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FINAL REPORT

INTERIM REVIEW OF
RURAL SANITATION PROJECT
(SUB-PROJECT V) IN UTTAR PRADESH

UNIVERSITY OF DELHI
CENTRE FOR ENVIRONMENTAL AND
SOCIAL SCIENCES
INDO-DUTCH COOPERATION
(IRCC)

INDO-DUTCH COOPERATION

SEARCH INDIA/OPERATIONS RESEARCH GROUP

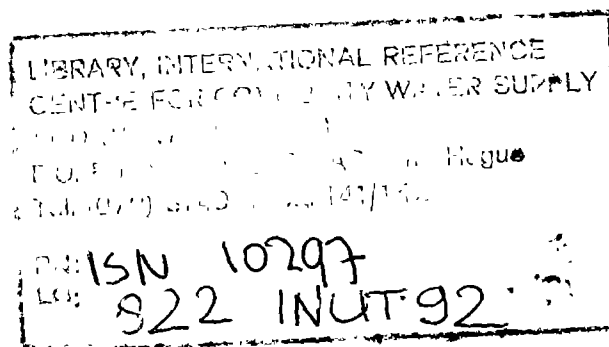
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FOREWORD

Sanitation, especially in rural areas, had not received the attention it deserves from the planners till the launching of the International Water Supply and Sanitation Decade programme in 1980. During the decade (1980-90) the Union and State governments have assigned priority to this sector and several bilateral and multilateral agencies have been cooperating with the Government of India in achieving its sectoral objectives. The Rural Sanitation Project in Uttar Pradesh is one such initiative (Sub-Project V) executed with assistance provided by the Government of Netherlands under the Indo-Dutch Cooperation arrangements.

Several programme approaches have been tried out in the country and each approach provides fresh insights for policy planning. Sub-project V, too has several unique features. Some of the key issues are, how to generate adequate demand, ensuring programme acceptance by beneficiaries, ensuring community participation and cost sharing by beneficiaries. The ultimate aim is to ensure that the programme has sustainable features. Search India/ORG was entrusted to carry out an interim review of Sub-Project V.

This interim review exercise was conducted after the project had made some progress and the objective was to provide immediate feedback for the subsequent phase of project execution. It is sincerely hoped that the review would serve its purpose.

Raghu Roy
Vice President

R Narasimhan
President

ACKNOWLEDGEMENT

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We have had extremely useful deliberation with Mr. Robert Trietsch, Mission Leader and we thank him for this.

At our end, the review team acknowledges the sincere efforts from the support staff - Mr. H. R. Sarangi, Mr. J. K. Samantaray and Mr. C. Radhakrishnan in particular.

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LIST OF ABBREVIATIONS USED

ADO	-	Assistant Development Officer
AE	-	Assistant Engineer
APL	-	Above Poverty Line
BDO	-	Block Development Officer
BHU	-	Benaras Hindu University
BPL	-	Below Poverty Line
CO	-	Community Organiser
CP	-	Community Participation
DG	-	Discussion Guide
DI	-	Depth Interview
DMU	-	Direction and Monitoring Unit
DPRO	-	District Public Relation Officer
DWCRA	-	Development of Women and Child in Rural Areas
EE	-	Executive Engineer
GO	-	Group Organiser
HSL	-	Household Sanitary Latrine
IEC	-	Information Education Communication

IRDP	-	Integrated Rural Development Programme
JE	-	Junior Engineer
JN	-	Jal Nigam
MD	-	Managing Director
NREP	-	National Rural Employment Programme
PHE	-	Public Health Engineer
PR	-	Panchayati Raj
PSU	-	Programme Support Unit
RD	-	Rural Development
RLEGP	-	Rural Landless Employment Guarantee Programme
RSD	-	Rural Sanitation Division
SEW	-	Social Extension Wing
SPA	-	Social Planning Adviser
SP	-	Sub-Project
-SSL	-	School Sanitary Latrine
T & D	-	Training and Documentation
UD	-	Urban Development
UPDESCO	-	Uttar Pradesh Development Systems Corporation
VDO	-	Village Development Officer

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ANNEXURES

ANNEXURE-I

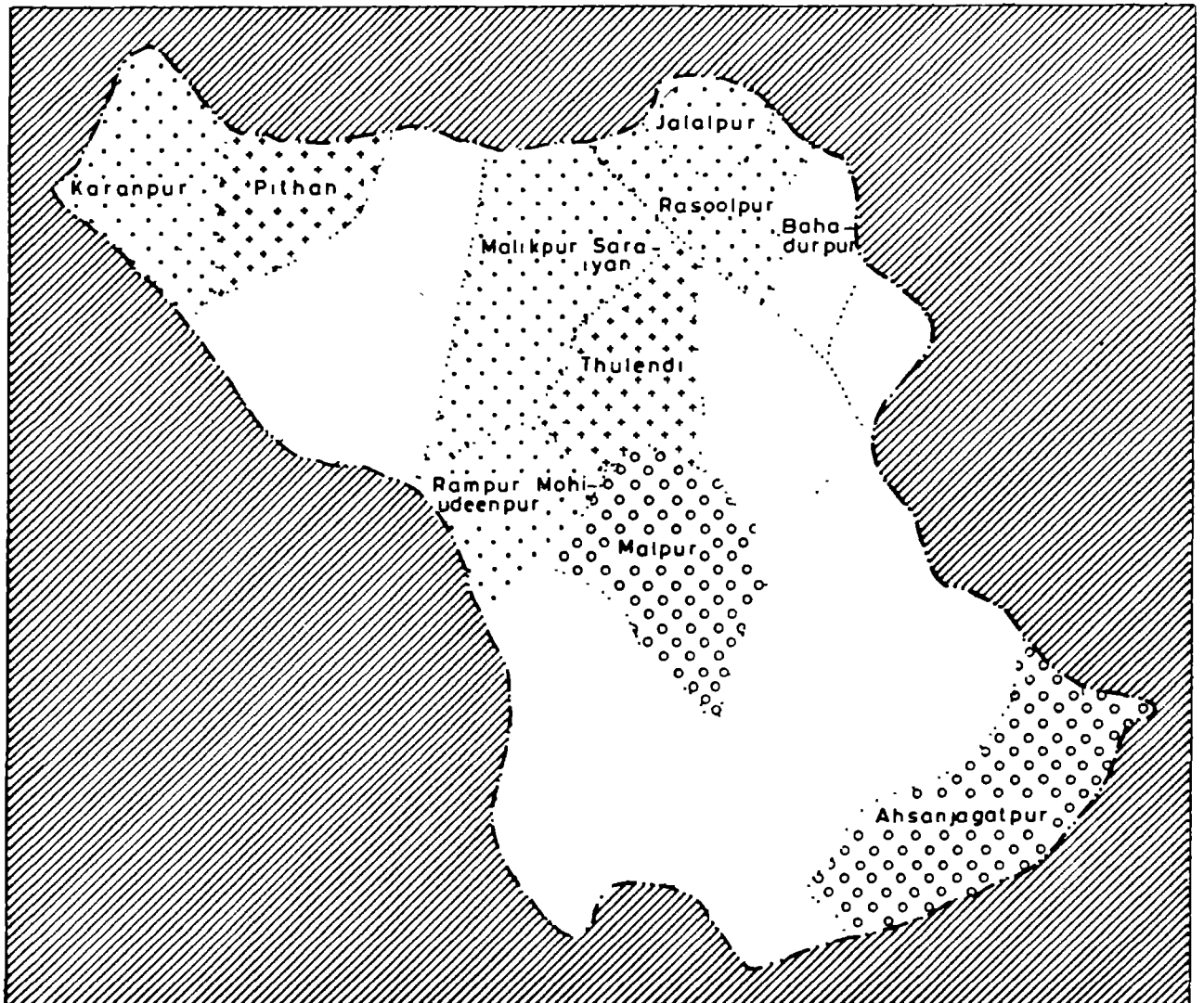
ANNEXURE-II

ANNEXURE-III

ANNEXURE-IV

Figure 1.

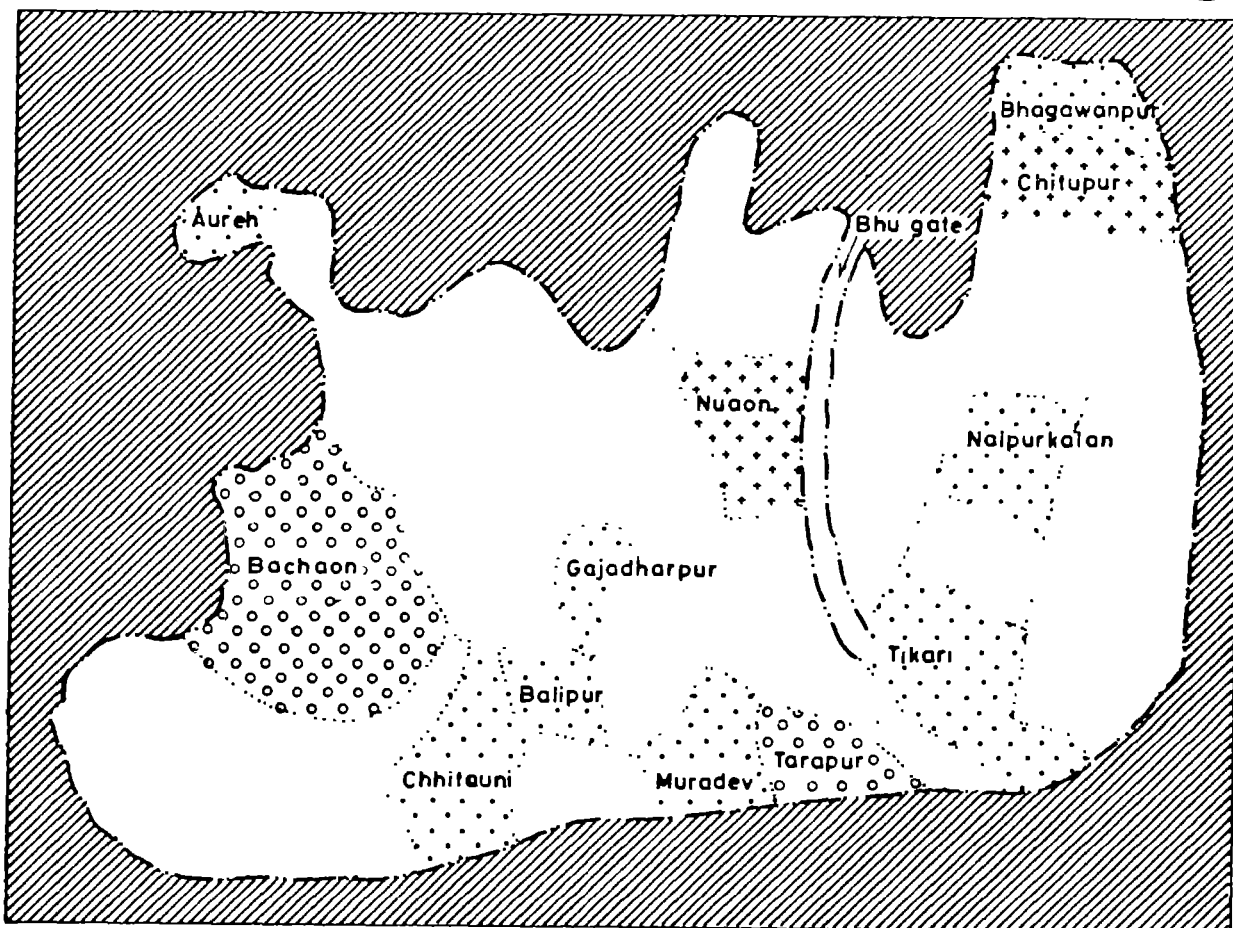
RAEBARELI DISTRICT : THULENDI GROUP OF VILLAGES



REFERENCE

-  CASE STUDIES  HOUSEHOLD SURVEY  FOCUS GROUP DISCUSSION

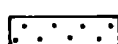
Figure 2
VARANASI DISTRICT : TIKARI GROUP OF VILLAGES



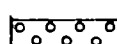
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CASE STUDIES



HOUSEHOLD SURVEYS



FOCUS GROUP DISCUSSION

EXECUTIVE SUMMARY

1. Background of Sub - Project V :

- 1.1 A programme on rural water supply was launched in 1978 in Uttar Pradesh with bilateral assistance provided by the Netherlands Government under the Indo-Dutch development co-operation arrangements. In early 1983, a suggestion for inclusion of a health and sanitation component within the programme was first mooted. In August, 1987 the project, called Sub Project V on Rural Sanitation, was formalised through the exchange of "side letters" between the concerned Governments. At this stage, it had been proposed that the Panchayati Raj department of the Govt. of U.P would implement a major part of the programme.
- 1.2 The flow of funds was formalised in early 1989. However, in late 1989, the entire implementation responsibility was shifted to the Uttar Pradesh Jal Nigam (UPJN) because of the "poor performance" of the Panchayati Raj department in executing the project. This made the UPJN the only executing agency involved in the project and this was expected to result in better coordination.
- 1.3 A separate Programme Support Unit (PSU) was created to plan and execute the community participation component which included health education and motivation. In mid 1990, a Rural Sanitation Division (RSD) was created within the UPJN to implement the latrine construction programme. The RSD was headed by an Executive Engineer who reported directly to the Chief Engineer (East) of UPJN.
- 1.4 After the field testing of the various alternatives, the design of the household sanitary latrines (HSL) was finalised in January, 1991. In comparison with the design adopted in the other sanitation programmes (being implemented through the Panchayati Raj department) the design adopted in this project was superior - a finished readily usable unit, complete with a steel door and asbestos roof. The walls are plastered and white-washed inside and washed with a coat of cement outside. There was a ventilator in the rear wall and a grill protected opening at the top of the door to make the unit well ventilated. The cost of the unit was naturally much higher (Rs 3,575 at 1990 prices) compared to that of the Panchayati Raj department units (unit cost Rs. 1,837).
- 1.5 The project was implemented in phases in one block each of two districts - Rae Bareilly and Varanasi. Phase - A of the project which covered five villages in Rae Bareilly and seven in Varanasi ended on 31st March, 1992 after which the project has entered an Interim Phase. The Interim phase ends on 31st December, 1992. Thereafter the next phase (Phase-B) of the project was expected to start.

2. Need for and Objectives of an Interim Review

- 2.1 The approach and strategies to be adopted during the implementation of Phase B of the project were to be based on the lessons learned from the first phase. Hence an Interim review was conducted with the following objectives:
- 2.1.1 To review the implementation process and assess the contribution of the various agencies.

- 2 1 2 To assess the suitability of the household latrine unit design, acceptability, its replicability and cost aspect.
- 2 1 3 To identify elements of sustainability - both social and technical - to be necessarily incorporated, in the implementation of Phase B

3. Methodology adopted for the review

A combination of programme review techniques were used

- 3 1 Survey of 200 beneficiaries and 250 non-beneficiaries using structured questionnaires ,
- 3 2 Focus Group Discussions with 22 groups of men, women and children in villages covered in Phase-A as well as in other village to be covered in Interim Phase and Phase-B of the project
- 3 3 In-depth (recorded) Interviews with 34 programme implementers at the State, District and village level,
- 3 4 Informal discussions with more than 20 others associated with the sanitation sector both within and outside the state

4. FINDINGS

4.1 Strategy adopted for social mobilisation

- 4 1 1 The Programme Support Unit (PSU) which is responsible for designing and implementing the social mobilisation component has used both interpersonal as well as group approaches in communicating the project objectives, for spreading messages on proper use and maintenance of the sanitary latrines and on general sanitation. Group Organisers (GOs) are the final link at the village level who convey these messages
- 4 1 2 The GOs work under the overall guidance and close supervision of Social Scientists of the PSU. An intermediate level of functionaries, Village Development Officers in Rae Bareilly and Community Organisers in Varanasi, directly supervise the GO's
- 4 1 3 Puppet shows, magic shows and films on video format have been used as group communication media to spread promotional messages. Songs and street plays using sanitation as the theme have also been developed. Recall of media events as well as messages is highest for puppet shows
- 4 1 4 Lately during the Interim Phase a participatory communication technique has been attempted. In this innovative approach community members are being actively guided to develop slide-talk shows on sanitation-related themes. This approach needs to be formalised and systematised and once the methodology is refined, it should be used on a wider scale

4.2 Awareness and knowledge of Programme

- 4 2 1 Awareness regarding the programme in general is very high, 30% of households are aware of the programme even in villages where implementation is yet to begin



- 4 2 2 The project has acquired a distinct identity in both operational areas. The chief source of awareness creation regarding project aspects have been the GOs and the PSU field staff. Most of the beneficiaries (78%) had been told about the project details through door-to-door contacts, although group meetings at the village level have also been conducted by the project Staff.
- 4 2 3 Knowledge of functional details of the sanitary latrine unit is very high. At least half of the beneficiaries (52%) were convinced about the advantages of using sanitary latrines, and an almost equal proportion (42%) knew about the precautions to be taken during site selection-particularly the minimum safe distance from a drinking water source. Similarly, nearly two thirds of the beneficiaries know what quantity of brick, cement and sand are required to build such a latrine. However, knowledge regarding cost is poor particularly among the women.
- 4.3 Use of Latrines**
- 4 3 1 Of the carefully selected sample of 200 household latrine units, 197 have been used some time or other, 72% are reported to be used regularly. More units are used regularly in Rae Bareilly (79%) than in Varanasi (68%).
- 4 3 2 Use does not appear to start immediately on provision of the facility, a little above one-third (38%) were used almost immediately after they were handed over to the beneficiaries while the rest were used usually within a week to a month later. The percentage of "early users" was relatively higher in Varanasi (39%) compared to that in Rae Bareilly (32%).
- 4 3 3 If the decision to accept the programme is used to differentiate the beneficiaries into "early adopters", "late adopters" and "laggards", the proportion of "early adopters" is much higher (44%) in Varanasi, too, in comparison with Rae Bareilly (25%). Similarly, the proportion of those who accepted the programme after a lot of persuasion -after almost everyone had a latrine installed ("laggards") -was much higher (20%) in the latter district in comparison with Varanasi (5%).
- 4 3 4 In the beneficiary families use is highest among the relatively younger age group (7-14 yrs.), 85% of the children in this age group use the latrines regularly.
- 4 3 5 Use generally starts around the age of six. Toilet training starts relatively later in the rural areas, hence the high proportion of users among children is a very encouraging trend. Older people (those above 45 years) use the latrines less often.
- 4 3 6 Since some of the units surveyed were only a month old, use is yet to stabilise. On the whole 11% of all family members have never used the latrines, while 82% are reported to be using them more or less regularly.
- 4 3 7 Convenience is the prime motivation for accepting the latrine. But once the convenience is experienced, the habit strength is reinforced and with increasing frequency of use, the practice is established. During rains and after dark convenience is acutely experienced.

4.4 Maintenance of the Units

- 4 4 1 Considering that the rate of use is high, the beneficiaries are observed to be maintaining the latrines well. Almost all the households clean the pan, and about one-third (37%) clean it daily as a matter of habit.
- 4 4 2 Nearly two-thirds (61% of the families) store water for use in the latrine and quite a few (13%) have built storage tanks exclusively for this purpose.
- 4 4 3 One or two buckets of water (approximately 10-15 litres) are poured after every use. While a few families have built permanent storage tanks near the latrines, most have to carry the water from some distance - usually within 25 mtr or so - for every incidence of use. A large proportion of beneficiaries feel that too much water is required for using the sanitary latrines, since they invariably compare this quantity with what they would otherwise have needed (1-2 litres) if they had been using some open space.
- 4 4 4 In nearly half of the user households (49%) it is the women who clean the pan. In some families (19%), especially if the couple are young, the men have also started sharing the responsibility.
- 4 4 5 The data on use and maintenance together further lend support to the inference that use of latrines as a matter of habit is being established. The constant persuasion of community-based Group Organisers and follow up by the supervisory staff has reinforced this desirable change in behaviour.
- 4 4 6 A clear idea regarding the cleaning of the pit and its life has not been formed yet, although there does not seem to be any strong aversion to the hypothetical task of handling pit sludge.
- 4 4 7 Although it is too early- the oldest of the units are just about a year old- misconceptions regarding the responsibility of pit cleaning need to be taken care of in the next stage of communication drive in the phase-A village.

4.5 Acceptability of design

- 4 5 1 The design features include both below-the-plinth construction as well as the superstructure.
- 4 5 2 As far as the former is concerned, the decision to locate the latrine in close proximity to the dwelling unit is itself an indicator of the acceptability of the concept of on-site disposal.
- 4 5 3 Location options are decided by other factors, too - primarily the availability of adequate land for the main unit, the pits, sand envelope provision wherever necessary to cope with high water table conditions, the junction chamber as well as a little more space for the construction crew to work. Besides, if there is a drinking water source, the pits have to be located at least 3 mtrs away from the source. In nearly all the project villages, shallow open wells and shallow tube wells were observed to be the main source of drinking water. Hence, there are constraints of space required for locating the latrine units.
- 4 5 4 Settlement pattern in quite a few villages in the project area is dense with very little homestead land. Typical examples are Thulendi in Rae Bareilly and Chitupur in Varanasi. Within these constraints, great care has been taken to locate the units as close to the dwelling units as possible,

which has often meant prolonged discussions with beneficiaries. Both PSU and Jal Nigam field staff have carried out these discussions.

4 5 5 In a few cases, however small, there is a persistent misapprehension that the pits are too small, especially when family size is larger than the average size of five to six. In such cases, this doubt seems to deter complete/regular use by all members of the household.

4.6 Superstructure

4 6 1 There is an overwhelming preference shown for the type of superstructure being provided in sub-project V. In this context, a comparison with the design features and superstructure of the sanitary latrines provided under the Panchayat Raj department is necessary. In the latter programme, only unplastered brick walls are provided, and without any door, roof or additional conveniences like the Ventilator (Jali) in the rear wall or the niche in the wall and projection (stone slab) for keeping a mug or lamp.

4 6 2 The cash contribution by beneficiaries is Rs 400/- per beneficiary for those above Poverty Line, that is, annual household income above Rs 6400/- in sub project V. Since in a number of project villages, the P R department had already initiated their programme, the beneficiaries show a distinct preference for the superstructure features in Sub-Projet V.

4 6 3 Roof and door emerge as the two essential components of the superstructure for obvious reasons. They provide protection from the elements, offer privacy and render the unit readily usable.

4 6 4 However, considering that nearly two-thirds of the beneficiaries are below poverty line and the latrine unit is often the only permanent construction in the entire house, the necessity of providing a steel door is questionable. Durability of the unit is often cited as the major reason for providing a structurally strong door. But considering that use within a family generally stabilises within a month, any door that lasts about two years should be considered as an attractive enough feature to induce use.

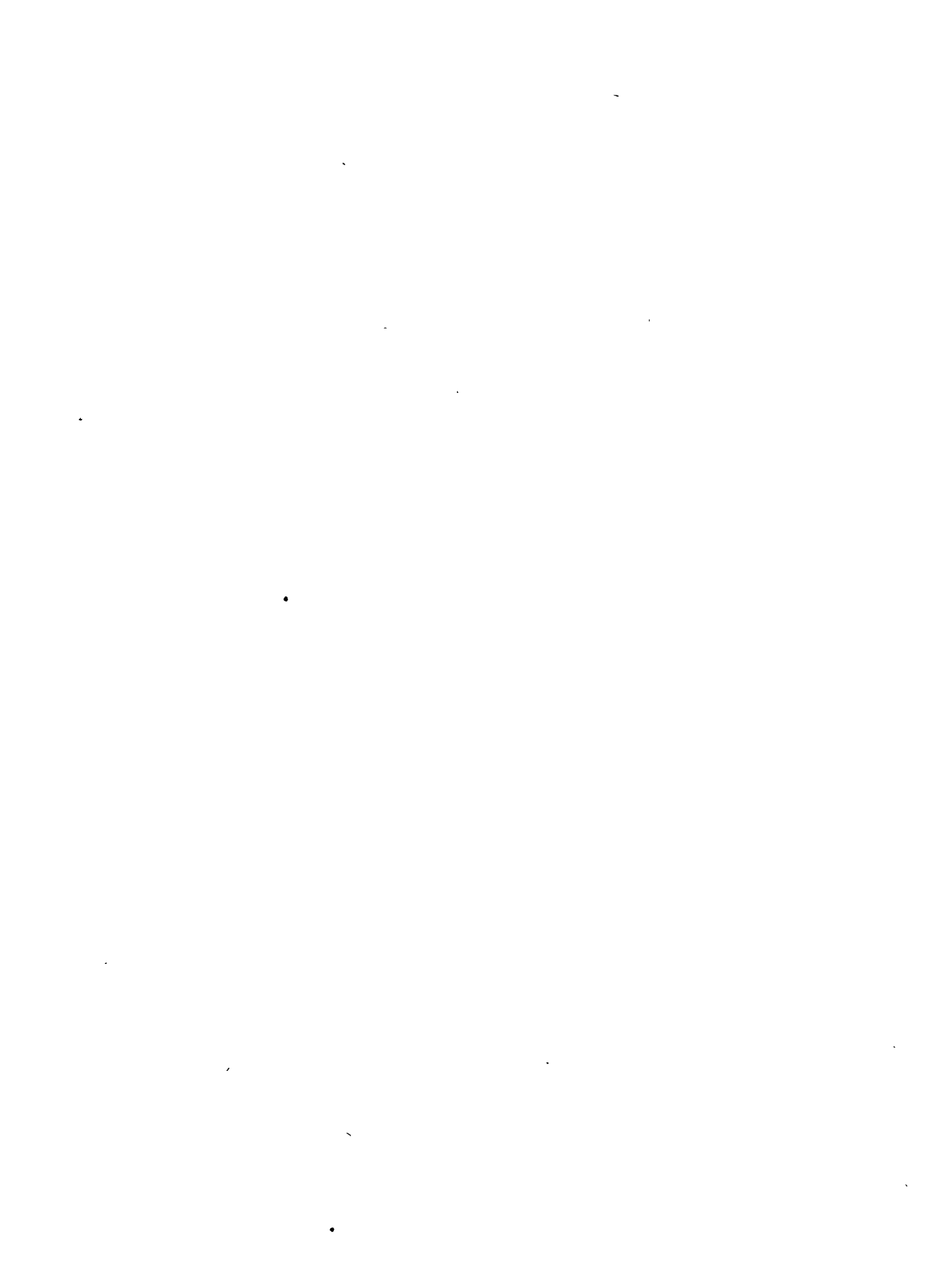
4.7 Cost-Sharing

4 7 1 There seems to be a strong case for increasing beneficiaries' contribution. It seems both desirable as well as feasible. It is desirable because the current level of net subsidy is too high (Rs 3500/- to Rs 4000/-) from the point of view of replicability. It is feasible because

4 7 1 1 Some beneficiaries classified as BPL (Annual household income below Rs 6400/-) who are expected only to provide voluntary labour have also hired labour to do the job for them.

4 7 1 2 Some among those who have paid Rs 400/- feel that they might have considered paying more money, if asked to do so, had they realised the convenience it offers.

4 7 1 3 Potential beneficiaries in villages where work is yet to begin, are also willing to contribute, even without actually seeing built-up units in their respective villages. The median amount of such contribution is estimated to be Rs 375/-.



4.8 General Sanitation Practices

- 4 8 1 It is unfortunate that one of the preconditions for implementation of the project - availability of "safe" drinking water- is practically non-existent. Although all the villages of the project area are "covered" by Piped Water Supply schemes, the supply is extremely erratic and people depend on shallow openwells and tubewells for meeting their drinking water requirements. Since piped water schemes are already implemented, these villages are automatically left out of the coverage of handpumps.
- 4 8 2 Given such a situation, the water handling and storage practices are uniformly good. Use of ladles to transfer drinking water from storage container which is being promoted by the project is yet to be practised on a wider scale.
- 4 8 3 Use of soakpits is almost negligible in project villages. Some soakpits have been built (in 12% of houses surveyed in Phase- A villages) but again most of these do not actually take care of the waste water disposal problem. The problem is usually much more acute at a community level which results out of the waste water management practices or rather the absence of it at the household level.

4.9 Programme Acceptance

- 4 9 1 Sub-Project V offers an integrated package consisting of safe water, sanitation facilities and health education. The package of services as well as the service delivery strategy have been designed in a way such that the intervention in one behavioural area would bring about synergistic changes in other sanitation-related behaviour, too. However, as mentioned earlier, one of the preconditions for such holistic change in health and sanitation related practices, i.e. access to "safe" drinking water is itself either not there or, limited at the best.
- 4 9 2 The physical facilities provided (under the Sub-Project V) include the Household Sanitary Latrines at the individual household level and the Sanitary latrines provided in schools. Since, the school latrines are meant for a specific client section -mainly school children- the overall programme acceptance has to be assessed mainly from the individual/community response to the household latrine programme. It needs to be stated in this context, however, that the school latrine programme has achieved a limited success, in none of the schools visited, the children take part in routine cleaning and maintenance of the units. Wherever possible (e.g. Thulendi Islamia School) the school management has engaged sweepers to maintain the latrines, otherwise they are not cleaned at all (e.g. Chitupur School latrine).
- 4 9 3 As far as the household latrine programme is concerned, acceptance as reflected in use/maintenance has been discussed earlier. There are other aspects of programme acceptance, too which can be summarised as follows:
- 4 9 3 1 It is evident that there was a "need", however dormant, for the latrines in the project villages which the project has been able to translate into a "demand" at this point of time, there are several instances of people in "saturated" project villages "demanding" latrine units. Some are willing to pay even Rs 1000/- to Rs 2000/- for having a HSL unit installed.
- 4 9 3 2 At present, the project authorities do not seem to have formulated any clear policy to handle such "inconvenient" requests, but it may be worthwhile testing the operational validity of such demands in order to determine the upper threshold of beneficiary contribution.

- 4 9 3 3 There is some resentment regarding the criteria used for categorising beneficiaries and deciding the terms of participation. While the stated cut-off point is annual household income of Rs 6400/- (those below are classified as BPL and have to provide labour only while those above this cut off point are asked to pay Rs 400/- as cash contribution) typical occupation/income patterns make it difficult to arrive at accurate estimates of household income. Hence surrogate measures have to be used, and that is what has been done by the PSU. However, the criteria used in such cases have not been explained clearly to the beneficiaries and hence the resentment. The basis for classification into APL/BPL needs to be made more transparent and socially acceptable.
- 4 9 3 4 The role of the field level functionaries in promoting the project concepts has been extremely useful. The PSU staff, for instance, have a visible presence in the villages and they are also very well accepted by the GO's with whom the Supervisory staff keep up a steady contact, appear to be highly motivated. Together, these "change agents" have successfully "marketed" the sanitation programme.
- 4 9 3 5 The high quality of the core product of the package - the household sanitary latrine and particularly the superstructure which is visible - has enhanced the acceptability of the programme.
- 4 9 3 6 The saturation policy - to provide one latrine to each household in the village - has obviously contributed positively since some people who initially had misgivings regarding the product and its utility have been motivated to accept the programme after seeing others use the latrines.
- 4 9 3 7 However, as already stated it is only the latrine component of the entire package which has been accepted well at this point of time. It can only be hoped that the other major behaviour area, namely waste water disposal practices will improve over time if the communication and motivation drive is continued.
- 4 10 **Horizontal Coordination with other Agencies**
- 4 10 1 Coordination between PSU and Jal Nigam - the two key executing agencies - appears to be smooth, both at the field as well as at higher levels. The periodic review meetings which are held at the field level and jointly attended by functionaries of both the agencies help in effective implementation.
- 4 10 2 Interaction with other government agencies has been, at the best, limited. While formal involvement with other government departments which have a potential role in any sanitation programme - specifically Health and Education departments - was ensured in the project formulation stage, at the implementation stage, they do not seem to have been involved in the programme in any significant way. The concerned officials at Block/District level are aware of sub-project V, but only in a superficial way. For instance, not many of them are aware of the programme details and can not even visualise any role for themselves in the programme.
- 4 11 **Role of Group Organisers(GOs)**
- 4 11 1 GOs have been a key instrument in promoting knowledge of the programme and in promoting use and maintenance. They can serve as catalysing agents even after the project has achieved full saturation as per target. Their potential needs to be utilised by other agencies.

RECOMMENDATIONS

On the basis of findings of this interim review the following recommendations are being made

- 1 Full saturation is a strategy that needs to be retained. In a situation where all households have a sanitary latrine, clearly some amount of "modeling" effect is observed both in use and maintenance. In a few cases constraints of space are there. It is best that these difficult cases are identified at the outset itself and a clear strategy worked out right from the beginning regarding whether or not in the absence of adequate space latrines would be installed.
- 2 In case of joint families where no formal division of property has taken place but two or more nuclear families are sharing common space, there are occasional demands for additional latrine units. It is suggested that before starting the project activities in the phase-II villages the baseline data be reviewed and any changes in the demand situation be taken into account. The norm for providing latrine units in such cases should also be clearly explained so that there is no resentment among the beneficiaries on this account.
- 3 The principle of categorising beneficiaries into those who have to pay cash and those who do not needs to be made more transparent and the criteria whether based on income, occupation or other surrogate measures explained clearly to the beneficiaries at the initial stage itself. There are obvious problems of accurate estimation of income since agriculture happens to be a major source of income. In a number of cases, the block records of economic survey have been used to determine the basis of cash contribution and this appears to be well accepted by the beneficiaries. It is recommended that a set of feasible external indicators of income be developed which would be acceptable to the community at large.
- 4 It is worth examining the possibility of adopting a graded contribution approach in this context. A minimum cash contribution of Rs 100/- can be asked from those below the poverty line and thereafter with increasing income higher contribution can be asked at different income slabs. This may be more acceptable than a flat contribution of Rs 400/- for all those above poverty line.
- 5 In a few cases, either because of large family size or because of cultural factors there is demand for additional latrine units. Discussion with these individuals indicate that they are willing to bear a substantial part of the cost of the additional units upto Rs 2000/- or even more. The project can consider providing latrines in such cases purely on experimental basis to determine the upper threshold of beneficiary's contribution.
- 6 There is a strong preference for the superstructure being provided currently. It is understood that during the Interim Phase certain changes have been made to bring down the cost of the superstructure. It is suggested that whitewashing of inside and outside walls be done in order to retain attractiveness of the unit. The other changes are not likely to affect acceptance in a major way.
- 7 The communication techniques used in the project have proved to be useful in ensuring high level of programme acceptance. Some of the innovative techniques used e.g magic shows and slide talk shows can be useful in a larger context, too. A proper documentation of the communication strategies used along with feedback from the field regarding their adaptability for wider circulation would be a worthwhile contribution of the project.
- 8 A careful monitoring of the bacterial level (Coliform) needs to be done in the water from open wells and shallow tubewells during the period of the year when the water table is high to make sure that the proximity of leach pits to these sources does not have an adverse effect.

- 9 Interaction with other agencies especially, the Primary Health Centres and the Education Department needs to be improved. At this point of time, they appear to be involved on an informal basis. In strengthening sanitation practices at a community level on a long-term basis, the grassroots functionaries of these two departments can play a major role. The project can consider forming village level sanitation committees and coopting Health workers and primary school teachers into these committees.
- 10 The Group Organisers (GOs) need to lay more emphasis on safe waste water disposal practices. While sanitary latrines seem to have been well accepted, used and maintained, at the next stage it is necessary to improve home sanitation practices, in order that the project achieves its objectives fully and the GOS (in Phase-A village) would have to be entrusted with the task.

Hence, even after completion of the construction of the household latrines, i.e. achievement of 100% saturation, the GOs need to continue with their task of motivation, for at least a period of one year.



CHAPTER 1

BACKGROUND OF THE INDO-DUTCH SANITATION PROJECT

Genesis of the Project

As early as In January - February, 1983, the Indo-Dutch Appraisal Mission had recommended that health and sanitation education should become an essential component of any water supply programme. It was felt that the creation of drinking water sources in the villages covered by the project would further compound the already existing severe problem of drainage and sanitation. It was, therefore, considered necessary to pay attention to the problem of sanitation and drainage in a systematic way.

But it was In 1985, that the mission (UP-11) came out with specific proposals and an operational plan. At that point of time, it was proposed that six districts already covered by the Indo-Dutch Project with water supply be included in the sanitation programme. **The stated objectives of this programme were to provide schools with water and sanitation facilities, introduce community and individual pour flush latrines, to provide health education and communication inputs for water and sanitation, and to ensure community participation, especially that of women, in operation and maintenance of the facilities created.**

Initial Strategy

A demonstration project on sanitation was already being implemented in collaboration with the UNICEF and UNDP (the so called U/U/U Programme) in Uttar Pradesh by the UP Government. The mission (UP-11), therefore, felt that the broad approach of the ongoing U/U/U programme could be adopted in the proposed Indo-Dutch Sanitation Project also. **The department of Housing & Urban Development of Government of U.P. was identified as the nodal department and the responsibility for coordination of the social and technical aspects was vested with the B.D.O. at the Block level. It was proposed that the construction would be carried out by the UP Jal Nigam while the pre and post implementation activities - motivation of beneficiaries as well as ensuring operation and maintenance of the facilities by the users - were identified as the responsibility of the Panchayati Raj Department.**

It was also proposed that a Direction and Monitoring Unit (DMU) be established within the department of Housing & Urban Development mainly to take charge of the software component, to guide the programme, and to coordinate between and communicate with the various concerned agencies

Change In Project Formulation : Sharper Focus

Subsequently, however, a number of changes took place in the implementation details of the ongoing Rural Sanitation Programme in the so called U/U/U Project which had, as stated earlier, provided the basis for formulation of the Indo - Dutch Sanitation Project. Therefore, in late 1986, Mission UP-15 recommended several other changes in the Sanitation Sub-Project which was referred to as Sub-Project V under the Dutch assisted Programme. These were :

- **A reduced emphasis on school latrines and more pronounced emphasis on household latrines;**
- **"Saturation approach" to be adopted for household latrines;**
- **Community latrines were totally taken out;**
- **Greater emphasis on training and community involvement**
- **Emphasis on coordination at village/block level**

Jal Nigam was retained as the crucial implementing agency at this stage. It was recommended that a Social Extension Wing (SEW) be created within the Jal Nigam for promoting community involvement. Essentially, SEW appears to be a new title conferred to the already proposed DMU with more specific role. The SEW was conceived to guide the Jal Nigam staff on :

- **Involving community in site selection and operation and maintenance while retaining its own technical responsibility, and**
- **planning the health education component without the responsibility of executing it.**

The importance of health education was more clearly visualised. It was felt that for a significant impact on health and hygiene practices, an active participatory role has to be played by the community in identifying the risky practices as well as in planning the change

process itself. The stated emphasis was, therefore, on methodology aimed at behavioural change rather than on mere transfer of knowledge.

Assessment of Institutional Capability : Entry of PR Dept.

In order to define the institutional arrangements, subsequently a separate mission (Mission -16) was fielded with the objective of investigating the existing organisational and coordinating structure for sanitation and health education / community involvement and submit recommendations on the most appropriate organisational structure for implementing sub-project V. Special attention was to be paid to the composition and role specification of the proposed SEW of the UP Jal Nigam.

Mission-16 which submitted its report in April 1987 suggested a major departure from the set up proposed till then. After having reviewed the on-going rural sanitation programme being executed by the Department of Panchayati Raj and Institutional arrangements the mission concluded that the department of Rural Development and Panchayati Raj (RD & PR) should be the nodal agency for household latrine construction whereas the UP Jal Nigam should implement the drainage component. The rationale for this recommendation was the fact that the PR department was the state level agency for implementation of rural sanitation programme. The department has a well-defined organisational set up right down till the village level and hence it was felt that this department was the most competent to coordinate resources and inputs of some of the relevant agencies at district and block level. The other strengths of this agency were stated to be the Panchayat Udyog and Extension Training Centre which could produce and supply essential components and the "social supervision and monitoring network" of the department. In essence, it was the capability to handle the motivation and health education component which led to the PR Department being recommended as the nodal agency at that stage

Further Mission-16 also suggested intensive village level contact drives through a series of informal group meetings and contacts with individuals in disseminating basic messages of the programme and for resource identification.

The next Mission (UP-17) agreed with the major recommendations of Mission UP-16 and further recommended preparation of proposals on the implementation of a rural sanitation

/ health education programme for all villages under the Tikari group of villages (Varanasi district) and the Thulendi group of villages (Rae Bareli district) under the coordination of the Panchayati Raj department. Another major recommendation was that the Jal Nigam should carry out a Pilot Project in one of the villages under the Dutch Credit Programme aimed at involving the community in taking measures to prevent insanitary conditions developing around public standposts and handpumps

Further, the Government of UP was requested to create a Social Extension Wing within the Jal Nigam organisation at as short a notice as possible. The Panchayati Raj department after discussion with the Mission agreed to implement the DWCRE programme in the villages under the Thulendi Dutch Credit Programme scheme in Rae Bareli district to enhance women's participation in the planned project activities.

Formal Beginning : Redefinition of Project Area

The side letter on sub-project V was exchanged in August 1987. A provisional allotment of Rs. 30 million was indicated at this stage. In the course of the next one year that is by April 1988 the sub-project V had undergone major changes in terms of strategies. The coverage was narrowed down to one cluster of villages each in two districts i.e. Rae Bareli and Varanasi instead of six districts as originally proposed. The "Principle of saturation" or "full coverage" was extended to mean that all household members would use such latrines at all times, that the latrines are used and maintained properly, that drains and additional facilities are constructed, and habits regarding the proper use of (waste) water are adopted. (UP-18 , Volume-II, Page-2).

In principle all schools in the selected group of villages were to be provided with latrines and water storage facilities of tank type public stand post. Community participation and involvement of women were reiterated as essential components of the project.

The strategy of implementation was proposed as follows. In Thulendi group of villages (Rae Bareli district) the project was to be implemented entirely through the state government set up : Construction of household latrines was the responsibility of the PR department and that of school latrines, standpost (at schools), and drainage facilities was the responsibility of the UP Jal Nigam; community participation and health education components were to be

entrusted to the PR and DW CRA machinery. In Tikari group of villages (in Varanasi district) on the other hand while the construction responsibilities were assigned to the same government agencies, the software component was assigned to the Benares Hindu University. At this stage the SEW and DMU units suggested earlier were replaced by a new entity - the Programme Support Unit (PSU). This unit was to be created within UP Development Systems Corporation (UPDESCO) - an independent consultancy agency of the State Government

As a follow up of the recommendation of Mission-18 a two day workshop was organised in 1988 which was attended by all the important actors identified by the mission. Some of the important out-comes of the workshop were:

- Specific time schedules were drawn up for both the school latrine and household latrine construction according to which school latrine construction was to begin by May/June 1988 and household latrine by October 1988,
- Baseline surveys for generating technical as well as socio-economic data for the project villages were planned;
- Preparatory action for awareness and motivation campaign in the 2 project districts was planned and the responsible agencies (DW CRA/BHU) agreed to post field level personnel for coordinating this campaign.

At this stage, since the PR Department was responsible for construction of household latrines, selection and participation criteria were congruent with the other sanitation programmes (with RLEGP & NREP funds) already being implemented by this department. Thus all families who would have been eligible for free latrines under these programmes were also to receive the facilities provided under Sub-project-V free; the rest were to contribute 20% of the capital cost which was calculated as approximately Rs. 300 at that stage. The unit cost of household sanitary latrine (HSL) unit was estimated at Rs. 1220 in 1987 when the PR Department was initially proposed as the implementing agency. This figure did not include the cost of roof and door. It was proposed that the beneficiaries would have to provide roof and door at own expenses

Change in Institutional Arrangement :

Over the next eighteen months there was hardly any physical progress. By 1989 December, however, it was realised by the project that the PR Department would not be able to

implement the programme as per schedule primarily because of "non availability of staff for supervising the construction work, it's poor performance....., lack of technical expertise..... Inadequate monitoring (and poor) quality control"¹. It is learnt that the department had completed only 4 units during a period of one and half years out of the total target of more than 14000 odd units to be completed during the total project period. In a meeting between Review and Support Mission (UP-23) and senior officials of the RD and PR Department in November, 1989 it was decided, therefore, that the construction of household latrines would no longer be handled by the PR Department and the entire construction responsibilities would be taken over by Jal Nigam. Since the Dutch Credit Programme in UP had by this time established a fairly stable working relationship with the department, such an arrangement looked more appropriate, too.

Subsequent to this, a number of quick steps were taken to make up for the lost time and set the project on course. A team of engineers from Jal Nigam and the Manager, PSU visited the rural sanitation Programme in Gujarat and based on this experience constructed demonstration units in the two Sub - Project V districts. The terms of reference for a task force, constituted earlier for the water supply component of Dutch credit, with a Chief Engineer (Appraisal) UP Jal Nigam as its Chairman, were extended to include monitoring the quality of social inputs in the Sanitation Sub-project and providing suggestions for corrective measures as its duties. The reconstituted task force included representatives from the Programme Support Unit as members. The UP Jal Nigam created a Rural Sanitation Division (RSD) exclusively to implement the household and school latrine construction programme in May, 1990.

Testing of Alternate Designs :

By April, 1990, 36 demonstration units in which various super-structure options had been tried out were evaluated jointly by senior Jal Nigam Officials, task force members, PSU/DWRCA/BHU representatives using a participatory concurrent evaluation process. Criteria for evaluation were functionality, adaptability, cost effectiveness and acceptability by local communities.

¹Source : Letter from SPA to Secretary, Nagar Vikas, dated 12.03.90

Based on this evaluation a new design was suggested. The new design which was based largely on the design adopted in the Gujarat project included complete super structure with door, roof and a fully finished unit which could be readily used by the beneficiaries. The important features of the unit now proposed (and this is the design finally adopted in Phase

- A) include :

- Flatly laid bricks rather than bricks-on-edge in the pit lining
- Asbestos cement pipes rather than brick work drainage for connecting junction chamber to pits
- 2' 3" wide steel door with a coat of primer paint
- a RCC Jali for ventilation
- Provision of a grill on top of the door
- Asbestos (A.C) sheet roofing
- Door latches made of steel both inside and outside
- Damp proof cement course in the flooring
- Plastering of inside wall and white washing
- Cement wash on outer surface
- 15 x 15 cm. cement concrete plate for putting water mug or lamp inside the latrine

There was thus a major shift in the project implementation strategy: **a new implementing agency as well as a radically altered and improved design.**

Phasing of the Project :

Adoption of the new design, however, required approval from the State Government. On the recommendation of the Task Force and after prolonged discussion with mission UP-25, in which the PSU took active role, the design of the HSL was finally cleared in January, 1991; the unit cost of this unit was Rs. 3575 (based on April 1990 prices). In comparison, the unit cost of the PR Dept.'s design (with vastly inferior superstructure) was Rs. 1837 when the PR dept. withdrew from the project in 1989.

Meanwhile other major changes had occurred in the initial assumptions. There was an increase of 2281 beneficiary households from (11140 to 13421) as revealed by the baseline survey figures. Together with the increased unit cost this entailed nearly a four fold increase in Project cost from the provisional figure of Rs.30 million to Rs. 138 million by January, 1990. The increase in Project cost again necessitated approval from both the donor and recipient governments. In the meanwhile, funds available under Sub project-V permitted project execution in a part of the project area. By the end of 1990, therefore, it was decided to implement sub-project V in a phased manner. The duration of phase-A was April 1991 to March 1992 and a total budget provision of Rs. 38 million was made for covering 13 villages (6 in Rae Bareli and 7 in Varanasi). In actual practice, during implementation, the operational area of first phase was reduced from 13 to 12 villages (5 in Rae Bareli and 7 in Varanasi).

Need for an Interim Phase :

As mentioned earlier, the progress of Sub-Project V had been almost negligible. The initial teething problem mainly relating to the identification of the implementing agency, delays in release of funds by the State Government and subsequent delays in clearing the design and unit cost of the household latrine proposed by the Task Force of the implementing agencies have been discussed in the preceding sections. By the middle of Phase A, i.e. November 1991, however, the pace of construction of HSL units had picked up; approximately 400 units were being constructed monthly. The target set for Phase - A which was to be completed by March 31, 1992 (3551 household latrines and 27 school latrines) therefore appeared achievable.

The remainder of the original target - 13,441 household latrines and 48 school latrines - required a major allocation of funds. Hence a new proposal for Phase B of the project had to be formulated and routine administrative clearance would have to be obtained for this new proposal which would naturally require some time. In November 1991, therefore it was felt by all the agencies concerned that for uninterrupted progress of Sub - Project V, an interim phase should be implemented. The interim phase (April 1992 to December 1992) would provide sufficient time for an indepth review of the project approach adopted in Phase A, and simultaneously provide the continuity between Phase A and the next Phase

(Phase B) which could possibly start in 1993. **The approach and strategies to be adopted during Phase B are to be based on the lessons learned from Phase A and on the results of the present independent review exercise.**

Initially, it was proposed that 3,552 latrines would be built in 8 villages of Rae Bareli and 3 villages in Varanasi adjacent to the Phase A villages. Subsequently, after the initiation of the Interim Phase, the coverage was altered. The villages being actually covered in the Interim Phase are :

Rae Bareli	1. Thulendi	5. Gajadharpur
	2. Malpur	6. Umarpur
	3. Malikpur Sarayla	7. Kaligari
	4. Bahadurpur	8. Rampur Mohiuddinpur
Varanasi	1. Chittupur	4. Akhari
	2. Sri Gobardhanpur	5. Susuwahi
	3. Tarapur	

CHAPTER 2

OBJECTIVES OF THE REVIEW AND METHODOLOGY

Objectives of The Mid-Term Review

The specific objectives of the Mid-term review conducted in May/June, 1992 were :

1. To review the implementation process of rural sanitation programme in Sub-Project-V vis-a-vis role and contribution of concerned agencies;
2. To assess suitability of unit design, acceptability, its replicability and cost aspects;
3. To identify elements of sustainability (social and technical) to be necessarily incorporated in the implementation of Phase - B.

Approach

A major area of concern of the Review was the Social Mobilisation and Community Participation aspects. The specific issues to which the exercise addressed itself in this context were the contribution of these two aspects in determining :

- To what extent Sanitation has been a felt need
- The degree and quality of rapport between the community and the implementing agencies
- Participation and Cost-sharing by beneficiaries
- The level of use and maintenance of services provided
- Acceptability of the HSL units vis-a-vis its design and quality of construction

The Review also dealt with the following issues (keeping in mind the operational objective outlined earlier) :

- Suitability of the existing organisational set up for implementing the technical and social component for lending sustainability to the programme
- Changing sanitation - related attitudes and practices of the user community, specially of women and children, and any attitudinal change taking place due to the implementation of the sanitation programme
- Community prejudices regarding handling of pit sludge, and sharing of responsibility of cleaning the toilets with the female members, (by the male members) of the community

Considering the importance of the Interim review and its scope SI/ORG adopted a combination of research techniques. Broadly, three different methods were used : Quantitative, Qualitative and Case study

Research Techniques Used :

Quantitative : Based on the review of the literature available on the project and initial discussions with the project personnel a detailed questionnaire was designed which posed specific and pointed structured questions on all relevant issues. The structured questionnaires generated quantitative trends. The questionnaire was discussed with representatives of PSU, pretested and then finalised. The questionnaires were then canvassed by a team of investigators who have a training in survey research methods. The sample of respondents was carefully selected as detailed out later.

Qualitative : To supplement and enrich the data collected through structured questionnaires, two important qualitative techniques were employed : **Focus Group Discussions and Depth Interviews.**

Focus Group Discussions were conducted with carefully selected groups of both **beneficiaries as well as non - beneficiaries.** Techniques of qualitative research borrow heavily from ethnographic approaches and other social sciences mainly sociology and psychology. The advantage of focus group discussions and depth interviews lie mainly in their flexibility. They allow the spontaneous emergence of ideas and issues, the scope for which is restricted in structured interview settings

The success of qualitative techniques depend to a large extent on the rapport that the interviewer is able to establish with the groups/individuals and the extent to which the confidence of the group is acquired. These interviews were, therefore, conducted by professionals of SI/ ORG. Guidelines for group discussions/interviews were developed, carefully pretested and constantly modified depending on the nature of response and the new issues which emerged. **The emphasis on the qualitative part was specifically on participation , involvement, response to alternate super-structures and cost sharing - issues** which could not be probed in detail through household surveys using structured questionnaires

Case Studies : Based on the feedback from initial field visits, two villages in each project area were selected to represent variation on two dimensions :

- **Village saturation** (one saturated / one yet to be completed)
- **Size of village** (small / large / intermediate)

In the villages selected for case studies, both structured and unstructured methods were used. Detailed observations were made using **checklists** and a number of **focus group discussions** and **in-depth interviews** were conducted. Besides, **observations were made in participatory settings** among beneficiaries as well as in the work situation among functionaries. The objective was to draw deductive inferences on implementation process using the village as an unit, which could then be generalised for the project area as a whole.

As mentioned earlier the Group Discussions were conducted with beneficiaries already covered in Phase - A as well as potential beneficiaries who would be covered during subsequent phases. The in-depth interviews were held with project functionaries at all levels : Village Level Functionaries, that is Group Organisers and Village Development Officers (VDOs), PSU field staff (Social Scientists and Community Organisers as well as PSU Head Quarter staff), masons engaged in construction, Project Engineers, and Opinion Leaders such as Gram Pradhans and Up-Pradhans. All Group Discussions and Depth - Interviews were recorded using cassette recorders and then transcripts prepared. Detailed content analysis of these transcripts was then carried out.

Methodological Problem :

The review however, presented a typical methodological problem. In all such situations where an intervention is being made and some kind of attitudinal / behavioural changes are in the process of occurring, any attempt to enquire into the process of change is likely to affect the change process itself. In this particular case, since the process of enquiry depended heavily on individual and group discussions, the intervention and investigation settings were similar in a social psychological sense. Inevitably, there is an use of interpersonal communication in both situations, and the target of change as well as the subject of enquiry are congruent.

Some of the issues discussed during the process of review were rather sensitive. The issue of increased cost sharing, possibility of alteration in super-structures, problems in use and maintenance had to be posed in concrete terms to the respondents to get a feedback. In a large number of cases the discussion process itself started generating a number of doubts and misapprehensions etc. To give one example, one of the issues that we were examining was the feasibility of inviting cash contribution from groups that are currently excluded. We posed a hypothetical situation and invited respondents' opinion on whether they would have considered paying a small cash contribution if they were fully acquainted with the convenience provided. It appears that there was already a prevailing suspicion that the "Government" would sooner or later impose some kind of cess for having provided sanitary latrines. Our process of enquiring only reinforced these misapprehensions. In spite of our best attempts to convince them that this was only a hypothetical question, we could not apparently allay the fears.

SAMPLE

Sample Plan : Three categories of villages were included in the study :

- A) Villages in which Phase A of the project has been implemented.
- B) Interim phase villages and other villages (Phase B) included in sub-project V.
- C) Control villages (within the Project blocks) where sub-project V has neither been implemented nor is proposed to be implemented.

The number of sample villages to be covered by the three methods outlined earlier was predecided .

- * **18 villages to be covered by quantitative household surveys.** These 18 villages were to be distributed among the three categories of village above as per the following plan

Category A : - 8 villages

Category B : - 6 villages

Category C : - 4 villages

- * **2 villages of category B to be covered in Group discussion. This part of the sample was expanded; GDS were conducted in 4 villages of category B.**
- * **4 villages of category A to be covered through case studies.**

Sample for Quantitative Component

A two stage sampling method was used.

Village Level :

Category A:

Since only 12 villages constituted the sample universe of Category A villages, and 4 were to be included in Case studies (for which selection criteria had been fixed) the remaining 8 villages were naturally selected for quantitative survey ensuring **full coverage of Phase A villages.**

Category B:

The villages included in phase A were first excluded from the total list of Project villages. The remaining villages in the two clusters were then grouped into three cells representing varying proportion of households below poverty line based on the results of the base line survey. From each cell in each cluster one village was randomly selected **Two of the villages thus selected in Rae Bareilly (Thulendi cluster) happened to be Interim phase villages.**

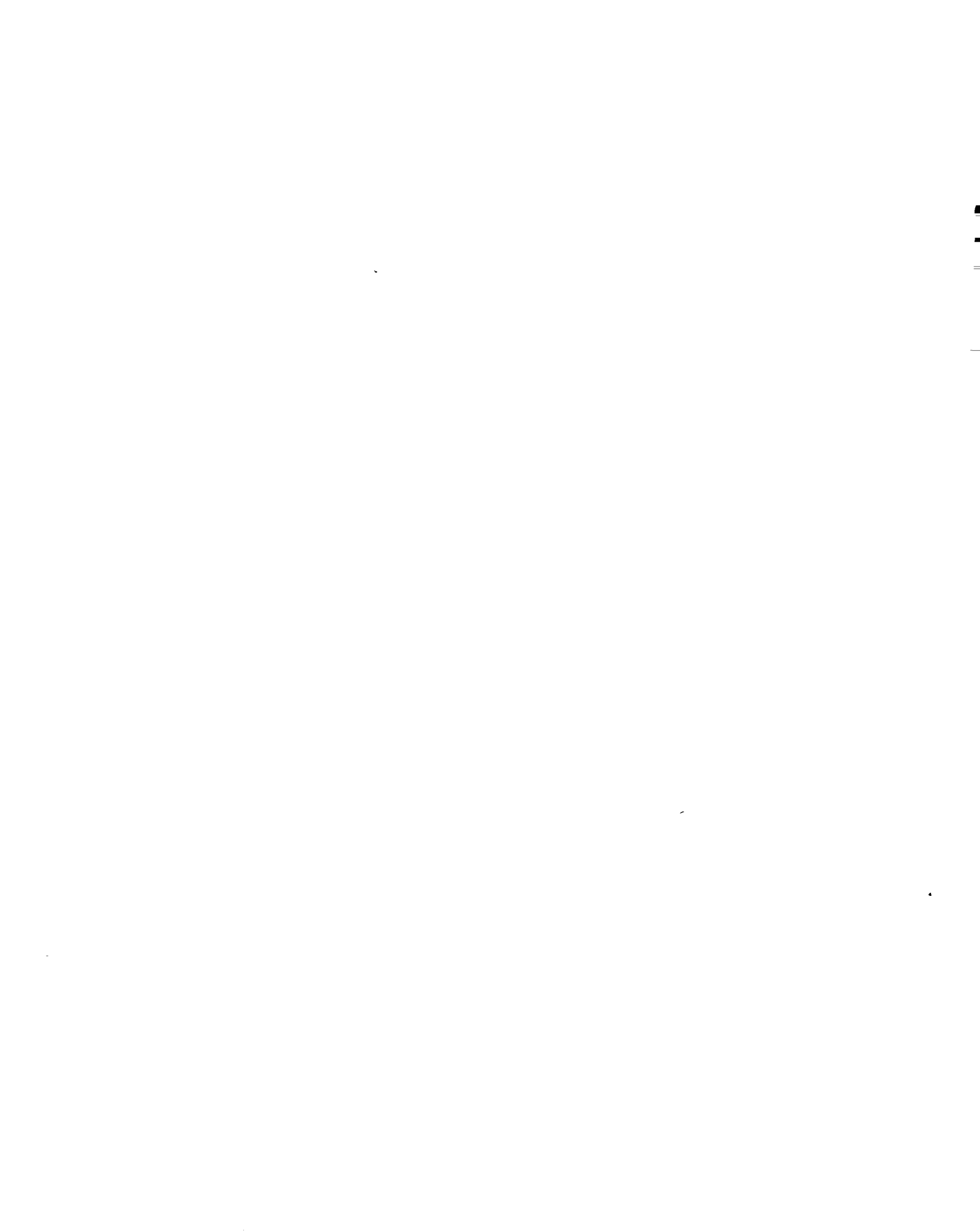
Category C :

In each Community Development block, (in which the two clusters of project villages are located) all nonproject villages were arranged in descending order of population. From each C D block, two villages were then selected to match the population size of the two villages with the highest and lowest population already selected under category A

The list of villages covered in the quantitative part can be seen from Annexure-I

Household level

For selecting respondent households, a multi - stage stratified proportionate sampling method with a random start was adopted



First the total committed sample of 450 households was proportionately divided among the three categories of villages which resulted in the following distribution

Category A : 200 (Representing 11% of the units handed over as in May 1992)

Category B : 150

Category C : 100

Category A:

The sample size of households in the two project clusters (for the phase A villages) was then determined by distributing the number of sample villages in each cluster proportionately. This resulted in the following allocation of sample beneficiaries households:

Thulendi group / Rae Bareli 75

Tikari Group / Varanasi 125

At the next stage, the sample in each cluster was distributed among the sample villages in proportion to the number of units handed over ensuring a minimum of 20 and maximum of 30 per village.

Within each village, a rigorous method was used to select the sample respondents. The list of beneficiaries to whom Sanitary latrine units had been handed over was used as the base.

This list was then cast into a matrix using two dimensions:

- Period of installation (Up to Sept ' 91
Oct ' 91 to Mar ' 92
After March' 92
- Economic criteria (Above the Poverty Line
and Below the Poverty Line)

Thus 6 cells resulted. The sample size for each village was then distributed proportionately among the cells. Based on the cell size thus obtained, and using a random start the sample of respondents at the village level was drawn

Category B:

In this case, the list of households from the baseline survey was used as the base

The list was arranged in a matrix representing

- Income (APL/BPL)

- Caste/Religion (Scheduled caste/others/Muslims)

Using a proportionate sampling method , with a random start as in the previous exercise, the sample households were selected.

Category C:

In the non-project villages since categorisation by level of income was not readily accessible, the respondent households were selected randomly from within the caste groups present in the villages .

Sample for Qualitative Component :

Group Discussions

21 group discussions were conducted in eight project villages

One each in the following four categories of villages in two districts -

- 1 Villages saturated in Phase A
- 2 Villages partially saturated in Phase A, and to be completed in interim phase
- 3 Interim phase villages
- 4 Phase B villages

Following characteristics were considered as criteria to recruit participants to the groups-

- (i) Possession of a HSL, under the Project
- (ii) Gender
- (iii) Economic status (for beneficiary groups only)
- (iv) Age (for female groups only)

These characteristics were systematically varied across groups so as to get sufficient cases for all variations of all characteristics. Each group had participants who were homogeneous with respect to one or more of the above characteristics.

Depth Interviews

Depth interviews covered project functionaries at various levels, and selected members of the community whose opinion on issues related to the project activities in the village are significant

The list of villages covered in qualitative component can be seen from Annexure - II

Informal discussions (some of which were not recorded) were also held with senior officials of all concerned agencies and other experts working in the sanitation sector in various capacities in different parts of the country. In all 37 such individuals were contacted besides those already covered in the Depth Interviews. The list of persons contacted is provided in Annexure - III.

ANALYSIS

Quantitative data collected through the household survey have been analysed in three ways :

- i) By sex of respondent
- ii) Caste of respondent : Three categories have been used
 - Scheduled Castes and Other Backward Castes
 - Upper Castes (mentioned as General in the tables)
 - Others (Muslims cannot be categorised under any of the above two categories), and
- iii) Economic status of respondents :
 - Above Poverty Line, and
 - Below Poverty Line

The categories used in the analysis, however, are based on household income as reported in this survey and **not on the listing done by the project (i.e. those who have paid Rs.400/- and those who have not)**. The basis of drawing up the categories is the same as used in the project. Annual household income of Rs 6400/- has been used as the cut-off point. This mode of analysis was adopted since the categorisation in the project is not unanimously accepted by the beneficiaries. However, in the relevant areas, analysis has also been done using project categories.

Qualitative Analysis of the transcripts from Group Discussions and in-depth interviews was done keeping in mind the essential study elements. In the process of the analysis an

attempt was made to isolate important determinants of attitudes and practices and the apprehensions that are likely to affect project implementation

The findings were then integrated so that a total perspective emerged.

The field visits and data collection for the entire Review exercise was completed in 6 weeks.

The detailed time schedule is enclosed in Annexure - IV.

Table 2.1

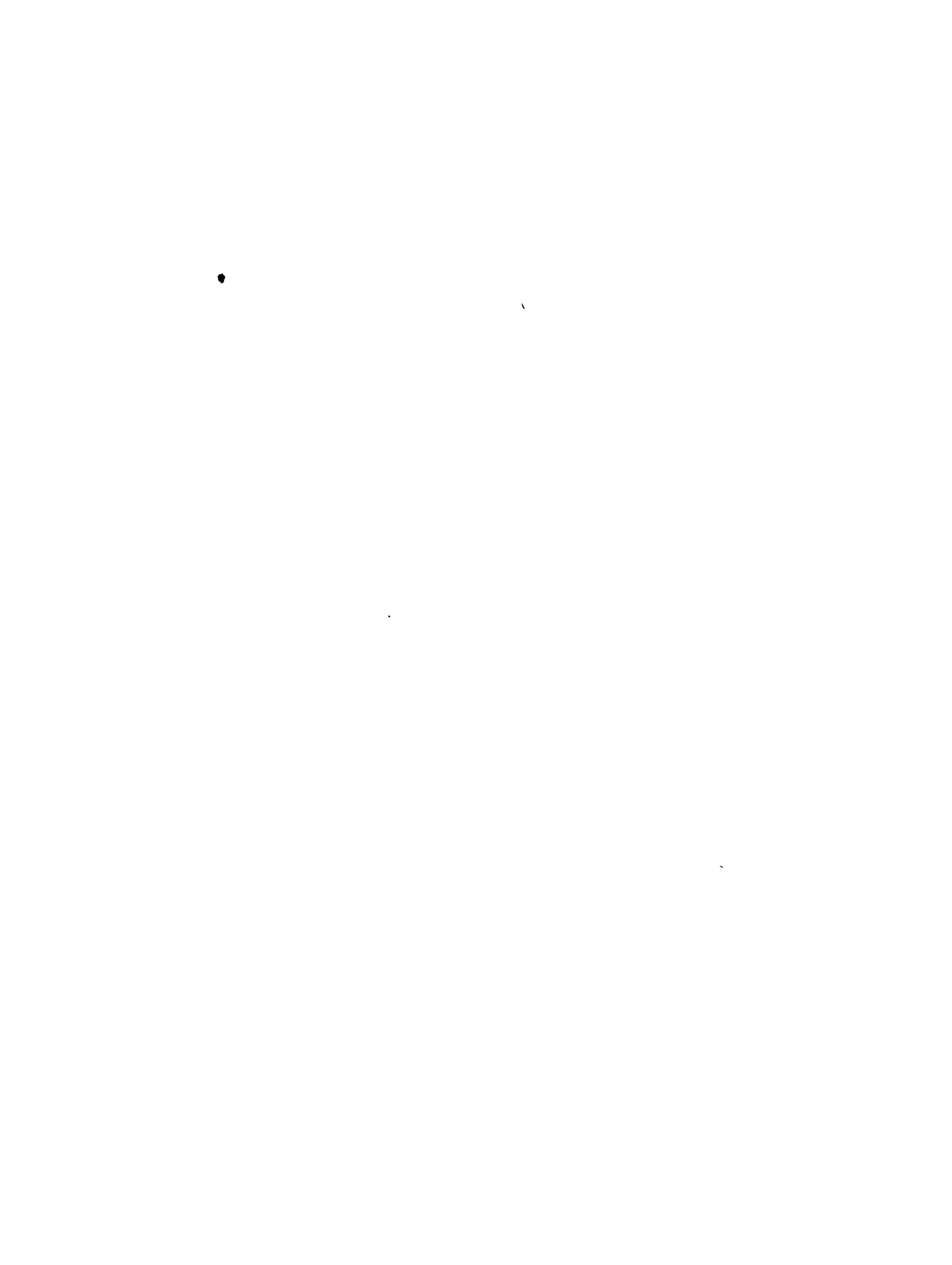
SAMPLE DETAILS

METHOD	SAMPLE SIZE
Quantitative :	
8 Project villages	: 200 Beneficiaries
6 Other project villages	: 150 Non Beneficiaries
4 Non-project villages	: 100 Non Beneficiaries
Qualitative	
Group Discussions	
4 Phase A villages	: 13 groups
2 Interim Phase villages	: 4 groups
2 Phase B villages	: 4 groups
	Depth interviews : 34 persons
Case studies :	Conducted in 4 villages already covered in Phase A of the project.

Table - 2.2

Details of Group Discussions conducted

Type of villages	Type of Groups				
	Beneficiary			Non-beneficiary	
	Male	Female	Children	Male	Female
Phase A village - 4	4	4	1	3	1
Interim Phase village - 2				2	2
Phase B village - 2				2	2



CHAPTER 3

IMPLEMENTATION PROCESS

Agencies Involved

By the time Phase A started, two main agencies were clearly the chief "actors" : UP Jal Nigam which has been an old partner in the Dutch Credit Programme had been assigned the responsibilities for construction of household latrines (HSL) and the Programme Support Unit (PSU) responsible for social planning, implementation, coordination and monitoring of the community participation activities Till this point several other agencies had contributed to the conceptualisation of the project, but their role remains relevant only in a historical context.

Two other agencies were involved at the initial stages in the project namely the DW CRA set up in the Thulendi Group of villages (in Rae Bareli) and a group from Benares Hindu University in Tikari group of villages (in Varanasi District). These latter agencies were assigned the task of health education and social mobilisation for the project.

However, in June, 1991, after intensive discussions with the BHU Project team, the Rural Sanitation Division of Jal Nigam and the PSU, the BHU team was divested of its social implementation responsibilities for Sub - Project V. The main reasons for recommending a change were :

- " - delays in decisions and procedural complications, due to University rules;
- ineffective team work due to weak coordination with other agencies, felt in particular by Jal Nigam field staff, primarily due to only very partial involvement of both the project coordinators Poor coordination probably has also resulted in a delay of one and a half years in the production of the main written report, viz. the Baseline Survey Report;
- the surplus value as originally expected from the research experience within BHU did not materialise while no professional relationships developed around the project team. The team worked in virtual isolation

from the mainstream of the University community." (Report of Mission UP-26)

By this time the latrine construction programme had picked up momentum and hence a full-time coordinator was required. Mission UP-26 discussed with a smaller Varanasi-based institution which expressed its willingness to support the activities of the existing team in the Rural Sanitation Programme. Eventually, by October, 1991 the PSU set up a full fledged field office headed by a Social Scientist to implement the social mobilisation component. The shift in umbrella agency was formalised at some intermediate point.

In Rae Bareilly, the DWCRAs involvement continues formally. Reportedly the performance of the DWCRAs team was not quite satisfactory, although there is no documentation on this aspect. As of now, almost all the functions which were supposedly the responsibility of the DWCRAs team, are being discharged by the PSU field office. "A provision of funds exists for DWCRAs to undertake activities in the project area" *

The baseline studies for providing technical and socio-economic data for the project area which were crucial to project implementation were carried out by two agencies including the BHU Unit. Baseline study for the Thulendi group of villages were carried out by the UP Development System Corporation (UPDESCO) while for the Tikari group of villages the BHU unit had provided these inputs. Although action had been initiated in this regard much earlier the role of these two agencies remains relevant to the implementation process.

Organisation Structure of the Main Agencies Involved Currently

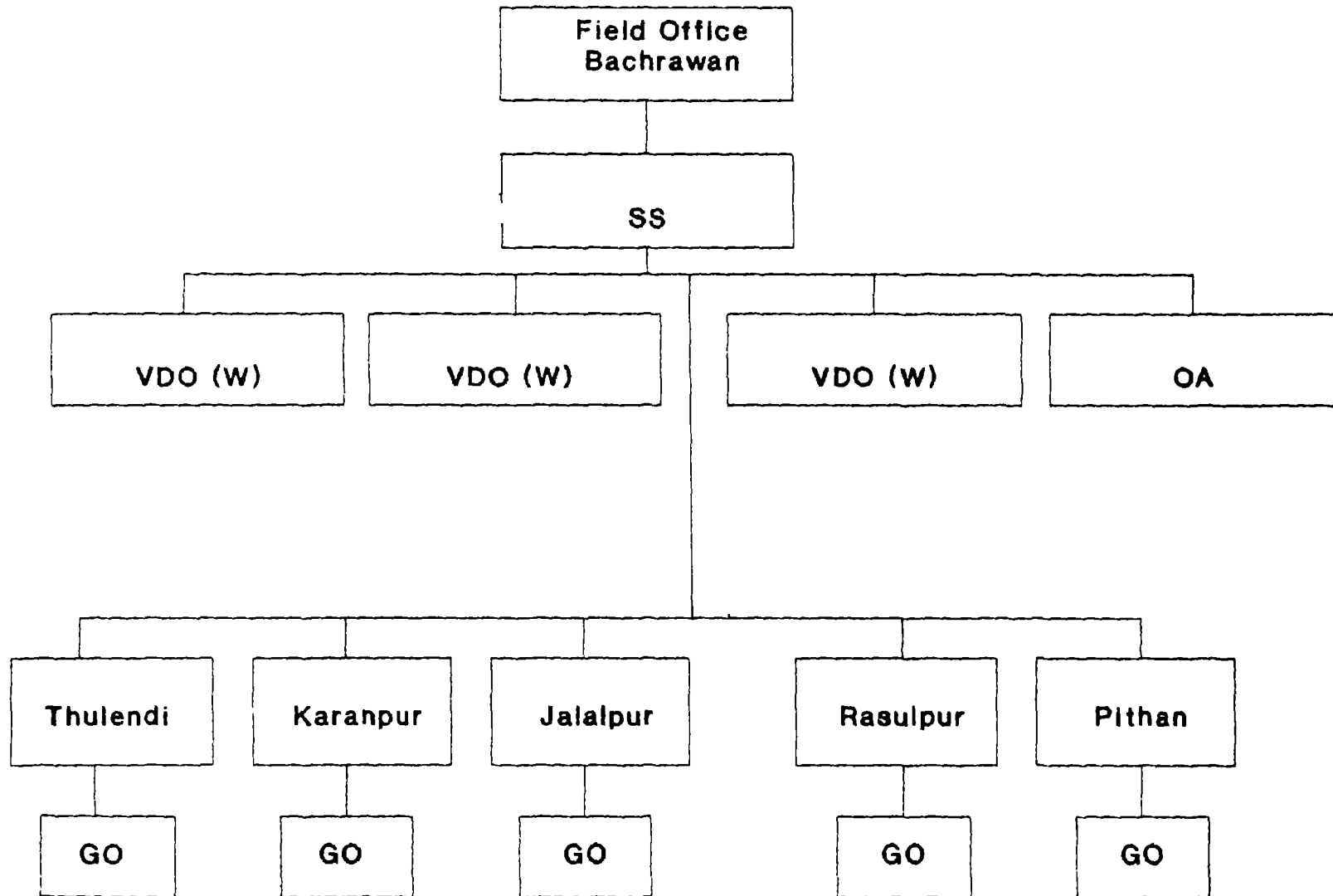
1. Programme Support Unit (PSU)

As we have seen earlier, the idea of a software support unit for the project had been mooted fairly early. Originally conceived as Direction and Monitoring Unit, the formation of Programme Support Unit was clearly spelt out in Mission-18 report. The PSU was originally established within the UPDESCO primarily for coordination of activities of the various agencies whose involvement was envisaged at that stage. The specific inputs expected from PSU were .

* Ref. No 890/1/cor/Const/SI dated 29.07.92 from PSU

Figure.3

ORGANOGRAM OF PSU FIELD OFFICE, RAE BARELI



SS : SOCIAL SCIENTIST

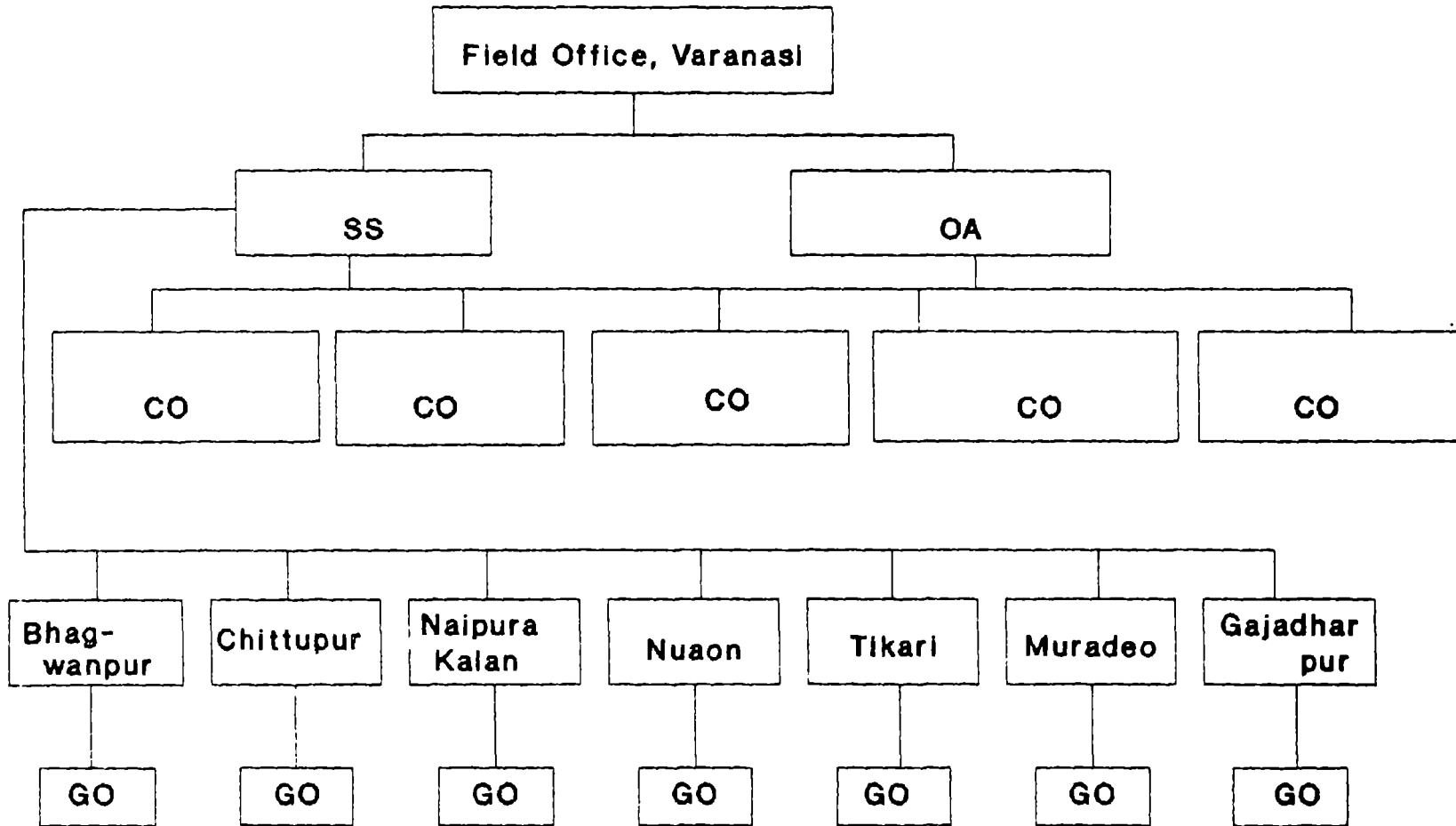
VDO(W): VILLAGE DEVELOPMENT OFFICER (WOMEN)

GO: GROUP ORGANISER

OA: OFFICE ASSISTANT

Figure. 4

ORGANOGRAM OF PSU FIELD OFFICE, VARANASI



SS : SOCIAL SCIENTIST

CO: COMMUNITY ORGANISER

GO: GROUP ORGANISER

OA : OFFICE ASSISTANT

- Necessary professional inputs in the area of planning and implementation of a package of software for ensuring health education, community participation and involvement in rural sanitation programme;
- Coordination of various agencies involved in implementation
- Support to UP Jal Nigam in Rural Water Supply Programme and support mission fielded by the Govt of Netherlands. The PSU was to be directly accountable to the Royal Netherlands Embassy for all its activities.

When started, the PSU had only two professionals - a Manager / Public Health Engineer and a Social Planning Adviser (SPA) with the necessary support staff. Subsequently, in November, 1989 the PSU became an independent unit outside UPDESCO headed by a Director and SPA

There are two field offices for sub project V, one at Bachrawan and another at Varanasi. Each field office is headed by a Social Scientist. The Bachrawan team consists of 2 other tiers of field workers. There are 3 Village Development Officers (VDOs) reporting to the Social Scientist. At the village level, there are Group Organisers (GO) who are literate / semi-literate women selected from within the community who serve as the direct interface between the project and the user community.

In Varanasi, there are 4 Community Organisers (COs) who form the second tier. However, compared to the set up in Bachrawan the COs in Varanasi are more qualified than the VDOs in Varanasi. For instance, while the VDOs are Intermediates or Graduates, three of the COs in Varanasi have Doctorate degree in Social Science.

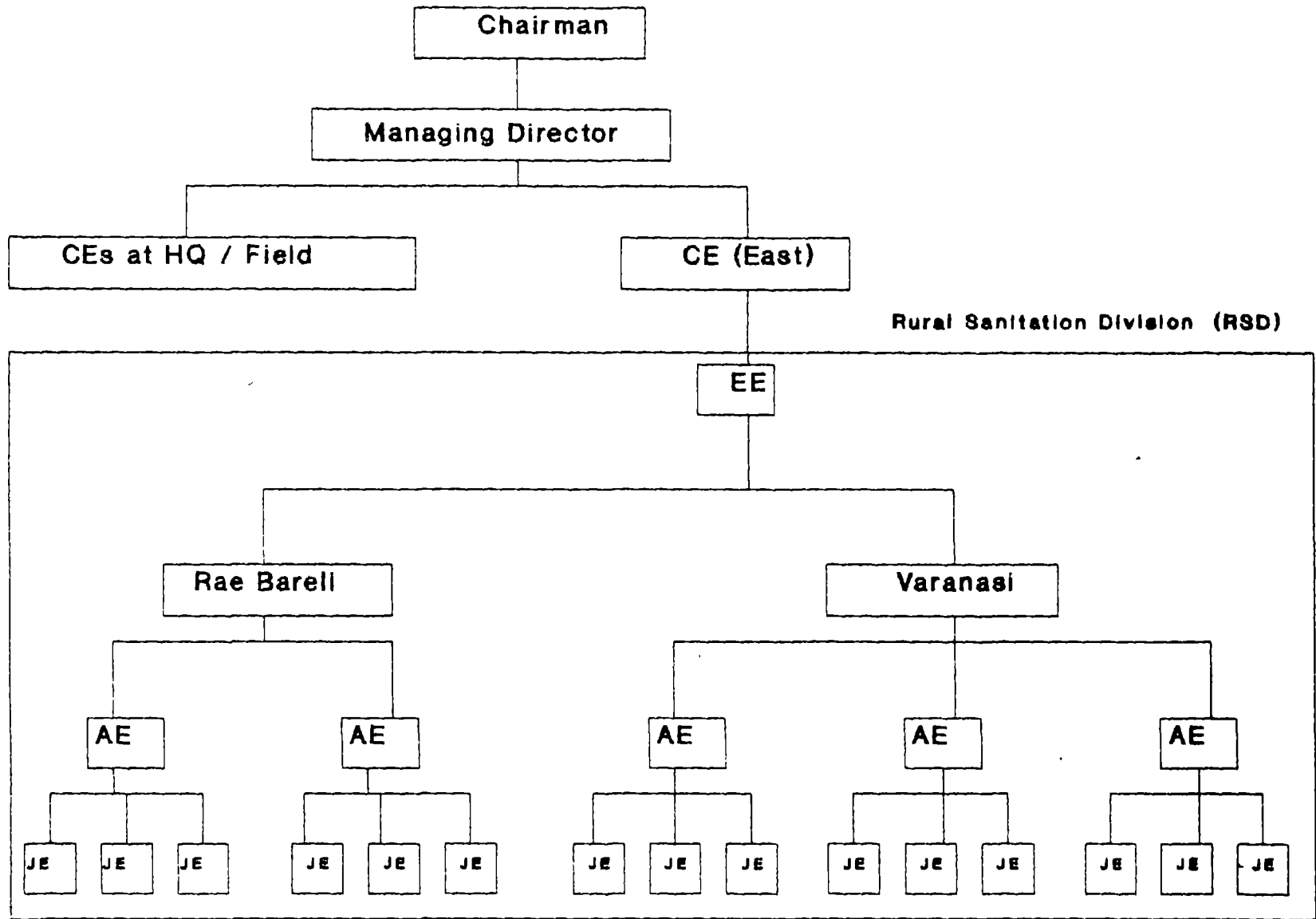
Figures 3 and 4 show the organisational structure of PSU's field set up for Sub - Project V

Jal Nigam

Jal Nigam is an autonomous body primarily responsible for planning and creation of drinking water supply systems in the state and for maintenance of these structures in the rural areas. In that sense, rural sanitation is a new activity to which UP Jal Nigam has been recently introduced. The Jal Nigam is headed by a Chairman and an Executive head - the Managing Director. It is controlled by the Department of Urban Development. The field level

Figure.5

ORGANOGRAM OF RURAL SANITATION DIVISION



CE : CHIEF ENGINEER

AE ; ASSISTANT ENGINEER

JE : JUNIOR ENGINEER



organisation of UPJN, however, is not vastly different from the respective departments in charge of rural water supply in the other states

The state has been divided into seven zones each headed by a Chief Engineer. Each zone has several Circles and each Circle about 4 to 5 Divisions which execute the works. In May, 1990, within six months of assuming responsibility of construction of both school and household latrines the Jal Nigam created a Rural Sanitation Division (RSD) to implement Sub-Project V. The RSD is headed by an Executive Engineer who reports directly to the Chief Engineer (East). Both the CE (East)'s office and the RSD office are in Allahabad which is almost equidistant from the two project areas namely Varanasi and Rae Bareilly. At the field level, Junior Engineers are directly responsible for the execution of the construction work. The JEs are supervised by an Assistant Engineer. For Thulendi Group of villages there are six JEs and two AEs whereas for Tikari Group of villages, there are nine JEs and three AEs. Figure 5 shows the organisational hierarchy of the RSD

The creation of a Rural Sanitation Division is a major achievement of the project and this Division can remain as a permanent resource base within Jal Nigam for implementation of Rural Sanitation Programmes in future.

IMPLEMENTATION PROCESS :

Training and Orientation of Functionaries :

Several planning and orientation workshops have been organised to formulate the Plan of Action, to discuss operational aspects and later to provide an orientation on the project to the key functionaries of both the agencies as well as other district level officials. The first of such workshops was held in March' 1988 in which officials of Jal Nigam, PSU, UNICEF, Panchayati Raj Department, UPDESCO, DWCR and NGOs worked out the Plan for operationalising Sub-Project V. The outcome of this workshop has been discussed earlier in the first chapter. Subsequently, six other workshops have been organised, three of them just prior to launching of Phase A and in the first quarter of Phase A. These last three workshops were organised,

- to orient the PSU / JN / Dist. officials on the Project and to mutually share relevant experience,
- to standardize the monitoring formats, and

- to orient the field staff on methods of promoting proper use of rural sanitation facilities

Details of these workshops can be seen from Table 3 1

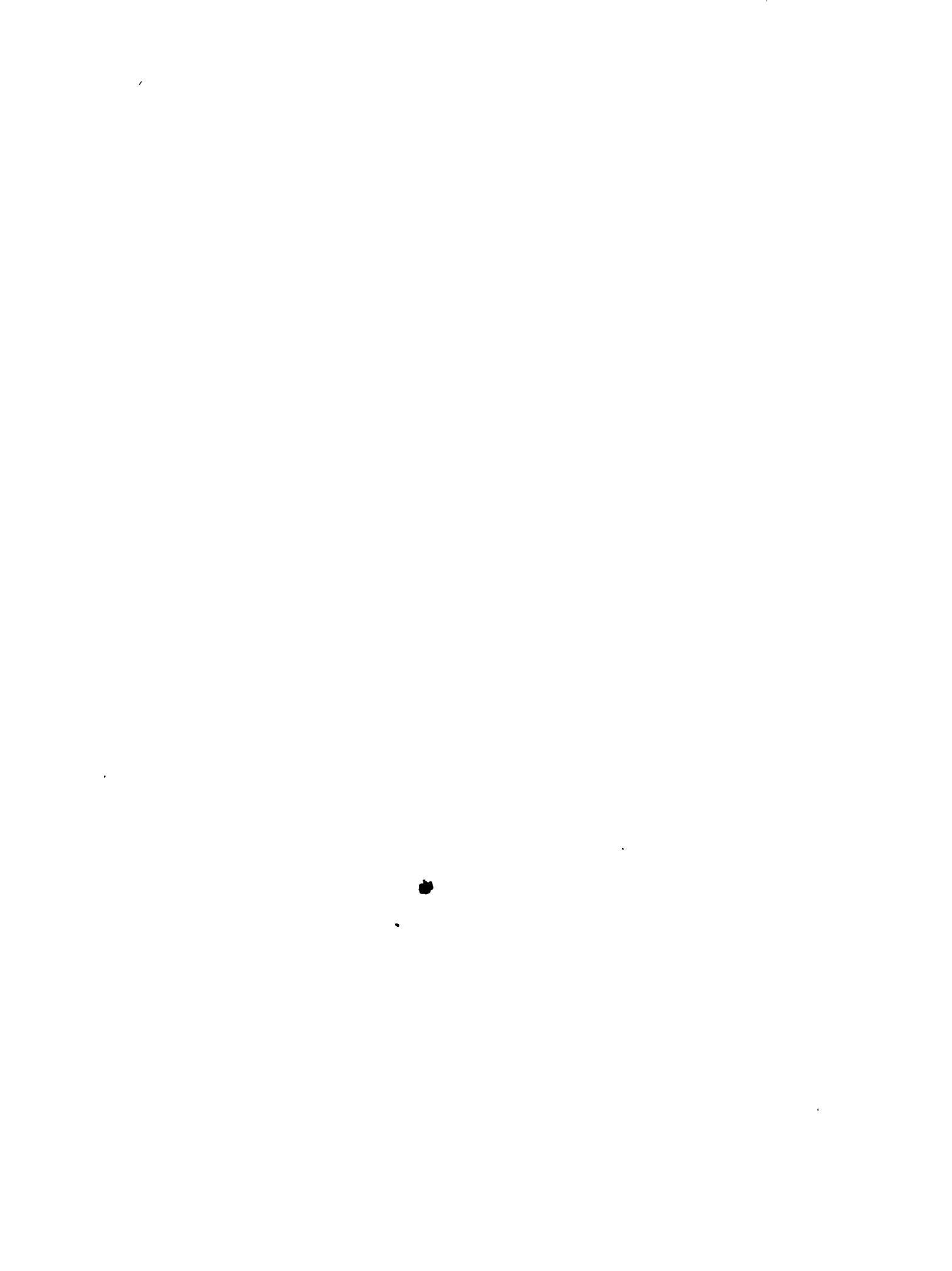
Selection of Beneficiaries :

Typically project Implementation in a village begins with group and individual contacts by PSU field staff. In these meetings, the need for sanitation and specifically household sanitary latrines is explained and the mode / norms of participation are detailed out. The baseline Information already available is used as a reference point for categorising beneficiaries. Since all beneficiaries above poverty line (APL) that is those having annual family income above 6400 rupees are to contribute Rs. 400 in cash while those below this cut-off point are to participate by providing voluntary labour at all stages, this poses a problem at the outset in ensuring acceptance. There are three major obstacles in enlisting beneficiaries:

- Availability of adequate space** (about 200 Sq ft.), since the project is promoting the idea of locating the HSL unit as close to the dwelling unit as possible, space is the first limitation.
- Once space is ensured, the question of **participation either through labour or by paying cash** comes up. A minimum of two to three mandays and a little more time distributed over a week is expected from those below poverty line (BPL). It is not always possible for a family to provide uninterrupted voluntary labour for two to three days for digging the pits especially when there are no adult males in the family or when the family feels that the wages foregone would cause immediate hardship.
- When the question of cash contribution comes up, there is an inevitable **comparison with those who are not asked to make such contribution**

Implementation Strategy :

Various strategies have been adopted to mobilise "early adoptors" and initiate work with the expectation that by demonstration effect slowly the others would follow. Once the consent of a family is obtained and they are willing to install the HSL unit the process of site selection begins. At this stage, the Junior Engineer accompanied by the PSU field staff initiates detailed dialogue with the beneficiaries regarding the precautions to be taken while



locating a unit. A minimum distance of 3 metres. from a drinking water source is the uppermost consideration. Besides, as cited earlier, the unit is located as close to the dwelling unit as possible.

Procurement of Materials and Construction

Most of the low - value materials such as bricks, brick ballast, sand, stone grits, etc. are procured through tender and supplied by contractors. The UP Jal Nigam directly procures cement from UP Cement Corporation, steel (for the door / M.S. rods) from Steel Authority of India (SAIL) or other manufacturers conforming to Bureau of Indian Standards (BIS) norms. The entire set up ceramic pan / pan-trap / footrests are supplied by CERA of Gujarat (Khodiyar make). The pans are especially designed for use in rural areas, with a higher slope provided to the pan surface so that less water would be required for cleaning than that in conventional pans. Labour - masons and helpers - are selected mostly from the local community and engaged on work order agreement by the Sub-Divisional Officer of the RSD.

This procedure is followed in most of the project area "barring a few cases in district Varanasi".

(Ref : Letter 852/Anu Dutch Sub-Project V/dated 07.08.92 P. 5)

Construction starts once formal consent is obtained from the beneficiaries for providing labour or cash contribution. Those above APL are asked to deposit Rs 400/- with the Jal Nigam against a printed receipt issued by Jal Nigam.

Once a minimum of 10 to 12 beneficiaries have given formal consent, construction begins. In every village, there is a store maintained by UP Jal Nigam for maintaining an inventory of materials. Cement, Ceramic pan set (Pan, footrest, and water seal) and MS rods, steel doors, etc. are stored here. Other construction materials like brick, cement, brick ballast, which are locally procured are carried as close to the construction site as possible. The BPL beneficiaries are expected to carry the bricks and sand meant for their respective units, while for the APL beneficiaries the construction crew do the job. All households are provided with a list of items and materials to be used in the HSL unit.

However, for ensuring that the materials are not pilfered, in a number of cases even APL beneficiaries either carry this materials themselves or engage some hired labour to do the job.

Groups of masons are recruited by the JE departmentally. It is understood that the process of obtaining brick, cement and brick ballast, etc. (which are locally procured) as well as construction crew (masons and helpers) is contracted out. While for some cases, there are separate contractors for supplying materials and labour, in Varanasi, usually, the same contractors supply both. As mentioned earlier attempts are made to use local masons wherever they are available.

Coordination between PSU and Jal Nigam :

Construction work is supervised by the JE's of UP Jal Nigam. Occasionally, Assistant Engineers (designated as Sub-Divisional officers) also pay field visit during construction. The Engineer of PSU also undertakes regular field visits for assessing both quality of construction as well as progress of work and especially in resolving community - level issues arising out of construction and other technical problems. The ultimate responsibility for ensuring quality work and completion of units in scheduled time is of the Rural Sanitation Division (RSD) of Jal Nigam.

There is close coordination between the PSU and UPJN on technical matters and it is understood that usually any technical problem occurring in the field are sorted out periodically at the field level itself. Every month a meeting of the PSU field staff and RSD (Jal Nigam) staff is held to discuss the process of work and various other issues which require coordination of the two agencies.

In Varanasi, in all the project villages a weekly meeting is held in which all field level staff meet and discuss the problems related to construction like siting, alteration and addition in the original design at beneficiaries' cost, as well as grievances of beneficiaries on any aspect of construction. This appears to be a very useful exercise.

Completion and Handover of units :

After an unit is completed, detailed joint inspection of the unit is done by the JEs of the RSD and PSU representatives, usually the Engineer or the Social Scientists. If the unit is

found to be constructed as per the project standards, both functionaries sign on a prescribed format certifying that the unit has been completed. The unit is then formally handed over to the beneficiary who also signs on the format. Only after this unit is formally handed over, it is ready for using.

After this stage, the GOs take over and continue with the second phase of motivation work to ensure proper use and maintenance of the unit

Based on the report of beneficiaries it is learnt that the average interval between completion and handover of units is about 17 days. This seems to be a reasonable period of time considering that technical checks have to be made in between. However, during the period of review, it was observed that the number of units completed but not handed over was substantial in a few villages of Varanasi. In Table 3.2 the position has been shown at four different points of time between March '92 to June '92.

As this Table shows, in specific cases the progress of handover of units does not follow the construction schedule. For example, in Tikari village, between March 24 and June 2, 87 new units were constructed but the number handed over remained constant at 81. The position was also similar in Muradeo village of Varanasi. In discussions with the Assistant Engineers of Jal Nigam and PSU officials, at Varanasi, it was learnt that the backlog was because of minor problems in construction which had not been rectified. The hurried pace of construction towards the end of Phase - A has possibly resulted in such a situation.

Social Mobilisation :

Each Group Organiser is assigned a specific number of households, usually around 80, after an orientation training. The specific responsibility of Group Organisers is :

- to introduce the project concepts in informal group meetings and through personal contacts, explaining major components of the project, identification of constraints which are likely to come up from the point of view of the people in participating, organising awareness campaigns to help the PSU / Jal Nigam team;
- to identify beneficiaries and motivate them to participate as per project norms;
- to provide an interface between the project officials and the community during construction process,

- to make home visits after installation to promote use and regular cleaning of units;
- to disseminate messages on correct water use and handling and sanitation practices

The GOs are paid an honorarium of Rs 300 per month.

Monitoring and Supervision :

The PSU has developed a participatory monitoring approach using the GOs. The GOs record their communication and information activities in a **weekly reporting format**. The activity heads in this format include .

- contacts made at household level in the project villages
- purpose of household visit (sanitation, soakpits and sanitary latrines)
- meetings held with Jal Samiti / School Sanitation Committee / members of Gram Sabha / with small groups

The GOs also record their activities relating to promotion of safe water use in a separate format which indicates the name of the head of the household, the source of water used, water storage practices, food handling practices and sanitary latrine maintenance practices. Besides the Jal Samiti^{**} members are also supposed to record the details of supply of water from the water point on a weekly monitoring format which includes :

- time at which water is supplied through the stand post (morning / noon / evening)
- nature of flow of water (heavy / medium / slow)
- condition of platform and drain (clean / dirty)
- meetings of the Jal Samiti

The strength of an organisation like PSU lies in the flexibility of working. The Social Scientists in charge of field office is in a number of ways free to take day to day decisions on project implementation within the framework of the project policy. They are free to adopt innovative approaches to gain access into the community, for instance, in the Thulendi

^{**} Jal Samitis are water-point based user groups formed to take care of operation and maintenance requirements drinking water of sources provided under the Indo-Dutch Project

Group of villages the PSU Social Scientist felt it necessary to extend the initiatives into other areas not strictly related to the realisation of immediate project objectives. Some of the innovative approaches were - organising a night school for children, organising immunisation campaigns in close coordination with the female Multi Purpose Workers and identification and treatment of Fluorosis cases. While this obviously meant stretching the available resources, by going beyond the immediate project objectives and taking interest in other crucial aspects of the community's existence, the PSU field staff have been able to gain the confidence of the people.

There is close monitoring and supervision from the PSU headquarters staff and the extent of interaction between the field staff and PSU headquarters staff is also fairly high. The Social Scientists can and do suggest specific strategies and these are discussed and debated at the headquarter level. The field staff of PSU also provide regular feedbacks to the PSU Headquarters at Lucknow regarding the project functioning and progress. This participatory management process has resulted in a very high motivational level in the PSU field staff. They spend long hours in the project villages and have intimate knowledge of the area. Whether or not such close personal contacts can be maintained in the next phase, when the project area expands considerably, remains to be seen but the positive impact of this method of working can not be questioned. The details of such initiatives have been discussed later in Chapter - 9.

TABLE - 3.1

Workshop / Training Programmes Organised for Officials and Project Functionaries

Sl. Training/ No. Workshop	Participants	Duration (No. of day/s)	Main objectives	Period	Training Agency/ Resource Person/s	Venue
1. Workshop	Officials of RNE/JN/NGOs/ UNICEF/PSU/PR/ Government of U.P./DWCRA	2	Planning workshop on rural sanita- tion	Mar.1-2 '88	PSU/Review and Support Mission	Lucknow
2. Workshop	Concerned officials of JN / State Government	1	Finalisation of Plan of Action for rural sanitation	Oct. 25 '88	PSU	Lucknow
3. Workshop	Selected commu- ty members/dist. level officials of PR/JN/DWCRA in NAP	1	Orientation on sanitation program to the concerned district level officials	July 19 '88	PSU/Literacy House, Lucknow	Rae Bareli
4. Workshop	Concerned PSU/JN DWCRA field staff and community	3	Key aspects of rural sanitation and training to the masons for construc- tion of sanitary units	Aug.31- sept.2 '89	ESI, Ahmedabad/ Mr. Ishwar Bhai Patel	Lucknow
5. Workshop	Concerned staff of PSU/JN and district administration	2	Orientation and sharing of experiences	Mar.6 & 16 '90	PSU/CHETNA	Varanasi/ Lucknow
6. Workshop	Concerned offi- cials of PSU/ BHU/DWCRA	1	Standardisation of MIS for rural Sanitation of SP - V	March 14 '91	PSU	Lucknow
7. Workshop	Field staff of PSU/BHU/JN	2	Orientation of the team on proper use of rural sanitation	May 10-11 '91	PSU/CHETNA	Varanasi

RURAL SANITATION PROGRAMME

Table 3.2 : Position of Hand - over of Units in Phase A villages

Village	March 24'92		April 22'92		May 7'92		June 2'92	
	Constructed	Handed over	Constructed	Handed over	Constructed	Handed over	Constructed	Handed over
RAE BARELI								
Karan pur	325	221	381	344	381	344	-	-
Pithan	105	101	106	106	106	106	-	-
Jalalpur	210	209	210	210	210	210	-	-
Rasoolpur	160	90	161	161	161	161	-	-
Thulendi	341	114	361	307	418	307	-	-
VARANASI								
Bhagawanpur	197	119	210	119	-	-	260	200
Chittupur	95	88	95	88	-	-	95	95
Naipura-kalan	180	99	235	99	-	-	285	149
Tikari	123	81	185	81	-	-	210	81
Muradeo	140	120	185	120	-	-	195	120
Gajedharpur	73	10	160	10	-	-	160	55
Nuaon	177	125	215	138	-	-	240	200

CHAPTER 4

STRATEGIES ADOPTED FOR SOCIAL MOBILISATION AND COMMUNICATION

As mentioned earlier in the second chapter, the Programme Support Unit (PSU) is responsible for designing and implementing the social mobilisation component. The PSU has used both interpersonal approaches as well as group approaches in communicating the project objectives and messages to the beneficiaries.

Interpersonal Approach

The key communicators at the village level are the Group Organisers (GOs) whose job responsibilities have been discussed earlier. The Group Organisers have played a crucial role in the initial stages by introducing the project implementation approach to the beneficiaries during the construction process itself by explaining construction details as well as in the post-construction stage by making repeated household visits to promote use and maintenance. Each GO is provided with a complete kit which contains a series of flip charts, posters, pamphlets, and stickers in a shoulder bag. The GOs have been trained in the use of these interpersonal media in several training programmes and workshops. These training programmes which are usually of three to four days duration have been organised by CHETNA, the chief media consultant for the project in collaboration with PSU.

The PSU has consciously and deliberately adopted a strategy of emphasising inter personal contacts. While group media have also been used, as discussed later, explicit attention has been paid to inter-personal contacts. It is the Group Organisers and other project staff members who have carried out a major part of the communication on a person-to-person basis.

Media activities :

The project has used a number of popular media at various stages to spread messages on the sanitation programme. The themes of these programmes / materials have been - advantages of using latrines, how to keep latrines clean, safe water handling practice, storage of water, ideal waste water disposal practices and use of soakpits. Other supportive healthy practices like immunization, Oral Rehydration Therapy,

healthy dietary practices for mothers and infants and use of iodised salt have also been promoted. In the initial stages long before the beginning of Phase A, Literacy House (Lucknow), a government media institution, had also provided training to selected community members in puppetry. Training programmes for PSU field staff and representatives from the district administration have also been organised in creative use of development communication techniques in promoting sanitation and safe drinking water handling practices. The details can be seen from Table 4.1. In the Thulendi group of villages (in Rae Bareli) a number of innovative media approaches have been tried out. Magic show for instance, is a highly innovative medium of entertainment in the context of sanitation. A renowned magician, Mr. Madan Kundu, based at Lucknow, was retained by PSU for performing magic shows using sanitation as a theme. To give an idea regarding the way the medium has been adapted, one of the performances showed a person drinking dirty water and then producing an unending white strip (made to represent a worm); when the person drinks clean water, however, nothing comes out.

CHETNA a non government voluntary organisation based at Ahmedabad specialising in use of media in rural development sector has provided extensive media support to the project. In collaboration with PSU, CHETNA has organised twelve communication workshops and training sessions in both the project areas for the GOs and PSU field staff. One training programme has also been organised by the Literacy House, Lucknow, on advanced use of puppets in communication.

The CHETNA group has also developed a number of promotional materials which are being used in the project. They include :

- A series of posters on four themes (motivation for adopting latrines, importance of washing hands after defecation and home sanitation)
- A series of flip charts on five themes . motivation, construction and maintenance of sanitary latrines, use of soakpits and safe waste water disposal, and safe drinking water practices
- Manual on sanitation

The GOs have been trained by CHETNA and PSU together to use the promotional materials effectively. The flip charts for instance, are used after building up a flexible story line and retaining a continuity in the characters.

Another agency which has also provided communication support is **Chitrabani** a reputed audio-visual training institute based at Calcutta. Besides documenting the project activities, Chitrabani has produced colour transparencies which are used in slide shows as part of the communication package. A film on video format is now reported to be in the process of preparation at Chitrabani.

Recently, another innovative approach is being attempted by the project using a participatory development communication approach. Two resource persons have conducted a 10 day workshop at Bachrawan (PSU field office for Thulendi group of villages) for trainees identified from the Project villages. Using the available collection of transparencies of the project area, the two trainers encouraged three mixed groups of men, women and children to select the most appropriate visuals. The resource persons aided the group to tie up the visuals and develop a story line on village sanitation appropriate to their setting in which the theme of construction of latrines was also woven in. There was a very high level of participation from the groups and each member in the group developed his or her own story line which was noted down. This formed the basis for an audio commentary to accompany the sequence of slides.

The training workshop concluded with a series of audio-visual presentations by the group members in the interim phase villages in a live setting. This review team witnessed one such presentation in Malikpur Saraiya village which had an impressive attendance. The entire presentation was handled by the trained group members with technical support from PSU staff in handling slide projectors. Our impression is that such an approach has two advantages:

- 1 It encourages active participation and develops a sense of involvement of community members who make the presentation,
- 2 Such a presentation is likely to have a higher credibility and acceptance among the audience since the communicator himself / herself is from within the same community.

These innovative approaches need to be formalised and systematised. It is also hoped that the experience acquired by the project from this exercise would be used in designing future programmes. For instance, in this particular exercise the communication trainers were limited by the selection of visuals. Instead of starting out with a set of available visual materials it might be more appropriate to allow the community

members to develop the themes and then produce visuals to match the story line. Another aspect that needs to be kept in mind is that the perspective of rural people is substantially different from that of literate urban photographers. Recognising two-dimension representation of three - dimensional objects needs a certain amount of visual learning which cannot be taken for granted. Matching the visuals from the perspective of the rural audiences might make such programmes very effective.

Coverage of Media and Communication Activities :

The coverage of media activities, in general, seems to be inadequate. Less than half of the respondents (40%) could recall any group media or communication programme in the project villages (Table - 4.2). What was more surprising, nearly one-third of the respondents in these villages were certain that no such programmes have been conducted. However, in the project villages other than Phase-A villages particularly in Rae Bareilly, the level of recall was significant (32%). Two of the villages included in this category happen to be Interim phase villages where already communication / group media programmes have been started

Spontaneous recall of specific media was also rather poor (Table-4.3) The only programme that was spontaneously recalled by a relatively larger section was puppet shows, particularly in the Thulendi Group of villages. Apart from the puppet shows, the other medium that needs mention in this context are the video shows particularly in the Tikari group of villages (18%). Even when prompted, the recall of various media activities did not improve substantially.

The relatively high recall in the interim / other project villages is explained by the fact that the programmes have been conducted more recently

Recall Of Messages In Table - 4 4A to 4 4D, the level of recall of various messages have been analysed by type of medium. It is seen that recall of messages related to use and maintenance of latrines is highest followed by messages on personal hygiene. This is the general pattern irrespective of the type of medium. The recall is particularly high among those who have watched puppet shows. In fact, puppet shows seem to be the most popular medium (Table 4 5)

TABLE - 4.1
Communication Workshop / Training Programmes Organised

Sl. No.	Training/ Workshop	Participants	Duration (No. of day/s)	Main objectives	Period	Training Agency/ Resource Person/s	Venue
1.	Training	Identified community members to form a puppetry team	10	Communication through puppetry (TOT)	Sept.9-18 88	Literacy House/ Lucknow	Lucknow
2.	Training	Puppetry Team	3	Communication through puppetry to disseminate health messages	Oct.25 88	PSU	Lucknow
3.	Training	Puppetry team	6	Advanced training on communication through puppetry	Dec.5-10 88	PSU/Literacy House, Lucknow	Rae Bareilly
4.	Training	Dist. Administration/Community representatives	3	Communication through puppetry	Sept.6-8 89	CHETNA/PSU	Varanasi
5.	Training	Concerned field staff and village level workers	2	Training of GOs on creative communication	Jan.23-24 91	PSU/CHETNA	Varanasi
6.	Workshop	Village level workers	2	Refresher course on community participation & health education in water and sanitation programme	Jan.30-31 91	PSU	
7.	Workshop	PSU/Concerned field staff	2	Workshop on developmental communication; a perspective for community mobilisation in water and sanitation programme	Apr 1-2 91	CHETANA	Ahmedabad
8.	Training	Field staff of	4	Communication	July 2-5	PSU/CHETANA	Rae Bareilly

10.	Workshop	Field Staff of Varanasi	3	Communication Work- shop for GOs at Tikari.	Sept.5-7 91	PSU/CHETANA	Varanasi
11.	Workshop	Field Staff of Rae Barelli	3	Training of GOs on Health and Nutrition	Mar.16-18 92	PSU/CHETANA	Rae Barell
12.	Workshop	Field staff/ resource persons of Rae Barelli	2	Communication workshop for community	Mar.20-21 92	PSU/CHETANA	Rae Barell
13.	Workshop	Field staff of Varanasi	2	Training of GOs on Health and Nutrition	Mar.23-24 92	PSU/CHETNA	Varanasi
14.	Workshop	School teachers of project vil- lages of Varanasi	2	Communication workshop for teachers from the project villages	Mar.26-27 92	PSU/CHETNA	Varanasi
15.	Workshop	GOs and community of Rae Barelli	16	Development Communication	May 9-24 92	PSU	Rae Barell
16.	Workshop	PSU SSs	2	Creative communi- cation in water supply and sanita- tion programmes	Sept.26-27 90	PSU / Mr. Jiwan Pani, Director, Kathak Kendra	Lucknow
17.	Workshop	PSU SSs	1	Developmental Communication for encouraging commu- nity for water supply and sanitation programmes	Nov.14 90	PSU/Father Gaston. Roberge, Director, Chitrabani	Lucknow
18.	Workshop	PSU+community	3	Use of popular films for social communica- tion:an experiment in rural sanitation programme	Oct.3-5 91	PSU/Father Gaston.Roberge, Director, Chitrabani.	Lucknow & Rae Barelli

RURAL SANITATION PROGRAMME

Table 4.2 : Awareness of Media Activities organised in the village

	Total	Rae Bareli			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
All Respondents	450	75	75	50	125	75	50	200	150	100
Organised	105 23.3	43 57.3	24 32.0		36 28.8	2 2.7		79 39.5	26 17.3	
Not organised	286 63.5	24 32.0	34 45.3	44 88.0	75 60.0	65 86.7	44 88.0	99 49.5	99 66.0	88 88.0
Did not know	59 13.1	8 10.7	17 22.7	6 12.0	14 11.2	8 10.7	6 12.0	22 11.0	25 16.7	12 12.0

RURAL SANITATION PROGRAMME

Table 4.3 : Awareness of Activities - (spontaneous)

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
All Respondents	450	75	75	50	125	75	50	200	150	100
Puppet Show	65	29	22		14			43	22	
	14.4	38.7	29.3		11.2			21.5	14.7	
Street Theatre	10	6			4			10		
	2.2	8.0			3.2			5.0		
Magic Shows	14	14						14		
	3.1	18.7						7.0		
Video Presentation	27	4			23			27		
	6.0	5.3			18.4			13.5		
Songs	6	4			2			6		
	1.3	5.3			1.6			3.0		
None of the above	356	35	53	50	93	75	50	128	128	100
	79.1	46.7	70.7	100	74.4	100	100	64.0	85.3	100



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Table 4.4 (A) : Recall of the message given in the Programme - Puppet Show

	Total	Rae Bareli			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
Watched Puppet Show	58	19	26		11	1	1	30	27	1
Water use	5	1	3		1			2	3	
	8.6	5.3	11.5		9.1			6.7	11.1	
Water storage	9	4	4		1			5	4	
	15.5	21.1	15.4		9.1			16.7	14.8	
Personal hygiene	11	6	4		1			7	4	
	19.0	31.6	15.4		9.1			23.3	14.8	
Environmental sanitation	8	6	2					6	2	
	13.8	31.6	7.7					20.0	7.4	
Proper use of latrine	28	8	15		5			13	15	
	48.3	42.1	57.7		45.5			43.3	55.6	
Cleaning of latrine	20	5	9		6			11	9	
	34.5	26.3	34.6		54.5			36.7	33.3	
Waste water disposal	3		1		1		1	1	1	1
	5.2		3.8		9.1		100	3.3	3.7	100
Soak pit	1		1						1	
	1.7		3.8						3.7	
Proper nutrition of mother and child	1		1						1	
	1.7		3.8						3.7	
Use of iodised salt	1		1						1	
	1.7		3.8						3.7	
Could not Recall	18	6	6		5	1		11	7	
	31.0	31.6	23.1		45.5	100		36.7	25.9	

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Table 4.4 (B) : Recall of the message given in the Programme - Street Theatre

	Total	Rae Bareli			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
Watched Street Theatre	9	3	1		4		1	7	1	1
Water use	33.3		100		50.0			28.6	100	
Water storage	11.1				25.0			14.3		
Personal hygiene	22.2	33.3	100					14.3	100	
Enviornmental sanitation	11.1	33.3						14.3		
Proper use of latrine	44.4	33.3	100		50.0			42.9	100	
Cleaning of latrine	22.2				50.0			28.6		
Could not Recall	44.4	66.7			25.0		100	42.9		100

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Table 4.4 (C) Recall of the message given in the Programme - Magic show

	Total	Rae Bareli			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
Watched Magic Shows	13	12	1				12	1		
Water use	2 15.4	2 16.7					2 16.7			
Water storage	1 7.7	1 8.3					1 8.3			
Personal hygiene	4 30.8	4 33.3					4 33.3			
Environmental sanitation	3 23.1	3 25.0					3 25.0			
Proper use of latrine	4 30.8	4 33.3					4 33.3			
Cleaning of latrine	3 23.1	3 25.0					3 25.0			
Could not Recall	6 46.2	5 41.7	1 100				5 41.7	1 100		

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Table 4.4 (D) : Recall of the message given in the Programme - Video show

	Total	Rae Bareli			Varanasi			Type of Village		
		Phase A	Other	Non-	Phase A	Other	Non-	Phase A	Other	Non-
		vill.	Proj	Proj	vill.	Proj	Proj	vill.	Proj	Proj
Watched Video Shows	22	6	2		13	1		19	3	
Water use	4				4			4		
	18.2				30.8			21.1		
Water storage	6				6			6		
	27.3				46.2			31.6		
Personal hygiene	5				5			5		
	22.7				38.5			26.3		
Proper use of latrine	3				3			3		
	13.6				23.1			15.8		
Cleaning of latrine	2				2			2		
	9.1				15.4			10.5		
Waste water disposal	1				1			1		
	4.5				7.7			5.3		
Immunisation	1				1			1		
	4.5				7.7			5.3		
Diarrhoea management	2				2			2		
	9.1				15.4			10.5		
Proper nutrition of mother and child	3	1			2			3		
	13.6	16.7			15.4			15.8		
Could not Recall	14	6	2		5	1		11	3	
	63.6	100	100		38.5	100		57.9	100	

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Table 4.5 : Most Preferred Programme

	Total	Rae Bareli			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
Seen any programme	168	61	50		54	2		115	52	
Puppet shows	35	9	18		7	1		16	19	
	20.8	14.8	36.0		12.9	50.0		13.9	36.5	
Street theatre	4				4			4		
	2.4				7.4			3.5		
Magic shows	2	2						2		
	1.2	3.3						1.7		
Video shows	8	1			6	1		7	1	
	4.8	1.6			11.1	50.0		6.1	1.9	
No specific preference	119	49			37			186	32	
	70.8	80.3			68.5			74.8	61.5	

CHAPTER 5

AWARENESS AND KNOWLEDGE OF PROGRAMME AMONG BENEFICIARIES

The Project has consistently emphasized a participatory approach in programme planning and implementation. As seen earlier, in finalising the design to be adopted the response of beneficiaries to various types of superstructure were carefully assessed. The ultimate objective of encouraging participation is, of course, to ensure optimum use. Hence, an intensive communication campaign has been carried out by the project personnel.

The methods used are group meetings and personal contact through Group Organisers and field staff of the agencies involved. In the initial period, it was the DWCRA in Rae Bareilly and BHU in Varanasi, who had carried out the communication drives, but with the gradual withdrawal of these two agencies, that is, during implementation of Phase A, it is the PSU which has implemented the entire communication process.

General Awareness in Project and Non-Project Villages

The general level of awareness regarding the project is very high not only in the Phase A project villages but also in other villages included in the project area which are yet to be covered (Table - 5.1). Since in most of the Phase A villages the programme is already implemented, everybody was obviously aware of the sanitation Programme. But it is noteworthy that nearly one third (30%) of the respondents interviewed in the other project villages, where work is yet to begin, were also aware that there is such a Programme in operation for construction of sanitary latrines. A few respondents (4%) from non-project villages, too knew that such a programme was being implemented in other villages in the area. It is possible, however, that in the villages outside the project area, there is some confusion of identity with the PR department's latrine construction programme. Even in the group discussions, it was quite apparent that the awareness generated by the programme is very high.

Source of Awareness

Group Organisers and project staff appear to be the most important source of initial awareness about the project. In fact, the GOs are the single most important source of information, nearly half of the respondents (48%) had got information about the project from them (Table - 5.2). Similarly, about one fourth (23%) were told about the project by PSU project staff. Initial awareness has also been generated through word of mouth. For instance, 14% of beneficiaries mentioned that it was from their neighbours that they had come to know about the project first. But it is in personal meetings at home with project functionaries that the beneficiaries have come to know about the details of the programme such as terms of participation, site selection criteria or materials to be used, etc. Table - 5.3 indicates that 78% of beneficiaries had come to know details of the programme in personal meetings. It appears that in Varanasi a much higher proportion (86%) have got the details in such personal meetings as compared to Rae Bareilly (17%).

Follow-up Visits

In nearly all cases, follow up visits have been made by some programme functionary or other (Table - 5.4). Only 4% of respondents said that after the initial contact either in a meeting or at home when they came to know about the programme, no one else had contacted them till the stage of site selection. It is the PSU field staff or the Group Organisers who have made follow up contacts in most cases. Only one fourth (23%) of the respondents mentioned that the Jal Nigam Engineers had also paid follow up visits. This was mostly in such cases where there was a problem of site selection because of lack of availability of space and hence several visits had to be paid by the Junior Engineers before the final site was selected. It needs to be mentioned at this stage that the follow up visit by project staff or GOs are reported to be relatively higher in Varanasi as compared to that in Rae Bareilly because the BHU team which was originally assigned the task of spreading the project ideas had been paying field visits for nearly 3 years before actual construction started. We are told that, in fact, it had been extremely embarrassing for the field staff to go on repeating the same point over and over again in the absence of any tangible construction activity. Some of the community organizers and GOs in Varanasi who had earlier worked under the BHU set up mentioned that because of this delay in initiation of construction activity they had almost lost their credibility in the project villages.

In the course of this enquiry another aspect that stood out quite clearly was that the project had certainly acquired a distinct identity. Since in some of the villages, the Panchayati Raj Department has also constructed sanitary latrines, one would have expected some confusion between the two programmes. But "Dutch Project" and its functionaries are clearly of a separate category not only in terms of the hardware provided but also in terms of the close relation that the project functionaries have established.

For instance, the head man of a hamlet in village Malpur (Gram Pradhan) said .

"There is a big difference between the manner in which the Dutch Project people talked to us and the way in which other government officials approach us. These people (PSU staff) have great patience and because of their continued visit we have agreed to install sanitary latrines in our village." Malpur village incidentally is included in the Interim phase and construction work is yet to begin in this hamlet.

Initial Resistance to Acceptance

In spite of the intensive contacts, a small portion of the beneficiaries (16%) had expressed initial reluctance to accept the programme. The proportion of such problem cases was relatively higher in Rae Bareilly (29%) as compared to Varanasi (8%) (Table-5.5). In this context it is relevant to mention that prima facie it appears that the demand for latrines was initially higher in the Varanasi project villages. In fact, the two project areas presented marked differences in socio-economic characteristics. While the Varanasi villages are on the fringe of Varanasi city and, therefore, share a number of urban characteristics, the Thulendi group of villages in Rae Bareilly exhibit more typical rural features. A greater degree of resistance to the concept of sanitation in the latter is, therefore, understandable.

It appears that the major reason for the initial reluctance to accept the programme was that the beneficiaries had assumed that they would have to pay cash contribution, all of them belong to the BPL category. These beneficiaries were not sure initially to which category they belonged, but later after they were informed that they would not have to pay any money, agreed to accept the HSL unit. Other reasons mentioned were insufficient information about the programme (25%), lack of the required amount of money to be deposited as beneficiary's share (13%) and insufficient space for building the units. Three respondents mentioned that initially they did not want to install the latrine since they did not consider it necessary or because they were not habituated to use latrines (Table - 5.6). However, after persuasion by the project officials all of them decided to adopt the facility. Further details are given in Table - 5.7.

Awareness of Basic Aspects before Installation

The awareness of the essential aspects of the programme prior to actual installation was quite high (Table - 5.8). Nearly three-fourth (71%) were convinced about the advantages of using sanitary latrines. It may be mentioned that in its communication campaign, the project had highlighted the convenience aspect. More than half of the respondents (51.5%) also knew the basic principle on which the twin-leach-pit latrine works and an almost equal proportion (42%) had also been told about the precaution to be taken during

site selection, - specifically the minimum distance from a drinking water source. Similarly, more than half of the beneficiaries knew how to use and maintain the sanitary latrines before installation.

One area on which the knowledge prior to installation was poor was the total cost of the latrine; only about one-fourth (26%) knew how much it would cost to build such a unit.

Between the two districts, in Varanasi project villages, the level of knowledge at this stage on crucial aspects specifically on use and maintenance and functioning of the latrine was significantly higher. Further, in the Thulendi group of villages (Rae Bareli) nearly one-third (32%) mentioned that they did not have detailed information on any of the above aspects before actual construction started, in comparison the proportion of such people is much lower (8%) in Varanasi. This indicates that the quality of pre-construction awareness campaign was superior in Varanasi.

Once the construction started, however, a great deal of awareness seems to have been created. The saturation approach adopted ensured continued presence of the construction crew in the project villages. Since the process of construction of a unit usually stretches over a period of nearly a week, it allows sufficient interaction between the construction crew and the beneficiaries. This is reflected in Table - 5.9. It is observed that more than half of the beneficiaries had discussions on the functions of the different components.

In Table - 5.10 the responses of beneficiaries (obtained in the household survey) on specific function of various components have been presented. The overall knowledge of the specific functions of the various components is high. For instance, more than three fourths of the beneficiaries knew why two pits have been provided or why pit covers have been provided. But the function of the trap / waterseal has not been very well understood; only 11% of the beneficiaries mentioned that the waterseal prevents odour.

In the detailed discussions with groups of beneficiaries, too, this high level of knowledge was confirmed. Even a group of children (10-14 Years) in Thulendi had remarkably accurate understanding of the functioning of the unit. In general, however, men seem to have a better understanding of the technical aspects than women. Since the group discussions were conducted using a scale model of the unit, this setting provided a better means of obtaining the knowledge of technical aspects.

However, there still seem to be certain misconceptions regarding the design. Two such common misconceptions which surfaced in the group discussion were.

- Some kind of explosive gas is likely to build up inside the pit with continuous use. When asked to suggest improvement in design, five respondents (out of 200) have suggested that there should be a pipe fixed to the pits to provide outlet for the gas. Although this number might be considered very small, in the subsequent group discussions such apprehensions surfaced. Several persons expressed the fear that pressure of the gas, in fact, might even blow up the pit. When probed further, it was realised that these people had seen septic tank units which are provided with vent pipes and felt that this conspicuous component is missing in the twin leach pit design.
- Another serious misapprehension is that the size of pits is too small and if a family of say 6-8 persons use it regularly, the pit would get filled up in no time. Again these numbers are very small (4 respondents suggested deepening of the pits) but the fact that these fears were expressed on several occasions as the reason why the entire family does not use the unit emphasises the perceived nature of the problem.
- Another fear expressed in group discussions is that the pit lining might collapse because the intermediate layers in the honeycomb structure are not fixed with cement mortar. The following comment is typical

"I have a suggestion that cement should be used to join the bricks specially considering the rainy season and also the heavy traffic and vehicles. Hence stronger pit walls would be required."

But these fears arise from an inadequate understanding of the design and the poor quality of construction of latrines in other Sanitation Programmes

Quantity of materials

Nearly two thirds (65%) of beneficiaries knew more or less about the quantity of materials required for construction of a unit (Table - 5 11). In fact, each household was provided with a list of items and the quantity thereof to be used in the latrines. The materials referred to include cement, sand and bricks. Since the pit covers are cast in batches not many people could recall correctly the quantity of MS rods or granite chips used

Cost of the unit

In spite of the fairly high level of knowledge of the technical details, it is surprising that not many people knew the total cost of the unit they have been provided even after the entire construction had been completed. As Table - 5.12 shows only 38% mentioned that they knew the total cost. Even among this group one fourth suggested a figure of Rs. 3000/- or less while another one tenth (9%) could not specify any figure. Not surprisingly a much higher proportion of women could not even hazard a guess regarding the cost. Knowledge of the total cost, however, is important, as we shall see later in the context of cost sharing

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Table- 5.1 : Awareness of sanitation programme

		Rae Bareli			Varanasi			Type of village		
		Phase A Village	Other project village	Non- project village	Phase A Village	Other project village	Non- project village	Phase A Village	Other project village	Non- project village
All Respondent	450	75	75	50	125	75	50	200	150	100
Aware	249 55.3	75 100.0	12 16.0	1 2.0	125 100.0	33 44.0	3 6.0	200 100.0	45 30.0	4 4.0
Not Aware	201 44.7	0 0.0	63 84.0	49 98.0	0 0.0	42 56.0	47 94.0	0 0.0	105 70.0	96 96.0

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Table 5.2 : Source of Initial Awareness

	Rae Bareli										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not		
		male			OBC				Spec		male			OBC				Spec		
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Group Organiser	96	17	17	9	17	8	26	7	1	34	29	33	12	50		32	29	1	62	
	48.0	40.5	51.5	52.9	42.5	44.4	49.1	38.9	25.0	45.3	46.8	52.4	66.7	47.2		50.8	48.3	50.0	49.6	
Project Staff	46	6	2	1	5	2	3	4	1	8	21	17	3	35		20	17	1	38	
	23.0	14.3	6.1	5.9	12.5	11.1	5.7	22.2	25.0	10.7	33.9	27.0	16.7	33.0		31.7	28.3	50.0	30.4	
Neighbours	28	6	10	3	8	5	12	4		16	6	6	2	10		6	6		12	
	14.0	14.3	30.3	17.6	20.0	27.8	22.6	22.2		21.3	9.7	9.5	11.1	9.4		9.5	10.0		9.6	
Engineers	4	3			2	1	1	1	1	3	1			1			1		1	
	2.0	7.1			5.0	5.6	1.9	5.6	25.0	4.0	1.6			.9			1.7		.8	
Family Member	4	1	3	2	1	1	3	1		4										
	2.0	2.4	9.1	11.8	2.5	5.6	5.7	5.6		5.3										
Block Officials	2											2		2		2			2	
	1.0											3.2		1.9		3.2			1.6	
Others	21	10	1	2	7	2	8	2	1	11	5	5	1	8	1	3	7		10	
	10.5	23.8	3.0	11.8	17.5	11.1	15.1	11.1	25.0	14.7	8.1	7.9	5.6	7.5	100	4.8	11.7		8.0	



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Table 5.3 : Source of awareness about the programme details

	Rae Bareli										Varanasi								
	Total	Sex		Caste			Inc			Total	Sex		Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not	
		male	male		OBC				Spec		male	male		OBC				Spec	
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125
Approached at Home	157	27	23	9	27	14	35	12	3	50	55	52	16	90	1	52	53	2	107
	78.5	64.3	69.7	52.9	67.5	77.8	66.0	66.7	75.0	66.7	88.7	82.5	88.9	84.9	100	82.5	88.3	100	85.6
In a village meeting	25	9	4	3	7	3	8	4	1	13	3	9	1	11		7	5		12
	12.5	21.4	12.1	17.6	17.5	16.7	15.1	22.2	25.0	17.3	4.8	14.3	5.6	10.4		11.1	8.3		9.6
Casual encounters	20	8	5	4	7	2	10	3		13	4	3	2	5		3	4		7
	10.0	19.0	15.2	23.5	17.5	11.1	18.9	16.7		17.3	6.5	4.8	11.1	4.7		4.8	6.7		5.6
When other villagers installed	2	1	1	1	1		2			2									
	1.0	2.4	3.0	5.9	2.5		3.8			2.7									
Could not Specify	2		1		1		1			1	1			1		1			1
	1.0		3.0		2.5		1.9			1.3	1.6			.9		1.6			.8

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Table 5.4 : Follow up Contacts

	Rae Bareli										Varanasi								
	Total	Sex		Caste			Inc			Total	Sex		Caste			Inc			Total
		Male	Female	Gen	SC	Oth	BPL	APL	Not Spec		Male	Female	Gen	SC	Oth	BPL	APL	Not Spec	
		male		OBC							male		OBC						
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125
Contacted	193	39	31	15	38	17	51	15	4	70	61	62	17	105	1	63	58	2	123
	96.5	92.9	93.9	88.2	95.0	94.4	96.2	83.3	100	93.3	98.4	98.4	94.4	99.1	100	100	96.7	100	98.4
No one contacted	7	3	2	2	2	1	2	3		5	1	1	1	1			2		2
	3.5	7.1	6.1	11.8	5.0	5.6	3.8	16.7		6.7	1.6	1.6	5.6	.9			3.3		1.6

All contacted	193	39	31	15	38	17	51	15	4	70	61	62	17	105	1	63	58	2	123
Project Staff	134	23	17	9	19	12	27	11	2	40	47	47	12	82		53	40	1	94
	69.4	59.0	54.8	60.0	50.0	70.6	52.9	73.3	50.0	57.1	77.0	75.8	70.6	78.1		84.1	69.0	50.0	76.4
Group Organiser	117	25	13	7	21	10	24	12	2	38	40	39	11	67	1	39	38	2	79
	60.6	64.1	41.9	46.7	55.3	58.8	47.1	80.0	50.0	54.3	65.6	62.9	64.7	63.8	100	61.9	65.5	100	64.2
Engineers	45	14	3	6	8	3	11	4	2	17	13	15	8	20		9	18	1	28
	23.3	35.9	9.7	40.0	21.1	17.6	21.6	26.7	50.0	24.3	21.3	24.2	47.1	19.0		14.3	31.0	50.0	22.8
Govt. Officials	10	2	1	1	2		3			3	1	6	1	6		4	3		7
	5.2	5.1	3.2	6.7	5.3		5.9			4.3	1.6	9.7	5.9	5.7		6.3	5.2		5.7
Others	10	3	3	1	5		6			6	2	2		4		3	1		4
	5.2	7.7	9.7	6.7	13.2		11.8			8.6	3.3	3.2		3.8		4.8	1.7		3.3

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Table 5.5 : Programme Acceptance

	Rae Bareli										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not		
		male			OBC				Spec		male			OBC				Spec		
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Agreed after initial contact	168	35	18	13	26	14	35	15	3	53	58	57	17	97	1	56	57	2	115	
	84.0	83.3	54.5	76.5	65.0	77.8	66.0	83.3	75.0	70.7	93.5	90.5	94.4	91.5	100	88.9	95.0	100	92.0	
Was not convinced initially	32	7	15	4	14	4	18	3	1	22	4	6	1	9		7	3		10	
	16.0	16.7	45.5	23.5	35.0	22.2	34.0	16.7	25.0	29.3	6.5	9.5	5.6	8.5		11.1	5.0		8.0	

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Table 5.6 : Reasons for not agreeing initially

	Rae Bareilly									Varanasi									
	Total	Sex		Caste			Inc			Total	Sex		Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not	
		male			OBC				Spec		male			OBC				Spec	
Not convinced initially	32	7	15	4	14	4	18	3	1	22	4	6	1	9	7	3		10	
Resp. thought he had to pay money	12	2	7	1	5	3	9			9	3		3		3		3		
	37.5	28.6	46.7	25.0	35.7	75.0	50.0			40.9	50.0		33.3		42.9		30.0		
Insufficient knowledge about the programme	8	3	3		6		5		1	6	2		2		1	1		2	
	25.0	42.9	20.0		42.9		27.8		100	27.3	50.0		22.2		14.3	33.3		20.0	
Resp. had no money at that time	4		3	2		1	1	2		3	1		1		1		1		
	12.5		20.0	50.0		25.0	5.6	66.7		13.6	16.7		11.1		14.3		10.0		
Did not consider it necessary	2		1		1		1			1	1		1			1		1	
	6.3		6.7		7.1		5.6			4.5	25.0		11.1			33.3		10.0	
Land Constraints	2										2		2		2			2	
	6.3										33.3		22.2		28.6			20.0	
Not habituated	1	1			1		1			1									
	3.1	14.3			7.1		5.6			4.5									
Water available at a distance	1		1			1	1			1									
	3.1		6.7			25.0	5.6			4.5									
Others	3	1	1	1	1		1	1		2	1		1			1		1	
	9.4	14.3	6.7	25.0	7.1		5.6	33.3		9.1	25.0		100			33.3		10.0	

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Table 5.7 : Why subsequently agreed after initial reluctance

	Rae Bareilly										Varanasi							
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc	Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not
		male			OBC				Spec		male			OBC				Spec
Not convinced Initially	32	7	15	4	14	4	18	3	1	22	4	6	1	9	7	3		10
Learned, no money had to be paid	10	2	5		5	2	6		1	7		3		3		3		3
	31.3	28.6	33.3		35.7	50.0	33.3		100	31.8		50.0		33.3		42.9		30.0
Govt. Official asked to Install	5		2		2		2			2	1	2		3		3		3
	15.6		13.3		14.3		11.1			9.1	25.0	33.3		33.3		42.9		30.0
When other villagers installed	5	1	4	1	3	1	4	1		5								
	15.6	14.3	26.7	25.0	21.4	25.0	22.2	33.3		22.7								
P.S.U Staff asked to Install	3	1	1	1	1		1	1		2	1			1			1	1
	9.4	14.3	6.7	25.0	7.1		5.6	33.3		9.1	25.0			11.1			33.3	10.0
When received sufficient knowledge	3	1			1		1			1	1	1	1	1	1	1		2
	9.4	14.3			7.1		5.6			4.5	25.0	16.7	100	11.1		14.3	33.3	20.0
Felt, difficulty in going outside	2		1	1				1		1	1			1			1	1
	6.3		6.7	25.0				33.3		4.5	25.0			11.1			33.3	10.0
When arranged for money	1		1	1				1		1								
	3.1		6.7	25.0				33.3		4.5								
Other villagers convinced	1		1			1	1			1								
	3.1		6.7			25.0	5.6			4.5								
Others	3	2	1	1	2		3			3								
	9.4	28.6	6.7	25.0	14.3		16.7			13.6								

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Table 5.8 : Awareness of basic aspects before installation

	Total	Rae Bareli									Varanasi								
		Sex		Caste			Inc			Total	Sex		Caste			Inc			Total
		Male	Fe male	Gen	SC OBC	Oth	BPL	APL	Not Spec		Male	Fe male	Gen	SC OBC	Oth	BPL	APL	Not Spec	
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125
Advantages of using Latrine	141	23	19	10	19	13	29	12	1	42	48	51	15	83	1	53	44	2	99
	70.5	54.8	57.6	58.8	47.5	72.2	54.7	66.7	25.0	56.0	77.4	81.0	83.3	78.3	100	84.1	73.3	100	79.2
How the Latrine works	103	15	11	8	13	5	16	9	1	26	43	34	15	62		38	37	2	77
	51.5	35.7	33.3	47.1	32.5	27.8	30.2	50.0	25.0	34.7	69.4	54.0	83.3	58.5		60.3	61.7	100	61.6
Precaution to be taken during site selection	89	16	8	8	12	4	15	8	1	24	39	26	14	51		31	32	2	65
	44.5	38.1	24.2	47.1	30.0	22.2	28.3	44.4	25.0	32.0	62.9	41.3	77.8	48.1		49.2	53.3	100	52.0
Cost of the Latrine	51	13	2	4	9	2	11	4		15	21	15	10	26		11	23	2	36
	25.5	31.0	6.1	23.5	22.5	11.1	20.8	22.2		20.0	33.9	23.8	55.6	24.5		17.5	38.3	100	28.8
Beneficiary's Contribution	147	26	19	9	22	14	32	12	1	45	52	50	17	84	1	51	49	2	102
	73.5	61.9	57.6	52.9	55.0	77.8	60.4	66.7	25.0	60.0	83.9	79.4	94.4	79.2	100	81.0	81.7	100	81.6
Use and Maintenance	114	16	9	6	12	7	17	8		25	46	43	15	73	1	43	44	2	89
	57.0	38.1	27.3	35.3	30.0	38.9	32.1	44.4		33.3	74.2	68.3	83.3	68.9	100	68.3	73.3	100	71.2
None of the above	34	15	9	6	15	3	16	5	3	24	7	3	1	9		3	7		10
	17.0	35.7	27.3	35.3	37.5	16.7	30.2	27.8	75.0	32.0	11.3	4.8	5.6	8.5		4.8	11.7		8.0

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Table 5.9 : Discussion on function of components

	Total	Rae Bareli									Varanasi									
		Sex		Caste			Inc			Total	Sex		Caste			Inc			Total	
		Male	Fe male	Gen	SC OBC	Oth	BPL	APL	Not Spec		Male	Fe male	Gen	SC OBC	Oth	BPL	APL	Not Spec		
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Pan	116	24	12	7	21	8	23	10	3	36	43	37	14	66		43	35	2	80	
	58.0	57.1	36.4	41.2	52.5	44.4	43.4	55.6	75.0	48.0	69.4	58.7	77.8	62.3		68.3	58.3	100	64.0	
Waterseal	74	19	9	7	14	7	17	10	1	28	25	21	5	41		25	21		46	
	37.0	45.2	27.3	41.2	35.0	38.9	32.1	55.6	25.0	37.3	40.3	33.3	27.8	38.7		39.7	35.0		36.8	
Footrest	124	26	15	9	22	10	28	10	3	41	44	39	13	69	1	47	35	1	83	
	62.0	61.9	45.5	52.9	55.0	55.6	52.8	55.6	75.0	54.7	71.0	61.9	72.2	65.1	100	74.6	58.3	50.0	66.4	
Junction Box	102	23	9	6	17	9	19	11	2	32	39	31	11	59		39	31		70	
	51.0	54.8	27.3	35.3	42.5	50.0	35.8	61.1	50.0	42.7	62.9	49.2	61.1	55.7		61.9	51.7		56.0	
Drain	128	27	14	9	22	10	26	12	3	41	49	38	12	75		49	37	1	87	
	64.0	64.3	42.4	52.9	55.0	55.6	49.1	66.7	75.0	54.7	79.0	60.3	66.7	70.8		77.8	61.7	50.0	69.6	
Pits	140	29	17	12	23	11	28	14	4	46	52	42	14	80		50	43	1	94	
	70.0	69.0	51.5	70.6	57.5	61.1	52.8	77.8	100	61.3	83.9	66.7	77.8	75.5		79.4	71.7	50.0	75.2	
Pit Cover	132	28	14	8	23	11	28	11	3	42	51	39	13	77		49	40	1	90	
	66.0	66.7	42.4	47.1	57.5	61.1	52.8	61.1	75.0	56.0	82.3	61.9	72.2	72.6		77.8	66.7	50.0	72.0	
No Component	52	11	15	4	15	7	22	4		26	9	17	3	23		10	16		26	
	26.0	26.2	45.5	23.5	37.5	38.9	41.5	22.2		34.7	14.5	27.0	16.7	21.7		15.9	26.7		20.8	



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Table 5.10 : Knowledge of functions of components

	Rae Bareilly																				Varanasi									
	Total		Sex							Caste						Inc							Total							
	Male	Fe male	Gen	SC	Oth	BPL	APL	Not Spec	Male	Fe male	Gen	SC	Oth	BPL	APL	Not Spec	Male	Fe male	Gen	SC	Oth	BPL	APL	Not Spec	Total					
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125											
WATERSEAL																														
Since full of water, no odour	23	4	2	5	1		2	4		6	10	7	4	13		8	9		17											
	11.5	9.5	6.1	29.4	2.5		3.8	22.2		8.0	16.1	11.1	22.2	12.3		12.7	15.0		13.6											
Pouring water feces is flushed away	14	7	2	1	6	2	6	3		9	1	4	1	4		3	2		5											
	7.0	16.7	6.1	5.9	15.0	11.1	11.3	16.7		12.0	1.6	6.3	5.6	3.8		4.8	3.3		4.0											
Feces is washed into the chamber	10	2	3	1	3	1	4		1	5	2	3	1	4		3	2		5											
	5.0	4.8	9.1	5.9	7.5	5.6	7.5		25.0	6.7	3.2	4.8	5.6	3.8		4.8	3.3		4.0											
Not Specified	155	30	26	11	30	15	42	11	3	56	50	49	12	86	1	50	47	2	99											
	77.5	71.4	78.8	64.7	75.0	83.3	79.2	61.1	75.0	74.7	80.6	77.8	66.7	81.1	100	79.4	78.3	100	79.2											
JUNCTION CHAMBER																														
Check if pit is filled up	11	1	3		4		3		1	4	5	2		7		3	4		7											
	5.5	2.4	9.1		10.0		5.7		25.0	5.3	8.1	3.2		6.6		4.8	6.7		5.6											
Close one pit and work with the other	66	15	7	5	10	7	14	8		22	29	15	8	36		25	18	1	44											
	33.0	35.7	21.2	29.4	25.0	38.9	26.4	44.4		29.3	46.8	23.8	44.4	34.0		39.7	30.0	50.0	35.2											
Directs feces into one pit	10	5	1	1	4	1	4	2		6	1	3	2	2		3	1		4											
	5.0	11.9	3.0	5.9	10.0	5.6	7.5	11.1		8.0	1.6	4.8	11.1	1.9		4.8	1.7		3.2											
Join both pipes	4	2			2		1		1	2		2	1	1		1	1		2											
	2.0	4.8			5.0		1.9		25.0	2.7		3.2	5.6	.9		1.6	1.7		1.6											
To clear obstruction	12	1	2		2	1	3			3	3	6	2	7		4	5		9											
	6.0	2.4	6.1		5.0	5.6	5.7			4.0	4.8	9.5	11.1	6.6		6.3	8.3		7.2											
Opens pit entrance	4	1	1	1			1	2		2	1	1	1	1			2		2											
	2.0	2.4	3.0	5.9			5.6	3.8		2.7	1.6	1.6	5.6	.9			3.3		1.6											
Not Specified	96	17	21	10	19	9	28	8	2	38	24	34	5	52	1	27	30	1	58											
	48.0	40.5	63.6	58.8	47.5	50.0	52.8	44.4	50.0	50.7	38.7	54.0	27.8	49.1	100	42.9	50.0	50.0	46.4											

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Table 5.10(cont.) : Knowledge of functions of components

	Rae Bareli										Varanasi											
	Sex		Caste					Inc			Total	Sex		Caste					Inc			Total
	Male	Fe male	Gen	SC	Oth	BPL	APL	Not Spec	Male	Fe male		Gen	SC	Oth	BPL	APL	Not Spec					
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125			
WHY TWO PITS																						
When one is filled, other is used	130	25	20	11	22	12	33	11	1	45	43	42	12	72	1	44	41		85			
	65.0	59.5	60.6	64.7	55.0	66.7	62.3	61.1	25.0	60.0	69.4	66.7	66.7	67.9	100	69.8	68.3		68.0			
Use second, when first is being cleaned	26	8	1		6	3	4	4	1	9	9	8	4	13		8	7	2	17			
	13.0	19.0	3.0		15.0	16.7	7.5	22.2	25.0	12.0	14.5	12.7	22.2	12.3		12.7	11.7	100	13.6			
Water and feces are poured in	10	8	2	4	6		7	1	2	10												
	5.0	19.0	6.1	23.5	15.0		13.2	5.6	50.0	13.3												
For the feces to decompose	2	2							2	2												
	1.0	4.8							11.1	11.1												
One for water, and other for feces	2										1	1		2		1	1		2			
	1.0										1.6	1.6		1.9		1.6	1.7		1.6			
Not Specified	35	4	10	3	8	3	12	2		14	9	12	2	19		10	11		21			
	17.5	9.5	30.3	17.6	20.0	16.7	22.6	11.1		18.7	14.5	19.0	11.1	17.9		15.9	18.3		16.8			
PIT COVER																						
Prevent bad odour	86	19	12	5	14	12	23	7	1	31	26	29	9	46		29	26		55			
	43.0	45.2	36.4	29.4	35.0	66.7	43.4	38.9	25.0	41.3	41.9	46.0	50.0	43.4		46.0	43.3		44.0			
So other matter does not fall into the pit	58	18	10	4	18	6	19	7	2	28	16	14	6	24		14	16		30			
	29.0	42.9	30.3	23.5	45.0	33.3	35.8	38.9	50.0	37.3	25.8	22.2	33.3	22.6		22.2	26.7		24.0			
Prevent animals/cattles from falling into the pit	24	4	2	1	2	3	3	3		6	9	9	1	17		7	10	1	18			
	12.0	9.5	6.1	5.9	5.0	16.7	5.7	16.7		8.0	14.5	14.3	5.6	16.0		11.1	16.7	50.0	14.4			
So the dirt inside is not seen	13	1			1		1			1	7	5	2	10		11	1		12			
	6.5	2.4			2.5		1.9			1.3	11.3	7.9	11.1	9.4		17.5	1.7		9.6			
Pits can be cleaned by removing pit cover	11	2	3	2	3		3	2		5	2	4	1	4	1	2	4		6			
	5.5	4.8	9.1	11.8	7.5		5.7	11.1		6.7	3.2	6.3	5.6	3.8	100	3.2	6.7		4.8			

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Table 5.10(cont.) : Knowledge of functions of components

	Rae Bareilly										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Female	Gen	SC	Oth	BPL	APL	Not Spec		Male	Female	Gen	SC	Oth	BPL	APL	Not Spec		
			male		OBC							male		OBC						
<u>DRAIN/ CONNECTING PIPE</u>																				
Water and feces passes through it to the pit	159	31	25	11	30	15	40	13	3	56	53	50	16	86	1	54	48	1	103	
	79.5	73.8	75.8	64.7	75.0	83.3	75.5	72.2	75.0	74.7	85.5	79.4	88.9	81.1	100	85.7	80.0	50.0	82.4	
To ensure one pipe function at a time	3	2				2		2		2		1		1			1		1	
	1.5	4.8				11.1		11.1		2.7		1.6		.9			1.7		.8	
Not Specified	38	9	8	6	10	1	13	3	1	17	9	12	2	19		9	11	1	21	
	19.0	21.4	24.2	35.3	25.0	5.6	24.5	16.7	25.0	22.7	14.5	19.0	11.1	17.9		14.3	18.3	50.0	16.8	

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Table 5.11 : Knowledge of quantity required of various materials

	Rae Bareilly										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not		
		male	male		OBC				Spec		male	male		OBC				Spec		
All Benefeciaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Yes	129	32	14	10	27	9	31	12	3	46	43	40	15	67	1	41	40	2	83	
	64.5	76.2	42.4	58.8	67.5	50.0	58.5	66.7	75.0	61.3	69.4	63.5	83.3	63.2	100	65.1	66.7	100	66.4	
No	70	10	19	7	13	9	22	6	1	29	18	23	3	38		22	19		41	
	35.0	23.8	57.6	41.2	32.5	50.0	41.5	33.3	25.0	38.7	29.0	36.5	16.7	35.8		34.9	31.7		32.8	
Not Specified	1										1			1			1		1	
	.5										1.6			.9			1.7		.8	

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Table 5.12 : Knowledge of Cost/ Affordability

	Rae Bareilly									Varanasi										
	Sex			Caste			Inc			Total	Sex			Caste			Inc			Total
	Male	Fe	Gen	SC	Oth	BPL	APL	Not	Male		Fe	Gen	SC	Oth	BPL	APL	Not			
		male		OBC			Spec		male	OBC			Spec							
Beneficiaries say Usefull	187	39	31	16	36	18	50	17	3	70	55	62	16	100	1	58	57	2	117	
Total cost Known	71	21	4	6	11	8	13	11	1	25	26	20	6	39	1	17	27	2	46	
	38.0	53.8	12.9	37.5	30.6	44.4	26.0	64.7	33.3	35.7	47.3	32.3	37.5	39.0	100	29.3	47.4	100	39.3	
Total cost not known	116	18	27	10	25	10	37	6	2	45	29	42	10	61		41	30		71	
	62.0	46.2	87.1	62.5	69.4	55.6	74.0	35.3	66.7	64.3	52.7	67.7	62.5	61.0		70.7	52.6		60.7	

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Beneficiaries have Knowledge	71	21	4	6	11	8	13	11	1	25	26	20	6	39	1	17	27	2	46
Upto Rs. 2000	9	2			2		2			2	1	6	1	6		4	3		7
	12.7	9.5			18.2		15.4			8.0	3.8	30.0	16.7	15.4		23.5	11.1		15.2
Rs.2001-3000	10	4		1	1	2		3	1	4	6		2	4		2	4		6
	14.1	19.0		16.7	9.1	25.0		27.3	100	16.0	23.1		33.3	10.3		11.8	14.8		13.0
Rs.3001-4000	25	9	2	4	5	2	5	6		11	8	6	2	12		3	10	1	14
	35.2	42.9	50.0	66.7	45.5	25.0	38.5	54.5		44.0	30.8	30.0	33.3	30.8		17.6	37.0	50.0	30.4
Rs.4001+	21	5	1	1	2	3	4	2		6	9	6	1	13	1	7	7	1	15
	29.6	23.8	25.0	16.7	18.2	37.5	30.8	18.2		24.0	34.6	30.0	16.7	33.3	100	41.2	25.9	50.0	32.6
Not Specified	6	1	1		1	1	2			2	2	2		4		1	3		4
	8.5	4.8	25.0		9.1	12.5	15.4			8.0	7.7	10.0		10.3		5.9	11.1		8.7

CHAPTER 6

PROGRAMME ACCEPTANCE AND PARTICIPATION

The sanitation project was implemented in the Thulendi group of villages in Rae Bareilly and Tikari group of villages in Varanasi as these villages had already been provided with piped water under Sub-Project I of the Dutch Credit Programme and were thus considered ideal for the overall sanitation programme. Considering the physical differences of the two groups of villages it is interesting to see that the villages have reacted positively to a programme aiming at changing their defecation habit which is intensely private and conditioned fairly early in life.

Programme Acceptance And Motivation For Acceptance :

The initial response to the programme, as discussed earlier in Chapter-5 was good, 84% of the beneficiaries had accepted the programme after the initial contact itself and agreed to have latrines constructed in their houses. In Varanasi the acceptance was almost total with 92% of the beneficiaries agreeing to get latrines constructed after the initial contact.

The willingness to construct latrines is high in the other project villages and non-project villages also. Most of the people are aware of the programme and some have even used sanitary latrines elsewhere. These villages also have substantially high use of safe drinking water from handpumps and standposts and seem to be prepared for the next stage of sanitation programme.

Convenience has been the predominant factor for accepting the latrines. The increasing pressure on land for housing with the increase in population has already started creating problems for defecation in the fields in the villages studied in Varanasi. In the villages located near the town the problem of lack of space - which is going to come up in near future - has been cited as a reason for accepting the latrines.

"Ab to janasankhya itni badh gayi ki log idhar makan banate hi ja rahen hei, isliye logon ko siwan jane mein kasta hota hei. Ab to khamokha logon ko latrine banawana hi padega."

("Now the population has increased so much that people are building houses everywhere; so people find it a problem to find a place to relieve themselves. Now people will have to build latrines (although it is superfluous)")

The Jal Nigam officials & PSU staff have been the source of providing information on the benefits of the sanitary latrines and they have succeeded in motivating the people to accept the latrines . In many instances the PSU staff have managed to develop excellent rapport with the people of the village and even handled other problems in the village which are not of immediate interest for the programme. **The PSU staff have a high acceptance among the villagers** and are looked upto as informal advisers. In this sense, they have served as ideal **change agents**. Their active interest in solving community problems, starting non-formal education centres, motivating people for immunisation etc. have helped the programme as a whole and the acceptance level of the latrine component of the programme has been much higher than similar programmes carried out by Panchayati Raj and other Govt. organisations.

The saturation policy of the programme itself has made the people accept the latrines as they get motivated by seeing others using the latrines About 52% of the beneficiaries have accepted the programme after seeing some latrines built in their village (Table 6.1). Also the fact that they are able to get an expensive asset with nominal contribution has made them accept these latrines. In some cases, the latrine is the only pucca structure in the house and it has enhanced their social status.

Response to Selection Procedure :

The baseline survey data was used as the primary reference point in the selection and categorisation procedure The income criteria in the baseline survey was used for classification of beneficiaries into two categories - those above or below poverty line. Those with an annual income below Rs. 6400 were considered to be below poverty line (BPL) and the others were categorised as APL. However, in the absence of reliable records of income, and in trying to be as accurate as possible, the project authorities have attempted to validate these figures by consulting official records - mainly the records on economic survey maintained at the block office - which also use a similar basis of economic categorisation. The project has also, in some cases, used certain external indicators of economic classification such as occupation (salaried job service) and / or possession of agricultural land especially in Varanasi. Hence the income criteria adopted has not been very well understood and appreciated by some sections of the beneficiaries

In case of those categorised as APL there was a lot of dissent regarding the classification specially among the borderline cases. This has also resulted in many APL beneficiaries not willing to pay the stipulated contribution of Rs 400/- and in a few cases they have actually not been in a position to pay. A progressive contribution based on further subdivision of income categories might have been appreciated by the beneficiaries. It is not that the BPL who were asked to contribute labour only, always agreed with the classification. Many have mentioned that some APL's really had problems paying as they may have higher income but the family size was large, too. Their problems for cash contribution were appreciated by the BPL beneficiaries.

Another problem in this selection procedure has been the unusual time interval between the point at which baseline data have been generated and final classification of beneficiaries for actual project implementation. In the ensuing interval, changes have occurred in the income of beneficiaries. Therefore, dissatisfaction was voiced by some who have been categorised as APL and have had to pay cash. They alleged that the classification has been "subjective" and they felt discriminated against. While the review exercise has not attempted to examine how valid these allegations are, this aspect ought to be paid attention in order to make the programme a complete success. We have discussed this issue in the context of policy implications later in Chapter - 9.

The people of the Phase A villages are fully aware of contribution of cash and labour according to economic criteria. The general feeling is that the BPL beneficiaries specially, the Harijans are getting the latrine "free".

Affordability and Cost Sharing

Most of the beneficiaries find the latrines to be useful (93%) but are not willing to bear the total cost (Table 6.2). About 68% of the beneficiaries, who cannot bear the cost, could not even specify the maximum amount that they could afford. Of the remaining, only 13% of the beneficiaries are now willing to contribute more than Rs 400/- after having used the latrines. It is encouraging to see that some beneficiaries are able to realise the worth of the latrines and contribute more. In the other project villages and non-project villages 15% and 36% of the people respectively who are not able to bear the total cost are however willing to contribute more than the stipulated cash contribution of Rs 400/- (Table 6.3 & 6.4). In these villages the awareness of the programme is high because the communication campaign has already started. However many people of these villages are willing to accept the latrines provided they do not have to pay. They are aware of the benefits of the latrines but feel that other development programmes are more urgently needed at this stage in their villages.

Participation In Construction And Effect On Family Income :

The project criteria for contribution is Rs 400/- for all APL families that is with annual household income above Rs. 6400/- and labour in lieu of cash for the BPL families with income below the specified level. The beneficiaries as well as non beneficiaries in the Phase - A villages are fully aware of this norm of contribution according to economic criteria. The people who contribute cash are not expected to provide any labour during construction. The following analysis has been made based on contribution of Rs 400/- for classification of APL and BPL beneficiaries.

The BPL beneficiaries have actively participated in the construction process of their own latrines and more than 90% of them have worked at different stages of construction (Table 6.5). However, for digging pits more than two-thirds (77%) of the beneficiaries in this category have hired labour as it is the most labour-intensive part of the total construction and in the elderly BPL families or in BPL families with male members working outside the village they had to use hired labour. In Rae Bareilly more hired labour was used than in Varanasi. The APL beneficiaries, if they have worked at all during construction have mainly been involved in supervision or curing of walls and pits, while few have also carried material to the construction site. The APL beneficiaries have not spent any extra money on hiring of labour to work in the construction. But the BPL beneficiaries have hired labour for almost all activities during the construction, mostly for digging pits (Table-6.6).

The above analysis shows that some of the BPL beneficiaries might have had the ability to pay some cash contribution. In a few cases, the BPL beneficiaries have felt that they have finally contributed more in terms of wage - days lost or in hiring labour than the APL beneficiaries and feel that they would have benefited more by paying Rs 400/- as their contribution. In this context the BPL beneficiaries' willingness to contribute cash can be explored for increased cost sharing in future.

About half of the BPL beneficiaries (45%) feel that participation in the construction of latrines has affected their family income (Table 6.7). This is natural as many of them work as wage labourers and had to trade-off wage for giving labour for construction of the latrine.

About half of the beneficiaries (57%) whose earnings have been affected have foregone upto 7 days' earning in order to participate in the construction of their own latrine (Table 6.8). One third (30%) have even provided labour over a period of eight to fifteen days when the project specifies only three days of labour participation, in such cases, either construction has been interrupted or the work has been completed in a

piecemeal fashion by the construction crew. In Rae Bareli in about 40% cases the construction seems to have stretched to around fifteen days and even beyond in four cases. In Varanasi on the other hand more than two third (67 %) of the BPL beneficiaries completed the work within one week. (Table - 6.8). It has been observed in a number of project villages that the sequence of work is not always smooth and uniform and the BPL beneficiaries dig pits even after the mason has finished the superstructure. Work in the construction site is also not done continuously by the beneficiaries and often the work is done for few hours only in the night and afternoon, when they are free from their main occupation thus stretching the construction period for their latrines.

Participation In Site Selection

In almost all cases the beneficiaries had been consulted for site selection. The 6 people out of 200 contacted who have reported that they have not been consulted, mainly fall in the below poverty line (BPL) category and belong to lower castes (Table -5.9). It is seen that the beneficiaries as a whole are more or less satisfied with the location of their latrines. Only 5% of the beneficiaries have reported dissatisfaction with the site selected. Of these 11 beneficiaries who reported problems in site selection, 8 were in Varanasi alone.

The reasons for dissatisfaction with site selection in Rae Bareli are either because the location is too close to the living room / kitchen or it is too far from the living quarters, resulting in hardships in carrying water. In Varanasi the reasons for dissatisfaction are also lack of space, problems in extending the house after the HSL unit has been constructed has been reported by 3 out of 8 beneficiaries facing problems with location (Table - 6.10). Contrary to expectation younger people of the age group of 26-45 and even some beneficiaries who are 25 years or below have expressed dissatisfaction because the units are located close to living quarters (Table 6.11).

Availability of land has been a crucial constraint while locating the latrines and in many cases they are far away from the house or in inaccessible places thus affecting the convenience aspect. In Pithan, one latrine had to be reached through a window in the cowshed. When asked, the family confirmed that the land was the only consideration for such a location "Because there was no place near my house we had to build it where we found land convenient for the latrine "

Even in 100% saturation villages also, (for example in Pithan village of Rae Bareli and Nuaon village Varanasi) it has been seen that the few people who have been left out of the service coverage are mainly those who have had no land for constructing the latrine. Though the project has discouraged the location

of the latrines at a distance from the dwelling unit, the lack of a better alternative has forced them in some villages to locate the latrine quite far. In a few cases, (e.g. Bhagwanpur village) the PSU / Jal Nigam team have negotiated with village leaders and managed to release community land for locating individual HSL units. The success of this exercise indicates the high level of motivation on the part of the project staff on the one hand and the sense of community resource sharing on the other.

There is a subtle resistance to building the latrine inside the house in the Hindu families. This is evident from the fact that 4 out of the 11 people have mentioned proximity to living quarters or kitchen as the reason for dissatisfaction (Table-6.10). This is because of the traditional practice and knowledge of cleanliness wherein latrine is not considered a clean place. In this context the "pure"/"impure" and sacred/profane dichotomy from an anthropological perspective become very important. In caste Hindu families, for instance, defecation is considered a "polluting" act. Elderly brahmin males still wrap the sacred thread around the ear while defecating or even while urinating so that the sacred thread is not "polluted".

Muslims on the other hand have traditionally built latrines close to their house because the feeling of "Sharam" (Shame) and "izzat" of women is very strong and this prevents their women from defecating in the open. The Hindus have categorically mentioned that they would never have it located inside the house near the kitchen. But due to lack of space many have located their latrines inside the house, or very close (almost attached to the house) and in one stray case even on the roof.

Most of the people are aware of the fact that the latrines should be located away from wells and handpumps. The women and children in Rae Bareilly have even mentioned that it should be around 30 metres away from the water source. The source of knowledge for this aspect has mainly been the mason or the JE. These factors have been considered during the selection of the site and in most cases the JE's opinion has dominated. In a few cases when alternate sites were available, the JE's opinion seems to have finally determined the location but always after detailed consultation with the beneficiaries.

Acceptability Of Design

Design acceptability needs to be considered at different levels. At the most superficial level it is the superstructure which seems to be making the initial difference. The superstructure itself is accepted/rejected on the basis of utility features and aesthetic features. In analysing acceptance of the superstructure component in this project, a comparison with the PR department units is inevitable.

There are several visible and obvious differences between the two types of units on both utility features as well as aesthetic appearance. The PR department units are not provided with door and roof. The walls are not plastered either. Since this is an immediate alternate model available for the beneficiaries to compare their own units against, there is a overwhelming preference indicated for the types of superstructure provided in Sub-Project V. **The roof particularly emerges as an essential feature of the superstructure.** In several group discussions across project villages, it was mentioned that the roof is very useful during rains. While this seems too obvious, it establishes the validity of the choice of design

Similarly, the **provision of a door seems to have induced acceptability.** Considering the other external features of the superstructure, **a fully finished unit with provision of ventilation, cement washing outside and white washing inside has added to the acceptability.** Considering the superstructure as a whole, preference for the kind of superstructure provided results from appreciation of both the functional as well as superficial features.

There are other improvements made in the Sub-Project V household latrine units in the more functional components, too. The essential differences in the design features between the P R dept units and the Sub-Project V HSL units have been shown clearly in Table - 6.12. Of course, these improvements have also resulted in a comparatively higher unit cost in the latter case; the unit cost of the P.R. dept units was estimated to be Rs 1,870 /- (at the price level prevailing in 1989) while the unit cost in the project under study is Rs. 5,037/- in Rae Bareli and Rs 4,100/- in Varanasi* (at price levels prevailing in March, 1991).

On the question of the more important functional components of the HSL unit i.e. the excreta disposal system, both the level of and the reasons for acceptance and dissatisfaction have been discussed in a different context in the section on siting. The very willingness to locate units not too far from the house is an obvious indicator of the prima facie acceptance of the functionality of the design. It was also learnt that in a few cases where there were minor problems of blockage in inspection chambers, the beneficiaries have opened and cleared the obstruction on their own (Thulendi Village). Although these are isolated instances, they reflect on the increasing acceptance of the functionality aspects. Against this background, the acceptability of specific design features needs to be examined

* The difference in unit cost in the two areas is because of the additional cost of treatment works in the leaching pits (sand envelope) to cope with high water table conditions in Rae Bareli.

The beneficiaries have found the latrines quite convenient after initial apprehension and discomfort which is normal considering that traditionally they have been using open space. Most (96%) of the beneficiaries think that the space inside the latrine is sufficient (Table 6.13). Only 8 people out of 200 felt otherwise. In Varanasi they belong to the upper castes / APL category and probably were dissatisfied with the latrine as they had paid money and had expected a more spacious structure. In Rae Bareilly on the other hand, the few people who reported inconvenience belong to BPL sections and backward castes. In any case, the number complaining about insufficient space inside the latrine is negligible compared to the total number of people who have accepted the latrines

As mentioned earlier the pans used in the project are specially designed for rural areas; with a steeper slope provided to the pan surface. The water required for proper cleaning of the pan surface after every use is half of the amount required for the conventional pans. One needs to pour about 4-5 litres of water after every use for cleaning of pan and flushing. The requirement of water for cleaning latrines is inevitably compared with the quantity of water required only for self ablution when defecating in open. In the project villages the beneficiaries normally pour 1-2 buckets of water after every use, whereas half a bucket is considered sufficient. This is considered very high, if water has to be carried from a distance. In fact, many have mentioned in the Group Discussions that they continue to go out to the fields in order to avoid carrying water.

As mentioned earlier when discussing misconceptions regarding pit capacity, a small section of beneficiaries felt that the depth of the pit is insufficient. In some families men are not using the latrines regularly as they feel that the pit is not deep enough to accommodate regular use by everybody in the house. Hence the women and old people are encouraged to use the latrines whereas the male members continue to go out to the field. This misconception about pit capacity needs to be countered through a systematic information campaign.

In some villages where different models have been tried out, there is a strong preference for R C C roof. Asbestos and tin roofs are considered too light since they can be blown away by a strong wind. However **they are satisfied with the overall finish, porcelain pans and footrests. These are highlighted as being the reasons for preferring the Indo-Dutch latrines when compared to the latrines provided by other organisations which have mosaic pans.** In Varanasi some beneficiaries have mentioned that a sun-shade above the door would increase the life of the door

Some people in Varanasi also feel that the pan is too small to be used by adults. They feel that a bigger pan should be used in the villages in which the project is going to be implemented later. Some of the other improvements suggested are painting of the door and whitewashing of the outside walls.

Initial Response to Use

It has already been seen that 84 % of the beneficiaries were convinced about the programme after initial contact and the remaining subsequently agreed after sufficient knowledge was acquired about the programme (Table 5.6) Half of the early acceptors (58%) had waited for some time before starting to use the latrine (Table 6 14) In Rae Bareli 70 % of the APL beneficiaries who were "early acceptors" started using the latrine immediately But in Varanasi, though nearly two third (60 %) of early acceptors in the APL category had started using the latrines after some days. The general response, as reflected in use, was early in comparison to Rae Bareli. The reasons for this could be that though the programme appeared beneficial to them the actual use was postponed as defecating habits are formed at early ages and a sudden change is not comfortable or easy. Some have mentioned that after the open fields, the latrines gave them a claustrophobic feeling which affects the motion and they were not habituated to defecating in an enclosed place However, many confess that the initial discomforts were minor and they were able to overcome them easily Now it has become their habit to use the latrines. "Pahle to main jhijhakta tha aur khule maidan ke bad latrine mein ghuttan sa lagta tha, hota hi nahin tha, magar dat kar jana padta hei. Ab to abhyas ho gaya hai "

("Initially the latrine felt stuffy after the open space and I was hesitant . . there was no motion and one had to work him self up to go to the latrine Now I have got into the habit").

Most of the beneficiary households after overcoming their initial discomfort, use the latrine regularly though the habit has not been fully formed as yet It is seen that many have started using the latrines after seeing others do so. The future beneficiaries (mainly whose latrines are under construction) are already prepared for using the latrines and by seeing the early adopters they have no hesitation in starting to use the latrines immediately on handover.

Perceived benefits from HSL

The HSL were accepted mainly for convenience, as it has already been mentioned. Subsequently, after using these units the benefits perceived were privacy, hygiene and protection from insects and snake bites. Subconsciously, their esteem needs had been satisfied too and the prestige associated with latrines the "Barat" and the "new bride" arrive in the family is mentioned by some beneficiaries

"Pahale baraat aane se pareshani hoti thi Ab to asani ho gayi hai, izzat ki bat bhi to hai".

("Earlier when the groom's party used to come, we were embarrassed. Now, it is so convenient ! Besides, it is a matter of prestige for us").

In Varanasi the latrines were felt to be a necessity, due to lack of space for defecating in future, with increasing demand on land for housing. Already the problem has been perceived by the villagers and repeatedly mentioned by those living close to urban areas. Though the lack of land in future for defecating has not been mentioned in Rae Bareilly, the overall convenience aspects specially, during rains, in summer when the sun is very strong, in the night, or when the need to relieve oneself is urgent, when in a hurry and in case of illness has been perceived. The HSL units are located near the house and the people do not have to walk for half an hour to go to the fields. Also, when the crops are planted and just before harvesting it is difficult to find space in the fields. With the possession of individual latrines they are able to use them at their own convenience. Many seem to have realised the implications of hygiene and sanitation. They have mentioned that the surroundings are relatively cleaner now and perceive a decrease in the rate of water-borne diseases and skin diseases.

The latrines provide privacy and this is seen as an important benefit for the women. Many men have actually cited this as the reason for accepting the latrines, specially in the Muslim community. The women have also realised this advantage of the HSL unit but men seem to highlight it more than women themselves.

The Sanitary Latrines are perceived to be useful for the old people specially during illness and "emergency" since the units are located near the house and hence the old people do not have to go far. However, some stronger old men prefer the walk to the fields still, as it has become their habit.

In a number of cases, beneficiaries have added on their own to make the units more attractive. Some additions noticed were painting of doors, colourwashing of walls, extension of platform, construction of bathroom adjoining the latrine units and electrification. These additional investments made by beneficiaries indicate the acceptability of the units.

The children have been encouraged to use the latrines from a young age which is a positive trend. The habit of using the latrines will therefore form at an early age and the practice of going to the fields will be

rejected as they will get habituated to latrines. It is interesting to note that children have understood the linkages of sanitation, latrines and overall effect on health much better than grown-ups and are eager to use the latrines.

The possession of such an expensive asset at practically no expense from their side is perceived as a major benefit. The latrine seems to have elevated their status since in many cases this is the only pucca structure in the house. Most take good care of their HSL and keep it clean as the authorities are still very strict and make them use and clean the latrines regularly. In this way, habit of using latrines and cleanliness is being ingrained in them, the permanent benefits of which are likely to be seen in future.

RURAL SANITATION PROGRAMME

Table 6.1 : Stage of Acceptance

	Rae Bareli										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not		
		male		OBC					Spec		male		OBC					Spec		
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Programme was being Launched	74	16	3	3	12	4	12	7		19	29	26	4	50	1	34	20	1	55	
	37.0	38.1	9.1	17.6	30.0	22.2	22.6	38.9		25.3	46.8	41.3	22.2	47.2	100	54.0	33.3	50.0	44.0	
After few latrines were built	105	20	21	11	21	9	30	8	3	41	31	33	13	51		26	37	1	64	
	52.5	47.6	63.6	64.7	52.5	50.0	56.6	44.4	75.0	54.7	50.0	52.4	72.2	48.1		41.3	61.7	50.0	51.2	
After almost everyone had Installed	21	6	9	3	7	5	11	3	1	15	2	4	1	5		3	3		6	
	10.5	14.3	27.3	17.6	17.5	27.8	20.8	16.7	25.0	20.0	3.2	6.3	5.6	4.7		4.8	5.0		4.8	

RURAL SANITATION PROGRAMME

Table 6.2 : Usefulness/ Willingness to bear the cost

	Rae Bareilly										Varanasi								
	Total	Sex		Caste			Inc			Total	Sex		Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not	
		male			OBC				Spec		male			OBC				Spec	
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125
Useful	187	39	31	16	36	18	50	17	3	70	55	62	16	100	1	58	57	2	117
	93.5	92.9	93.9	94.1	90.0	100	94.3	94.4	75.0	93.3	88.7	98.4	88.9	94.3	100	92.1	95.0	100	93.6
Not useful	11	3	2	1	4		3	1	1	5	5	1	2	4		4	2		6
	5.5	7.1	6.1	5.9	10.0		5.7	5.6	25.0	6.7	8.1	1.6	11.1	3.8		6.3	3.3		4.8
Not Specified	2										2			2		1	1		2
	1.0										3.2			1.9		1.6	1.7		1.6
All who say - useful	187	39	31	16	36	18	50	17	3	70	55	62	16	100	1	58	57	2	117
Willing to bear total cost	27	3	1	2		2		4		4	16	7	5	18		4	18	1	23
	14.4	7.7	3.2	12.5		11.1		23.5		5.7	29.1	11.3	31.3	18.0		6.9	31.6	50.0	19.7
Not willing to bear total cost	160	36	30	14	36	16	50	13	3	66	39	55	11	82	1	54	39	1	94
	85.6	92.3	96.8	87.5	100	88.9	100	76.5	100	94.3	70.9	88.7	68.8	82.0	100	93.1	68.4	50.0	80.3

Table 6.2 (contd.)

	Rae Bareilly										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc		Total	
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not		
		male	male		OBC				Spec		male	male		OBC				Spec		
Maximum the Beneficiary could afford																				
Will not bear total cost	162	36	30	14	36	16	50	13	3	66	41	55	11	84	1	55	40	1	96	
Upto Rs. 400	25	7	2	1	6	2	6	3		9	8	8	4	12		9	7		16	
	15.4	19.4	6.7	7.1	16.7	12.5	12.0	23.1		13.6	19.5	14.5	36.4	14.3		16.4	17.5		16.7	
Rs. 401-750	8	2		1	1		1	1		2	3	3	2	4		1	5		6	
	4.9	5.6		7.1	2.8		2.0	7.7		3.0	7.3	5.5	18.2	4.8		1.8	12.5		6.3	
Rs. 751-1000	13	4	1	3	1	1	1	3	1	5	6	2	2	6		4	4		8	
	8.0	11.1	3.3	21.4	2.8	6.3	2.0	23.1	33.3	7.6	14.6	3.6	18.2	7.1		7.3	10.0		8.3	
Rs.1001-1500	2	1		1				1		1	1			1			1		1	
	1.2	2.8		7.1				7.7		1.5	2.4			1.2			2.5		1.0	
Rs.1501+	5	1		1					1	1	4		1	3			4		4	
	3.1	2.8		7.1					33.3	1.5	9.8		9.1	3.6			10.0		4.2	
Not Specified	109	21	27	7	28	13	42	5	1	48	19	42	2	58	1	41	19	1	61	
	67.3	58.3	90.0	50.0	77.8	81.3	84.0	38.5	33.3	72.7	46.3	76.4	18.2	69.0	100	74.5	47.5	100	63.5	

RURAL SANITATION PROGRAMME

Table 6.3 : Afford to pay Total Cost of Rs. 4000/-

	TOTAL	Rae Bareilly			Varanasi			Type of Village		
		Phase A Villages	Other Project Villages	Non-Project Villages	Phase A Villages	Other Project Villages	Non-Project Villages	Phase A Villages	Other Project Villages	Non-Project Villages
		Who Install	236	71	48	70	47	141	95	
Afford	6		4	2		2	4			
	2.5		8.3	2.9		1.4	4.2			
Can not afford	229	70	44	68	47	138	91			
	97.0	98.6	91.7	97.1	100	97.9	95.8			
Could't specify	1	1				1				
	.4	1.4				.7				
Can afford total cost	6		4	2		2	4			
Deposit within 7 days	1		1				1			
	16.7		25.0				25.0			
8 - 15 days	1			1		1				
	16.7			50.0		50.0				
16 - 30 days	3		2	1		1	2			
	50.0		50.0	50.0		50.0	50.0		50.0	

RURAL SANITATION PROGRAMME

Table 6.4 : Cost Sharing : Affordable amount

	TOTAL	Rae Bareilly			Varanasi			Type of Village		
		Phase A Villages	Other Project Villages	Non-Project Villages	Phase A Villages	Other Project Villages	Non-Project Villages	Phase A Villages	Other Project Villages	Non-Project Villages
Can not afford	229		70	44		68	47		138	91
Rs. 76 to 100	10		2	3		2	3		4	6
	4.4		2.9	6.8		2.9	6.4		2.9	6.6
Rs. 101 to 250	15		6	3		2	4		8	7
	6.6		8.6	6.8		2.9	8.5		5.8	7.7
Rs. 251 to 400	40		9	7		15	9		24	16
	17.5		12.9	15.9		22.1	19.1		17.4	17.6
Rs. 401 to 500	32		4	5		12	11		16	16
	14.0		5.7	11.4		17.6	23.4		11.6	17.6
Rs. 501 to 1000	18		3	8		1	6		4	14
	7.9		4.3	18.2		1.5	12.8		2.9	15.4
Rs. 1001 +	4			1		1	2		1	3
	1.7			2.3		1.5	4.3		.7	3.3
Could not Specify	110		46	17		35	12		81	29
	48.0		65.7	38.6		51.4	25.5		58.7	31.9
Mean amount	499.44		395.83	579.00		469.70	537.14		438.60	555.37
Can afford	6			4		2			2	4
Total cost										
Could not Specify	6			4		2			2	4
	100			100		100			100	100

RURAL SANITATION PROGRAMME

Table 6.5 : Participation in Construction

Participation In	RAE BARELI			VARANASI			TOTAL		
	BPL	APL	NR	BPL	APL	NR	BPL	APL	NR
Taking Materials	52 89.7	2 15.4	3 75.0	77 96.3	1 2.3	1 100.0	129 93.5	3 5.3	4 80.0
Digging pits	40 69.0	2 1.4	3 75.0	67 83.8	0 0.0	0 0.0	107 77.5	2 3.5	3 60.0
Assistance in construction	55 94.8	4 2.9	3 75.0	78 97.5	4 9.1	0 0.0	133 96.4	8 14.0	3 60.0
Looking after	56 96.6	6 4.3	3 75.0	79 98.8	8 18.2	1 100.0	135 97.8	14 24.6	4 80.0
Curing of wall	56 96.6	5 3.6	3 75.0	78 97.5	8 18.2	1 100.0	134 97.1	13 22.8	4 80.0
Curing of pits	50 86.2	3 23.1	3 75.0	78 97.5	8 18.2	1 100.0	128 92.8	11 19.3	4 80.0
Others	27 46.6	1 7.7	3 75.0	49 61.3	1 2.3	0 0.0	76 55.1	2 3.5	3 60.0
Total HHs	58 100.0	13 100.0	4 100.0	80 100.0	44 100.0	1 100.0	138 100.0	57 100.0	5 100.0

NOTE : CLASSIFICATION AS APL / BPL BASED ON RS. 400/- AS CONTRIBUTION

RURAL SANITATION PROGRAMME

Table 6.6 : Use of hired labour in construction

Participation In	RAE BARELI			VARANASI			TOTAL		
	BPL	APL	NR	BPL	APL	NR	BPL	APL	NR
Taking	5	0	0	3	0	1	8	0	1
Materials	8.6	0.0	0.0	3.8	0.0	100.0	5.8	0.0	20.0
Digging pits	20	0	0	15	0	1	35	0	1
	34.5	0.0	0.0	18.8	0.0	100.0	25.4	0.0	20.0
Assistance in construction	3	0	0	2	0	1	5	0	1
	5.2	0.0	0.0	2.5	0.0	100.0	3.6	0.0	20.0
Looking after	1	0	0	2	0	1	3	0	1
	1.7	0.0	0.0	2.5	0.0	100.0	2.2	0.0	20.0
Curing of wall	0	0	0	2	0	0	2	0	0
	0.0	0.0	0.0	2.5	0.0	0.0	1.4	0.0	0.0
Curing of pits	1	0	0	2	0	0	3	0	0
	1.7	0.0	0.0	2.5	0.0	0.0	2.2	0.0	0.0
Others	0	0	0	1	0	0	1	0	0
	0.0	0.0	0.0	1.3	0.0	0.0	0.7	0.0	0.0
Total HHs	58	13	4	80	44	1	138	57	5
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE : CLASSIFICATION AS APL / BPL BASED ON RS. 400/- AS CONTRIBUTION



RURAL SANITATION PROGRAMME

Table 6.7 : Participation in construction Affecting family income

	RAE BARELI			VARANASI			TOTAL		
	BPL	APL	NR	BPL	APL	NR	BPL	APL	NR
AFFECTED	23 39.7	0 0.0	4 100.0	40 50.0	0 0.0	0 0.0	63 45.7	0 0.0	4 80.0
NOT AFFECTED	34 58.6	11 84.6	0 0.0	40 50.0	24 54.5	1 100.0	74 53.6	35 61.4	1 20.0
NOT SPECIFIED	1 1.7	2 15.4	0 0.0	0 0.0	20 45.5	0 0.0	1 0.7	22 38.6	0 0.0
TOTAL	58 100.0	13 100.0	4 100.0	80 100.0	44 100.0	1 100.0	138 100.0	57 100.0	5 100.0

NOTE : CLASSIFICATION AS APL / BPL BASED ON RS. 400/- AS CONTRIBUTION

RURAL SANITATION PROGRAMME

Table 6.8 : Wage days that affected family earnings

	RAE BARELI			VARANASI			TOTAL		
	BPL	APL	NR	BPL	APL	NR	BPL	APL	NR
UPTO 7 DAYS	9 39.1	0 0.0	2 50.0	27 67.5	0 0.0	0 0.0	36 57.1	0 0.0	2 50.0
8 TO 15 DAYS	9 39.1	0 0.0	1 25.0	10 25.0	0 0.0	0 0.0	19 30.2	0 0.0	1 25.0
16 TO 30 DAYS	4 17.4	0 0.0	0 0.0	1 2.5	0 0.0	0 0.0	5 7.9	0 0.0	0 0.0
NOT SPECIFIED	1 4.3	0	1 25.0	2 5.0	0 0.0	0 0.0	3 4.8	0 0.0	1 25.0
TOTAL AFFECTED HOUSEHOLD	23 100.0	0 0.0	4 100.0	40 100.0	0 0.0	0 0.0	63 100.0	0 0.0	4 100.0

NOTE : CLASSIFICATION AS APL / BPL BASED ON RS. 400/- AS CONTRIBUTION

RURAL SANITATION PROGRAMME

Table 6.9 : Consultation with beneficiaries on site selection

	Rae Bareilly										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not		
		male		OBC					Spec		male		OBC					Spec		
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Was not consulted	6	1	1		2		2			2	3	1	1	3		4			4	
	3.0	2.4	3.0		5.0		3.8			2.7	4.8	1.6	5.6	2.8		6.3			3.2	
Reporting Problem	11	2	1	1	1	1	2		1	3	3	5	1	7		3	5		8	
	5.5	4.8	3.0	5.9	2.5	5.6	3.8		25.0	4.0	4.8	7.9	5.6	6.6		4.8	8.3		6.4	

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Table 6.10 : Reasons for dissatisfaction

	Rae Bareilly									Varanasi											
	Total	Sex			Caste			Inc			Total	Sex			Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not Spec		Male	Fe	Gen	SC	Oth	BPL	APL	Not Spec			
		male			OBC						male			OBC				Spec			
All dissatisfied	11	2	1	1	1	1	2		1	3	3	5	1	7		3	5		8		
Close to living room/ Kitchen	4	1			1				1	1		3	1	2		1	2		3		
	36.4	50.0			100				100	33.3	60.0	100	28.6		33.3	40.0		37.5			
Far, hence problem to carry water	2	1	1	1		1	2		2												
	18.2	50.0	100	100		100	100		66.7												
Want to extend house...	2										2		2		1	1			2		
	18.2									66.7			28.6		33.3	20.0			25.0		
Water comes in during rains	1										1		1		1				1		
	9.1									33.3			14.3		33.3				12.5		
Not Specified	2										2		2			2			2		
	18.2										40.0		28.6			40.0			25.0		

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RURAL SANITATION PROGRAMME

Table 6.11 : Age of distribution those who feel location is causing problem

	Rae Bareli									Varanasi											
	Total	Sex			Caste			Inc			Total	Sex			Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not			
		male			OBC				Spec		male			OBC				Spec			
MALES-feel loc.causing prob.	14	4	1	2	2	1	3	2	5	5	4	1	8	5	4	9					
Upto 25 years	4	2		1	1		1	1	2	1	1		2		2				2		
	28.6	50.0		50.0	50.0		33.3	50.0	40.0	20.0	25.0		25.0		40.0				22.2		
26 - 45 years	7	1	1	1		1	2	2	2	3	2	1	4	2	3	5					
	50.0	25.0	100	50.0		100	66.7	40.0	60.0	50.0	100	50.0	40.0	75.0	55.6						
46 + years	2	1			1			1	1		1		1		1				1		
	14.3	25.0			50.0			50.0	20.0		25.0		12.5		25.0				11.1		
Not Specified	1									1			1		1				1		
	7.1									20.0			12.5		20.0				11.1		
FEMALES-feel loc.causing prob.	9	2	1	1	1	1	2	1	3	1	5		6		3	3			6		
Upto 25 years	2	1			1			1	1		1		1		1				1		
	22.2	50.0			100			100	33.3		20.0		16.7		33.3				16.7		
26 - 45 years	5	1	1	1		1	2	2	2	1	2		3		1	2			3		
	55.6	50.0	100	100		100	100	66.7	100	40.0		50.0	33.3	66.7	50.0				50.0		
46 + years	2										2		2		1	1			2		
	22.2										40.0		33.3		33.3	33.3			33.3		

TABLE - 6.12

**Difference in Design Features Between P.R. Dept. Latrine Units
and Sub-Project V Latrine Units**

Sl. No.	Features	PR Dept. HH Latrine Units	Sub-Project V Latrine Units
1.	Size of the latrine cubicle	750 X 900 mm	750 X 1050 mm
2.	Leaching pit	1130 mm dia 1200 mm depth	1130 mm dia 1420 mm depth
3.	Damp proof Course	Not used	Used
4.	Floor	1 : 5 : 10 PCC	1 : 2 : 4 PCC (above 80 mm thick base of 1 : 4: 8 PCC to make the floor hard and farm)
5.	Brick work below	II class brick work with mud mortar'	I class brick work with cement mortar
6.	Super structure	II class brick work	I class brick work
7.	Plastering	No plastering	Plastering on inner surface of wall
8.	Fixing of ventilator jali	Brick Jali	RCC Jali
9.	Door shutter	No door	MS Door with inside and outside latching and two hooks provided on

Sl. No.	Features	PR Dept. HH Latrine Units	Sub-Project V Latrine Units
11.	Cement wash on outer surface	No cement wash	Cement wash provided for decreasing weathering effect on brick surface
12.	Dado work inside latrine room	No Dado work	Dado work with neat cement to restrict damping due to routine use of water for cleaning purposes
13.	Writing work, identification no. of latrine unit and construction year	No writing work	Writing work done
14.	Fixing of pre-cost plate in latrine room	No such provision	Precast plate provided to keep a pot filled with water and for use of candle during night
15.	Sanitary pan trap and foot rest	Mossaic	Ceramic

RURAL SANITATION PROGRAMME

Table 6.13 : Whether space inside latrine sufficient

	Rae Bareilly										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Fe male	Gen	SC OBC	Oth	BPL	APL	Not Spec	Male		Fe male	Gen	SC OBC	Oth	BPL	APL	Not Spec		
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Yes	192	41	31	17	39	16	51	17	4	72	58	62	15	104	1	62	56	2	120	
	96.0	97.6	93.9	100	97.5	88.9	96.2	94.4	100	96.0	93.5	98.4	83.3	98.1	100	98.4	93.3	100	96.0	
No	8	1	2		1	2	2	1		3	4	1	3	2		1	4		5	
	4.0	2.4	6.1		2.5	11.1	3.8	5.6		4.0	6.5	1.6	16.7	1.9		1.6	6.7		4.0	

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Table 6.14 : Relationship between initial programme and acceptance and use
RAE BARELI

	AGREED INITIALLY			NOT AGREED INITIALLY		
	BPL	APL	NR	BPL	APL	NR
STARTED IMMEDIATELY	13 32.5	7 70.0	1 33.3	3 16.7	0 0.0	0 0.0
AFTER SOME DAYS	26 65.0	3 30.0	2 66.7	14 77.8	0 0.0	1 100.0
NEVER USED	1 2.5	0 0.0	0 0.0	1 5.6	3 100.0	0 0.0
TOTAL HHS	40 100.0	10 100.0	3 100.0	18 100.0	3 100.0	1 100.0
VARANASI						
	AGREED INITIALLY			NOT AGREED INITIALLY		
	BPL	APL	NR	BPL	APL	NR
STARTED IMMEDIATELY	30 41.7	17 40.5	1 100.0	1 12.5	0 0.0	0 0.0
AFTER SOME DAYS	39 54.2	25 59.5	0 0.0	7 87.5	2 100.0	0 0.0
NEVER USED	3 4.1	0 0.0	0 0.0	0 0.0	0 100.0	0 0.0
TOTAL HHS	72 100.0	42 100.0	1 100.0	8 100.0	2 100.0	0 0.0
TOTAL						
	AGREED INITIALLY			NOT AGREED INITIALLY		
	BPL	APL	NR	BPL	APL	NR
STARTED IMMEDIATELY	43 38.4	24 46.2	2 50.0	4 15.4	0 0.0	0 0.0
AFTER SOME DAYS	65 58.0	28 53.8	2 50.0	21 80.8	2 40.0	1 100.0
NEVER USED	4 3.6	0 0.0	0 0.0	1 3.8	3 60.0	0 0.0
TOTAL HHS	112 100.0	52 100.0	4 100.0	26 100.0	5 100.0	1 100.0

NOTE : CLASSIFICATION AS APL / BPL BASED ON RS. 400/- AS CONTRIBUTION
NR = Not Reported

RURAL SANITATION PROGRAMME

Table 6.15 : Feeling discomfort while using latrine in the beginning

	Rae Bareilly										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Female	Gen	SC	Oth	BPL	APL	Not Spec		Male	Female	Gen	SC	Oth	BPL	APL	Not Spec		
All beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Yes	10	3	1		4		3	1		4	3	3		6		3	3		6	
	5.0	7.1	3.0		10.0		5.7	5.6		5.3	4.8	4.8		5.7		4.8	5.0		4.8	
No	187	38	32	17	35	18	50	16	4	70	57	60	18	98	1	59	56	2	117	
	93.5	90.5	97.0	100	87.5	100	94.3	88.9	100	93.3	91.9	95.2	100	92.5	100	93.7	93.3	100	93.6	
Never Used	3	1			1			1		1	2			2		1	1		2	
	1.5	2.4			2.5			5.6		1.3	3.2			1.9		1.6	1.7		1.6	
93																				
---Reasons---																				
Feel discomfort	10	3	1		4		3	1		4	3	3		6		3	3		6	
Not habituated	7	3	1		4		3	1		4	2	1		3		1	2		3	
	70.0	100	100		100		100	100		100	66.7	33.3		50.0		33.3	66.7		50.0	
Not Specified	3										1	2		3		2	1		3	
	30.0										33.3	66.7		50.0		66.7	33.3		50.0	



CHAPTER 7

USE AND MAINTENANCE

Analysis Of Current Use Pattern

Installation of latrines being provided by an agency at a heavily subsidised rate does not imply the regular use of the same by all members of the family. Since the ultimate aim of the sanitation programme is to ensure use of all latrines by all members. In the project villages, the pattern of use of these latrines was investigated in detail. It was reported that nearly all the units (197 of the 200 surveyed) have been used by some member or other in the household after installation.

All of the 200 beneficiary households were asked about the use of the household sanitary latrine (Table 7.1A). **Nearly three fourth of them (72%) reported regular use by all members** of the household. A little above one fourth of the respondents (28%) admitted that the latrine was not being used regularly.

Across the project area (Table 7.1B) around four-fifth (79%) of the households in Rae Bareli, and over two-thirds (68%) of the households in Varanasi, reported regular use of the latrine by all members of the household. Use was highest in Rasulpur village (Rae Bareli district) where more than four-fifths of the households (84%) reported regular use by all and lowest in Tikari village of Varanasi district where only about half (55%) of the households use it regularly.

When use pattern is analysed for all family members in the 200 families of respondents in Phase-A villages, it is found (Table - 7.2) that about four-fifths of (81%) of the family members use the latrine regularly. Around one-tenth of the people (11%) are found to have never used the latrine, and around 7% occasional users. Use seems to be progressively higher among the younger age groups. A less proportion of children younger than 6 years use the latrines, about three-fourth (76%) of the children in this age group use it (Infants obviously cannot use it). But toilet habits among younger children in rural areas are established relatively later. Besides, some children are scared that they might fall into the pan. Some parents do not insist therefore that the children use the toilets. However, among the older children (7-14 years) a substantial proportion (85%) use the units regularly.

Among the older age groups, the proportion of users is relatively lower; only three-fourth (77%) of persons older than 45 years are regular users. A small proportion of the older population (11%) occasionally use the toilet. **If the children below 6 years are excluded from the group of potential users, nearly one-tenth (9%) have never used the latrines since installation.**

The main reason cited for using the latrine was the convenient location with respect to the living quarters. **Since the latrines are fully complete with roof and door, unlike latrines provided by the Panchayati Raj department, they provide cover from sun and rain and are thus used more often and by more people.** The privacy it provides, specially to women, was also mentioned as an important advantage and a reason for preferring it.

As a person belonging to lower income group said " the fields are clean with very little plants and during the cropping season it is difficult to go to the field. Then we had to go to the road side. Now that the latrines have been made most people use the latrines and very few people go to the fields . Sometimes one or two go out when they feel like going for a walk but these latrines are near the house, who will go far?".

People agreed unanimously that the latrine was particularly convenient for use after dark as going out during the night posed the risk of getting bitten by snakes or insects and falling into ditches and slushy grounds. Beneficiaries across project villages reiterated that they invariably used the latrine during the night, but some went out during the day.

A beneficiary in Pithan remarked " Sarkar, din mein to bahar hi jaate hain, magar raat mein pair mein kachra lag jata hai."

["In the day time we go to the fields, but in the night we tread onto the dirt (and hence prefer to use the latrines)"]

Another woman in Bachaon said, " In the rainy season, there is water everywhere and one finds it really difficult to locate a convenient place to defecate. If a latrine is constructed then everyone will use it during the rains" Bachaon, incidently, is a village where the project has not yet been taken up.

Difference in use across age/sex/caste

Virtually no difference is observed in the use by male and female members as shown in Table - 7.3. Though it is widely believed that the need for latrine among women is more acute from the point of view of privacy, this is not reflected in practice. It appears that once a latrine is installed in the household, members of both sexes are equally likely to use it. In discussion while men point out the problem of lack of privacy faced by women if they have to squat in the open, surprisingly, women themselves do not seem to perceive it as a serious problem, and if probed, laugh it away. Thus, privacy for women appears to be more a concern of the menfolk.

A non-beneficiary in Thulendi expressed the hope that "in mid night or any time during the day, one was forced to go out. Now at least, there will be some kind of purdah for the women".

Similarly, a marginal difference is observed in the use pattern by different caste categories (Table 7.4). Regular use among upper caste people is slightly more (78%) than that among people belonging to backward castes (81%). The proportion of never users is slightly higher, too, among the Scheduled Caste (15%) as compared to the higher castes (9%).

Analysis by income class does not reflect any significant difference in use.

Change in use pattern over time

Constant visits by the Group Organizers and other project functionaries motivating the people to use the latrine, also plays some role in enhancing use. If they do not use the latrines, the functionaries disapprove of it and put moral pressure by saying that the "government" (meaning the project) has spent a lot of money on the units and they should therefore use them regularly. This does make them a little guilty and enhances use. We get the impression that some of the poorer individuals took the words of the GOs very seriously and considered it to be an "order by the government" to use latrines.

If probed in detail, as we did in the Group Discussions, they confide that they sometimes go to the fields, too when it is not too inconvenient to do so.

Use of the latrine by the beneficiary households is expected to improve further over time, as the presence of a latrine provides the basis for formation of habit with the gradual recognition of its convenience.

To analyse whether use has improved over time or not, the sample was divided into two groups according to the date of installation, the cut off date being 30th of September, 1991, the mid point of phase A of the project. Date of installation on site was available only for 121 units.

As Table - 7.5 shows, over two thirds (71%) of units installed earlier are used regularly, whereas the proportion is well over four-fifth (85%) in case of the later installations. This can be explained by the fact that the early adopters serve as a role model for the late adopters and the initial fears, etc., are allayed by seeing the early adopters' advantage of using the latrines. Beneficiaries of later installations therefore started with a higher motivational level

Response of current non-users; reasons for not using

Those who reported not using the latrines regularly, were further asked if they had never used it, or whether they stopped using after initially trying out for some days, or they restrict use only to specific occasions (Table 7 6A to 7 6D). Though in over 40% of the occasional user households the children were reported to have never used the latrine, in only one-fifth (21.8%) the old people had never used it. The corresponding figure for adult females is relatively low (16.4%). In a higher proportion of households (33%) men have discontinued after using for sometime.

In non-user households the reason for not using were probed in detail. The reasons were different for adult males, adult females and children. The reasons have been analysed in Table 7 7A to 7 7D. They can be summarised as follows:

- i. The most common reason for not using appears to be the difficulty in changing the old habits. This has been expressed in different ways, e.g. that they are not habituated to using latrines, that they feel suffocated, and prefer to go out to the open fields.
- ii. Women have specifically mentioned that they miss the gossip when they go out to defecate in a group. For an average rural woman who is usually engaged in some work or the other at home or in her occupation, the daily ritual of defecation provides practically the only occasion when she meets her peer group. Some women who have started using the latrines more or less regularly, also mentioned that they do join their peer groups now and then to update themselves on the latest gossip.

- iii Males of different villages expressed the opinion that defecation in the open in the morning is "indeed a healthy practice as it provides a scope for exercise and breathing in clean fresh air" As those who go out to defecate in the open have to get up early in the morning, this "sustains the habit of rising early, whereas the practice of using a latrine spoils this habit".
- iv The typical work habits and timings of rural people also force them to use the open fields. Those who have to spend practically the whole day in the agricultural fields during cultivation season cannot come back home only to use the latrine
- v One misconception regarding the capacity of the pit seems to be limiting use also. There is a feeling that the pit is too small and the first pit would get filled up too quickly if all members use the latrines. Hence only those for whom it is absolutely essential e.g. somebody old or ailing or female members use it while others in the family use the traditional site
- vi Children, as mentioned early are sometimes afraid to use the latrine Also, if they are too young the parents do not encourage them to use the toilet. In a few cases, the children are not able to use the latrine properly Because they are not accustomed to the toilet seat, the floor becomes dirty and the parents therefore discourage the children to use the toilets.

For those over 60 years of age (Table 7 7A) lack of habit was the main reason for not using the latrine. Lack of water nearby (7%), and presence of open field nearby (6%) were other reasons cited for not using.

Among the adults water scarcity was mentioned as the main reason, cited by 16% of the males and a slightly lower proportion of females (13%) Suffocation inside the latrine for males (9%) and lack of habit for both males and females were other prominent reasons

Immediate users and late users The time period between the installation of the latrine and its use by the members would reflect the motivation of the people Respondents were asked when they started use of the latrine after installation (Table 7 8) It is seen that only about one-third (37%) started using immediately after installation whereas the majority (61%) waited for some time before initiating use Across villages, wide variation was noted in Rae Bareli District, with over half of the beneficiaries (54%) in Jalalpur using immediately, but only a small percentage (11%) in Rasulpur doing so

A majority (55%) could not specify the interval. Of those who could, about one-fifth (21%) had waited for 8-15 days, and slightly less (16%) had waited for 16-30 days. Only around 5% had started use within a week. Of the late users none in Rae Bareilly district started use within a week of installation

Immediacy of use corresponds closely with the stage at which the beneficiaries decided to adopt the latrines. Those who had decided to have the latrine right from the beginning, were categorised as "early adopters", those who arrived at that decision when nearly half had already made up their mind were grouped as "late adopters" and the rest as "laggards". It is seen from Table - 7.9 that half of the early adopters started use immediately, while only about one-third of the late adopters did so. Only about one tenth of the laggards started use immediately

Routine cleaning and periodic cleaning of HSL

A good indicator of how well use has stabilised is the provision for storing water for use in the latrine. If a latrine is used regularly, some water is usually kept closeby; also, if a little water is poured on the pan before use, less water is required later to clean the pan

The survey indicates (Table - 7.10) that water is stored for use in the latrine in about two-third (61%) of the households. A higher proportion of households belonging to Upper Castes reported storing water

Most (68%) use buckets. Less than a quarter (21%) had a large storage tank and one-tenth use a plastic container or a tinpot to store water. The proportion of people using storage tank is much higher in Varanasi area. These tanks are usually made of cast concrete. The practice of pouring a little water on the pan before use is quite well established (Table - 7.11). The persistent efforts of the GOs and the communication campaigns on use and maintenance appear to have yielded results

A beneficiary in Chittupur confirmed "we clean it with our own hands. Whoever is there, will clean it. We see to it that dirt do not stick to the pan because by chance any one can come to inspect."

Beneficiaries reported (Table - 7.12) using as less as 3 litres to more than 16 litres of water, for flushing the pan after use. However, maximum proportion of people (45%) were found to use 7-9 litres of water, and over a quarter used 10-15 litres of water. The average quantity used appears to be around 10 litres

In group discussions it was pointed out that people have been told to use a bucket of water to flush after defecation, and were doing so. In one group discussion some participants brought up the issue that their

latrine required more water for proper cleaning, whereas others suggested that the particular unit could be having some problems as every one else needed only one bucket. Children in Thulendi had the idea that 3-4 buckets are needed after use by elders

Besides flushing after use, the pan has to be cleaned periodically by scrubbing with a brush or a broom. As results show (Table- 7 13) around two-thirds of the respondents (37%) reported that they scrub the pan daily, and a slightly lesser proportion (32%) said they did it once in three to four days. Though some (7%) said that they do it to scrubbing only when the pan looked very dirty, a few (3%) also admitted that they have never scrubbed it. **Nearly every latrine (97%) is reported to be cleaned regularly.** While observing the inside of the latrine, a brush or broom was found in about 60% of the units. This was more prevalent in Varanasi than in Rae Bareli

Cleanliness of the latrine is considered essential by the users to prevent bad odour. This **association of cleanliness with bad odour can be exploited by the project to enhance cleanliness**, rather than linking it with hygiene, which people have not internalised yet

As a person said, "pour a little water before use and then clean it with water. If it is cleaned instantly then why should there be any smell "

In the first series of demonstration latrines, instructions on proper methods of use had been put up inside on the door. These were tin plates on which the instruction had been printed accompanied by suitable illustrations. Reportedly the PSU has modified the material and now a self sticking sheet with the same contents is pasted on the inside of the door soon after the unit is handed over. However the Review team did not see any much material, possibly because they come off too soon. In any case, this idea of using reminder material in site needs to be pursued systematically

The quality of the pan, especially the smooth ceramic surface, is perceived by the people as an advantage, as it is not difficult to clean it. A suggestion was given in the group in Nuaon to distribute brushes among the poor beneficiaries to help them in keeping the latrines clean. The PSU field office in Rae Bareli has also reportedly made arrangements for procuring latrine brushes (which cost Rs 10 - 12) on behalf of those villagers who are willing to pay the cost price. The community members have shown interest too. This strategy of promoting the use of "peripherals" can be carefully reviewed and if the response is good, the people can be taught to make them at home using locally available material.

In isolated cases a misconception that one of the two pits received water only and that it would get filled up early if too much water is poured down the pan has led to use of limited amount of water for cleaning.

Some people initially had reservation against scrubbing the pan but as they gradually realised the utility of the latrine and the advantages of keeping it clean the feeling was overcome.

As regards the type of materials used for cleaning the pan (Table-7.14) more than two thirds (71%) use only water, and a quarter (24.2%) also use detergents or soaps along with it. The proportion of people using detergents was higher in Rae Bareilly, than in Varanasi.

Using any type of detergent or deodorant for cleaning prevents bacterial activity in the leach pit. This is the message being disseminated, but with varying emphasis - deodorants are never to be used, but detergents may be used sometimes. The GO in Pithan explained that if a little bit of detergent is not used the pan will lose its sparkle. The people also feel the same way and although they know that detergents may interfere with the process of sludging they still use it. "Nirma" was the brand commonly mentioned. In Nuaon use of phenyle was also reported.

Cleanliness of the latrines was assessed from the appearance of three parts - the pan, foot rest and the latrine floor. In about one fourth of the units observed, these parts were not found to be clean.

In general, the standard of cleanliness was found to be better in Varanasi than in Rae Bareilly. Across caste groups, there was no consistent difference in Varanasi, but in Rae Bareilly, latrines belonging to backward caste people were found to be cleaner than those owned by upper caste households. Across income categories also, the difference was clearly in favour of the people Below Poverty Line, only in Rae Bareilly.

Sharing the Responsibility of Cleaning

When asked who normally cleans the pan, in about half of the cases (49%), the housewife was reported to be doing so. Though, in some cases (19%) the husband or other male members of the household also help in cleaning the pan, **the primary responsibility appears to be that of women.**

In more than a quarter of households, it was reported that there was no specific person who cleans and anyone from the family who feels like does it. Very few (2%) also reported that they hire a sweeper or some scavenger (Bhangi) to clean the pan regularly. It was anticipated that cleaning the pan would become an

additional chore for the housewife as a result of the installation of a latrine in the house, and the project has also attempted to promote the practice of cleaning the pan by male members of the household.

But such changes in behaviour do not come about in a short time. Since the project in operational terms has just crossed the one year mark it is too early to expect major behavioural changes

In younger families where the husband also helps the wife in household work, the task of cleaning is usually shared among the husband and wife. In contrast in orthodox joint families where the traditional role model prevents the male from performing such tasks

In Chittupur, it was explained by the women group that in cases where males did not clean latrine, it was because of lack of time rather than any taboo or aversion against it.

Cleaning of pits - Awareness and Misconceptions

More than half of the respondents (60%) said that they had not given any thought to the question of who would clean the pits when it would get filled up (Table 7.15). **About one-fifth (20%) said that their family members would do it, and a slightly lesser proportion (12%) said that they would hire out a person for the job, although most of them did not know where they would find such a person.** A small proportion (4%) even asserted that the government or project will make arrangements for cleaning the pits

In group discussions also, people's response made it clear that they were still indecisive about the issue, as it was not an immediate concern. Those who did not have a definite knowledge of what happens inside the pit said that they would wait for the government's suggestion on the matter. Specific assurances that "PSU will come and carry it away in trucks" have also been reportedly given to beneficiaries by unconfirmed sources. Such careless remarks may only breed confusion

Further, people were also asked about how they proposed to dispose off the manure taken out of the pit (Table 7.16). About half (52%) replied that they would use it in the fields as manure, while some (5%) said that they would throw it somewhere outside. About one-third of the respondents (34%) said that they had not thought about it. But a small proportion (5%) also mentioned that they would be able to sell the manure to some farmers

Considering the fact that no one has even seen what the pit sludge would be like at the time of cleaning and the general aversion for handling excreta, the awareness seems to be high. They appear to know that it would be in a state that they will themselves be able to handle. The idea of using it as manure in the fields, and selling it at a price shows that they are aware of its value as a manure and assured about its harmlessness.

The opinion expressed by the Pradhan of Tarapur village of Varanasi district, is quite amusing in this context. He saw more "selfish" underlying motives of the "foreign govt." which was funding this latrine "programme" According to him "this was actually a project to manufacture fertiliser from the manure derived from pits. When all these pits would be due for cleaning, the foreign government would collect all this and process it in some factory to be set up by them, and would manufacture cheap fertiliser from it".

RURAL SANITATION PROGRAMME

Table 7.1 (A) : Regular usage of the new latrine

	Rae Bareilly										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not		
		male			OBC				Spec		male			OBC				Spec		
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Use regularly	145	36	23	14	33	12	42	14	3	59	44	42	13	72	1	44	40	2	86	
	72.5	85.7	69.7	82.4	82.5	66.7	79.2	77.8	75.0	78.7	71.0	66.7	72.2	67.9	100	69.8	66.7	100	68.8	
Do not use regularly	55	6	10	3	7	6	11	4	1	16	18	21	5	34		19	20		39	
	27.5	14.3	30.3	17.6	17.5	33.3	20.8	22.2	25.0	21.3	29.0	33.3	27.8	32.1		30.2	33.3		31.2	

RURAL SANITATION PROGRAMME

Table 7.1 (B) : Regular usage of the new latrine

	Total	Rae Bareilly				Varanasi					
		Kera npur	Jala lpur	Rasu lpur	Total	Bhagw 'pur	Gaja 'pur	Mura dev	Thik ari	Nai pur	Total
All Beneficiaries	200	32	24	19	75	30	20	25	20	30	125
Use regularly	145	25	18	16	59	25	13	16	11	21	86
	72.5	78.1	75.0	84.2	78.7	83.3	65.0	64.0	55.0	70.0	68.9
Do not use regularly	55	7	6	3	16	5	7	9	9	9	39
	27.5	21.9	25.0	15.8	21.3	16.7	35.0	36.0	45.0	30.0	31.1

RURAL SANITATION PROGRAMME

Table 7.2 : Use by Age

AGE	ALWAYS	OCCASIONALLY	NEVER	NOT SPECIFIED	TOTAL
UPTO 6 YEARS	196 76.9	9 3.5	50 19.6	0 0.0	255 100.0
7 TO 14 YEARS	197 85.3	12 5.2	20 8.7	2 0.9	231 100.0
15 TO 35 YRS.	365 83.9	30 6.9	38 8.7	2 0.5	435 100.0
36 TO 45 YRS.	108 81.8	13 9.8	10 7.6	1 0.8	132 100.0
ABOVE 46 YRS.	128 76.6	19 11.4	19 11.4	1 0.6	167 100.0
TOTAL	994 81.5	83 6.8	137 11.2	6 0.5	1220 100.0

RURAL SANITATION PROGRAMME

Table 7.3 : Use by Sex

AGE	ALWAYS	OCCASIONALLY	NEVER	NOT SPECIFIED	TOTAL
MALE	557 81.2	47 6.9	78 11.4	4 0.6	686 100.0
FEMALE	437 81.8	36 6.7	59 11.0	2 0.4	534 100.0
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TOTAL	994 81.5	83 6.8	137 11.2	6 0.5	1220 100.0
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RURAL SANITATION PROGRAMME

Table 7.4 : Use by Caste

AGE	ALWAYS	OCCASIONALLY	NEVER	NOT SPECIFIED	TOTAL
S.C.	336 78.3	21 4.9	66 15.4	6 1.4	429 100.0
O.B.C.	389 82.9	46 9.8	29 6.2	0 0.0	464 98.9
GENERAL	170 84.2	13 6.4	19 9.4	0 0.0	202 100.0
OTHERS	99 56.6	3 1.7	23 13.1	0 0.0	125 71.4
TOTAL	994 81.5	83 6.8	137 11.2	6 0.5	1220 100.0

RURAL SANITATION PROGRAMME

Table 7.5 : Regular user households by period of installation

CASTE	TILL SEPT.'91			AFTER OCT.'91		
	Used regularly	Not used regularly	Total	Used regularly	Not used regularly	Total
GENERAL	7 87.5	1 12.5	8 100.0	10 76.9	3 23.1	13 100.0
S.C. & O.B.C.	34 69.4	15 30.4	49 100.0	32 86.5	5 13.5	37 100.0
OTHERS	3 60.0	2 40.0	5 100.0	8 88.8	1 11.2	9 100.0
TOTAL	44 71.0	18 29.0	62 100.0	50 84.7	9 15.3	59 100.0
APL	25 67.6	12 32.4	37 100.0	33 89.2	4 10.8	37 100.0
BPL	18 75.0	6 25.0	24 100.0	14 77.7	4 22.3	18 100.0
NOT SPECIFIED	1 100.0	0 0.0	1 100.0	3 75.0	1 25.0	4 100.0
TOTAL	44 71.0	18 29.0	62 100.0	50 84.7	9 15.3	59 100.0

RURAL SANITATION PROGRAMME

Table 7.6 (A) : Whether Latrine was never used - Old

	Rae Bareli										Varanasi							
	Total	Sex		Caste			Inc			Total	Sex		Caste			Inc		Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not
		male	male		OBC				Spec		male	male		OBC				Spec
Do not use regularly	55	6	10	3	7	6	11	4	1	16	18	21	5	34	19	20		39
OLD																		
Never used	12	1			1		1			1	6	5	2	9	5	6		11
	21.8	16.7			14.3		9.1			6.3	33.3	23.8	40.0	26.5	26.3	30.0		28.2
Stopped using after some days	9	2	2	1	1	2	3	1		4	5		5		1	4		5
	16.4	33.3	20.0	33.3	14.3	33.3	27.3	25.0		25.0	27.8		14.7		5.3	20.0		12.8
Use occasionally	4	1	1	1	1		2			2	2		2		1	1		2
	7.3	16.7	10.0	33.3	14.3		18.2			12.5	11.1		5.9		5.3	5.0		5.1
Not relevant	30	2	7	1	4	4	5	3	1	9	5	16	3	18	12	9		21
	54.5	33.3	70.0	33.3	57.1	66.7	45.5	75.0	100	56.3	27.8	76.2	60.0	52.9	63.2	45.0		53.8

RURAL SANITATION PROGRAMME

Table 7.6 (B) : Whether Latrine was never used - Male adults

	Rae Bareilly										Varanasi								
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc		Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not	
		male			OBC				Spec		male			OBC				Spec	
MALE ADULTS																			
Never used	10	1			1			1		1	3	6	2	7		5	4		9
	18.2	16.7			14.3			9.1		6.3	16.7	28.6	40.0	20.6		26.3	20.0		23.1
Stopped using after some days	18	1	3	1		3	3	1		4	11	3	1	13		4	10		14
	32.7	16.7	30.0	33.3		50.0	27.3	25.0		25.0	61.1	14.3	20.0	38.2		21.1	50.0		35.9
Use occasionally	4	1	1		2			2		2	1	1	1	1			2		2
	7.3	16.7	10.0		28.6			18.2		12.5	5.6	4.8	20.0	2.9			10.0		5.1
Not relevant	23	3	6	2	4	3	5	3	1	9	3	11	1	13		10	4		14
	41.8	50.0	60.0	66.7	57.1	50.0	45.5	75.0	100	56.3	16.7	52.4	20.0	38.2		52.6	20.0		35.9

RURAL SANITATION PROGRAMME

Table 7.6 (C) : Whether Latrine was never used - Female adults

	Total		Rae Bareli							Varanasi							
	Sex		Caste			Inc				Sex		Caste			Inc		Total
	Male	Female	Gen	SC	Oth	BPL	APL	Not Spec	Male	Female	Gen	SC	Oth	BPL	APL	Not Spec	
		male		OBC						male		OBC					
FEMALE ADULTS																	
Never used	9	1		1		1			1	3	5	1	7	5	3	8	
	16.4	16.7		14.3		9.1			6.3	16.7	23.8	20.0	20.6	26.3	15.0	20.5	
Stopped using after some days	15	2	3	1	1	3	4	1	5	8	2		10	3	7	10	
	27.3	33.3	30.0	33.3	14.3	50.0	36.4	25.0	31.3	44.4	9.5		29.4	15.8	35.0	25.6	
Use occasionally	5	1	2		3		2		3	1	1	1	1		2	2	
	9.1	16.7	20.0		42.9		18.2		18.8	5.6	4.8	20.0	2.9		10.0	5.1	
Not relevant	26	2	5	2	2	3	4	3	7	6	13	3	16	11	8	19	
	47.3	33.3	50.0	66.7	28.6	50.0	36.4	75.0	43.8	33.3	61.9	60.0	47.1	57.9	40.0	48.7	

RURAL SANITATION PROGRAMME

Table 7.6 (D) : Whether Latrine was never used - Children

	Rae Bareilly										Varanasi								
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc		Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not	
		male		OBC					Spec		male		OBC					Spec	
CHILDREN																			
Never used	22	1	3		1	3	3	1		4	5	13	1	17		11	7		18
	40.0	16.7	30.0		14.3	50.0	27.3	25.0		25.0	27.8	61.9	20.0	50.0		57.9	35.0		46.2
Stopped using after some days	7	2	2	1	1	2	3	1		4	3		3			3			3
	12.7	33.3	20.0	33.3	14.3	33.3	27.3	25.0		25.0	16.7		8.8			15.0			7.7
Use at night only	1	1			1		1			1									
	1.8	16.7			14.3		9.1			6.3									
Not relevant	25	2	5	2	4	1	4	2	1	7	10	8	4	14		8	10		18
	45.5	33.3	50.0	66.7	57.1	16.7	36.4	50.0	100	43.8	55.6	38.1	80.0	41.2		42.1	50.0		46.2

RURAL SANITATION PROGRAMME

Table 7.7 (A) : Why OLD PEOPLE Do not use regularly

(% HHS REPORTING)

REASON	DISTRICT		TOTAL
	RAE BARELI	VARANASI	
HHS REPORTING OCCASIONAL / NEVER USED	7	18	25
1. Not habituated	1 14.2	4 22.2	5 20.0
2. Water resource too far	2 28.6	2 11.1	4 16.0
3. Alternate site preferred	-	3 16.7	3 12.0
4. Latrine too far	1 14.2	1 5.6	2 8.0
5. Others	4 57.1	6 33.3	10 40.0
6. No specific reason	-	2 11.1	2 8.0

RURAL SANITATION PROGRAMME

Table 7.7 (B) : Why ADULT MALES do not use regularly

REASON	DISTRICT		TOTAL
	RAE BARELI	VARANASI	
HHS REPORTING OCCASIONAL / NEVER USED	7	25	32
1. Water scarece	4 57.1	5 20.0	9 28.1
2. Not habituated	-	5 20.0	5 15.6
3. Feel suffocated	1 14.3	4 16.0	5 15.6
4. Use another sanitary latrine	1 14.3	2 8.0	3 9.4
5. Go out to work early	1 14.3	1 4.0	2 6.2
6. Alternate site preferred	-	2 8.0	2 6.2
7. Pit fills up quickly	-	2 8.0	2 6.2
8. Others	3 42.9	3 12.0	6 18.7
9. Not reported	-	1 4.0	1 3.1

RURAL SANITATION PROGRAMME

Table 7.7 (C) : Why ADULT FEMALES do not use regularly

REASON	DISTRICT		TOTAL
	RAE BARELI	VARANASI	
HHS REPORTING OCCASIONAL / NEVER USED	9	20	29
1. Water scarece	4 44.4	3 15.0	7 24.1
2. Not habituated	-	5 25.0	5 17.2
3. Can gossip in the open in a group	1 11.1	3 15.0	4 13.8
4. Alternate site preferred	1 11.1	2 10.0	3 10.3
5. Pit fills up quickly	1 11.1	2 10.0	3 10.3
6. Go outside for work	1 11.1	1 5.0	2 6.9
7. Others	4 44.4	3 15.0	7 24.1

RURAL SANITATION PROGRAMME

Table 7.7(D) : Why CHILDREN do not use regularly

REASON	DISTRICT		TOTAL
	RAE BARELI	VARANASI	
HHS REPORTING OCCASIONAL / NEVER USED	9	20	29
1. Afraid to use	1 11.1	10 47.6	11 36.7
2. Children too young to use	2 22.2	4 19.0	6 20.0
3. Water scarece	3 33.3	1 4.8	4 13.3
4. Alternate site preferred	-	2 9.5	2 6.7
5. Others	4 44.4	2 9.5	6 20.0

RURAL SANITATION PROGRAMME

Table 7.8 : Latrine used immediately after installation

	Rae Bareilly										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not		
		male			OBC				Spec		male			OBC				Spec		
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Used immediately	73	20	4	4	12	8	13	10	1	24	29	20	7	42		25	23	1	49	
	36.5	47.6	12.1	23.5	30.0	44.4	24.5	55.6	25.0	32.0	46.8	31.7	38.9	39.6		39.7	38.3	50.0	39.2	
Used after some days	122	20	29	13	26	10	39	7	3	49	30	43	10	62	1	35	37	1	73	
	61.0	47.6	87.9	76.5	65.0	55.6	73.6	38.9	75.0	65.3	48.4	68.3	55.6	58.5	100	55.6	61.7	50.0	58.4	
Never used	1										1			1		1			1	
	.5										1.6			.9		1.6			.8	
Not Specified	4	2			2		1	1		2	2		1	1		2			2	
	2.0	4.8			5.0		1.9	5.6		2.7	3.2		5.6	.9		3.2			1.6	
Used after some days	122	20	29	13	26	10	39	7	3	49	30	43	10	62	1	35	37	1	73	
Within 7 days	6										5	1	1	5		3	3		6	
	4.9										16.7	2.3	10.0	8.1		8.6	8.1		8.2	
8 - 15 days	26	6	1	4	3		6		1	7	8	11	1	17	1	12	7		19	
	21.3	30.0	3.4	30.8	11.5		15.4		33.3	14.3	26.7	25.6	10.0	27.4	100	34.3	18.9		26.0	
16 - 30 days	20	1	10	3	6	2	8	3		11	3	6	2	7		2	6	1	9	
	16.4	5.0	34.5	23.1	23.1	20.0	20.5	42.9		22.4	10.0	14.0	20.0	11.3		5.7	16.2	100	12.3	
31 + days	3	1	1	1		1	1	1		2		1		1		1			1	
	2.5	5.0	3.4	7.7		10.0	2.6	14.3		4.1		2.3		1.6		2.9			1.4	
Not Specified	67	12	17	5	17	7	24	3	2	29	14	24	6	32		17	21		38	
	54.9	60.0	58.6	38.5	65.4	70.0	61.5	42.9	66.7	59.2	46.7	55.8	60.0	51.6		48.6	56.8		52.1	

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Table 7.9 : Latrine used immediately after Installation

	Total	Rae Bareilly			Varanasi				
		Early Adopters	Late Adopters	Laggards	Total	Early Adopters	Late Adopters	Laggards	
All Beneficiaries	200	19	41	15	75	55	64	6	125
Used Immediately	73	10	13	1	24	28	20	1	49
	36.5	52.6	31.7	6.7	32.0	50.9	31.3	16.7	32.9
Used after some days	122	9	27	13	49	27	41	5	73
	61.0	47.4	65.9	86.7	65.3	49.1	64.1	83.3	58.4
Never used	1						1		1
	.5						1.6		.8
Not Specified	4		1	1	2		2		2
	2.0		2.4	6.7	2.7		3.1		1.6
Used after some days	122	9	27	13	49	27	41	5	73
Within 7 days	6					3	3		6
	4.9					11.1	7.3		8.2
8 - 15 days	26		4	3	7	11	8		19
	21.3		14.8	23.1	14.3	40.7	19.5		26.0
16 - 30 days	20	2	6	3	11	3	5	1	9
	16.4	22.2	22.2	23.1	22.4	11.1	12.2	20.0	12.3
31 + days	3		1	1	2		1		1
	2.5		3.7	7.7	4.1		2.4		1.4
Not Specified	67	7	16	6	29	10	24	4	38
	54.9	77.8	59.3	46.2	59.2	37.0	58.5	80.0	52.1

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Table 7.10 Storage of water

	Rae Bareilly										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not		
		male		OBC					Spec		male		OBC					Spec		
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Water stored	122	21	18	10	18	11	23	12	4	39	35	48	13	69	1	41	40	2	83	
	61.0	50.0	54.5	58.8	45.0	61.1	43.4	66.7	100	52.0	56.5	76.2	72.2	65.1	100	65.1	66.7	100	66.4	
Store water in....																				
Bucket	83	14	17	8	14	9	19	9	3	31	22	30	8	44		26	25	1	52	
	68.0	66.7	94.4	80.0	77.8	81.8	82.6	75.0	75.0	79.5	62.9	62.5	61.5	63.8		63.4	62.5	50.0	62.7	
Storage tank	26	3		1	1	1	1	2		3	9	14	4	18	1	12	10	1	23	
	21.3	14.3		10.0	5.6	9.1	4.3	16.7		7.7	25.7	29.2	30.8	26.1	100	29.3	25.0	50.0	27.7	
Plastic/ Tin/ Pot	12	3	1	1	2	1	3	1		4	4	4	1	7		3	5		8	
	9.8	14.3	5.6	10.0	11.1	9.1	13.0	8.3		10.3	11.4	8.3	7.7	10.1		7.3	12.5		9.6	
Earthen Pot	1	1			1				1	1										
	.8	4.8			5.6				25.0	2.6										

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Table 7.11 : Pouring of Water

	Rae Bareilly										Varanasi									
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc			Total
		Male	Female	Gen	SC	Oth	BPL	APL	Not		Male	Female	Gen	SC	Oth	BPL	APL	Not		
		male		OBC					Spec		male		OBC					Spec		
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125	
Pour little water on pan before use	172	34	32	16	35	15	47	15	4	66	49	57	17	88	1	52	54		106	
	86.0	81.0	97.0	94.1	87.5	83.3	88.7	83.3	100	88.0	79.0	90.5	94.4	83.0	100	82.5	90.0		84.8	
Do not pour water	24	7	1	1	4	3	6	2		8	10	6		16		9	5	2	16	
	12.0	16.7	3.0	5.9	10.0	16.7	11.3	11.1		10.7	16.1	9.5		15.1		14.3	8.3	100	12.8	
Could not Specify	4	1			1			1		1	3		1	2		2	1		3	
	2.0	2.4			2.5			5.6		1.3	4.8		5.6	1.9		3.2	1.7		2.4	

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Table 7.12 : Water required for flushing

	Rae Bareli										Varanasi								
	Total	Sex		Caste			Inc				Total	Sex		Caste			Inc		Total
		Male	Fe	Gen	SC	Oth	BPL	APL	Not		Male	Fe	Gen	SC	Oth	BPL	APL	Not	
		male	male	OBC					Spec		male	male	OBC					Spec	
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125
Upto 3 litres	6	1	1		1	1	1	1		2	4		2	2		2	2		4
	3.0	2.4	3.0		2.5	5.6	1.9	5.6		2.7	6.5		11.1	1.9		3.2	3.3		3.2
4 - 6 litres	17	6	3	3	4	2	4	5		9	5	3		8		3	5		8
	8.5	14.3	9.1	17.6	10.0	11.1	7.5	27.8		12.0	8.1	4.8		7.5		4.8	8.3		6.4
7 - 9 litres	91	17	17	12	15	7	26	6	2	34	22	35	9	48		26	30	1	57
	45.5	40.5	51.5	70.6	37.5	38.9	49.1	33.3	50.0	45.3	35.5	55.6	50.0	45.3		41.3	50.0	50.0	45.6
10 - 15 litres	57	15	12	2	17	8	20	5	2	27	14	16	3	26	1	16	13	1	30
	28.5	35.7	36.4	11.8	42.5	44.4	37.7	27.8	50.0	36.0	22.6	25.4	16.7	24.5	100	25.4	21.7	50.0	24.0
16 + litres	25	2			2		2			2	14	9	3	20		13	10		23
	12.5	4.8			5.0		3.8			2.7	22.6	14.3	16.7	18.9		20.6	16.7		18.4
Not Specified	4	1			1			1		1	3		1	2		3			3
	2.0	2.4			2.5			5.6		1.3	4.8		5.6	1.9		4.8			2.4

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Table 7.13 : Frequency of scrubbing the pan

	Rae Bareli										Varanasi								
	Total	Sex		Caste			Inc			Total	Sex		Caste			Inc			Total
		Male	Female	Gen	SC	Oth	BPL	APL	Not Spec		Male	Female	Gen	SC	Oth	BPL	APL	Not Spec	
					OBC									OBC					
All Beneficiaries	200	42	33	17	40	18	53	18	4	75	62	63	18	106	1	63	60	2	125
Daily	73	9	6	2	9	4	11	3	1	15	25	33	6	51	1	33	25		58
	36.5	21.4	18.2	11.8	22.5	22.2	20.8	16.7	25.0	20.0	40.3	52.4	33.3	48.1	100	52.4	41.7		46.4
Once in 3-4 days	63	19	11	8	18	4	23	5	2	30	16	17	4	29		14	17	2	33
	31.5	45.2	33.3	47.1	45.0	22.2	43.4	27.8	50.0	40.0	25.8	27.0	22.2	27.4		22.2	28.3	100	26.4
Once a week	36	9	12	5	9	7	12	8	1	21	12	3	4	11		4	11		15
	18.0	21.4	36.4	29.4	22.5	38.9	22.6	44.4	25.0	28.0	19.4	4.8	22.2	10.4		6.3	18.3		12.0
Occasionally	8	1	2	1	1	1	3			3	1	4	2	3		2	3		5
	4.0	2.4	6.1	5.9	2.5	5.6	5.7			4.0	1.6	6.3	11.1	2.8		3.2	5.0		4.0
Only when very dirty	14	3	2	1	2	2	4	1		5	4	5	1	8		7	2		9
	7.0	7.1	6.1	5.9	5.0	11.1	7.5	5.6		6.7	6.5	7.9	5.6	7.5		11.1	3.3		7.2
Never scrubbed	6	1			1			1		1	4	1	1	4		3	2		5
	3.0	2.4			2.5			5.6		1.3	6.5	1.6	5.6	3.8		4.8	3.3		4.0

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Table 7.14 : Materials used for cleaning the pan

	Total	Rae Bareli				Varanasi					Total
		Karanpur	Jalapur	Rasulpur	Total	Bhagwapur	Gajapur	Mura dev	Thikari	Nainpur	
Clean the Pan	194	32	23	19	74	30	20	24	17	29	120
Only water	138	18	19	13	50	17	16	18	14	23	88
	71.1	56.3	82.6	68.4	67.6	56.7	80.0	75.0	82.4	79.3	73.3
Soap/ Detergent	47	13	5	5	23	14	2	5	2	1	24
	24.2	40.6	21.7	26.3	31.1	46.7	10.0	20.8	11.8	3.4	20.0
Phenyle	4	1			1	1			1	1	3
	2.1	3.1			1.4	3.3			5.9	3.4	2.5
Bleaching Powder	2	1			1					1	1
	1.0	3.1			1.4					3.4	.8
Others	8			1	1		2	1		4	7
	4.1			5.3	1.4		10.0	4.2		13.8	5.8

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Table 7.15 : Who would clean the pits

	Total	Rae Bareilly			Total	Varanasi					Total
		Karanpur	Jalapur	Rasulpur		Bhagwapur	Gajapur	Muradev	Thikari	Nainpur	
All Beneficiaries	200	32	24	19	75	30	20	25	20	30	125
Not thought about it	119	20	14	8	42	17	12	17	12	19	77
	59.5	62.5	58.3	42.1	56.0	56.7	60.0	68.0	60.0	63.3	61.6
Family Members	39	7	8	10	25	3	3	3	3	2	14
	19.5	21.9	33.3	52.6	33.3	10.0	15.0	12.0	15.0	6.7	11.2
Hired Person	34	4	2	1	7	8	2	5	4	8	27
	17.0	12.5	8.3	5.3	9.3	26.7	10.0	20.0	20.0	26.7	21.6
Project will do	5	1			1	1	2			1	4
	2.5	3.1			1.3	3.3	10.0			3.3	3.2
Government will do	2					1	1				2
	1.0					3.3	5.0				1.6
Could not Specify	1								1		1
	.5								5.0		.8
Hire person to clean pits	34	4	2	1	7	8	2	5	4	8	27
Person available within the village	11	1	1		2	3	1	4	1		9
	32.4	25.0	50.0		28.6	37.5	50.0	80.0	25.0		33.3
Person not available	22	3	1		4	5	1	1	3	8	18
	64.7	75.0	50.0		57.1	62.5	50.0	20.0	75.0	100	66.7
Could not Specify	1			1	1						
	2.9			100	14.3						

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Table 7.16 : Use of manure taken out from Pit

	Total	Rae Bareilly				Varanasi					
		Kara npur	Jala lpur	Rasu lpur	Total	Bhagw 'pur	Gaja 'pur	Mura dev	Thik ari	Na pur	Total
All Beneficiaries	200	32	24	19	75	30	20	25	20	30	125
Use it in the fields	104	20	16	12	48	10	14	13	9	10	56
	52.0	62.5	66.7	63.2	64.0	33.3	70.0	52.0	45.0	33.3	44.8
Not thought about it	68	10	7	2	19	15	5	11	6	12	49
	34.0	31.3	29.2	10.5	25.3	50.0	25.0	44.0	30.0	40.0	39.2
Throw somewhere outside	11	1		1	2	3		1	2	3	9
	5.5	3.1		5.3	2.7	10.0		4.0	10.0	10.0	7.2
Will sell it	10			3	3	1			2	4	7
	5.0			15.8	4.0	3.3			10.0	13.3	5.6
Project will take it away	3	1	1		2		1				1
	1.5	3.1	4.2		2.7		5.0				.8
Give it to a farmer	2					1				1	2
	1.0					3.3				3.3	1.6
Could not Specify	2			1	1				1		1
	1.0			5.3	1.3				5.0		.8

CHAPTER 8

GENERAL SANITATION PRACTICES

Besides providing sanitary latrines to all families the project also aims at improving the general sanitation practices at the household level. The ultimate objective of offering sanitation as a package is that change occurs in a whole set of attitudes and practices which are dynamically related to each other. Changes in each element of the behavioural set would reinforce each other. Such changes are expected to be more stable since the change process would occur at a "gestalt" level. In fact, the chief rationale for Sub Project V was that safe drinking water had already been provided under a different programme under the Indo-Dutch Cooperation arrangements.

Further, through the communication package which makes the use of both interpersonal and group approaches, a specific set of behavioural practices are promoted. They are

- i) Safe drinking water handling practices. Safe carriage, storage and use of ladles to remove water,
- ii) Safe waste water disposal practices, specially construction and use of soak pits,
- iii) Improved personal hygiene

Apart from this, in all the project villages a committee, consisting of user representatives, has been formed for promoting operation and management of public standpost / water points by the community members themselves. These village level bodies called "Jal Samiti" are formed as a part of the plan of operation of a separate Sub Project but the Sub-Project V villages are included under it. The functions of Jal Samiti are

- Selection of sites for new community drinking water source
- Selecting a caretaker for handpumps (wherever they have been installed)
- Maintaining public water sources
- Ensuring proper disposal of waste / spillover water from public water points
- Keeping surroundings of water points clean and creating general awareness on village sanitation
- Dissemination of health messages

The findings discussed subsequently should be read against this background

Drinking Water Use

Use of safe sources of drinking water in project villages in either district is much below the expected level. Piped water provided through standposts and deepwell handpumps are considered as safe sources. But even shallow tubewells fitted with handpumps can be considered as relatively safer than surface sources or unlined openwells. In Table 8.1 the proportion of households using various sources of drinking water has been shown. The category "handpump" includes users of both deep as well as shallow tubewells. In the project villages shallow tubewells are very common since subsurface (ground water) water table is fairly high. In fact, in certain villages (e.g. part of Thulendi) the water table is so high that the latrine pits which were dug immediately after the monsoon got partly filled with water overnight. A large number of households therefore have installed conventional handpumps on shallow tubewells in their own courtyards.

Piped water supply was observed to be extremely erratic. For instance, in Thulendi village on three different days (two of them consecutive) no water had been supplied at all. There is a lot of resentment among the villagers on this count since in a number of villages in both project areas (e.g. Chittupur in Varanasi also) such interrupted supply is quite common. The resentment is very strong among those who have taken private connections, for which they reportedly pay the tariff anyway, irrespective of the quality of service. Discussion with Jal Nigam Engineers indicates that the failure / poor service occurs especially in the tail end villages. Three reasons were offered:

- The design population has been exceeded in less than half of the designed life,
- Yield of the source of headworks itself has fallen below estimated figure,
- There were unconfirmed reports of unauthorised tapping of the supply line, too.

Further in a few villages, (Aureh of Varanasi) we were told that a part of a village (some hamlets) have been left out of the service coverage. Whatever be the reason, the fact that the people are deprived of safe water and usually without a backup (safe) source defeats one of the essential objectives of sub project V. As an ad hoc measure, it is learnt that the Dutch mission is examining the feasibility of installing deepwell handpumps as alternate safe sources.

It may be relevant to mention here that Review Mission UP - 12 had noted much earlier that "there is a need for more reliable and field - tested design data on which to base the designs for rural water supply schemes. Especially the fact that in practice such schemes are operated differently (e.g. during less hours

per day) than according to the design criteria, has to be taken into account, as this may have far - reaching effects on the effectively of the schemes themselves " (UP - 12, Page - 8)

Surprisingly, in the non-project villages of Rae Bareli, a sizeable proportion (30%) had access to safe sources

The specific reasons for not using safe sources are mentioned in Table - 8 2. Analysis reveals that a very high proportion (54%) in Rae Bareli project villages do not use safe sources - mainly deepwell handpumps - even when they are available because of the distance

Table - 8 3 further establishes the point made about the erratic nature of piped water supply. Not surprisingly, open wells appear to be the alternate source in a majority of cases (69%) when the piped water supply or (deepwell) handpumps break down (Table - 8 4). Most of these wells are unlined shallow dugwells without a sanitary apron

Other Drinking Water Related Practices

In Tables 8 5 to 8 8, the practices related to drinking water have been presented. Table - 8.5 gives the frequency of cleaning of vessels used for carrying drinking water. Table - 8.6 shows how these vessels are cleaned and Table - 8 7 shows what proportion of people cover the vessels in which drinking water is stored. The practices seem to be generally sound across project villages as well as non-project villages

But the practice of using a ladle to remove drinking water from storage does not seem to have been accepted in any significant way, only 7% of the total beneficiaries - all of them in Varanasi reported using them for transferring water (Table-8 8). Surprisingly, in Rae Bareli, not a single user was reported, where as the review team has seen the concrete effort made to promote this highly desirable practice. The PSU team has in fact offered a number of low-cost ladle options and some people have actually purchased metal ladle through the PSU efforts. An experiment has also been made to popularise indigenously designed baked clay ladles. The fact that no use is made of ladles indicates that the practice is yet to be adopted

Another "safe practice" being promoted is straining of drinking water using a cloth strainer. The practice has been adopted by less than one-fourth of the beneficiaries in Rae Bareli and a little over half of them in Varanasi (Table - 8 9)



Waste Water Disposal

Use of soak pits has not quite been established yet (Table 8.10) A large majority (70 of the 75 beneficiaries in Rae Bareli and 106 of the 125 beneficiaries in Varanasi contacted) have not made soakpits In other words only 12% households have made a soakpit for waste water disposal Our observation in the field indicates that waste water accumulation is a serious problem in several villages (notably Thulendi)

In most of the villages studied, the major problem mentioned mainly by the males at present is that of waste water disposal In all the group discussions, the beneficiaries of the latrine programme now feel that for keeping the surroundings clean and for overall sanitation of the villages, facilities for overall waste water disposal is the next requirement for the village

When probed on the issue of waste water disposal, some beneficiaries (27% of those who could think of some solution) did suggest soakpits as a solution But a majority felt that drains need to be constructed to take care of the problem (Table- 8 11)

Jal Samiti

Awareness of Jal Samitis, is almost negligible, only 6 persons - two in Rae Bareli and four in Varanasi knew about the existence of Jal Samiti (Table - 8 12) and its function (Table - 8 13) Obviously, the identity of Jal Samiti is yet to be established

Inducing voluntary community participation is a difficult task and needs a lot of nurturing The GOs could be persuaded to give priority to this aspect in the phase A villages, now that the major aspect, use and maintenance of sanitary latrine, has been successful

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Table 8.1 : Source of Drinking Water

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
All Respondents	450	75	75	50	125	75	50	200	150	100
Stand post	67 14.9	4 5.3	4 5.3	15 30.0	35 28.0	6 8.0	3 6.0	39 19.5	10 6.7	18 18.0
Handpump	113 25.1	33 44.0	27 36.0	16 32.0	12 9.6	11 14.7	14 28.0	45 22.5	38 25.3	30 30.0
Open well	310 68.9	41 54.7	50 66.7	29 58.0	99 79.2	62 82.7	29 58.0	140 70.0	112 74.7	58 58.0
Irrigation tube wells	7 1.6					3 4.0	4 8.0		3 2.0	4 4.0

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Table 8.2 : Reason for not using Standpost / Handpump (Deepwell)

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
Not using SP/ HP	315	41	50	29	99	63	33	140	113	62
Not available / No supply	150	14	21	11	49	36	19	63	57	30
	47.6	34.1	42.0	37.9	49.5	57.1	57.6	45.0	50.4	48.4
Source too far	93	22	19	9	18	18	7	40	37	16
	29.5	53.7	38.0	31.0	18.2	28.6	21.2	28.6	32.7	25.8
Bad taste	4						4			4
	1.3						12.1			6.5
Supply is irregular	22		5		9	5	3	9	10	3
	7.0		10.0		9.1	7.9	9.1	6.4	8.8	4.8
Out of order	2				2			2		
	.6				2.0			1.4		
Could not Specify	45	5	6	9	21	4		26	10	9
	14.3	12.2	12.0	31.0	21.2	6.3		18.6	8.8	14.5

RURAL SANITATION PROGRAMME

Table 8.3 : Whether Supply time enough to collect water from Standpost

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
Who use Standpost	67	4	4	15	35	6	3	39	10	18
Enough	29	2	2	12	10	1	2	12	3	14
	43.3	50.0	50.0	80.0	28.6	16.7	66.7	30.8	30.0	77.8
Not enough	38	2	2	3	25	5	1	27	7	4
	56.7	50.0	50.0	20.0	71.4	83.3	33.3	69.2	70.0	22.2

RURAL SANITATION PROGRAMME

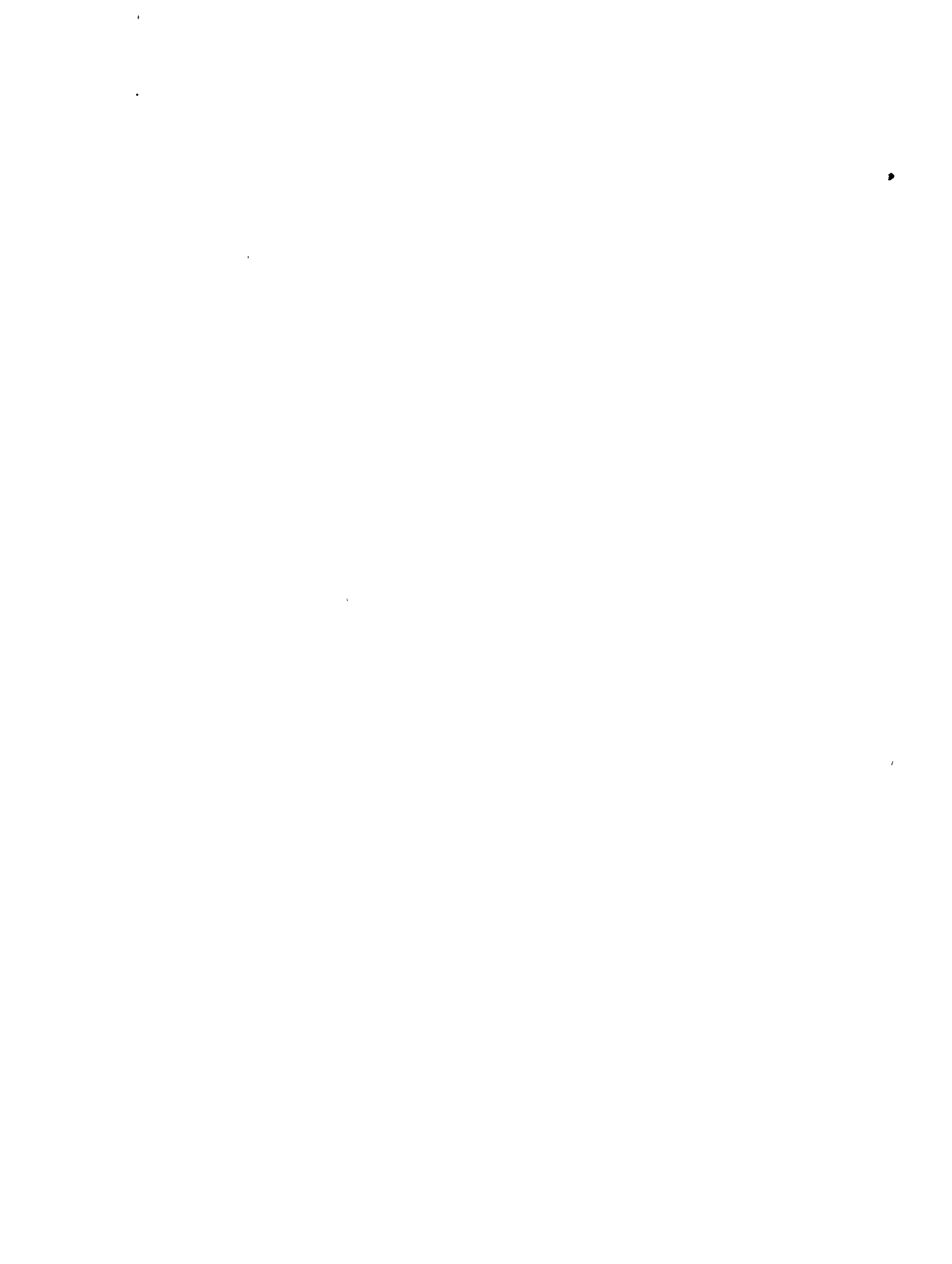
Table 8.4 : Other source used when handpump/ standpost breaks down

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
SP/ HP Users	104	11	7	22	40	8	16	51	15	38
Handpump	7	2		3	1		1	3		4
	6.7	18.2		13.6	2.5		6.3	5.9		10.5
Open Well	72	4	5	16	31	6	10	35	11	26
	69.2	36.4	71.4	72.7	77.5	75.0	62.5	68.6	73.3	68.4
River/ Canal	1				1			1		
	1.0				2.5			2.0		
Could not Specify	24	5	2	3	7	2	5	12	4	8
	23.1	45.5	28.6	13.6	17.5	25.0	31.3	23.5	26.7	21.1

RURAL SANITATION PROGRAMME

Table 8.5 : Frequency of cleaning the vessel used for carrying drinking water

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
All Respondents	450	75	75	50	125	75	50	200	150	100
Everyday	398 88.4	63 84.0	56 74.7	41 82.0	118 94.4	72 96.0	48 96.0	181 90.5	128 85.3	89 89.0
Alternate days	43 9.6	7 9.3	16 21.3	9 18.0	6 4.8	3 4.0	2 4.0	13 6.5	19 12.7	11 11.0
Less frequently	7 1.6	3 4.0	3 4.0		1 .8			4 2.0	3 2.0	
Do not clean it at all	1 .2	1 1.3						1 .5		
Could not Specify	1 .2	1 1.3						1 .5		



RURAL SANITATION PROGRAMME

Table 8.6 : How is the vessel cleaned

	Total	Rae Bareli			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
Clean vessels	448	73	75	50	125	75	50	198	150	100
Rinsed only	72 16.1	23 31.5	16 21.3	12 24.0	17 13.6	2 2.7	2 4.0	40 20.2	18 12.0	14 14.0
Use detergent	35 7.8	7 9.6	5 6.7	3 6.0	12 9.6	4 5.3	4 8.0	19 9.6	9 6.0	7 7.0
Use soda	3 .7		1 1.3	1 2.0	1 .8			1 .5	1 .7	1 1.0
Use sand/ soil	196 43.8	16 21.9	27 36.0	16 32.0	67 53.6	41 54.7	29 58.0	83 41.9	68 45.3	45 45.0
Ash	196 43.8	40 54.8	28 37.3	24 48.0	54 43.2	27 36.0	23 46.0	94 47.5	55 36.7	47 47.0
Bhusi	16 3.6	3 4.1	10 13.3			2 2.7	1 2.0	3 1.5	12 8.0	1 1.0
Could not Specify	2 .4		1 1.3		1 .8			1 .5	1 .7	

RURAL SANITATION PROGRAMME

Table 8.7 : Whether vessel for storing drinking water covered

	Total	Rae Bareli			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
All who store	339	51	42	28	109	62	47	160	104	75
Vessel covered	286	47	26	22	100	53	38	147	79	60
	84.4	92.2	61.9	78.6	91.7	85.5	80.9	91.9	76.0	80.0
Vessel not covered	53	4	16	6	9	9	9	13	25	15
	15.6	7.8	38.1	21.4	8.3	14.5	19.1	8.1	24.0	20.0



RURAL SANITATION PROGRAMME

Table 8.8 : How is drinking water handled

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A	Other	Non-	Phase A	Other	Non-	Phase A	Other	Non-
		vill.	Proj	Proj	vill.	Proj	Proj	vill.	Proj	Proj
Water taken out from storage vessel by										
Pouring	181	25	16	12	57	37	34	82	53	46
	53.4	49.0	38.1	42.9	52.3	59.7	72.3	51.3	51.0	61.3
Dipping any pot that is available	135	26	26	16	30	25	12	56	51	28
	39.8	51.0	61.9	57.1	27.5	40.3	25.5	35.0	49.0	37.3
Using a ladle	23				22		1	22		1
	6.8				20.2		2.1	13.8		1.3

RURAL SANITATION PROGRAMME

Table 8.9 : Whether drinking water Strained

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
All Respondents	450	75	75	50	125	75	50	200	150	100
Always	86 19.1	10 13.3	3 4.0	3 6.0	61 48.8	3 4.0	6 12.0	71 35.5	6 4.0	9 9.0
During Monsoon	40 8.9	7 9.3	8 10.7	8 16.0	10 8.0	3 4.0	4 8.0	17 8.5	11 7.3	12 12.0
Never strain	319 70.9	56 74.7	62 82.7	39 78.0	53 42.4	69 92.0	40 80.0	109 54.5	131 87.3	79 79.0
Water not stored	5 1.1	2 2.7	2 2.7		1 .8			3 1.5	2 1.3	

RURAL SANITATION PROGRAMME

Table 8.10 : If absence of drainage causes any discomfort

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
No soakpit	415	70	67	50	106	74	48	176	141	98
Causes discomfort	112	18	24	26	22	17	5	40	41	31
	27.0	25.7	35.8	52.0	20.8	23.0	10.4	22.7	29.1	31.6
Does not cause discomfort	290	50	43	24	78	53	42	128	96	66
	69.9	71.4	64.2	48.0	73.6	71.6	87.5	72.7	68.1	67.3
Could not Specify	13	2			6	4	1	8	4	1
	3.1	2.9			5.7	5.4	2.1	4.5	2.8	1.0
Drainage causes discomfort	112	18	24	26	22	17	5	40	41	31
Foul smell	55	7	12	15	13	4	4	20	16	19
	49.1	38.9	50.0	57.7	59.1	23.5	80.0	50.0	39.0	61.3
Makes movement difficult	44	10	5	8	8	11	2	18	16	10
	39.3	55.6	20.8	30.8	36.4	64.7	40.0	45.0	39.0	32.3
Breeds mosquitoes /insects	47	9	8	13	7	7	3	16	15	16
	42.0	50.0	33.3	50.0	31.8	41.2	60.0	40.0	36.6	51.6
Spreads diseases	25	1	7	6	6	5		7	12	6
	22.3	5.6	29.2	23.1	27.3	29.4		17.5	29.3	19.4
Cleaning, when pit is filled	2			1	1			1		1
	1.8			3.8	4.5			2.5		3.2
Could not Specify	49	9	14	9	9	7	1	18	21	10
	43.8	50.0	58.3	34.6	40.9	41.2	20.0	45.0	51.2	32.3

RURAL SANITATION PROGRAMME

Table 8.11 : Solution to waste water disposal

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
No Soakpit	415	70	67	50	106	74	48	176	141	98
Know	100	17	14	23	26	12	8	43	26	31
	24.1	24.3	20.9	46.0	24.5	16.2	16.7	24.4	18.4	31.6
Do not know	315	53	53	27	80	62	40	133	115	67
	75.9	75.7	79.1	54.0	75.5	83.8	83.3	75.6	81.6	68.4
Know Solution	100	17	14	23	26	12	8	43	26	31
Making drain	54	7	7	14	12	7	7	19	14	21
	54.0	41.2	50.0	60.9	46.2	58.3	87.5	44.2	53.8	67.7
Making soakpit	27	4	7	8	7	1		11	8	8
	27.0	23.5	50.0	34.8	26.9	8.3		25.6	30.8	25.8
Making drain underground	13	1		3	2	6	1	3	6	4
	13.0	5.9		13.0	7.7	50.0	12.5	7.0	23.1	12.9
Cleaning where water accumulates	11	4		1	3	2	1	7	2	2
	11.0	23.5		4.3	11.5	16.7	12.5	16.3	7.7	6.5

RURAL SANITATION PROGRAMME

Table 8.12 : Awareness about Jal Samiti

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
All Respondents	450	75	75	50	125	75	50	200	150	100
Aware of Jal Samiti	6	2			4			6		
	1.3	2.7			3.2			3.0		
No such committee	383	43	69	45	115	67	44	158	136	89
	85.1	57.3	92.0	90.0	92.0	89.3	88.0	79.0	90.7	89.0
Cannot Say	61	30	6	5	6	8	6	36	14	11
	13.6	40.0	8.0	10.0	4.8	10.7	12.0	18.0	9.3	11.0

RURAL SANITATION PROGRAMME

Table 8.13 : Awareness of Function of Jal Samiti

	Total	Rae Bareilly			Varanasi			Type of Village		
		Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill	Phase A vill.	Other Proj vill	Non- Proj vill
Aware of Jal Samiti	6	2			4			6		
Reasons why such committee formed - SPONTANEOUS										
Select site for water point	3 50.0				3 75.0			3 50.0		
Keep surroundings of water point clean	2 33.3				2 50.0			2 33.3		
Disposal of water from water point	2 33.3				2 50.0			2 33.3		
Select caretakers for water points	2 33.3				2 50.0			2 33.3		
Maintenance of water points	3 50.0				3 75.0			3 50.0		
Awareness of sanitation	4 66.7	1 50.0			3 75.0			4 66.7		
Reasons why such committee formed - PROMPTED										
Select site for water point	2 33.3	2 100						2 33.3		
Others	3 50.0				3 75.0			3 50.0		
None of the above	1 16.7				1 25.0			1 16.7		

STRATEGIES ADOPTED AND THEIR IMPLICATION

Saturation Approach

The project has started with a stated policy of saturating all project villages with sanitation facilities. Full saturation is defined as providing sanitary latrines to all families. All units should be used and maintained properly in order to achieve the overall goal of improving sanitary conditions.

The following conclusions can be drawn regarding the implications of saturation policy .

- I Since the overall strategy is to improve the sanitation in the villages, by definition, every person should have access to the facilities. In urban slums, where availability of open space poses an acute sanitation problem, community toilets have been tried out as an option. But maintenance poses additional problems and the responsibility is not shared. The other option is pay-for community toilets of the Sulabh model. In Sub-Project V, initially the concept of community latrines was also thought of but later rejected because of the same problem of maintenance. Our visits to some of the school latrines (for example Tarapur, Thulendi, Gajadharpur, Bachaon, etc villages) only confirms this. The obvious alternative, therefore, is to provide individual latrines to all households which the project is trying to achieve. While the demand for latrines had not been very high nor uniform throughout the project area initially, our impression is that the project has been able to create a high level of "need" in all the Phase-A villages. Today latrines are being actually demanded.
- II There seems to be clearly some amount of modelling effect. In quantitative terms, for instance, if we compare the proportion of units regularly used at two points of time (August '91 / May '92) in Varanasi, there seems to be an improvement (from 64% to 69%). Improvement in maintenance is even higher (87% to 97%) over this period. Although use of latrines, as a matter of habit, is yet to be established, the improvements just mentioned is an indicator of the trend of increasing acceptance.

III. Saturation being the primary target of the project, the convenience aspect has been sometimes compromised to achieve the target. The two major constraints to achieve 100% saturation are availability of suitable space and willingness of beneficiaries to contribute cash. Besides, the attempt to saturate villages has also resulted in protracted negotiation with beneficiaries on these issues and sometimes delayed the implementation process too. In some cases, solution has been worked out with participation by community leaders but it is quite possible that a few cases, however small, would be ultimately left out of the project coverage. IV. So far the project has adopted the principle of equality - those above the official poverty line to pay cash and those below it to contribute labour only. But the project can possibly attempt a transition from the principle of equality to equity, which brings us to the issue of beneficiary identification and cost sharing.

Beneficiary Identification

The point that there is a strong resentment among some sections of the beneficiaries regarding the norm used for classifying beneficiaries into above and below poverty line has been made earlier. Occupation and income patterns being typically as they are in rural areas, accurate estimation of income is a difficult exercise. In the absence of any other reliable record, the project has made use of two sources :

- Baseline information provided by UPDESCO / BHU
- The economic register maintained in the block which provides a list of beneficiaries of national anti-poverty programmes.

Besides, knowledgeable sources from within the village like school teachers, Pradhans, etc. are also consulted to validate the classification criteria. In spite of this care, the procedure is not universally accepted specially in large villages. Some of those who were categorised as APL refuse to accept the classification or have grudgingly accepted it. The following cases narrated by a Community Organiser in Varanasi is illustrative :

One of the COs in Varanasi while discussing the inaccuracy of the baseline survey report in deciding the economic status of a beneficiary, mentioned that she found an obviously rich person in Chittupur listed as BPL. Being certain that the person had the capacity to pay, she informed the person that he would be reclassified in the APL category and he would have to pay Rs. 400/-. The person had previous knowledge from some source that he was listed under BPL, so he informed the Pradhan. The Pradhan, who had a copy of the household survey list, verified his status in the original list and he came back to challenge the CO, who, had to relent under the pressure and follow the original listing.

Evolving a reliable, valid and universally acceptable objective criterion for classifying beneficiaries is an exercise that needs to be taken up separately. At this point of time, it can only be suggested that instead of using household income which cannot be assessed accurately, indirect but visible indicators of income would be a better way of classifying beneficiary households.

This problem could probably be partially resolved by reviewing the cost sharing arrangements also.

Cost Sharing

Quantitative as well as qualitative data indicate that there is a possibility of increased cost sharing in the subsequent phases. The basis for the inference are

- 1 14% of beneficiaries feel that they would have considered bearing the total cost of the latrine had they realised how useful the facility is. Another 13% said that they could have paid a higher contribution of upto Rs. 750/-.
- 2 Further analysis indicates that in almost all of these households the HSL unit is used regularly
- 3 All the beneficiaries who have contributed cash (Rs. 400/-) i.e. those categorised as APL were asked a specific question: Whether they feel that the money they had paid was a useful investment. All of them (100%) replied in the affirmative.
4. A sizeable proportion of BPL beneficiaries have engaged hired labour for digging pits and in fewer cases for other tasks for which they were supposed to contribute voluntary labour. The average amount spent in such cases is about Rs. 70/-. This means there is a capacity to pay even among those categorised as BPL
- 5 In general, knowledge of total cost is rather poor; only 26% know that the total cost is around Rs 4000/- or a little more. Since most beneficiaries do not know how expensive the units are, it is quite likely that a dialogue can be initiated with the potential beneficiaries in Phase B villages on the question of increased contribution
- 6 In a large number of group discussions, when the issue of cost and the present norms of cash contribution was broached we found a preparedness to discuss the issue. While there was no immediate unanimity in the groups that they would be willing to pay a higher contribution than is

presently sought, we feel that if a process of negotiation with the community is launched immediately putting forth acceptable reasons, eventually they would agree.

Superstructure

A overwhelming preference was expressed for the type of superstructure being provided in the latrines under sub project V. A host of factors are working in tandem resulting in the high rate of use: Information and communication drives have generated a high level of awareness; use of constant persuasion through personal contacts has reinforced the information / awareness drive; but most important of all, the product offered has highly attractive features in comparison with the product offered in a contemporary parallel programme

It is understood that certain downgrading of the superstructure features is being currently considered in an attempt to bring down the cost of the unit. The changes being considered are :

- plastering of inner wall up to 75 cm. from the floor only
- no whitewashing inside
- no cement washing outside
- reduction in inner dimensions
- ventilator jali in the wall and grill at the top of the door are being dropped

Reportedly, this would bring down the total cost by about Rs.450/-. While the proposed changes are not going to affect in any way the functional attributes of the superstructure, this would certainly reduce the attractiveness of the superstructure. The project can consider adopting a "cafeteria approach" in which both the original and the revised superstructure are offered but with varying contribution from beneficiaries. Beneficiaries can be given the choice of accepting either the original superior design but with a higher contribution or the revised downgraded structure at the existing rate of contribution

Strategy adopted to create acceptance within community

In Thulendi group of villages the project has adopted an innovative strategy to gain acceptability within the community. Instead of restricting themselves to the immediate stated objectives of the project, the PSU team has taken active interest in various other aspects of community life and taken active interest in issues not linked with latrine construction in any way. Some of them are worth mentioning in detail .

- 1 The PSU team here runs an informal school for young boys and girls. The age cohort is not uniform, there are children as young as four years as well as others who are 11 or 12 years old. The total

strength of the group of children is around 50 but on any given day at least 20 to 30 can be seen in the evening class organised in the Village Organiser's compound. The emphasis is not so much on formal literacy as on expanding the mental horizon of the children. Play - learning techniques are used and among other things sanitation, environmental awareness and health issues are subtly introduced. The review team had an opportunity to witness an impromptu performance of a dance drama by the children. What struck us was the rapport that the PSU field staff has been able to establish with the children.

The Social Scientist has a vision of social change because of his long experience in the voluntary sector. He feels that each of the children when they grow up would become change agents. While this effort obviously stretches the available resources (mainly time), it goes to the credit of the PSU team that they have taken up this venture entirely without additional demands on project resources. It is understood that the idea of such an informal learning group is being extended to other villages too.

- 2 The PSU team in Thulendi have also collaborated with the peripheral health workers in organising immunisation clinics in the village for the children and mothers. Again, in this case the team has utilised available resources in a synergetic fashion.
- 3 Because of flouride content in ground water, there are several cases of fluorosis in the village. The PSU team has taken initiative to get the patient examined by a medical specialist and even arranged for their treatment.

The community or at least some sections within the community are highly appreciative of these gestures. The credibility of the project team is therefore, very high and this has obviously helped in achieving the main project objective of improving acceptance of the sanitation programme.

The limitation of such a strategy, however, is that they depend heavily on the personal initiative of individuals. In this case, the social scientist has stepped beyond his immediate brief because of his own high social commitment. The question arises, however how replicable are such strategies which are centred around the social commitment of an individual. At this stage it can only be said that they have helped in realisation of the ultimate project objectives.

Role of Group Organisers

The Group Organisers have been an ultimate interface between the project and the community and they

have in most cases been selected from the community itself. The quality looked for in the GOs (though not rigorously specified) are that they be articulate, have ability to communicate, possess leadership qualities and willingness to take initiative in mobilising the community. Educational qualification has not been a selection criteria. Women are preferred since they are accepted by both men and women in the community.

The function of the GOs has mainly been making repeated contacts with the community to accept better sanitation and health practices in order to improve the overall environment of the village. The GOs are trained to handle communication materials. They are regarded as being knowledgeable and since they have themselves initially adopted the practices they promote they served as role models for other members of the community. By coopting community members into the implementation team the project has been able to successfully market the concept of latrines. As a result defecation-related practices have changed in a positive way (e.g. cleaning of toilets, washing hands and with soap after toilet use, etc.). However, they do not seem to have been able to make much of an inroad into the behavioural realms relating to sanitation at home. For instance, waste water disposal practices have not improved. Neither have basic awareness of the potential hazards that waste water accumulation can create. Similarly, they have not been able to activate the Jal Samitis. At this point of time, the Jal Samitis do not seem to have an organisational identity in the project villages. The GOs would have to complete these tasks.

Nevertheless, the role of the GOs at the project implementation stages is crucial. In a long term perspective, their role in the community needs to be reassessed. After saturation of a village with HSL units, the GOs would remain as permanent resource persons in the village. Their potential needs to be utilised by linking them to other related programmes of health, education and income generation.

In many cases this might result in duplication of efforts as some of the concerned agencies already have representatives at village level.

But the changed role of the GO can be that of a permanent change agent at the community level. Those with a better level of understanding and perception due to their exposure can be trained at stages to handle different development programmes. In any case, the PSU needs to start thinking about the issue.

SUSTAINABLE FEATURES

From the foregoing analysis it emerges that the following features and strategies need to be sustained during the next phase of the project.

- 1 Full saturation is a policy that needs to be retained since it is promoting use through demonstration effect. However when there are constraints of space and no viable solution emerges, such households as do not have space for locating the latrines would have to be left out of the programme coverage. These cases should be identified at the early stages of programme initiation in a village, so that physical implementation in a village is not unusually delayed.
2. The GOs as a resource group clearly need to be systematically nurtured. However their role in the second phase needs to be carefully reviewed. There are two broad options.
 - a) Let them continue to monitor the use and maintenance aspects in phase-A villages as well as promote the deficient areas in sanitation.
 - b) They can serve as master trainers who will work with the new GOs in phase-B villages.
- 3 The communication strategy with its explicit emphasis on inter-personal communication needs to be retained. Use of reminder materials needs to be continued albeit in a more systematic fashion. The participatory communication methods need to be pursued more extensively after formalising the methodology.
- 4 If full saturation is assumed as a continuing basic implementation strategy, the provision of complete superstructure - wall, door and roof - needs to be retained during the second phase. Since this review exercise included mainly phase-A cases in its scope, the response to and impact on programme acceptance of the reduced attractiveness of the superstructure offered in the interim phase construction can only be conjectural at this point. However, this aspect needs a careful review. Care needs to be taken not to reduce the attractiveness of the "packaging" of the superstructure.
- 5 The importance of a software support function like that provided by the PSU has been adequately established in the preceding discussion. It may be in order to point out that some of the work procedures of an unit like the PSU need to be formalised and a clearer decision making system with adequate devolution at field level needs to be established. The PSU can start developing implementation guidelines which can be useful from the point of view of long term replicability.
- 6 Some alterations in the arrangements for procuring the hardware components can be considered. The procurement of pan/ pantrap/ footrest sets from Gujrat does not appear to be a very feasible procedure from the point of view of sustainability - short or long term. Negotiations with U P based manufacturers can be initiated so that (pan)sets are made locally to the same technical specifications as currently adopted. Similarly the possibility of manufacturing low-cost (although probably less durable) doors can be explored.

A N N E X U R E - I

List Of Villages Covered In Quantitative Survey

Dist	Block	Phase	Village
Rae Bareli	Bachrawan	A	Karnapur
Rae Bareli	Bachrawan	A	Jalalpur
Rae Bareli	Bachrawan	A	Rasulpur
Rae Bareli	Bachrawan	Interim	Malikpur saraiya
Rae Bareli	Bachrawan	Interim	Rampur Mohiudeenpur
Rae Bareli	Bachrawan	B	Bahadurpur
Rae Bareli	Bachrawan	Non-project	Ichauli
Rae Bareli	Bachrawan	Non-project	Neewa
Varanasi	Kashi Vidyapith	A	Bhagwanpur
Varanasi	Kashi Vidyapith	A	Gajadharpur
Varanasi	Kashi Vidyapith	A	Tikari
Varanasi	Kashi Vidyapith	A	Muradeo
Varanasi	Kashi Vidyapith	A	Naipura Kalan
Varanasi	Kashi Vidyapith	B	Chitauni Kot
Varanasi	Kashi Vidyapith	B	Balipur
Varanasi	Kashi Vidyapith	B	Aureh
Varanasi	Kashi Vidyapith	Non-project	Kandava
Varanasi	Kashi Vidyapith	Non-project	Kakrahiya

A N N E X U R E - I I

List of villages covered in Qualitative survey

Dist	Block	Phase	Village
Rae Bareli	Bachrawan	A	Thulendi
Rae Bareli	Bachrawan	A	Pithan
Rae Bareli	Bachrawan	Interim	Malpur
Rae Bareli	Bachrawan	Interim	Ahsan Jagatpur
Varanasi	Kashi Vidyapith	A	Chittupur
Varanasi	Kashi Vidyapith	A	Nuaon
Varanasi	Kashi Vidyapith	B	Bachaon
Varanasi	Kashi Vidyapith	Interim	Tarapur

A N N E X U R E -III

OFFICIALS/FUNCTIONARIES CONTACTED IN CONNECTION WITH THE STUDY

1. PSU

- | | | |
|------|-------------------------|--|
| 1.1 | Dr. Jatin De' | - Director - cum -
Social Planning Adviser, PSU |
| 1.2 | Ms. P.Nair | - Coordinator,
Training and Documentation |
| 1.3 | Dr. Y Kumar | - Coordinator,
Community Participation |
| 1.4 | Mr. Ashis Biswas | - Social Sceintist, PSU, Bachrawan |
| 1.5 | Mr. Goutam Banerjee | - Public Health Engineer, PSU. |
| 1.6 | Ms. Rekha Singh | - V.D.O., PSU, Bachrawan |
| 1.7 | Ms. Sarada Mishra | - V.D.O., PSU, Bachrawan |
| 1.8 | Mr. Subroto Palit | - Assistant,
PSU Field Office, Bachrawan |
| 1.9 | Mr. Kirtikar Ojha | - Social Scientist, PSU, Varanasi |
| 1.10 | Dr. Ashok Singh | - Community Organiser,
Tikari Group of villages |
| 1.11 | Mr. Mata Prasad | - Community Organiser,
Tikari Group of villages |
| 1.12 | Dr. Radheshyam | - Community Organiser,
Tikari Group of villages |
| 1.13 | Dr. Padmavati | - Community Organiser,
Tikari Group of villages |
| 1.14 | Ms. Sarmistha Chaterjee | - Social Scientist (Designate),
PSU, Bachrawan |

2. Nagar Nigam / Jal Nigam / U.P. Govt.

- 2.1 Mr. P.L. Punia - Secretary, Urban Development
- 2.2 Mr. Mehrotra - Secretary, Rural Development
- 2.3 Mr. Y. N.Chaturvedi - Chief Engineer, Jal Nigam
- 2.4 Mr. Akhilesh Chandra - District Panchayati Raj Officer,
Allahabad
- 2.5 Mr. S.C. Banerjee - Chief Engineer, Jal Nigam (East)
- 2.6 Mr. N.R. Agrawal - P.A. to Chief Engineer (East),
Jal Nigam
- 2.7 Er.B.N. Saran - Executive Engineer,
Rural Sanitation Division,
Jal Nigam, Allahabad.
- 2.8 Mr. D.P.Vaish - Project Officer, UNICEF, Lucknow.
- 2.9 Mr. Sinha - Asst. Engineer (RSD),
Jal Nigam, Karanpur
- 2.10 Mr. Roy - Asst. Engineer (RSD),
Jal Nigam, Thulendi

3. Dutch Mission

- 3.1 Ir. Robert Trietsch - Mission Leader, DHV Consultant BV, The
Netherlands

4. Block / Village level functionaries

- 4.1 Mr. D.B. Singh Yadav - B.D.O., Bachrawan Block,
Rae Bareli
- 4.2 Dr. Agrawal - Medical Officer, PHC, Bachrawan.
- 4.3 Dr. Kapoor - Medical Officer, PHC, Bachrawan
- 4.4 Ms. Chinmoyee Banerjee - ADO, DWCRA, Bachrawan Block,
Rae Bareli
- 4.5 Mr. K.P. Dubey - B.D.O., Kashi Vidyapeeth Block,
Varanasi.
- 4.6 Mr. R.N. Tripathy - A.P.R.O., Kashi Vidyapeeth Block,
Varanasi.
- 4.7 Dr. G.K. Tripathy - Medical Officer-In-charge,
PHC, Kashi Vidyapith Block,
Varanasi.
- 4.8 Dr. Ashok K. Singh - M.O. (II), PHC, Kashi Vidyapeeth.
- 4.9 Mr. Fuzail Ahmed - Pradhan, Kadirpur Village,
Allahabad.

5. Others

- 5.1 Mr. Anil Ku. Yadav - GO, Chittupur
- 5.2 Ms. Rani - GO, Nuaon
- 5.3 Ms. Sreepati - GO, Nuaon
- 5.4 Ms. Girijesh Shukla - GO, Thulendi
- 5.5 Ms. Vimla - GO, Pithan
- 5.6 Ms. Ramvati - GO, Pithan
- 5.7 Ms. Kamalavati - GO, Malpur
- 5.8 Ms. Ramkali Devi - GO, Bhagwanpur
- 5.9 Ms. Manni Devi - GO, Bhagwanpur
- 5.10 Mr. Omprakash - GO, Naipurakalan
- 5.11 Mr. Nathuram - GO, Muradeo
- 5.12 Ms. Dhanno Devi - Go, Gajadhanpur
- 5.13 Mr. Sambhunath Mishra - Private practitioner, Chittupur
- 5.14 Ms. Namita Basumallick - Teacher , Chittupur
- 5.15 Mrs. P.Mishra - Socio-economic Executive,
DANIDA Water Project,
Bhubaneswar.
- 5.16 Mr. L.V.R. Reddy - Hydrologist, AFPRO
(Member Review Mission UP-11)

A N N E X U R E - I V

TIME SCHEDULE

- 01.05.92 - Field visit to Bacharwan, Thulendi and Jalalpur
- 02.05.92 - Meeting with
Mr. P. L. Punia, Secretary, Urban Development
- 04.05.92 - Meeting with
Mr. Mehrotra, Secretary, Rural Development
- 05.05.92
to - Preparation of draft household schedule
07.05.92
- 08.05.92 - Field testing of household schedule in Rai Bareli
- 09.05.92 - Discussion with Dr. Y. Kumar / Mrs. P. Nayar
and finalisation of household schedule
- 10.05.92
to - Quantitative survey in Rai Barelli
14.05.92
- 16.05.92
to - Quantitative survey in Varanasi
21.05.92
- 22.05.92 - Meeting with C.E., Jal Nigam, DPRO (Allahabad) &
Asst. Engineers of Jal Nigam in Allahabad
- 24.05.92 - Discussion with Ir. R. Trietsch of Dutch Mission and
Trip to Mallikpur saraiya to see the audio visual
presentation
- 25.05.92 - Discussion with the members of the communication team.
- Detailed discussion with the investigators about
their field observations and recording of feedback. *
- 26.05.92
to - Planning and preparation for qualitative investigation
27.05.92 (* Focus Group Discussions etc.)
- 28.05.92
to - Qualitative investigation (Focus Group Discussions
02.06.92 and Depth Interviews) in Rae Bareli
- 29.05.92 - Visit by PSU senior professionals to Thulendi
- 29.05.92 - Visit to the evening school in Thulendi

- 03.06.92 - Debriefing on qualitative investigation by
Ms. Sukanya Pal in PSU office, Lucknow
- 03.06.92
to - FGDs / Depth Interviews in Varanasi
08.06.92
- 09.06.92
to - Analysis of quantitative data
30.06.92
- 12.06.92 - Meeting of SI Professionals (R. Roy / D. Roy) with
SPA at PSU office
- 13.06.92 - Wrap-up meeting with Executive Engineer, RSD
at Allahabad
- 01.07.92
to - Report writing
18.07.92
- 20.07.92 - Presentation of Draft Report
- 22.07.92 - Discussion of SI / ORG Review team with PSU Team on
Draft Report
- 29.07.92 - Receipt of comments on draft report from PSU
- 12.08.92 - Receipt of comments on draft report from Jal Nigam

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- Health and Sanitation Education Programme : Evaluation of Media Coverage, Perception, Retention, Process of Implementation and Management, prepared by Socio-Economic Division DANIDA project Directorate, Bhubaneswar, Orissa, August 1987.

- Attitude and Practices Relating to Sanitation, Hygiene and Water use in the Pilot Latrine Programme of DANIDA sponsored Orissa Drinking Water project, by Institute of Communications and Development Studies, 1988.

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- Plan of Action : Rural Sanitation project (SP-V) in Districts Varanasi and Rai-Bareli Phase -I : April 1991 - March 1992. Indo-Dutch Co-operation in rural Water Supply and Sanitation in Uttar Pradesh, October 1991.
- Suachalaya Evam Jalstambha, Vidyalaya Margdarsika (Hindi) : designed and developed by Centre for Health Education Training and Nutrition Awareness (CHETNA), February 1991.

- Jal evam Swasthya, Margdarshika (Hindi) : designed and developed by CHETNA, Feb.1991.
- Jalband Gharelu Sauchalaya (Hindi) : Margdarshika, designed and developed by CHETNA , Feb.1991.
- Phulmati' Ka Rahasya (Hindi) : designed and developed by CHETNA, Feb.1991.
- Bacche Swastya Ke Rakshak (Hindi) : designed and developed by CHETNA, February 1991.
- Ram Avtar Ka Naya Sauchalaya (Hindi) : designed and developed by CHETNA, February 1991.
- Hirau Ne Sauchalaya Kyon banvaya (Hindi) : designed and developed by CHETNA, February 1991.
- Sokhte gaddhe ke fayde (Hindi) : designed and developed by CHETNA, February 1991.
- Swachh Bachhe, Swasth Bachhe (Hindi) : designed and developed by CHETNA, February 1991.
- Sauchalaya Banane Ki Vidhi (Hindi) : designed and developed by CHETNA, February 1991.

