

# Community Water Supply and Sanitation Programme

Pokhara

Ministry of Housing  
and Physical Planning

Department of Water  
Supply and Sewerage



HELVETAS

UNICEF - Noted 'A'

## ANNUAL REPORT

For

NATIONAL REFERENCE CENTRE  
COMMUNITY WATER SUPPLY

Western Development Region  
NEPAL

*Fiscal Year 2045-2046*

*July 1988 - July 1989*

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**Papers quoted in this report:**

- Evaluation Report on CWSS Western Region / SDC Berne 1989
- Report on Technicians Training / CWSS-HELVETAS Pokhara 1988
- Report on Project Survey CWSS Western Region / HELVETAS/NO-FRILLS 1989
- Approach Paper Women Involvement / CWSS-HELVETAS 1989

1. INTRODUCTION

1.1 Background

Since 1971, His Majesty's Government (HMG) of Nepal with assistance from UNICEF has been executing the **Community Water Supply and Sanitation (CWSS)** Programme through the Ministry of Panchayat and Local Development (MPLD). With the reorganisation of HMG's ministries in early 1988 the responsibility for the execution of the CWSS programme has been shifted to the newly established **Ministry of Housing and Physical Planning (MHPP)**. Hence from 1988 onwards the **Department of Water Supply and Sewerage (DWSS)** under MHPP will be the implementing agency of the CWSS programme.

The programme in its initial stage was financed from UNICEF's general resources (pre-noted projects). Since 1976 the Project for Western Region is funded by a grant (Noted "A") from the Government of Switzerland and technical assistance is provided by HELVETAS.

The Project Agreement for the present, fourth phase of Noted "A"-project covering the period from 1987 to 1989 was signed in February 1988. This Project forms part of UNICEF's Programme of Cooperation with HMG as documented in the Plan of Operations of UNICEF (chapter 5) 1988 to 1992.

The principal objective of the Programme is to reduce health problems, which in rural Nepal are often caused by water- and sanitation-related diseases. It is expected to reduce the burden of water collection and thus save energy for more productive activities. An important objective of the Programme is furthermore to enhance the management of completed schemes by strengthening and institutionalising maintenance by the water supply user's committee. Emphasis is given to the involvement of women in the implementation of the schemes and its subsequent management.

The Programme has developed as a partnership between the villagers and the implementing agency MPLD (since mid 1988 MHPP/DWSS), with assistance from UNICEF and HELVETAS. The contributions of the four partners are as follows.

**The Community** is expected to contribute unskilled labour and local materials for their water supply system and organise a user's committee for the management and maintenance of the system.

**HMG/MHPP/DWSS** provides administrative and technical manpower, carries out survey, design, estimate and site supervision work and pays all skilled labour and transportation of materials from Regional Store to the site.

**UNICEF** is administering the Swiss funds which are used for the supply of all construction material, vehicles and equipments, training and scholarships.

**HELVETAS** is providing technical and managerial assistance and supports the project with regard to trainings and extension activities.

The project covers twelve hill districts in Western Region, i.e. Gorkha, Lamjung, Tanahun, Kaski, Syangja, Myagdi, Parbat, Baglung, Palpa, Gulmi, Arga-Khanchi, Nawal-Parasi.

## 1.2 National Programme

A significant increase in the Government's commitment to water supply was observed following the declaration of the International Drinking Water Supply and Sanitation Decade in 1980. However the level of commitment for sanitation remained low.

Since the beginning of the Decade successive plans and targets have been prepared and revised. They finally culminated in the goal of providing safe drinking water to all Nepalese by the year 2000 which is part of the Government's Basic Need Programme.

Following the declaration of this programme the Government had to find new approaches to achieve these goals. As a result it decided to consolidate all development programmes sectorwise under the respective Ministries. As part of this reorganisation all water supply activities fell under the Ministry of Housing and Physical Planning. The intention of this Ministry is to strengthen district-level capacity and make community participation a general policy for rural water supplies.

Overall coverage of water supply has continued to increase but not at the rate needed to reach the mid-1990 target of 48 percent. The Government has estimated that 23 percent coverage was reached by mid-1985 and stands at 33 percent in mid-1988. These figures, however reflect coverage obtained as a cumulative total of population served by new facilities and do not reflect the actual population currently receiving the service, a figure likely to be much lower.

## 2. AGREEMENT

### 2.1 Fourth Funding Period

The coming into being of the Agreement for the fourth funding period was a rather lengthy process. Negotiations on the final draft started in July 1986 still under MPLD. Due to various problems and constraints the signing of the agreement was delayed. It was only in February 1988 when it was eventually signed. However with the reorganisation of the ministries the organisational set-up as foreseen in the agreement was no longer valid. UNICEF/HELVETAS agreed to sign it as it was but supplement it with a covering letter which provides for a review of the contract once the new structures of the programme are clear. Thus the project at least had a contractual basis again to work on.

The fourth funding agreement provides for the following contributions:

Government Contribution:	US \$	758,800	(24 %)
UNICEF Noted "A" Funds:	US \$	1,924,400	(62 %)
Community Contribution:	US \$	428,700	(14 %)

It is covering a period of three years from 1987 to the end of 1989.

## 2.2 Evaluation

Along with the agreement to a fourth funding period for CWSS, the donor i.e. Swiss Development Cooperation (SDC) asked UNICEF for an evaluation of the programme. It was the first one since Noted "A"-funding started in 1976.

Originally the evaluation was planned for the end of 1988 but finally took place in February 1989. The advantage of this was that by then the new organisational set-up under MHPP/DWSS was already operational for a few months at least. This was in particular important since the objectives of the evaluation were not so much to assess past performance of the project but rather:

- to recommend ways of improving implementation of the project and
- to prepare an outline of the primary elements and the main focus for the next (fifth) phase of project implementation.

The team consisted of two Swiss consultants hired by SDC, Mr. S. Niederer (civil engineer, teamleader), Mr. E. Reinhardt (forestry eng. and planner), one Nepali consultant Mrs. S. Belbase (mass communication, women involvement) hired by UNICEF Nepal, one Nepali consultant Mr. G.R. Shrestha (agricultural eng., peoples participation) employed by HELVETAS Nepal and as representative of HMG, Mr. V.R. Yami (environmental eng.) Divisional Engineer of DWSS.

Out of the five weeks available for the whole evaluation, the team spent one week in Pokhara for discussions with project staff and one week on a fieldtrip to Baglung and Parbat area. For the rest various contacts with involved ministries were established.

The major findings of the evaluation were, that CWSS has a successful history and that "the programme yields cost effective and viable rural water supply schemes because of the low cost, appropriate technology, good quality of structures and maintenance. It has the added advantage of creating a sound sense of belonging in the communities who are strongly involved in the project planning/preparation, construction, operation and maintenance of their water supply schemes. There is also a greater possibility of effectively integrating and institutionalizing women involvement, sanitation, health education and maintenance components at the programme level from the valuable experiences already gained under the CWSS project in the Western Region". Furthermore "...many incompatibilities were found between the CWSS approach and the DWSS approach", which has "...caused many people to wonder whether CWSS can survive under the present unified DWSS policy \*)".

\*) policy: see chapter 3.

It is to say that the evaluation had the very difficult task to assess future options for the programme at a moment when many questions, in particular with regard to organisational set-up and policy followed by the government, were still open. However one of its major conclusions is noteworthy. "Primarily, the evaluation makes it evident that for the sake of achieving viable drinking water supply schemes and enhancing self-reliance in the rural communities of Nepal, the objectives of community approach and community participation as followed in the CWSS programme should not be given up".

The problem of the evaluation, to provide clear-cut recommendations in a rather open situation, is reflected in the two future scenarios one of them proposing two different sections (CWSS & DWSS) within the same department and the other one sketching an approach with full fledged User's Committees, where HMG would only provide support services to the villages.

### 2.3 Extension of Agreement (Fourth Phase)

The evaluation stated that the CWSS-programme at present is in a critical phase where it is difficult to foresee in which direction it could be developed. Much depends now on the efforts that HMG, i.e. the Ministry and the Department undertake to harmonize the CWSS and the DWSS approach and to what extent the policy on peoples participation is put into practice.

In view of this problem and the fact that the fourth phase is actually running only since a bit more than a year and thus has by far not achieved its objectives yet, the Swiss donor has considered to extend the agreement by two years until the end of 1991. To this end negotiations with HMG have been taken up.

It is planned that CWSS/HELVETAS until the end of September 1989 develops a monitoring system for this two years. The aim of it will be to collect sufficient reliable information that will allow the project partners to decide on the future of their cooperation. Based on such a decision the planning of a next phase should start in 1991 in order to have a next agreement settled beginning of 1992.

## 3. REORGANISATION

In January 1988 HMG reorganised its ministries sectorwise. As a consequence the Ministry of Housing and Physical Planning was assigned full responsibility for all water supply and sanitation activities. That meant that the CWSS-programme, previously executed by MPLD and the Department of Water Supply and Sewerage previously under the Ministry of Water Resources have been merged into one Department under MHPP. All external support including UNICEF's is now channeled through MHPP and all Projects, whether funded from internal or external resources, will be executed by DWSS.

Along with the reorganisation the cabinet approved a policy on Community Participation to be followed in all district level water supply projects. It stipulates that out of the total cost of the projects the village has to contribute a minimum of 5% in cash or 3% in cash and 5% in people's labour or 10% in people's labour where cash contribution is not possible. However the policy is not very specific on its practical implementation. It will have to be seen how MHPP/DWSS are going to implement it and what impact the policy has in view of a harmonization of CWSS and DWSS approach.

The new organisation has the potential to resolve certain recurring problems that were a result of the former structure where responsibilities were shared. Duplication in annual programme planning should be eliminated and DWSS which is administratively and technically stronger than MPLD has better management capability.

To support Decentralisation, District Water Supply Offices (DWSO) were established in all 75 districts working under the supervision of the Regional Directorates of DWSS. With the beginning of the fiscal year, July 1988, the organigrams had been finalized and approved by the cabinet. Thereafter Regional Directors and District Engineers were appointed. At the beginning of the construction season in November 1988 the District Engineers started establishing their offices.

Until November 1988 the Divisional Engineer responsible for CWSS under MPLD continued this duty under the Regional Director of DWSS. By then he left for his new assignment as District Engineer in Dhankuta. As a consequence the RD himself took over the responsibility for CWSS assisted by initially one later two Assistant Engineers of Kaski DWSO.

The overseers who had been working for CWSS under MPLD were assigned to various DWSO's whereby attention was given to providing each DWSO with a "CWSS-overseer" in order to transfer their particular know-how on CWSS-programme to the DWSO's. Finally 10 out of 12 districts where CWSS-projects are implemented got a "CWSS-overseer". They took up their assignments in the DWSO end of December 1988.

The Water Supply and Sanitation Technicians were assigned projectwise by the Regional Directorate, and then worked under the DWSO's on the basis of this assignment.

The cabinet decision on the reorganisation also referred to the sharing of infrastructure between MPLD and MHPP. As a result in Western Region only part of the vehicles provided to the CWSS-programme out of UNICEF funds were handed over to MHPP/DWSS. Furthermore the office and store facilities used by CWSS were given to DWSS only on a temporary basis.

#### 4. PROJECT ACTIVITIES AND RESULTS

##### 4.1 Water Supply Schemes

##### 4.1.1 Regular Programme

Carry-over projects: At the beginning of the construction season 20 regular projects were in the carry-over list. Out of them in 7 only little work was left whereas in the 10 projects that were taken up newly in the previous (2044/45) season, construction work only started now, since last year the materials for these projects were not available in time.

Out of 10 rehabilitation projects that were in the carry-over list 2 were actually still finished at the end of last fiscal year. So 8 rehabilitation projects had to be taken up again this year. In 2 of this projects for the reason mentioned above construction work actually started only this year.

In two projects (Chang-Changdi & Chiti Tilahar) again work could not really be taken up because of persisting disputes. In Chang-Chandi towards the end of the season once more a solution was in sight and a resurvey and new design were prepared, whereas in Chiti Tilahar after



discussions with the District Engineer and the Regional Director it was decided to drop the project from the list, since it is very unlikely that the dispute in this place can be solved at all. The source dispute in Harrchour, Gulmi could be settled by extending the project to the neighbouring panchayat Bishnukharka, but a new design/estimate had to be prepared.

At the end of the season 7 regular and 5 rehabilitation projects were completed whereas in 5 only little work (e.g. school latrines) are left.

New Projects: In order to be able to reduce the number of carry-over projects only 7 new projects were proposed for this year. Even though in the approved budget 8 more new projects were shown (see also chapter 6.) only this 7 projects were actually taken up for construction. Due to the transfer of overseers to the DWSO's the finalisation of the according designs/estimates was delayed so that actual construction work in these projects started only in February/March. Even then the achieved progress was rather good. 3 of them are almost complete.

Project Data: Typical data for the projects undertaken in the past year are given in table 1:

Actual Population	Overall Length of system	No. of Taps	Total Cost	Cost per Capita	
1221	8.7 km	20.0	Rs 840000	Rs 688	1)
1458	10.1 km	18.3	Rs 787000	Rs 543	2)

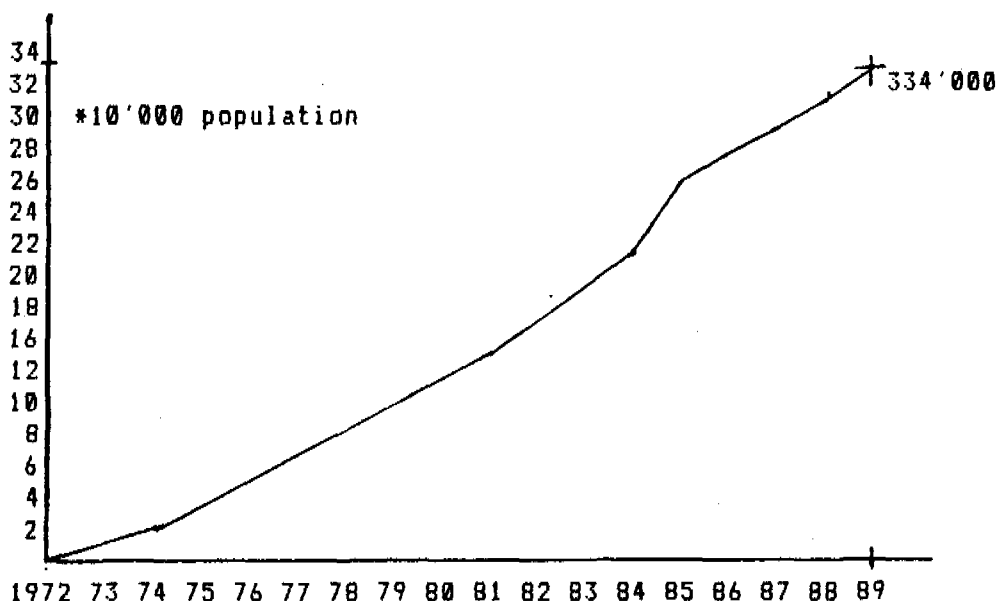
Table 1. Typical data for a CWSS project

- Note: 1) average figures for projects taken up in 2045/46 (1988/89) season ( 8 projects)  
 2) average figures for projects taken up since 2041/42 (1984/85) season (68 projects)  
 3) Rs 688 equalled US \$ 27.50 in July 1989

As a result of a mailsurvey conducted in 1985/86 it became possible to give a rough picture of the overall population covered by projects built by the present programme or by HMG and UNICEF before noted-A started.

In addition a survey of about 200 completed projects commissioned to No-Frills Consultants by Helvetas in 1988 (see also 4.9) provided results of actual coverage end of 1988 and thus allows a good check of the figures.

Whereas the figure based on the mail survey and updated according to the assumptions mentioned below comes to 334'000 population, the figure taken from the survey comes to about 330'000 people served by a CWSS-project mid-1989.



Includes corrections:

- 10 % annual reduction in coverage for projects built before 1976/77
- 4 % annual reduction for projects built after 1977
- 2.6 % population growth
- compensation is made for rehabilitated and maintained projects

Figure 1. Population covered by CWSS in the Western Development Region (in 10'000) since 1972.

The survey executed in 1988 allowed for a revision of the list of projects completed under the CWSS-programme in Western Region. This revised list differs a little from previous lists because in some cases two old projects were merged into one during rehabilitation or some very old projects (prenoted) were in the list where actually work was never started. The revised list reflects now a physically checked status. Thus the **number of projects completed** by the Local Development Department and MPLD and recently MHPP/DWSS under the CWSS-programme between 1972 and mid-1989 **totals 259**. The figures do not include small projects executed under training programmes and area specific programme.

PROJECTS COMPLETED				since 1972	
GANDAKI ZONE		DHAULAGIRI ZONE		LUMBINI ZONE	
Kaski	57	Baglung	14	Palpa	18
Lamjung	19	Myagdi	24	Gulmi	13
Manang	4	Mustang	9	Argha-Khanchi	7
Gorkha	19	Parbat	23	Nawal-Parasi	7
Tanahun	23			Rupandehi	1
Syangja	21				
	---		--		--
Total	143		70		46 : 259
					===

Table 2: Projects completed by zone and district.

#### 4.1.2 Area Specific Programme

Besides the regular programme CWSS is providing assistance to other development programmes supported by UNICEF. For this area specific programmes (SFDP, PCRW, BSLD) 1 overseer and 5 technicians are set aside. Under their supervision small water supply schemes up to 3 km length are built in these programme areas. For this year the following projects were proposed:

Battakachour (Baglung),	BSLD,	carry-over
Sundar Bazaar (Lamjung),	SFDP,	carry-over
Tara Khola (Baglung),	SFDP,	carry-over
Waling (Syangja),	PCRW,	carry-over
Ram Bazaar (Lamjung),	SFDP,	new
Manakamana (Gorkha),	SFDP,	new

In Battakachour only some minor work was left at the beginning of the construction season. The payment for this project created some problems because the BSLD-programme has been stopped last year. In Sundar Bazaar the few remaining work took almost the whole season due to difficulties with the committee. Tara Khola and Ram Bazaar came near to completion until the end of the construction season whereas in Waling a dispute over the location of tapstands delayed the work. Manakamana project was not taken up for construction because UNICEF together with Water-Aid are building up a special unit for area specific projects, which became active in Gorkha district and assessed the project as unfeasible.

#### 4.2 Maintenance / Repair

Repair: Over the last few years there was a budget set aside for repair work in existing projects. The number of projects that ask for assistance for repair in the form of material, technical assistance or both still seems to increase. Since last year the Helvetas-engineer is assigned as Maintenance/Repair-Coordinator and all repair requests were channeled through him. That helped to get a clear picture of the activities going on in this field and do the repair work according CWSS's maintenance policy.

However this year with the reorganisation a problem was created in that the repair budget was allocated to the DWSO whereas in the budget proposal it had been put under the RD. More critical was the fact that surprisingly high amounts particularly on HMG-side were allocated for this work. Whereas the proposed amounts were, HMG: 230'000 Rs & UNICEF: 860'000 Rs, the total of allocated amounts in 12 districts were, HMG: 636'000 Rs & UNICEF: 1'460'000 Rs. Thus the District Engineers were under big pressure to utilize this money, which was simply not possible, provided the CWSS maintenance policy should be followed. With regard to the UNICEF portion it would not have been possible to provide materials to that extent. In the end it turned out that DWSO's were too much absorbed by their regular programme and the fact that repair requests that included UNICEF-components had to be channeled through the RD still reduced the expected pressure. Thus assistance in repair was provided to 27 projects (see annex I). However this figure does not reflect those projects where the DWSO's might have undertaken repair work on their own out of the HMG-allocation only.

Maintenance: Since a maintenance policy based on the Jhapa and Pokhara Conference Papers was drafted by the Maintenance-Coordinator (Helvetas-engineer) last year and was discussed with the then Divisional Engineer responsible for CWSS we continued to work with the Maintenance Unit according to this policy.

The policy defines the terms maintenance, minor and major repair, rehabilitation and gives a clear picture of the responsibilities of all involved partners (villagers, user's committee, RD/MPLD). Furthermore it lists the duties of the Village Maintenance Worker and the Maintenance and Sanitation Technician in detail. Finally it contains all forms necessary in this regard like contract for user's committee, checklists for VMW and MST and reports.

Since the whole maintenance set-up is still new and not well established it was agreed with the Ministry that for the time being this activity would be run out of the Regional Directorate to gain more experience before shifting the responsibility to the DWSO's.

The six Maintenance and Sanitation Technicians so far assigned to the Maintenance Unit visited 35 projects in 9 districts. During these visits they checked the whole system together with the VMW, assisted in the case of minor problems, assessed major problems to later report them to RD, brushed up the knowledge of the VMW, contacted or in many cases reactivated user committees and finally promoted sanitation in the village.

The activities in this field could not be followed-up to the desired extent because the Maintenance-Coordinator was very much absorbed by other tasks related to the transfer of the CWSS-programme to MHPP/DWSS. In addition confusion was created by the fact that in some districts the MST's were utilized by District Engineers to survey repair projects. Even then this years activities helped to get more experience on how to run the Maintenance Unit.

#### 4.3 Sanitation

Like last year a sanitation campaign was lanced in the newly taken up projects. Technicians were briefed on their task and sent to their projects in order to run a three-weeks sanitation motivational programme before even starting construction of the water supply. They had to build a latrine for their own use as a demonstration object and then they were given time and information/motivational material to promote the issue of sanitation so that the villagers would build their own latrines. After a first stay in the village the technicians had to follow up the activities in a second phase when they came back to the village for the construction of the water supply.

To motivate the technicians and to assess the results of the campaign all the villages were visited at the end of the construction season to evaluate the latrines on the basis of the following criteria: latrine completed and in proper use, pit at least 1.5 meters deep, slab tightly sealed, lid on the hole and location of the latrine within reasonable distance of the house. The results for the 7 new projects taken up this year are shown in the table below:

		Total No. of latrines built	No. of latrines acc. to criteria
Prasauni,	Nawal Parasi :	85	10 (12%)
Kota,	*) Tanahun :	100	25 (25%)
Ghyalchowk,*)	Gorkha :	99	48 (49%)
Bhachok,	*) Kaski :	69	41 (59%)
Khilung Deurali,*)	Syangja :	96	26 (27%)
Dhoban,	Palpa :	3	0 (0%)
Amalachour,	Baglung :	60	34 (57%)
	Total :	512	184 (36%)

\*) Projects where Women Involvement Programme is active.

Table 3: Latrines built in new projects (1988/89)

All the latrines were built purely out of locally available materials. The intention is to provide cement and rebars for a concrete slab in those places where good latrines were built and are in use, provided people request it. The results show that the promotion of latrines has an impact regarding construction but that the importance of quality with latrines is not yet sufficiently understood by WSST's as well as villagers. It will furthermore be revealing to see the condition of the good latrines after one year of use.

Public latrines this year were built only in some old carry-over projects. In the projects taken up last year and this year public latrines will be built next year on the basis of a new standard design, provided genuine requests are filed by the villages or schools. Experience indicates that public latrines only have a chance to be used if they are built according to a felt need and not because they are included in the design of the water supply scheme.

#### 4.4 Training

A list of all trainings conducted along with statistical figures and a brief account of each is given in annex IV.

##### 4.4.1 CWSS-staff Trainings

Training of our own staff has always been given high priority in CWSS-programme since it helps best to maintain the quality standard and is also a motivation for the employees. Therefore again an intensive training programme was run during the rainy season. Since many of the technicians had already participated in the courses that were offered to them in the past years and the observation of their work in the field showed that some improvement of basic skills was necessary, two new courses were designed.

First a Technicians Trainers Training for 12 of the best WSST's was conducted to evaluate their capability as trainers and refine their skills and teaching methods. The training was mainly designed and conducted by Mr. Heini Müller (former engineer & training-in-charge in CWSS till 1985), nowadays advisor to the engineering sector in IHDP. Thanks to the kind cooperation of IHDP we could benefit from his

particular experience in technician trainings in CWSS and thus got a course tailor-made to our needs. Besides our 12 WSST's, 6 technicians of IHDP participated in this course.

Following this training these WSST'S acted as trainers in a so-called **Skill Development Training** in which 36 senior WSST's got a four-weeks training in which their basic skills were evaluated and improved. For this training we hired Mr. Fritz Baumgartner (formerly sectionhead of construction trade at Jiri Technical School) as a consultant. He set up the training and supervised the first part whereas for the second part Mr. Klaus-Peter Witlandt (GVS-volunteer at PUDTC) stepped in. Besides them we could again rely on the competent assistance of our own CWSS-overseers Mr. G.S. Pun and Mr. Subba Gurung. A separate report on these trainings including a review of our training concept is available with CWSS/Helvetas.

In addition to these trainings a number of "routine"-trainings were conducted for technicians who had not yet attended these courses earlier.

A **Ferrocement-Training** for 14 WSST's was run in Deupur Jaisithok, Parbat where a 5 m3 tank was constructed.

A regular **Upgrading- and Final Foremen Course** was held for 13 junior technicians. During the practical part of the training a small water supply scheme was built in Dhiprang, Kaski.

Again a **Workshop for CWSS-overseers** was conducted to further improve their skill in project design and to discuss job-related issues such as operation and maintenance. In the course of the workshop they prepared the designs of the new projects. Following the workshop a study-tour to Dolakha district was organised for the overseers and MPLD-engineers. The Integrated Hill Development Project, the Lamosangu-Jiri Road Project as well as the Jiri Technical School were visited.

In order to replenish our staff of WSST's for the 1988/89 construction season, it was planned to conduct a **Basic Foremen Training** for about 20 people so that in the end about 15 suitable candidates could be employed as foremen. However the then Assistant Minister of MHPP responsible for DWSS interfered with the selection of the trainees and delayed the decision to the extent that the training could not be conducted in 1988/89 fiscal year. As a result the number of foremen and WSST's available for the construction season was not adequate.

#### 4.4.2 Other Training Programmes

Since most of the District Engineers of DWSS who are now responsible for the execution of the CWSS-programme were not yet familiar with the programme a first 3-days **Orientation Workshop on CWSS** was organised at the beginning of the construction season at the request of the Regional Director of DWSS. The workshop was organised and run by the CWSS/Helvetas teammembers who at that moment were the only ones left from the old set-up who could ensure a smooth handing over of the programme. Thanks to the active support of the Regional Director the workshop became an encouraging introduction to the new collaborators of the programme.

In order to review first experiences with the programme and to familiarize the District Engineers with the policies and opinions of the Ministry and the Department a second 3-days **Workshop for District Engineers** was held end of March. This workshop was attended by the new Assistant Minister Mr. Parshuram Khapung, the Secretary of MHPP Mr. Santa Bahadur Rai, the Director General of DWSS Mr. Shiv Nath Sharma and Deputy Director General Mr. Ratnakar Datta as well as Mr. Larry Robertson from UNICEF Kathmandu.

Just before this workshop we took the chance of having all the District Engineers in Pokhara to conduct our "traditional" **Project Coordination Workshop** for User's Committee members. In this 3-days workshop policies and work procedures of the CWSS-programme are explained and discussed among the involved partners, i.e. District Engineers, Committee Members and WSST's. Due to the fact that this workshop could not be run last year the Committee Members of last years as well as of this years new projects were invited which resulted in a rather big number of 56 participants.

In January again a one-weeks **Training for Women Committee Members** as part of the women involvement programme was conducted in Hemja, Kaski. Besides the women of the four newly taken up projects also the women of three of the projects taken last year were invited for three days to share their experiences with the "new" ones and to get some more input for their own.

In our traditional **Village Maintenance Worker Training** in February 36 VMW's got trained on their task. The training was held in Deupur Jaisithok, Parbat where at the same time our earlier built water supply scheme got rehabilitated.

#### 4.4.3 Scholarships

At present three overseers who worked in CWSS-programme are on a scholarship studying in the BE-special course run at Pulchowk campus in Kathmandu.

B.P. Shah is on a scholarship of HELVETAS and attends his last year of the course. Actually he was about to finish, but shortly before this year's examinations all campuses were closed due to the economic crisis that started in April. It will have to be seen when he can finalize his studies.

The two other overseers (D.P. Subedi, I.V. Khanal) are on scholarships provided out of Noted "A" funds through UNICEF. They study in the third and first year respectively.

#### 4.5 Women Involvement

Women are the main responsables for all tasks related to drinking water in the household. Therefore they are actually the most competent persons in the village if it comes to water supply and they are the immediate beneficiaries of it. Furthermore they are the appropriate persons to introduce changes in hygiene behaviour in the family and in the village.

Out of this realisation three years ago a women involvement component was introduced in the programme. For this task HELVETAS employed a Nepali woman and later on a part-time advisor. After a first period where some preliminary trials were run and other similar projects were visited to gain insights the programme now runs on the basis of a clear cut concept since two years. This concept is documented in an **approach paper** which was written in June 1987 and since then has been updated periodically according to the experiences.

The concept provides for a continuous looking after the village during the construction period and even beyond. In a first phase before construction starts the villagers are advised to include at least two women members in the User's Committee. During several visits to the project our staff introduces the whole Committee to the objectives of the Women Involvement Programme with the help of motivational programmes on water supply, sanitation, hygiene. During this phase the women members are encouraged to build their own latrine and are provided with a concrete slab for it and with a smokeless chulo as demonstration objects.

Later on the women members are called for a one-weeks training to Hemja, Kaski. There they live together with our staff in a village environment with improved water supply, latrine and smokeless chulo and are taught how to make use of this facilities to improve their household environment and how to manage the water supply scheme.

Back in the village the women members will transfer the gained knowledge to their own households and to women groups which are organised at each tapstand. For this task they again can rely on several follow-up visits of our staff. After one year the women are again called to the training in Hemja to brush up their knowledge and to share their experience with the women of new projects.

Once the water supply is completed the women are familiarized with the maintenance of it.

Last year three of the projects (Gankhu, Keshabtar, Limithana) that were taken up first according to the described concept came into the final stage of the programme and their women members attended the refresher course in January 1989 in Hemja.

Out of the projects started in 1987/88 season again four projects were selected to run the women involvement programme. For the time being not all the new projects can be taken up due the limited manpower. The projects are:

Bhanu,	Tanahun
Satupasal,	Syangja
Lunkhu Deurali,	Parbat
Gaindakot,	Nawal Parasi

These projects were visited 3 to 4 times within the construction season and the eight women members participated in the 5-day training in January 89.



From the new projects of 1988/89 construction season initially four projects were included in the programme:

Bhachok,	Kaski
Khilung Deurali,	Syangja
Kota,	Tanahun
Ghyalchowk,	Gorkha

The first two visits to these villages were made during the construction season. Later at the strong request of the villagers a fifth project was taken up, Prasauni in Nawal Parasi.

In general the approach chosen proved very satisfactory and appropriate. With some more staff it will be possible to cover all the projects that will be taken up for construction in the future.

#### 4.6 Communication Unit

In a programme that pursues a policy of partnership with the communities it is building water supply schemes for, it is essential that there is good communication between the partners. To achieve this a number of activities are undertaken by the programme.

During the preliminary survey executed by the project staff special attention is given to the social context of the new project. Later while the detail survey is done the overseers also involve the villagers in defining the places for the tapstands and at that time start explaining them the procedures for implementation.

Before the construction season started the technicians were sent to the newly approved projects to collect more information about the situation in the project area and to further introduce the villagers to the project. This information helps to identify the readiness of the village for cooperation and reveals where additional information and motivation is necessary and where problems might crop up.

As a next step a Project Coordination Workshop was organised where User's Committee Members of new projects, the District Engineers and the concerned Technicians took part. In this workshop implementation procedures are explained and discussed. Due to the reorganisation this years workshop took place rather late, i.e. in March 1989 only. Since last year this workshop could not be held the committee members of the projects started in 1987/88 construction season were invited this time.

During the construction season the **Mobile Communication Unit** visited a the following projects:

Lunkhu Deurali,	Parbat
Satupasal,	Syangja
Bhanu,	Tanahun
Gaindakot,	Nawal Parasi
Dhiprang,	Kaski
Khilung Deurali,	Syangja
Prasauni,	Nawal Parasi
Kota,	Tanahun

The MCU is running a "road show" in the project sites by showing films and slide shows related to hygiene, water supply, sanitation and the use of chulos. It is a good possibility to raise the awareness of the villagers for this issue in an attractive way. At the same time it also becomes a forum to discuss about the project.

#### 4.7 Chulo Programme

With the new funding agreement the chulo programme has become an official part of the programme. Since the conservation of forests is directly related to the availability of drinkable water, besides being a general concern in Nepal, it is well justified as a part of a water supply programme. As a policy three sets of chulos are provided to each project as demonstration objects and additional stoves can be bought at a subsidized rate from the project.

However this year only about 42 chulos were distributed by the project. In places where the women involvement programme was active the response to this facility was quite good whereas from other sites there were no requests.

Besides the distribution of the chulos it is the aim of the project to involve potters in the dissemination of chulos. To this end an agreement was sought last year with the potter groups that were trained by the project earlier. According to it the potters would get a subsidy on chulos which they sold and installed themselves in our projectsites. Even then none of the potters made use of this facility. For one the potters are not very interested in the installation of chulos and for another villagers are not willing to pay even a marginal amount for chulos because various agencies, including UNICEF keep distributing chulos free of cost.

#### 4.8 Water Testing

The project has a facility to do water tests with a simple method that identifies the faecal contamination by counting E-coli bacteria. The Junieur Project Assistant of Helvetas is doing these tests. In the past year the sources of Gankhu, Limithana, Lunkhu Deurali, Satupasal and Khilung Deurali project were tested.

Except for two sources the results were withing WHO-standards. In the case of these two sources the quality should be achieved, once the source is protected with a proper intake structure.

#### 4.9 Project Survey

In view of the oncoming evaluation and in order to get an assessment of the performance of the programme in terms of physical output a survey of most of the projects built with UNICEF assistance was executed in an eight-months period from April to December 1988. The fieldwork and compilation of the data was done by NO-FRILLS Consultants and financed by HELVETAS.

Four teams consisting of an engineer and an assistant each were visiting the projects and checking the system with the help of a standardised recording form assessing the condition of the projects, how far it still serves the purpose and what maintenance arrangements are there. In addition some social data were collected too. The information was transferred on to evaluation sheets as well as data sheets. The latter will serve as a data bank for the use by the DWSD's and the Maintenance Unit whereas the evaluation sheets allowed to draw conclusions on the status of the projects and its influencing factors.

Finally the data of 220 projects built between 1972 and 1987 were available out of which 193 projects that were built or rehabilitated under Noted "A", means according to standardized designs, were evaluated. This stands for 83% of the the total of projects completed until 1987.

Out of the whole information evaluated and put down in a report by CWSS/HELVETAS a few interesting results are worth mentioning here. The structurewise assessment shows that throughout between 64% (valve chambers) and 93% (storage tanks) of the structures are in satisfactory general condition. 76% of all tapstands provide adequate water whereas only 17% have no flow at all.

The projects were further evaluated with regard to utility (flow from tapstands) and overall physical condition (repair requirements). In terms of utility 60% of the projects can be considered as good, i.e. more than 70% of the taps provide adequate water and not more than 15% have no flow at all. Another 15% of the projects could be considered as average whereas only about 25% are bad with regard to utility. With regard to physical condition about 40% of the projects are good without major flaws, another 28% need some major repair whereas about 32% are in serious disrepair.

An evaluation of the relations between the general condition of projects and influencing factors shows that there is a significant relation between the condition of the project and the quality of maintenance whereas construction quality is secondary to this.

It also reveals that the CWSS-concept for maintenance with Users Committees and Village Maintenance Workers caught on considerably. 78% of the projects have a VMW and 62% of them are even trained. Similarly 78% have a User's Committee out of which 87% are active, i.e. the whole committee or at least the chairman. About 61% of the VMW's get regular remuneration for their job. Finally it shows that trained VMW's perform better, but also the type of payment (regular or not) has an influence on their performance.

## 5. MANPOWER

### 5.1 HMG-Staff

#### 5.1.1 Engineers

Under the new organisational set-up the CWSS-programme runs under the overall supervision of the Regional Director of DWSS Mr. Poshan Nath Nepal, who has taken a strong interest in the programme from the beginning. As mentioned earlier the Divisional Engineer Mr. Gautam Shrestha, responsible for the programme while it was still under MPLD remained at the RD until November 1988 to assist in the handing over process. After that the Regional Director assigned two Assistant Engineers of Kaski DWSO, Mr. B.P. Gautam and Mr. S. Uphadyaya to handle the day-to-day management of the programme from HMG-side whereas he himself takes care of all planning tasks and major decisions in close cooperation with the Helvetas Co-manager.

As regards the actual implementation of the projects from this year onwards the individual District Engineers of DWSS are responsible. A list is given in annex V.

### 5.1.2 Overseers

All the overseers working under RD/MPLD were transferred either to MHPP/DWSS or to the Irrigation Department at the beginning of the fiscal year. Later also the overseers of the former District Technical Offices of MPLD were transferred to MHPP where they were assigned to the DWSS or to the Department of Housing. In the case of Western Region out of the 14 overseers that had worked for CWSS at the end of last fiscal year 3 were assigned to other regions or departments. The remaining 11 were posted in such a way that one each is working now in 10 of the 12 districts covered by CWSS. Later an overseer who had worked with CWSS earlier came back from the DTO, so that by now except for Nawal Parasi each district has one "CWSS-overseer". The overseer responsible for projects in Lamjung is also handling the area specific projects and therefore is posted at the RD.

### 5.1.3 Technicians

At the beginning of the construction season we had 74 technicians. Out of them 5 technicians have left their job during this year, some of them being qualified senior people.

Since it is necessary to fill all 85 posts available for WSST's to run all the components of the programme it was planned to conduct a Basic Foremen Training for a group of about 20 people in August 1988 so that finally our staff of technicians could have been supplemented with some 10 to 15 persons. However for reasons mentioned earlier the training could not be held. As a result we have now only 69 WSST's left instead of 85.

Under the new set-up the cabinet sanctioned a number of permanent posts for non-gazetted staff in DWSS. Two posts for WSST's and two for plumbers were allocated per district. However the problem is that the posts for WSST's are only 3rd class non-gazetted whereas our senior most technicians are 2nd class. Hence they are loosing one level if they apply for the permanent post. Adding to problem is the fact that the posts for plumbers are 2nd class non-gazetted. To reduce the problem the RD proposed to provide a number of the plumbers 2nd class posts to senior WSST's for the time being. At the end of the fiscal year interviews were taken and evaluated. However the employment of the WSST's in the permanent posts becomes effective only from the new fiscal year on.

### 5.2 HELVEIAS-Staff

In the reporting period Helvetas assisted the CWSS-programme with the following staff:

One expatriate engineer who's term as Project Co-manager ended mid June 1989. However he stays on in the project until end of September 89 with a task to establish a monitoring system. His successor arrived in Nepal end of April and after an introductory period took over mid June 89.

One engineer acts as Maintenance-Coordinator. However due to the big workload created by the handing-over of the programme to a new HMG-

agency he got more and more involved in management tasks. Since the workload for Helvetas under the new set-up (12 DWSO's to communicate with) will be bigger it was decided to assign this engineer Deputy Co-manager and employ a second engineer as Maintenance Coordinator.

In the field of extension Helvetas is assisting with one Sociologist who is responsible for the communication aspects but also coordinates all training activities.

Furthermore for the Women Involvement Programme Helvetas is employing one Women Involvement Officer, assisted by a parttime Advisor for conceptual and methodological aspects. It is foreseen to replace the advisor by a second Women Involvement Officer with similar skills by September 89.

The chulo programme is coordinated by the Project Assistant and supported by two Chulo Technicians hired by Helvetas and finally the water testing is done by the Junieur Project Assistant.

## 6. BUDGET

The budget proposal for the fiscal year 2045/46 (1988/89) included 7 new projects, 20 carry-over and 8 rehabilitation carry-over projects. Once more the approved budget differed considerably from the proposed one.

10 carry-over projects were simply dropped from the list whereas on the other hand 8 new projects were added. On the whole the construction budget (12.2) on HMG-side was increased by 32% from a proposed 5'810'000 Rs to 7'687'000 Rs. The total UNICEF-portion under construction was slightly decreased but the amounts put for the carry-over projects that had been omitted were "distributed" to the districts under repair. As mentioned earlier in the repair budget the proposed HMG-contribution was inflated by 176% and the UNICEF-contribution by 70%.

On the other hand the operational budget was again cut, salaries to 78% and allowances to about 40% of the proposed amount. All in all the approved budget was not according to the actual requirements of the programme. In addition the budget was released only after 5 month from the beginning of fiscal year.

Had it not been for the good cooperation of the Regional Director in the process of readjusting the budget to the actual needs and for the fact that the DWSO's had some funds from other sources to use for advances, the programme would have been hampered much more. As for the new projects added, these projects were put under grant-in-aid projects but without UNICEF-contribution.

With regard to the budget ceilings for 2046/47-budget a problem was created in that UNICEF forwarded too high ceilings to MHPP for Western Region, a matter which was adjusted immediately. Even then the ceilings that the DWSO's received were still higher than the already too high ones that were submitted to the Ministry in the first place.

## 7. LOGISTICS

### 7.1 Material

The order for the 1988/89 construction season for material to be procured abroad was placed in October 87, the one for locally procured materials was placed August 88 with UNICEF Kathmandu.

The material procured abroad arrived in time. The cement even though being a bit late arrived just in time before the buffer stock available with HELVETAS was exhausted too.

On the other hand the local procurement created a lot of problems and additional work to the project staff. It seems that the UNICEF-procedures are not appropriate to do efficient procurement on the local market which has its own characteristics. The bids were handed out by UNICEF in January 89 only and returned to UNICEF in February. It took another month to get the purchase order to the supplier. Later when the supplier was not able to deliver part of the items it took a similarly lengthy process to get the approval to buy the items from other suppliers. As a result project staff every now and then had to procure small quantities of materials that were exhausted in the meantime out of contingency.

As a consequence of the reorganisation all the materials in stock for CWSS-programme were handed over from MPLD to MHPP. This was a rather difficult process since MPLD had to separate the materials of various programmes run under its auspices. However this process had the advantage that now at least we have an accurate picture of what is available and in what condition the materials are. It allows for a new start with proper book-keeping and regular physical checks an issue about which RD/MPLD had become a bit relaxed over the past years. The new storekeepers of RD/DWSS have taken up their job very seriously.

### 7.2 Transportation

According to the cabinet decision the assets of MPLD had to be shared with MHPP. To this end the Regional Directors of MPLD and DWSS met at the beginning of the fiscal year to separate the infrastructure. As a result one of the two newer trucks and some of the newer motorbikes remained with MPLD.

After this decision the maintenance of the old truck was taken up again and completed so that now there are at least again two trucks available for transportation of project materials, even though the old one is no longer fit for long journeys. Even then the fact that for most of the construction season only one truck was available hampered the distribution of materials to the projects. UNICEF is trying to convince the ministries that actually all the vehicles bought for the execution of CWSS-programme should be handed over to DWSS.

After April 89 due to the economic crisis fuel was hardly available which further slowed down the transportation of material. We often had to leave it up to the chairmen to organise a truck or at least fuel on their own.

### 7.3 Stores/Fieldoffice Baglung

At the RD in Pokhara the cement store and part of the go-down had to be left for the use by MPLD. The remaining facilities, one store and the workshop plus part of the go-down are sufficient to store pipe and fittings, but for cement temporary arrangements had to be fixed by DWSS. Furthermore even the remaining facilities still belong to MPLD and it is not sure whether and when they have to be vacated too.

The Fieldoffice Baglung in the meantime is completed and handed-over to HMG. The DWSS has taken the responsibility for the building and it is most likely that the building will be used as a transit store for projects in the upper Dhaulagiri Zone. It will no longer be used as a fieldoffice under the new organisational set-up.

## 8. VARIOUS

### 8.1 FINNIDA-Project

In June 1988 a fact-finding mission of FINNIDA visited Western Region. HMG and FINNIDA had agreed to cooperate in the field of water supplies and therefore the mission's task was to investigate into possibilities to implement a rural water supply and sanitation programme in this region. The team was shown several DWSS- as well as CWSS-projects and introduced to both programmes a fact that was an immediate result of the ongoing reorganisation. Seemingly the first contacts of FINNIDA were channeled only through DWSS, so that actually the team was rather surprised to find with CWSS a programme that is already established in the field of community participation approach to water supply, a field that FINNIDA expected to pioneer according to the TOR's of the mission. Out of this realisation the mission proposed to concentrate the input of FINNIDA to the Lumbini zone.

In autumn 1988 an appraisal mission for the same project visited Pokhara and had contacts with our programme. In April 89 some consultants from Finland who were bidding for the contract to execute the project for FINNIDA stopped by to collect further information.

The projects objective is to provide safe, sustainable water supplies and improved sanitary facilities to 175'000 people within a period of four years. The project is supposed to start beginning of 1990.

### 8.2 Visitors

In the past year our project again was visited by quite a number of persons who took interest in our work and in most cases did not hesitate to take the trouble of a fieldtrip.

Aug. 88: W. Wirz, new Director of SDC Nepal  
Y.B. Malla, Helvetas Nepal

Oct. 88: A group of Women Workers from IHDP to familiarize with our Women Involvement Programme  
A group of Extension Workers also from IHDP

Nov. 88: Mr. Kritzler from Helvetas "Ortsgruppe" Zurich, Switzerland

- Dec. 88: R. Gautschi, Sectionhead and W. Hofer, Desk Officer for Nepal at SDC-headquarter in Switzerland accompanied by B. Dolf, Programme Director Helvetas Nepal visited CWSS project in Rakhi.  
H. Pfiffner and H. Heijnen (former CWSS Co-manager) from Helvetas Sri Lanka
- Feb. 89: Mr. and Mrs. Jenny, Minister of Finance of county of Basel, Switzerland accompanied by a journalist from Switzerland and B. Dolf visited Ghanku project in Gorkha
- Apr. 89: P. Spycher, new Desk Officer Nepal at SDC headquarter in Switzerland and R. Wieser, new Deputy Director SDC Nepal, visited Satupasal project in Syangja  
H. Böni, Junior Project Officer for Sanitation at UNICEF KTM  
K. Regmi and R. Shrestha, consultants of AsDB working for Human Resource Development Section of DWSS

## 9. PROJECT ASSESSMENT

### 9.1 General

Once more, one is tempted to say, the programme was operating under difficult circumstances. On one hand it was the first year that the programme ran under the new organisational set-up which demanded a lot of extra efforts of all the involved staff to adjust and familiarize with the new situation. On the other hand during the second half of the construction season Nepal was hit by an economic crisis which had its impact on the programme as well, as mentioned earlier.

Considering these difficulties the progress achieved this year is still satisfactory which can be attributed to the good cooperation that was established between CWSS- and HELVETAS-staff and the newly involved DWSS-staff. In particular the commitment of the Regional Director to the programme helped a lot to show to the District Engineers the potential of the CWSS-programme. But also the loyalty of the CWSS-technicians and -overseers to "their" programme facilitated the transition.

### 9.2 Institutional Arrangements

This year has shown that the new institutional arrangement definitely has its potential. DWSS as the implementing agency is technically and administratively rather strong and has a good management capability. The fact that there are now DWSO's in each district further enhances decentralisation of the programme. However, as most engineers have come from the Department's side they are not yet that familiar with facilitating community involvement in project implementation. It will take some time to sensitize the engineers to this method of operation.

On the other hand with the Government policy on community participation in all rural water supplies a basis is given to harmonize the different approaches taken so far by CWSS and DWSS. It does not mean that one or the other is the sole approach to implement water supplies, but in order to run both programmes in future smoothly it will be important that the Ministry together with the Department provide clear implementation guidelines.



### 9.3 Water Supply Projects

The performance of individual projects depends very much on the participation of the villagers. It is obvious that the villages with a good internal organisation perform much better because they are not prone to any sort of dispute. On the other hand in cases where political considerations take precedence over actual felt needs during the selection process usually the participation of the villagers in the implementation is not satisfactory.

It is realised that to an increasing degree factions within the villages misuse the water supply projects to deal with their internal quarrels, thus delaying the implementation seriously. In such cases it is important that DWSS has the possibility to suspend or even drop the project because otherwise resources are blocked and thus the start of new projects delayed. A first such case was made this year with the project in Chiti Tilahar, where for the last three years villagers could not agree to solve their dispute in spite of various attempts by project-staff and consequently no progress was achieved.

In last years report a remark was made on the implementation of rehabilitation projects. It was felt that in these projects village participation is more often a problem than in new ones. The project survey (chapter 4.9) has now revealed that there is a direct relation between the degree of village organisation and the condition of the project. That meant many projects fall into disrepair because the village is not able to organize the maintenance. This again will reflect in the involvement of the village during rehabilitation.

### 9.4 Maintenance/Repair

The maintenance policy established under CWSS-programme aims at utmost selfreliance of the villages. The basic idea is that operation and maintenance, including some minor repair is left with the village to the extent possible. Only in those aspects where the village needs outside assistance the project will help. These are in particular the training aspects (VMW-trainings, Committee Orientation Workshops, etc.) and the quality control aspect (periodical visit of the project by a MST). The organisation of the work and remuneration of the VMW is the duty of the user's committee. Only for major repair the input from the project side will be bigger, particular with regard to spare parts.

Whereas the user's committee and the VMW are already widely accepted features of CWSS-projects, as the survey executed last year showed, the idea of the Maintenance and Sanitation Technicians (MST) still needs further advocating. During the last two years we gained first experiences with regular visits of MST's to the projects. These technicians can do a lot in prevention. They can give advise to the VMW in cases where later bigger damage would occur or they can motivate the village to keep the user's committee active. Furthermore they can provide continuous sanitation promotion to the village.

Even then this years experience shows that still a lot needs to be done. For one the MST's themselves still need more intensive follow-up to get a sound understanding of their job. For another the DWSS-engineers, used to a different approach to operation and maintenance, need to be introduced further to the CWSS-policy. The difference between

operation/maintenance and repair has to be pointed out in particular. In this regard the extraordinary high repair budget of this year has had a bad impact since it pressed the engineers towards the "repair-attitude" to maintenance rather than a preventive attitude.

#### 9.5 Training

The new types of training provided this year had a good impact with regard to the skill but also the motivation of the technicians. They felt more confident in their work again. However the problem remains that in the long run these two issues alone can not be the only benefit technicians get out of trainings. There should be a recognition of their improved skills in the form of promotion.

With the joining of DWSS the issue gains even more importance since DWSS brings in a big staff of plumbers and supervisors who are working at a similar level as the WSST's but who's professional background is different. The problem becomes most apparent in the fact that among the permanent posts allocated to DWSS the plumbers are given 2nd class non-gazetted whereas the WSST's are given only 3rd class non-gazetted which grossly contradicts their respective position in terms of skills. Here it will be very important that in the near future the training concepts and curriculums of DWSS and CWSS and as a consequence the classification of staff will be harmonized.

The overseer workshop showed again that there is a big interest for it because it provides a forum to the overseers where they can discuss the problems they are confronted with during their work.

Trainings aiming at better communication among different parties involved in the project proved to be very helpful. Particularly for the user's committees a further expansion of such programmes could be useful to provide management skills to them. After the positive experience of the District Engineers workshops it will be important to impart the concept of CWSS-programme also to other engineers working in the DWSO's.

The CWSS-programme has achieved quite some experience in the training of fieldstaff for water supply and in workshops for user's committees. It is therefore desirable that this experience is shared with DWSS to come to a harmonized training concept.

With the change of the ministry and the fact that PDTC Pokhara was assigned new tasks we are confronted with the fact that there is not yet a set-up in the new structure for trainings, neither in terms of infrastructure nor in terms of personnel. At present we greatly depend on the good-will of various training institutes in Pokhara with regard to infrastructure. It is therefore most important that the Ministry and the Department go ahead with establishing training units at the Regional Directorates, because with the introduction of the new policy there will be a huge scope for trainings of DWSS own fieldstaff as well as villagers.

## 9.6 Women Involvement, Health Education, Sanitation

This three items are assessed in one chapter because they are very much related to each other.

As mentioned above construction activities in sanitation were very low this year. Only in carry-over projects school-latrines were built and where ever requested some assistance was given for the construction of private latrines.

On the other hand new approaches in the field of sanitation promotion were undertaken which are promising. The sanitation campaign launched this year for the second time showed some good results and helped us gaining more experience. In spite of a number of nicely built latrines it is clear that the promotion of sanitation/hygiene as an attitude is the crucial issue and not so much the construction of latrines. To see whether we succeeded in this task the villages monitored this year will have to be observed furtheron.

How effective promotion can be, is shown in the women involvement programme. The women are informed and introduced to the issue in several steps over a period of time. Once they saw the necessity of clean latrines they started building latrines on their own and motivated their fellow villagers to do the same with good success. It will be necessary that the sanitation campaign run with the WSST's is further coordinated with and integrated into the activities of WIP.

The WIP as a whole, as it is established now, in many aspects is very successful. It seems to be worthwhile to limit this programme to the field of water supply, hygiene and health education but look for links with other women programmes. At present not all projects can be taken up due to limited manpower but the Ministry has agreed to employ women workers with the assistance of UNICEF in the next fiscal year. This will allow for an extension of the programme to more projects.

## 9.7 Manpower

With the establishing of DWSO's in each district the situation with regard to engineers and overseers has improved to a certain extent. But looking at the huge annual programmes (DWSS & CWSS) that the DWSO's have to accomplish it will be important that the posts available are actually filled, which is not yet the case. It also remains to be seen how much of their time the engineers and overseers can devote to the CWSS-programme.

With regard to technicians the recruiting of suitable persons becomes increasingly difficult. One reason are the criteria that are given by HMG-rules for such a post (emphasis on school education) and another is that it becomes more difficult to find the type of person who has some basic trade skills and is dedicated to field work.

Adding to the problem is the fact that the position of the technicians within the HMG-system is not sufficiently appreciated which became very obvious with the issue of permanent posts (see 9.5). Such issues and their position within the DWSO's have a strong influence on their motivation. With the help of the Regional Director it was possible to reduce the problem by providing some of the 2nd class permanent posts to

senior WSST's, but in the long run it is necessary that at higher levels measures are taken to improve the situation of the WSST's. Otherwise the trend that senior WSST's are leaving the programme will increase.

#### 9.8 Budget, Annual Programme

As described in chapter 6. the budget proposed for this year has been changed at the ministry level to an extent which seriously endangered the smooth implementation of the programme (e.g. omitting of carry-over projects). If the impact was not that strong it is only for the pragmatic approach that the RD took in resolving these problems. Even then the fact remains that such changes or rather the process of adjusting to them absorbs a lot of energy of the involved staff during the whole of the construction season and thus still hampers progress. Therefore the recommendation of the evaluation mission shall be emphasized here which says, that "HMG, i.e. MHPP/DWSS, MOF, NPC shall confine the approval to the programme level and the Regional Director shall be the ultimate authority to reshuffle, within the centrally set budget ceilings,

- funds allocated to new and carry-over projects
- funds allocated to construction and maintenance works
- other projects to be taken up which were not listed"

#### 9.9 Logistics

Experience of the last two years has shown that the procedures that UNICEF is following for local procurement are not suitable for efficient procurement on the local hardware-market. This situation will become even more difficult under the new trade situation between India and Nepal. It is therefore necessary that UNICEF undertakes to adjust or interpret the procedures in such a way that the timely delivery of the material is possible.

#### 10. CONCLUSION

The first year of executing the CWSS-programme under the new institutional arrangements has shown that the set-up has its potential to further improve the effectiveness of the programme. It is also clear that the programme has to adjust further to the new situation in order to fit in. However it is hoped that with the commitment that is there in many quarters and levels within the Ministry as well as the Department the idea of Community Participation in its true sense is maintained if not extended in future. This will be a vital issue if the ambitious national goals are taken seriously.

For the future of the CWSS-programme a lot depends on whether the Ministry together with the Department come up with appropriate and meaningful guidelines for rural water supplies and actually get them implemented. Furthermore some incompatibilities within the present system such as staff classifications, etc. need to be removed.

If the right ingredients of each approach are chosen the merging of DWSS and CWSS can result in a most effective approach to fulfill the big demand for water supplies in a sustainable manner.

## B) IMPLEMENTATION PLAN FOR 1989/90 (2046/47)

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### 1. GENERAL

During the next fiscal year it will be necessary to further adjust the programme to the new circumstances. In particular more time and inputs are needed to familiarize DWSS-staff with the CWSS-approach. Besides that next year the King's visit to Western Region is due which will absorb capacities for part of the year. Therefore the work programme for next year was kept at a reasonable size.

### 2. INSTITUTIONAL ARRANGEMENTS

During the first year under the new institutional arrangements a good cooperation among the involved partners at the regional and district level has been established, which will be refined during the coming year.

To further develop the new set-up a lot depends now on the efforts that the Ministry and the Department undertake to come up with clear implementation guidelines for rural water supplies.

### 3. CONSTRUCTION PROGRAMME

#### 3.1 Regular Programme

For the reasons mentioned above the programme was limited to finishing carry-over projects without taking up new projects for implementation. This should also help to adjust the planning cycle in such a way that projects will be surveyed at least one year before actual construction starts. That means this year new projects will be taken only for survey.

Thus there will be:

- 20 carry-over projects
- 4 carry-over rehabilitation projects (see annex II)

In addition 12 old projects (see annex II) will be taken up for major repair or rehabilitation. The intention is to consolidate the status of completed projects.

#### 3.2 Area Specific Projects

Here four carry-over projects remain to be finished whereas the new projects to be implemented during the coming construction season are not yet selected.

#### 3.3 Design and Surveys

Since we do not start new projects this year surveys will be done during dry season on the basis of the requests from the district assemblies and consequently the designs will be prepared towards the end of the year to ready for next fiscal year.

In order to get a stock of feasibility studies, budget to do about 60 preliminary surveys during the next season is proposed.

#### 4. MAINTENANCE

##### 4.1 Maintenance Unit

With the employment of a second engineer from HELVETAS side as Maintenance Coordinator it will be possible to expand the activities in this field. It is foreseen that under his guidance 10 to 12 MST's would work, i.e. an average of one MST per district. At the same time the Maintenance Coordinator will undertake to introduce the DWSO's to the maintenance set-up.

##### 4.2 Repair

Besides the 12 projects mentioned above again a budget for minor repair work in existing projects is set aside. The amounts allocated to each district should provide for repair requests of about 40 projects in the 12 districts.

#### 5. SANITATION

In the budget provision is made for support to the construction of about 1200 household latrines. It is mainly ment for the provision of cement and rebars to build concrete slabs to improve pit latrines made out of local material. The main focus in sanitation however should be on promotion. This again is planned by way of WSST's and the women involvement programme. It is also planned to establish a Sanitation Unit with four Sanitation Technicians who could follow up the initial campaigns run by WSST's in the projects.

For a number of projects where the water supply was completed this year still some budget was set aside to build school latrines provided there is a genuine request from the village for it.

#### 6. TRAINING PROGRAMME

##### 6.1 DWSS-Programme Training Activities

Originally there was the idea of revising the whole training concept this year on the basis of past experience. However the new set-up has not developed sufficiently to see the full scope of such a revision and at present we also do not have the capacity to devote enough time to such a job. Therefore next years training programme will mainly concentrate on basic courses for WSST's and for new people to be trained as foremen to supplement our staff of technicians.

In addition some trainings for DWSS-staff will be organised, such as ferrocement for plumbers.

Besides the trainings for our staff again a number of courses are planned for the beneficiaries of our water supplies, i.e. Orientation Workshop for committee members, VMW-course, Women Member Training and a District Level Orientation workshop.

## 6.2 Training Policy

It will be necessary to establish contacts with the Department and the Ministry to review the various training concepts and to harmonize them in order to have compatible curriculums for various staff-levels.

## 7. WOMEN INVOLVEMENT

With the decision of the Ministry to provide the posts for 6 women workers at 3rd class non-gazetted level in each region it is possible to expand the women involvement programme. It is foreseen that with these additional staff more projects can be covered and more input can be given to the individual projects.

An important task of the WIP will be to involve the DWSO's in their activities.

## 8. MANPOWER

To run all the programmes under the DWSO's smoothly it will definitely be necessary to fill all available posts.

At the RD-level the proposed structure still needs to be materialised. This would enhance the capacities with regard to planning, monitoring but not least training.

To have sufficient WSST's to run all activities planned under the CWSS-programme it will be necessary to train and employ about 15 new technicians.

## 9. SUPPLIES, STORES

The order for locally procured material for the 1989/90 construction season was forwarded to UNICEF in June 89, whereas the order for materials procured from abroad for the 1989/90 construction season was submitted in October 1988.

It will be necessary to further establish the system for releasing material from the regional store to the projects or the DWSO's respectively. The transit store in Baglung might be put in operation provided it enhances the project implementation.

## 10. TRANSPORT

With the old truck running again we can at least make use of two trucks. Even then it would still be helpful if the third truck would be handed-over to DWSS as well. In particular so because MPLD seemingly has no funds to maintain the vehicle so that it lays at their go-down unused. Again provision for a 4-wheel drive pick-up was made in the budget. It could not be bought last year. This vehicle could help a lot in transportation of small quantities for repair work.

## 11. HMG-BUDGET

The proposed budget is shown in annex III. After a first round in the MoF the budget still seems to be "intact". Under the austerity measures introduced as a response to the difficult economic situation water supply construction is getting less priority. This might have the advantage that the budget remains at the proposed level.

## 12. EXPECTED CONSTRAINTS

It is expected that after the first year under the new set-up all the partners involved in the programme are familiar with it to a certain extent so that in the coming year many things run smoothly again. The preparation for the visit of His Majesty the King will definitely absorb people for part of the time. In addition it is not clear how the economic condition of Nepal will develop in the near future but it might well be that it has an adverse effect on the project with regard to transportation (fuel) and material procurement.



## LIST OF PROJECTS COMPLETED IN 2045/46 FISCAL YEAR (1988/89)

ZONE	Project	Pres.	Number	Overall	Cost per	Started
****	Name	Pop.	of	Length of	Capita	in
District			Taps	System	(actual)	
=====						
DHAULAGIRI						
*****						
Myagdi	Pulachaur	2340	26	15.3 km	448	1985/86
Parbat	Bajung Kalimati	3263	19	9.4 km	350	1985/86
GANDAKI						
*****						
Syangja	Chandi Kalika	2700	19	16.1 km	234	1985/86
Tanahu	Bhanu	406	10	2.8 km	556	1987/88
LUMBINI						
*****						
Palpa	Hungi	1750	20	10.7 km	355	1986/87
	Gehja	1730	25	9.7 km	498	1985/86
Gulmi	Balithum	1897	18	15.0 km	618	1986/87
-----						
Total population covered		14086	137	79.0 km	437	

## REHABILITATION PROJECTS COMPLETED IN 2045/46 FISCAL YEAR (1988/89)

ZONE	Project	Pres.	Number	Overall	Cost per	Started
****	Name	Pop.	of	Length of	Capita	in
District			Taps	System	(actual)	
=====						
DHAULAGIRI						
*****						
Baglung	Lekh Khani	1680	18	5.7 km	509	1985/86
Parbat	Deupur Deurali	2253	18	7.4 km	470	1985/86
Myagdi	Pakhapani	707	13	3.9 km	696	1986/87
GANDAKI						
*****						
Syangja	Armadi Dhanubase	2066	18	7.4 km	264	1986/87
LUMBINI						
*****						
Palpa	Gandakot	1831	41	17.7 km	702	1985/86
-----						
Total population covered		8537	108	42.1 km	528	

Projects completed in the context of training programmes:

DHAULAGIRI						
*****						
Parbat	Deupur Jaisithok	591	9	2.4 km		rehabilitated
GANDAKI						
*****						
Kaski	Dhiprang	224	4	3.0 km		

REPAIR PROJECTS  
completed in 2045/46 construction season

ZONE **** District	Project Name	Work Done	Cost Involved UNICEF in Rs
<b>GANDAKI</b>			
*****			
Kaski	Lkunswara	Repair of pipeline	1843
	Sildujure	Repair of pipeline/ replacement of fitts & tools	10395
	Lwang Ghalel	Repair of structures/ replacement of tools	2907
	Kristinachnechaur	Repair of pipeline & str./ replacement of fitts & tools	3033
	Talbesi	Repair of catchment	1148
	Bharat Pokhari	Replacement of tools	592
	Kahun	Extension	14616
	Mouja *)	Repair and extension	49688
	Thamkaure(Kalika)	Extension	N.A.
	Syangja Tanahun	Walling Dhanubase	Replacement of valve
Chhang W.9		Replacement of fittings	1431
Farakachour		Replacement of tools and spare parts	2901
Ramjakot Arunodaya *)		Replacement of fitts & tools Extension	8074 10273
Gorkha	Gaikhur Pauwater	Extension and improvement of local sources	N.A.
<b>DHAULAGIRI</b>			
*****			
Parbat	Karkineta	Repair of pipeline & str./ replacement of fitts & tools	4956
	Kyang *)	Repair of str. and pipeline	4510
	Wahakithanti *)	Maintenance	1186
	Talathum		
	Bhuka Deurali	Maintenance	2506
	Tribeni *)	Replacement of spare pipes	2536
	Wahakithanti Deurali	Repair of str. & pipeline/ replacement of fittings	14769
Baglung	Malika- Laharepipel	Repair of structure and pipeline	1444
	Myagdi	Chim Khola *)	Extension and repair
		Mudi *)	Extension and repair

## REPAIR PROJECTS (cont'd)

## LUMBINI

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Palpa	Hungi	Replacement of valve	1295
Gulmi	Hunga	Replacement of fittings	1200
Argha- Khanchi	Dhikura W 5,6	Replacement of fittings	3310

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TOTAL Rs 189'034

=====

- NOTE: 1) The amount given is the cost of UNICEF supplied materials only.  
2) In most of the projects transportation and labour costs were borne by beneficiaries.  
3) Projects in which HMG cash was provided, are marked \*).

## PRIVATE LATRINES

built in new projects (1988/89)

ZONE **** District	Project Name	Total No. of latrines built	No. of latrines acc. to criteria
-----			
GANDAKI			
*****			
Kaski	Bhachok	69	41 (59%)
Tanahu	Kota	100	25 (25%)
Gorkha	Ghyalchowk	99	48 (49%)
Syangja	Khilung Deurali	96	26 (27%)
DHAULAGIRI			
*****			
Baglung	Amalachour	60	34 (57%)
LUMBINI			
*****			
Palpa	Dobhan	3	0 (0%)
Nawal- Parasi	Prasauni	85	10 (12%)
-----			
	TOTAL	512	184 (36%)
		===	===

## CARRY-OVER PROJECTS 2046/47 CONSTRUCTION SEASON (1989/90)

ZONE **** District	Project Name	Pres. No. Pop. of	No. of Taps	Overall Length of System	Cost per Capita	Started in	Progress Mid- July
<b>DHAULAGIRI</b>							
*****							
Baglung	Amalachaur	980	12	5.2 km	584	1988/89	40%
	Malika	660	11	3.6 km	607	1987/88	98%
	Bungadobhan 1 / 2	1060	10	5.8 km	522	1987/88	76%
Myagdi	Dhoba	550	10	4.8 km	1013	1987/88	65%
Parbat	Limithana	930	23	6.8 km	767	1986/87	90%
	Lunkhu- Deurali	2330	44	11.2 km	621	1987/88	25%
<b>GANDAKI</b>							
*****							
Kaski	Bhachok	1015	16	6.5 km	651	1988/89	90%
Tanahu	Kota	1430	27	9.7 km	534	1988/89	50%
Lamjung	Kunchha	2600	28	34.9 km	684	1985/86	98%
	Nalma	1280	15	11.0 km	688	1987/88	60%
Syangja	Chang Changdi	2760	46	18.0 km	203	1985/86	41%
	Satupasal	1940	29	8.7 km	366	1987/88	60%
	Khilung Deurali	1068	31	9.2 km	728	1988/89	61%
Gorkha	Ghyalchowk	947	17	7.7 km	639	1988/89	100% *)
<b>LUMBINI</b>							
*****							
Palpa	Dobhan 3 / 8	750	10	6.5 km	960	1988/89	50%
Gulmi	Harrachour/ Bishnukharka	2695	35	17.7 km	674	1988/89	72%
Nawal- Parasi	Gaidakot Prasauni	530 1421	10 17	10.0 km 10.0 km	1033 887	1987/88 1988/89	100% *) 50%
Argha- Khanchi	Dharapani Hansapur	2230 1940	27 25	20.1 km 11.9 km	702 490	1986/87 1987/88	61% 100% *)

\*) --> Water supply complete, public latrines remain to be built.

## REHABILITATION CARRY-OVER PROJECTS 2046/47 CONSTRUCTION SEASON (1989/90)

ZONE	Project	Pres. No.	Overall	Cost per	Started	Progress
****	Name	Pop.	Length of	Capita	in	Mid-
District			Taps System			July
=====						
DHAULAGIRI						
*****						
Baglung	Bungadobhan 8 / 9	770	8	5.9 km	741	1987/88 75%
Parbat	Khurkot Lampata	2010	27	8.3 km	469	1987/88 60%
Myagdi	Ghatan	1360	16	6.0 km	536	1987/88 80%
GANDAKI						
*****						
Tanahu	Kihunbadahar	1670	12	12.7 km	526	1987/88 35%

NOTE: Lamjung / Chiti Tilahar: This project has been deleted from the list. Due to persistent social disputes, construction work became impossible.

## NEW REHABILITATION PROJECTS FOR CONSTRUCTION IN 2046/47 SEASON (1989/90)

ZONE	Project Name	Pres. No. of pop.	No. of Taps	Overall Length of System	Cost per Capita in Rs.	Estimated Cost of Project in Rs. 1'000
<b>DHAULAGIRI</b>						
*****						
Baglung	Malika- Laharepipal	2140	9	8.1 km		figure not yet available
Myagdi	Banduk	700	4	1.0 km		
Parbat	Khurkot- Subedithar	1740	14	4.8 km		
<b>GANDAKI</b>						
*****						
Kaski	Ghachok- Tinmanetar (3,4,5)	770	8	3.0 km		
	Siklis- (Parche)	2500	15	3.8 km		
Tanahu	Jyamrukot- Bahepani (W.4)	1330	5	3.0 km		
Lamjung	Bhalayakharka	1115	17	10.7 km		
	Kolki Tasyo	1240	17	8.8 km		
Gorkha	Taranagar- Chhepetar	770	3	4.3 km		
	Simjung (1,2)	350	3	1.4 km		
<b>LUMBINI</b>						
*****						
Palpa	Rupse (Sapandi/ Amarahi)	665	18	9.5 km		
Gulmi	Turang (Remi)	2220	10	6.1 km		

NOTE: All figures reflect present status. Survey/designs pending.

PROPOSED BUDGET FOR CWSS-PROGRAMME FOR FISCAL YEAR 2046/47 (1989/1990)

		HMG		UNICEF	
		Contribution		Contribution	
		RD	Dist.	Cash	Kind
1.	Salaries	1620000		80000	
2.	Allowances	312000		15000	
3.	TA/DA	726000		35000	
4.	Services				
		4.1	50000		
		4.2	30000		50000
5.	Rent	100000	102000		
6.	Maintenance	75000			100000
7.1	Office Stationery	60000			
7.2	Magazines	5000			
7.3.1	Fuel for vehicles	150000			
7.3.2	Other fuel	10000			
7.5.1	Other Materials for Office	50000			
8.1	Training			200000	765000
9.	Contingency	10000			
10.1	Furniture	50000			
10.2	Transport Devices	10000			350000
10.3	Machinery & Implements	100000			550000
12.2	CWSS-Project Construction :				
	(Reg. level)	810000			700000
	(Dist.level)		6385000		8880000
Total Budget CWSS		4168000	6487000	330000	11395000

HMG RD	CASH	4168000 Rs	HMG	: 10655000 Rs
HMG DISTRICT	CASH	6487000 Rs		
UNICEF	CASH	330000 Rs	UNICEF:	11725000 Rs
UNICEF	KIND	11395000 Rs		
TOTAL BUDGET		22380000 Rs		

## REVIEW OF TRAINING ACTIVITIES UNDERTAKEN IN 2045/46 (1988/89)

Type of Course	Conducted in	Number of Partic.	Total Cost in Rs	Cost per Partic.	Major Subjects handled
Technicians Trainers Training (TTT)	Jul 10 - July 17, 1988 (1 week)	18	22276	1237	Evaluation and refinement of practical and organizational skill of senior WSSTs in order to enable them to work as trainers.
Skill Development Training (SKIDET)	Jul 31 - Sep 4, 1988 (4 weeks)	36	66774	1855	Evaluation & improvement of practical and organizational skills of WSSTs.
Ferrocement Tank Constr. Training	Aug 7 - Sep 3, 1988 (4 weeks)	14	15663	1119	Construction of 20 m <sup>3</sup> tank at Jaisithok- Deupur V.P. in Parbat District.
Upgrading & Final Foremen Training	Aug 7 - Oct 7, 1988 (8 weeks)	13	24450	1881	Refresher of CWSS works of water supply structures.
CWSS Overseers Workshop	Sep 6 - Sep 18, 1988 (2 weeks)	14	28974	2069	Information of modern technology in water supply and refresher of past skills with practical design and drawing.
DWSS District Engineers Orientation to CWSS Programme	Nov 23 - Nov 25, 1988 (3 days)	24	5027	209	Orientation of CWSS Programme and Policy.
Women Involvement Programme Workshop	Jan 22 - Jan 27, 1989 (6 days)	8	5469	684	Orientation training programme for involvement of women in CWSS projects and maintenance of health and hygiene.
Village Maintenance Workers Training	Feb 12 - Mar 13, 1989 (1 month)	36	51340	1426	Basic CWSS structures & their maintenance at Deupur village in Parbat district.
Project Co-ordination Workshop	Mar 15 - Mar 17, 1989 (3 days)	56	59690	1066	Information about the policy & work procedures of CWSS Programme through RD and the duties of Dist. Engineers, Committee Members and co-ordination among the three partners.
District Engineers Workshop	Mar 19 - Mar 20, 1989 (2 days)	36	14000	389	Practical problem solving aspects and new policy & procedures about new projects.



STAFFLIST (JULY 1989)

## I) Regional Directorate (for CWSS)

1	Mr. Poshan Nath Nepal	Regional Director
2	Mr. Buddhi Prakash Gautam	Asst. Engineer
3	Mr. Srawan Kumar Upadhyaya	Asst. Engineer
4	Mr. Bal Krishna Sharma	Accountant
5	Mr. Rupendra Giri	Storekeeper
6	Mr. Rajendra Shrestha	Storekeeper
	Administrative Staff (parttime)	

## II) District Water Supply Offices (for CWSS)

Kaski	: 1	Mr. Arun Kumar Ranjitkar	Sr. Divisional Engineer
	2	Mr. Nirbachan Kumar Shrestha	Overseer
Tanahu	: 3	Mr. Khom Bahadur Subedi	Divisional Engineer
	4	Mr. Bal Krishna Pandit	Overseer
Lamjung	: 5	Mr. Bishwa Bhakta Kharel	Divisional Engineer
	6	Mr. Shankar Prasad Adhikari	Overseer + area specific proj.
Gorkha	: 7	Mr. Anil Kumar Upadhyaya	Divisional Engineer
	8	Mr. Krishna Prasad Jamarkatyel	Overseer
Syangja	: 9	Mr. Birendra Man Shakya	Divisional Engineer
	10	Mr. Achhung Ghale	Overseer
Parbat	: 11	Mr. Ashok Nath Upreti	Divisional Engineer
	12	Mr. Subba Gurung	Overseer
Baglung	: 13	Mr. Badri Govinda Rajkarnikar	Divisional Engineer
	14	Mr. Krishna Bahadur Bogati	Overseer
Myagdi	: 15	Mr. Shiva Bahadur Karki	Asst. Engineer
	16	Mr. Surya Prasad Baral	Overseer
Palpa	: 17	Mr. Raj Kumar Malla	Sr. Divisional Engineer
	18	Mr. Pushpa Nidhi Neupane	Overseer
Gulmi	: 19	Mr. Bishnu Prasad Sharma	Asst. Engineer
	20	Mr. Gajendra Singh Pun	Overseer
Argha-	: 21	Mr. Bishnu Mani Gyawali	Sr. Divisional Engineer
Khanchi	: 22	Mr. Jhalak Prasad Bhusal	Overseer
Nawal-	: 23	Mr. Dhan Prasad Shrestha	Sr. Divisional Engineer
Parasi			

## III) HELVETAS Staff

1	Mr. Kurt Müller	Project-Comanager
2	Mr. Markus Engler	Project-Comanager (till June 1989)
3	Mr. Chidananda Sharma	Deputy Comanager
4	Mr. Lekh Bahadur Gurung	Maintenance Coordinator (July 89)
5	Mr. Man Bahadur Pun	Sociologist/Training Officer
6	Mr. Kubir Jang Gurung	Project Assistant
7	Mrs. Yam Kumari Gurung	Women Development Officer
8	Mr. Dil Bahadur Gurung	Junior Project Assistant
9	Mrs. Judith Schwierin	Advisor WIP (til Sept. 89)

## EMPLOYMENT RECORD OF WATER SUPPLY AND SANITATION TECHNICIANS AS OF JULY 1989

	Full Name	Age when enlisted	education qualification	experie before service	starting of service	CWSS- courses taken
1	K Ratna Bdr Thapa	19	Class 10		2032/7	1234567+s.o.s./SD
2	K Bal Bdr Thapa	33	BA 2nd class		2033/9	1234567 + TT
3	K Buddhi Bdr Shrestha	26	Test Pass		2033	1234567 + SD
4	K Kaji Man G.T.	35	Test Pass		2033	12345670+ SD
5	K Rudra Nath Baral	32	Class 10		2034/8	12345679+PVC /SD
6	K Pahal Man Shrestha	30	Class 10	Mason	2035/7	12345678+ TT
7	K Gehendra N.Acharya	35	Class 10	DWSS	2035/10	12345689+ TT
8	K Tika Pun	26	Class 8		2035/10	12345789+ SD
9	K Dol Nath Acharya	23	Test Pass		2036	12345678+ TT
10	K Buddhi Gurung	23	Class 10		2036/4	123456 + SD
11	K Thir Bdr Thapa	37	IA 2nd class		2036/7	12345679+ SD
12	K Kesh Bdr Gurung	35	BA 1st class		2036/7	1234569
13	K Man Bdr Sotimagar	27	Test Pass	Carpen-try/masonry	2036/7	123456789+ TT
14	K Srawan Singh Gurung	37	Matric Fail		2036/8	123456789+ SD
15	K Purna Bdr Gurung	35	Class 8		2036	123456789+ SD
16	K Mukti Ram Bhandari	36	Class 10		2036/9	1234567 + SD
17	K Krishna Bdr Gurung 'A'	37	BA 1st class		2036	123456 + SD
18	K Iswori Pd. Bastola	29	Class 8		2036/11	123456789+ SD
19	K Tek Bdr Thapa	21	Class 9		2037	12345678 + SD
20	K Tika Ram Tripathi	19	IA (first year)	Bhala Engineering/Delhi	2037/10	1234567 + SD
21	K Bhim Man Shrestha	22	Class 8		2037/10	1234569 + SD
22	K Ran Sing Thapa	21	SLC		2037/12	12345679 + TT
23	K Ratna Bdr Sarki	36	BA 2nd class	G.Engr.	2037	12345678 + SD
24	K Chitra Bdr Gurung	29	SLC		2038/4	1234569 + SD
25	K Prem Bdr Thapa	33	Class 8	BA	2038/4	123567 + SD
26	K Hom Bdr Gurung	20	SLC	Teacher	2038/4	123567 + SD
27	K Krishna Bdr Gurung 'B'	19	SLC		2038/4	123567 + TT
28	K Bir Sing Pun	21	Test pass		2038/10	1235679 + SD
29	K Lal Bdr Thapa	20	Class 8		2038/4	123567 + TT
30	K Durga Bdr Gurung	40	IA 1st class		2037/7	12345678 + SD
31	K Kul Bdr Gurung 'A'	39	Class 10		2038/7	12345679
32	K Bharat Lal Thapa	23	Class 10		2037/8	123456789+ TT
33	K Surya N. Adhikari	24	Test Pass	Nil	2038/10	1234567 + TT
34	K Hom Nath Acharya	20	Test Pass		2039/12	12356789 + SD
35	K Hari Bdr Khadka	22	Test Pass		2039/12	12356789 + SD
36	K Dhan Bdr Khatri	22	Test Pass		2039/12	12356789 + SD
37	K Bhadra Bdr Khatri	24	Test Pass		2039/12	123569 + SD
38	K Chinta Mani Baral	24	Class 9 F.		2039/11	1235679 + SD
39	K Krishna Bdr G.C.	26	SLC	Nepal Police District	2040/10	12368 + SD
40	M Khim Bdr Gurung	30	Class 8		2040/4	12356789 + SD
41	K Indra N. Shrestha	20	Test pass		2040/11	123679 + PVC
42	K Krishna Pd Dhakal	26	SLC	Nepal Army	2040/11	123569 + TT
43	M Kul Bdr Gurung (B)	31	Test pass	CWSS	2041/10	123567
44	M Rama Nidhi Kaini	31	Class 10	District	2041/10	1234569+ SD

## EMPLOYMENT RECORD OF WATER SUPPLY AND SANITATION TECHNICIANS AS OF JULY 1989

	Full Name	Age	education	experie	starting	CWSS-
		when qualif-		before	of	courses
		enlisted	ication	service	service	taken
45	M Kyar Sing Thapa	22	Class 10		2041/10	12356 + SD
46	M Bishnu Pd Aryal	26	Test Pass		2041/10	123569
47	M Brihaspati Adhikari	32	class 8	Mason	2041/10	12367
48	M Dhan Bdr Thapa	25	SLC Fail	VMW	2041/10	12356
49	M Khadak Bdr Thapa	41	IA 2nd class		2041/10	123689
50	M Ram Bdr Gurung	27	class 8		2041/10	12356
51	M Narayan Pd Bastola	24	class 10		2041/10	12356
52	M Gamar Sing Gurung	25	class 8	VMW	2041/10	1236 + SD
53	M Pushpa Raj Baral	31	class 10	WSS	2041/10	12367
54	M Chet Bdr Gurung	31	class 8		2041/10	12369
55	M Kedar Nath Acharya	35	class 10	Mason	2042/1	123579
56	M Prem Pujari Gurung	27	Test pass		2042/1	123579
57	M Pushpa Raj Kafle	26	class 10		2042/1	123579
58	M Rishi Ram Tripathi	27	Class 8		2042/1	125679
59	M Yam Bdr Ghartimagar	22	Class 8	VMW	2042/1	12367
60	M Dal Bdr Ghartimagar	25	Class 8		2042/1	12368
61	M Man Subba Lama(Tamang)	32	Class 8		2042/9	12
62	M Dil Bahadur Ale	34	Class 8		2043/12	12
63	M Krishna Pd. Acharya	27	SLC	CWSST	2045/1	12
64	M Rudra Bdr Thapa	26	Test Pass		2045/1	12
65	M Punya Pd. Lamichhane	23	Test Pass		2045/1	12
66	M Jagat Bdr Malla	23	Class 10		2045/1	12
67	M Chandra Bdr Gurung	29	Class 9		2045/1	12
68	M Bhom Bdr Thapa	23	Test Pass		2045/3	12
69	M Shyam Kumar Malla	31	Class 8		2044/7	12

## CWSS courses taken:

- |                        |                          |
|------------------------|--------------------------|
| 1 Basic Foreman Course | 6 Ferrocement Course     |
| 2 Upgrading Course     | 7 Bamboocement Course    |
| 3 Final Foreman Course | 8 Bagricement Course     |
| 4 Refresher Course     | 9 Smokeless Chulo Course |
| 5 Sanitation Course    |                          |

SD = Skill Development Training 1988

IT = Technicians Trainers Training 1988

K = Kharidar;

M = Mukhiya;

BA = British Army;

IA = Indian Army;

s.o.s. = sub overseer

**CALL FORWARDS RAISED AGAINST  
SWISS FUNDING (PHASE IV)  
(BY TAD)**

CF NO.	PARTICULARS	ISSUE DATE	TAD EXPEN- DITURE	CF VALUE US\$X000'S	ACTUAL EXPENSES US\$X000'S	
<b>SUPPLY ASSISTANCE</b>						
516-1	CEMENT	1/87	4/88	4.5	4.5	*
542-1	CEMENT	4/88	10/88	18.0	18.0	*
543-1	HDP PIPES	4/88	10/88	189.0	189.0	*
546-1	CAMPING EQUIPMENT	4/88	10/88	1.0	1.0	*
534-1	GI PIPES, VALVES ETC.	4/88	10/88	40.6	40.6	*
575-1	TYRES & TUBES	5/88	11/88	2.5	2.5	*
<b>SUBTOTAL SCF 1988</b>				<b>255.6</b>	<b>255.6</b>	
593-1	MOTORCYCLES S.PARTS	6/88	1/89	1.4	1.4	*
542-1	CEMENT	7/88	3/89	13.5	13.5	*
8628-1	HARDWARE MATERIAL	10/88	1/89	15.9	15.9	*
8643-1	HDP PIPES	11/88	5/89	160.2	160.2	*
9013-1	CEMENT	12/89	10/89	18.0	18.0	*
9014-1	BLOW TORCH & PLIERS	1/89	4/89	1.6	1.6	*
9017-1	GI PIPES, VALVES ETC.	6/89	6/89	37.3	37.3	*
9019-1	CAMPING EQUIPMENT, M.TAPE	1/89	6/89	1.9	1.9	*
9072-1	CEMENT	4/89	10/89	34.3	34.3	*
9091-1	PRINTING	5/89	6/89	4.0	4.0	*
9108-1	HAND TOOLS	6/89	11/89	1.3	1.3	*
9109-1	GI FITTINGS VALVES ETC.	6/89	11/89	14.2	14.2	*
9110-1	HARDWARE MATERIALS	6/89	10/89	23.0	23.0	*
9132-1	SLAB FRAME	9/89	10/89	1.1	1.1	*
<b>SUBTOTAL SCF 1989</b>				<b>326.6</b>	<b>326.6</b>	
<b>GRAND TOTAL SCF</b>				<b>582.2</b>	<b>985.7</b>	
<b>CASH ASSISTANCE</b>						
036-1	CONTINGENCY	1/88	12/88	5.0	5.0	*
037-1	SALARY & ALLOWANCES-WSSTs	1/88	12/88	10.5	10.5	*
038-1	OPERATIONAL	1/88	12/88	5.0	5.0	*
104-1	PRINTING	3/88	12/88	5.0	5.0	*
132-1	SMOKELESS CHULO PROD & DISTBN	5/88	12/88	5.0	5.0	*
145-1	COMMUNITY LATRINE CONSTN	6/88	12/88	5.0	5.0	*
147-1	TRAINING	7/88	12/88	14.0	14.0	*
<b>SUBTOTAL CCF 1988</b>				<b>49.5</b>	<b>49.5</b>	

CF NO.	PARTICULARS	ISSUE DATE	TAD EXPEN- DITURE	CF VALUE US\$X000'S	ACTUAL EXPENSES US\$X000'S	
9001-1	LATRINE CONSTRUCTION(COMMTY)	1/89	12/89	1.0	8.0	*
9002-1	PRINITNG (HES)	1/89	12/89	4.0	4.0	*
9004-1	TRAINING	1/89	12/89	10.0	10.0	*
9008-1	PRINTING (WES)	1/89	12/89	4.0	4.0	*
9009-1	BE COURSE	1/89	12/89	5.0	5.0	*
9010-1	OPERATIONAL EXPENSES	1/89	12/89	10.0	10.0	*
9011-1	CONTINGENCY	1/89	12/89	5.0	5.0	*
9012-1	SAL & ALLOW (WSSTs)	1/89	12/89	8.0	8.0	*
9143-1	SAL & ALLOW (HES)	1/89	12/89	4.0	4.0	*
SUBTOTAL CCF 1989				51.0	58.0	
GRAND TOTAL CCF				100.5	107.5	
TOTAL SUPPLY & CASH CALLED FORWARD				682.7	1,093.2	

## CALL FORWARDS CHARGED AGAINST PHASE III BUT REPORTED UNDER PHASE IV

CF NO.	PARTICULARS	ISSUE DATE	TAD EXPEN-DITURE	CF VALUE US\$X000'S	ACTUAL EXPENSES US\$X000'S
<b>SUPPLY ASSISTANCE</b>					
311-1	FITTINGS	9/86	2/87	0.7	0.7
334-1	GI PIPES AND UNIONS	11/86	4/87	26.3	25.7
335-1	HDP PIPES	11/86	2/87	32.0	30.8
338-1	GI PIPES	11/86	1/87	9.0	8.9
377-1	FLANGE SET, GATE VALVE ETC.	3/87	8/87	13.0	19.2
378-1	CAMPING EQUIPMENT	3/87	8/87	1.7	2.1
380-1	HDP PIPES	5/87	11/87	225.0	265.2
387-1	CEMENT	3/87	5/87	14.0	9.5
388-1	CEMENT	3/87	10/87	17.8	10.9
419-1	TYRES & TUBES	5/87	10/87	2.5	2.2
437-1	CEMENT	7/87	8/87	4.2	4.1
467-1	HARDWARE ITEMS	10/87	1/88	24.2	24.2 *
SUBTOTAL SCF 1987 & 1988				370.4	403.5
<b>CASH ASSISTANCE</b>					
804-1	CONTINGENCY	1/87	12/87	5.0	4.8
805-1	OPERATIONAL	1/87	12/87	5.0	1.9
806-1	SALARY & ALLOWANCES-WSSTs	1/87	12/87	19.5	23.2
871-1	TRAINING	10/87	12/87	12.0	11.9
SUBTOTAL CCF 1987				41.5	41.8
TOTAL SCF AND CCF				411.9	445.3