Innovation Fund Project S-63424
Ramechhap Rural Health Improvement Project (RRHIP)
World Neighbours Canada
Report for May 2006 to June 2007
(submitted by Tamakoshi Service Society)

General Background of the Project

The project is located in Ramechhap district of Nepal. It is a two-year project, expected to be completed in June 2008. The project is being implemented by Tamakoshi Service Society (TSS), an NGO in Ramechhap district. World Neighbors Canada with matching grant from CIDA's Innovation Fund is supporting TSS to implement the project.

Purpose & Goal of the Project

The main purpose of the project is to improve the health condition of poor and disabled people and reduce poverty. People in need will have improved facilities for drinking water and sanitation. The project is implemented using participatory approaches through which local people will feel more empowered and will learn both technical and managerial skills to allow them to construct and maintain the facilities and participate in effective local organizations.

Expected Results of the Project in Year One

The project was expected to achieve the following results in the first year:

1. About 75 families (450 population) will construct rainwater harvesting water systems and use it with technical and materials support from TSS.

2. About 2,000 families (12,000 population) will construct domestic toilet houses and use them properly with technical and materials support from TSS.

Achievements in the First Year

In the first year of RRHIP implementation, the following results were achieved in the two program sectors by June 2007.

1. Rainwater Harvesting Program:

62 families (households) in 9 communities have constructed household rainwater systems. These systems have directly benefitted 418 people (see Table 1 below for locations).

The rainwater harvesting program has been very useful and productive for these households as there is no possibility of piped-water systems in these locations (i.e. no water source at a higher elevation within a reasonable distance). This program has helped people to reduce water shortages required for household and livestock purposes. It has also helped to reduce the physical burden of carrying water, especially for women.

A water-vessel type ferro-cement tank of 2,000 liters capacity has been constructed by each household nearby their homes. Rainwater is collected from the roof, generally made of corrugated galvanized sheets or thatch or slate. A half-cut high-density polythene pipe is connected to the roof as a gutter. The gutter is fixed just below the roof. This gutter is used to transport rainwater from the roof into the storage tank through the polythene pipe. A tap stand is attached to each storage tank. The rain water accumulates in the tank during rainy periods and is used for domestic purposes when needed.

Each beneficiary household has made in-kind contributions as well as a cash contribution. In terms of in-kind contribution, the households provided their voluntary labor for construction work and construction materials collection. They also contributed cash for the purchase of high-density polythene pipe that goes from the roof to the storage tank. TSS has provided supported in the form of non-local construction materials such as cement and fittings and also technical guidance.

The total cost of a rainwater harvesting system has been NRs. 21,370 on average. This includes TSS non-local material/technical contribution (NRs. 14,350), beneficiary household in-kind labor/material contribution (NRs. 5,720) and cash contribution for polythene pipe (NRs. 1,300).

Thus, the rainwater harvesting program has proved to be a very useful, practical and efficient solution for rural areas, where gravity systems are not feasible technically or economically. However, the cost per household is high compared to gravity-fed piped water systems which normally serve an entire hamlet or at least several homes.

Table 1 below gives details on the locations and the numbers of beneficiaries for the rainwater harvesting systems that have been constructed.

Table 1: Rainwater harvesting program – locations and beneficiaries

	VDC, Ward, Community	No. of systems/families	No. of Population
1	Okhreni - 5, Chyasku	5	41
2	Okhreni - 5, Dhande	6	44
3	Okhreni - 7, Chhap	16	95
4	Okhreni - 7, Kami	6	36
5	Ramechhap - 5, Tulechaur	7	43
6	Salu - 6, Salu	5	30
7	Sukajor - 8, Chambot	5	28
8	Sukajor - 9, Dandatol	6	51
9	Sukajor - 9, Nigalghari	6	50
	Total	**62**	**418**

2. Community Hygiene Program:

2,045 families (households) in 18 VDCs (village development committees) have constructed domestic water-sealed latrines. These systems have directly benefitted 11,884 people. Details of locations and numbers of beneficiaries are given in Table 2 below.

The water-sealed latrine is an improved technology for rural communities where flush toilets are not practical. This is a low-cost technology and can be built mostly with locally available materials (the pan, siphon and sewage pipe must be brought in). TSS has helped beneficiary households with provision of non-local materials for the construction of toilets. These households have made their own contribution to constructing the toilets through provision of labor and local materials.

Having the improved domestic latrine is especially appreciated by women (pregnant and elderly women most of all), disabled people and children who now have convenient and comfortable access to a sanitary latrine. The health condition of family and community has been also improved with the construction and use of such improved and managed toilet systems. The open defecation and traditional ad hoc way of disposal has now totally stopped where latrines have been built.

The toilets have been built near individual homes for easily access by all family members. Each toilet is connected to a septic tank and covered with slab or stone. The capacity of the septic tank is 2 cubic meters. This kind of septic tank generally lasts for 15 years. All the toilets are far from water sources to prevent environmental impact.

The total cost of a water-sealed latrine has been NRs. 9,350 on average. This includes TSS material/technical contribution (NRs. 780), beneficiary household in-kind labor/material contribution (NRs. 7,850) and cash expense for cement (NRs. 720).

The construction of domestic latrines and their use has become very important in improving the environment of the community and the health condition of its members.

Table 2 gives the locations and number of beneficiaries for the community hygiene program.

Table 2: Community hygiene program – locations and beneficiaries

	Name of VDC	No. of Families	No. of Population
1	Bamti	184	1025
2	Bethan	40	220
3	Bhatauli	42	232
4	Chuchure	66	390
5	Daduwa	273	1687
6	Doramba	50	295
7	Duragaun	127	664
8	Gagal Bhadaure	61	316
9	Gumdel	135	700
10	Khandadevi	29	155
11	Khimti	244	1429
12	Phulasi	40	220
13	Puranagaun	22	121
14	Rampur	64	349
15	Saipu	188	1164
16	Those	396	2435
17	Tilpung	23	137
18	Tokarpur	61	335
	Total	**2,045**	**11,874**

Modification of the Project

Due to unexpected price increases for non-local construction materials for rainwater harvesting systems, less output has been achieved compared to the expected result. TSS has supported the construction of 62 rainwater systems instead of 75 as planned. The expected result has been successfully achieved in the community hygiene program.

The proposal for RRHIP was originally developed in June 2005 and submitted to World Neighbors Canada and became part of a proposal to the Innovation Fund. The materials cost was budgeted on the basis of market price at that time. The project was finalized and approved by CIDA about one year later. At the time of materials purchase in November 2006, the price of cement had increased by 36%. Thus, TSS was compelled to reduce the number of rainwater schemes constructed.

Plan for the Second Year

RRHIP is now in the final. We expect to construct 62 rainwater systems from the previously approved budget, as well as additional money to be transferred from monitoring mission budget. We also expect to construct 2,000 toilets.