

304  
182 572



-----

8



304-3212

Via D. de Song

# Training field workers in rural sanitation

Lorna Clarke

**This is a report of a unique Pakistani training course for village-level workers in how to construct—and, more important, how to motivate village communities to construct for themselves—low-cost soakpit latrines. The training also covered bio-gas systems and simple water storage and filtration. These field workers were the first of a new category of Water and Sanitation Promotors. The course was held in Mirpur (Azad Jammu and Kashmir) from September 1 to December 28, 1981.**

In organizing any kind of activity the planner must have very clear-cut, easily comprehensible and convincing ideas of what must be accomplished and how—for his own use and for those to whom he might wish to “sell” his plan

Those who conceived and implemented the Water and Sanitation Promotors Training Course acted on these principles. Though initially the framework might have been shaky and incomplete, it formed a base for building and improving. The present documentation outlines the process. It presents questions one wants to ask oneself or others when seated at the drawing board, at a loss as to how to make a start. While parts are specific to Pakistan, there is much with worldwide application and significance. We hope it will not only inform and educate, but also motivate other planners and decisions-makers to take a step in bringing cheap but effective water and sanitation facilities and practices to rural people in their part of the world

UNICEF Pakistan

LIBRARY ~~1309~~  
International Reference Centre  
for Community Water Supply

LIBRARY, INTERNATIONAL REFERENCE CENTRE FOR COMMUNITY WATER SUPPLY AND SANITATION P.O. BOX 9570, 2300 AD The Hague Tel: (070) 814511 ext. 141/142 RN: <del>04309</del> bh 3212 LO: 304 82TR
---

## Contents

1.	Why?	4
2.	What kind?	4
3.	How?	5
4.	Who?	5
5.	When?	9
6.	Where?	10
7.	How much?	11
8.	How was it?	12
9.	What else?	27
10.	What next?	29
11.	Conclusion	30

## THE LOTA



Whether in burnished copper, intricately worked, as shown above, or in plain, serviceable plastic or earthenware, the Lota is considered the symbol of hygiene and cleanliness in Pakistan. Widely used by both urban and rural population, it is a multi-purpose water container for religious ablutions, bathing, cleaning after defecation and washing hands.

In fact, it appears in every Mosque and every home. For the water and sanitation course it became their logo, appearing in light silhouette against the certificate presented to promoters as a symbol of their achievement in their fight for hygiene and cleanliness.

Moreover, the latrine designed for this course functions closely with the use of the Lota. The water it contains is used both for cleaning and flushing; one Lota of water is sufficient to evacuate the hand flush pan, which in honour of its "partner" has been called the LOTA LATRINE.

## 1. WHY

Pakistan has a basic problem in providing safe, adequate water supplies and proper sanitation and facilities, due in part to lack of public and government awareness and interest. This is reflected in a lack of trained personnel in these aspects, especially at the low and middle levels

As part of its International Water Supply and Sanitation Decade activities in Pakistan, UNICEF, as a necessary and initial step to future programmes undertook a course to prepare qualified field staff from all the concerned implementing agencies for UNICEF-assisted water projects.



*Large waste water and garbage deposits pose a menace to community health.*



*Sodden village streets are not only problematic for vehicular and pedestrian traffic, but a health hazard as well.*

## 2. WHAT KIND

In order to establish this cadre of low to middle level field workers, the course had to be

- a) relevant to Pakistan's particular situation and
- b) use local personnel, institutions and material.

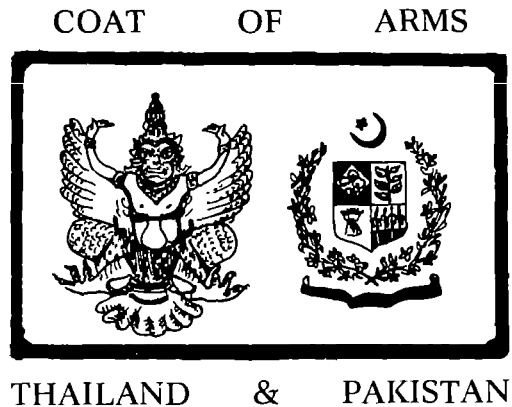
Simultaneously with theoretical teaching, practical and field training should gear the student to provide simple, concrete administrative, managerial and structural innovations and/or improvements in water and sanitation conditions and facilities, within the particular geographical area of the course

This area will consequently serve as a model, applicable to other regions/provinces, while the students with their knowledge-base will become resource persons, trainers-cum-field workers throughout the country

### 3. HOW

The initial approach in organizing the course was made through UNICEF and the Government of Punjab which had allocated the majority of the funds for the sanitation component of UNICEF's programmes in Pakistan. The government suggested a training institute and demonstration villages. The need for this particular type training was emphasized by the inability of existing education institutions to provide the required curriculum, trainers, study and living accommodation, up-to-date demonstration facilities, field practicum etc, relevant to rural areas. Further, government interest waned somewhat, and also demonstration villages were too large.

At the same time, a consultant was sought specifically someone with sound field experience. A suitable candidate was identified at the Regional Water and Sanitation workshop in Bangkok, Thailand (12-20 January 1980) and was requested on 8 months deputation from the Thai Government.



*The coat of arms of Pakistan and Thailand: symbols of inter-government co-operation*

Soon after his arrival, he undertook a survey tour of all Pakistan and gave recommendations on each province.

Based on observations made during this study the consultant was able to suggest that the Local Government and Rural Development Department (LGRDD) of Azad Jammu & Kashmir (AJK) be selected to implement this training. Some of the considerations in their favour were

— Low cost, proximity for observation and liaison between UNICEF and the field, good administrative and managerial government personnel.

— Mirpur in AJK was seen as having a “bright future for sanitation” due to keen co-operation of the LGRDD in introducing and starting sanitation programmes and activities in their villages.

A Project Document was prepared by UNICEF outlining budgets, targets, responsibilities, personnel etc.

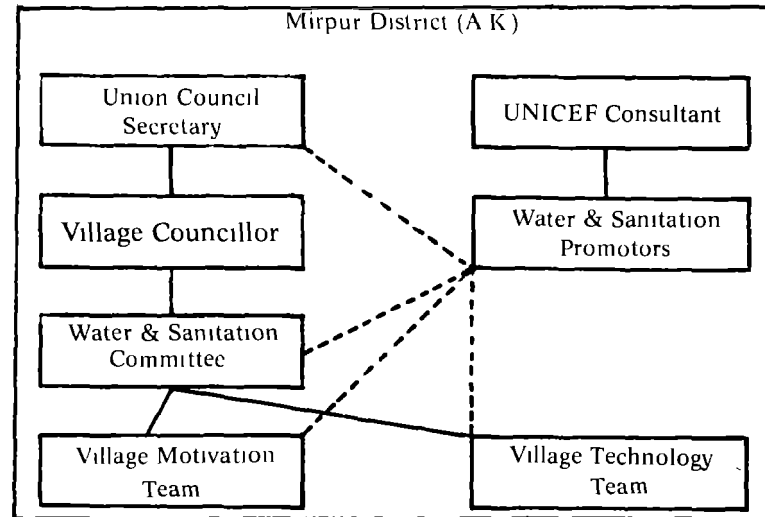
### 4. WHO

#### A. GOVERNMENT PERSONNEL:

The following agencies or departments took charge of input in the course

—For the Rural Development Department.

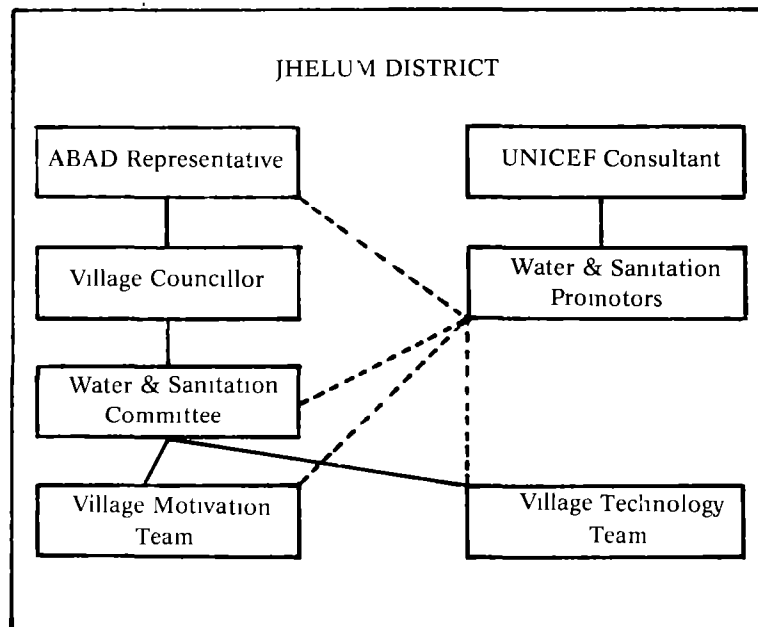
In AJK, officials such as the Programme Director and Assistant Director were designated as Project Director and Operational Director respectively. They would employ staff such as class attendant, typist, accountant, draughtsman, driver, etc, for the duration.



*Organizational chart for water and sanitation villages in AJK*

— Agency For Barani Areas Development (ABAD)

The Deputy Director (Training) ABAD would coordinate classroom and field activities and the Project Manager would arrange and coordinate field practice including construction of demonstration units in 3 villages



**B. UNICEF PERSONNEL:**

Personnel from the following sections were cooperatively responsible for UNICEF's input

— Programme Section

The four provincial (AJK and Northern Areas) programmes contributed to the cost of training and demonstration villages. Each provincial desk was responsible for the selection of students and signing an agreement with the respective governments. The Federal Programme Officer was responsible for NGO participants

— Water & Environmental Sanitation Section (WESS).

They were responsible for locating the trainer, formulating the curriculum, organizing visits, establishing contacts with sources for construction material, organizing post-training working conditions and activities for promoters

— Communication & Information Service (CIS)

The formulation, production and printing of motivational and educational posters and flip-charts, manuals, guidebooks, and certificates were the responsibility of this Section. Additionally they were responsible for translation, calligraphy, photographic charges, designers and artists for the English and Urdu versions of all materials

— Planning, Finance, Administration & Supply Section. were also actively involved in relative aspects of the course

— **Trainers:**

- 1 Mr Chit Chaiwong Trainer/Consultant, Director Health and Sanitation Department, Thailand, 25 years field experience, Masters Degree in Sanitation (USA)
- 2 Two Pakistani assistants were involved from the initial stages.

- 1 Lady Masters in Sociology (Pakistan)
- 1 Man Associate Engineer in Mechanical Technology (Pakistan)

They were responsible for the initial illustration and translation of all training books and material into Urdu and also for instruction and interpreting in Urdu during classroom and field sessions

The UNICEF Sanitarian was occasionally guest lecturer for some aspects of the course

**C. STUDENTS:**

— Originally, 50 designated staff of the concerned implementing agencies (government and NGOs) were to participate, but eventually 44 students participated. The break-down is as follows



Govt	NGOs*	Volunteers	Male	Female
30	12	2	36	8

\*Non-governmental organizations

— Qualifications/Requirements

1. Should come from Departments of Health (e.g. sanitary inspectors), Social Welfare, Rural Development (e.g. extension agents) and Local Government.
2. Should come as much as possible from places where government with support, planned to develop a sanitation project in 1982
- 3 10 years of study (matriculation)
- 4 Physically and mentally fit
- 5 20-35 years of age
- 6 From the rural areas

Lady recruits were specially requested since trained female social and technical workers are even more scarce than men

Secondly, the cultural restraints of "purdah" necessitate a cadre of lady field workers to enter the homes and communicate with and motivate the village women who are most actively concerned with providing water and sanitary conditions for their families

The majority of students were 10th grade level, 2 were diplomaed in engineering (sub-engineers) and 2 were medical technicians

Most ladies were teachers, two were volunteers and one was a lady vaccinator

MAJOR PERSONNEL FROM CONTRIBUTING PARTIES

- |                                   |  |
|-----------------------------------|--|
| 1- Rural Development Deptt (AJK): | -----District Director.  |
| 2- ABAD (PUNJAB):                 | -----Chief of ABAD.  |
| 3- UNICEF:                        | -----Sanitation Specialist.<br>Sanitation Consultant.<br>Water & Sanitation Promoters. |
| 4- Village Representative         | -----Member of Union Council.  |
| 5- Villagers                      | -----Water & Sanitation Committee.<br>Clean Team.<br>Mason Units                       |

*Each party has a responsibility and contribution to make.*



*The students—ladies in front, but together with the men is unusual for Pakistan.*



*The deft hands of a lady promotor engaged in technical construction.*



*A lady promotor learns the proper technique for mixing cement.*

– Conditions

The UNICEF Sanitarian suggested the following conditions on completion of training

Period 1 year-contract (initially)

Duties To work in the water and sanitation activities of their sponsoring agencies

Salary Rs 1,500 per annum

Other Motor cycles and cost of petrol, oil and lubricants (POL) benefits and travel allowances upto Rs 800

## 5. WHEN

The course lasted four months September to December 31, 1981, since weather conditions are most favourable at this time. The consultant decided that the first two months were to be devoted to theory and practical training and the last 2 months to apply this knowledge to setting-up demonstration villages

DURATION OF THE COURSE

SEPTEMBER 1981							OCTOBER 1981						
1	2	3	4	5	6	7	1	2	3	4	5	6	7
8	9	10	11	12	13	14	8	9	10	11	12	13	14
15	16	17	18	19	20	21	15	16	17	18	19	20	21
22	23	24	25	26	27	28	22	23	24	25	26	27	28
29	30	31					29	30	31				

CLASSROOM

Theory & practical training

SIX DEMONSTRATION VILLAGES

NOVEMBER 1981							DECEMBER 1981						
1	2	3	4	5	6	7	1	2	3	4	5	6	7
8	9	10	11	12	13	14	8	9	10	11	12	13	14
15	16	17	18	19	20	21	15	16	17	18	19	20	21
22	23	24	25	26	27	28	22	23	24	25	26	27	28
29	30						29	30	31				

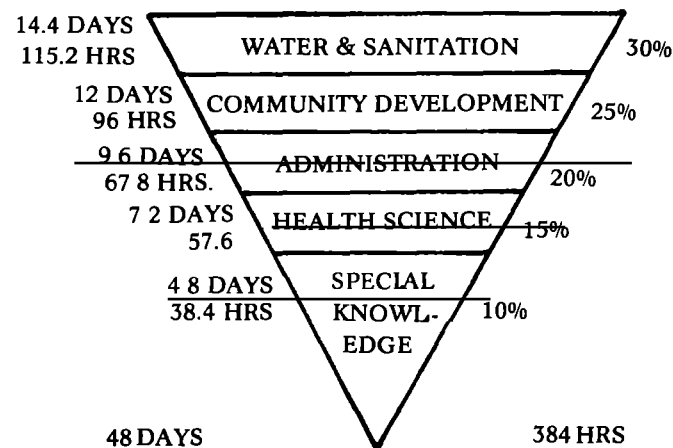
Community motivation & construction

Of the total 122 days (976 hours) 98 days were spent in actual learning or practice as outlined below

TIME DISTRIBUTION GENERAL

	DAYS	HOURS
TOTAL	122	976
Fridays and Govt Days	17	136
Course days	98	784
Lectures & Demonstration in Class	48	384
Demonstration & Practice in field	25	200
Practice & Evaluation in Field	25	200

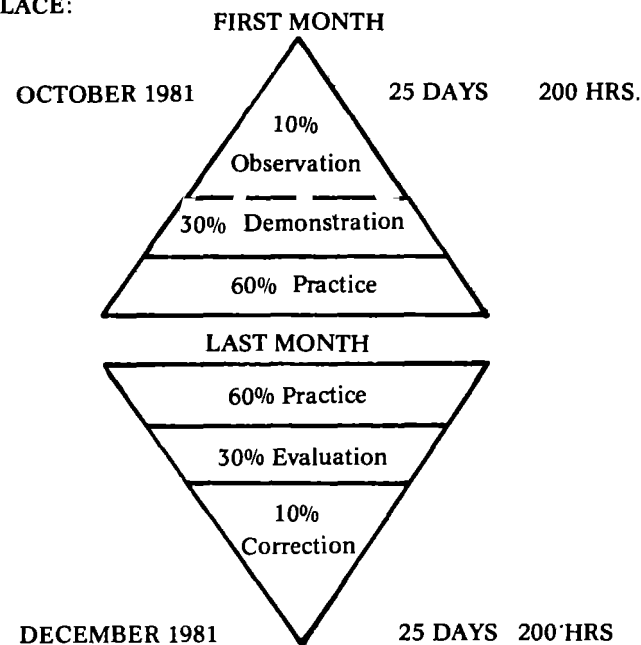
### TIME DISTRIBUTION— THEORY & PRIORITY (TIME 2 MONTHS)



### TIME DISTRIBUTION FIELD PRACTICE & STRATEGY

TIME 2 MONTHS (OCTOBER - DECEMBER 81)

PLACE:



## 6. WHERE



*Above: The scenery of Azad Jammu and Kashmir. Below: The men's hostel, Banni village, AJK*

### A. AZAD JAMMU & KASHMIR:

- Banni Village: Buildings offered free of cost by village leaders
  - 1 Living accommodation for men: 1 house separate (36)
  2. Living accommodation for women: 1 house separate (8)
  - 3 1 Teaching Centre: Classroom upstairs Mess Hall downstairs  
These were all within walking distance.
  - 4 Village homes for practical training and construction
- Niagal Village: Village homes and public places for practical training and construction

### B. PUNJAB

- Sohawa, Bakarala, Khabal and Junghal villages  
Site of demonstration/model villages with construction in homes and public places e.g. primary school, MCH Centres etc  
Students were asked to provide their own linen, blankets and lothing, while UNICEF supplied furniture, kitchen and dining-ware, etc.



## 7. HOW MUCH

The total contribution made by the 6 programming desks of UNICEF in Pakistan was

### A. TRAINING:

Rs 10,450 per student = Rs 574,500 00

### B. DEMONSTRATION VILLAGES:

The Punjab Desk contributed the following

Rs 1,062,500 00

Special guidelines were formulated for payments at all periods and to all persons involved, as well as who could disburse these funds

### BUDGET INITIAL ESTIMATED EXPENDITURE

I T E M	PAK.RS.	US \$	I T E M	PAK.RS.	US \$
			<u>B. F.</u>	<u>543,500.00</u>	<u>45,292.49</u>
- PERSONNEL	42,000.00	3,500.00	PERSONNEL	54,500.00	4,541.00
SALARIES			TRANSPORTATION	25,000.00	2,083.00
- ALLOWANCES	300,000.00	25,000.00	EQUIPMENT	4,800.00	400.00
- TRANSPORT	62,000.00	5,166.66	CONSTRUCTION	402,000.00	33,500.00
- EQUIPMENT	11,500.00	958.33	MATERIALS		
- TRAINING & DEMONSTRATION	124,500.00	10,375.00	LEADERSHIP	6,000.00	500.00
MATERIALS			STUDY TOUR		
- MOTIVATION & TECHNOLOGY TEAMS	3,500.00	292.50	MANUALS, & GUIDE BOOKS	188,000.00	15,668.00
MATERIALS					
			TOTAL:	680,300.00	56,690.00
T O T A L	543,500.00	45,292.00	G/TOTAL:	1,223,800.00	112,982.82

## 8. HOW WAS IT

The running of the course

### A. TARGETS:

- To produce qualified water and sanitation promoters
- Promoters will learn methods of improving drinking water and methods of human excreta and waste water disposal, both theoretical and practical
- Promoters will, during the first two months training, learn to and construct biogas plants, latrines, filters and cisterns
- Promoters will learn to organize, through social involvement, village committees for work in the 6 demonstration villages: Water and Sanitation Committee, CLEAN Team and Village Mason Team
- During the demonstration/construction period, promoters in each of the 6 villages were assigned to construct in public places and private homes.
  - 100 household latrines, (handflush type)
  - 10 household water filters
  - 2 Sanitary Wells.
  - 4 Biogas tanks.
  - 2 small-scale school water and sanitation systems
  - 3 rain water cisterns.
- In each of the 6 villages they should also set up Water and Sanitation Committees of 5 members each.
  - 5 Committees
- organize and train 5 motivator learn per village
  - 30 CLEAN teams
- organize and train village sanitation technicians: (Mason Units)
  - 30 Mason Units

### B. THE CURRICULUM:

The original curriculum was drafted by the teaching staff of the College of Community Medicine, Lahore (Pakistan) and reflected their years of experience and expertise. Some changes in terms of study hours and emphasis were made by the consultant to make it more relevant to the field and rural orientation of the programme. The subjects in order of presentation were:

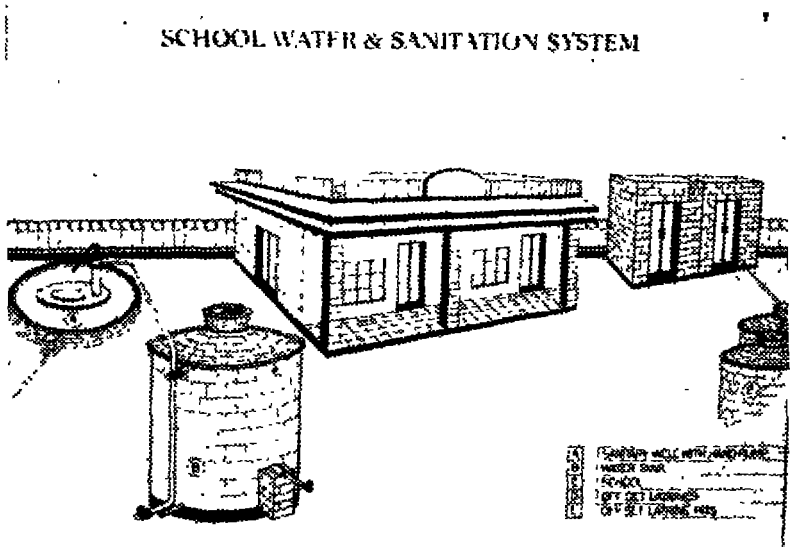
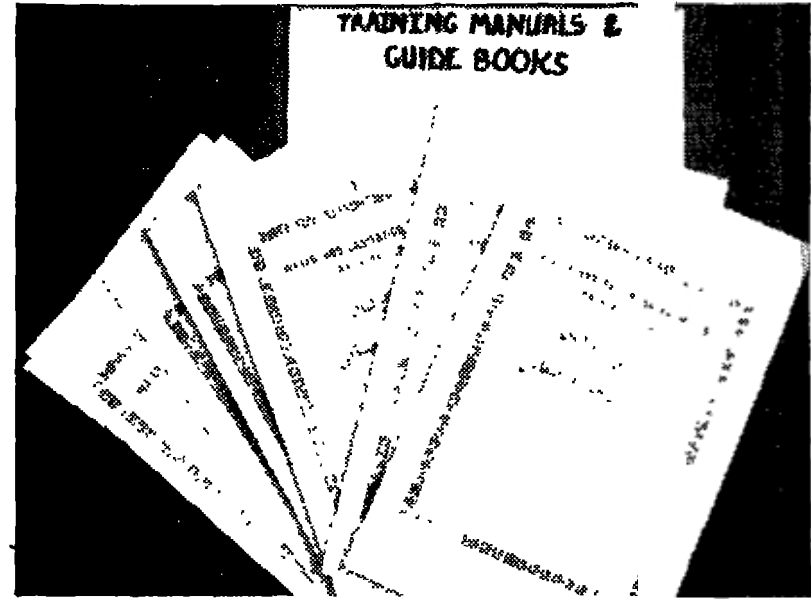
- 1 Pakistan Sanitation
2. Housing Sanitation
- 3 Water Sanitation
- 4 Excreta Sanitation
- 5 Food Sanitation
- 6 Refuse & Sewerage Sanitation
- 7 Pakistan Community Development (General)
- 8 How to choose the community
- 9 Mass approach (formal & informal)
- 10 Individual Approach
11. Choosing the Committee and Volunteer team, students, volunteers, masons
- 12 Administration principles for promoters
- 13 Pakistan Rural Development Administration & Organization
- 14 Promoters role in his/her organization (written communication).
- 15 Promoters relations with official & private sector
- 16 Promoters experience in planning implementation, evaluation
- 17 Promoters experience in organizing training supervising
- 18 Water & foodborne diseases and their control
- 19 Microbes & Cleanliness
- 20 Community mason & volunteer training
- 21 Health education in conversation, meeting & public speaking
- 22 Masonry work & plumbing.
- 23 Mapping, survey, simple statistics.

### C. THE MATERIALS

– Theoretical teaching material comprised a packet of photo-copied passages from the following texts, translated into Urdu, typed and bound and distributed to each student.

- 1- Community Development in Thailand.
- 2- Health Science for tropical countries.
- 3- 14 guidebooks.

Visual material such as charts were produced by the students themselves during the course



*The original texts served as basis. for photocopied—and later, printed—teaching materials*

#### **D. A DAY IN THE LIFE OF THE PROMOTORS (Sept-October, 1981)**

0600-0800 hours

Personal preparation and communal breakfast

0800-0830 hours

Class begins Ladies sit in front Recitation from Holy Quran in Arabic Message of the day translated into Urdu then into English for the benefit of the consultant Consultant then links the message of God with Sanitation

0830-0845 hours

Song about community assistance 'Help Them'.

0845-1000 hours

Actual lecture on subjects from the curriculum by consultant Notes taken The assistants then translate into Urdu and explain with the aid of charts

1000-1030 hours

Questions on lectures by students

1045-1130 hours

The assistants review the lecture of the previous day, students finalise notes then on this lecture

1130-1200 hours

Each promotor takes a turn to review the previous lecture at the blackboard before the class

1200-1300 hours

Lunch

1300-1500 hours

Class divided into 6 groups with at least one lady in each, for group discussions on parts of the lecture

1500-1515 hours

Tea



*Assistants leading revision of the lesson in Urdu.*



*Students listen keenly and take notes on the topic for the day.*





*Group discussion on the lawns outside the classroom.*

1515 hours

The six groups have a practical assignment, e.g. to construct latrines in Banni village. For the months of September and October each group took a turn at one aspect of construction so that each group, as it rotated, gained proficiency in all aspects. Competition was strong between groups so they worked until late in the evenings to complete their tasks to their satisfaction.

#### **E. WORKING IN THE COMMUNITY:**

The key is planning ahead. The promotor must first outline his targets and realistically analyse the possibility of their being achieved. Then he must select and train village workers to assist him before choosing the village. Choice of village is based on criteria such as centrality, compactness, strong leadership, etc. Once this suitability is established then he must get to know the village informally—who are the leaders, number of households, problems, etc. A formal survey is the next step—house to house interviewing to assess needs and conditions.



*A lady promotor approaches the community individually.*

Having obtained his baseline data the promotor then undertakes the individual approach—informing villagers individually of his programme. Each person can receive personalized attention and explanations, plus it facilitates good human relations and cements social bonds. Next he launches the mass approach—consolidating his message using films, demonstrations or other techniques to inform, educate and motivate.



*The latrine pan holds the place of honour. At a mass meeting, a promotor explains its features to leaders, villagers and school children.*

Now the community is enthusiastic he can proceed to forming village committees who will supervise various activities of the programme with the aid of sub-committees, etc. These are the adults, but an important, influential sector of the community remains—the children—especially those at primary school level. Junior Motivation Teams like the CLEAN team are marked by their badges and jackets of office. But each school child has a chance to participate and feel involved. They are indispensable to influencing parents and are fertile ground for the “seed” of development to fall upon.



*Working with the Junior Motivation Team.*



*A lady promotor looks proudly at her charges as they sing the water and sanitation theme song at a mass meeting.*

## F. COSTS

### —LATRINE

- 1 4'x5'x6' (House & Pit)  
Materials Rs 1,629 00  
Labour 850 00  
TOTAL 2,479 00

- 2 4'x5'x6' and 4'x5'x6'  
(Latrine house with Bathroom(includes soakage pit)  
Materials Rs 2,276 00  
Labour 440 00  
TOTAL 2,716 00

- 3 4'x6'x6'  
(Latrine house with Bathroom-includes soakage pit)  
Materials Rs 1,648 00  
Labour 440 00  
TOTAL 2,088 00

- 4 4'x6'x6'  
Circular latrine house with bathroom (includes soakage pit)  
Materials Rs 1,900 00  
Labour 880 00  
TOTAL 2,780 00

- BIOGAS PLANT (with stove)  
Materials Rs 4,795 00  
Labour 1,200 00  
TOTAL 5,995 00

### —SANITARY WELL

- Materials Rs 1,308 00  
Labour 770 00  
TOTAL 2,078 00

### —SCHOOL WATER SUPPLY TANK

- Materials Rs 4,922 00  
Labour 770 00  
TOTAL 5,692 00

### —WATER FILTER

- TOTAL Rs 169 00

### —CISTERN

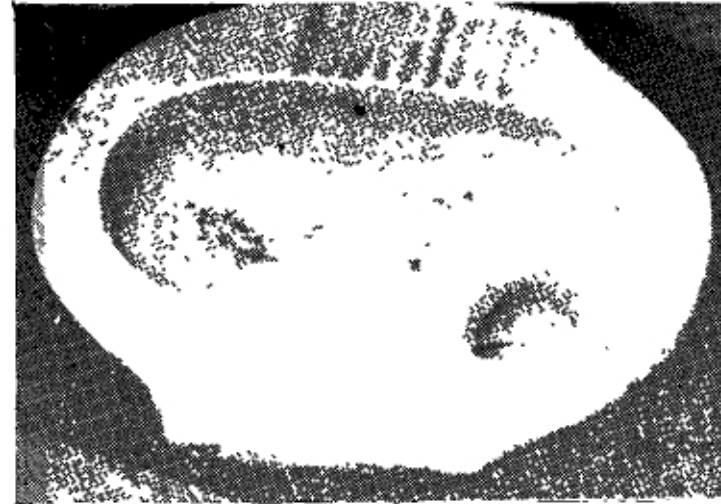
- Materials Rs 4,037 00  
Labour 770 00  
TOTAL 4,807 00

### —SCHOOL SANITATION SYSTEM

- 1 4'x6'x6' (Latrine Rs 2,088 00  
house with bathroom + soakage pit)  
2 Sanitary well 2,078 00  
3 Water tank 5,692 00  
4 Water filter 169 00  
TOTAL 10,027 00

## ACHIEVEMENTS

Name of village	Latrine	Biogas	Cistern	Sanitary Well	Filter	School Sanitation
Banni	105	3	-	1	6	2
Niagal	95	1	-	1	-	1
Bakarala	80	5	3	-	10	-
Sohawa	27	4	-	-	-	-
Khabal	42	9	3	1	10	2
Junghal	85	4	3	1	10	2
<b>TOTAL</b>	<b>434</b>	<b>26</b>	<b>6</b>	<b>3</b>	<b>36</b>	<b>7</b>



*Close-up of the ceramic pan of the "lota latrine".*

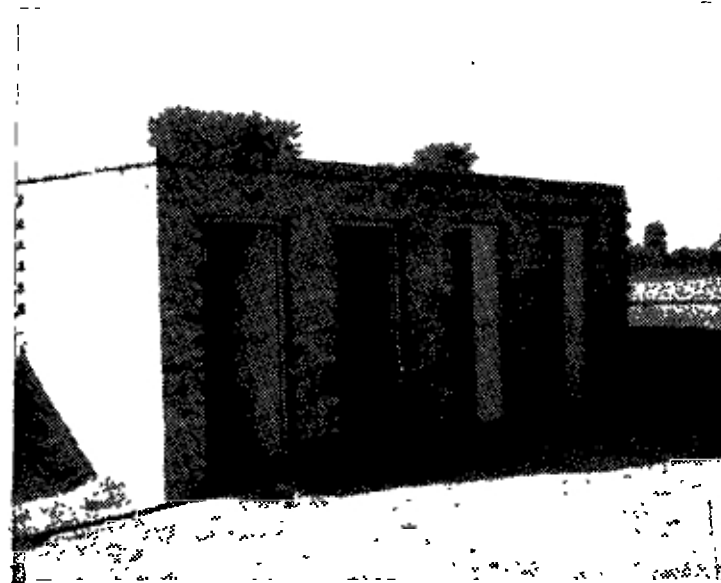
### -LATRINE

Type Offset Direct or Two Pit Latrine (with privy & bathroom)

Dimensions. 4',5'6' - 4' width  
5' length  
6' height

Components One privy with metal door  
One (or two) underground soakage pits 5',6' — 5' diameter 6' depth  
One handflush pan (for squatting position)

Functioning The handflush pan can be evacuated using one lota of water. The bowl of the latrine retains water which seals off bad smells and insects. Evacuated excreta can go to one of three types of soakage pits. a) a direct pit immediately below the privy house, b) an offset pit to one side of the privy connected by a cement pipe or c) a two pit model which is an offset pit with a second pit for extra soakage when soil conditions necessitate. Pits are lined with bricks and cement at the side only, the base is unlined to allow maximum seepage and soakage.

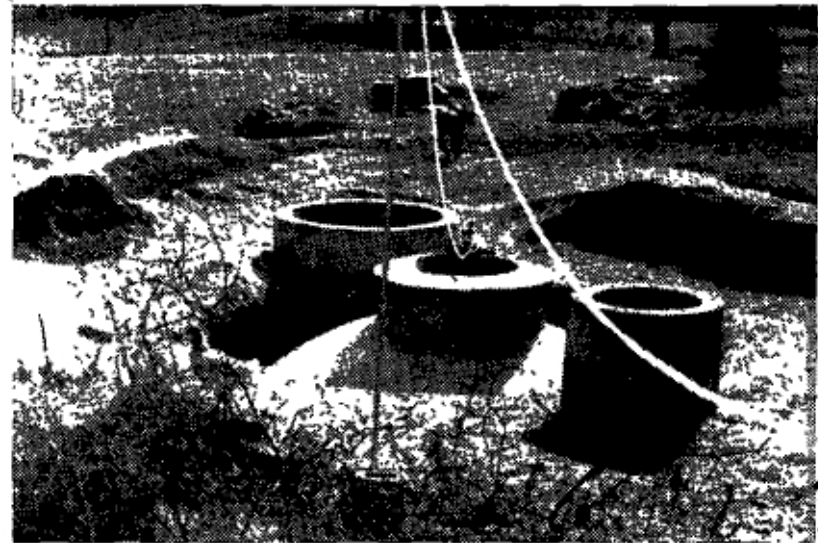


*Two sets of latrine privies with attached room for taking baths. An important feature is the strong metal door.*

## —BIOGAS PLANT

Type	Dome
Dimensions	Volume - 10 cm Diameter - 3 m Depth — 2.5 m
Components	Inlet tank Digestion tank Outlet tank Connecting gas pipe & hose

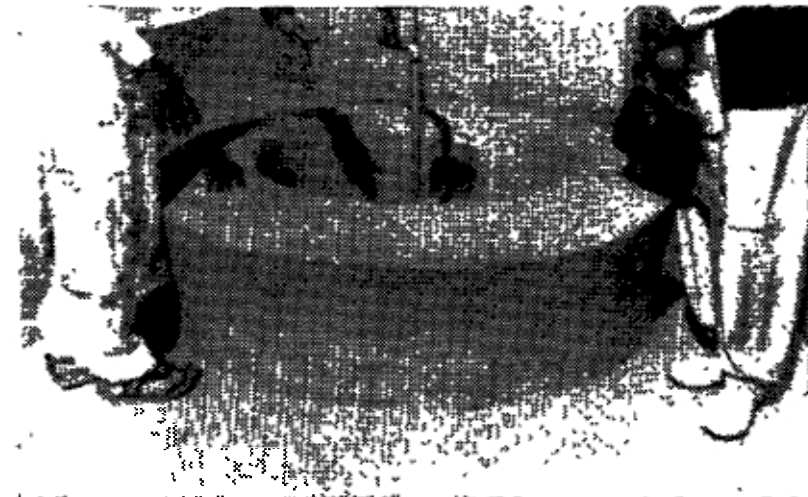
Operation A mixture of human excreta (if culturally acceptable), animal excreta and water is fed into the inlet tank, then to the air and water tight digestion tank where bacteriological decomposition produces methane gas. A pipe and hose fitted to the central tank above ground leads to the stove or other gas operated device. Excess excreta, etc. is evacuated or spilt off into the outlet tank.



*The complete bio-gas system showing inlet, digestion and outlet tanks and the connecting gas hose.*



*Interested spectators watch the construction of the impermeable brick lining for the bio-gas tank.*



*Close up of the digestion tank with outlet pipe.*



*A young village woman attends to the dung and water mixture in the inlet tank of a biogas plant at her home*



*Preparing the base of the water cistern This lady promotor is just as skilled as her male counterparts*

—CISTERN

Type	Dome
Dimensions	Height 7'-6" Diameter 7'-4"
Components	Drain pipes with 2 valves 1 collection tank 1 pipe outlet 1 overflow pipe

Functioning Water from a sloped roof enters the drain pipe One valve allows the first dirty roof water to pass off When water seems clean this valve is blocked and another opened to channel water into the collection tank A pipe at the top channels off excess water and a tap, one foot up the side allows for domestic use



*Construction continues on a water cistern the village mason and promotor work closely together*





*A complete water cistern showing the pipes which channel water from the roof of the house into the tank.*



—WATER FILTER

Type Upward Filter

Dimensions Jar size. Height 5'  
Diameter 1'

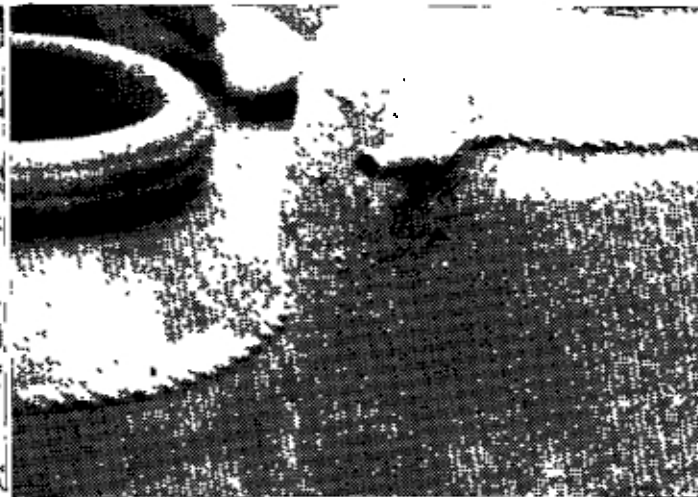
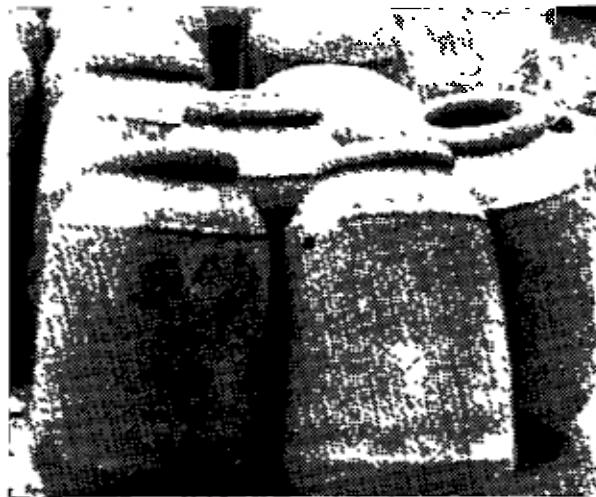
Components 5 earthenware jars fitted with covers, connection pipe attached to plastic or rubber connecting hose, one jar fitted with pipe and tap.

Earthenware bricks. sand—green bean size.

Functioning Five earthenware jars are mounted on platforms of bricks of varying heights the inlet jar is heightened and each succeeding jar is lowered, with the outlet jar (with the water tap) lowest They are fitted to each other by a connecting hose fitted to a pipe inserted into the body of the jar The first hose at the base of the first jar leads to the bottom of the second The outlet hose of the second is at the top and leads to the bottom of the third which also has its outlet hose at the top and so on Each jar is filled with sand as filtering agent As water flows through the jars, sediment etc remains deposited in each jar and increasingly pure water rises to the outlet hose at the top of each succeeding jar to be piped off through the tap on the last jar



*Transformation.  
using simple  
technology, everyday  
earthenware jars are  
converted into an  
efficient water  
filtration system*

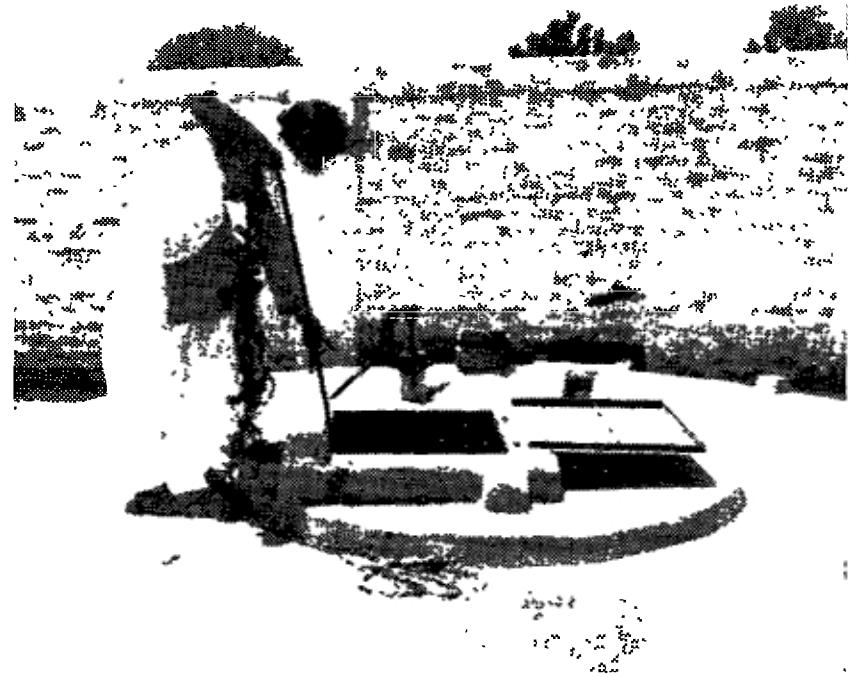




*Girls at Niaga' village school are completely satisfied with the output from their water filter*



*UNICEF visitors and AJK officials trying out the handpump for a sanitary well.*



*School girl manually draws water from a sanitary well. The handpump in the background works just as well.*

#### – SANITARY WELL

Dimensions Diameter of Manhole 4'  
 Diameter of opening 2'  
 Apron 3'8"

Components Handpump well with covered Manhole and Apron  
 1 soakage pit

Functioning This functions like any ordinary well but the apron, manhole and cover protect the well from contamination, dirt and animals and the soakage pit prevents re-entry of contaminated waste water into the well stream.

## —SCHOOL SANITATION SYSTEM

Components 4',5',6' latrine and bathroom with soakage pit  
Water tank  
Sanitary well  
Water filter

Functioning The complete sanitary system allows children to learn the use of these facilities in the school environment, encourages home use and protects the health of the child in another important area of its daily environment



*Banni village school's sanitation system, showing the latrine and soakage pit, water tank and sanitary well.*

## —COMMUNITY DEVELOPMENT

(For all six villages—five members each)

1 2 Junior Teams

- a) Boys construction team
- b) Girls construction team

2 2 Senior Teams (5 members each)

- a) Male construction team
- b) Mixed motivation team (male/female)
- c) Village Water and Sanitation Committee

Each committee and team has the designation CLEAN

C-Coordinator

L-Leader

E-Educator

A- Actor

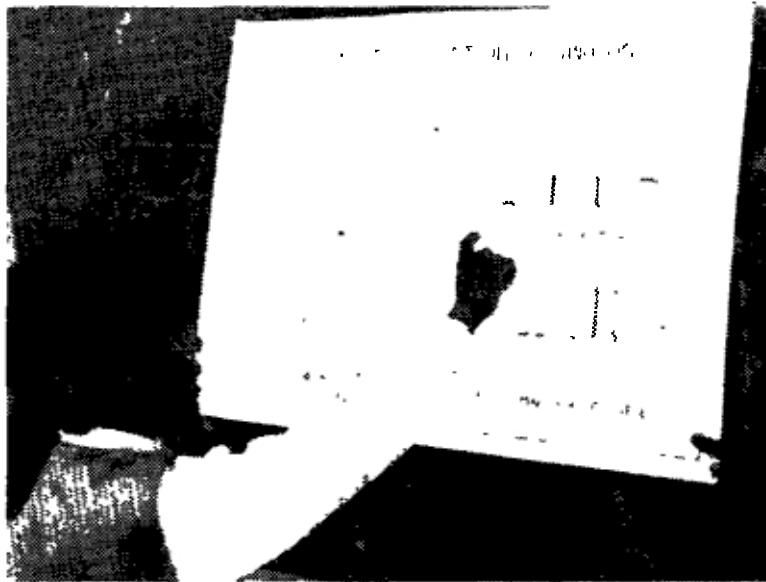
N- Noter

Members work among their peers to inform, educate and motivate towards better sanitation practices and adoption of the technologies

3 At least 24 village masons were trained for the six villages



*Village masons being trained and supervised by promoters...and children?*



*A member of a Junior Motivation Team learns about water and sanitation technology*



*Wearing their blue vests of office, the Village Water and Sanitation Committee pose proudly with the consultant and promoters*

## 9. WHAT ELSE

Among the outstanding aspects of the course were its:

### A. INTEGRATED APPROACH TO TRAINING

Rather than concentrating only on construction techniques, its multidisciplinary approach served to equip the promoters to effectively work in, and motivate rural communities, with a simple but sound comprehension of

- Community participation
- Management and Administration
- Human Communication principles
- Sociology and Human Psychology
- Mapping, surveying, data collection



*Survey in progress. these two lady promoters confidently approach the men in the village to gather the information for assessing village needs*

## B. THE VISITS AND CEREMONIES

From the commencement to the termination of the course—were not mere formalities but designed to play an effective part in communication

- Focussed attention of important dignitaries, the press and the community on the work being done
- Served to arouse interest of other communities and other donor agencies
- Helped other UNICEF staff and NGOs to understand and gain ideas for other programmes in the deployment of the promoters on completion of the course
- Comments from visitors were part of evaluation, in-course restructuring and future planning
- Helped reinforce the interest, pride and self-esteem of the students, trainers and community in the work they were doing. The comments in the visitors book for each village were treasured by the promoters



*The visiting Thai ambassador listens intently as members of the Junior Motivation Team explain aspects of water and sanitation technology*



*This . Mr Ambassador . is how the diesel pump operates for the sanitary well*

## C. VISUAL DOCUMENTATION:

A very useful system of documentation—using slides, artwork and photographs—evolved during the course

- Artwork - an artist was employed for 2 months during the course to work in the field and observe and draw technical aspects of construction according to the specifications relevant to the Pakistan situation.

This art work would be used in the new, revised course manual and flipcharts for use by the promoters and for future courses

- Lesson material was revised and re-translated so that it would be more accurate, efficient and useful

- Slides and photographs were used to document construction techniques, class-room experience, visits, ceremonies and the finished construction achieved by the promoters

## D. EVALUATION:

Evaluation was another important aspect of this course. Visitors from UNICEF, the participating NGOs, external government and non-governmental personnel, foreign dignitaries and local community leaders visited, made criticisms, comments and recommendations some of which were immediately applicable, others could be implemented in the future. The students themselves were asked to rate various aspects of the course including lectures, methods, personal relations with other students, villagers and government officials, field practice etc. 70% of the students claimed improvement in their knowledge and experience in sanitation management and community development



## E. THE CLOSING CEREMONY:

This was an imposing and touching ceremony at which the President of Azad Kashmir and the UNICEF Representative officiated. Other UNICEF and government officials were present, including those directly concerned with the planning and implementation of the course. The teachers, relatives of the promoters, union council and village leaders, villagers and school children shared the moment of glory with the promoters as they received their certificates and listened to the project report and speeches in praise of their accomplishments.



GOVERNMENT OF AZAD JAMMU AND KASHMIR



### WATER AND SANITATION PROMOTORS TRAINING COURSE

This is to certify that Mr /Miss/Mrs. \_\_\_\_\_  
son/daughter of \_\_\_\_\_  
from \_\_\_\_\_  
has successfully completed the WATER AND SANITATION PROMOTORS TRAINING COURSE held at Mirpur, Azad Jammu and Kashmir with technical co-operation and financial support of United Nations Children's Fund (UNICEF) from 1st September to 28 December, 1981.

MUHAMMAD SIDDIQUE KHAN,  
Project Director,  
Water and Sanitation Promoters Course,  
Mirpur

CHIT GERING  
Sanitation Consultant  
UNICEF

RAJA ABDUL KHALIQ KHAN,  
Secretary  
Local Government and Rural  
Development Department,  
Government of Azad Jammu  
and Kashmir

*The closing ceremony certificate bears a superimposed picture of the lota, the crests of UNICEF and the Government of AJK, and is signed by representatives of both parties.*



*A promotor proudly receives his certificate from the President of AJK.*

## 10. WHAT NEXT

### A. SHORT TERM

- In the early part of January 1982 all promoters returned to their respective provinces and agencies to begin water and sanitation activities
- Upto April 1982 only the promoters in NWFP were already actively engaged in such activities. Promoters in Punjab and Sind began activities in that month.
- Monitoring and follow-up of the work in the 6 demonstration villages started during the training course, began in January in the Punjab and was executed by the two training assistants of the consultant. A specially designed monitoring and evaluation form has been formulated for this purpose.
- Reports and evaluations by the consultant and some students have been prepared
- Carefully designed motivational and educational material, incorporating texts, charts, manuals etc. from the course, revised and improved by the artist, and using the Pakistani specifications, has been produced. These include

LIBRARY  
International Reference Centre  
for Community Water Supply

# BIOGAS

Type	CHINA
Volume	10 Cu M
Gas Capacity	225 Lit/day
Cow Dung	15-20 Lit (Fresh) daily
Design for	One family (6 members)
Date of Operation	-----

Village	-----
Owner of House	-----
Province/Distt	-----

## I INLET (Cow Dung Filling)

Date of visit/OBSERVATIONS

- 1 How much cow dung fills daily?
- 2 How much water mix with dung?
- 3 Which type of water they use?
- 4 How many times daily, fills the cow dung?
- 5 Who do this job?
- 6 Is the Latrine connected with Biogas tank?
- 7 Who uses the latrine?
- 8 Is Lota in the latrine?
- 9 Is water bucket in the latrine?
- 10 Is excreta still around the house?

## II GAS

- 11 Gas is being used for
  - i) Cooking
  - ii) Light
- 12 Gas is used for how many hours?
- 13 Is gas pressure sufficient for cooking?
- 14 Is there any smell of gas in the house?
- 15 Are they satisfied with Biogas working?
- 16 Is there any leakage of Gas?
- 17 Is there any leakage of liquid from tank?
- 18 Which type of stove they use?
- 19 Which type of pipe, for Gas, they use?
- 20 Which type of accessories they use?
- 21 Is there any defect in Biogas?

## III OUTLET (Fertilizer)

- 22 Who collects the fertilizer?
- 23 How many time in a week take the fertilizer?
- 24 Where do you put this fertilizer?
- 25 How do you collect the fertilizer?
- 26 Is there any smell of fertilizer?
- 27 Are the inlet and outlet covered?

1—1 Manuals for training (community organization & sanitation)

2— 6 guide books 3 Technology

3 Community Development

3— Educational material

a 3 flipcharts (technical)

b Posters

4— Motivational material

a 1 flipchart

b 3 Posters

A package containing the above mentioned amounts of the above material will be distributed to each promotor for use in educational motivation and construction activities for water and sanitation. One thousand copies each have been printed.

## B LONG TERM

— Refresher courses for the 44 promotors trained in Mirpur are planned on a yearly basis

— Future courses are planned some to be organized and undertaken by the original promotors, other by UNICEF

— The present documentation, as well as a slide and sound set will be presented at a Workshop on Community education and participation in Water and Sanitation, to be held in Pakistan in November

These are also designed for use in other provinces of Pakistan as well as in other countries, and will be translated into Urdu

— Promotors in general have been given contracts with their respective agencies prevailing salary rates for their provinces. Other benefits include travelling, special allowances, motor bikes etc, again according to prevailing conditions in their respective provinces or agencies

# 11. CONCLUSION

Much has been achieved in a short time. On the global scale it appears not to be much but in a country where the mortality rate of infants is estimated at 105 and sometimes even as high as 170 per thousand\*, it is a major initiative. For urban populations where a mere 14% has access to potable, safe water and a negligible amount to sanitation facilities, it is an unprecedented blessing.

\*105 per thousand is the estimated child mortality rate given by the Federal Planning and Development Division while the Pakistan Paediatrics Association estimate is 170 per thousand

Constant inputs in terms of financial aid and motivation are needed, backed by a firm commitment as voiced in the theme song of the Mirpur Training Course (see inside back cover)



President AJ&K,  
Brig Muhammad Hayat Khan



Raja Zafar Ali Khan  
Assistant Director  
Local Govt, & Rural Development  
Mirpur – Azad Kashmir



UNICEF, Pakistan has launched a multifaceted programme for the welfare of children. In Azad Kashmir various development projects relating to the Education, Health and Social coverage have been successfully completed with the technical and financial assistance of UNICEF. I was particularly impressed by the training course, the syllabus and results achieved are highly commendable, a valuable endeavour which not only benefitted the trainees but Government, its functionaries and the rural community. It is indeed a significant break-through in a social sector which remained neglected in this country in the past. I believe that with this motivational collaboration we shall be able to generate a healthy community outlook.

The course was very useful and it attracted community support in a short period. I feel if it is spread among villages, it will receive a positive response and meet success.

Malik Muhammad Amir  
Councillor, Khabal Village

I went house to house to motivate people about sanitation programme. With UNICEF's hard work and my efforts we built 9 biogas plants and 42 latrines in a short time. Now our village is very neat and clean.



Mr M Siddique Khan  
Project Director  
Water and Sanitation Training Course



Miss Tasnim Zia  
Promotor  
Azad Jammu and Kashmir



This course—the first of its kind ever held in this country—was a great breakthrough in the social sector which is too often neglected in developing countries. UNICEF Pakistan deserves thanks and heartfelt gratitude from the rural community especially future generations. The course had useful and interesting approaches and objectives and my colleagues and I benefitted greatly.

I joined the course as a Promotor and completed the four months training. I felt it an interesting and beneficial programme. At present I am serving as promotor. I think if this programme is extended among the village population, it will be very useful.

Mr Mohammad Yaqoob  
Promotor – Attock



This was a very useful course for the under-developed villages, where villagers' total ignorance about Sanitation contributes to the outbreak of various diseases UNICEF and Government are taking measures to overcome these diseases and villagers are pleased with the course as it is good and beneficial



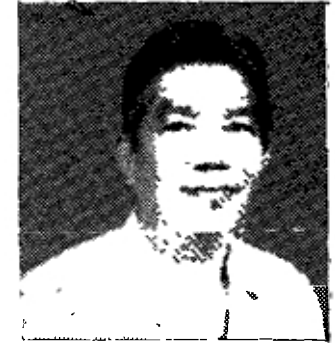
Mr Aftab Ahmad & Ms Mahmooda Jilani  
Assistant Trainers/Promoters  
Water and Sanitation Promoters Training Course



Our simple Pakistani villagers are not acquainted with the machinery of sanitation. Whenever we use the word "Sanitation" they think only about drainage systems In this course, the Promoters were introduced to disposal of human excreta, animal wastes and waste water. In six villages we have already implemented simple sanitation technology, easily adopted by Pakistanis. We hope the same conditions will prevail in other villages where the Promoters will work and try to change existing conditions.



Miss Margarita Cardenas  
Sanitarian  
UNICEF Pakistan



Mr Chit Chaiwong  
Consultant/Trainer  
Water and Sanitation  
Promoters Training Course

Our hope is for a successful Water and Sanitation Decade (1981-1990) for the benefit of Pakistan's children We are very happy that we have succeeded with the Course, where the students learnt how to work—involving the community, motivating and educating the people in water and sanitation projects We need more Promoters in Pakistan, the more we have, the less problems children will have to face.

Dr Ramon A D. Hermano  
Representative  
UNICEF – Pakistan



UNICEF is indeed privileged to collaborate with the Governments of Pakistan and Azad Jammu & Kashmir, and the Provincial Government of Punjab in this effort to assist the rural communities in improving the situation of children and women The provision of a consultant from the Royal Thai Government is appreciated

## **Help them**

Help them, help them, help them  
Begin with what they know  
Build on with what they have  
Go and serve for our people  
Plan with them, work with them  
Love them, love them, love them

## **Planning**

Planning is our life  
We apply for everyday  
We all know it pays  
No-one delay, no-one hesitate  
Plan, plan, plan, plan, plan, plan,  
Plan, plan, plan, plan, plan, plan,  
All we do and say  
Come from A B C D E F  
A B C D E F  
A B C D E F  
Be brave, be bright, we'll have success  
Be brave, be bright, we'll have happiness

