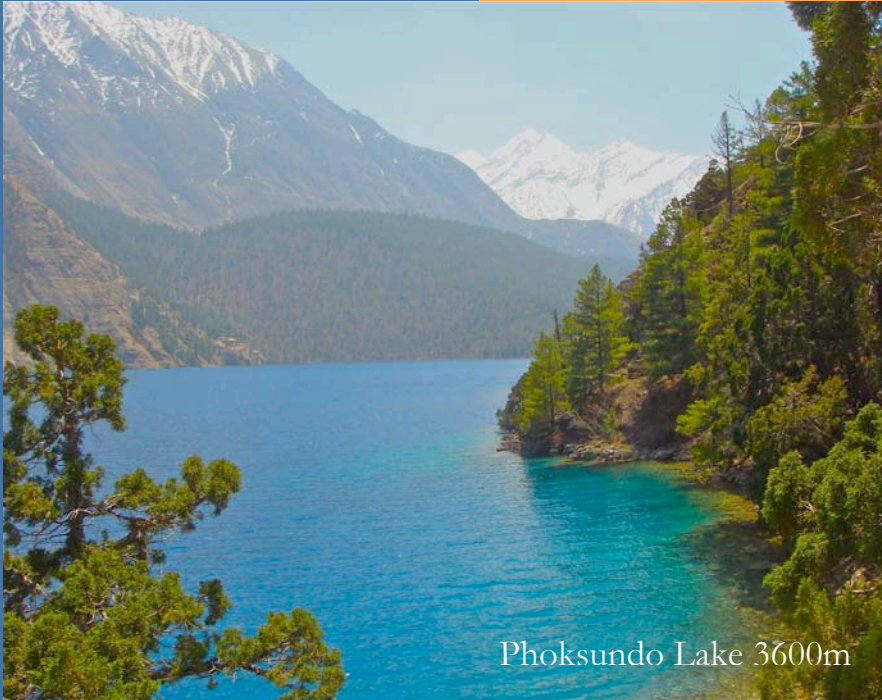


LAKE-TO-LAKE: FOOD FOR ENTERPRISE PROGRAM



Phoksundo Lake 3600m

REPORT
SUBMITTED

TO



REPORT
SUBMITTED

BY



Rara Lake 2900m

July 2009

ACRONYMS	3
1. INTRODUCTION	4
2. INTRODUCTION OF WFP	4
3. WHY FOOD FOR ENTERPRISE.....	4
4. DEVELOPMENT INDICATORS OF KARNALI	5
5. SELECTED DISTRICTS FOR FOOD FOR ENTERPRISE (FFE).....	5
6. THE MOUNTAIN INSTITUTE APPROACH.....	6
7. NGO PARTNERSHIP CONTRACT	6
TOTALING 9 MONTHS.....	6
7.1 Mugu District	6
<i>Table No. 1 Population census of Fourteen VDCs of TMI working areas in Mugu District.....</i>	7
<i>Table No. 2 Planned rice, beneficiaries and population</i>	7
7.2 Jumla District.....	8
<i>Table No. 3 Population census of Fifteen VDCs of TMI working areas in Jumla District</i>	8
<i>Table No. 4 Planned rice, beneficiaries and population</i>	9
7.3 Dolpa District.....	9
<i>Table No. 5 Population census of 17 VDCs of TMI working areas in Dolpa District.....</i>	10
<i>Table No. 6 Planned rice, beneficiaries and population</i>	11
7.4 Humla District	11
<i>Table No. 7 Population census of Eighteen VDCs of TMI working areas in Humla District.....</i>	11
<i>Table No. 8 Planned rice, beneficiaries and population</i>	12
<i>Table No. 9 Planned rice, beneficiaries and population for phases II and III of FFE Programs</i>	13
8. BRIEF INFORMATION ABOUT MICRO PROJECTS.....	13
8.1 TRAILS AND BRIDGES.....	13
8.2 TERRACE IMPROVEMENT.....	14
8.3 IRRIGATION SUPPORT.....	14
8.4 MAPs FARMING	15
8.5 HORTICULTURE.....	15
8.6 SCHOOL SUPPORT	16
8.7 COMMUNITY BUILDING.....	17
8.8 GHATTA.....	17
8.9 COMMUNITY PONDS	18
8.10 RURAL COMMUNITY INFRASTRUCTURE WORKS (RCIW).....	18
8.11 CLIMATE CHANGE ADAPTATION	19
9. CONSTRAINTS AND LESSONS LEARNED.....	20
10. LESSONS LEARNED	22
11. THE NGOS PERFORMANCE	23
12. THE PROJECT'S IMPACT.....	23

ACRONYMS

CBO	Community-Based Organizations
DI	Dolpa Institute
FFE	Food for Enterprise
HCDA	Himalayan Conservation and Development Association
ICD	Institute of Community Development
MAP	Medicinal and Aromatic Plant
NFE	Non-Formal Education
NGO	Non-Governmental Organization
PRRO	Protected Relief and Recovery Operation
RCDC	Rural Community Development Center
TAR	Tibet Autonomous Region
TMI	The Mountain Institute
VDC	Village Development Committee
WFP	World Food Programme
VAM	Vulnerability Assessment Map

1. INTRODUCTION

The “Lake-to-Lake: Food For Enterprise” Program is being implemented in 4 districts of the mid-western development of Karnali Zone by The Mountain Institute (TMI) under the banner of the United Nations World Food Programs (WFP). The program aims to provide food assistance to food deficit and conflict affected populations in Nepal as Protected Relief and Recovery Operation (PRRO).

SN	Districts	Number of VDCs
1	HUMLA	18
2	MUGU	14
3	JUMLA	15
4	DOLPA	17

This project covers 54 Village Development Committees of Jumla, Mugu, Dolpa and Humla districts. Lake-to-Lake uses two mechanisms: Food for Work (FFW¹) and a TMI initiative entitled Food for Enterprise (FFE). The initial program is for the period of July 2008 to June 2009. The program is being implemented through partner Non-Governmental Organizations (NGOs). TMI is assisting partner NGOs by providing technical and administrative

assistance to implement programs.

With its innovative approach, this project not only addresses food deficit needs but also emphasizes the importance of creating local enterprises to improve people’s livelihoods, thus reducing dependency on direct food aid over the long run.

2. INTRODUCTION OF WFP

Established in 1963, WFP is the frontline agency of the United Nations in the fight against global hunger. WFP's vision is of a world in which “everyone has access at all times to the nourishment they need for a full life”. It believes that the issue of hunger belongs at the top of the international agenda.

During its 41 years of operations, WFP has invested \$27.8 billion or 43 million metric tons of food, through the support of its donors in its fight against hunger. In 2004, WFP fed 113 million people in 80 countries, including most of the world’s refugees and internally displaced peoples.

3. WHY FOOD FOR ENTERPRISE

Nepal, landlocked between India and China and with a population of approximately 27 million people, has recently emerged from a decade-long civil war. Most rural families, and women and children in particular, have been affected by this war.

¹ Food-for-Work: Where people are chronically hungry, WFP promotes self-reliance through food-for-work projects. Workers are paid with food aid to allow communities to devote more time to development.

Much of the population most affected by the conflict is also struggling to recover from recurring natural disasters such as drought and landslides. Development and humanitarian relief efforts remain challenged by a new wave of civil unrest and violence in the southern districts. Keeping this problem in mind, WFP recently launched humanitarian relief operations to include nearly two million people suffering from the combined impacts of the devastating civil war, an onslaught of natural disasters, and a new wave of violence and unrest in several districts in southern Nepal.

4. DEVELOPMENT INDICATORS OF KARNALI

District	Mugu	Jumla	Dolpa	Humla
Per capita income (\$ 240)	203	203	235	186
Rank based on overall composite development Index	75	69	67	74
Overall literacy rate	28	32.52	34.98	27.09
Per capita production of food (Rank)	74	65	47	75 (1018 cal/day)
Life expectancy	44.07	50.82	52.52	58.37
Chronic malnourishment among children under 5 years of age)	68.8	74.1	74.2	90

Source (UNDP) 2004 + ICIMOD 2003)

5. SELECTED DISTRICTS FOR FOOD FOR ENTERPRISE (FFE)

TMI and NGO partners selected a total of 54 VDCs in Dolpa, Mugu, Jumla and Humla districts for the FFE project after assessing each area's need, based on the following factors:

- VAM (Vulnerability Assessment Map), livelihood assessment and priority setting
- Food depots status and condition
- Food logistics and transport system (trails and bridges)
- Major infrastructure
- Irrigation
- Food storage improvements

6. THE MOUNTAIN INSTITUTE APPROACH

All TMI programs are designed on the premise that full involvement of local people is essential for the long-term success of conservation programs. We have developed several innovative techniques, which have been field-tested using a technique called Appreciative Participatory Planning and Action (APPA). TMI helps local people and other stakeholders understand their assets, define threats and issues, use their assets to address threats, prioritize activities for follow up and monitor on-going progress

7. NGO PARTNERSHIP CONTRACT

TMI has implemented the program extensively through local partner organizations. TMI has helped form and strengthen a number of local NGOs in the Himalayan region. The approach of using local partner organizations yields many lasting positive benefits including reducing costs, expanding impacts, enhancing program sustainability and creating local capacity to conduct conservation programs after projects are completed.

TMI and the partner NGOs signed an agreement to implement the programs and activities identified and planned for “Lake-to-Lake, A Food for Enterprise, Project from Rara Lake to Phoksundo Lake in mid-western Nepal.” The agreement was signed for the period from October 2009 to 30th June 2009; totaling 9 months.

Below are short descriptions of each district in the project area:

7.1 Mugu District

Mugu district, a part of the Karnali Zone, is one of the seventy-five districts of Nepal. The district, with Gamgadhi as its district headquarters, covers an area of 3,535 square kilometers and has a population of 43,937. The biggest lake in Nepal, Rara Lake, lies in the Mugu district.

The FFE program is being implemented in 14 Village Development Committees (VDCs) of the Mugu district. The 14 VDCs are: Rara, Mangri, Pina, Rova, Ruga, Karkibada, Kalai, Kotdada, Natharphu, Bhee, Jima, Photu, Hyanglu and Dhainakot. A total of 5,826 households within the 14 VDCs are directly benefiting from these programs.



Table No. 1 Population census of Fourteen VDCs of TMI working areas in Mugu District

Sn	VDC	Households	Total Population
1	Rara	263	1657
2	Mangri	460	2520
3	Pina	638	4142
4	Rova	749	4403
5	Ruga	668	3512
6	Karkibada	621	3661
7	Kalai	265	1520
8	Kotdada	289	2103
9	Natharphu	287	1695
10	Bhee	206	1299
11	Jima	470	2682
12	Photu	207	1331
13	Hyanglu	310	2039
14	Dhainakot	393	2263
	TOTAL:	5826	34,827

Male: 17617 Female: 17210

Table No. 2 Planned rice, beneficiaries and population

Phase:	Planned no of HH	Planned no of beneficiaries	Planned qty of food aid (MT)	Number of VDC coverage
II	3399	19895	455.68 Rice	6
III	2680	16169	343.68 Rice 42.96 Lentils	9
Total	6079	36064	842.34 Rice	15

Source: FFE field visit October 08 to June 2009

7.2 Jumla District

The Jumla district is located in the mid-western development region of Nepal. It is one of five districts of the Karnali zone. Khalanga is the headquarters of the Jumla district. It covers 2,531 square kilometers and has 86,603 population (2001).

Jumla is located between 28°58'N-29°30'N latitude and 28°18'E-82°18'E longitude. Jumla is also the headquarters of the Karnali Zone. The district borders Dolpa in the east, Kalikot in the west, Mugu in the north and Jajarkot in the south.

The FFE program is being implemented in 15 VDCs of the Jumla District. The 15 VDCs are: Patmara, Dilichaur, Patrasi, Chhumchaur, Gothichaur, Kanakasundari, Bumramadichaur, Haku, Kundari, Rarali, Malikathata, Mahabaipatarkhola, Ghodemahadev, Badki and Kalikaketu. A total of 6798 households within 15 VDCs are directly benefiting from these programs.



Table No. 3 Population census of Fifteen VDCs of TMI working areas in Jumla District

Sn	VDC	Households	Total population
1	Patmara	467	2674
2	Dilichaur	621	3542
3	Patrasi	490	2674
4	Chhumchaur	317	2637
5	Gothichaur	421	2852
6	Kanakasundari	406	2912
7	Bumramadichaur	190	1157
8	Kundari	526	3622
9	Haku	477	3022
10	Ghodemahadev	213	1503

11	Malikathanta	375	2741
12	Raralihi	468	5277
13	Badki	836	5277
14	Kalikaketu	460	3213
15	Mahabaipatharkhola	531	3378
	Total	6798	44280

Male: 22,536

Female: 21,744

Table No. 4 Planned rice, beneficiaries and population

Phase:	Planned no of HH	Planned no of beneficiaries	Planned qty of food aid (MT)	Number of VDC coverage
II	2912	18448	465.92 Rice	7
III	3886	25832	582.91 Rice	8
Total	6798	44280	1048.83 Rice	15

Source: FFE field visit October 08 to June 2009

7.3 Dolpa District

The Dolpa District is one of the five districts of the Karnali Zone. The district, with Dunai as its district headquarters, covers an area of 7,889 km and has a population of 29,545 (2001). Dolpa is the largest district of Nepal covering 5.36% of the country's total landmass. Located between 28°24' N - 29°43' N latitude, and 82°24' E - 83°38' E longitude, the elevation in Dolpa ranges from 1,525 to 7,625 meters above sea level. The district borders TAR (China) in the north and northeast, the Jumla and Mugu districts of Karnali in the west, Myagdi, Jajarkot and Rukum in the south and Mustang in the east.

Juphal is the main entry point if flying from Nepalgunj and Surkhet. It is located at 2480 meters of elevation where small twin otter planes are the only means of transportation. It is a three-hour walk to Dunai, the headquarters of Dolpa.



The FFE program is being implemented in 17 VDCs of the Dolpa District of the Karnali Zone. The 17 VDCs are: Rimi, Kaigaon, Narku, Sarmi, Raha, Tripurakot, Pahada, Liku, Phoksundo, Juphal, Majphal, Dunai, Sahartara, Lahan, Lawan, Kalika and Shun. A total of 2899 households within the 17 VDCs are directly benefiting from this program.

Table No. 5 Population census of 17 VDCs of TMI working areas in Dolpa District

Sn	VDC	Households	Total population
1	Rimi	188	1053
2	Kaigaon	131	788
3	Narku	217	1244
4	Sami	332	1772
5	Raha	177	991
6	Tripurekot	410	1995
7	Pahada	322	1473
8	Liku	307	1500
9	Phoksundo	95	708
10	Juphal	416	2330
11	Majphal	92	515
12	Dunai	212	1187
13	Kalika	255	1384
14	Lawan	348	1644
15	Sahartara	414	2112
16	Laha	193	1105
17	Shhun	354	1717
	TOTAL:	4463	23518

Source: FFE field visit October 08 to June 2009

Table No. 6 Planned rice, beneficiaries and population

Phase:	Planned no of HH	Planned no of beneficiaries	Planned qty of food aid (MT)	Number of VDC coverage
II	2899	15556	472.3 Rice	12
III	5153	24914	640.8 Rice 80,1 Lentiles	14
Total	8052	40470	1113.1 Rice	26

Source: FFE field visit October 08 to June 2009

7.4 Humla District

Humla is the highest, most remote northerly region of Nepal lying on the border with Tibet Autonomous Region (TAR) China and located in the far mid-western region of Nepal. The district is part of the Karnali Zone. It has a total population of 40,595 (2001). Buddhists inhabit the northern part of the Humla District while mostly Hindus live in the southern part. Simikot is accessible only on foot or by plane. Simikot also serves as the administrative head quarters of the Humla district.

The FFE program is being implemented in 18 VDCs of the Humla District. The 18 VDCs are: Bargaon, Thehe, Kharpunath, Rodikot, Gothi, Saya, Jaira, Melchham, Shreemastha, Mimi, Darma, Shreenagar, Baraigaon, Chhipra, Lali, Simkot, Syanda and Dandafaya. A total of 3,309 households within the 18 VDCs are directly benefiting from this program.

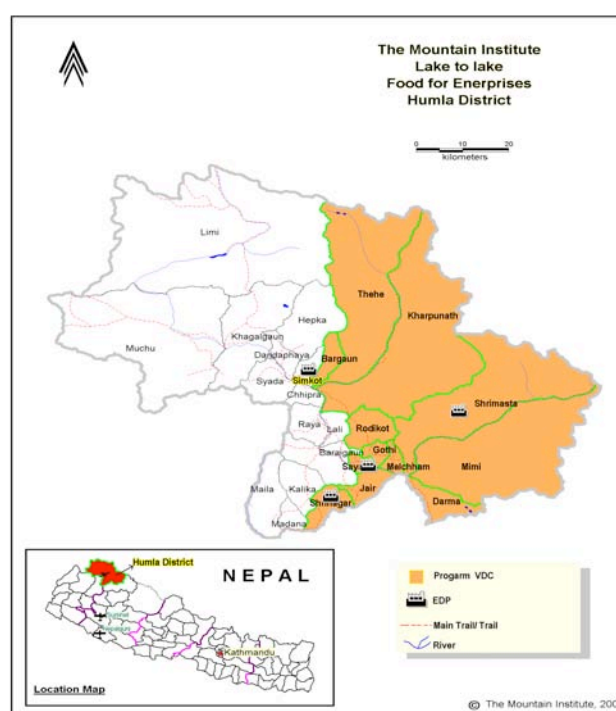


Table No. 7 Population census of Eighteen VDCs of TMI working areas in Humla District

Sn	VDC	Households	Total population
1	Bargaon	138	784
2	Thehe	366	3011
3	Kharpunath	211	1568
4	Rodikot	350	3077

5	Gothi	190	1444
6	Saya	154	1125
7	Jaira	282	2479
8	Melchham	114	1204
9	Shremastha	144	1125
10	Mimi	164	1007
11	Darma	303	2932
12	Shreenagar	641	4450
13	Baraigaon	190	1234
14	Chhipra	169	1155
15	Lali	248	1684
16	Simkot	476	2804
17	Syanda	237	1293
18	Dandafaya	298	2454
	TOTAL	4675	34830

Male: 17,071 Female: 17,759

Table No. 8 Planned rice, beneficiaries and population

Phase:	Planned no of HH	Planned no of beneficiaries	Planned qty of food aid (MT)	Number of VDC coverage
II	3309	20546	549.44 Rice	12
III	4537	34046	726.04 Rice 111.69 Lentils	17
Total	7846	54592	1275.48	18

Source: FFE field visit October 08 to June 2009

Table No. 9 Planned rice, beneficiaries and population for phases II and III of FFE Programs

District	Targeted no of HHs	Planned no of beneficiaries	Planned qty of food aid (MT)	Planned qty of Lentils (MT)
Dolpo	8052	40470	1113.1	80.1
Jumla	6798	44279	1048.83	
Mugu	5826	34827	799.36	42.96
Humla	4675	34830	1275.48	111.69
Total	25351	154406	4236.77	234.75

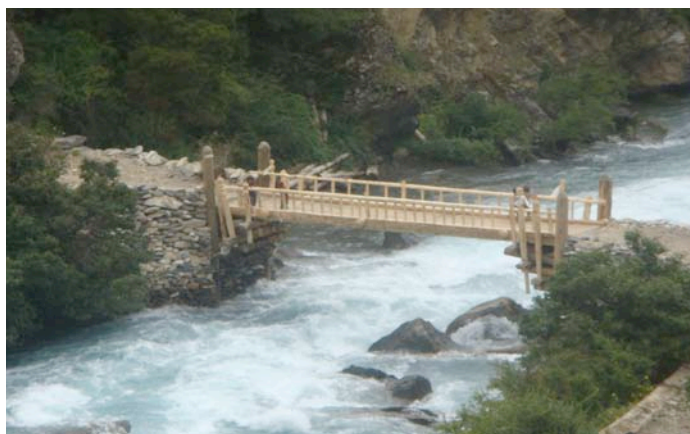
Source: FFE field visit October 08 to June 2009

8. BRIEF INFORMATION ABOUT MICRO PROJECTS

All the implemented micro projects were selected through a community consultation. The programs are being implemented with complete impartiality, regardless of race, caste, religion, political opinion or gender, without linking assistance, either directly or indirectly, to any religious or political persuasion.

8.1 TRAILS AND BRIDGES

Improving the food condition in remote mountain communities and bringing mountain products to markets requires well-constructed trails and bridges. In remote mountain districts, safe trails and bridges are the only means of travel for visitors and local people; and a key factor in local development.



Wooden bridge in Ringmo (Phoksundo)

They are also critical to develop community-based tourism enterprises in Nepal's mountain regions. The FFE project has improved over 140 km of trails, widening them to make them safer and faster to walk for local people and for the mules that bring many local supplies. The trails and bridges are one of the key components of the FFE program in places where walking trails are the only means of travel for both visitors and local people. Since February 2008, 60 bridges in 4 districts were identified for improvement. 60 bridges were completed by the end of June 2009.

8.2 TERRACE IMPROVEMENT

The local residents have decided to improve the wild terrace along the Karnali River for cultivation of rice, wheat, potatoes and peanuts. The community aims to reduce food insecurity by improving this wild terrace. The wild terrace is located in Sarkeghat of Humla district. Successful completion of this project will benefit approximately 140 households of Saya VDC.



Terrace before cultivation in Simkot



Terrace after cultivation in Simkot



Terrace before cultivation in Sarkeghat



Terrace after cultivation in Sarkeghat

8.3 IRRIGATION SUPPORT

In order to promote growth of healthy crops, irrigation supply water to land has been supported as part of the FFE program. Irrigation is important in dry areas, in periods of reduced rainfall and to protect plants against frost.



Wooden irrigation in Mugu



Irrigation canal in Dolpa

8.4 MAPs FARMING

TMI has helped communities establish 12 MAP nurseries in the Dolpa, Mugu and Jumla Districts, with four locally managed nurseries per district. These nurseries are planted with locally valuable cash crops such as the aromatic plants *Chiraito* and *Bikuma*.



Stone wall fencing for Attis farming in Bargaon



Attis grows at 2500 to 3900 m.

Once mature, these seedlings will be transplanted to land belonging to trained farmers. Presently, TMI has trained 150 farmers in cultivation techniques. There is a high demand for Attis (*Aconitum heterophyllum*) in the market because it is a valuable medicinal plant and it is mainly found in western Nepal. Attis can be used to treat cough, fever and toothache and promotes high energy and general health. The communities are interested in cultivating Attis because it has not yet been grown despite heavy demand. Therefore, they are eager to initiate this cultivation as a pilot program through FFE.

8.5 HORTICULTURE

Horticulture farming, like apple and banana farming, has become the most promising agriculture for mountain communities. The local communities of Shreenagar, Jaira, Rodikoti and Simkot have agreed to maintain horticulture farms to grow apples and bananas.



Banana farming in Shreenagar (Humla)



Banana farming in Shreenagar (Humla)

These horticulture farms will make substantial contributions to food needs and play an important role in raising income. Because of the need for labor, the farms have been a major source of employment and offer great opportunities. These farms will benefit approximately 4957 hh of Humla.

8.6 SCHOOL SUPPORT

Supporting the primary to secondary level schools has been one of the principal components of FFE. This support has been essential to meet basic infrastructural needs. Many schools did not have adequate playgrounds and in many sites due to frequent disruptions from free roaming livestock and other pests, students faced difficulty concentrating. The school support consists of roofing, construction of building and school compounds. In addition, the school teacher at Malika Primary School of Setibada has raised Rs.100 per household to plant trees around the compound and regular clean up of the school areas.



School support in Rimi of Patmara (Jumla)



Primary school in ...Mugu



Primary school benefited from the support

8.7 COMMUNITY BUILDING

The FFE program works to build stronger communities by providing support and community building initiatives and helping to connect communities, making it easier for them to work among themselves. It involves local people and community organizations working together to achieve agreed social, economic and environmental outcomes. A total of 28 community buildings have been completed. The primary objectives of the community building are to conduct the following programs: • Users Meetings; Training and Workshops; Saving & Credit Programs and Non-Formal Education.



Community building in Mugu

8.8 GHATTA

To free up women's time and reduce drudgery, the local communities identified 12 improved ghattas as priority micro projects. In the four districts, turbines, HDPE pipes, and shafts were provided for the ghattas identified by the communities for improvement.



Water mill before improved materials



Improved water mill

8.9 COMMUNITY PONDS

The residents of Rova VDC no 2 of Mugu district have built a community pond as one of the farm activities supported by the FFE project. Local residents initiated this concept for the purpose of both irrigation and water supply for improved ghattas (water mills).

The construction of this community pond has benefited approximately 43 households and a population of 175 (89 male and 86 female) people of Rova ward no 2. To complete this community pond, a total of 6.88 MT of rice was distributed.



Community pond completed for irrigation and ghatta purpose

8.10 RURAL COMMUNITY INFRASTRUCTURE WORKS (RCIW)

TMI is a partner in the Rural Community Infrastructure Works (RCIW); a project to build a new road from Hilsa to Simkot in the Humla District of western Nepal. RCIW is one of the Government of Nepal's most important infrastructure development programs. The Ministry of Local Development, WFP, District Development Committees, and TMI have jointly implemented it.

The long-term objective of RCIW is to improve the livelihoods of the 50,000 households most vulnerable to food insecurity living in Humla; a district with one of the worst food deficits in Nepal. To this end, RCIW uses a food-for-work approach to build local infrastructure. This year 3.171 km of road have already been completed, exceeding the goal of 2 km and adding to the total of 35 km of road built so far from Hilsa.



Mapping for RCIW planning



RCIW trail construction from Simkot to Hilsa

8.11 CLIMATE CHANGE ADAPTATION

A series of six community consultations were held in separate communities in the Patmara and Dilichaur VDCs of the Jumla district in western Nepal. The consultations were hosted by TMI with support from the Institute for Community Development, their local partner.



Community Consultation on Climate Change Adaptation

A total of 326 people attended the meetings, 158 of whom were female. Attendees represented various socio-economic and ethnic backgrounds. All were engaged in farming as their primary occupation. The consultations were a series of facilitated discussions that asked community members to identify certain indicators in their historical context (which was phrased as 50 years ago), in their current context, and to identify when significant changes began to occur as a means of identifying rates of change. The results have been compiled in this document (see more in Appendix One).



Information collecting from local participants Local community participation during this climate change workshop

9. CONSTRAINTS AND LESSONS LEARNED

1. Frequent strikes and blockades made movement difficult in the field. One of the major targets for spring 2009 was to complete the third phase of TMI's FFE and to propose development for extension of the program for the period of July to June 2010.
2. One of the major challenges faced by the staff of both TMI and the NGO partners was targeting and selecting the VDCs for participation; unlike in the first phase in which all VDCs in a particular area were covered. There were a lot of complaints from the local beneficiaries and it was difficult to select the target groups. This also delayed the programs selections. The distribution of the sprinkle program was also a major challenge due to inefficient cooperation and lack of proper coordination from the NGO selected particularly for this program.
3. Extreme remoteness, hard field travel, unfavorable weather and a lack of reliable transportation have prevent easy access to program sites. A lack of a reliable means of communication is preventing messages from being sent and delivered dependably and is preventing timely production of reports.



River Crossing with temporary twin



Rice delivery by helicopter in remote villages



Poor trail in remote village in Humla



Snowstorm during field visit in Humla

4. Working in a district like Dolpa is also challenging as the majority of the local people are engaged in collecting worms known as Yarcha Gumbu in the mountain areas as an additional source of income to supplement their families.



Local people leaving village to collect worms in the mountains

This population started to leave for the mountain areas in early June for a period of approximately 2 to 3 months for the collection of these worms. Therefore it was difficult to complete the PRRO on time before they left for the mountains. Without EDP in the extended working area, it is difficult to distribute commodities to beneficiaries by mule because of long distances and rough trails.



Yarcha Gumbu collecting in Dolpa



Yarcha gumbu before collection

5. One of the key issues facing TMI and the partner organizations in Karnali are the logistical challenge of distributing rice directly to beneficiaries in remote and isolated communities who have worked in RCIW program in Simkot/Hilsa road. The Local Development Officer (LDO), under the Ministry of Local Development (MLD), and TMI, under WFP, jointly handle the logistical aspects of RCIW.

The LDO receives rice at one of their warehouses in Seri (Tibet border). LDO then oversees the delivery of the rice to the RCIW's beneficiaries. This distribution has been delayed although TMI's RCIW program was completed by the given period. This has created major confusion between the users committee and TMI for the failure to distribute the rice upon timely completion of the work.

10. LESSONS LEARNED

Working with district based NGO partners is more effective than using out of district partners for implementing and monitoring programs and activities. With a district based TMI representative, the exact situation of the field is easily known and tracking and monitoring for programs and activities can be completed without difficulty.

Local and central level coordination minimizes the working area and prevents redundancy within the program. It is important for TMI's District Program Coordinators as well as the NGO partners to be separate from politics as some user groups in the project area may use FFE for their own benefit or political agenda. Vigilance regarding this situation is necessary to avoid problems.

Both parties must maintain greater relationships with all the stakeholders and remain informed about FFE programs. Thus, rather than interfering in the execution of the programs, they will foster greater cooperation from these user groups that will lead to better program implementation.

It is very important that both the District Program Coordinators and the NGO partners are consistently engaged with the local population during the implementation period to inspire hard work and provide motivation for continuation of projects.

One of the major lessons we have learned is there exists considerable overlap within the programs due to nature of our contract with WFP. It will be better to complete the second and third phases of the current projects before beginning of a new contract so that TMI can better monitor the program as well as the balance of commodities. The role and responsibilities of TMI should be clearly mentioned in the Memorandum of Understanding (MOU) while developing an agreement between WFP and other NGOs, such as Sprinkle and Winrock.

AREAS FOR IMPROVEMENT:

- More timely data from the field is required to consolidate and submit timely progress reports
- Timely ledger submissions with correct information
- Regular preparation and submission of financial reports with supporting documentation.

11. THE NGOs PERFORMANCE



TMI's District Program Coordinator with NGO partner during program assessment

NGOs have played a significant role in all FFE programs in the four districts to date. Unlike other districts, which lack significant local NGO input and rely more on government input, so far TMI's partners have played a major role in successful completion of FFE.

Since FFE began working in mid-western Nepal under the umbrella of UNWFP, the NGOs' role has been transformed into an active participant and facilitator in supporting and assisting the communities.

NGOs involved with TMI's FFE program have generally been enthusiastic and committed in performing their role, and have been surprisingly cooperative with each other. They have facilitated the emergence of community-based institutions and have provided training to enhance community capacity focused mainly on resource, institutional and financial management.

12. THE PROJECT'S IMPACT

With support from the United Nations' World Food Program (WFP), The Mountain Institute has initiated the "Lake-to-Lake: Food For Enterprise" that has become highly valued by local communities and provide the means to both feed families in need and develop micro projects that build self reliant communities in mid-western Nepal.

"Lake-to-Lake" draws on WFP's Food for Work (FFW) mechanism, which promotes self-reliance through food-for-work projects, as well as TMI's own adaptation, Food for Enterprise (FFE). Through these initiatives, local people not only receive direct food aid, but also improve infrastructure in their communities such as trails and bridges (including mule trails), school support, ghattas (water mills), irrigation, and more. In this way, immediate food deficits are met, while local people improve access and local enterprise in their communities in order to work towards a better, more independent future.

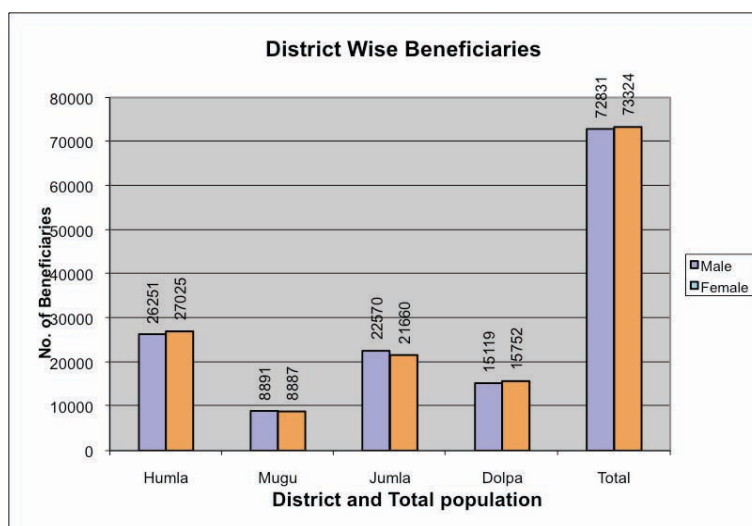
Since 2008 local communities have constructed more than 451 village-level projects in mid-western Nepal. These projects are designed to assist communities that are coping with food scarcity resulting from droughts, floods, and other environmental and social problems that are often exacerbated by climate change.

These mechanisms not only reduce dependency on climate sensitive sectors like agriculture, but they also actively re-establish food security through projects that build severely needed infrastructure and rehabilitate degraded ecosystems. The FFE projects are focused on environmental and economic resilience in the face of climate change. One of the most successful projects is the effort to improve community trails and wooden bridges.

Well-constructed trails and bridges are critical to mountain enterprise development and food security, as well as climate change adaptation. Not only does transportation infrastructure allow food to reach remote mountain communities, but it also provides access to government services, health care, education and markets.

In one instance, the project reduces the time it takes to reach a remote hospital by nearly three hours for more than 4,500 families. Additionally, these improvements minimize the safety and environmental hazards of tourism, which is an enterprise opportunity less sensitive to climatic shocks than traditional income sources.

Like trails and bridges, one of the great impacts from the FFE program is the school support provided in these project sites. Various forms of support such as construction of school compounds and buildings, roofing and furniture have been provided to the schools. The educational system has improved due to this support, particularly in remote areas where school facilities were poor. This support promotes increased enrollment and attendance rates and in turn supports children's concentration and learning achievements.



The FFE program has produced encouraging results. For example, 635 community-initiated mini infrastructure projects were completed and 16 MAP nurseries were established. These nurseries were created to secure the livelihood of vulnerable communities through sustainable MAP enterprise development.

Over 44 hectares of terraced farmlands and more than 552 hectares of irrigated land were built in the project area. Since February 2008, the project has distributed a total of 4595.89 MT of rice to increase food security of vulnerable communities through direct aid.

In addition to the continued distribution of rice to local residents, TMI also facilitated distribution of micronutrient sprinkles to children less than 5 years of age in Dolpa and Jumla as pilot programs. Although the results of the sprinkles are not yet known, there was a good reception by the parents who appreciated the support.

Strong and effective partnerships are critical to the FFE program. The project must therefore continue its efforts to strengthen and build successful and solid partnerships with local partners to implement FFE in the four districts. The second and third implementation phases have been successfully completed in cooperation with various NGOs in each district.

These NGOs include: HCDA in Humla, ICD in Jumla, RCDC in Mugu and DI in Dolpa. To ensure success, TMI has provided the NGO partners with technical and administrative assistance, as well as training in various skills to improve the capacity of local staff.

In brief, a solid foundation has been laid for the future growth of the Lake-to-Lake project in the four districts of Karnali region. Although it is too early to assess the long-term impacts of the programs, a strong foundation for future programs has been established along with considerable trust at the districts and local level.

APPENDIX ONE: COMMUNITY CONSULTATIONS ON CLIMATE CHANGE

Summary of Community Consultations in Jumla District

Submitted to The Mountain Institute

April 27th, 2009

Program Methodology:

A series of six community consultations were held in separate communities in Patmara and Dilichaur VDCs of Jumla district in Western Nepal. The consultations were hosted by TMI with support from the Institute for Community Development, their local partner.

A total of 326 people attended the meetings, 158 of whom were female. All were residents from varying socio-economic and ethnic backgrounds; all were engaged in farming as a primary occupation.

The consultations were a series of facilitated discussions that asked community members to identify certain indicators in their historical context (which was phrased as 50 years ago), their current context, and to identify when significant changes began to occur as a means of identifying rates of change. The results are compiled into this document.

Summary of Findings:

The residents of our target communities were extremely aware of climate-related changes to their livelihoods and local environment. The main manifestations of climate change were noticed to be irregular rainfall patterns – long periods of drought followed by short but intense storms – a massive decrease in the amount of snowfall, earlier blooming among fruit trees and other crops, and an increase in both insects and disease in food and fodder crops. All of these elements pose a very real threat to the food security and long-term livelihood options for our target populations, especially considering the history of food deficit therein.

The change was noticed to be quite rapid, with the majority of major climactic changes occurring within the past ten years. Even during the past year, residents noted new widespread diseases among fodder grass and forest trees, and the introduction of mosquitoes in communities where they had never before been seen.

The vulnerability of communities is rooted in their dependence upon sustenance agriculture and outside food grain subsidies to survive. The land in Jumla and the surrounding districts is located at relatively high altitude with soils of marginal quality. Essentially all local residents are primarily occupied as farmers. One may anticipate that local farms –which still heavily favor rainfall for watering crops rather than irrigation systems – will continue to witness decreases in production and crop failure as climate variance increases. Due to the lack of rainfall this year, many of the local farmers spoke of complete crop failures being likely. Also, the continuation of external food aid will likely end or decrease significantly in the near future, thus placing the communities in double jeopardy.

One of the greatest pressures on the local communities and land is the massive population growth over the past fifty years. On average, our communities claimed that the number of households increased by over eightfold in the given time span. Contrary to our expectations, there has been no significant migration out of the local areas for employment as a result of the increased population.

This tradition –which was historically established around leaving the village for extended durations to trade salt, woven goods, or medicinal plants for foodstuffs or migrating to India to work as laborers – has actually been halted, and many people have returned into the villages to work on various development projects in the area in exchange for rice. Ironically, it seems the influx of food aid into Jumla has eliminated the practice of diversifying income sources via off-farm or remote employment, which has been proven to be one of the most effective adaptation strategies to climate change and natural disasters.²

The increased intensity of rainfall combined with rampant deforestation (caused by increased population and weak local Community Forest User Groups) has led to a noted increase in landslides and flood events in local rivers and tributaries. Most communities claimed that this increase began within the past ten years.

While there was overall little awareness of the scientific or technical mechanisms for, or causes of climate change, there was an unquestionable recognition that there was significant warming in temperatures and a significant decrease in rainfall and snow.

The residents also all showed a firm belief that this change was caused by human behavior and not by angry deities or otherwise. Most communities, when questioned, believed that climate change was most likely caused by local population growth and deforestation, by living out of balance with the natural world.

This consciousness shows the great awareness around the human causality of the issue on a local and individual level and, accordingly, offers hope for the human ability to adapt or to set the situation right.

² Moench, Marcus and Ajaya Dixit (2004). Adaptive Capacity and Livelihood Resilience: Adaptive Strategies for Responding to Floods and Droughts in South Asia. Institute for Social and Environmental Transition International, Boulder, USA. pp. 26-35.

Concurrently, the visited communities are also wrestling with some of the negative consequences of (mis) use of industrial and chemical fertilizers, pesticides, and herbicides as well as introduced strains of crops. While some of the improvements in agriculture have been welcomed – for example, a higher-yield variety of potatoes, and hail-resistant rice strains in the lower communities – we discovered an overall negative attitude towards such advancements. Many residents speculated that a devastating blight on the indigenous strain of ‘red rice’ *kali marshi dhan* was introduced with the new higher-yield and hail-resistant strains of rice brought in by the Government Agricultural Office. This blight has destroyed from 70%-100% of the red rice crops over the past five years and the local government banned planting the strain at all this year in an attempt to eliminate the disease. Also, use of pesticides on mustard crops was widely known to be the cause of the massive die-off of local honeybees – a significant source of local income and sugar.

The entire district of Jumla has decided to only practice organic farming and to discontinue the use of industrial fertilizers, herbicides, and pesticides. However, many farmers stated they continued to use industrial fertilizers and that enforcement was minimal or none.

Current Adaptation Strategies:

The target communities were all engaged in mitigation strategies of some form, although their agricultural efforts were met with little success in the face of the devastating drought this year. The main means of coping with the massively reduced agricultural yields already experienced was employment in exchange for food aid in local development projects. As mentioned above, this strategy is extremely effective in the short term, but is not an effective long-term strategy as it depends upon unreliable external aid projects.

Also, the resulting migration back into our target communities increases vulnerability should this aid cease and the residents widely commented upon how the readily available white rice has changed local diets and discouraged traditional and historical food sources such as millet and corn.

On the positive side, the eagerness of community members – both male and female – to work as laborers on local road and other infrastructure projects shows an ability, and interest, in working in exchange for food or money and this practice may lay the foundation for future migration and establishing off-farm income sources. Migration abroad was almost non-existent (only two households in all of the interviewed communities were noted to have people working abroad).

The communities all expressed a great need for irrigation infrastructure to support agricultural production. Jumla is fortunate in the abundant water resources in local rivers and tributaries, however the visited communities exhibited limited use of such as irrigation. There have been a number of small projects in recent years to establish irrigation canals in three communities, however, and drip-irrigation had been just introduced on a small scale in a few villages as well.

Sales of cash crops have been widely adapted as a strategy, and many staple crops have been displaced by the planting of apple trees, potato, vegetable, and bean crops. the communities commented that this practice began twenty years ago, but has only become significant in the past five years or so. It was well established that at current market prices, planting potatoes and selling them in the Jumla market, then using the proceeds to purchase rice resulted in a much higher overall yield and amount of available food than simply planting local rice.

This being said, it is important to note that the sale of such products has not reached a great scale due to most vegetables being consumed by the farmers and the currently inadequate transportation infrastructure.

The practice of selling cash crops shows that our communities are actively aware of, and engaged in, using local markets and commerce to multiply their agricultural productivity, and all of the participants in our meetings expressed a desire to increase the amount of cash crops planted and to further develop markets for their products. This is probably the most effective, scalable, and feasible strategy for climate change adaptation in this area – especially due to the impending completion of the local road network that will allow access to regional and national markets.

The gathering and selling of medicinal plants has been widely practiced by our communities for generations, and the local residents were very proud and quick to point out the amount and diversity of such plants in the area.

However, there was no established cultivation practice among our participants, and many residents noted that the availability of medicinal plants has decreased significantly from over-harvesting in recent years.

Earthworks have been established to control shore erosion and flooding along local rivers and tributaries, and in a few instances, along areas prone to landslides. The communities all identified the need to increase such to prevent the further loss of fields, homes, and life from flooding and landslides. Most of the earthworks, it seems, were initiated by aid projects in the area.

All of the communities we visited had active Community Forest User Groups, although the amount of perceived effectiveness of such was quite varied. During the recent civil war, the CFUGs all fell into inaction and disrepair, and some have been reformed only in the past two years. There is great awareness around the importance of forest and watershed conservation and while four of the interviewed communities stated that the CFUGs were controlling the harvest of trees and firewood, no communities noted that any significant reforestation projects were underway or planned.

It was noted that savings and credit cooperatives are quite active in the target communities, with as many as four or five different groups active in each small village. It is unclear regarding how available credit is and at what terms – one assumes that having many small groups reduces both the size and number of loans that any single coop can bear, and may thus adversely effect the overall credit situation.

Suggested Program Strategies:

The communities were unified in their common identification for the need to implement a series of programs that are primarily focused around water resource management as a foundation for farm-based income generation as a main climate change adaptation strategy.

The ultimate goal for adaptation should be creating durable income generation sources that will allow the target populations to reliably survive with numbers higher than the carrying capacity of the local environment. Income generation combined with savings will also allow stakeholders to engage in other adaptation strategies such as sending a family member abroad, purchasing new and improved technology, leveraging credit, etc.

Forest Conservation/Watershed Protection

All of the communities repeatedly stressed the need for forest and watershed conservation as both a means of mitigating landslides, erosion, and flooding as well as maintaining drinking water and irrigation sources.

There was much recognition around how preservation of forestland increases the water table and, thus, water available for human use. Programs that strengthen the capacity and effectiveness of existing CFUGs and promote reforestation and re-introduction of bamboo crops along with watershed conservation should be seen as a foundation for water resource security in our target communities, and this strategy fits into the local perspective that identifies deforestation as one of the main causes of climate change.

Another benefit of forest conservation is the increased quality of manure resulting from harvesting forest by-products to mix with livestock manure. The carrying capacity for livestock of a healthy forest is also much greater. This is essential for the development of organic farm products that are dependent upon organic manure and compost.

Market Development

In order to take advantage of the nearly completed road system, and to ensure the effectiveness of income generation projects, market studies should be implemented to determine which farm products would result in maximum sustainable profits for our stakeholders. Consideration should be given to diversifying products within our stakeholder groups to minimize flooding potential markets and encouraging unhealthy competition.

Processing technology that adds value to agricultural products should also be considered as a means of reducing weight (and thus transportation cost) of the products and increasing their marketability. One example of this would be to create powdered apple and grape juice from local fruits. Jumla's decision to become an 'organic district' should also be applauded and leveraged when considering markets for Jumla products.

Irrigation

Irrigation projects should also be pursued, as this is the most direct and effective means of increasing agricultural yields and crop selection. The recommended approach is to create two phases, the first being mass irrigation where community-managed irrigation channels or piping should be used to bring large volumes of water into sections of fields that currently lack access to water.

This will allow irrigation of staple crops or mass-production of crops such as potatoes and wheat. Digging irrigation ditches and laying pipe are labor-intensive activities that can be used to leverage current TMI/World Food Programme activities as well.

The second phase is smaller drip irrigation systems managed by individuals and used to grow high-value crops such as off-season vegetables or herbal medicinal products. The water source for drip irrigation can either be the above mass irrigation sources or captured water from local drinking water taps or hydropower generation.

Drip irrigation systems should be linked to the established markets and sold to individuals (or financed with low interest) to ensure local buy-in and to reduce dependency. For drip irrigation projects, a partnership with IDE or other such organization with high level of technical expertise is highly recommended.

Training on Organic Pest Control and Farming Techniques

The communities expressed an awareness around the negative impacts of industrial agriculture, but also had limited knowledge of how to address the increasing threat posed to agricultural products from insects and disease. Training on organic farming techniques and non-chemical pest management should be given to stakeholders.

Consideration should also be given to livestock usage and development, as they play a crucial role in the nutrient chain by providing manure. It may be worth considering pursuing increasing livestock or types of livestock as a means of providing fertilizer to stimulate crop production.

Earthworks

The construction of a variety of earthworks to reduce erosion and loss of cropland caused by flooding, and a landslide was identified as an important mitigation strategy. These types of projects are very labor intensive and could leverage current TMI/WFP programs.

APPENDIX TWO: NGO PARTNERS

HIMALAYAN CONSERVATION AND DEVELOPMENT ASSOCIATION (HCDA)

INTRODUCTION

Himalayan Conservation and Development Association (HCDA) is a non - political and non - profit making independent social organization. It was established in 2050 B.S. (1994 A.D.). In the same year, the Association acquired affiliation from Social Welfare Council, Kathmandu. With the support from donors and local people, HCDA has been carrying out various social development activities since its inception including the TMI initiated “Lake-to-Lake: Food for Enterprise” in 12 VDCs of the Humla District.

MISSION

Promotion of integrated efforts for socio - economic upliftment of the people and natural resources management in the Himalayan region

VISION

Development of a self - reliant, equitable, environmentally balanced, healthy and empowered Himalayan society. This society will help promote national prestige by developing democratic culture and supporting human rights, human norms and values, and good governance.

INTRODUCTION OF ICD

INTRODUCTION

The Institute of Community Development (ICD) is a non - political and non - profit making independent social organization. It was established in 2058-2-11 and the registration number is 15/057/058. ICD was established with the objectives of enabling target groups to strengthen their capacity to promote economic empowerment; expanding the opportunities of the unprivileged class to lift themselves and their families out of poverty; developing local entrepreneurship for self sustainable income generating activities; conducting tourism development activities, preserving environmental balance and balance of utilization of natural resources. With support from donors and local people, ICD has been carrying out various social development activities since its inception including the TMI initiated “Lake-to-Lake: Food for Enterprise” in 12 VDCs of Jumla District.

ICD currently works in 7 VDCs of Jumla under the “ Lake-to-Lake: Food for Enterprise Programs”. ICD has been partnering with TMI to implement the FFE program since September 2008. The ICD office is located in Khalang the district HQ of Jumla.

RURAL COMMUNITY DEVELOPMENT CENTER (RCDC)

INTRODUCTION

Rural community Development Center (RCDC), as a self – governed organization was registered at District Administration office Mugu on 19th August 1998 under non-government Act 2034 (registration no is 28). It is affiliated with Social Welfare Council (Affiliated no. Is 7765) and also associated with Non-Government Organization Federation, Nepal. Objectives include resource mobilization for awareness, capacity building, skill development, income generation and infrastructure in communities and empowerment for poverty reduction.

DOLPA INSTITUTE (DI)

INTRODUCTION

Dolpo Institute (DI) is a non-profit non-governmental organization registered at District Administration Office, Dolpa: Registration no. DO111/064/065 and is affiliated with Social Welfare Council: Affiliation no. 24080. DI has been carrying out various social development activities since its inception including the TMI initiated “Lake-to-Lake: Food for Enterprise” in 12 VDCs of Dolpa District.

MISSION STATEMENT

To offer greater opportunities in life to the disadvantaged of Karnali

OBJECTIVES

- Promote economic growth and poverty reduction in Karnali through better management, conservation efforts and proper utilization of natural resources.
- Develop community based sustainable tourism and infrastructure maximizing economic benefits to local communities with minimum negative impacts on natural and cultural resources.
- Instill positive attitudes and foster stewardship

APPENDIX THREE: COMMUNITY LEVEL MICRO PROJECTS