

His Majesty's Government of Nepal
Ministry of Housing and Physical Planning
DEPARTMENT OF WATER SUPPLY AND SEWERAGE
and
The Government of Finland
Ministry for Foreign Affairs
FINNISH INTERNATIONAL DEVELOPMENT AGENCY
(FINNIDA)

RURAL WATER SUPPLY AND SANITATION PROJECT
LUMBINI ZONE

ANNUAL REPORT 1991



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Consultant: PLANCENTER LTD Helsinki

List of abbreviations

CHV	= Community Health Volunteer
CWSS	= Community Water Supply and Sanitation
DEO	= District Educational Officer
DPHO	= District Public Health Officer
DWE	= District Water Engineer
DWSO	= District Water Supply Office
DWSS	= Department of Water Supply and Sewerage
FIM	= Finnish Mark
FINNIDA	= Finnish International Development Agency
HESP	= Health Education and Sanitation Programme of RWSSP
HMG/N	= His Majesty's Government of Nepal
HP	= Health Post
HRD	= Human Resources Development
IOM	= Institute of Medicine
MHPP	= Ministry of Housing and Physical Planning
MOEC	= Ministry of Education
MOH	= Ministry of Health
NER	= Nepalese Rupee
NPC	= National Planning Commission
PHC	= Primary Health Care
PIU	= Project Implementation Unit
RAP	= Rapid Assessment Procedure
RD	= Regional Director
RWSSP	= Rural Water Supply and Sanitation Project
UC	= User's Committee
UMN	= United Mission to Nepal
UNICEF	= United Nations Children Fund
USD	= United States Dollar
VHW	= Village Health Worker
WHO	= World Health Organization
WSST	= Water Supply and Sanitation Technician

LIBRARY, INTERNATIONAL REFERENCE
CENTRE FOR COMMUNITY WATER SUPPLY
AND SANITATION (IRC)
P.O. Box 93190, 2509 AD The Hague
Tel. (070) 8149 11 ext. 141/142

RN: KSN 10506

LO: 822 NP.LU 92

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1. GENERAL

The year 1991 was the second year of the Project. The working procedures and offices were established before the beginning of the year, thus allowing the staff to concentrate on the progress of the Project.

Political decision making bodies do not exist yet on the district and village levels. The schemes, which were taken in the project programme were recommended by the District Engineers, who had received the requests from the user's groups.

Full capacity of the project activities has been reached in most health education and training activities, and in prefeasibility and feasibility studies of the water supply schemes. Procedures for construction supervision has been established, but the work load in the districts will continuously increase because new schemes enter the construction stage. The maintenance support to the existing schemes is still at the initial because the transfer of the maintenance from the DWSOs to the Committees has not yet taken place, and because new schemes are still under construction.

Increased efforts for district development planning and private sanitation were undertaken by the end of the year, and essential increase of activities are to be expected during the year 1992.

It has been noticed so far, that the adoption of responsibilities by the line agencies have been successful in health education, prefeasibility and feasibility studies, design and construction supervision of the water supply schemes. Also the ability of the communities to mobilize themselves in the planning, decision making, and construction is encouraging.

2. PROJECT PERSONNEL

2.1 General

The Project is jointly funded by FINNIDA and HMG/N. The project funds are channeled through the Project Implementation Unit (PIU), which is composed of HMG/N staff and Consultant's staff. The implementation of the schemes is done by the District Water Supply Offices based on community participation.

The health education and the supervision of the CHV programme is done through the existing government infrastructure by health post staff, village health workers and school teachers. The duty of the Project Implementation Unit is to support the

government line organizations in the implementation of the project targets.

2.2 Consultant's Staff

The Consultant's staff headed by the Project Coordinator is, jointly with the HMG/N staff, supporting the government's line agencies in the implementation of the project's targets. The Consultant is responsible for the use of FINNIDA funds.

List of the Consultant's staff is shown in the Appendix 4. At the end of the year the number of the Consultant's long term staff was 49 people, out of which three were expatriates.

Short term local and expatriate consultants were used in preparation of the District Development Plans and design and training of the water quality monitoring system.

2.3 HMG/N Staff in the Project Implementation Unit

The HMG/N staff, headed by the Project Manager is, jointly with the Consultant's staff, supporting the government line organizations, i.e District Water Supply Offices, health staff and school teachers in their work. The Project Manager is responsible for the Project and for the use of HMG/N funds.

The staff records of the HMG/N staff is shown in Appendix 4. At the end of the year the number of HMG/N staff was 10 people.

2.4 District Water Supply Offices' Staff

The total of the DWSOs' staff working or undertaking training with RWSSP was at the end of 1991 as follows:

-	Overseers	29
-	Technicians	71

Apart from this full time staff, 6 to 8 Assistant Engineers are participating the RWSSP work on a part time basis.

A list of the DWSOs' staff, which has been involved in the RWSSP schemes during 1991, the training they have received and their work with the RWSSP is presented districtwise in the Appendix 4.

The staff situation improved considerably from 1990. 14 new technicians were transferred from other districts in the Western Region in November and December and were trained in the Basic Foreman Course for water supply technicians.

Although the staff situation has improved, the implementation of the RWSSP still presents a considerable workload for the present staff. To cover the target population the DWSOs must

implement 96 schemes and subschemes, so one overseer must survey, design and supervise at least 3 schemes. Also in most cases two technicians - one experienced and one younger one - are needed to supervise the construction of a gravity pipe line. Therefore the 71 technicians cannot possibly cover much more than 40 gravity and groundwater schemes. Staff allocations must also be made for operation and maintenance.

3. SUPPORT SERVICES

3.1 Offices

The offices of the PIU into the office space of Rupandehi DWSO have been under development. The office capacity have expanded with the growing number of the PIU, however, the offices whilst being highly operational remain congested. The development of office space will continue at least until the end of 1992. Toilet facilities will be also improved.

The office staff's role in data processing and in the preparation of the District Water Supply Development Plans has required additional resources to be made available.

In regard to the preparation of scheme designs the approach of the PIU has been to facilitate most of the work to be done at the DWSO which has assisted in the problem of congestion.

Electrical supply problems have resulted in the purchase and installation of a generator within the Rupandehi DWSO in 1991.

3.2 Stores

The extensive stores facilities now available to the PIU in Manigram have been a great asset. They now provide secure stores facilities of adequate size. There are no plans to further develop stores facilities.

The computerization of the stores recording system has continued. This stores system of recording should be fully operational by end of the 1st quarter 1992.

3.3 Workshop

As previously described, it is not thought relevant that the workshop facilities should be developed beyond a minimum level as adequate facilities exist locally. The workshop has constructed in 1991 a vehicle ramp. General maintenance and small purchases regarding tools is all that is now required.

3.4 Laboratory

The laboratory activities are reported in chapter 4.3.2 "Water Quality Monitoring".

3.5 Vehicles and Transportation

The vehicles ordered in February 1991 arrived in December 1991. Motorcycles ordered in February 1991 has arrived in February 1992.

The vehicles have performed well and are not considered to be a constraint. The list of vehicles is attached, Appendix 5.

3.6 Support of District and Regional Offices.

The support of the PIU to the DWSOs has continued and has been influenced very much by the individual DWSO's needs and work programme achievements. With the increasing development of all responsibilities from the PIU to the DWSOs the scope of support will increase in 1992/93.

One vehicle has after its arrival in December 1991 been permanently stationed at the Regional Director's Office in Pokhara.

3.7 Procurement Policy and Quality Control of Materials.

This is an area that requires constant scrutiny, however with our gaining experiences and with the establishment of regular supplies and manufactures the work load has been much reduced. The Project has continued to use the services of both SGS (Swiss) and Crown Agents(British) to conduct inspections of large purchases.

The Project has been working on the hand pump development during the last year. A field survey of operation and maintenance rates of different types of handpumps was undertaken. The results showed, among other things, that the operational rate on the local Nepal No 6 handpumps was 93 %. This extremely good performance can mostly be credited to the fact that spare parts are easily available, even in the rural areas.

The Project was somewhat doubtful to install the improved UNICEF model pumps as the spare part distribution was not organized, i.e. the spares were not available in the local market.

The Project has now made a simple 50 NER (5FIM) modification to the plunger of the UNICEF model which will enable it to be used either with its own specialised spares or with locally available spare parts Nepal No.6 Hand pump. The improved UNICEF model spares will also be encouraged into the retail market but in the event this is not successful (due to free market consumer choice) the pumps will still be maintainable.

4. PROGRESS OF THE WORK

4.1 District Water Supply Development Plans

In September 1990, the Ground Water Resources Study was commenced in the Three Terai district's, Nawalparasi, Rupandehi and Kapilvastu. The field work was completed during 1990. The Final Report, covering all the three districts was completed in April 1991, by Cemat Consultants, Kathmandu.

The planning of the detailed field data collection and development of the questionnaire format was commenced in July. A seminar on District Water Supply Development Plans was held in September, the seminar was participated by Deputy Director General of DWSS, Regional Director, District Engineers and PIU staff. The enumerators commenced the detailed data collection in Arghakhanchi District in November. At the same time the evaluation of existing schemes was commenced in Arghakhanchi District.

The desk study on physical and environmental features of the three Hill Districts and the preparation of the Environmental Impact Assessment guidelines were commenced in December 1991, by Cemat Consultants, Kathmandu.

4.2 Water Supply Programme

A lot of work was done in simplifying and accelerating the design and estimate procedures. Standard designs, bills of quantities and formats were further developed and introduced to the DWSOs' staff.

Water supply programme was started in two new districts - i.e. Palpa and Arghakanchi - during the year.

Driven tubewell construction was started in a large scale during 1991. Although only 22 wells are reported in the target tables, the total number constructed during the year is close to 100. The reporting is, however, done, when the whole scheme area is completed.

The progress of the implementation in each district, as per the step-by-step implementation procedure, is presented in the Appendix 7.

The progress of studies, surveys, designs and construction work, in relation to the numerical targets is presented in the Appendix 6.

4.3 Health Education and Sanitation Programme

4.3.1 Health Education

Major activities of the HESP are,

- i) Research - behavioral studies and assessments
- ii) Training & orientation - all levels of Health Workers, - DWSO technical staff, school teachers, health volunteers, User Committee members, District and Regional level Orientation Meetings.
- iii) Study, acquisition and dissemination of teaching and learning materials.
- iv) Preparation of professional papers and participation in professional meetings.
- v) Monitoring of water quality in RWSSP scheme areas.

The year 1991 has been a fairly productive one for HESP. In the aspect of research Health Data was collected from 117 wards and 351 clusters. 69 clusters were studied in detail on health and sanitation related behaviour. Likewise assessments and studies of 64 school and 10 Health Posts were carried out.

During the year 49 Community Health Volunteers, 40 Village Health Workers, 33 Health Post Paramedics and 34 school teachers participated in the regular HESP training.

60 technicians, 11 overseers and over 100 user committee members were given one to two days training on Health and Sanitation.

Likewise 2 coordination orientation workshops were organised. The first orientation workshop was organized in Butwal in which District and Regional level Officers and Directors from Water, Health and Education Sectors participated. Another one was organized at Tansen, Palpa in which NGOs engaged in water and health programme/projects in Lumbini Zone participated. Major NGOs in this sectors were: Nepal Red Cross Society, United Mission to Nepal and Redd Barna. These coordination meetings have proved to be very fruitful in sharing experiences and coordinating the field level activities.

HESP has established a good link with Kathmandu based, UNICEF, Communication Production Centre, Adult Literacy Programme - MOEC, UMN Material Production Unit and Institute of Medicine. These organizations and institutions have excellent expertise and facilities for preparation production of audio-visual and printed teaching and learning materials and HESP has tremendously benefitted from cooperation with them. HESP has

also prepared a special manual for CHVs who are barely literate.

During 1991, HESP personnel - two Training Officers and Advisor submitted 2 papers to the scientific committee of International Union of Health Education (IUHN) which led to their participation in the conference held at Helsinki in the month of July. Later in the year HESP advisor was invited to participate in a two day long National Level Consultation meeting in Kathmandu organized by the MHPP. She also participated along with 16 other NGOs including Water Aid, Care, Action Aid, Redd Barna & UNICEF in another Sanitation Workshop organized by Social Services National Coordination Committee to prepare a Sanitation Policy for the HMGN's consideration.

4.3.1 Water Quality Monitoring

The water quality laboratory is fairly well established and functional.

Using MPN method 122 samples have been tested for to find out microbiological status of the water currently being used by the village people and of water points provided and/or to be provided by the Project. Microbiological test are conducted on a regular basis and each source is tested at three different points of time. Firstly before construction work, second time during the construction period and lastly at the completion of the construction. HESP has also been regularly monitoring the microbiological quality of the water supplied by the Butwal Water Supply corporation on their request.

Chemical test are done in only suspect cases arising out of bad taste or visible deposits.

4.4 Human Resources Development

This chapter describes the training of the DWSOs' staff.

The Projects training programme has been consolidating itself during the year. The Project has had good cooperation with the District Offices in training. Determining the training needs, formulating the training programmes and courses, and selection of trainees has all been done together with the District Engineers. The Districts have also in many cases provided trainers and resource persons, especially for the Water Supply and Sanitation Technician training.

The most pressing training need has been to provide training of technicians for the construction of gravity and tubewell schemes.

The following training activities have been established during the year and will be repeated in future:

Orientation and training in community participation skills:

1. **Overseer course in preliminary surveys and designs.** A one week course to familiarize the DWSO overseers and assistant engineers with the RWSSP procedures. A pre-feasibility, feasibility study and a design meeting is undertaken in a scheme area during the course. Course organized by RWSSP\PIU.
2. **Community participation course for technicians.** A one week course for technician level staff in RWSSP procedures, communication skills and community mobilization. A field exercise in resource mapping is undertaken during the course. Course organized by RWSSP/PIU.

Technical training

Water Supply and Sanitation Technician training courses:

1. **Basic Foreman Training** A two months course in basic skills in constructing a gravity water supply scheme as a community effort. A small gravity scheme is constructed during the course. Course organized by Helvetas/RD in Pokhara.
2. **Upgrading Training.** Second stage in the WSST training. A two months course giving more practice in gravity schemes and sanitation construction. A small gravity scheme is constructed during the course. Course organized by Helvetas/RD in Pokhara.

(The full WSST course has two more courses, the ferrocement tank construction course and the final course, but these were not undertaken during the year 1991 for the Lumbini Zone trainees).

Other courses in technical training:

3. **Overseers orientation** One months course in technical survey and design of a gravity scheme using the CWSS/RWSSP design criteria. Course organized by Helvetas/RD in Pokhara.
4. **Basic groundwater training.** A one month course in survey and construction of a tubewell scheme with a sludging method. A groundwater scheme area is surveyed during the training and 3 - 5 tubewells, complete with platforms and drainage, are constructed during the training. Course organized by RWSSP/PIU.
5. **Assessment of water sources and water quality.** A one week course for the overseers in assessment of water quality in the field, interpretation of the laboratory analyses and source protection. Course organized by the RWSSP/PIU.

6. **Laboratory technician training.** A training for undertaking the bacteriological water tests. Course organized mainly to produce staff for the Project's laboratory. Course organized by the RWSSP/PIU.

The course schedule of 1991 and number of trainees in each course are presented in the Appendix 10. The progress of training, in relation to the numerical indicators and targets, is presented in Appendix 6.

Trainers' training

Trainers' training has been organized by the Nepal Staff College by the Central Human Resource Development Unit. The following courses have been organized, with the following numbers of participants from the Lumbini Zone:

Course	No of participants from Lumbini Zone	Duration
Users' Committee trainers' training	5	2 weeks
Trainers' training for Village Maintenance Worker II	1	4 weeks
Trainers' training for Village Maintenance Worker III	2	4 weeks
Trainers' training for Village Maintenance Worker IV	4	4 weeks

4.5 Community Involvement

Community involvement has been implemented, as stated in the Annual Report 1990, as a method of the scheme implementation. No study, survey, design or construction work has been done without the consultation with the villagers.

There has been very few problems of the community involvement, given the fact that construction work has to be timed in par with the agricultural calender of the villages. Several cases of source dispute have risen during surveys. Some of these have been solved by the villagers themselves, some are still pending.

Especially the villagers' participation in survey and design activities has been active. The users' committees are usually also pressing the Project and the DWSOs to start the construction work and delegations from the committees are not uncommon in the DWSOs and PIU office.

The progress of the community involvement is shown together with the Progress of the scheme implementation Appendix 7. The certain key points of community involvement are followed in the schemewise progress tables i.e.:

- the design meeting, where the villagers approve of the results of the feasibility study and the lay-out of the scheme
- users' committee training, where the users committee members discuss and learn some management of construction work
- the agreement, where the villagers approve of the final design and a contract is made for the construction of the scheme.

Users' committee seminar is held before the beginning of the construction activities. The number of users' committee members trained during 1991 was 72. See Appendix 6.

4.6 Schemewise progress

The location of the schemes taken into the RWSSP programme is shown in Appendices 2 and 3.

The progress of project activities in the scheme areas is presented in Appendix 7.

The target for the total population coverage of the Project is 175 000 people. The population coverage achieved by different activities at the end of 1991 was as follows:

Pre-feasibility studies	169 973
Feasibility studies	121 011
Designed and surveyed	58 644
Construction started	36 477
Construction completed	5 000

5. METHODOLOGIES AND PROCEDURES

5.1 Implementation of the schemes through step-by-step procedure

The flow chart of the project activities has been presented in the Appendix 8.

The step-by-step procedure of the project activities has been consolidated mainly by several orientation and training

occasions and slowly the different steps are being implemented in the scheme areas.

The step-by-step procedure has been used for the Project planning and monitoring. Also monthly follow-up and reporting is based on the step-by-step procedure.

The engineers and overseers in charge of the scheme implementation, have been encouraged to use the step-by-step procedure as a management tool. Following the procedure, the overseer gets right information from the field before beginning the design, gets the right decisions and approvals from the community and his supervisors in right time to avoid unnecessary work, like redesigns and resurveys, and keeps the community involved in all stages.

5.2 District Development Plans

5.2.1 Objective of the District Development Plans.

The outputs of the District Water Supply Development Plans are clearly defined in the Project Document, sub-project 1.

For operational working purposes the activities within this sub-project follow mainly on two lines:

- (1) Development plan for the improvement of water supply and sanitation in the districts.
- (2) Institutional development of the District Water Supply Offices in order to improve their capability in the community based implementation and operation and maintenance of the water supply schemes.

5.2.2 Development Plan for the Improved Water Supply and Sanitation

The output of the development plan for the improved water supply will be a comprehensive District Water Supply Development Plan - report for each district. It will include:

- physical targets for improved water supply and sanitation,
- technologies to be used,
- identification of water sources,
- present coverage, present water use, priorities,
- manpower requirement and its development,
- financial resources needed,
- socio-economic resources for community based implementation and operation and maintenance.

It will also include a critical assessment of the resources like water, manpower, technology, sources of funding, socio-economic resources etc; and alternative targets are adjusted and proposed accordingly.

The inventory of the present water use, socio-economic conditions, water sources, population and domestic animals is based on detailed clusterwise data collection.

5.2.3 Institutional Development of the District Water Supply Offices.

The institutional development of the District Water Supply Offices includes training of the DWSO staff, stream lining, strengthening and supporting working procedures in scheme implementation and operation and maintenance.

The types of training include but are not limited to :

- Formal and on-the-job training of overseers and assistant engineers to carry out pre-feasibility and feasibility studies and prepare designs of community water supply and sanitation schemes.
- training of engineers, overseers and technicians in community skills to make them able to implement the schemes and advise User's Committees and Village Maintenance Workers in administrative and managerial and technical matters.

As a part of the streamlining of the planning and monitoring procedures a Data System is developed for each district. The Data System will be regularly maintained by the District Water Supply Offices. Data system will be used for collecting and storage of data needed in planning, monitoring and management. It will provide regular information on following:

- water sources for water supply purposes
- coverage of water supply and sanitation
- condition of existing schemes
- monitoring of schemes under implementation from initial request to the completion
- user's Committees and Village Maintenance Workers.
- water quality
- agencies active in water supply and sanitation in the district.

The Data System will be simple to be used for quick reference and it will not include too much detailed information, which is available elsewhere in the documents in the district.

5.3 Water Supply Programme

5.3.1 Gravity Water Supply

Development of the following designs and procedures has been undertaken during the year 1991:

1. The preparation of standard design formats

- New design formats have been developed to allow most of design work to be done by DWSO staff with a minimum time and effort. These design formats not only include the technical design aspects of a water supply scheme but also the social, health/sanitation and educational aspects.
- Brief abstracts of all the information gathered during prefeasibility and feasibility survey have been included in the formats.
- These format need a little subjective wetting hence easy to fill up.

2. Introduction of Minicomputer

The use of personal computer, Casino Fx 730P has been introduced in the Project and will be supplied 2 nos, in each district. Introduction of personal computer not only makes design calculation easy but also helps to understand a basic use of computer. Following Design Calculations are programmed:

- Hydraulic calculation/pipe design calculation
- Survey calculation/Theodolite survey/Leveling/Abney level survey.

3. System Design Modifications

Most commonly used system design at present consists of one large reservoir tank and a number of break pressure tanks. In such system BPT has two objectives, i.e.:

- i) To cut-off the static pressures to allow a lower pressure class of pipe to be used
- ii) To allow the flow back to the reservoir with the help of float valve when the taps are closed in the distribution lines.

This type of system is designed with the following assumptions:

- Users will instantly close the taps after fetching the required quantity of water.

- BPT/Float valve works promptly and as soon as it is damaged, users will replace it.

The following draw backs have been observed in the old type of systems, especially when the system is under the community's management:

- unbalanced operation due to float valve failure
- unbalanced operation due to untimed tap operations
- unavoidable high pressure at the tapstand
- the operation and maintenance responsibility of a single reservoir is often not defined amongst different villages of the supply area, resulting in failure of O & M
- high maintenance cost due to high pressure and constant failures of float valves.

To overcome above drawbacks "intake-reservoir-distribution network" -type of system has been modified:

- in a standard type of design a break pressure tank should be as far as possible be replaced by a small storage tank near by the cluster or by an interruption chamber
- a large no of small storage tanks will be provided instead of a big storage tank

New system design has the following positive features in relation to the community operation and maintenance:

- balanced operation due to the absence of BPTs/float valves
- suitable for locally available fittings
- as the reservoir tanks are located more or less one per cluster, maintenance responsibility is clear
- easy to achieve required pressure at the tapstand
- sustainability and minimum maintenance due to low pressure
- easy for material transportation
- low maintenance cost
- comparatively not more expensive construction cost than the old system, due to small pipe size in the distribution system.

4. Replacement of the Tapstand Valve Chamber

In the previous design there was a valve chamber before each tapstand incasing a gate valve. The main objective of the gate valve was to control the water flow to the tap, and the objective of the valve chamber is only to cover/protect the gate valve. To replace both the gate valve and the valve chamber a control valve has been designed in co-operation with Gobar Gas, Butwal. This valve has simple construction

mechanism and costs about Rs 300 only, as opposed to the cost of 4 500 of the gate valve + chamber.

This control valve can be imbedded in the masonry at the back portion of the tapstand post. The valve is designed so that it cannot easily be tampered with.

5.3.2 Well Technology

Use of different drilling methods

So far three different types of drilling methods have been tested:

1. Hand Sludging Method

This method has been successful up to 70 m depth, in alluvial soils only. Most of the prospected well sites can be constructed with this method.

2. Manual Hammering Method

This method has been tested in some places where the large size gravel & small boulder zones were encountered, but with out success ; hence this system is failed.

3. Percussion Method

a. Manually Operated

Although this system is still under testing, it seems that it can be used up to the depth of 40 m in large gravel and small boulder zones.

b. Machine Operated, Pilcon Wayfarer 1500 drilling rig

This system is newly introduced in the Project and can be used in those areas where other methods fail. Compared to the manual methods, the wells implemented with this rig are comparatively costly.

5.4 Hygiene Education and Sanitation Programme.

Strategies and methods of the health education and sanitation programme

Improvement in health and environmental sanitation require changes in the behaviour of people, which can be expected only through locally relevant and meaningful health and hygiene education and practices. In addition to relevancy and meaningful education its continuation is also a must. Age-old habits, habits that people have become used to, habits that have become a way of life with them, can not be changed easily overnight or within one-shot education or motivation

campaigns. Hence continued realistic activities are vital in dealing with behavioral changes.

HESP is thus aimed at promoting RELEVANCY, CONTINUITY, SUSTAINABILITY and SELF-RELIANCE . Its approach and programmes are thus, oriented towards:

RELEVANCY is assured by:

- i) Founding HESP activities on local socio-cultural practices, health and hygiene related behaviour, concerns and problems.
- ii) Making people understand the link between behaviour and problems, current beliefs and behaviour.
- iii) Enabling village health workers and paramedics to study, observe this behaviour and modify/develop health and hygiene improvement programmes based on village health behaviour and socio-economic diversity.

CONTINUITY can be a possible reality only when the programme is sustainable and self-reliant. Sustainability can be achieved only when tertiary level formal and informal but permanent institutions are strengthened and equipped. Community based workers/personnel are capable and committed, because these are the institutions and personnel who live among people and have been created for the benefit of rural communities.

SUSTAINABILITY is ascertained by strengthening tertiary level health and education institution and increasing the capabilities of paramedics and teachers through appropriate training and support services.

SELF-RELIANCE is another foundation for the programme's sustainability and continuity. Self-reliance among the people will strengthen and support sustainability and continuation of the programmes initiated. Self-reliance means people take CHARGE of their problems and remedial actions for the same. Utilization of local resources i.e. skill, money, time ability, institutions and systems promote and prosper self-reliance. When people take CHARGE, many things can happen and continue to happen.

SELF-RELIANCE is achieved by exploring, exploiting and enabling local resource i.e. financial, skill, ability and existing system/s.

Using RAPID ASSESSMENT PROCEDURE (RAP) and using village mapping, health behaviour Practices of the people and health care systems are carefully studied. The RAP procedure is described in detail in Appendix 9.

Water Quality Laboratory

Although the project had a plan to start a similar Water Quality monitoring laboratory at Tamghas, Gulmi during 1991 it had to be postponed because of our serious concerns regarding the management of the laboratory. Unlike other DWSO'S Gulmi Office is housed in rented building, space thus being a problem. Reliable power supply could not be guaranteed. Stability regarding manpower has been another daunting factor for our concern regarding the proper and optimum utilization of the laboratory.

5.4 Human Resource Development

Training needs

The training needs have been assessed together with the DWSOs staff and related to the starting of the construction programme on a wide range, in all six districts.

The most pressing training need has been to train enough technicians, who are able to independently construct gravity and groundwater schemes. Most of the existing DWSO technicians assigned to the programme have previously been working as plumbers, masons, pump operators or watchmen. Skills for the gravity or groundwater construction as a community effort has to be developed.

Implementation of training

For the gravity scheme construction, the Water Supply and Sanitation Training of the Regional Office/Helvetas has been utilized. The training is partly classroom training and partly practical. A small gravity scheme is constructed during each course.

The WSST training consists of four stages: Basic Foreman course, Upgrading course, Final Course and Ferrocement Construction Course. The trainees are supposed to work in the field between the courses.

The training is done by experienced DWSO technicians and overseers. Practical skills are emphasized during the training and especially during the evaluation. Trainees who only pass the theoretical part of any course are not favoured to continue into the next stage of training.

Training in tubewell construction is organized by the Project as a field course.

Classroom training is given in community participation and communication skills, also by the Project.

Training of the Village Maintenance Workers

The village maintenance workers are employed on a daily basis during the construction work. They will then learn to know the scheme and working some working methods. Formal one month course is organized each year in Pokhara by RD's office/Helvetas.

5.6 Community Involvement

Community involvement procedures, developed during the first year of the Project have been consolidated and used in the scheme implementation. The flow chart of activities used in each scheme is presented in Appendix 8. The community participation activities in each scheme area are, in short, as follows:

1. Discussions with the a number of villagers and key-informants during the pre-feasibility study.
2. Users' Committee formation (by the community)
3. Resource mapping done by the inhabitants in all the clusters of a Village Development Committee, during the feasibility study. Focus group discussions. Source selection and solving the possible source disputes done by the community.
4. Decisions over the lay-out done in a wardwise meeting by the community.
5. Collection of the maintenance fund by the community.
6. Community selects candidates for Village Maintenance Worker and Community Health Volunteer training.
7. A seminar organized to the users' committee, to introduce the design of the scheme and the construction procedures. Management, manpower etc. issues discussed.
8. Agreement made between the DWSO and the Users' Committee.
9. Community organizing the manpower, skilled workers, collection of local materials and generally the management of the construction work together with the DWSO technician. Village Maintenance Worker's on-the-job training. CHV training.
10. Second seminar for the Users' Committee, discussing operation and maintenance, fund raising and organizing labour for maintenance, accounting etc.
11. Village Maintenance Workers formal training, a one month training course.

6. WORK PLAN

6.1 General

According to the practice adopted in the Project, the work plans are prepared for the coming Nepalese fiscal years, which start in the middle of July. The work plan is related with HMG/N budget, especially with the new water supply schemes, which are to be included in the fiscal year's programme. Because most of the project activities, like training, hygiene education, community mobilization are related in time and location to scheme implementation, either preceding or following it, it has been seen practical to prepare the work plans based on the fiscal year's programme.

6.2 Work Plan for the Fiscal Year 1990/91

The Work Plan for the fiscal year 1990/91 was prepared in June 1990. It included the initiation of 14 water supply schemes, population coverage 60 000 people. All these schemes are to be completed by the end of 1993.

6.3 Work Plan for the Fiscal Year 1991/92

The Work Plan for the fiscal year 1991/92 was completed in August 1991, and it included the initiation of 33 new water supply schemes with a population coverage of 123 000 people. Hence the total population coverage of nominated schemes is now 183 000 people, which is more than the target of the Project, which is 175000. All these schemes are to be completed by the end of 1993.

The population coverage of the nominated schemes is, however, expected to drop slightly, because some of the schemes may not be feasible to the anticipated extent, or some may not be feasible at all.

7. MEETINGS, SEMINARS, VISITS

The project had the opportunity to present its activities and progress, and to discuss the project related matters in following occasions:

- (i) Mission from the MHPP, MOM, and DWSS on 9-11 February 1991. Mission Leader Mr. R.K. Siddhi, Superintendent Engineer in the MHPP.
- (ii) Mr. S.B. Rai, secretary of the MHPP, 28 February, 1991.
- (iii) Honorable Mr. A.R. Regmi, the Minister of Housing and Physical planning 29th April 1991.
- (iv) The Mid Term Evaluation Mission, visited Nepal 10-24 November 1992, Team Leader Mr. M. Makela, National

Board of Waters, Finland. During the Mission also the Project Officer, Mr. M. Junnila, and Technical Adviser, Mr. H. Wihuri also visited the Project.

- (v) Honorable Mr. B.B. Rai, the Minister of Housing and Physical Planning visited the Project on 14th November, 1991.
- (vi) District Water Supply Development Plan Seminar, participated by the D.D.G of DWSS, Regional Director District Engineers, and Project staff on 25 -26 September 1991 in Butwal.

8. FINANCIAL REPORT

8.1 General

The budget for FINNIDA allocation is prepared for each calender year starting on January 1st. The budget for HMG/N allocation is prepared for each Nepalese Fiscal year starting on July 16.

Both Finnida expenditure and HMG/N expenditure are monitored monthly, but the monthly periods do not coincide, they have about 15 days difference. This difference in the auditing periods does not, anyhow, cause any problems, because the auditing of FINNIDA contribution and HMG/N contribution are not interrelated.

8.2 Exchange Rates

In the Project Document the currency equivalentents were

FIM 1.00 = NER 6.30
 NER 1.00 = FIM 0.16
 FIM 1.00 = USD 0.23
 USD 1.00 = NER 27.06

During the project the exchange rate were the following

1990

Currency -----	January 1st -----	December 31st -----
USD/NER	28.50	30.30
USD/FIM	4.20	3.70
FIM/NER	6.78	8.19

1991

Currency	January 1st	December 31st
-----	-----	-----
USD/NER	30.40	42.60
USD/FIM	3.70	4.35
FIM/NER	8.21	9.79

1992

Currency	January 1st	December 31st
-----	-----	-----
USD/NER	42.60	
USD/FIM	4.35	
FIM/NER	9.79	

8.3 FINNIDA Expenditure

Following financial presentations are attached:

- budget 1991, matrix, January 1991, Appendix 11
- projected expenditure 1990-93, January 1991, Appendix 12
- budget 1992, matrix, January 1992, Appendix 13
- projected project expenditure 1990-93, January 1992, Appendix 14
- expenditure matrix 1991, Appendix 15
- project expenditure to 31st December 1991, FINNIDA codes, Appendix 16
- project expenditure to 31st December 1991, Project codes, Appendix 17

A summary of cost estimates and project expenditure is given below.

FINNIDA EXPENDITURE in million Finnish Marks

Year	1990	1991	1992	1993	Total
<u>Estimate</u>					
Project Document	7.000	10.000	10.000	10.000	37.000
June 1990	6.235	-	-	-	-
September 1990	5.500	-	-	-	-
January 1991	3.952	12.180	12.000	8.868	37.000
August 1991	3.952	7.263	13.559	12.226	37.000
January 1992	3.953	7.265	11.242	14.540	37.000
<u>Expenditure</u>	3.953	7.265	-	-	11.218

8.4 HMG/N Expenditure

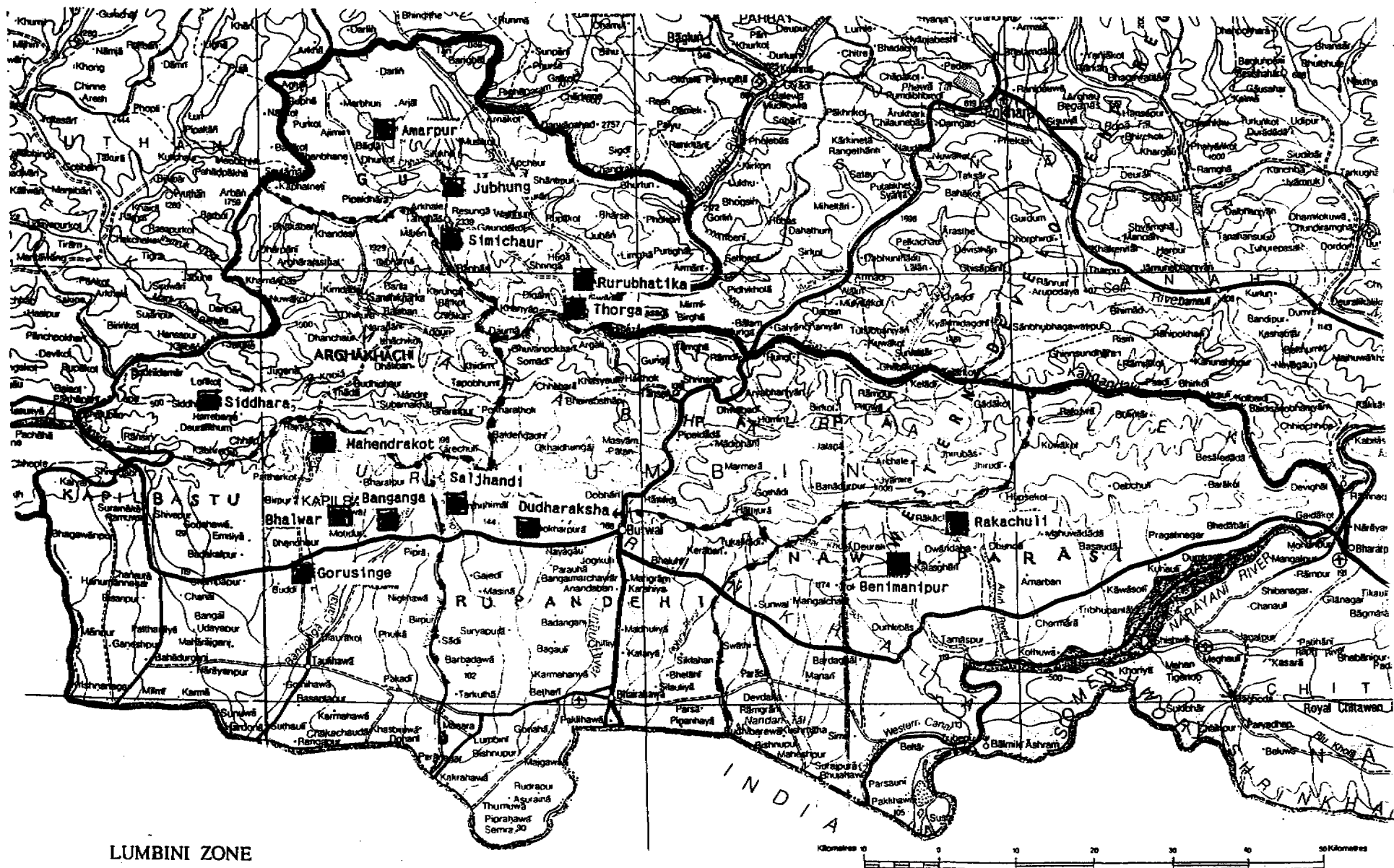
Following financial presentations on HMG/N are attached.

- HMG/N budget 1990/91, Appendix 18
- HMG/N budget 1991/92, Appendix 19
- HMG/N expenditure to 16 November 1991, Appendix 20

A summary of HMG/N budgets and expenditure is given below:

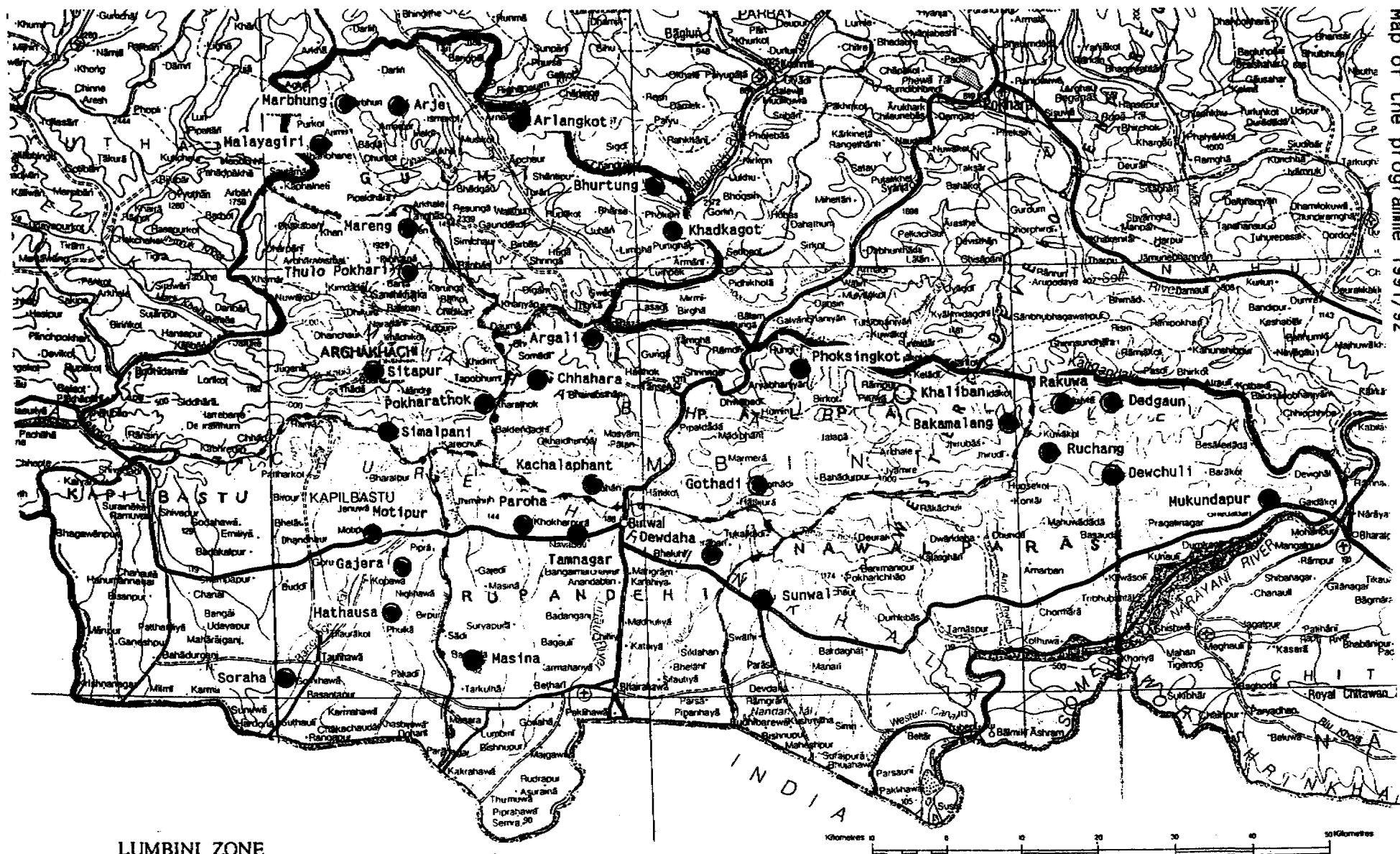
HMG/N BUDGET AND EXPENDITURE to Nov. 1991 in million Nepalese Rupees

Year	1989/90	1990/91	1991/92	1992/93	Total
Budget	2.483	7.462	9.000	-	18.945
Expenditure	0.212	6.00	10.175	-	6.388



LUMBINI ZONE

Map of the programme 1990/91



Map of the programme 1991/92

LUMBINI ZONE

Personnel information

Appendix 4-1(4)

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Rev.23.1.92

PERSONEL INFORMATION, PIU STAFF																							
SN.	POSITION	NAME	1990			1991						1992											
			OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AGU.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.			
			A/X	K/M	N/P	P/M	N/F	F/C	C/B	B/J	J/A	A/S	S/B	B/A	A/X	K/M	N/P	P/M	N/F	F/C			
PIU/Consultant Staff																							
LONG TERM																							
1	Project Coordinator	Mr. Tauno Arola	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2	Procurement Officer	Mr. J. Motley	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3	Training Coordinator	Mrs. M. Motley	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
4	Health Advisor	Dr. V.L. Shrestha	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
5	Engineer	Mr. K.K. Neupane	x	x	x	x	x	x	x	x	Resigned												
6	Engineer	Mr. P.R. Bista										x	x	x	x	x	x	x	x	x	x	x	x
7	Engineer	Mr. R. Bhusal																					
8	Training Officer	Mrs. K. Pandey	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
9	Training Officer	Mrs. H.M. Subba	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Resigned		
10	Training Officer	Ms. U. Shrestha																					
11	Training Officer	Mr. B.B. Thapa	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
12	Training Officer	Mr. J. Prasain	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
13	Administrative Officer	Mr. K. Adhikary	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
14	Liaison Officer	Mr. S. Nagley	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
15	Data Analyst	Mr. S. Baidhya																					
16	Procurement Asst.	Mr. R.K. Lohani	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
17	Accountant Asst.	Ms. L.M. Rena	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
18	Training Asst.	Mr. I.M. Sharma																					
19	Office Asst.	Mr. R. Sharma										x	x	x	x	x	x	x	x	x	x	x	x
20	Senior Secretary	Ms. I. Acharya																					
21	Secretary	Ms. P. Thapa	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
22	Secretary	Mr. K.R. Sen																					
23	Store Keeper	Mr. L. Thapa										x	x	x	x	x	x	x	x	x	x	x	x
24	Store Keeper	Mr. B. Thapa	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
25	Store Asst.	Mr. S. Bhattarai										x	x	x	x	x	x	x	x	x	x	x	x
26	Handy Man (General)	Mr. T.P. Adhikary	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
27	Mechanics	Mr. G. Pandey										x	x	x	x	x	x	x	x	x	x	x	x
28	Plumber	Mr. T.K. Shrestha	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
29	Peon	Mrs. D.M. Barel																					
30	Drivers	Total	4	5	6	6	6	8	8	8	8	8	8	8	8	8	11	11					
31	Guards	Total	5	5	5	7	7	7	8	9	9	10	12	12	12	12	12	12					
SHORT TERM																							
32	Env. Hygienist	Ms. A. Keinanen	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
PIU/HMG Staff																							
1	Project Manager	Mr. S.B. Mathema	x	x	x	x	x	x	x	x	Promotion Transferred to Department.												
2	Project Manager	Mr. D.B. Shrestha										x	x	x	x	x	x	x	x	x	x	x	x
3	Assistant Engineer	Mr. Dutta										x	x	x	x	x	x	On Deputation					
4	Assistant Engineer	Mr. D.P. Subedi	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
5	Overseer	Mr. J.L. Pandey				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
6	Overseer	Mr. G.P. Lamichane				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
7	Draftsman	Mr. N.P. Nagley				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
8	Draftsman	Mr. K. Lama				x	x	x	x	x	x	x	x	x	Resigned								
9	Health Officer	Mr. H.M. Acharya				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
10	Accountant	Mr. D. Upadhaya	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
11	Peon	Total				1	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

MANPOWER INVOLVED IN THE RWSSP SCHEMES, TRAINING SITUATION

Appendix 4-2(4)

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24.1.1991

KAPILBASTU DISTRICT

NAME	POSITION	TRAINING GIVEN	FIELD EXPERIENCE WITH RWSSP
K. Acharya	DE		
Gautam	AE	Feasibility study I	Pre-feas. Bang-Bhal
Yadav	AE	Feasibility study I	Pre-feas. Shourana
Rajendra Shrestha	OS	Ov.Or. (P)	Survey, design, ST const Bhal
Lamichanne	OS	Preliminary surveys	Survey, design Bhal, ST constr.
Thakur	OS	Feasibility study I	Survey, design, ST const Bang
Dhittal	OS	Preliminary surveys	
		Ov.Or. (P)	
Shiva Raj Shrestha	T	Basic+ST+CP	Bhalwad(F+S+ST CONS)
Vijay K. Sharma	T	Basic+ST	Bhalwad(F+S+ST CONS)
Abdul Fakir	T	Basic+CP	Mahendrakot(S+CP)
Ram Dev Teli	T	Basic+Upgrading+CP	Gorusinghe(F+CP)
Hari Ram Kewat	T	Basic+ST	Gorusinghe+Bakderya(F+S+ST CONS)
Gamber Singh Gurung	T	Full WSST+ST	Banganga(F+S+ST CONS)
R.Bdr.Burathoki	T	Basic+Upgrading	Banganga(F+S+ST CONS)
Hansu Mukhya	T	Basic	
Thakur Prasad Dhakal	T	Basic+Upgrading	Mahendrakot (Cons)
Ram Krishna Ahir	T	CP+Basic	
Yama Lal Yaishi	T	Basic	
Sheeram Pd. Harijan	T	Basic	
Shukha Raj Pd. Harijan	T	Basic	

NAWALPARASI DISTRICT

NAME	POSITION	TRAINING GIVEN	FIELD EXPERIENCE WITH RWSSP
Madav Sharma	AE	Preliminary surveys	
D. Pathak	OS	Feasibility I+Ov.Or (P)	Benimanipur(F+S+CP)
Kul Dev Shrestha	OS	Ov.Or. (P)	Rakachuli(F+S+CP)
K.L. Karna	OS		
Devendra Sharma	OS	Preliminary surveys	Sunwal(F+D)
S. Gyawali	T	Basic+Upgrading+CP	Benimanipur(F+S)
R. P. Bhattarai	T	Basic+Upgrading+CP	Benimanipur(F+S)
R.D. Gupta	T	Basic+UpgradingCP	Rakachuli(F+S)
S. Paudel	T	Basic+Upgrading+CP	Rakachuli(F+S)
S. Kahar	T	ST	
H. Pd. Kohar	T	ST	
Ratna Bdr. Sarki	T	Full WSST	
Ganesh Takuri	T	Basic	
Til Bikram Shrestha	T	Basic	
Khem Pd. Shrestha	T	Basic	
Dil Bdr. Thapa	T	Full WSST	From Regional Office
Brihaspati Adhikari	T	Full WSST	From Regional Office

PALPA DISTRICT

NAME	POSITION	TRAINING GIVEN	FIELD EXPERIENCE WITH RWSSP
P. Shrestha	DE		
Pradhan	AE		
R.B. Regmi	OS		Chhara F
J. Bhusal	OS	Prelimin. surv.+Os.Or(P)	Argeli F
Khadka	OS	Preliminary surveys	Phaksinkot Pre-feas
H.D. Poudel	OS	Preliminary surveys	Kachalphant Pre-feas
Neaupane	OS	Overseers Orientation(P)	
Ranjitkar	OS		Kachalphant feas.
D. Nath Gyawali	T	CP	Argeli V-Notch
Kamal Nepal	T	CP	*
Chandra Bdr. Shahi	T	CP	*
Bishnu Bdr. Thapa	T	CP+Basic	Argeli F
Taran Saru	T	Basic	
Lal Pd. Subedi	T	Basic	
Rishi Ram Tripathi	T	Full WSST	From Regional Office
Basnet	T	Training in HRD for WSST	Transfer from Tanau

ARGHAKHANCI DISTRICT

NAME	POSITION	TRAINING GIVEN	FIELD EXPERIENCE WITH RWSSP
M.K. Singh	DE		
Arun Kumar Simkhada	AE	Preliminary surveys	
Sashi Dhar Acharya	OS	Preliminary surveys	
Gyan Pd. Poudel	OS	Preliminary surveys	
Shiv Hari Acharya	OS	Prel.surv.+Ov.Or.(P)	
Matrika Gautam	OS	Ov.Or.(P)	
Mon Bdr. Sotimagar	T	Full WSST+CP	Sitapur+Siddhara
Purna Bdr. Gurung	T	Full WSST	Sitapur F
Nitayananda Pathi	T	Basic+Prel.surv.	Sitapur F
Mod Nath Poudel	T	CP	
Mahendra Kumar Maskey	T	CP	
Krishna Bdr. K.C.	T	CP	
Rudra Pd. Gyawali	T	Basic	
Ram Bdr. Shrestha	T	Basic	
Kamal Giri	T	Basic	
Bishnu Pd. Aryal	T	Full WSST	From Regional Office
Krishna Pd. Acharya	T	Full WSST	From Regional Office
Dwarika Bdr. Tamang	T	Basic	From Regional Office

RUPANDEHI DISTRICT

NAME	POSITION	TRAINING GIVEN	FIELD EXPERIENCE WITH RWSSP
Agrawal	DE		
Choudary	AE	Preliminary surveys	
Dutta	AE	Preliminary surveys	Khaliban F
Than Bdr. Thapa	OS	Preliminary surveys India: Env. Sanit	Porahaw (F+S), Duda (F+S)
C. Phatak	OS	Preliminary surveys	Gajedi (F+ST Cons) Tamnagar
I. N. Mishra	OS	Preliminary surveys Overseers Orientation (P)	Masina F
G. S. Shrestha	OS	Preliminary surveys	Devdaha F
Raju Shrestha	OS	Preliminary surveys Overseers Orientation (P)	Duda ST (F+S+C)
Hari Prd. Timilsina	OS	Overseers Orientation (P)	Sanjhandi (F+S+D+C)
Hari Prd. Kafle	T	CP+Basic	
Mahendra Shrestha	T	Full WSST, ST	
Binod Singh	T	Basic+Upgrading+ST	Masina F
Kesav Bhattarai	T	Basic+Upgrading+ST	
Banjare	T	CP	Gajedi (F+C)
R.N. Baral	T	Full WSST	Duda ST (F+C)
Hari Khadka	T	Basic+Upgrading+Refreshers	Sajhandi (F+S+C)
Indra Bdr. Thapa	T	Basic+Upgrading	Sajhandi (F+S+C)
Risal	T	Basic+Upgrading+CP	
Ram Krishna Nepal	T	Basic	
Lekha Nath Basnyal	T	Basic	
Gopal Pd. PAudyal	T	Basic	

GULMI DISTRICT

NAME	POSITION	TRAINING GIVEN	FIELD EXPERIENCE WITH RWSSP
I.P. Paudel	DE	Preliminary surveys	
K.P. Aryal	OS	Preliminary surveys	Jhubung, Marbung (F+S+D)
Banjare	OS	Prelimin. sur.+Os.Or (P)	Thorga D
I. Sharma	OS	Prelimin. sur.+Os.Or (P)	
Tamrakar	OS	Preliminary surveys	
Shanker Adhikari	OS	Prelimin. sur.+Os.Or (P)	
Salikram Acharya	T	Basic	Simichour C
Prem Basnyat	T	Basic+Upgrading	Amapur (F+S)
Gautam	T	Basic+Upgrading	Amapur (F+S)
N. Sharma	T	Basic+Upgrading	Bhurtung V-notch inst.
Malla	T	Basic+Upgrading	
Bishnu	T	Basic+Upgrading	Jhubung F
Madav Bhandari	T	Basic+Upgrading	
Paswan	T	Basic+Upgrading	Jhubung Res. map
Mandal	T	Basic+Upgrading	Simichour C
Tek Bdr. Thapa	T	Basic+Upgrading Preliminary surveys	
B. Lal Thapa	T	Full WSST Preliminary surveys	
Bom Bdr. Kumar	T	Basic	
Bal Bdr. Rana	T	Basic	
Laxman Bdr. Aryal	T	Basic	
Dhurba Raj Akela	T	Basic	From Regional Office

Ref;SYM/Lst'Vech.Wr1

LIST OF PROJECT VEHICLES IN 1991

NO.	PLATE NO.	TYPE	NAME	TAKEN INTO USE	REMARKS IF ANY
1	239	JEEP	MAHINDRA	27/2/90	SECOND HAND (L. Purchase)
2	243	JEEP	MAHINDRA	30/1/90	SECOND HAND (L. Purchase)
3	16-0-39	PICK-UP	LANCRUISER	15/12/90	
4	16-0-40	PICK-UP	LANDCRUISER	15/12/90	
5	16-0-41	STATION WAGON	LANDCRUISER	15/12/90	
6	16-0-84	STATION WAGON	LANDCRUISER	15/12/91	
7	16-0-85	STATION WAGON	LANDCRUISER	15/12/91	
8	16-0-42	PICK-UP	TOYOTA/HILUX	15/12/90	
9	16-0-43	PICK-UP	TOYOTA/HILUX	15/12/90	
10	104	STATION WAGON	LANDCRUISER	26/3/90	SECOND HAND (L. Purchase)
11	16-0-44	TRUCK 10 TONS	TATA	9/9/90	
12	16-0-45	TRUCK 10 TONS	TATA	9/9/90	
13	16-0-46	MOTOR CYCLE 185 CC	HONDA XL	10/9/90	
14	16-0-47	MOTOR CYCLE 185 CC	HONDA XL	10/9/90	
15	16-0-48	MOTOR CYCLE 185 CC	HONDA XL	10/9/90	
16	16-0-49	MOTOR CYCLE 185 CC	HONDA XL	10/9/90	
17	16-0-50	MOTOR CYCLE 185 CC	HONDA XL	10/9/90	
18	16-0-51	MOTOR CYCLE 185 CC	HONDA XL	10/9/90	
19	16-0-52	MOTOR CYCLE 100 CC	HERO HONDA	1/04/91	
20	16-0-53	MOTOR CYCLE 100 CC	HERO HONDA	1/04/91	
21	2682	MOTOR CYCLE 100 CC	HERO HONDA	7/2/91	
22	5907	MOTOR CYCLE 100 CC	HERO HONDA	15/9/90	SECOND HAND (L. Purchase)
23	3803	MOTOR CYCLE 100 CC	HERO HONDA	12/9/91	
24	25 NOS.	BICYCLES	HERO + RANGER	31.12.91 In use	
25	18 NOS.	"	RANGER	Ordered	

PROGRESS IN RELATION TO NUMERICAL TARGETS BY 31.12.1991

	Completed during the reporting period	Total by the end of the reporting period	Total target of the project (by the end of 1993)
TRAINING			
Community health volunteers, on average 6 in each approved scheme area	49	88	480
Village health workers, on average 9 in each ilaka, where a scheme construction is undertaken	40	67	216
Health post staff, on average 11 per health post.	33	55	66
School teachers, on average 3 in each approved scheme area.	34	50	240
Users Committee members, on average 6 per approved scheme area.	72	85	480
Village maintenance workers (gravity schemes), on average 1 in each completed scheme area.	-	-	40

APPENDIX 6 2(3)

PROGRESS IN RELATION TO NUMERICAL TARGETS

	Completed during the reporting period	Total by the end of the reporting period	Total target of the project (by the end of 1993)
TRAINING CONT.			
Village well maintenance workers, on average one for 5 wells.	-	2	200
Water supply and sanitation technicians (basic foreman course)	34 (24 Gravity+ 10 Ground water)	58	60
Overseers and other senior DWSS staff (various training schemes)	9	18	60
STUDIES AND SURVEYS			
Pre-feasibility studies, one per proposed scheme area	57	69	110
Feasibility study, one per proposed scheme area	58	63	90
Detailed surveys, one per approved scheme area	28	32	80
Health behavior study (wards covered)	117	171	405
Health post assessment	10	14	12
Water consumption survey, one per approved scheme area	7	10	80

APPENDIX 6 3(3)

PROGRESS IN RELATION TO NUMERICAL TARGETS

	Completed during the reporting period	Total by the end of the reporting period	Total target of the project (by the end of 1993)
DESIGN WORK			
Design drawings to be completed, one in each approved scheme area	23	25	80
Bill of Quantities to be produced, one in each approved scheme area	23	25	80
IMPLEMENTATION			
Handpump wells to be constructed	-	22	1000
Tapstands to be constructed	-	-	750
Intake structures to be constructed	-	-	40
Reservoirs to be constructed	-	-	30
Latrines and urinals to be constructed in school and health posts	2	3	480

RURAL WATER SUPPLY AND SANITATION PROJECT
LUMBINI ZONE

SCHEME-WISE PRESENTATION OF ACTIVITIES AND PROGRESS
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ARGHAKHANCHI DISTRICT

DISTRICT/ YEAR OF NOMINATION/ SCHEME NAME	DISTR	SCH WARDS TYPE	BASE POP	REQUEST RECEIVED OR RENEWAL	PRE-FEAS BILITY STUDY	F E A S I B I L I T Y S T U D Y				DESIGN MEETING IN VILL.	DETAIL SURVEY	HEALTH BEHAV. STUDY	DETAIL DESIGN	H E A L T H T R A I N I N G				UC SEMINAR	AGR'WENT	CONST- ROCTION STARTED	CONST- RUCTION COMPLETE
						RESOURCE MAPPING	HEALTH MAPPING	SOURCE MEASUREMENT	SOCIAL FEASIB.					CHV	SCHOOL TEACHERS	VHW	HP PARAMEDS				
Siddhara	Arg 47/48	grav	1279	1216	FEB.91	FEB.91	FEB.91	FEB.91	FEB.91	Source dispute solved											
Siddhara	Arg 47/48	grav	3	97	FEB.91	FEB.91	FEB.91	FEB.91	FEB.91												
Siddhara	Arg 47/48	grav	78	98	FEB.91	FEB.91	FEB.91	FEB.91	FEB.91												
Thela pokhara	Arg 48/49	grav	1-9	0	JUN.91			JUN.91		The scheme taken into the DWSS programme											
Pokharatok	Arg 48/49	grav	1-9	1300	NOV.91	NOV.91															
Simalpani	Arg 48/49	grav	1-9	2000	DEC.91	NOV.91			DEC.91												
Patauti	Arg 48/49	grav	1-9	900	NOV.91	NOV.91															
Sitapur	Arg 48/49	grav	89	650	OCT.91	OCT.91	OCT.91	OCT.91	OCT.91												
Sitapur	Arg 48/49	grav	67	630	OCT.91	OCT.91	OCT.91	OCT.91	OCT.91												
Sitapur rehab	Arg 48/49	grav	589	0	OCT.91	OCT.91	OCT.91	OCT.91	OCT.91												
Wareng	Arg 48/49	grav	1-9	1600																	

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PALPA DISTRICT

DISTRICT/ YEAR OF NOMINATION/ SCHEME NAME	DISTR	SCH TYPE	WARDS	BASE POP	REQUEST RECEIVED OR RENEWAL	PRE-FEAS BILITY STUDY	F E A S I B I L I T Y S T U D Y				DESIGN MEETING	DETAIL SURVEY	HEALTH BEHAV. STUDY	DETAIL DESIGN	H E A L T H T R A I N I N G				UC SEMINAR	AGR'MENT	CONST- RUCTION STARTED	CONST- RUCTION COMPLETE
							RESOURCE MAPPING	HEALTH MAPPING	SOURCE MEASUREM	SOCIAL FEASIB.					CHV	SCHOOL TEACHERS	VHW	HP PARAMEDS				
Argeli	Pal 48/49	grav	12356789	2400	MAR.91	MAR.91	OCT.91	OCT.91	JUN 91	OCT.91	OCT.91											
Argeli	Pal 48/49	grav	4	480	AUG.91	MAR 91	OCT.91	OCT.91	JUN 91	OCT.91	OCT.91	DEC.91										
Phaksinkott	Pal 48/49	grav	1-9	2000		OCT.91	OCT.91	OCT.91		OCT.91	OCT.91											
Khaliban	Pal 48/49	grav	123456789	5337	JUL 91	JUN.91	OCT.91	OCT.91		OCT.91												
Chhara	Pal 48/49	grav	8	540	APR 91	APR 91	OCT.91	OCT.91	MAY.91	OCT.91	OCT.91	DEC.91										
Chhara	Pal 48/49	grav	56	390	APR 91	APR 91	OCT.91	OCT.91	MAY.91	OCT.91	OCT.91											
Kachalphant	Pal 48/49	grav	56	1200	APR 91	MAR 91	MAY 91	MAY 91	JUN 91													
Gothadi	Pal 48/49	grav		0																		
Bakawalang	Pal 48/49	grav		0																		

RURAL WATER SUPPLY AND SANITATION PROJECT
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RUPANDEHI DISTRICT

DISTRICT/ YEAR OF NOMINATION/ SCHEME NAME	DISTR TYPE	SCH WARDS	BASE POP	REQUEST	PRE-FEAS	F E A S I B I L I T Y S T U D Y				DESIGN	DETAIL	HEALTH	DETAIL	H E A L T H T R A I N I N G				UC	AGR'MENT	CONST-	CONST-	
				RECEIVED	BILITY	RESOURCE	HEALTH	SOURCE	SOCIAL	IN VILL.	SURVEY	BEHAV.	DESIGN	CHV	SCHOOL	VHW	HP	SEMINAR		RUCTION	RUCTION	
				OR	STUDY	MAPPING	MAPPING	MEASUREM	FEASIB.			STUDY		TEACHERS	PARAMEDS			STARTED	COMPLETE			
Dudaraksia	Rup 47/48	hp	7	2717	SEP 90	SEP. 90	DEC. 90	DEC. 90	NA	JAN. 91	FEB. 91	MAR. 91	NOV. 90	MAR. 91	NOV. 90	NOV. 90	OCT 90	JUN 91	APR 91	APR 91		
Dudaraksia	Rup 47/48	hp	569	2120	AUG 91	SEP. 90	DEC. 90	DEC. 90	NA	JAN. 91	FEB. 91	MAR. 91	NOV. 90	MAR. 91	NOV. 90	NOV. 90	AUG. 91					
Dudaraksia	Rup 47/48	grav	12348	3668	SEP 90	SEP. 90	DEC. 90	DEC. 90	FEB 91	JAN. 91	FEB 91	scheme now pending due to achievements of gound water programme										
Saljhandi	Rup 47/48	bh	1	420	JUL 90	AUG 90	AUG. 90	AUG. 90	NA	AUG. 90			OCT. 90		OCT. 90	NOV. 90	OCT. 90	AUG. 91		pending		
Saljhandi	Rup 47/48	grav	127	2060	JUL 90	AUG. 90	AUG. 90	AUG. 90	FEB. 91	AUG. 90	AUG. 90	SEP. 90	OCT. 90	FEB. 91	OCT. 90	NOV. 90	OCT. 90	AUG. 91	DEC. 90	FEB. 91	FEB. 91	
Bevdaha	Rup 48/49	hp	45678	6022	JUN 91	FEB 91	AUG 91	AUG 91	NA	AUG 91		DEC. 91		DEC. 91			AUG. 91	AUG. 91				
Bevdaha	Rup 48/49	grav	1239	7562	JUN 91	FEB 91	AUG 91	AUG 91	JUN 91	AUG 91							AUG. 91	AUG. 91				
Porshav	Rup 48/49	hp	123456789	11017	MAR 91	MAR 91	MAY 91	MAY 91	NA	APR. 91			DEC. 91				AUG. 91	AUG. 91				
Porshav	Rup 48/49	grav	4	1000	MAR 91	MAR 91	MAY 91	MAY 91	APR 91	APR. 91			DEC. 91				AUG. 91	AUG. 91				
Porshav	Rup 48/49	grav	6	1100	MAR 91	MAR 91	MAY 91	MAY 91	APR 91	APR. 91	Pending on the source dispute						AUG. 91	AUG. 91				
Masina	Rup 48/49	hp	123456789	4237	JUN 91	JUN. 91	AUG 91	AUG 91	NA	AUG 91	NOV. 91		DEC. 91				AUG. 91	AUG. 91				
Tannagar	Rup 48/49	hp	2	804	FEB. 91	APR. 91	MAY 91	MAY 91	NA	MAY. 91	JUL 91		DEC. 91				AUG. 91	AUG. 91				
Tannagar rehab	Rup 48/49	grav	34579	0	APR 91	MAR 91	MAY 91	MAY 91	JUN 91	JUN 91	JUN. 91	Probably unfeasible due to calcium problems					AUG. 91	AUG. 91				
Tannagar	Rup 48/49	dw	3456789	5035	FEB. 91	APR. 91	MAY 91	MAY 91	NA	MAY. 91	JUL 91						AUG. 91	AUG. 91				
Gajedi	Rup 48/49	hp	1	1151	JUL 91	JUL 91	JUL 91	JUL 91	NA	JUL 91	JUL 91	AUG 91	DEC. 91	JUL. 91	JUL. 91	JUL. 91	AUG. 91	AUG. 91		JUL. 91	JUL. 91	SEP 91
Gajedi	Rup 48/49	hp	23456789	7000	JUL 91	JUL 91	NOV. 91	NOV. 91	NA			DEC. 91	DEC. 91	DEC. 91								

RURAL WATER SUPPLY AND SANITATION PROJECT
LUMBINI ZONE

SCHEME-WISE PRESENTATION OF ACTIVITIES AND PROGRESS NAWALPARASI DISTRICT
DECEMBER 1991 Our ref: sym\m\follow up I\s'fu

DISTRICT/ YEAR OF NOMINATION/ SCHEME NAME	DISTR TYPE	SCH WARDS	BASE POP	REQUEST RECEIVED OR RENEWAL	PRE-FEAS BILITY STUDY	FEASIBILITY STUDY				DESIGN MEETING IN VILL.	DETAIL SURVEY	HEALTH BEHAV. STUDY	HEALTH TRAINING				UC SEMINAR	AGR'MENT	CONST- RUCTION STARTED	CONST- RUCTION COMPLETED
						RESOURCE MAPPING	HEALTH MAPPING	SOURCE MEASURE	SOCIAL FEASTB.				CHV	SCHOOL TEACHERS	VHW	HP PARAMEDS				
Beninipur	Nav 47/48	hp	3	800	OCT. 90	OCT. 90	JAN. 91	JAN. 91	NA	JAN. 91	-	-	-	-	AUG. 91	APR. 91	-	-	-	
Beninipur	Nav 47/48	grav	7	1580	OCT. 90	OCT. 90	JAN. 91	JAN. 91	JAN. 91	JAN. 91	JAN. 91	MAR. 91	JAN. 91	MAY. 91	AUG. 91	APR. 91	AUG. 91	DEC. 91	-	
Beninipur	Nav 47/48	dw	8	1400	OCT. 90	OCT. 90	JAN. 91	JAN. 91	NA	JAN. 91	-	-	-	-	AUG. 91	APR. 91	-	-	-	
Beninipur	Nav 47/48	grav	13	1800	-	OCT. 90	JAN. 91	JAN. 91	JAN. 91	JAN. 91	-	-	JAN. 91	-	AUG. 91	APR. 91	-	-	-	
Beninipur	Nav 47/48	grav	4	1200	-	OCT. 90	JAN. 91	JAN. 91	JAN. 91	JAN. 91	-	-	-	-	AUG. 91	APR. 91	-	-	-	
Beninipur	Nav 47/48	grav	5	800	-	OCT. 90	JAN. 91	JAN. 91	JAN. 91	JAN. 91	-	-	-	-	AUG. 91	APR. 91	-	-	-	
Beninipur	Nav 47/48	grav	2	1000	-	OCT. 90	JAN. 91	JAN. 91	JAN. 91	JAN. 91	-	-	JAN. 91	-	AUG. 91	APR. 91	-	-	-	
Sunwal	Nav 47/48	hp	6	2000	-	-	-	-	NA	-	-	-	-	-	-	-	-	-	-	
Sunwal	Nav 47/48	hp	8	2953	APR. 91	MAY. 91	MAY. 91	MAY. 91	JUN. 91	JUN. 91	-	-	JULY. 91	OCT. 91	-	-	-	DEC. 91	-	
Mukundapur	Nav 48/49	hp	1234789	0	JUN. 91	MAY. 91	JUN. 91	JUN. 91	NA	-	-	No request community dispute pending				-	-	-	-	
Mukundapur	Nav 48/49	grav	5	1250	MAY. 91	MAY. 91	MAY. 91	MAY. 91	MAY. 91	MAY. 91	MAY. 91	-	-	-	-	-	-	-	-	
Mukundapur	Nav 48/49	grav	6	1125	MAY. 91	MAY. 91	MAY. 91	MAY. 91	MAY. 91	MAY. 91	MAY. 91	-	-	-	-	-	-	-	-	
Rakachuli	Nav 47/48	grav	6	678	DEC. 90	APR. 91	JUN. 91	JUN. 91	JUN. 91	JUN. 91	OCT. 91	OCT. 91	-	OCT. 91	AUG. 91	APR. 91	-	-	-	
Rakachuli	Nav 47/48	grav	234	678	DEC. 90	APR. 91	JUN. 91	JUN. 91	JUN. 91	JUN. 91	NOV. 91	NOV. 91	-	-	AUG. 91	APR. 91	-	-	-	
Rakachuli	Nav 47/48	grav	7	678	-	APR. 91	JUN. 91	JUN. 91	JUN. 91	JUN. 91	NOV. 91	Pending on source dispute		-	AUG. 91	APR. 91	-	-	-	
Rakachuli	Nav 47/48	grav	8	678	-	APR. 91	JUN. 91	JUN. 91	JUN. 91	JUN. 91	NOV. 91	DEC. 91	-	-	AUG. 91	APR. 91	-	-	-	
Rakachuli	Nav 47/48	grav	9	678	-	APR. 91	JUN. 91	JUN. 91	JUN. 91	JUN. 91	NOV. 91	-	-	-	AUG. 91	APR. 91	-	-	-	
Rakachuli	Nav 47/48	grav	1	678	-	APR. 91	JUN. 91	JUN. 91	JUN. 91	JUN. 91	NOV. 91	DEC. 91	-	-	AUG. 91	APR. 91	-	-	-	
Rakawa	Nav 48/49	grav	1-9	2500	-	JUN. 91	-	-	JUN. 91	-	-	-	-	-	-	-	-	-	-	
Dedhgau	Nav 48/49	grav	1-9	2976	-	JUN. 91	-	-	JUN. 91	-	-	-	-	-	-	-	-	-	-	
Deuchali	Nav 48/49	grav	1-9	3000	-	MAY. 91	-	-	-	-	-	Source dry	-	-	-	-	-	-	-	
Deuchali	Nav 48/49	grav	1-9	3000	-	MAY. 91	-	-	-	-	-	Source dry	-	-	-	-	-	-	-	
Ruchang	Nav 48/49	grav	1359	2715	-	JUN. 91	-	-	JUN. 91	-	-	-	-	-	-	-	-	-	-	

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LUMBINI ZONE

SCHEME-WISE PRESENTATION OF ACTIVITIES AND PROGRESS
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GULMI DISTRICT

Our ref: sym\follow up I\sfu

DISTRICT/ YEAR OF NOMINATION/ SCHEME NAME	DISTR	SCH WARDS	BASE POP	REQUEST RECEIVED OR RENEWAL	PRE-FEAS BILITY STUDY	F E A S I B I L I T Y S T U D Y				DESIGN MEETING IN VILL	DETAIL SURVEY	HEALTH BEHAV. STUDY	H E A L T H T R A I N I N G				UC SEMINAR	AGR'MENT	CONST- RUCTION STARTED	CONST- RUCTION COMPLETE		
						RESOURCE MAPPING	HEALTH MAPPING	SOURCE MEASURE	SOCIAL FEASIB.				CHV	SCHOOL TEACHERS	VHW	HP PARAMEDS						
Simichour	Gu	47/48	ps	1	163	DEC.90	NOV.90	DEC.90	DEC.90	JAN.91	DEC.90	FEB.91	NOV.90	JAN.91	MAR.91	JAN.91	JUN.91	MAY.90		APR.91	APR.91	APR.91
Simichour Rehab	Gu	47/48	grav	12345678	1453	DEC.90	NOV.90	DEC.90	DEC.90	JAN.91	DEC.90	FEB.91	NOV.90	JAN.91	MAR.91	JAN.91	JUN.91	MAY.90		APR.91	APR.91	APR.91
Anapur	Gu	47/48	grav	12345678	2070	DEC.90	NOV.90	DEC.90	DEC.90	DEC.90	DEC.90	FEB.91	MAR.91	APR.91	APR.91		AUG.91			APR.91	APR.91	APR.91
Anapur	Gu	47/48	grav	9	455	DEC.90	NOV.90	DEC.90	DEC.90	DEC.90	DEC.90	FEB.91	MAR.91	APR.91			AUG.91					
Anapur	Gu	47/48	grav	2	212	DEC.90	NOV.90	DEC.90	DEC.90	DEC.90	DEC.90	FEB.91	MAR.91	APR.91			AUG.91					
Thorga	Gu	47/48	grav	89	0	AUG.90	NOV.90	FEB.91	FEB.91	JUN.91	FEB.91	MAY.91	MAR.91									
Thorga rehab	Gu	47/48	grav	123456789	1425	OCT.91	NOV.90	FEB.91	FEB.91	JUN.91	JUN.91	JUN.91	JUN.91	JUN.91	JUN.91	DEC.91					SEP.91	
Thorga	Gu	47/48	ps	9	180	-	NOV.90	FEB.91	FEB.91	JUN.91			NOV.91	JUN.91	DEC.91							
Jhubung	Gu	47/48	grav	789	555	DEC.90	NOV.90	FEB.91	FEB.91	MAR.91	FEB.91	APR.91	MAR.91	NOV.91	JUN.91	DEC.91		MAY.90			SEP.91	JUN.91
Jhubung rehab	Gu	47/48	grav	12345678	4664	DEC.90	NOV.90	JUN.91	JUN.91	JUN.91	JUN.91	JUN.91	NOV.91				MAY.90					
Churak	Gu	47/48	grav	123	476	DEC.90	NOV.90	FEB.91	FEB.91	MAR.91	FEB.91	MAR.91	MAR.91	JUN.91	DEC.91						SEP.91	JUN.91
Bhatokwa	Gu	47/48	grav	789	1426	JAN.91	NOV.90	JUN.90	JUN.91	JUN.91	JUN.90	JUN.91	JUN.91	NOV.91	JUN.91	DEC.91					SEP.91	DEC.91
Khadgakot	Gu	48/49	grav	1-9	2800																	
Warbhong	Gu	48/49	grav	1234	1600	MAR.91	MAY.91	MAY.91	MAY.91	MAY.91												
Warbhong	Gu	48/49	grav	56	800																	
Warbhong	Gu	48/49	grav	9	300																	
Arje	Gu	48/49	grav	56789	3000		APR.91			APR.91												
Arjankot	Gu	48/49	grav	1-9	500	MAR.91																
Arjankot	Gu	48/49	grav	1-9	600																	
Arjankot	Gu	48/49	grav	1-9	200																	
Arjankot	Gu	48/49	grav	1-9	1200																	
Bhurtung	Gu	48/49	grav	1-9	1200	MAR.91				APR.91												
Bhurtung	Gu	48/49	grav	1-9	800	MAR.91				APR.91												
Kharjyang	Gu	48/49	grav	1-9	1000																	
Malayagiri	Gu	48/49	grav	1-9	960	MAY.91																

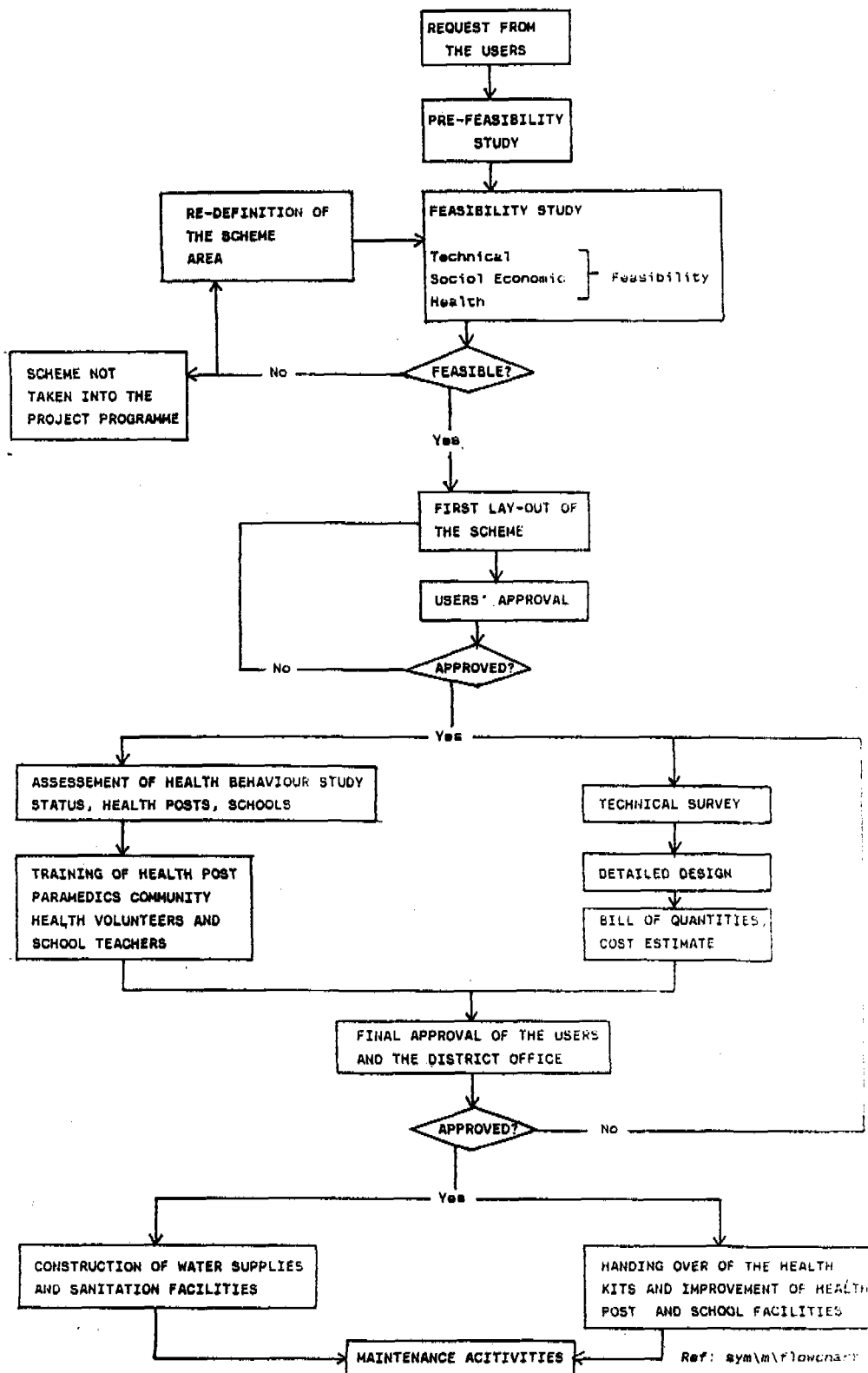
RURAL WATER SUPPLY AND SANITATION PROJECT
LUMBINI ZONE

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KAPILBASTU DISTRICT

DISTRICT/ YEAR OF NOMINATION/ SCHEME NAME	DISTR	SCH WARDS TYPE	BASE POP	REQUEST	PRE-FEAS	FEASIBILITY STUDY				DESIGN	DETAIL	HEALTH	DETAIL	HEALTH TRAINING				UC	AGR'MENT	CONST-	CONST-
				RECEIVED	BILITY	RESOURCE	HEALTH	SOURCE	SOCIAL	MEETING	SURVEY	BEHAV.	DESIGN	CHV	SCHOOL	VHM	HP	SEMINAR		RUCTION	RUCTION
				OR	STUDY	MAPPING	MAPPING	MEASUREM	FEASTB.	IN VILL.		STUDY		TEACHERS	PARAMEDS			STARTED	COMPLETE		
Banganga	Kap 47/48	hp	15789	2282	OCT.90	OCT.90	DEC.90	DEC.90	FEB.91	DEC.90	FEB.91	FEB.91	DEC.90	JUL 91	NOV.91	MAR.91	OCT.90	MAR.91	MAY.91	JUNE.91	JUNE.91
Banganga	Kap 47/48	grav	12679	4338	OCT.90	OCT.90	DEC.90	DEC.90	FEB.91	DEC.90	FEB.91	APR.91	DEC.90	AUG.91		MAR.91	OCT.90	MAR.91	MAR.91		
Bhalwar	Kap 47/48	hp	12345	2282	OCT.90	NOV.90	DEC.90	DEC.90	MAR.91	DEC.90	MAR.91	APR.91	DEC.90	MAY.91	NOV.91	OCT.90	OCT.90	JUL.90	MAY.91	JUNE.91	JUNE.91
Bhalwar	Kap 47/48	grav	678	1306	OCT.90	NOV.90	DEC.90	DEC.90	MAR.91	DEC.90	MAR.91	APR.91	MAR.91	AUG.91			OCT.90	JUL.90			
Gorsinghe	Kap 47/48	hp	123456789	5009	OCT.90	SEP.90	MAR.91	NOV.90	NA	MAR.91	MAY.91	MAY.91	NOV.90	FEB.91	NOV.90	MAR.91	OCT.90	JUL.90	MAR.91	APR.91	MAR.91
Notipur	Kap 48/49	hp	1-9	2100	-	JUN.91											OCT.90	MAR.91			
Notipur	Kap 48/49	grav	1-9	2100	-	JUN.91											OCT.90	MAR.91			
Gajera	Kap 48/49	hp	1-9	7600	-												OCT.90	MAR.91			
Shoura	Kap 48/49	hp	1-9	2280	APR.91	APR.91											OCT.90	MAR.91			
Hathousa	Kap 48/49	hp	1-9	8000	-				NA								OCT.90	MAR.91			
Bakderia	Kap 48/49	hp	12	790	JUL.91	JUL.91	JUL.91	JUL.91	NA	JUL.91	JUL.91	AUG.91		JUL.91	JUL.91	JUL.91	AUG.91	AUG.91		JUL.91	JUL.91
Mahendrakot rehab	Kap 47/48	grav	6789	2650	OCT.90	NOV.90	DEC.90	DEC.90	-	DEC.90	MAR.91	NOV.90	DEC.90	FEB.91	DEC.90	MAR.90	OCT.90	JUL.90	MAR.91	MAR.91	APR.91

FLOW CHART OF THE PROJECT ACTIVITIES



INTRODUCTION

RAPID AND RELIABLE ASSESSMENT PROCEDURE (RAP)

INTRODUCTION

Timely acquisition of the relevant and reliable data on which to design programmes is a chronic problem in Nepal. It is even more so in the rural water supply and sanitation sector of His Majesty's Government of Nepal which require active participation of the village people, where data is non-existent; unreliable and inadequate where data is available.

Department of Water Supply and sewerage have sought ways to overcome these problems. Baseline surveys or Bench-mark surveys and feasibility studies are two such methods.

However, findings of such studies seem to have made little or no input in the planning of water supply programmes. Some of the important factors responsible for the lack of utilization of survey findings are data are less relevant, less useful, because of the reports being technical and its academic nature of reporting system it is not easily understood by the planners and above all not available at the time of planning. In our effort to overcome these problems we decided to use Rapid and reliable Assessment Procedures and techniques.

A chronic problem facing planners in developing countries is the relevant, reliable and timely acquisition of data on which to design programmes. It is even more so for planners of public support programme. This problem is especially critical in the rural water supply and sanitation sector of His Majesty's Government of Nepal which require active involvement of the beneficiary groups, where data is non-existent; unreliable and inadequate where data is available.

Nepalese planners have sought ways to overcome these problems. Baseline surveys or Bench-mark surveys and pilot studies are two such methods. However, findings of such studies seem to have made little or no input in the planning of public support programmes. Some of the important factors responsible for the lack of utilization of survey findings are data are less relevant, less useful, because of the reports technical and academic nature of reporting system not easily understood by the planners and above all not available at the time of planning by the time the report is made available the planning has been done and issues out of date. In our effort to overcome these problems we decided to use Rapid Assessment Procedures and techniques.

RAPID ASSESSMENT PROCEDURE (RAP)

RAP was developed as a methodology especially to provide health workers and social scientist in fields other than anthropology/sociology and anthropologists/sociologists guidelines for conducting rapid and reliable assessments of health seeking behaviour of the people including Primary Health Care (PHC), nutrition and family planning MCH programmes. The impact of the health programme and the health related behaviour of the people can be best understood through inter-subjective data, individual cognitive representations, social definitions, social dynamics and qualitative data on villagers perceptions, beliefs, values and rural realities. RAP encourages the use and application of a variety of data gathering tools and technique in order to get maximum information on relevant topics in a rapid but reliable manner. Most commonly used data gathering techniques by the RAP users are namely, focus group discussions; informal dialogues and discussions; observations including participant observations; formal interviews and relevant secondary data where available.

Rapid Assessment Procedures (RAP) and techniques are a new phenomenon in Nepal Water Supply and Sanitation Programmes. Their usage has been encouraged by the fact that the data are non-existent, conventional data collection methods are time consuming-field work for baseline surveys usually take several months and twice as long to analyze, and absence of data collection infrastructure including the professionals to collect and analyze the data. Furthermore our emphasis on participatory approach, relevancy and sustainability required data on social, dynamics and historic perspective which can not be obtained through quantitative /conventional methods only.

RAP in the context of the Lumbini Rural Water Supply and Sanitation Project is a semistructured process of learning with and from village people about their needs, problems/conditions, local resources, expertise, capabilities experience and pertinent social information which progress into participatory planning, development and implementation of remedial activities that are relevant, acceptable, manageable and sustainable by the villagers. This process has lead to a direct rapport, and stimulating activities not envisaged otherwise.

The adaptation of RAP began with the preparation of a series of guidelines and checklists to entail relevant data on existing types, conditions and usages of water sources ; need for water ; social dynamics ; historical perspectives or formal and informal participatory activities and management of village-social, cultural and political affairs; local resources in terms of constructions materials and skills; health and sanitation situation in terms of existing services and behaviour; and village schools health education and sanitation status.

To a large extent utilization of data depends upon the interpretations and its presentation and presentation long and confusing findings are under utilized and shelved. Hence formats well prepared for reporting so that information are directly relevant, precise and easy to understand.

USAGE OF RAP

In the context of the rural water supply and sanitation programme Rapid Assessment Procedures and techniques were adapted and developed specifically to assess the need for water supply schemes, prospects and possibilities for participatory planning, implementation strategies, relevancy and appropriateness of the health education and sanitation activities in a reliable and rapid way. Preliminary results from these assessments were available to the project with a period of 2 to 15 days. RAP was used at several stages of programme planning.

SITUATION STUDY

In the first stage RAP was used to assess the needs for drinking water scheme each village/community (that have requested for drinking water) were visited for a day or two depending upon the size of the village to quickly and correctly. This we call Situation Study were a social scientist did a walk about survey, made observations and held brief informal dialogue with villagers individually and in groups in a random fashion to find out : i) villagers' knowledge about the request, ii) assess the situation of drinking water facilities in terms of adequacy, distance, type, quality and iii) some information on villagers cooperative efforts and experiences.

RESOURCE MAPPING

Use of resource mapping has shown that villagers' mental maps are more detailed and accurate than those of should that than most outsiders might have supposed. Our experiences mape can be diagrammed on the ground or drawn on paper in a matter of minutes to show all the houses or huts in a small villages take (say 10-15 minutes for 50 households), while larger villages take longer. For diagramming on the ground, literacy appears to be irrelevant. Maps can be drawn the ground with a finger or stick. Some of the best maps have been using cloured pens on draning paper.

Participatory maps can lead rapidly into the presentation of social and technical information. Villagers often make in the castes and names of household and existing water sources using colour codes. It also present rapid censuses of villages and children in each household, numbers of man, women health mapping has also been to indicate households with pregnant women, persons who are handicapped, malnourished children, or widows immunisation status.

SOCIOCULTURAL FEASIBILITY

When it was found that villagers are aware and eager for water supply a detailed sociocultural and economic and health feasibility is undertaken again using RAP. This is done usually between 4 to 15 days. This phase of the RAP involves prospective beneficiaries in several ways i.e. focus group discussions, informal discussions, participant observation, data on village records, water sources, village experience on participatory development and so on (see Annex B). Duration of this phase again determined by the number and size of the villages to be covered. This process of data collection not only entails in-depth information on relevant software issues of water supply but also makes participatory planning natural and truly meaningful.

PLANNING

After the feasibility future course of actions are charted out together with villagers - health education, sanitation, water supply schemes details, formation of Users' Committee, identification of community health volunteers training for health worker and volunteers and so on including technical feasibility to study proposed sources, explore alternatives.

Use of RAP beginning with identification followed by detailed socioeconomic technical feasibility and then sharing our findings with the concerned villagers/beneficiary groups has made them feel and act as true partners in planning water supply and initiation programme with a sense of pride and confidence.

This has encouraged open discussion between and among the project personnel and the villagers. As a result sticky problems like financial locally available materials and labour contribution, location of tap stands or dugwells, formation of users' committee, nomination of community health volunteers were all done by the villagers and not by only a few village leaders or influential.

Likewise information on health and sanitation related behaviour of the villagers and sharing of this information in the village meetings have been a tremendous help in making people understand the link between water and diseases/illness;hygienic behaviour and the health status and thereby increase interest and commitment in the participation of village based health education and sanitation activities. Within a period of twelve weeks and less RAP has enabled us to gather a wealth of information on health and sanitation behaviour, food habits, health and illness beliefs and practices and provide training to a group of community health volunteers in the water supply scheme areas.

Rapid Assessment Procedures and Techniques has confirmed the fact that given the opportunity, acknowledgement and application of their skills, abilities and indigenous institutions and management system they have much greater ability to create, understand, analyze the plans and situations, This not only creates report but also paves the way for self-reliance, commitment and true partnership in development.

RURAL WATER SUPPLY AND SANITATION PROJECT
LUMBINI ZONE

COURSES ORGANIZED DURING 1991

24.1.1991

sym\#followup\trwp91

COURSE NAME	JANU	FEBR	MARC	APRI	MAY	JUNE	JULY	AUGU	SEPT	OCTO	NOVE	DECE	PARTICIPANTS
Overseers Orientation (Pokhara)	****												5
Water quality and source assessment	*												6
Laboratory technician course	*												5
Basic Foreman Course (1st WSST course)										*****	*****		24
Upgrading Course (2nd WSST course)								*****	**				19
Community participation for Technicians							**						21
Basic Groundwater Theory and Construction course for Technicians							**	**					10
Overseers Orientation (Pokhara)												**	9
Preliminary surveys and designs course (Ru, Ka, Na, Pa)									*				14
Preliminary surveys and designs course (Gu, Argh)										*			18

RURAL WATER SUPPLY AND SANITATION PROJECT. NEPAL
BUDGET 1991 (All figure in Finnish Marks)

Ref: C'B SBF 1991

FINNIDA CODE	321*-*	322*-*	323*-*	331*-*	332*-*	333*-*	212*-*	213*-*	214*-*	215*-*	221*-*	231*-*	TOTAL
1. WATER SUPPLY SCHEMES (OF 1990)	4,237,500	105,930	158,906	158,906	105,930	529,688	0	0	0	0	0	0	5,296,875
2. WATER SUPPLY SCHEMES (OF 1991)	1,412,500	35,313	52,969	52,969	35,313	176,563	0	0	0	0	0	0	1,765,625
Sub Total 1 - 2 WATER SUPPLY SCHEMES	5,650,000	141,250	211,875	211,875	141,250	706,250	0	0	0	0	0	0	7,062,500 7,062,500
3. TOILET CONSTRUCTION	146,000	0	0	63,000	0	0	0	0	0	0	0	0	209,000
4. GENERAL/OTHER CONSTRUCTION ITEMS/COSTS	75,000	45,000	0	30,000	0	100,000	0	0	0	0	0	0	250,000
5. WORKSHOPS AND STORES	5,000	5,000	3,000	8,000	1,000	0	0	0	0	500	0	0	22,500
6. LABORATORY	10,000	15,000	0	5,000	5,000	0	0	0	0	2,000	0	0	37,000
7. DISTRICT INSTITUTIONAL/SCHEME SUPPORT	204,700	38,400	4,300	47,250	8,250	0	0	0	0	0	0	0	302,900
Sub Total 3 - 7 NON SCHEME SPECIFIC SUPPORT	440,700	103,400	7,300	153,250	14,250	100,000	0	0	0	2,500	0	0	821,400 821,400
8. DISTRICT DEVELOPMENT PLANS	0	10,000	0	58,000	0	12,000	0	0	0	0	0	0	80,000
9. HEALTH AND SANITATION EDUCATION	3,000	17,000	0	8,000	0	1,500	10,000	0	28,000	0	0	0	67,500
10. HUMAN RESOURCE DEV / TRAINING	0	5,000	0	40,000	0	12,000	3,000	0	22,000	0	0	0	82,000
Sub Total 8 - 10 SUPPORTING PROGRAMMES	3,000	32,000	0	106,000	0	25,500	13,000	0	50,000	0	0	0	229,500 229,500
11. OFFICE HELSINKI	0	0	0	0	0	0	0	0	0	0	0	40,000	40,000
12. OFFICE NEPAL	32,000	58,000	0	89,000	0	5,000	0	52,928	0	0	0	0	236,928
13. VEHICLES	246,000	17,000	0	28,360	0	0	0	0	0	30,000	0	0	381,360
Sub Total 11 - 13 SUPPORT SERVICES	278,000	135,000	0	117,360	0	5,000	0	52,928	0	30,000	0	40,000	658,288 658,288
SUB TOTAL 1 - 13	6,371,700	411,650	219,175	588,485	155,500	836,750	13,000	52,928	50,000	32,500	0	40,000	8,771,688
14. CONTINGENCIES	662,293	41,165	21,918	58,849	15,550	83,674	1,300	5,293	5,000	3,250	0	4,000	902,292 902,292
SUB GRAND TOTAL 1 - 14	7,033,993	452,815	241,093	647,334	171,050	920,424	14,300	58,221	55,000	35,750	0	44,000	9,673,980 9,673,980
15. CONSULTANT FEE	0	0	0	0	0	0	0	2,203,740	0	0	0	0	2,203,740
16. OTHER CONSULTANT AND STAFF COSTS	0	0	0	0	0	0	0	302,280	0	0	0	0	302,280
GRAND TOTAL	7,033,993	452,815	241,093	647,334	171,050	920,424	14,300	2,564,241	55,000	35,750	0	44,000	12,180,000 12,180,000

FINNIDA budget matrix for 1991

Appendix 11

Ref : PAE 1990/93

PROJECTED ANNUAL BREAKDOWN OF EXPENDITURE FOR 1990 -1993 JANUARY 1991

*1000PKM

PROJECT- BUDGET CODE	EXPENDITURE 1990	PROJECTED EXPENDITURE 1991	PROJECTED EXPENDITURE 1992	PROJECTED EXPENDITURE 1993	TOTAL PROJECT BUDGET
1 - 2 WATER SUPPLY SCHEMES	238	7,063	6,843	4,000	18,144
3. TOILET CONSTRUCTION	6	209	362	352	929
4. GENERAL/ OTHER CONSTRUCTION ITEMS/COSTS	19	250	250	250	769
5. WORKSHOPS AND STORES	42	22	22	22	108
6. LABORATORY	14	37	20	20	91
7. DISTRICT INSTITUTIONAL/SCHEME SUPPORT	18	303	300	294	915
8. DISTRICT DEVELOPMENT PLANS	14	80	80	20	194
9. HEALTH + SANIT EDUC	31	68	80	60	239
10. HUMAN RES DEVELOPMENT	31	82	130	80	323
11. OFFICES HELSINKI	46	40	40	40	166
12. OFFICES NEPAL	295	237	230	230	992
13. VEHICLES	831	381	140	140	1,492
SUB TOTAL 1 - 13	1585	8772	8497	5508	24,362
14. CONTINGENCIES PHYSICAL 10%		902	850	551	2,303
15. CONSULTANT FEE	1,885	2,204	2,336	2,476	8,901
16. OTHER CONSULTANT COSTS	482	302	317	333	1,434
TOTAL	3,952	12,180	12,000	8,868	37,000

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SUMMARY PRESENTATION OF DRAFT FINNIDA BUDGET FOR 1992

	SUB TOTAL	321*-*	322*-*	323*-*	331*-*	332*-*	333*-*	212*-*	213*-*	214*-*	215*-*	221*-*	231*-*
1 CONST OF W/S +TOILET	5005132	4146000	120000	30000	567306	141826	0	0	0	0	0	0	0
4 GENERAL/OTHER CONSTR COST	518000	250000	20000	5000	96000	10000	137000	0	0	0	0	0	0
5 WORKSHOP AND STORES	92000	5000	45000	0	40000	0	2000	0	0	0	0	0	0
6 LABORITORY	40000	22000	7000	0	11000	0	0	0	0	0	0	0	0
7 DISTRICT DEV PLAN	340000	234000	84000	0	19000	0	3000	0	0	0	0	0	0
8 DISTR/INSTI/SCHEME SUPP	157000	0	20000	0	55000	0	10000	0	72000	0	0	0	0
9 H E S P	315000	139000	72000	0	17000	0	3000	42000	0	42000	0	0	0
10 HUMAN RESOURCES DEV	413500	21000	7500	3000	254000	0	12000	92800	0	23200	0	0	0
11 OFFICE HELSINKI	25000	0	0	0	19000	0	4000	0	0	0	0	2000	0
12 OFFICE NEPAL	340000	117000	54000	2000	149000	10000	8000	0	0	0	0	0	0
13 VEHICLES	450000	282000	60000	0	37000	44000	27000	0	0	0	0	0	0
14 CONTINGENCIES	769563	384782	76956	76956	76956	76956	76956	0	0	0	0	0	0
15 CONSULTANT FEE	2580000	0	0	0	0	0	0	0	2580000	0	0	0	0
16 CONS/STAFF COSTS	197000	0	0	0	0	0	0	0	0	0	0	25000	172000
	11242195	5600782	566456	116956	1341262	282783	282956	134800	2652000	65200	0	27000	172000

FINNIDA budget matrix for 1992,
January 1992

EXPENDITURE FOR 1990 & 1991, BUDGET SUMMARY FOR 1992, TENTATIVE BUDGET SUMMARY FOR 1993

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	EXPENDITURE*	EXPENDITURE	BUDGET	TENTATIVE	PROJECT SUB
	1990	1991	1992	1993	TOTAL
1 SCHEME AND TOILET CONSTRUCTION	243,687.71	3,115,849.32	5,005,132	7,953,285	16,317,954
4 CAPITAL INVEST/SCHEME OVERHEADS	0.00	490,811.56	518,000	600,000	1,608,812
5 WORKSHOP AND STORES	42,410.07	71,188.92	92,000	40,000	245,599
6 LABORATORY	14,085.72	38,455.26	40,000	40,000	132,541
7 INSTITUTIONAL SUPPORT	0.00	312,415.72	340,000	400,000	1,052,416
8 DISTRICT DEVELOPMENT PLANS	13,920.72	61,728.51	157,000	160,000	392,649
9 HEALTH PROGRAMME	30,653.66	45,239.01	315,000	500,000	890,893
10 HUMAN RESOURCE DEVELOPMENT	30,811.41	84,187.04	413,500	500,000	1,028,498
11 OFFICE HELSINKI	29,050.86	26,985.53	25,000	35,000	116,036
12 OFFICE NEPAL	283,413.11	278,159.11	340,000	340,000	1,241,572
13 VEHICLES/TRANSPORTATION	831,612.18	452,439.62	450,000	200,000	1,934,052
Sub total 1.	1,519,645.44	4,977,459.60	7,695,632	10,768,285	24,961,022
14 CONTINGENCIES	63,423.40	0.00	769,563	1,076,829	1,909,815
Sub total 2.	1,583,068.84	4,977,459.60	8,465,195	11,845,114	26,870,838
15 TECHNICAL ASSISTANCE	1,921,598.28	2,117,701.25	2,580,000	2,475,000	9,094,300
16 OTHER CONSULTANT/STAFF COSTS	448,233.97	169,628.56	197,000	220,000	1,034,863
TOTAL	3,952,901.09	7,264,789.41	11,242,195	14,540,114	37,000,000
QTR1	1,272,357.54	2,296,925.04	2,250,000		
QTR2	934,071.09	1,825,649.59	2,810,000		
QTR3	915,140.28	1,794,240.34	2,810,000		
QTR4	831,332.18	1,347,974.44	3,720,000		
TOTAL	3,952,901.09	7,264,789.41	11,242,195		

* Adjusted codes to 1991-1993 format

Cost estimate 1990-93, January 1992

Appendix 14

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SUMMARY MATRIX FOR THE YEAR 1991
PROJECT

PROJECT CODE	TOTAL	321*-*	322*-*	323*-*	331*-*	332*-*	333*-*	212*-*	213*-*	214*-*	215*-*	221*-*	231*-*
	FIN												
01 WATER SUPPLIES\ TOILETS	3,115,850.32	3,078,314.11	5,500.93	0.00	32,035.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04 GENERAL\OTHER	490,811.56	382,344.78	3,529.96	0.00	29,073.03	0.00	75,863.79	0.00	0.00	0.00	0.00	0.00	0.00
05 WORKSHOPS\STORES	71,188.92	33,559.69	7,181.42	0.00	30,445.98	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06 LABORATORY	38,455.26	26,375.47	9,670.35	0.00	2,409.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
07 DISTRICT SUPPORT	312,415.72	246,476.39	37,847.87	0.00	27,166.96	530.16	394.34	0.00	0.00	0.00	0.00	0.00	0.00
08 DISTR DEV PLANS	61,728.51	384.97	9,645.08	0.00	51,698.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
09 HEALTH\SANITATION	45,239.01	24,024.41	9,602.88	0.00	4,608.28	0.00	0.00	4,041.90	0.00	2,981.54	0.00	0.00	0.00
10 HUMAN RES DEV	84,187.04	35,947.32	2,778.61	0.00	32,883.44	0.00	2,241.95	10,335.72	0.00	0.00	0.00	0.00	0.00
11 OFFICES HELSINKI	26,985.53	0.00	6,010.32	0.00	14,378.55	0.00	0.00	0.00	298.56	0.00	0.00	0.00	6,300.10
12 OFFICES NEPAL	278,159.11	93,638.86	45,913.50	0.00	93,026.68	4,389.73	0.00	0.00	41,190.34	0.00	0.00	0.00	0.00
13 VEHICLES	452,438.62	295,108.84	48,132.94	0.00	103,473.75	0.00	0.00	0.00	278.37	0.00	5,446.72	0.00	0.00
14 CONTINGENCIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15 CONSULTANTS FEE	2,117,701.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,117,701.25	0.00	0.00	0.00	0.00
16 OTHE CONS & STAFF COSTS	169,628.56	692.56	134.09	0.00	1,318.57	0.00	0.00	0.00	167,483.34	0.00	0.00	0.00	0.00
TOTAL	7,264,789.41	4,216,865.40	185,947.95	0.00	422,516.42	4,921.72	78,500.08	14,377.62	2,326,951.66	2,961.54	5,446.72	0.00	6,300.10

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	TOTAL FIN	212*-*	213*-*	214*-*	215*-*	221*-*	231*-*	321*-*	322*-*	323*-*	331*-*	332*-*	333*-*
OVERALL SUMMARY EXPENDITURE 1990													
Expenditure 1st Quarter	1,272,357.55	0.00	592,592.33	0.00	177.40	0.00	15,953.10	619,257.63	13,502.20	0.00	30,720.25	154.64	0.00
Expenditure 2nd Quarter	934,071.09	12,633.05	619,007.87	0.00	0.00	72,992.46	10,733.88	158,863.09	19,341.90	0.00	40,438.81	54.03	0.00
Expenditure 3rd Quarter	915,140.28	9,335.60	587,685.02	0.00	5,651.32	742.45	2,269.36	194,296.40	41,397.75	0.00	73,701.38	0.00	0.00
Expenditure 4th Quarter	831,332.18	3,040.50	548,020.42	0.00	5,881.65	179.22	2,280.15	137,707.78	62,413.67	0.00	71,808.78	0.00	0.00
Total expenditure of 1990	3,952,901.10	25,050.15	2,347,305.64	0.00	11,710.38	73,914.13	31,236.49	1,110,124.90	136,655.52	0.00	216,669.22	208.67	0.00
OVERALL SUMMARY EXPENDITURE 1991													
Expenditure 1st Quarter	2,296,925.04	742.97	665,216.70	1,096.08	5,446.72	0.00	4,523.62	1,503,665.07	50,181.41	0.00	45,769.19	5.54	20,277.74
Expenditure 2nd Quarter	1,825,649.59	0.00	544,992.55	1,865.46	0.00	0.00	1,776.48	1,087,038.27	47,531.01	0.00	124,936.88	4,916.18	12,592.76
Expenditure 3rd Quarter	1,794,240.34	10,732.92	490,050.87	0.00	0.00	0.00	0.00	1,137,196.87	30,849.62	0.00	104,633.81	0.00	20,776.25
Expenditure 4th Quarter	1,347,974.44	2,910.73	626,691.74	0.00	0.00	0.00	0.00	488,965.19	57,385.91	0.00	147,176.54	0.00	24,853.33
Total expenditure of 1991	7,264,789.41	14,377.62	2,326,951.86	2,961.54	5,446.72	0.00	6,300.10	4,216,865.40	185,947.95	0.00	422,516.42	4,921.72	78,500.08
TOTAL TODATE (31.12.1991)	11,217,690.51	39,427.77	4,674,257.50	2,961.54	17,157.10	73,914.13	37,536.59	5,326,990.30	322,603.47	0.00	639,185.64	5,130.39	78,500.08

Expenditure to 31st December
1991, FINNIDA codes

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 Rev:17.1.92

BREAKDOWN OF EXPENDITURE FROM THE BEGINING OF THE PROJECT UNTIL 31.12.1991

PROJECT CODE	EXPENDITURE 1990	1991 EXPENDITURE 1ST QUARTER	1991 EXPENDITURE 2ND QUARTER	1991 EXPENDITURE 3ND QUARTER	1991 EXPENDITURE 4TH QUARTER	YEAR TOTAL EXPENDITURE BY 31.12.91	PROJECT TOTAL BY 31.12.91
01 WATER SUPPLIES\ TOILETS	244000	1,404,760.74	721,424.83	563,566.75	426,098.00	3,115,850.32	3359850
04 GENERAL\OTHER	19000	24,123.16	13,891.30	404,082.99	48,714.11	490,811.56	509812
05 WORKSHOPS\STORES	42000	10,906.10	18,640.90	22,527.54	19,114.38	71,188.92	113189
06 LABORITORY	14000	18,636.83	4,989.25	313.43	14,515.75	38,455.26	52455
07 DISTRICT SUPPORT	18000	67,816.20	83,350.89	107,140.67	54,307.96	312,415.72	330416
08 DISTR DEV PLANS	14000	155.36	43,695.93	0.00	17,877.22	61,728.51	75729
09 HEALTH\SANITATION	31000	15,130.57	11,122.20	7,856.19	11,130.05	45,239.01	76239
10 HUMAN RES DEV	31000	3,504.59	13,534.56	53,754.93	13,392.96	84,187.04	115187
11 OFFICES HELSINKI	46000	7,630.28	3,197.48	9,132.42	7,025.35	26,985.53	72986
12 OFFICES NEPAL	295000	45,433.94	74,366.51	101,716.38	56,642.28	278,159.11	573159
13 VEHICLES	831000	40,100.06	301,257.94	47,549.66	63,530.96	452,438.62	1283439
14 CONTINGENCIES	0	0.00	0.00	0.00	0.00	0.00	0
15 CONSULTANTS FEE	1885000	620,531.15	479,056.31	444,314.39	573,799.40	2,117,701.25	4002701
16 OTHE CONS & STAFF COSTS	482000	38,396.06	57,121.49	32,284.99	41,826.02	169,628.56	651629
GRAND TOTAL	3,952,901.10	2,296,925.04	1,825,649.59	1,794,240.34	1,347,974.44	7,264,789.41	11,217,690.51

Expenditure to 13st December 1991, Project codes

HMG BUDGET ALLOCATION FOR FISCAL YEAR 1990/91,
INCLUDING ESTIMATED FINNIDA CONTRIBUTION

Rural Water Supply and Sanitation Project, Lumbini Zone.

Approved Budget for the Fiscal year 2047/48 (Mid 1990-Mid 1991)

<u>Budget</u> <u>Headings</u>	<u>Details</u>	<u>Total</u> <u>Rupees</u>	<u>HMG's</u> <u>Contribution</u> <u>Rupees</u>	<u>FINNIDA</u> <u>Contribution</u> <u>Rupees</u>
1.	Salary	3,50,000	3,50,000	-
2.	Allowances	25,000	25,000	-
3.	TA/DA	1,50,000	1,50,000	-
4.1	Services (Teleph, Elect & Others)	50,000	50,000	-
4.2	Services others	1,20,50,000	50,000	1,20,00,000
5.	Rent	1,20,000	1,20,000	-
6.	Repairs/Maintenance	25,000	25,000	-
7.1	Office materials	75,000	75,000	-
7.2	News papers/Books	3,000	3,000	-
7.3.1	Fuels (Petrol, Desial & others).	1,00,000	1,00,000	-
7.3.2	Fuels (Kerosine)	2,000	2,000	-
7.5.1	Office/materials	75,000	75,000	-
9.	Contingency	17,12,000	25,000	16,87,000
10.1	Furniture	1,00,000	1,00,000	-
10.2	Transportation/Vehicles	25,05,000	5,000	25,00,000
10.3	Machinery/Equipments	25,50,000	50,000	25,00,000
11.1	Land acquirement.	2,00,000	2,00,000	-
12.1	Building maintenance	10,000	10,000	-
12.2	Others construction Improvements	<u>3,73,60,000</u>	<u>60,47,000</u>	<u>3,13,13,000</u>
	Total	<u>5,74,62,000</u> =====	<u>74,62,000</u> =====	<u>5,00,00,000</u> =====

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PROJECT NAME :RURAL WATER SUPPLY AND SANITATION PROJECT
HMG/N BUDGET BREAKDOWN FOR FISCAL YEAR 048/49 (1991/92)

RUPEES IN THOUSANDS

FUND NO.	PARTICULAR	PALPA		GULMI		ARGHAKHANCHI		RUPANDEHI		KAPILBASTU		NAWALPARASI		P.T.U			PROJECT TOTAL		
		TOTAL	HMG	TOTAL	HMG	TOTAL	HMG	TOTAL	HMG	TOTAL	HMG	TOTAL	HMG	TOTAL	HMG	FINNIDA	TOTAL	HMG	FINNIDA
1	Salary	86	86	103	103	56	56	120	120	154	154	137	137	294	294		950	950	
2	Allowance	0	0	0	0	0	0	0	0	0	0	0	0	5	5		5	5	
3	TA/DA	33	33	72	72	29	29	36	36	48	48	52	52	30	30		300	300	
4.1	Service Fees	0	0	0	0	10	10	0	0	0	0	10	10	45	45		65	65	
4.2	Service Other	5	5	0	0	5	5	0	0	0	0	0	0	65	65		75	75	
5	Rent	36	36	6	6	18	18	0	0	0	0	13	13	52	52		125	125	
6	Repair/maintenance	15	15	0	0	5	5	0	0	0	0	0	0	10	10		30	30	
7.1	Office Equipment	8	8	5	5	5	5	5	5	5	5	4	4	93	93		125	125	
7.2	News Paper	0	0	0	0	0	0	0	0	0	0	0	0	6	6		6	6	
7.3.1	Vehicle Fuel	20	20	10	10	10	10	0	0	0	0	0	0	85	85		125	125	
7.3.2	Fuel Others	0	0	0	0	0	0	0	0	0	0	0	0	5	5		5	5	
7.5.1	Office Other Goods	8	8	8	8	8	8	5	5	5	5	5	5	86	86		125	125	
9	Other Fund	0	0	0	0	0	0	0	0	0	0	0	0	25	25		25	25	
10.1	Furniture	0	0	10	10	10	10	0	0	10	10	10	10	60	60		100	100	
10.2	Vehicle	0	0	0	0	0	0	0	0	0	0	0	0	20	20		20	20	
10.3	Machine tools	0	0	0	0	0	0	0	0	0	0	0	0	225	225		225	225	
11.1	land Procurement	0	0	102	102	0	0	0	0	0	0	0	0	198	198		300	300	
12.1	House Construction	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	
12.2	Other Construction	174	174	408	408	107	107	722.5	722.5	660	660	341.5	341.5	23981	3981	20000	26394	6394	20000
	Grand Total	385	385	724	724	263	263	888.5	888.5	882	882	572.5	572.5	25285	5285	20000	29000	9000	20000

Translated from Nepali

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DATE 16.1.1992

RURAL WATER SUPPLY AND SANITATION PROJECT
HMG/N EXPENDITURE FROM THE BEGINNING TO 16.11.1991
Expenditure in Rupees (Nepalese)

Nepalese Fiscal Year		.46/47	.47/48	47/48	47/48	.47/48	.48/49	PROJECT
		.1989/90	1990/91	1990/91	1990/91	1990/91	1992/93	TOTAL
Budget	Details	YEAR				YEAR		TOTAL
Heading		TOTAL	1ST THIRD	2ND THIRD	3RD THIRD	TOTAL	1ST THIRD	TODATE
1	Salary	0.00	7,502.00	28,429.81	130,023.94	165,955.75	93,258.00	259,213.75
2	Allowance	0.00	0.00	0.00	0.00	0.00	500.00	500.00
3	TA/DA	4,521.20	2,364.30	39,741.15	81,565.85	123,671.30	23,142.25	151,334.75
4.1	Service Fees	0.00	0.00	510.00	22,791.12	23,301.12	630.00	23,931.12
4.2	Service Other	10,000.00	0.00	35,794.00	14,164.50	49,958.50	17,630.00	77,588.50
5	Rent	0.00	0.00	0.00	28,550.00	28,550.00	3,900.00	32,450.00
6	Repair/maintenance	0.00	0.00	0.00	24,449.00	24,449.00	0.00	24,449.00
7.1	Office Equipment	19,999.50	0.00	35,529.50	39,382.00	74,911.50	9,316.00	104,227.00
7.2	News Paper	1,330.00	0.00	249.00	8,697.72	8,946.72	0.00	10,276.72
7.3.1	Vehicle Fuel	88.30	0.00	100.75	20,971.80	21,072.55	15,870.83	37,031.68
7.3.2	Fuel Others	107.00	0.00	580.00	1,417.00	1,997.00	160.00	2,264.00
7.5.1	Office Other Goods	19,992.77	7,691.50	25,610.30	41,692.20	74,994.00	1,470.00	96,456.77
9	Cntingencies	597.00	0.00	896.00	2,384.00	3,280.00	598.00	4,475.00
10.1	Furniture	99,516.50	0.00	71,600.00	28,385.00	99,985.00	0.00	199,501.50
10.2	Vehicle	6,000.00	0.00	4,980.00	0.00	4,980.00	0.00	10,980.00
10.3	Machine tools	49,786.00	0.00	10,063.00	39,825.00	49,888.00	0.00	99,674.00
11.1	Land Procurement	0.00	0.00	0.00	200,000.00	200,000.00	0.00	200,000.00
12.1	House Const+Rehab	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.2	Other Construction	0.00	0.00	116,051.00	4,929,407.58	5,045,458.58	8,295.00	5,053,753.58
Grand Total		211,938.27	17,557.80	370,134.51	5,613,706.71	6,001,399.02	174,770.08	6,388,107.37

RWSSP 16.02.1992/TA

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**LIST OF GUIDELINES, MANUALS, CURRICULA AND
OTHER PAPERS PREPARED BY THE PROJECT**

1. Testing of bacteriological quality of drinking water. Manual for laboratory personnel. Auli Keinanen. Revised February 1991.
2. Review on well technology in Saljhandi, Rupandehi. J.L. Shrestha August 5, 1990.
3. Guidelines for environmental impact assessment. Second Draft. T. Arola. October 1991.
4. Ground Water Resources Study in Kapilbastu, Nawalparasi and Rupandehi Districts. CEMAT Consultants (Pvt.) Ltd. April 1991.
5. Community Health Volunteers' Curricula, in English and Nepali.
6. Health Post based Parameds' Curricula. 1990.
7. Village Health Worker's Curricula. 1990.
8. School Teachers' Curricula. 1990.
9. Training Report Format. 1990.
10. Health Behaviour Research Outlines. 1990.
11. Health Behaviour Report. 1990.
12. Village Concept of Health and Safe Water. 1990.
13. Food Behaviour. 1990.
14. Health Post Assessment Observation Records. 1990.
15. School Assessment Record. 1990.
16. Research Methods and Techniques. 1990.
17. Curricula for Oversees and Technicians. 1990.
18. Training Programme for the Users' Committee training. 1990.
19. Training Programme for Village Maintenance Workers. 1990.

20. Evaluation and Present Status of Project Developments in Regard to the Utilization of Ground Water Technology in the Northern Parts of the Terai. December 1990.
21. Instructions and Formats for Undertaking Feasibility Study. December 1990.
22. Training programme for Ground Water Training.
23. Handouts for Community Health volunteers.
24. Health and Sanitation Aspect of the RWSSP: A positive step towards continuity and integration into the main stream government. Vijaya L. Shrestha a paper presented at WEDC conference, Hyderabad, 27-31 August 1990.
25. Rapid Assessment Procedures in the Context of RWSSP Programme. Vijaya L. Shrestha, a paper presented at International Conference on Rapid Assessment Methodologies for Planning of Health Related Programmes Nov. 12-15,1990. Washington, D.C.
26. Survey, planning and implementation procedure of a water supply scheme. 1990.
27. Training Report on Community Participation Training and Workshop in July 1991.