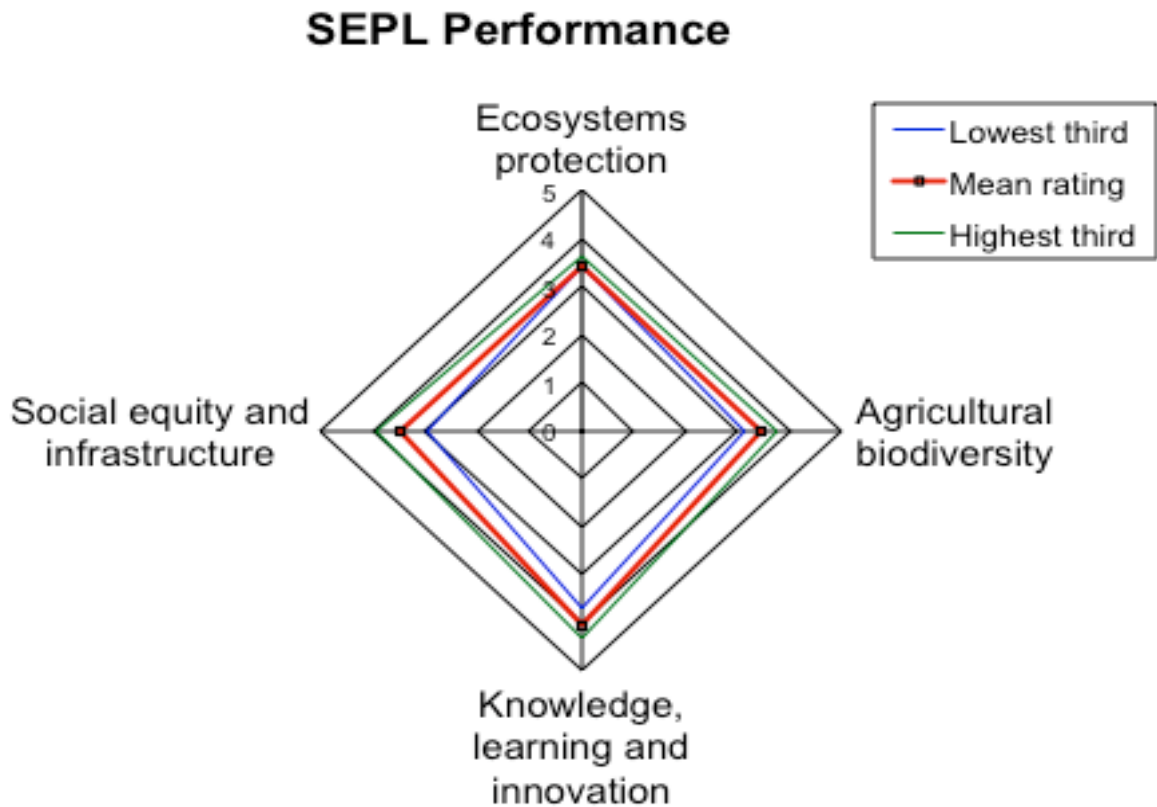
Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	2.22	2.94	3.03	2.79
Mean rating	2.84	3.45	3.54	3.23
Highest third	3.47	3.94	3.98	3.67
Standard dev.	0.64	0.60	0.57	0.46

Source: MDI Baseline Survey, 2012

2.6 Kankada VDC

The SEPL performance of Kankada VDC is presented in the radar diagram (Figure 5). According to the diagram, mean on the themes are relatively high compared to other VDCs - 3.41, 3.45, 4.05 and 3.46 for the indicators Ecosystems protection, Agriculture biodiversity, Knowledge, learning and innovation and social equity and infrastructure respectively. This is because of the larger scale earlier interventions in the VDC by MDI. The deviations in perceptions are also close to the mean indicating not much difficulty in consensus building within the VDC.

Figure 5: SEPL Performance of Kankada VDC



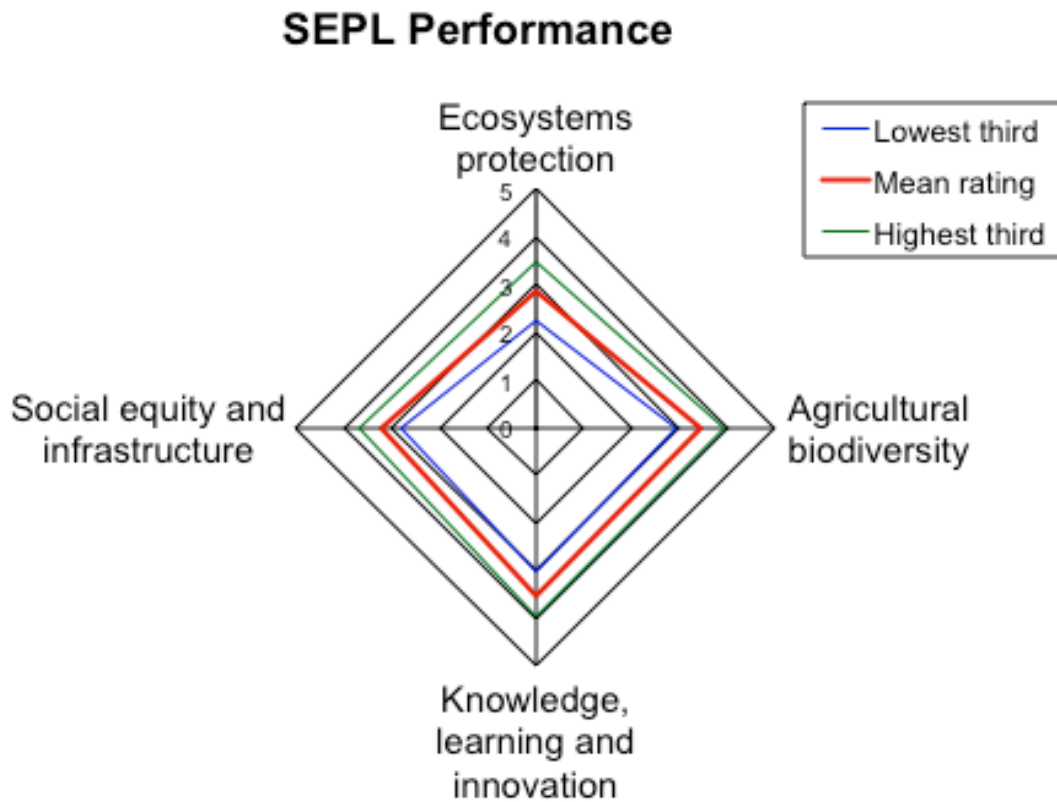
Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	3.41	3.13	3.70	2.98
Mean rating	3.41	3.45	4.05	3.46
Highest third	3.63	3.75	4.33	3.94
Standard dev.	0.44	0.43	0.33	0.54

Source: MDI Baseline Survey, 2012

2.7 Kalikatar VDC

The SEPL performance of Kalikatar VDC is presented in the radar diagram (Figure 6). According to the diagram, mean on the themes are moderate - 2.84, 3.45, 3.54 and 3.23 for the indicators Ecosystems protection, Agriculture biodiversity, Knowledge, learning and innovation and social equity and infrastructure respectively. Major gap in this VDC is in the theme of ecosystem protection. People of Kalikatar have only relatively favourable perception on agricultural bio-diversity. The diversity in perception is relatively high indicating the need for further social mobilization.

Figure 6: SEPL Performance of Kalikatar VDC



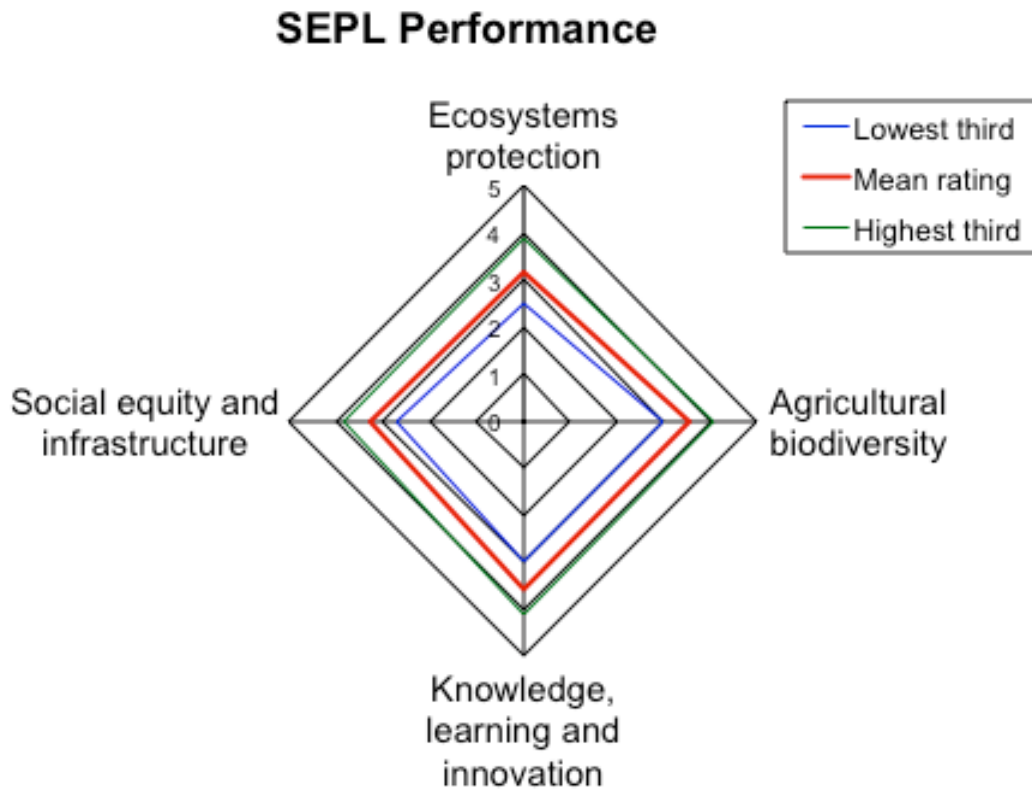
Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	2.22	2.94	3.03	2.79
Mean rating	2.84	3.45	3.54	3.23
Highest third	3.47	3.94	3.98	3.67
Standard dev.	0.64	0.60	0.57	0.46

Source: MDI Baseline Survey, 2012

2.8 Manahari VDC

The SEPL performance of Manahari VDC is presented in the radar diagram (Figure 7). According to the diagram, mean on the themes are rather high - 3.18, 3.55, 3.59 and 3.26 for the Ecosystem protection, Agriculture biodiversity, Knowledge, learning and innovation and social equity and infrastructure respectively. Relatively weaker link is perceived in the theme of ecosystem protection and the differences in perceptions are also highest in this theme.

Figure 7: SEPL Performance of Manahari VDC



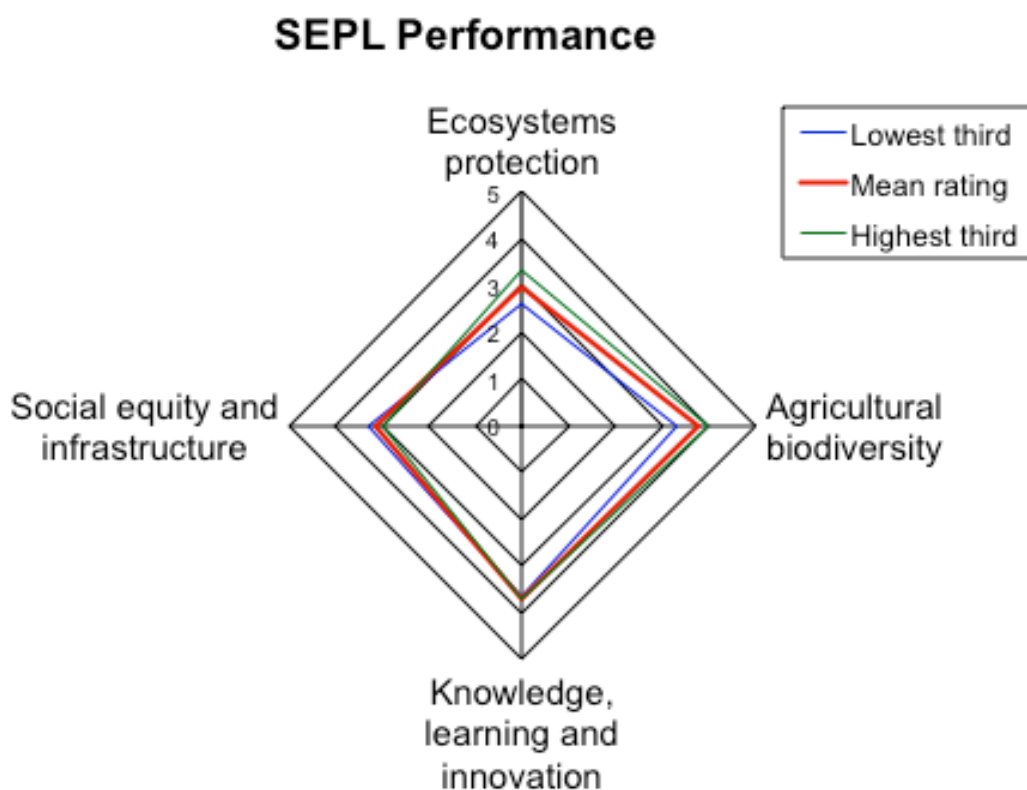
Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	2.47	3.00	3.00	2.69
Mean rating	3.18	3.55	3.59	3.26
Highest third	3.88	4.06	4.14	3.85
Standard dev.	0.75	0.51	0.61	0.57

Source: MDI Baseline Survey, 2012

2.9 Raksirang VDC

The SEPL performance of Raksirang VDC is presented in the radar diagram (Figure 8). According to the diagram, mean on the themes are relatively high - 2.98, 3.60, 3.66 and 3.39 for Ecosystem protection, Agriculture biodiversity, Knowledge, learning and innovation and social equity and infrastructure respectively. Somewhat weaker link is noticed in the theme of ecosystem protection. The diversity is low except in the theme of ecosystem protection and agricultural bio-diversity meaning that the institutional development in the VDC is in a fair state.

Figure 8: SEPL Performance of Raksirang VDC



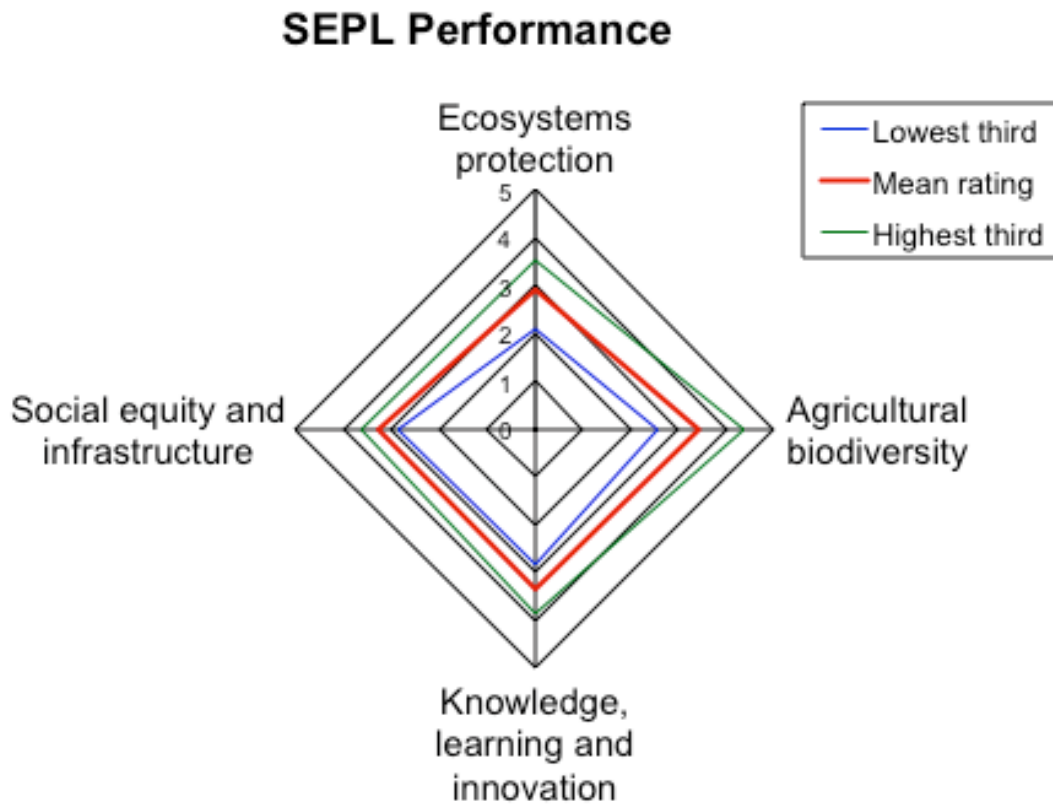
Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	2.16	3.06	3.36	2.83
Mean rating	2.98	3.78	3.74	3.14
Highest third	3.75	4.44	4.13	3.44
Standard dev.	0.84	0.73	0.40	0.29

Source: MDI Baseline Survey, 2012

2.10 Sarikhet VDC

The SEPL performance of Sarikhet VDC is presented in the radar diagram (Figure 9). According to the diagram, mean on the themes are relatively high - 2.89, 3.43, 3.36 and 3.25 for the Ecosystem protection, Agriculture biodiversity, Knowledge, learning and innovation and social equity and infrastructure respectively. Some gap for further work in this VDC is in the theme of ecosystem protection. The diversity in perception is generally high and very high on the theme of agricultural bio-diversity.

Figure 9: SEPL Performance of Sarikhet VDC



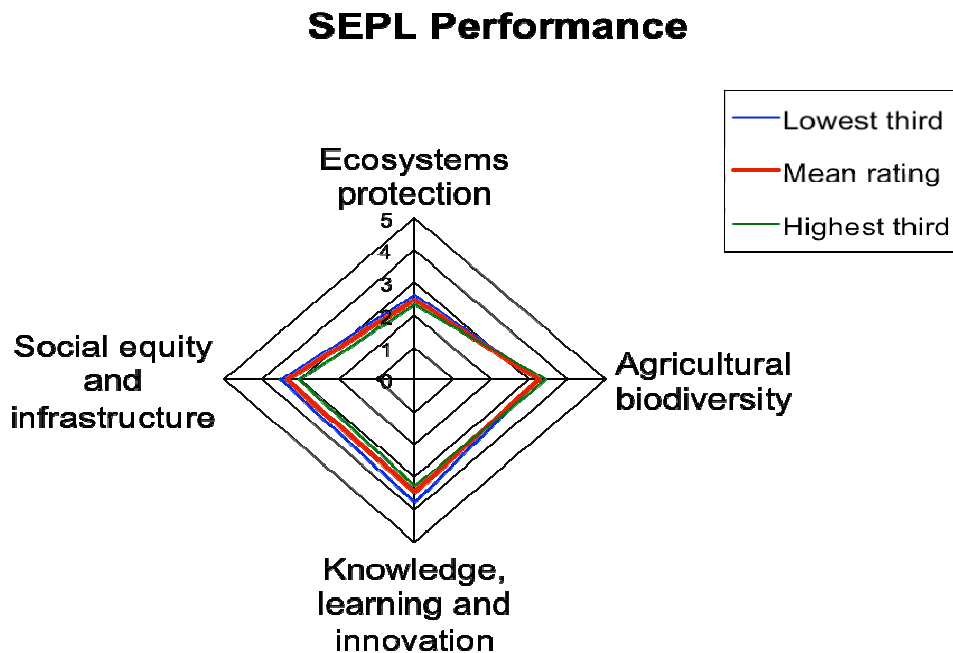
Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	2.09	2.56	2.84	2.85
Mean rating	2.89	3.43	3.36	3.25
Highest third	3.53	4.38	3.88	3.65
Standard dev.	0.80	0.91	0.59	0.48

Source: MDI Baseline Survey, 2012

2.11 Namtar VDC

The SEPL performance of Namtar VDC is presented in the radar diagram (Figure 10). According to the diagram, mean on the themes are low - 2.45, 3.25, 3.44 and 3.36 for the Ecosystems protection, Agriculture biodiversity, Knowledge, learning and innovation and social equity and infrastructure respectively. Major gap in this VDC is in the theme of ecosystem protection where substantial further work is needed. The perceptual understanding in this VDC is more common as revealed by the low level of difference between the means of highest 3 scores and lowest 3 scores, which can render the project implementation easier.

Figure 10: SEPL Performance of Namtar VDC



Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	2.59	3.25	3.80	3.50
Mean rating	2.45	3.25	3.44	3.36
Highest third	2.31	3.44	3.28	3.02
Standard dev.	0.59	0.72	0.76	0.62

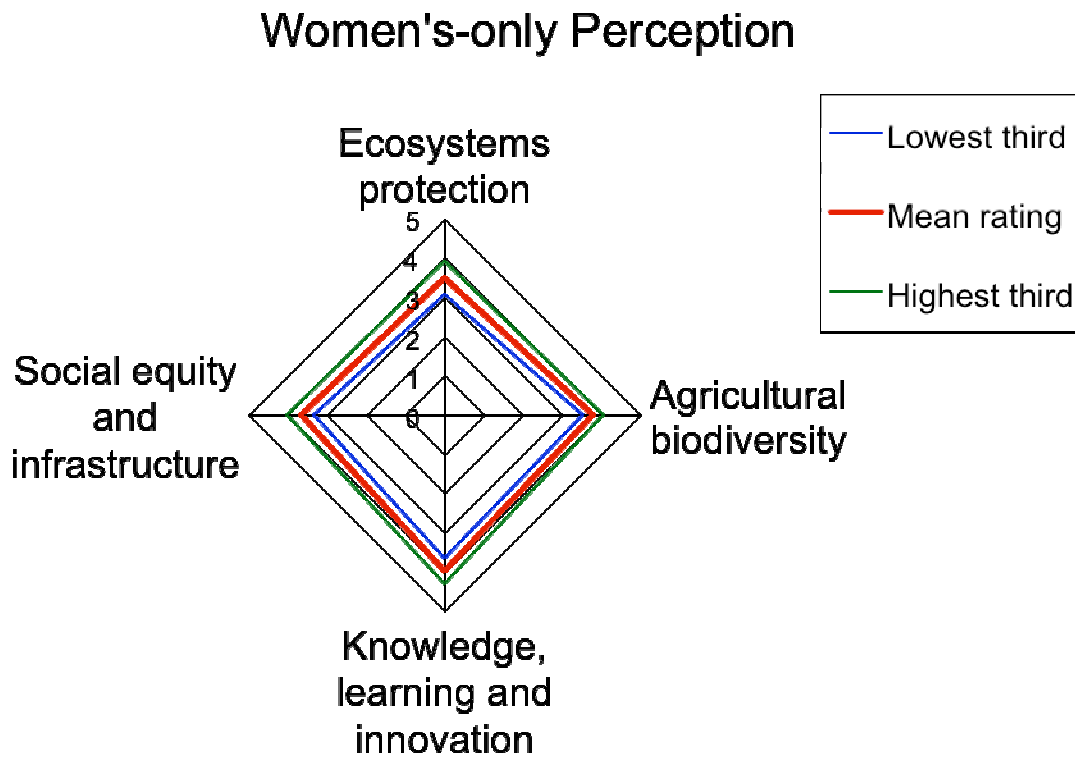
Source: MDI Baseline Survey, 2012

2.12 Perceptions on the thematic areas by Gender

2.12.1 Women's only Perception

A separate radar diagram was prepared taking women's only perception on four thematic areas (Figure 11). Altogether 42 women respondents (21%) participated out of the total 200 in providing the scores.

Figure 11: SEPL Performance of Women's only Perception



Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	3.06	3.50	3.64	3.33
Mean rating	3.49	3.79	3.97	3.65
Highest third	3.92	4.06	4.31	4.00
Standard dev.	0.49	0.30	0.32	0.41

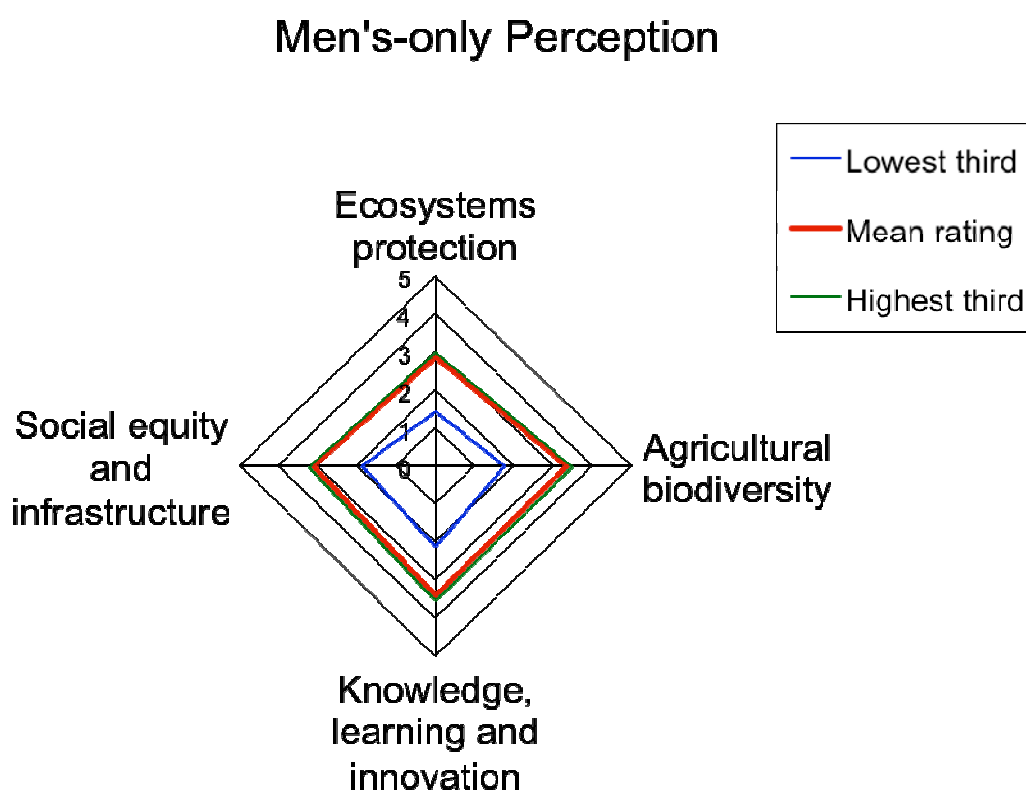
Source: MDI Baseline Survey, 2012

Note: The above scores are averages of 42 women respondents represented in the baseline survey.

2.12.2 Men's only Perception

As in the case of women, a separate radar diagram was prepared taking men's only perception on four thematic areas (Figure 12). Altogether 158 male respondents (79%) participated out of the total 200 in providing the scores.

Figure 12: SEPL Performance of Men's only Perception



Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	1.44	1.75	2.13	1.88
Mean rating	2.88	3.35	3.42	3.13
Highest third	2.99	3.48	3.52	3.22
Standard dev.	0.74	0.75	0.63	0.54

Source: MDI Baseline Survey, 2012

Note: The above scores are averages of 158 male respondents represented in the baseline survey.

2.12.3 Perception on SI themes compared by gender

Women are found to be conclusively positive about the status of development in all 4 thematic areas and their standard deviation in perception levels is found to be much lower than men. Women's perception was more cohesive while men held highly divergent perceptions about the development status in COMDEKS themes. The result implies that it will be much easier to form women's groups. The disaggregated average scores by gender are presented in **Table 1**.

Table 1: Average scores on COMDEKS themes disaggregated by gender

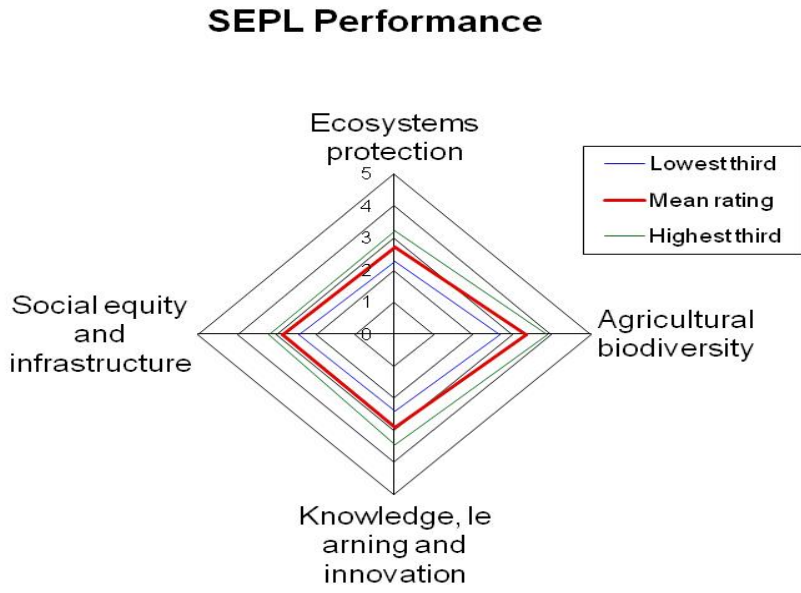
Category	Ecosystems protection		Agricultural biodiversity		Knowledge, learning and innovation		Social equity and infrastructure	
	Women	Men	Women	Men	Women	Men	Women	Men
Lowest third	3.06	1.44	3.50	1.75	3.64	2.13	3.33	1.88
Mean rating	3.49	2.88	3.79	3.35	3.97	3.42	3.65	3.13
Highest third	3.92	2.99	4.06	3.48	4.31	3.52	4.00	3.22
Standard dev.	0.49	0.74	0.30	0.75	0.32	0.63	0.41	0.54

Source: MDI Baseline Survey, 2012

2.13 Sauraha Workshop

In Sauraha workshop, one session was organized to have a test from the programme participants so that it could verify the results with that of recently carried out baseline survey in different 10 VDCs of North West Makawanpur. While matching the results of all VDCs, it was found to be almost the same. However, participants gave low score on the theme of Knowledge, Learning and Innovation compared to the VDC level findings (Figure 13).

Figure 13: SEPL Performance Scores from Sauraha Workshop



Category	Ecosystems protection	Agricultural biodiversity	Knowledge, learning and innovation	Social equity and infrastructure
Lowest third	2.28	2.69	2.41	2.44
Mean rating	2.73	3.36	2.90	2.84
Highest third	3.22	3.89	3.44	3.20
Standard dev.	0.63	0.63	0.59	0.45

Source: MDI Baseline Survey, 2012

3. Overall findings of the baseline study

Overall findings with detail reasons are presented below following different four themes;

3.1 Ecosystem Protection

This component describes the status of heterogeneity and the multi-functionality of the landscapes, areas protected for their ecological and cultural importance, ecological links sustainable production and rate of recovery from extreme environmental threats.

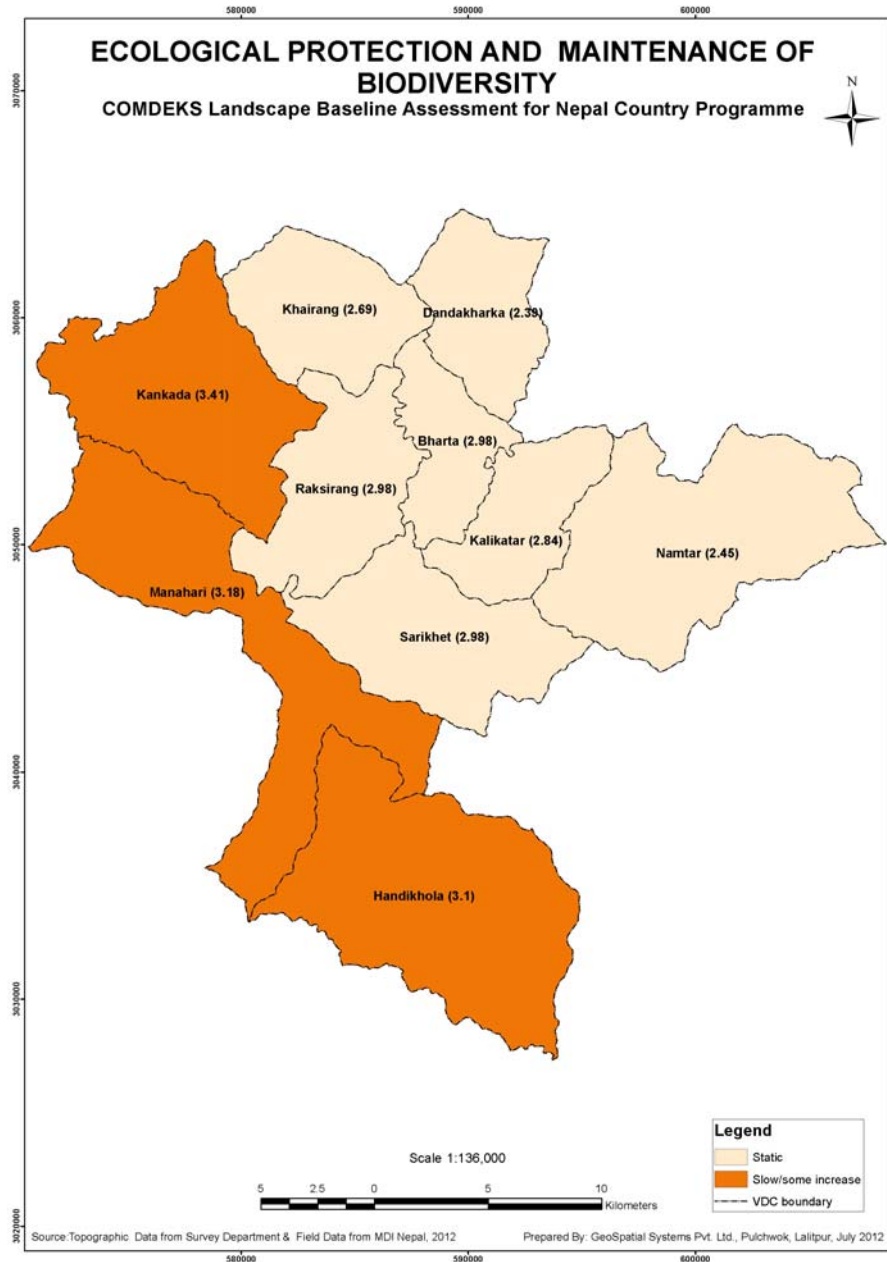
In the theme of eco-system protection, the mean value ranged from as low as 2.39 in Dandakharka VDC to high as 3.41 in Kankada VDC. The standard deviation ranged from as low as 0.44 in Kankada VDC to as high as 0.84 in Raksirang VDC. The low standard deviation meant that all respondents had similar perception on eco-system protection status in the VDC. The VDCs with higher mean in Manahari, Kankada and Raksirang had also previous intervention from SGP in areas of plantation in the slash and burn agriculture blocks. Kankada VDC with lower mean status would mean that further work is needed in this VDC for ecosystem protection.

VDCs	Mean	SD	Mean of first 3	Mean of last 3
Dandakharka	2.39	0.83	1.63	3.25
Bharta	2.98	0.72	2.22	3.66
Handikhola	3.1	0.63	2.47	3.72
Kalikatar	2.84	0.65	2.22	3.47
Kankada	3.41	0.44	3.41	3.63
Khairang	2.69	0.6	2.16	3.28
Manahari	3.18	0.74	2.47	3.88
Rakshirang	2.98	0.84	2.16	3.75
Sarikhhet	2.89	0.8	2.09	3.53
Namtar	2.45	0.59	2.31	2.59

Source: MDI Baseline Survey, 2012

Reasons for High Score

Those VDCs providing high perception scores gave several reasons – i) Forest, water resources, cultivated land, *Khoriyas* and other ecosystem patches are available and interlinked; ii) different types of crops are grown, particularly banana, pineapple, broom



grass are grown on *Khoriyas* not only as higher income sources but also as coping source if food crops failed; iii) for sustainable production of crops, animals are kept for fertilizers; iv) human habitation is near the forest; v) community forest covers large area and some protected areas have key resources where wide varieties of birds and animals can be seen vi) awareness level is good on landslide control, water resource protection and use of organic fertilizers. Bee keeping is practiced for synergy with oilseed and vegetable crops; and vii) pest control and other ecological links are maintained with the use of animal urine; and viii) people are conscious about environmental stresses. However,

considerable irrigation stress is felt in the area.

Reasons for Low Score:

Following reasons are noted for low scores—i) Landscape consists of khoriya's where only maize and millet can be grown; forest covers small area, water resources are limited so there is a problem of drinking water and irrigation, ii) There is less area of forest particularly the community forest, iii) Resources are not conserved and managed well, iv) Even if the committees are formed in community forest, the forest is randomly destroyed, v) Resources from forests are intensively used but it is not protected due to which water sources are drying, vi) Rules and regulation are made but these are not followed seriously, vii) Organic fertilizers are used but chemical fertilizers are much popular which are brought from external markets. viii) crops production level is low in the VDCs and production system largely depends on external inputs, ix) Environmental and climate change effects observed, x) Irrigation systems are very scant therefore appropriate support is needed in these areas.

3.2 Agricultural Biodiversity

This theme deals on an important facet - whether the agricultural biodiversity of the landscape is maintained, documented and conserved giving priority to local crop varieties and animal breeds and use of local foods such as cereals, vegetables, fruits, nuts, wild plants and so on.

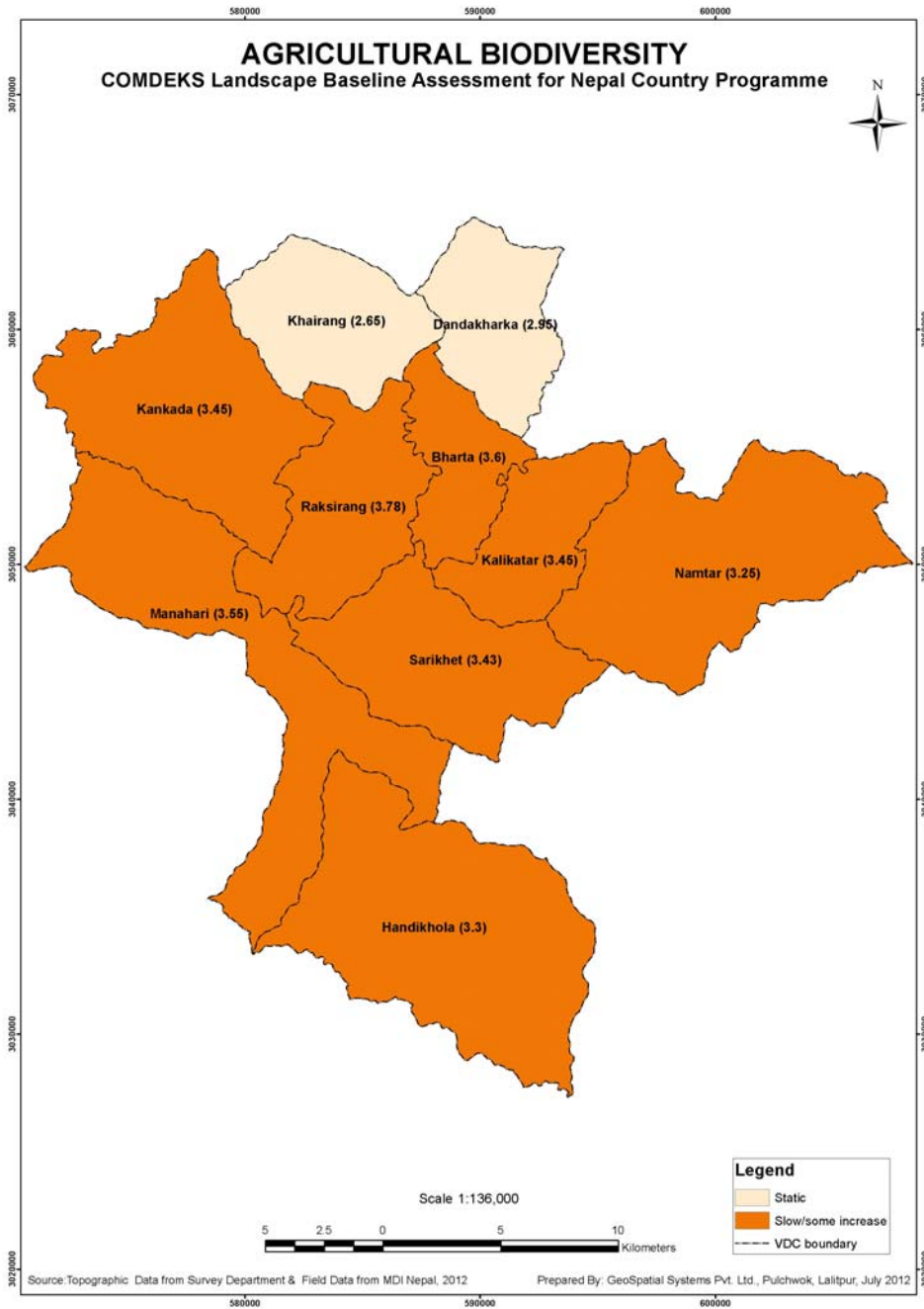
The results of the perception survey are presented below:

In the theme of agricultural biodiversity, the mean value ranged from as low as 2.95 in Dandakharka VDC to as high as 3.78 in Raksirang VDC. Similarly, the standard deviation ranged from as low as 0.43 in Kankada VDC to as high as 0.91 in Sarikhet VDC. Considering the perceived trend, all VDCs except Dandakharka gave a high score on this theme. However, peoples' understanding level in Sarikhet, Khairang, Handikhola are found to be diverse so these VDCs need to have more efforts for consensus building.

VDCs	Mean	SD	Mean of first 3	Mean of last 3
Dandakharka	2.95	0.6	2.44	3.44
Bharta	3.6	0.5	3.19	4.06
Handikhola	3.3	0.78	2.56	3.94
Kalikatar	3.45	0.6	2.94	3.94
Kankada	3.45	0.43	3.13	3.75
khairang	2.65	0.78	1.88	3.38
Manahari	3.55	0.51	3	4
Rakshirang	3.78	0.73	3.06	4.44
Sarikhet	3.43	0.91	2.56	4.38
Namtar	3.25	0.72	3.44	3.25

Source: MDI Baseline Survey, 2012

Reasons for High Score: Following several reasons are reported for high score on the theme of agricultural biodiversity as follows: i) Wide varieties of local breeds are used, conserved and protected, particularly local breeds of maize, millet, poultry, goats, cows are protected, ii) Many households use and conserve local seeds and breeds, iii) Generally, maize, millet and other crops are planted.



conserved and protected, particularly local breeds of maize, millet, poultry, goats, cows are protected, ii) Many households use and conserve local seeds and breeds, iii) Generally, maize, millet and other crops are planted.

Reasons for Low Score: These reasons are noted for low score as follows: i) Local breeds are less used but not conserved therefore these are becoming rare, ii) Most of the people use hybrid breeds of seeds for plantation, iii) Locally produced foods like fish, meat and rice are consumed only in festivals, and iv) Fruits and green vegetables are consumed only in season.

3.3 Knowledge, learning and innovation

This theme represents wide number of interests such as innovations in agricultural biodiversity management for improved resilience and sustainability, access and exchange of agricultural biodiversity, transmission of traditional knowledge systems across generations, cultural tradition related to biodiversity, number of generations

VDCs	Mean	SD	Mean of first 3	Mean of last 3
Dandakharka	2.84	0.42	2.44	3.23
Bharta	3.66	0.67	3.03	4.27
Handikhola	3.32	0.21	3.11	3.53
Kalikatar	3.54	0.57	3.03	3.98
Manahari	3.59	0.62	3	4.14
Rakshirang	3.74	0.4	3.36	4.13
Sarikhhet	3.36	0.59	2.84	4.33
Kankada	4.05	0.33	3.7	3.38
khairang	3.02	0.38	2.67	3.88
Namtar	3.44	0.75	3.28	3.8

Source: MDI Baseline Survey, 2012

interacting with landscape, practice, documentation and exchange of local knowledge, use of local terminology or indigenous language for natural resources and women's knowledge about biodiversity and its use.

The results of the perception survey on the theme of knowledge, learning and innovation are presented below:

In the theme of knowledge, learning and innovation, the mean value ranged from as low as 2.84 in Dandakharka VDC to high as 4.05 in Kankada VDC.

According to above data, all

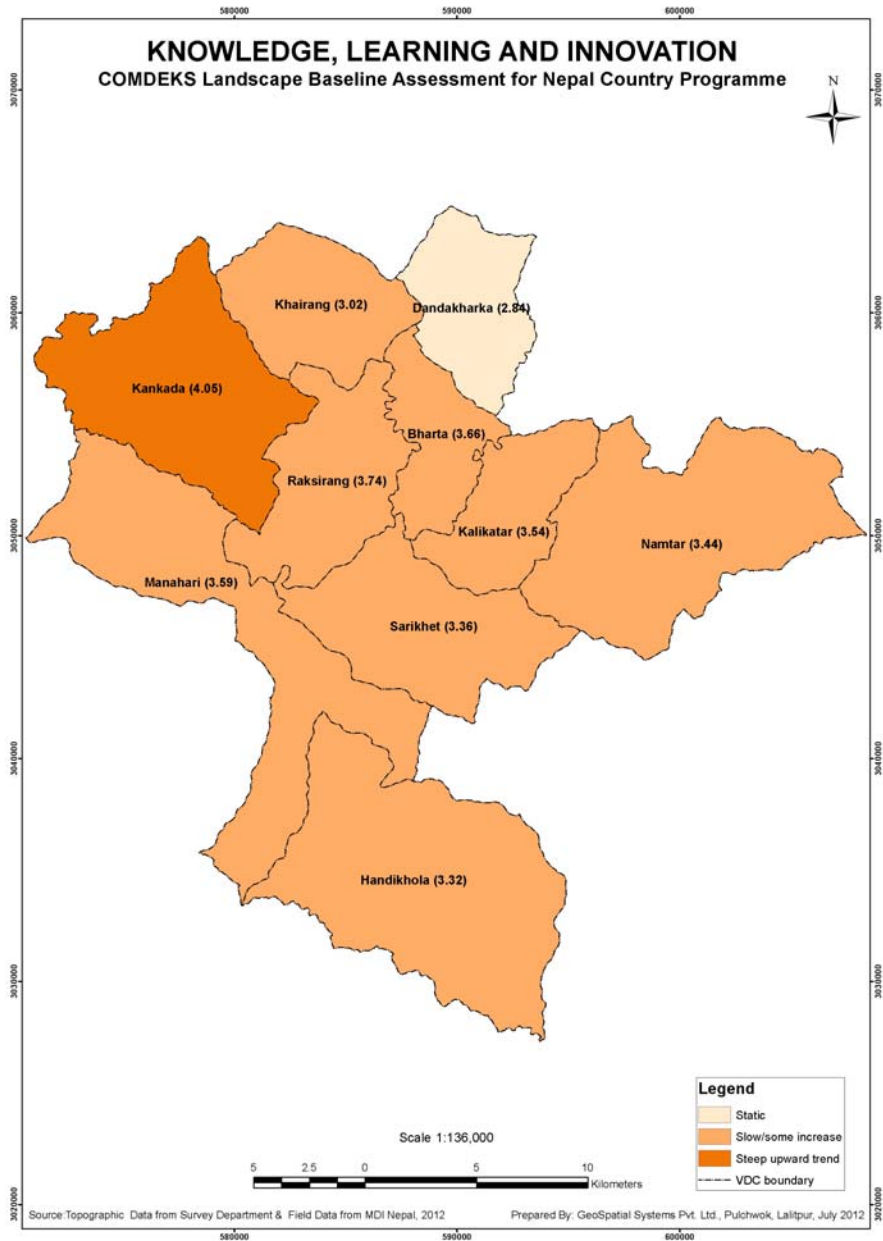
VDCs except Dandakharka have given higher score on the theme. Standard deviation reveals that some VDCs such as Bharta, Manahari and Sarikhhet have high level divergent views on understanding the issues therefore these VDCs need more efforts for consensus building through institutional development.

Reasons for High Score:

The reasons reported include: i) practice of seasonal farming is high and if food production falters, it is compensated by the income from banana, paddy, ginger, vegetables and other businesses; ii) some communities have practiced local goat keeping, fishery, piggery and other petty businesses; iii) seeds are exchanged between communities but on a limited scale in fairs and it needs to be managed and strengthened properly. In this respect, communities are aware but they need to be strengthened, iv) Knowledge about Buddhist religion, natural resource protection, cosmology is transmitted, v) Knowledge about conservation is transmitted to youths, vi) Elders give knowledge to younger ones, vii) All followed culture and rituals from many generations, viii) Youths are sufficiently conscious about it, ix) Traditional farming is done since many generations, x) Community are using local terminology for resources like land and water (particularly in chepang language).

Reasons for Low Score:

The reasons for low score are noted as: i) the communities are sufficiently aware on changes or in an innovation, ii) Exchange practices are only done occasionally, iii) Very few community are exchanging agricultural diversity, iv) Traditional knowledge are becoming rare and it is transferred to the near and dear ones, but not transferred formally and institutionally, v) Cultural traditions and rituals are not practiced well, vi) People go abroad for work, vii) Knowledge are not documented well, viii) Very few community use local terminology, and ix) Women's knowledge is partially used but they are barely involved in conservation of farming, maintaining hygiene, forest protection and so on.



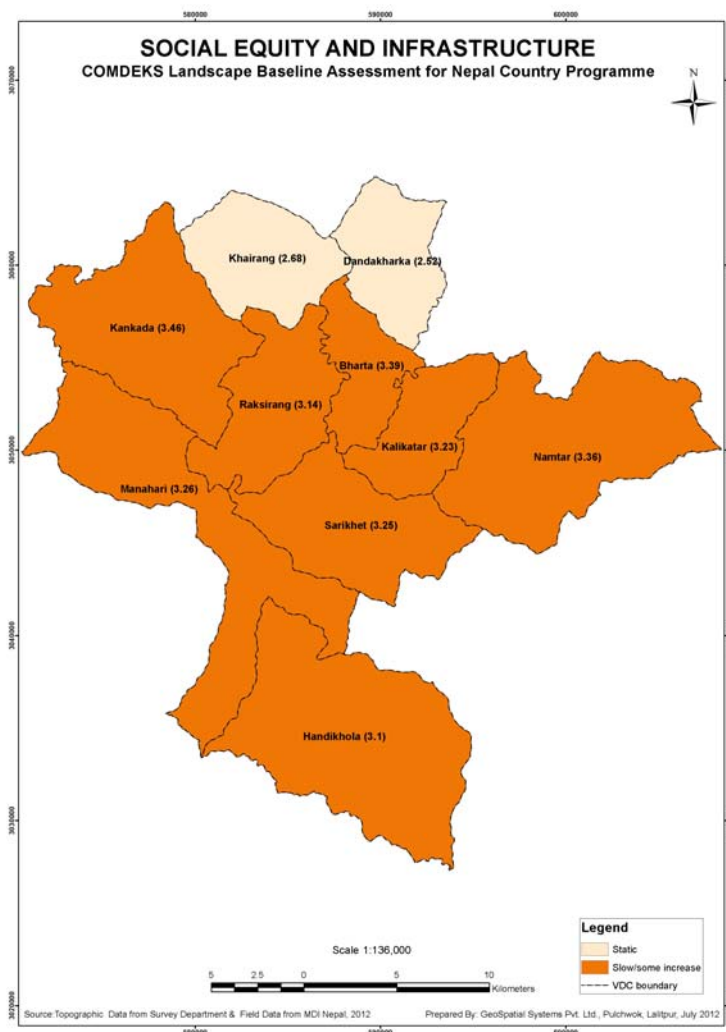
3.4 Social equity and infrastructure

This theme represents the position and status of local governance, autonomy in relation to land and resource management, involvement of women in decision making and communication with outsiders, respect of their knowledge, accessibility to social infrastructures such as roads, school, health care, etc.

In the theme of social equity and infrastructure, the mean value ranged from as low as 2.52 in Dandakharka VDC to high as 3.46 in Kankada VDC. Considering the above data, all VDCs except Dandakharka and Khairang have perceived a rather high score

VDCs	Mean	SD	Mean of first 3	Mean of last 3
Dandakharka	2.52	0.47	2.06	2.98
Bharta	3.39	0.32	3.13	3.67
Handikhola	3.1	0.4	2.67	3.46
Kalikatar	3.23	0.46	2.79	3.67
Kankada	3.46	0.55	2.98	3.94
khairang	2.68	0.62	2.15	3.25
Manahari	3.26	0.57	2.69	3.85
Rakshirang	3.14	0.3	2.83	3.44
Sarikhet	3.25	0.48	2.85	3.65
Namtar	3.36	0.62	3.02	3.5

Source: MDI Baseline Survey 2012



on the theme. As well, result of standard deviation shows that some VDCs such as Bharta, Handikhola, Raksirang, Dandakharka and Kalikatar have less divergent views but in some VDCs such as Khairang and Manahari, respondents have posited highly divergent views on the theme. Therefore, these VDCs need to have more efforts for consensus building.

Reasons for High Score: These are the reasons noted as: i) Resources are managed by local community but rules and regulations are made by the government, ii) Institutions' presence are noted; some are managed by community and some are managed by government. However, these Institutions should be strengthened.

Reasons for Low Score: Following reasons are noted: i) Communities have limited access and decision power in this theme, ii) Community forest, river, streams are under government control and community have no right to access, iii) Even if the

Women are capable, they are less involved in communication with outsiders, decision making of household and other works, iv) Infrastructure such as electricity and road, exists partially, less utilized and these are not functioning in a satisfactory way, v) Health facilities are available but not satisfactory and there is health risk due to bathing in dirty water, drinking dirty water that causes diarrhea, dysentery, cholera, eye and other skin diseases.

4. Post workshop in Sauraha, Chitwan:

4.1 Introduction

The post-workshop was organized on 23 July 2012 in Parkland Hotel, Sauraha, Chitwan. The workshop started with registration of the participants. A total of 35 people participated in the workshop. Ms. Dip Maya Gurung, Monitoring Officer, MDI-Nepal, Regional Office Nepalgunj, welcomed all participants represented from GO, NGOs, Media and community members. The workshop commenced with the participant introduction session. The workshop was chaired by Mr. Ram Krishna Thapa, Social Development Officer, DDC, Makawanpur, on behalf of the LDO Mr. Bhuwan P. Bista due to his busy schedule.

In the opening session, Mr. Khop Narayan Shrestha, Executive Director, MDI-Nepal briefed about the objective of the Post-workshop highlighting the recently carried out baseline survey in 10 VDCs as per the set principles of pre-workshop organized in 20 June 2012 at Daman. The workshop schedule and list of participants is presented in **Annex-4 and 5** respectively.

4.2 Presentation of Brief Overview of SI in Nepal

Before presenting the findings from the study team, Mr. Vivek Sharma, National Programme Assistant, UNDP GEF, SGP, presented about SI in Nepal. He explained to the participants that SI originated from Japan was proposed to be implemented in Nepal for which a COMDEKS Baseline Assessment Programme was needed as a prerequisite. He further added that the recently completed baseline assessment by the expert team would be utilized in developing the country strategy paper (COMDEKS strategy for Nepal). He went on to say that the meeting was expected to endorse the findings of the baseline and would reconcile the results from community to the results that would be obtained from the meeting.

4.3 Workshop Facilitation and Exercise

Exercise based on the SEPL indicator was done during post workshop meeting. Before going to the exercise, participants were explained about all the 20 SEPL indicators. Mr. Roshan Subedi, Agriculture Coordinator and Mr. Khop Narayan Shrestha, Executive Director, MDI-Nepal detailed on how the indicators would be utilized for developing the COMDEKS strategy for Nepal from the SEPL Radar diagram showing baseline of each

4 Major thematic components (Ecosystem Protection and Maintenance of Biodiversity, Agriculture Biodiversity, Knowledge Learning and Innovation and Social Equity and Infrastructure) of SI.

All the participants were requested to fill out the scores for all 20 indicators according to their perception for the landscape of their respective community. Participants were facilitated by the experts during the group exercise.

4.4 Presentation of district status of agriculture and forestry of Makawanpur

During the post workshop, representatives from DFO and DADO presented their own papers.

Mr. Khadananda Sharma, Vice-Secretary, District Forest Office, Makawanpur presented the status of forest situation of Makawanpur district mentioning the major four categories of forests namely, Private, Community, Leasehold and government managed forest. The area where the COMDEKS Baseline survey was conducted were affected by slash and burn agriculture resulting in deforestation. Forest resources were depleting and the DFO's attempt in a participatory way in recent days has been to restore and rejuvenate these forests. He appreciated the concept of SI, which, he believed, could be instrumental in ensuring harmonious relation between forest and human development.

Similarly, Mr. Mahesh Regmi, Senior Agriculture Development Officer, District Agriculture Development Office, Makawanpur presented the status of agriculture biodiversity and the trend of agriculture productivity of cereals and vegetables in past ten years in Makawanpur district. He informed that the agricultural productivity had been increasing while diversity in agriculture was being reduced. There were some sharp declines in agriculture productivity of cereals and vegetables in the year 2008, however the reasons for such decline had not been identified yet. He stated that Makawanpur district had diverse climate and there were greater opportunities for agro-biodiversity. He welcomed the attempts of SI in Nepal and committed to give best possible support to the project from DADO Makawanpur.

4.5 Results presentation and discussion

Dr. Govind Koirala, Team Leader and Mr. Kumar Adhikari, expert presented the results of the workshop exercise and baseline survey with the help of SEPL radar diagram. Mr. Kumar Adhikari was included in the team before the Daman pre-workshop as another expert had been unable to join the team. Dr. Koirala dealt with the SEPL score in post-workshop and said that the exercise result was very much close to the SEPL scores taken during COMDEKS baseline survey except differences in some Indicators. There has been wider variance of average scores in the indicators of Ecosystem Protection and Maintenance of Bio-Diversity and Agriculture Biodiversity. Hence, these could be the intervention areas for the *Satoyama* Initiatives.

During the presentation Dr. Koirala explained all SEPL radar diagrams figured from all target VDCs of Makawanpur district. He interpreted all the results as follows:

- General finding is that the people of the areas were among the poorest in Nepal practicing one of the most inefficient farming practices of slash and burn (slash and burn agriculture). But, the practice has been changing speedily, with MDI intervention to a large extent including that with support from UNDP GEF-SGP.
- Peoples' expectations have been found to be on the rise and the SI project is expected to cater to their further needs to a considerable extent.

During the result presentation Mr. Kumar Adhikari, Expert, presented the mean and standard deviation of the various indicators. He also presented the trend of Land-use change over the period 1992 and 2012. The trend was prepared using land use map of 1992 and Google map updated for 2012 prepared by Mr. Pramod Lamsal, GIS expert, GeopSpatial Pvt. Ltd.

The results showed the decline in forest land and increase in cultivated area. **Table 2** shows the land use trend of 1992 and 2012.

The land use change in the topographical map produced by Survey Department (1992) and the Updated map using Google Earth, 2012 can be summarized as follows:

Table.2: Land Use Trend 1992-2012

Categories	FCODE	Land Use 1992 (ha)	Land Use %	Updated land Use 2012 (ha)	Land Use %	Land Use Change (ha)
Cultivation	25102	14,955.20	28.49	16,567.89	31.56	1,611.99
Forest	25212	33,154.73	63.17	31,555.23	60.13	(1,765.12)
River	30131	263.19	0.50	261.39	0.50	(1.55)
Sand	25332	2,375.94	4.52	2,324.11	4.43	(51.84)
Scattered Trees	25282	51.55	0.10	74.74	0.14	23.18
Barren Land	25352	47.27	0.10	301.73	0.57	254.45
Built Up	15102	-	-	4.13	0.01	4.13
Bush	25262	1,285.93	2.45	1,005.05	1.91	(280.87)
Cliff,Cutting	20212	193.15	0.37	270.00	0.51	76.85
Orchard	25222	0.96	0.00	0.96	0.00	-
Grass	25252	151.54	0.29	114.23	0.22	(37.31)
Total		52,479.47		52,479.47		

During the presentation Mr. Adhikari attempted to compare the climatological trends observed in the last 15 years (1996 to 2010), which is stated as follows;

Change in annual temperature and rainfall profile (1996-2010)

- Daman Change in Maximum temperature 0.00
- Change in Minimum temperature. 0.20
- Change in Rainfall- Daman -2.5
- Change in Rainfall-Rajaiya -3.7
- Change in Rainfall-Beluwa -1.6

The result of analysis showed that the effect of global climate change – increasing the mean minimum temperature trend and the decreasing rainfall trend are begun to manifest clearly.

The results were computed using the following formula;

Slope = slope(data range, year range) (Based on microsoft excel)

The data used for computation is presented in **Annex-5** of the *COMDEKS Strategy Country Report*.

4.6 Feedbacks and Endorsement of the COMDEKS Baseline Assessment

After all the presentations participants provided their feedbacks. The major feedbacks were as follows:

Representing the community members Mr. Sajiwan Praja, Former President, Niguretar Agriculture Cooperative Ltd, Raksirang stated that the practice of slash and burn agriculture in cliff hills and mountains has degraded the land. SI in this critical juncture can be highly useful in conserving our resources and maintaining bio-diversity. If this initiative is not adapted soon, then our siblings will have to face greater disaster in the future not only in Makawanpur district but also in neighboring districts.

Major political party leaders of the Makawanpur district appreciated the *Satoyama* Initiatives. They recommended that the future developmental programmes should be designed on the basis of the recently held baseline survey that has brought to fore problems from the real ground situation and from the horses' mouth. Also, this could help in exploring the resources that we have and can be used for further development. It has greater implication in reducing the global threat of climate change issues as there are lots of evidences of rising temperature in past 15 years in Makawanpur district.

The workshop endorsed the COMDEKS Baseline results and provided their positive response over the approach taken by UNDP GEF Small Grants programme that has been conducted through MDI-Nepal in the target VDCs of Makawanpur district.

Mr. Vivek Sharma, Programme Manager, UNDP GEF Small Grants Programme, thanked all the participants for their active participation. He added that the information would be used for preparing the Country Strategy paper for *Satoyama* Initiatives in Nepal. He stated the concept is about working with the community in a holistic approach, hence stakeholders at all levels are equally important for the COMDEKS Baseline Assessment. He appreciated the effort of all the stakeholders during the post workshop.

The Chairperson for the post-workshop meeting, Mr. Ram Krishna Thapa, Social Development Officer, DDC, Makawanpur offered his vote of thanks to all the participants. He appreciated the *Satoyama* Initiatives in Nepal that is implicated through COMDEKS Baseline Assessment in the target VDCs of Makawanpur district. As closing remarks he thanked all the participants for making post-workshop meeting productive with their active participation and finally announced the conclusion of the one-day post workshop.

5. Local Terminology for SI in Nepal

Several nations implementing SI have created their own local nomenclature in their respective languages. For example, SI is named as Srair in Cambodia, muyong in Philippines, Terroir in France, Ayllu in Peru, Kebun in Indonesia and Malaysia. In the similar pattern, Daman workshop has come out with a special nomenclature for SI Nepal as follows:

- SI-PPP (Satoyama-Initiatives – *Paurakhi Pakha Pakhera*)

Annex 1: Pre-workshop Schedule – Daman

Date: 20 June 2012

Venue: Hotel Gaurishankar, Daman

Facilitator:

Mrs. Dip Maya Gurung, Monitoring Officer, MDI

Time	Activities	Resource Persons
7:00-10:00	Travel from Hetaunda to Daman	
10:00-10:30	Refreshment	
10:30-10:45	Registration of Participants	
10:45-11:00	Introduction	
11:00-11:30	Objective of the Workshop	Mr. Khop Narayan Shrestha, Executive Director, MDI-Nepal
11:30-12:00	Satoyama Initiatives in Nepal-Brief Introduction	Mr. Vivek Sharma, National Programme Assistant, UNDP GEF SGP, Kathmandu
12:00-13:15	Debriefing of SEPL Indicator	Mr. Roshan Subedi, Agriculture Coordinator, MDI-Nepal
13:15-14:00	Lunch	
14:00-15:00	Cont...Debriefing of SEPL Indicator	
15:00-16:00	Feedbacks and Comments	Participants
	Concept of COMDEKS Baseline Assessment Report	Dr. Govind Koirala, Team Leader
	Closing remarks by chairman	Mr. Bhuwan Prakash Bista, Local Development Officer, DDC, Makawanpur

Annex 2: List of Pre-workshop Participants - Daman

S.N.	Name of Participants	Designation	Organization/Address
I.	District Representatives		
1	Mr. Bhuwan Prakash Bista	Local Development Officer	District Development Committee, Makawanpur
2	Mr. Mahesh Regmi	Senior Agriculture Development Officer	District Agriculture Development Office, Makawanpur
3	Mr. Chet Narayan Kharel	District Livestock Officer	District Livestock Service Office, Makawanpur
4	Mr. Khadananda Sharma	Vice Secretary	District Forest Office, Makawanpur
5	Mr. Bol Bahadur Karki	Member	NGO Federation, Makawanpur
6	Ms. Pancha Maya Shyangtan	Chairperson	Federation of Community Forest Users' Group, Makawanpur
7	Mr. Mahesh Chepang	Secretary	Nepal Chepang Association
8	Mr. Pradip Kumar Mishra		District Soil Conservation Office, Makawanpur
9	Mr. Raja Ram Thapa	Chief of Chepang Development Project, DDC	District Development Committee, Makawanpur
10	Mr. Pratap Bista	Member	Nepal Journalist Association, Central Committee
11	Mr. Bhanu Bhakta Acharya	Chairperson	Nepal Journalist Association, Makawanpur
II.	Community Representatives		
12	Ms. Kanchhi Maya Chepang	Chairperson	Churidanda Community Organization, Manahari
13	Mr. Raj Kumar Chepang	Chairperson	SilingeAmriso Community Organization, Kankada
14	Mr. Sajiwan Praja	Former Chairperson	Niguretar Agricultural Cooperative Ltd. Raksirang
15	Mr. Ram Chandra Praja	Secretary	Jharana Community Organization, Sarikhet
16	Mr. Bir Bahadur Chepang	Chairperson	Dhodaya Community Organization, Kalikatar
17	Mr. Singh Bahadur Thing	Chairperson	Saraswoti Community Organization, Bharta
18	Mr. Umesh Praja	Member	Khairang Agroforestry Management Committee, Khairang
19	Mr. Yam Bahadur Shyangbo	Chairperson	Bhumeswori Community Organization, Dandakharka

S.N.	Name of Participants	Designation	Organization/Address
20	Mr. Sanu KanchhaTitung	Chairperson	Churiyamai Agriculture Cooperative Ltd., Handikhola
III	UNDP GEF Small Grant Programme		
21	Mr. Vivek Sharma	National Programme Assistant	UNDP Small Grant Programme
IV	Consultants		
22	Dr. Govind Koirala	Team Leader	Freelancer
23	Mr. Kumar Adhikari	Local Governance/Institutional Expert	APDN, Kathmandu
24	Mr. PramodLamsal	GIS Specialist	Geo Spatial System Pvt Ltd
V	MRC Nepal		
25	Mr. Bharat Khadka	Chief Executive Officer (CEO)	MRC Nepal
26	Ms. Gita Bhusal	Programme Manger	MRC Nepal
VI	Journalists		
27	Mr. Rabindra Ghimire	Reporter	Pratidhoni FM, Daman
28	Mr. Shiva Kumar Kashi	Reporter	Hetauda Today Daily
29	Mr. Bhanu Bhakta Acharya	Chairperson	Nepal Journalist Association, Makawanpur
VII	MDI- Nepal		
30	Mr. Khop Narayan Shrestha	Executive Director	MDI-Nepal
31	Mr. RoshanSubedi	Agriculture Coordinator	MDI-Nepal
32	Mr. Binod Shrestha	Water Resource Engineer	MDI-Nepal

Annex 3: Questionnaire used in Baseline Survey

WHAT TO ASSESS	SCORES			AVERA GE SCORE S
ECOSYSTEMS PROTECTION AND THE MAINTENANCE OF BIODIVERSITY		<i>Trend in the last 50 years</i>	TOTAL SCORE FOR SECTION	TOTAL / 4 =
<p>1. Heterogeneity and multi-functionality of the landscapes</p> <p>Do land management practices maintain a heterogeneous landscape mosaic composed of different land-use types and ecosystem patches, e.g. forest, home gardens, cultivated fields and orchards?</p>	<p>5) Heterogeneous landscape consists of diverse land-use types and well connected ecosystem patches.</p> <p>4) Landscape mosaic consists of several land-use types and some ecosystem patches.</p> <p>3) Landscape consists of several land-use types and fragmented ecosystem patches.</p> <p>2) Landscape consists of two or three land-use types and few ecosystem patches.</p> <p>1) No heterogeneity, i.e. one type of land-use predominates in the landscape.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p> <p>→ No change</p> <p>↘ slow/some decrease</p> <p>↓ steep downward</p>		
<p>2. Areas protected for their ecological and cultural importance</p> <p>How many landscape components that maintain ecosystem functions and services are protected? Protection may be formal or informal and include traditional forms of protection such as sacred groves.</p>	<p>5) Protected and low-use areas cover key resources and are well connected with ecological corridors.</p> <p>4) Protected and low-use areas cover key resources in the landscape.</p> <p>3) Protected and low-use areas small.</p> <p>2) Protected and low-use areas very small.</p> <p>1) Landscape intensively used, leading to resource depletion and accelerating loss of biodiversity.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p> <p>→ No change</p> <p>↘ slow/some decrease</p> <p>↓ steep downward</p>		
<p>3. Ecological links between landscape components for sustainable production.</p> <p>Are ecological links between different landscape components maintained and harnessed for sustainable production? e.g. ecosystem paths kept for pollinators, pest control, nutrient cycling, groundwater</p>	<p>5) Beneficial links between different landscape components are maintained and harnessed.</p> <p>4) Some beneficial links between landscape components are maintained.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p>		

recharge, soil erosion control, etc?	<p>3) Production systems partly depend on external inputs.</p> <p>2) Production systems largely depend on external inputs.</p> <p>1) Production systems heavily depend on external resources (e.g. high pesticide use).</p>	<p>→ No change</p> <p>↘ slow/some decrease</p> <p>↓steep downward</p>		
<p>4. Rate of recovery from extreme environmental and climate-change related stresses and shocks</p> <p>Does the landscape have the capacity to cope with and recover from extreme environmental and climate-related stresses and shocks e.g. pests and diseases, extreme weather events, floods and droughts?</p>	<p>5) No significant damage to landscape functioning.</p> <p>4) High rate of recovery.</p> <p>3) Medium rate of recovery.</p> <p>2) Low rate of recovery.</p> <p>1) Irreversible damage to landscape functioning.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p> <p>→ No change</p> <p>↘ slow/some decrease</p> <p>↓steep downward</p>		
AGRICULTURAL BIODIVERSITY			Trend in the last 50 years	TOTAL SCORE FOR SECTION
<p>5. Maintenance, documentation and conservation of agricultural biodiversity in a community</p> <p>Are local crops, varieties and animal breeds used in a community?</p> <p>Is agricultural biodiversity documented and conserved in community classification systems and community seed banks?</p>	<p>5) Local crops, varieties and breeds (#) widely used, documented and conserved.</p> <p>4) Local crops, varieties and breeds are used by some community members; documentation and conservation practices are weak.</p> <p>3) Local crops, varieties and breed are used by few community members; documentation and conservation practices do not exist.</p> <p>2) Local crops, varieties and breeds are rare and used only by very few community members; documentation and conservation practices do not exist.</p> <p>1) Local crops, varieties and breeds no longer found.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p> <p>→ No change</p> <p>↘ slow/some decrease</p> <p>↓steep downward</p>		
6. Diversity of local food system	5) Locally-sourced foods abundant and widely used.	↑ steep upward trend		

<p>Do communities use a diversity of traditional and locally-produced foods, e.g. cereals, vegetables, fruits, nuts, wild plants, mushrooms, berries, fish and animals?</p>	<p>4) Locally-sourced foods available and used by some community members.</p> <p>3) Locally-sourced foods available and occasionally used.</p> <p>2) Variable availability and use of locally-sourced foods.</p> <p>1) Scarcity of locally sourced foods.</p>	<p>↗ slow/some increase</p> <p>→ No change</p> <p>↘ slow/some decrease</p> <p>↓ steep downward</p>		
<p>KNOWLEDGE, LEARNING AND INNOVATION</p>		<p>Trend in the last 50 years</p>	<p>TOTAL SCORE FOR SECTION</p>	<p>TOTAL / 8 =</p> <p>_____</p>
<p>7. Innovation in agricultural biodiversity management for improved resilience and sustainability</p> <p>Do community members improve, develop and adopt new agricultural biodiversity management practices to adapt to changing conditions, e.g. climate change, population pressure, resource scarcity?</p> <p>Examples of innovative practices are the adoption of water conservation measures (drip irrigation), diversification of farming systems and switch to drought- or saline-tolerant crops/varieties.</p>	<p>5) Community members are receptive to change and adjust their practices through local innovation.</p> <p>4) Community members are receptive to change; local innovation takes place but can be strengthened.</p> <p>3) Community members are receptive to change but the rate of innovation is low.</p> <p>2) Community members are moderately receptive to change, no innovation.</p> <p>1) Community members are not receptive to change, no innovation.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p> <p>→ No change</p> <p>↘ slow/some decrease</p> <p>↓ steep downward</p>		
<p>8. Access and exchange of agricultural biodiversity</p> <p>Are individuals within and between communities connected through institutions and networks for the exchange of agricultural biodiversity, e.g. seed exchange networks, local markets and animal and seed fairs?</p>	<p>5) Multiple systems of exchange regularly operating within and between communities across different cultures and landscapes.</p> <p>4) Exchange within and across communities takes place but can be strengthened.</p> <p>3) Exchange takes place occasionally.</p> <p>2) Exchange takes place rarely.</p> <p>1) Systems of exchange do not exist.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p> <p>→ No change</p> <p>↘ slow/some decrease</p> <p>↓ steep downward</p>		
<p>9. Transmission of traditional knowledge from elders, parents and peers to the young people in a community</p> <p>Is the knowledge of key concepts and practices about land, water, biological resources and cosmology transmitted between different age groups?</p>	<p>5) Key concepts and practices known to all community members, including youth.</p> <p>4) Key concepts and practices known to community members, but not to those considered youth.</p> <p>3) Key concepts and practices known only to adults and elders.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p> <p>→ No change</p>		

	<p>2) Key concepts and practices known only to elders.</p> <p>1) Traditional knowledge lost.</p>	<p>↘ slow/some decrease</p> <p>↓ steep downward</p>		
<p>10. Cultural traditions related to biodiversity</p> <p>Are cultural traditions related to biodiversity maintenance and use continued by young people, e.g. festivals, rituals, songs, etc.?</p>	<p>5) Cultural traditions practiced by all community members including youth.</p> <p>4) Cultural traditions practiced by community members, but not by those considered youth.</p> <p>3) Cultural traditions practiced only by adults and elders.</p> <p>2) Cultural traditions practiced only by elders.</p> <p>1) Not practiced.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p> <p>→ No change</p> <p>↘ slow/some decrease</p> <p>↓ steep downward</p>		
<p>11. Number of generations interacting with the landscape</p> <p>How many generations interact with the landscape for subsistence and income?</p>	<p>5) Three or more generations interact with the landscape.</p> <p>4) Two or three generations interact with the landscape.</p> <p>3) Two generations interact with the landscape.</p> <p>2) One of two generations interact with the landscape.</p> <p>1) One generation interacts with the landscape.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p> <p>→ No change</p> <p>↘ slow/some decrease</p> <p>↓ steep downward</p>		
<p>12. Practices of documentation and exchange of local knowledge</p> <p>Are community-based institutions and systems for documentation, exchange and acquisition of externally-sourced knowledge in place? E.g. existence of traditional knowledge registers, resource classification systems, and community biodiversity registers, farmer field schools.</p>	<p>5) Institutions and systems for knowledge documentation and exchange are present and well-functioning.</p> <p>4) Institutions and systems for knowledge documentation and exchange present but can be strengthened.</p> <p>3) Some knowledge documentation and exchange taking place but need to be strengthened.</p> <p>2) Only a small fraction of knowledge documented.</p> <p>1) Documentation of knowledge does not take place.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p> <p>→ No change</p> <p>↘ slow/some decrease</p> <p>↓ steep downward</p>		
<p>13. Use of local terminology or indigenous languages</p> <p>Do community members use local terminology related to land and (the use of) biodiversity, and, if applicable, do they speak the local dialect or language?</p>	<p>5) Local terminology (and local dialect or language) widely used in the community.</p> <p>4) Local terminology used by the majority of community members.</p> <p>3) Local terminology used by a part of the community.</p> <p>2) Local terminology used by a small part of the community.</p>	<p>↑ steep upward trend</p> <p>↗ slow/some increase</p> <p>→ No change</p> <p>↘ slow/some decrease</p>		

	1) Local terminology not used.	↓ steep downward		
14. Women's knowledge about biodiversity and its use Are women's knowledge, experiences and skills recognized as central to practices that strengthen resilience?	5) Women's knowledge, experiences and skills recognized, respected and used. 4) Women's knowledge, experiences and skills mostly recognized and respected and used. 3) Women's knowledge, experiences and skills partially recognized, respected and used. 2) Women's knowledge, experiences and skills receive little recognition. 1) Women's knowledge, experiences and skills not recognized.	↑ steep upward trend ↗ slow/some increase → No change ↘ slow/some decrease ↓ steep downward		
SOCIAL EQUITY AND INFRASTRUCTURE			Trend in the last 50 years	TOTAL SCORE FOR SECTION _____
15. Local resource governance Are land, water and other resources effectively managed by community-based institutions? I.e. existence of traditional institutions (customary laws) and non-traditional local initiatives (governmental and non governmental) for the sustainable use of resources.	5) Institutions in place and resources effectively managed. 4) Institutions in place and some resources effectively managed. 3) Institutions in place but need to be strengthened. 2) Institutions not effective. 1) Institutions not present.	↑ steep upward trend ↗ slow/some increase → No change ↘ slow/some decrease ↓ steep downward		
16. Autonomy in relation to land and resource management Does the community have autonomous access to indigenous lands, territories, natural resources, and sacred and ceremonial sites (clarity of tenure rights)? Is that autonomy recognized by outside groups and institutions, e.g. governments and development agencies?	5) Community has access to its traditional lands and resources and autonomy in their management. 4) Community has access to its traditional lands and resources and partial autonomy in their management, but its autonomy needs to be strengthened and recognized by outside groups. 3) Community has limited access to its traditional lands and resources and limited decision power over their management. 2) Community has limited access to its traditional lands and resources and no decision power over their management.	↑ steep upward trend ↗ slow/some increase → No change ↘ slow/some decrease		

	1) Community has neither access to nor decision power over traditional lands and resources.	↓steep downward		
17. Gender	5) Women are involved in decision-making and communication with outsiders, and have the same access to resources and opportunities as men.	↑ steep upward trend		
Are women involved in decision-making and communication with outsiders?	4) Women are involved in decision-making and communication with outsiders, and have access to resources and opportunities, but less so than men.	↗ slow/some increase		
Do women have access to resources, education, information and opportunities for innovation?	3) Women are partially or occasionally involved in decision-making and have limited access to resources and opportunities.	→ No change		
	2) Women are rarely involved in decision-making and have limited access to resources and opportunities.	↘ slow/some decrease		
	1) Women are not involved in decision-making and have no access to resources and opportunities.	↓steep downward		
18. Social infrastructure	5) Social infrastructure exists and meets all community needs.	↑ steep upward trend		
Is social infrastructure including roads, schools, telecommunications, energy, and electricity in place?	4) Basic social infrastructure exists.	↗ slow/some increase		
	3) Not all necessary infrastructure exists or functions satisfactory.	→ No change		
	2) Some major social infrastructure is missing and opportunities for its improvement are limited.	↘ slow/some decrease		
	1) No infrastructure in place.	↓steep downward		
19. Health care	5) Health care accessible for all community members and functions to the satisfaction of the community.	↑ steep upward trend		
Do community members have access to health care?	4) Basic health care accessible.	↗ slow/some increase		
Are traditional healing methods and modern medicine present?	3) Health care facilities exist but do not function satisfactorily or are not easily accessible.	→ No change		
	2) Health care facilities not satisfactory and not easily accessible.	↘ slow/some decrease		
	1) Health care not accessible.	↓steep downward		
20. Health risk	5) Low risk.	↑ steep upward trend		

<p>Is there a health risk from epidemics, water contamination, air pollution or other threats, e.g. malnutrition?</p>	4) Average risk.	↗ slow/some increase		
	3) Moderate risk.	→ No change		
	2) High risk.	↘ slow/some decrease		
	1) Very high risk.	↓ steep downward		

Annex 4: Post-Workshop Programme Schedule

Date: 23 July 2012

Venue: Hotel Parkland, Sauraha, Chitwan

Facilitator:

Mrs. Dip Maya Gurung, Monitoring Officer, MDI

Time	Activities	Resource Persons
7:00-8:30	Travel from Hetaunda to Sauraha	
8:30-9:30	Breakfast, Hotel Parkland, Sauraha, Chitwan	
9:30-10:00	Participants Registration	Ms. Dip Maya Gurung, Monitoring Officer, MDI
10:00-10:30	Introduction of the Participants	
	Chairing of the Programme Chairperson	Mr. Ram Krishna Thapa, Social Development Officer, DDC, Makawanpur
10:30-10:45	Welcome the Participants and objective of the Post-Workshop	Mr. Khop Narayan Shrestha, Executive Director, MDI
10:45-11:15	Brief Overview of Satoyama Initiatives In Nepal	Mr. Vivek Sharma, Programme Manager, UNDP GEF Small Grants Programme, Kathmandu
11:15-13:00	Detail of SEPL Indicators and Exercise on the 20 SEPL Indicators	Mr. RoshanSubedi, Agriculture Coordinator, MDI
13:00-14:00	Lunch	
14:00-14:20	Status of Private, Community and Leasehold forest in proposed 10 VDCs of Makawanpur	Mr. Khada Nanda Sharma, Vice-Secretary, District Forest Office, Makawanpur
14:20-14:40	Status of Agro-biodiversity and trend of agriculture productivity in proposed 10 VDCs of Makawanpur	Mr. Mahesh Regmi, Senior, Agriculture Development Officer, District Agriculture Development Office, Makawanpur
14:40-15:00	Tea Break	
15:00-17:00	Expert Reports	
15:00-16:00	1. Ecosystem Protection & Maintenance of Biodiversity 2. Agricultural Biodiversity	Dr. Govind Koirala, Team Leader
16:00-17:00	3. Knowledge Learning & Innovations 4. Social Equity & Infrastructure	Mr. Kumar Adhikari Consultant
17:00-17:20	Tea Break	
17:20-17:50	Feedbacks and Endorsement of COMDEKS Baseline Assessment	Participants
17:50-18:15	Opinions Community UNDP GEF Small Grant Programme Political Parties	Mr. Sajiwan Praja, Former President, Niguretar Agriculture Cooperative Ltd. Raksirang
	Closing Remarks from Chairperson of the Workshop	Mr. Ram Krishna Thapa, Social Development Officer, DDC, Makawanpur
19:00-21:00	Tharu Cultural Programme with Refreshments	
21:00-22:00	Dinner	

Annex 5: List of Participants in Post-workshop – Sauraha, Chitwan

S.N	Name of Participants	Designation	Organization
I.	District Representatives		
1	Mr. Ram Krishna Thapa	Social Development Officer	District Development Committee, Makawanpur
2	Mr. Mahesh Regmi	Senior Agriculture Development Officer	District Agriculture Development Office, Makawanpur
3	Mr. Chet Narayan Kharel	District Livestock Officer	District Livestock Service Office, Makawanpur
4	Mr. Khada Nanda Sharma	Vice-Secretary	District Forest Office, Makawanpur
5	Mr. Buddha Sharan Lama	Chairperson	NGO Federation, Makawanpur
6	Mr. Bharat Khadka	CEO	MRC Nepal, Hetauda
7	Ms. Pancha Maya Syngtan	Chairperson	Federation of Community Forest Users' Group, Makawanpur
8	Mr. Mahesh Chepang	Secretary	Nepal Chepang Association
9	Dr. Sanjeev Kumar Singh	District Health Officer	District Health Office, Makawanpur
10	Ms. Munu Sigdel	Vice Chairman	District Women Coordination Committee, Makawanpur
11	Mr. PratapBista	Member	Nepal Journalist Association, Central Committee
12	Mr. BhanuBhaktaAcharya	Chairperson	Nepal Journalist Association, Makawanpur
13	Mr. Shiva Kumar Kashi	Journalist	Hetauda Today
II.	Representatives from Political Parties		
14	Mr. Raghu Raman Neupane	President	Nepali Congress

S.N	Name of Participants	Designation	Organization
15	Mr. Govinda Ram Chepang	Former Constituent Assembly Member	CPN (UML)
16	Mr. Indra Bahadur Pariyar (Nayan)	District Secretary	CPN (Maoist)
17	Mr. Sita Ram Bartaula	Regional Chairperson	National Democratic Party
18	Mr. Bhimsen Mahat	District Secretary	CPN (ML)
19	Mr. Man NathTimalsina	District Incharge	CPN (United)
III.	Community Representatives		
20	Ms. Kanchhi Maya Chepang	Chairperson	Churidanda Community Organization, Manahari
21	Mr. Raj Kumar Chepang	Chairperson	Silinge Amriso Community Organization, Kankada
22	Mr. SajiwanPraja	Former Chairperson	Niguretar Agricultural Cooperative Ltd. Raksirang
23	Mr. Ramchandra Praja	Chairperson	Jharana Community Organization, Sarikhet
24	Mr. Singh Bahadur Thing	Chairperson	BhartaAgroforestry User's Committee, Bharta
25	Mr. UmeshPraja	Member	Khairang Agroforestry Management Committee, Khairang
26	Mr. Yam Bahadur Shyangbo	Chairperson	Bhumishwori Community Organization, Dandakharka
27	Mr. Sanu Kanchha Titung	Chairperson	Churiya Agriculture Cooperative Ltd., Handikhola
IV.	UNDP GEF Small Grant Programme		
28	Mr. Vivek D. Sharma	National Programme Assistant	UNDP GEF Small Grant Programme
29	Mr. Aakal Thapa	Driver	UNDP GEF Small Grant Programme
v.	Consultants		
30	Dr. Govind Koirala	Team Leader	Freelancer
31	Mr. Kumar Adhikari	Consultant	APDN
vi	MDI-Nepal		
32	Mr. Khop Narayan Shrestha	Executive Director	MDI-Nepal

S.N	Name of Participants	Designation	Organization
33	Mr. Roshan Subedi	Agriculture Coordinator	MDI-Nepal
34	Mr. Binod Shrestha	Engineer	MDI-Nepal
35	Ms. Deep Maya Gurung	Monitoring Officer	MDI-Nepal, Regional Office Nepalgunj
36	Mr. RajanLamichane	Admin Finance Assistant	MDI-Nepal
37	Mr. Navin Subedi	Field Officer	MDI-Nepal
38	Mr. Ram Krishna Praja	Field Supervisor	MDI-Nepal
39	Ms. Anisha Lama	Office Assistant	MDI-Nepal
40	Mr. Ravin Hamal	Driver	MDI-Nepal