

# WATER AND ENVIRONMENT SANITATION

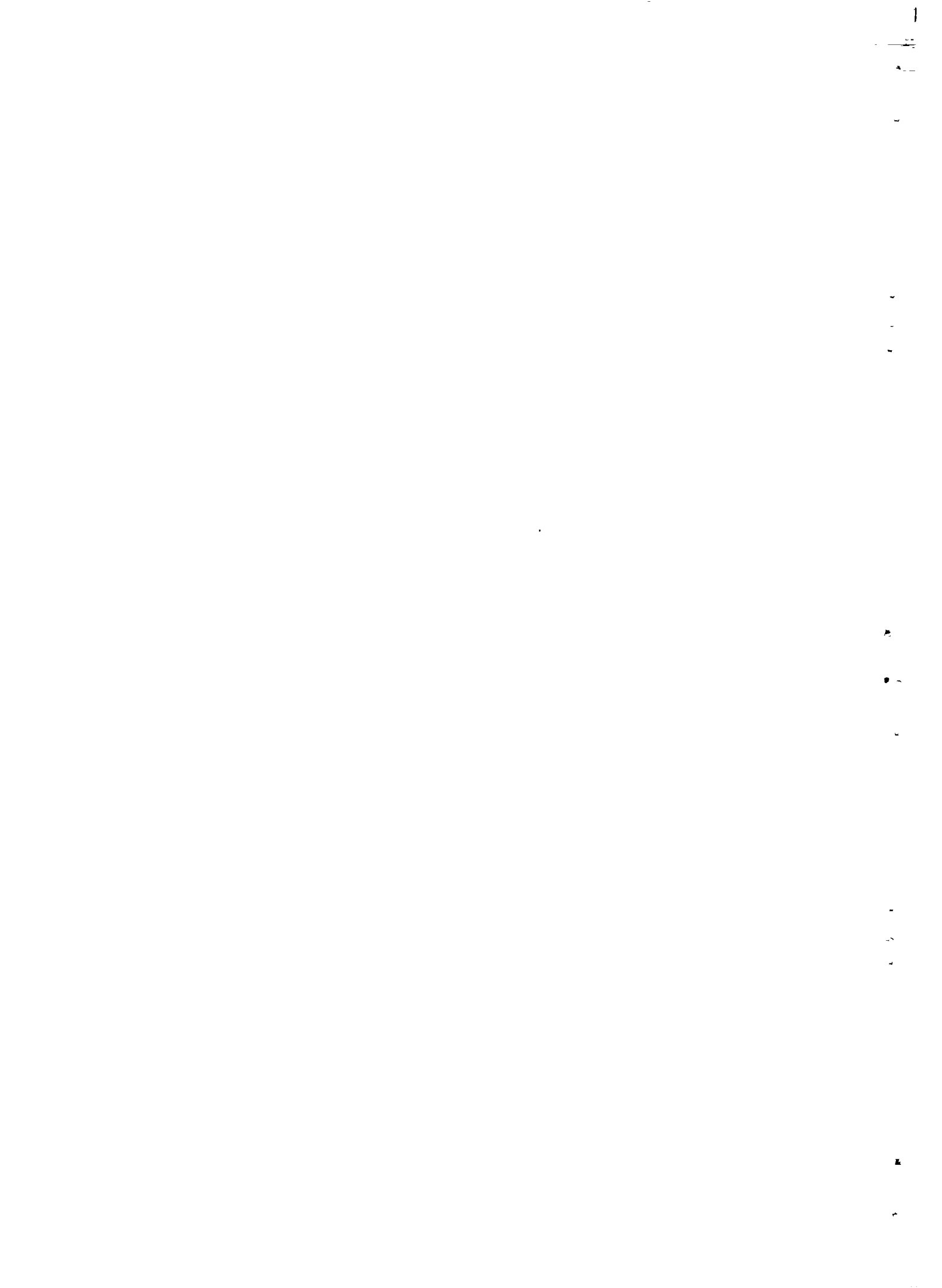
## Report on Qualitative Phase of Knowledge, Attitudes and Practices Study in Rural India (INFLUENCERS)

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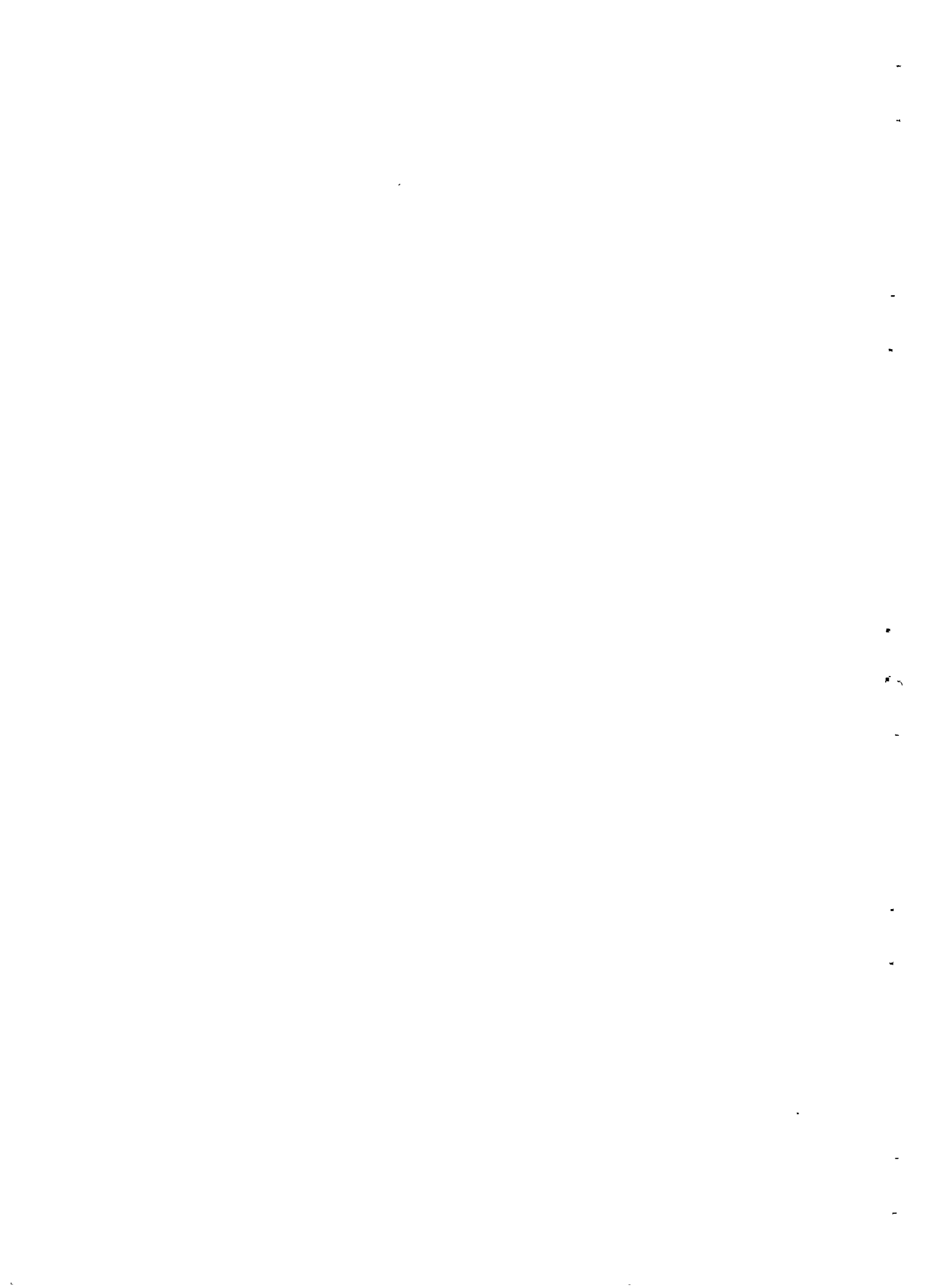
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WATER, ENVIRONMENT AND SANITATION  
A report on Knowledge, Attitude, and  
Practices Study in Rural India  
- Influencers

Prepared for UNITED NATIONS CHILDREN'S FUND  
BY INDIAN MARKET RESEARCH BUREAU  
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## II INTRODUCTION

### 1.0 DEFINITION OF INFLUENCERS

Influencers were defined as those residents of a village who held positions of influence by virtue of being respected for their age, social position or occupational authority and could therefore be expected to be active agents of change in attitudes and practices of villagers.

The persons defined as influencers for this study would belong to these broad categories :

- i/ Village chief/elder/priest
- ii/ Health/Aanganwadi worker/village doctor
- iii/ School teacher/Educated person/Government Officer
- iii/ School going child/village person who had lived in a large city for more than one year

## 2.0 RATIONALE FOR STUDYING INFLUENCERS

The primary objective of this study was to understand knowledge, attitudes and practices (KAP) of rural men and women on the issue of water and sanitation. Any issue, to be studied well, needs to be looked at from several angles. This is particularly true when the respondent group is not an educated, articulate group, as in the case of rural respondents. It therefore becomes essential to converge in on the rural respondent's KAP from several angles.

In a close-knit society such as a village, there are always some persons who influence the thoughts and actions of the others. To the extent that the beliefs and practices of these persons on an issue are 'correct', they would exert a positive influence. Secondly, persons in a village in a position of influence would be aware of beliefs held by villagers and their practices on the subject of water and sanitation. By questioning them about the knowledge attitudes and practices of villagers, it would be possible to gain greater insight into the subject. They would provide an outside view which could corroborate or contradict villager's views, allowing for interpretations and hypotheses.

The group of respondents interviewed under the category of influencers were thus studied :

- to understand their own knowledge, attitude and practices on water and sanitation.
- to obtain, through them, a greater understanding of the KAP of other people in the village.

### 3.0 METHODOLOGY

As this second phase of the research was essentially qualitative in nature a semi-structured questionnaire was used to obtain information from the respondents. All respondents were personally interviewed by IMRB's trained interviewers. Fieldwork was conducted in the months of June-July 1988. A total of 22 districts across 8 states were covered (the methodology has been discussed in chapter I). and a total of 176 respondents - 8 in each district were contacted and interviewed.



**III DETAILED FINDINGS**

EXHIBIT 1

Influencer household

base = 176

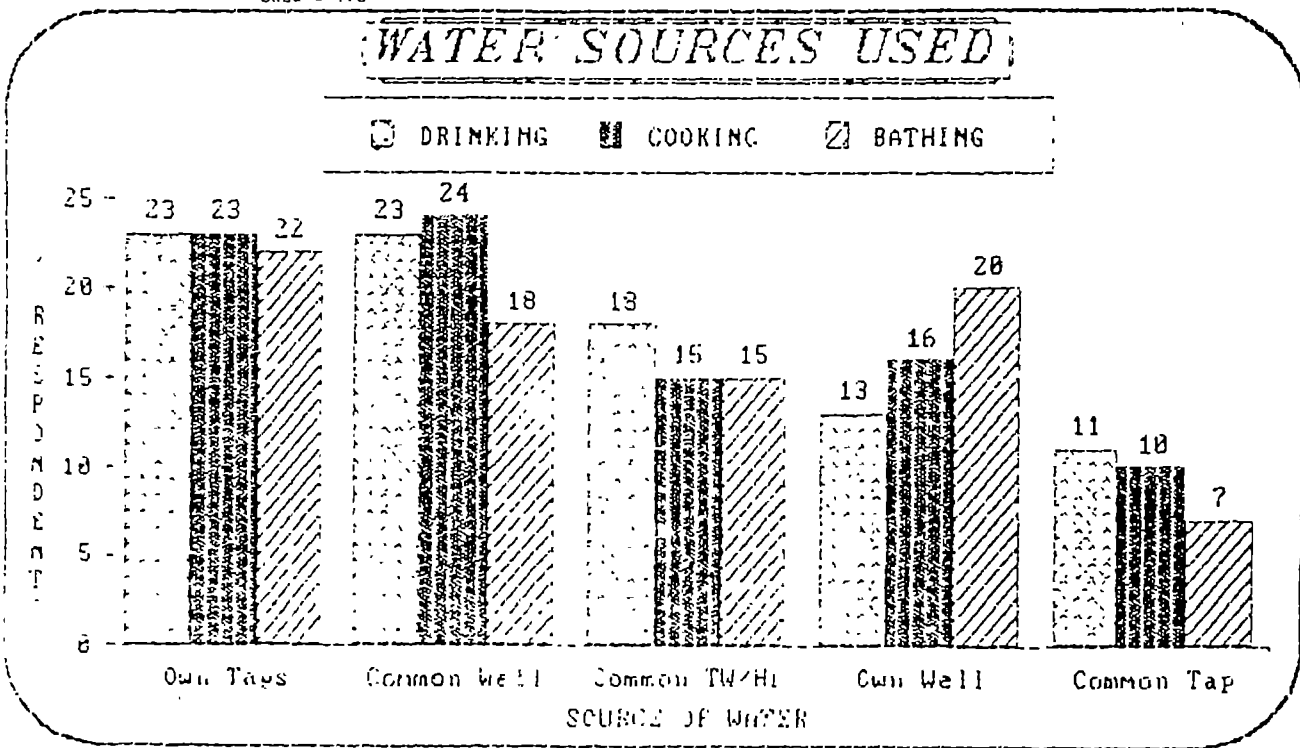


Table 11, 12, 13, 14

## 1.0 WATER

### 1.1 WATER COLLECTION PRACTICES

#### 1.1.1 Sources of water used

Influencers were asked about the water sources being used by their household for different purposes such as drinking, cooking, bathing and other uses. The answers provided by the influencers are presented in Exhibit 1 :

The following observations can be made from Exhibit 1.

1. The main sources of water for any purpose were dugwells, taps and handpump. Here the single most often mentioned source for any use was 'own taps' followed closely by the common well.

This is somewhat in contrast with the findings of the village observation sheet (VOS - Refer Tables 4a, 4c). As reported in the VOS, the major sources of water for drinking and other purposes for the villagers were - dugwell, tap, and handpump. Dugwells emerged as the single most important source - mentioned in 16 out of the 44 villages. This is not surprising as the influencers form a select group in the village and it is possible that the frequency of using taps was higher in their case as compared to the rest of the villagers.

2. It is obvious that the water source used does not vary much by the purpose of use, i.e no particular source has emerged as being preferred or used more often for a specific purpose such as drinking, cooking, bathing or washing.
3. Apart from the four main sources mentioned above, other water sources such as river, lake, pond etc. were also mentioned by some of the respondents. However, less than 5% of the influencers reported the use of these sources. This matches the findings of the VOS where natural sources such as these were mentioned in only 3-5 villages for drinking and other purposes.

4. The water sources used differed across 'good' and 'poor' villages. In 36% of the 'good' villages, respondents mentioned the use of their own tap for drinking water. By contrast only 9% of the influencers from 'poor' villages reported the same use. In 'poor' villages, the main source of drinking water was the common dugwell and 38% of the influencers from these villages reported its use.

A similar pattern emerged in the VOS where of the 6 villages in which private taps were mentioned as the main source of drinking water, 4 were 'good' villages and 2 were 'poor' villages. Similarly of the 17 villages where dugwell was the main source of drinking water, 5 were 'good' and 12 were 'poor' villages. Clearly the more developed villages appeared to be discarding the dugwell for the tap.

5. Statewise differences also emerged in the water sources used. The major water source reported by influencers in the different states were as follows :

<u>State</u>	<u>Major water source</u>
Uttar Pradesh, Rajasthan, Gujarat	Own tap
West Bengal, Tamilnadu	Common tubewell/ handpump
Madhya Pradesh, Andhra Pradesh	Common dugwell

6. At the end of this discussion we would like to highlight two interesting findings which, while mentioned before, need to be emphasized.
- a/ Own taps were being used as the main source by a much higher percentage of influencers as compared to common taps.
- b/ for drinking and cooking purposes common wells were being used more frequently than own wells.



The VOS data shows that of the 22 villages having piped water taps, 14 had public taps and 8 had private taps. The comparatively higher reported usage of own taps by influencers could therefore be attributed to the possibility that in some cases where influencers have mentioned 'own taps' it is with reference to a tap attached to a water tank and not a piped water system. The concerned water tank could either be filled manually or by a motorized pump.

The more frequent use of common dugwells for drinking and cooking purposes could be because the common wells may have had better quality of water. Findings from across the study indicate that taste of water would be the primary motivating factor in the choice of drinking water source. It is possible that as water is withdrawn more frequently from a common well - since it is used by a larger number of people - as compared to a private well, the water in a common dugwell is better.

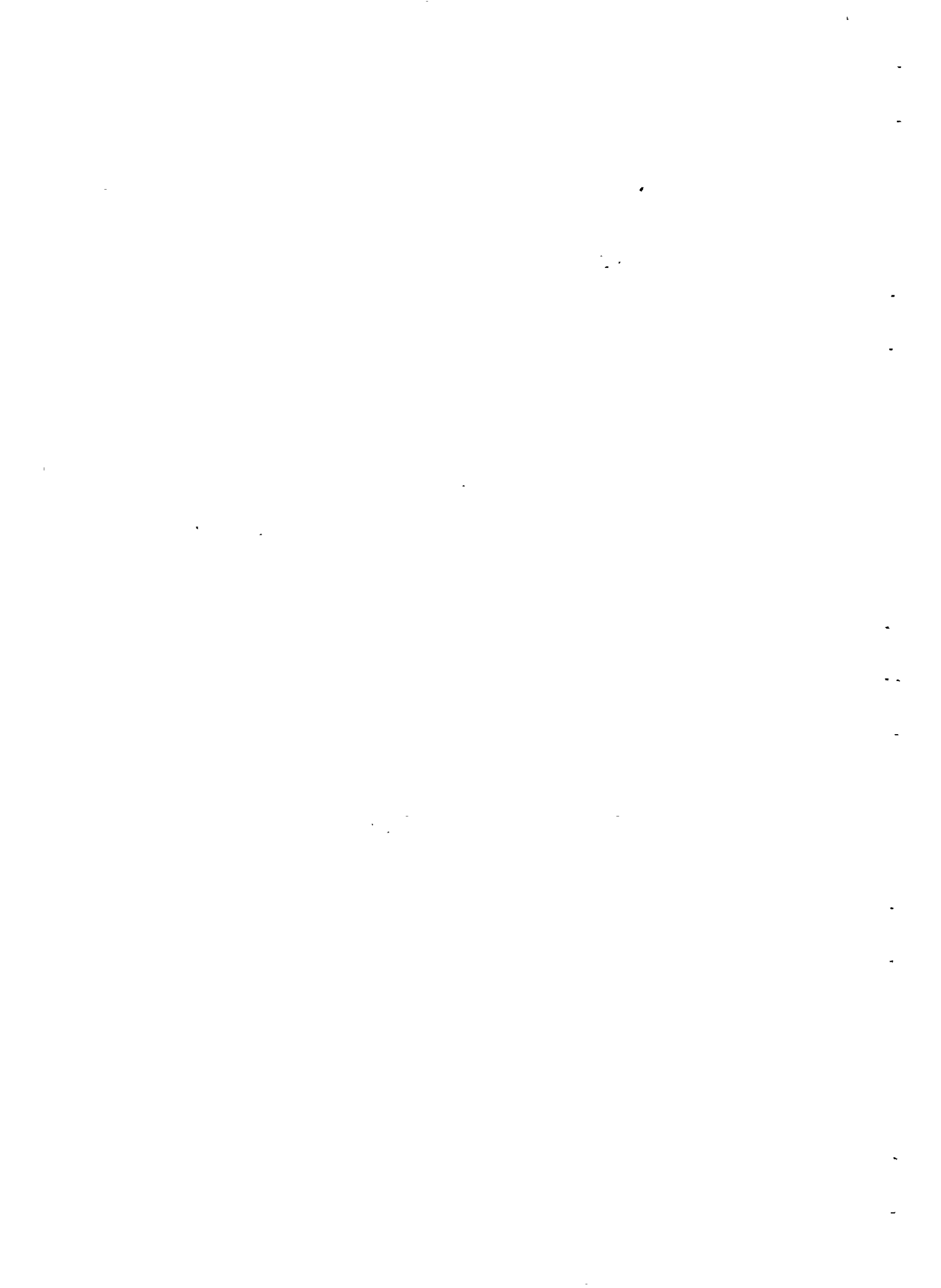
#### 1.1.2 Differentiation of water sources

Some additional analysis was done to gain a better understanding of the water sources used by influencer households. Interestingly it was found that more than half the influencers reported that they were using only one source of water for all purpose. This is presented in the following table :

Base : 176	(%)
<u>Number of water sources used :-</u>	
Only one source for all purposes	53
Two different sources	37
Three different sources	8
Four different sources	2

[Table 14(a)]

As can be observed only 10% of the influencers reported using more than two sources of water. Here it was also found that majority of influencers in Rajasthan, Uttar Pradesh and Gujarat - 83%, 79% and 69% respectively reported using one source for all



purposes. As compared to this 67% of the influencers in West Bengal reported that in their households two water sources were being used.

Influencers who were using the same source for all purposes were mainly using the following sources :

Base : 121	(%)
<u>Water source</u> :	
Own tap	31
Common well	19
Own well	17
Common tubewell/handpump	13
Common tap	7
Own tubewell/handpump	7

[Table 14(b)]

The above percentages indicate the same ranking of water sources as that obtained in Section 1.1.1, page 7. That is own taps were being used most often followed by common well, own well and so on.

In addition to the water sources being used by their own households, influencers were also questioned on water usage practices of other people in their village. One question pertained to whether there was any segregation of water sources being used by different people. Here the majority of the influencers - 78% - replied in the negative (Refer Table 65). Of the 21% of the respondents who replied that different water sources existed for different people almost a half belonged to the two southern states namely Tamilnadu and Andhra Pradesh. The others were from Uttar Pradesh, Gujarat and Manipur.

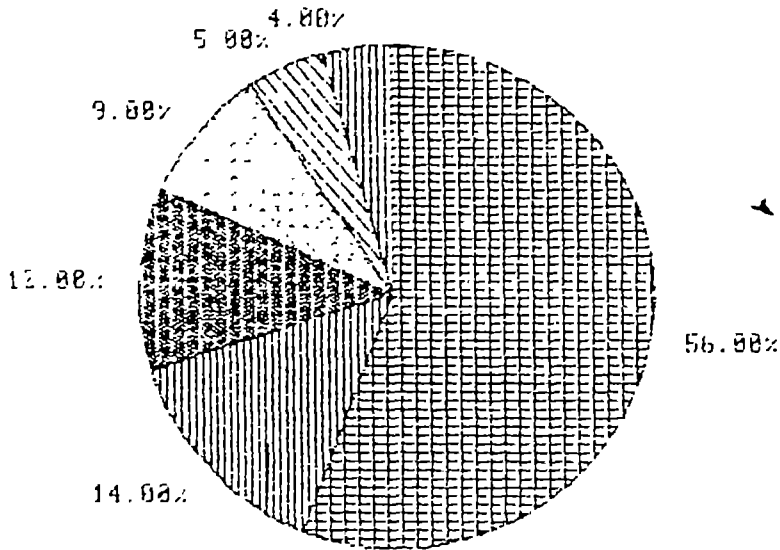
The main differentiating factor appeared to be that of caste. Some castes, particularly those perceived as being the low castes such as harijans and chamars were not allowed to use the water sources which were being used by the rest of the villagers. This is evident from the following table :

EXHIBIT 2 (a)

Influencer household

Base = 176

WHO COLLECTS WATER  
(REPORTED BY ALL RESPONDENTS)



- ☐ WIFE, RES. HERSELF
- ▨ SERVANT, LABOUR
- ▩ HUSBAND, FATHER
- ☐ MOTHER, GRANDMOTHER
- ▨ DAUGHTER, BIECE
- ▨ OTHERS

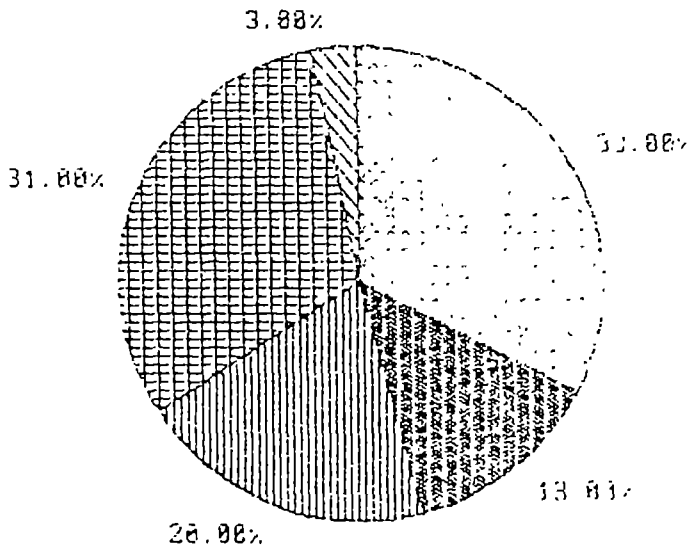
( Table 16 )

EXHIBIT 2 (b)

Influencer household

Base = 45

WHO COLLECTS WATER  
(REPORTED BY < 25 YRS OLD)



- ☐ Wife, res. herself
- ▨ Servant, labour
- ▩ Husband, father
- ☐ Mother, grandtather
- ▨ OTHERS

( Table 16 )

Base : 37

(Nos.)

	States							
	U.P	BTN	M.P	GUJ	W.B	MNP	A.P	T.N
<u>Water sources are differentiated :</u>								
People have their own preference/collect from the nearer source	3	-	4	-	-	2	2	2
Lower caste people cannot collect water from the same source as brahmins/ separate water sources for different castes	1	-	-	1	-	-	1	-
There are separate localities and wells for low castes/ Harijans take water from the taps in their street	-	-	1	-	-	-	1	4
No caste difference in water sources	2	2	-	-	-	-	-	-

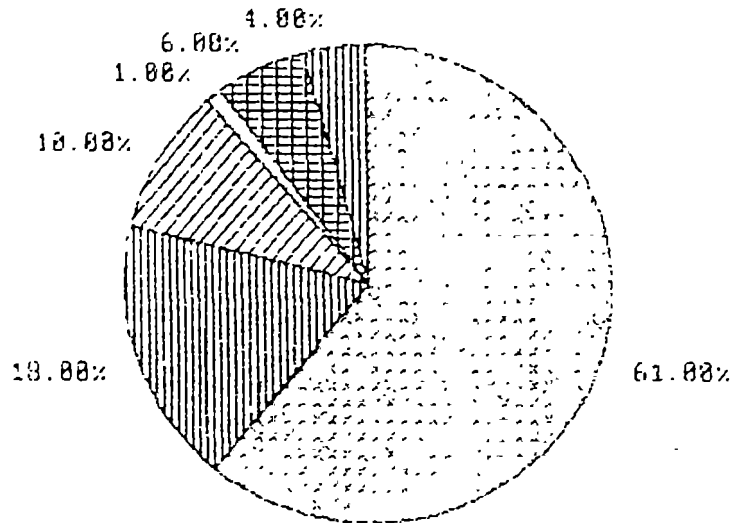
### 1.1.3 Collection practices

In most influencer households - about 70% - the task of collecting water was being performed by the women of the house (Refer Table 16). 14% of the influencers mentioned the use of a servant while 12% reported that the main water collector was a male member of the household. This can be observed from Exhibit 2(a)

It was the middle aged women of the household who mainly collected water. This is evident by the fact that wife, sister etc. were mentioned as the main collectors by influencers who were over 25 years old and wife, sister, mother was the main collector in case of respondents who were less than 25 years old. About one third of the influencers less than 25 years mentioned mother. Daughter was mentioned by influencers who were above 25 years of age and more so by influencers above 50 years of age.

Base = 90

**WHO COLLECTS WATER  
(REPORTED BY 26-50 YRS OLD)**

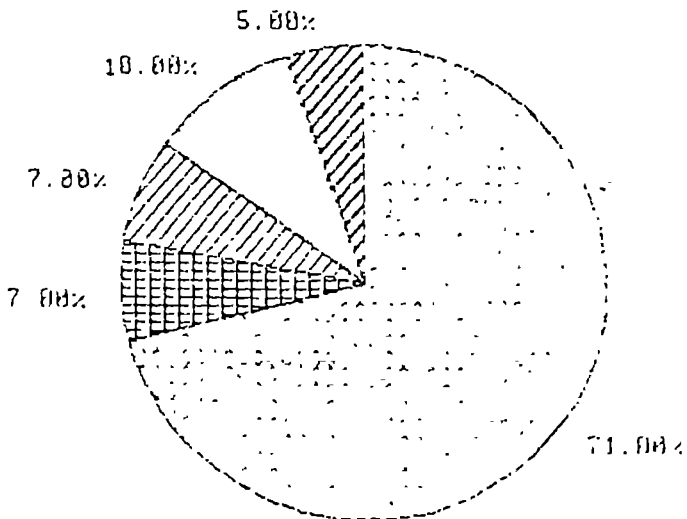


- ☐ Wife, Res. herself
- ▨ Servant, labour
- ▧ Husband, father
- ☐ Mother, grandmother
- ▨ Daughter, niece
- ▨ OTHERS

(Table 16)

Base = 41

**WHO COLLECTS WATER  
(REPORTED BY 51- YRS OLD)**



- ☐ Wife, Res. herself
- ▨ Servant, labour
- ▧ Husband, father
- ☐ Daughter, niece
- ▨ OTHERS

(Table 16)

This information is presented in Exhibits 2(b), 2(c) and 2(d) where the responses given by influencers in different age groups are shown separately.

Other observations that were made were :

1. Use of servants was reported more in 'good' villages (10%). This may be a reflection of the extent of affluence of 'good' villages
2. Uttar Pradesh was the only state where children were reported to be collecting water.
3. In the state of Madhya Pradesh, Gujarat, Manipur and Tamilnadu, no mention was made of water being collected by the male members of the household.

Influencers were then asked to comment about the water collection practices of the other villagers. Their responses are presented in Exhibit 3.

As can be observed from Exhibit 3 there is a clear difference in water collection practices between influencer households and other village households. A higher percentage of influencers - 98% - reported that women (middle aged, young and old) were the main water collectors in the village households (as against 70% in case of influencer households). The corresponding percentage for servants as water collectors was much lower in case of village households - 1% vs 14%. This was to be expected as influencers, being comparatively more affluent could afford servants which most other villagers could not.

Another observation here was that about one third of the influencers in the state of Andhra Pradesh reported that male members were the main water collectors in the village household. This has also been corroborated by the villager's own statements expressed in group discussions.

#### 1.1.4 Problems in water collection

Influencers were asked for their views on whether water collection was a problem or a source of trouble for the villagers. Two aspects were studied here, namely :

EXHIBIT 5

Base = 176

Who collects water in village households  
(Reported by all respondents)

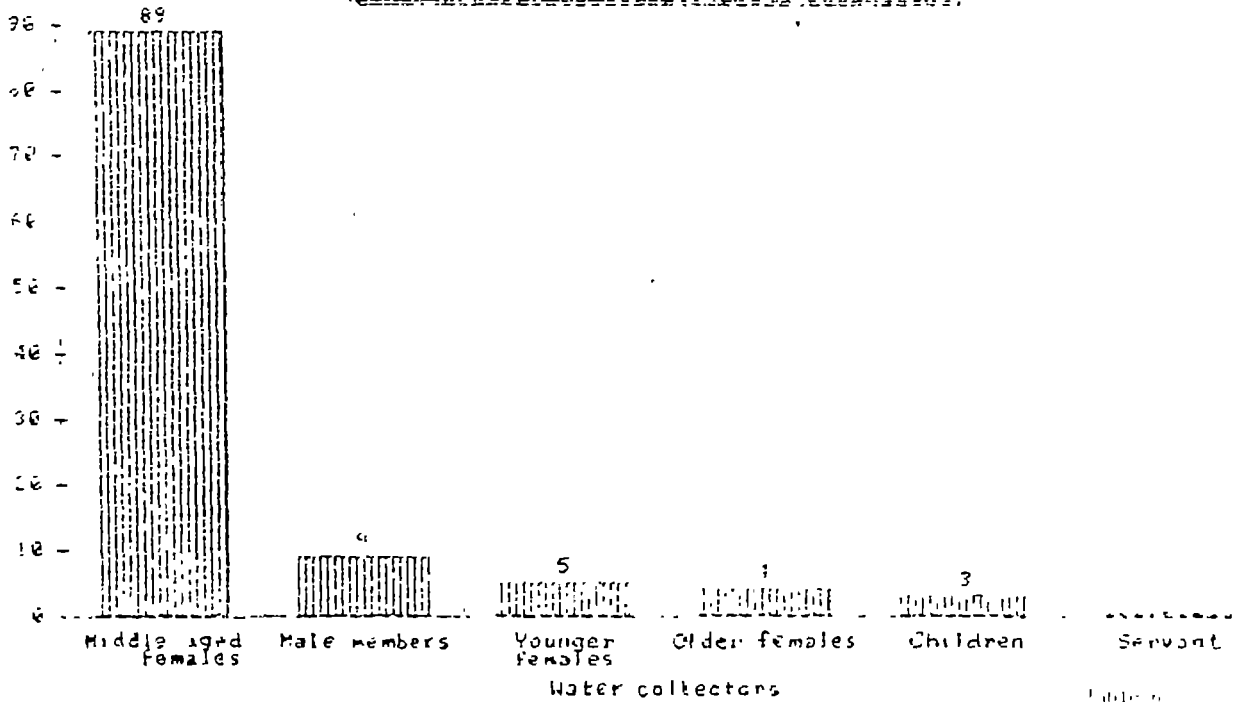


Table 6



1. Problem to women
2. Problems in collecting water from the source

Most influencers were of the opinion that the practice of water collection did not cause any harm to women. This is evident from other responses as presented below.

Base : 176 (%)

Problems to women :

No problem	59
Joint/backache, bodyache etc.	13
Not a problem but a benefit because it is a chance to meet other women and chat/ exercise for the body	8
It is a strenous task/causes weakness	6

(Table 70)

Only a small percentage of influencers felt that it was strenous work and caused bodyache or weakness.

Problems at the source of collection were checked by asking about whether there was quarrelling at the water source or not. Opinions were divided on this subject.

Base : 176 (%)

Quarrelling at water source :

Yes often	15
Sometimes	38
No, never	46

(Table 71)

About 53% of the influencers felt that there was quarrelling at the water source in their village, atleast sometimes if not often. A comparatively higher percentage of influencers in Uttar Pradesh, Madhya Pradesh and Gujarat - 75%, 62%, and 57%

respectively - reported that there was no quarrelling at water source in their village. Reported incidence of quarrelling at water sources was higher in Rajasthan and Tamilnadu.

The main reasons for quarrelling at water sources are linked with the ease of availability of water as can be observed :

Base : 94 (%)

Reasons for quarrelling :-

Fear of water scarcity 48

People are in a rush, they jump queues 48

(Tables 72,73)

Both indicate the fact that water was not abundantly available, if not actually scarce.

## 1.2 WATER STORAGE PRACTICES

Influencers were then asked to describe how the water collected for drinking purposes was stored in their household. They were asked to describe the type of vessel in which the water was stored as well as other details like how it was taken out.

The majority (72%) used earthen pots to store drinking water. Details are as follows :

Type of vessel :	States (%)									Village type	
	All	U.P	RTN	M.P	GUJ	W.B	MNP	A.P	T.N	Good	Poor
Earthen	72	75	92	71	100	79	50	48	46	65	80
Metal	30	-	8	43	35	4	25	48	71	31	30
Plastic	1	-	8	-	-	-	-	-	-	2	-

(Table 18)

Use of metallic pots was mentioned by about one third of the respondents.

A small percentage of respondents mentioned that drinking water was being stored in buckets (9%) and water filters (5%). Interestingly 1% of the respondents also mentioned storing drinking water in cement tanks. Such practices were mainly reported by influencers in the B & C category i.e health/anganwadi worker, doctor, educated person, teacher, and government officer. Majority of these influencers belonged to the 'good' villages. The use of buckets was mainly mentioned by influencers in Uttar Pradesh and West Bengal. The use of water filters was mentioned by influencers in West Bengal, Manipur and Andhra Pradesh. Interestingly Tamilnadu was the only state where a few influencers reported the use of big cement tanks for storing drinking water.

The type of vessel used varied across the different states. It was observed that in the Southern states of Andhra Pradesh and Tamilnadu there was a higher use of metallic pots rather than earthen pots. In contrast to this in the Northern states of Uttar Pradesh, Rajasthan and also West Bengal there was little mention of metallic pots.

A majority of the influencers (85%) reported that the storage vessel for drinking water was covered in their household. Only 2% of the influencers said that the water storage pot was not covered in their households.

Although the influencers were basically questioned about the water storage practices in their household, some also talked about practices regarding water purification. Responses were received from 17% of the influencers on this issue.

Base : 29 (%)

Water purification method :-

Filtered	72
Put alum/chlorine tablets	28
Boiled	7

(Table 19)

As can be observed filtration was the most common practice of water purification that was being followed.

The incidence of water filtration was the highest in the state of Andhra Pradesh. Influencers who were more educated and had exposure to life outside the village which included people such as the health/anganwadi worker and school teacher (B & C category) reported a higher incidence of water filtration in their households.

The next issue on which responses were sought from the influencers was the manner in which water was taken out from the vessel for use. The following responses were obtained :

Base :	176	(%)
<u>Method of taking out water :</u>		
With a bowl, lota, glass		30
By tap attached to the vessel/tilting the vessel		16
With a cup, mug, dolcha		14
Not specified		40

(Table 19)

As can be observed in most influencer households water was taken out from the storage pot using a vessel without a handle i.e bowl, lota etc.

Influencers from the different states reported different practices namely :

1. The use of a vessel without a handle i.e a bowl, lota etc. was mostly mentioned by influencers in Rajasthan and Manipur - 58% and 50% respectively.
2. The use of a vessel with a handle was mentioned mainly by influencers in Gujarat - 42%.
3. The practice of taking out water by a tap or by tilting the storage pot was more frequent in Uttar Pradesh and West Bengal - 46% in each.

### 1.3 CLASSIFICATION AND UNDERSTANDING OF WATER

#### 1.3.1 Classification of water

Influencers were asked to talk about the different types of water known to them. The objective was to study the dimensions on which influencers classified water. The responses obtained indicated the following classification :

Base : 176 (%)

Classification :-

By Source :	Well water	54
	River/stream water	36
	Tap water	31
	Borewell/tubewell water	28
	Not classified by source at all	34
By Usage :	Drinking water	29
	Bathing water	15
	Washing water	13
	Not classified by use at all	70
By Appearance:	Dirty water	22
	Clean water	19
	Not classified by appearance at all	73
By Taste :	Salty water	20
	Sweet water	16
	Not classified by taste at all	76

(Table 64)

As can be observed from the above table most influencers (66%) tended to classify water by its source i.e., well, river water etc. The other dimensions on which water was classified were - by its use, by its appearance and by its taste. However the percentage of influencers classifying water along these dimensions - between 30% - 24% was much lower as compared to the percentage classifying water by source. A few respondents also classified water as hard water and soft water - 11% and 10% respectively.

### 1.3.2 Understanding of clean/pure water

The most commonly mentioned criteria used to establish whether water was clean or not was the visual cue. Almost all respondents spoke of water that did not contain impurities and was visually clean as being pure water.

Base : 176 (%)

#### Clean/Pure water is .....

Does not contain insects, garbage, worms etc.	63
Is visually clean, transparent	55
Is tubewell water, or water collected from some underground source	34
Is well water, river water	19
Is chemically treated or boiled water	17
Is sweet water	16
Is odourless water	13

(Table 82)

It may be observed here that clean/pure water was defined along the following dimensions - by its appearance (visual), by its source, by its taste and smell. It was noted in section 1.3.1 that influencers classified water along dimension such as appearance, taste, source etc. This therefore reinforces the hypothesis that influencers would normally judge water by evaluating it on these dimensions.

It is interesting to note that one out of three respondents interviewed - 34% - believed that water obtained from underground sources such as a tubewell was clean and pure. As against this only 19% of the influencers reported that well, river water was clean/pure. This is even more interesting in light of the fact that, as reported in section 1.1.1, well water was being used more often for cooking and drinking purposes than tubewell water. Cross tabulation of data here shows that of influencers who mentioned well/river water to be clean and pure 65% were actually using one of the sources for domestic purposes. As against this of the influencers who mentioned tubewell water/water from underground sources to be clean and pure only 12% were actually using tubewell/handpump water. These respondents were evidently looking for something more than just purity in their choice of drinking water.

The fact that about 17% of influencers stated that chemically treated or boiled/filtered water was clean/pure indicates that atleast a certain section of influencers were aware at least at the theoretical level, of the meaning of pure water.

Some other descriptions of clean and pure water were :

- does not cause disease, stomach problems
- soft water is pure water
- light, not heavy
- dal/rice gets cooked fast

### 1.3.3 Link between impure water and health

To study whether or not the influencers were conscious of the harm caused by consumption of impure water, They were asked if, in their opinion drinking water could be a source of any health problems. The problems mentioned were :



Base : 176

(%)

Health problems :

Indigestion, dysentery, intestinal problems	76
Cold, cough, headache, bodyache	39
Skin diseases, pimples, boils	18
Malaria and other mosquito carried diseases	18
Worms, guinea worms, hook worms	14

(Table 84)

As can be observed stomach ailments such as indigestion, dysentery etc. were linked to the consumption of impure water by a majority of the influencers. This was followed by other common ailments like cold, cough, skin diseases, pimples and boils. These responses seem to indicate that the influencers were not really aware of the health problems that can be caused by drinking impure water. The general nature of the problems mentioned lead us to believe that the respondents were guessing rather than speaking from a knowledge base. There is little or no mention of specific water borne diseases such as worms and epidemics such as cholera. Guinea worms and other worms was mentioned mainly by influencers in Rajasthan, Gujarat and Uttar Pradesh. This was to be expected as these diseases are known to be endemic in these states.

In the VOS we had recorded the main health problems faced by the villagers. These were :

Base :	44	(%)
<u>Health problems :</u>		
Fever/flu/influenza		73
Diarrhoea/dysentry		52
Malaria		32
Cold/cough		30
Typhoid,/cholera, other water borne disease		23
Stomach ache, gastric problems		21
Skin diseases/boils		21
Measles, chicken-pox		21

(Table 3)

As can be seen, most of the health problems mentioned by influencers in connection with the consumption of impure water were the ones which were more often encountered in the village. These may or may not have been caused by the consumption of impure water.

#### 1.3.4 Water purification

After obtaining the influencers understanding of clean and pure water and the health problems caused by drinking impure water, they were further questioned about the ways by which impure water could be purified for consumption.

Influencers in general were well aware of the different ways or methods of purifying water.

Base : 176 (%)

Water purification methods :

Filtering with cloth/tea filter	72
Boiling	57
Adding bleaching power/alum/helogen	41
Covering water	13
Cleaning water sources/storage pots regularly	10

(Table 85)

Some other ways of purifying water as mentioned by the influencers were - use of water filters and storing the water for some time and allow the dirt to settle down before use. Water filters were mentioned by influencers in Andhra Pradesh and West Bengal.

As can be observed from the above table, filtering by use of cloth filters was one method, that had the highest awareness among influencers. This also supports the findings presented in section 1.2 where filtration emerged as the more often practiced method of water purification in influencer households.

Influencers were then asked to describe the type of water which would need to be purified. Most influencers were of the opinion that water which looked dirty - visually - needed to be purified. This was in keeping with the view expressed by villagers in general.

Base : 176	(%)
Water which looks dirty	87
Water which gives a bad smell	11
Water which contains germs	11
Water which tastes bad	6
No indicators mentioned	1

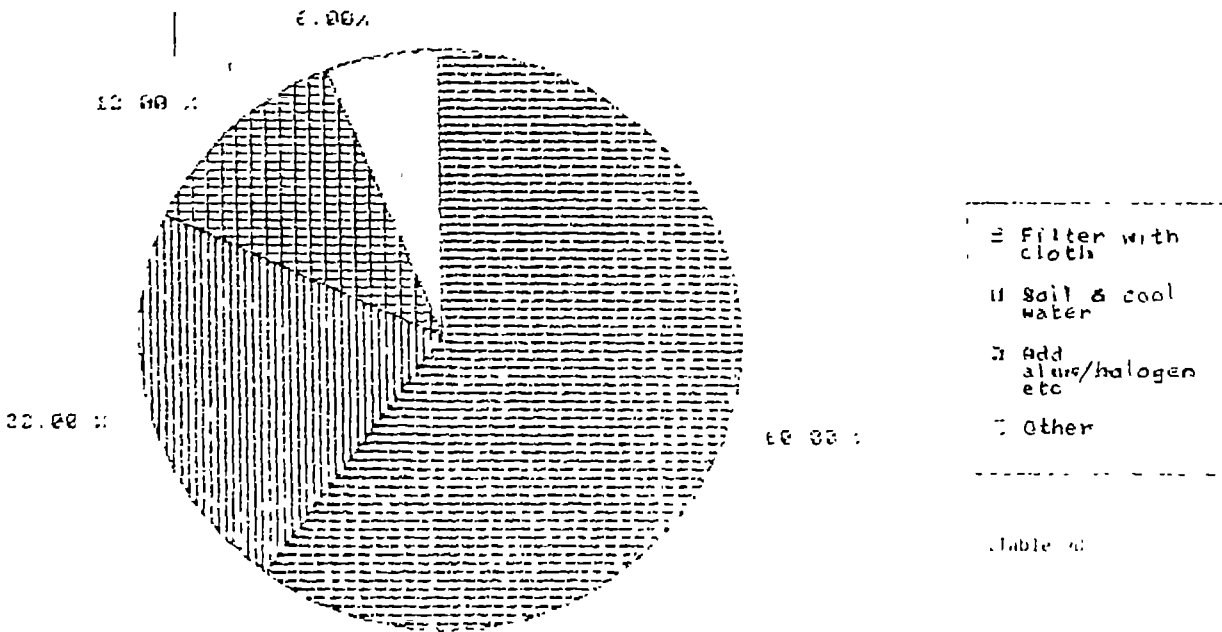
(Table 87)

EXHIBIT 4

Village household

Base = 176

Water purification methods used by villagers



Influencers were then questioned on whether or not people in their village were individually doing anything to purify drinking water. The responses obtained were mixed :

Base :	176	(%)
Most people do something		39
Some people do something		27
Most people do not do anything		34

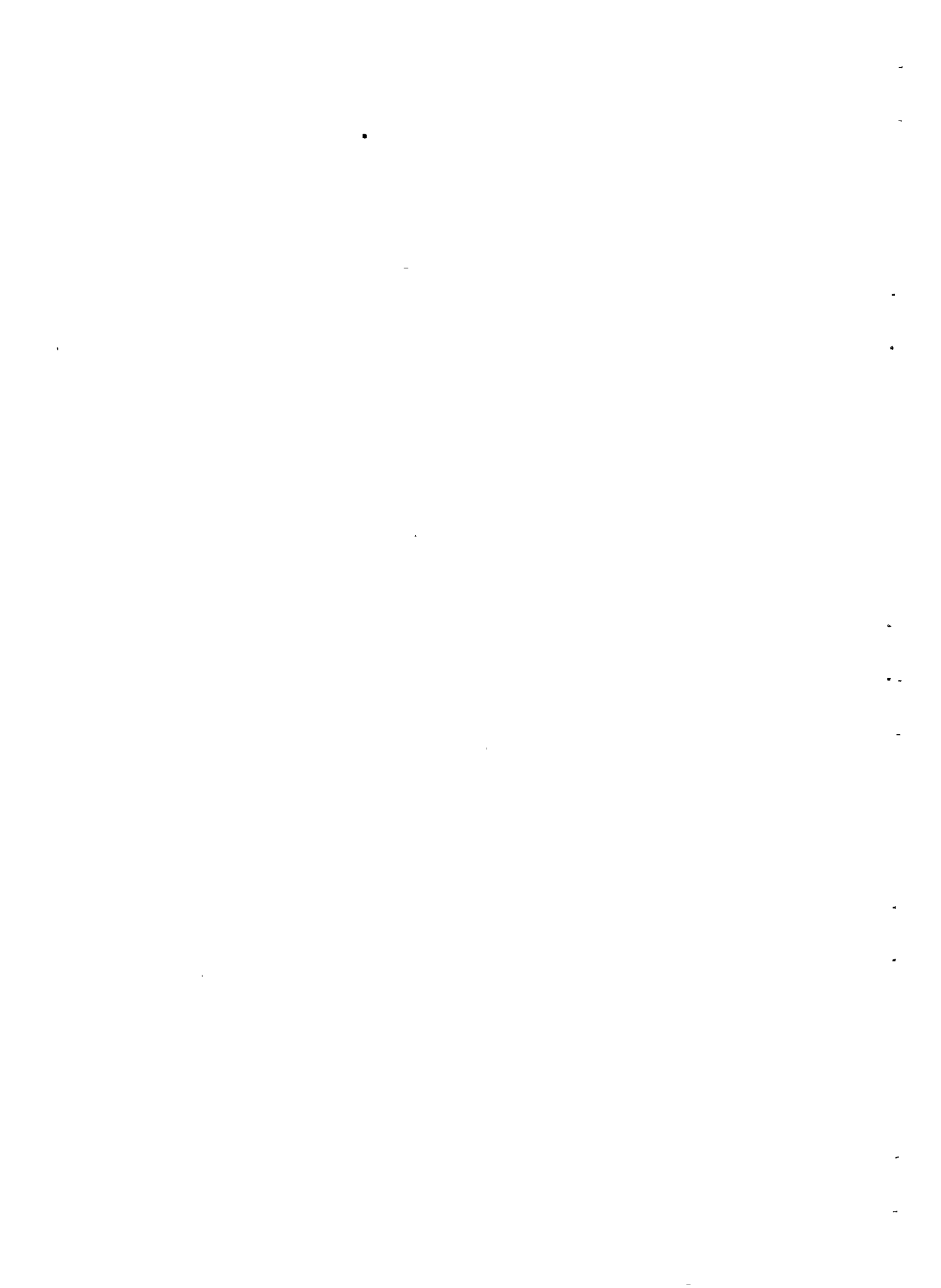
(Table 87)

The above table shows that in 66% of the cases influencers believed that some villagers if not all were practising water purification. Here it was also found that the reported prevalence of water purification was much higher in Gujarat as compared to other states. In Gujarat 92% of the influencers said that most people in their village were doing something to purify drinking water.

As compared to this in the states of Uttar Pradesh and West Bengal, a majority of the influencers (71% and 67% respectively) reported that most people were not doing anything to purify water.

Influencers also described the water purification method being followed by the village households. These were are shown in Exhibit 4.

It is evident from Exhibit 4 that filtration using a cloth was the most popularly practiced method of water purification. This is not surprising, since filtration is the easiest and most economical method of water purification. The practice of boiling water had a somewhat higher mention among C & D category influencers (teachers, educated persons, school going child, person who has lived in city) - 22% & 32% respectively as compared to influencers in A & B category (Priest, elder, health/anganwadi worker, doctor) - 15% in each.



## 1.4 HANDPUMPS

### 1.4.1 Perceived ownership

Government and the voluntary agencies have been installing public handpumps in various villages in an effort to provide better water facilities to the people. However subsequent maintenance of these handpumps has been difficult especially when village people have not felt involved with it.

To get an understanding of the degree of this involvement we asked the influencers for their opinion on the ownership of handpumps. The hypothesis was that if influencers believed handpumps to belong to somebody other than the village people their attitude would get transferred to the village people.

Base : 116 (%)

#### Perceived ownership of public handpumps

Government/Gram Panchayat	91
Us, the public/everyone	3

(Table 77)

It is evident that only a minority of the influencers felt that the public handpumps belonged to the village people. None of the influencers in the C & D category stated that the public handpump belonged to everyone in the village. As compared to this 6% of the A category influencers and 4% of the B category influencers answered that public handpumps belonged to the villagers. Most others saw them as the property of the government or gram panchayat. This reflects a detached attitude towards public handpumps, which would presumably get more detached when inputs were needed for the pump rather than benefits being obtained from the pump. Next, the influencers were asked about the maintenance of the public handpumps installed in their village. The influencers reported the following practices regarding the maintenance of public handpumps installed in their village.

Base : 116	(%)
Who is responsible for maintenance :	
Block authority is responsible	43
Gram Panchayat calls the repairmen	31
Panchayat pays for the maintenance	28
Villagers contribute for maintenance	12
Villagers are responsible	7
Villagers repair if necessary	5

(Table 78)

Evidently, it was only in a few cases that the villagers were taking the responsibility for maintaining the public handpumps. This is not very encouraging as it reflects the apathy of the villagers towards the handpumps installed by the government/voluntary agencies. It is also directly related to the fact that 91% of influencers did not feel that the public handpumps belonged to them. This attitude must have been transferred to or shared by villagers. Since they did not perceive these handpumps to be theirs, they also did not feel responsible for their maintenance.

The attitude of indifference was further cross checked by asking influencers to talk of their understanding of villagers attitudes to public handpumps. They were asked if the villagers were asked to pay for handpump maintenance, would they be willing to do so. It was interesting to note that 50% of the influencers who had public handpumps in their village believed that villagers would indeed be willing to pay. The responses given by influencers who replied either way i.e, 'villagers would be willing to pay' or 'villagers would not be willing to pay' were as follows :



Base :	58	(%)
Would be willing to pay because .....		
The handpump water is so critical		14
It belongs to the village		7
May pay if assured of timely supply		5
If more convenient then would pay		5
Panchayat/Govt. will bear the expenses		3
Will give money for minor repairs		3
Not pay regularly, but if and when repair is required		3
Yes, if village chief makes them understand that they should pay		2
Others		7
Not specified		50

Base :	52	(%)
Would not be willing to pay because .....		
Panchayat/government will bear the expenses		21
They are poor		17
Not regularly but will pay if repair is needed		4
Since it belongs to the village		4
Already paid through taxes		2
No, don't want to get involved as we might suffer		2
They have private wells, why should they give money		2
Others		4
Not specified		44

(Table 80)

Some other responses were :

- "Probably they might pay/nobody has asked for money as yet" (3%)
- "These are already paid for through taxes" (2%)
- "Yes, if the village chief makes them understand that they should make some contribution" (2%)

As the above table shows, about one fifth of the influencers who said villagers would not be willing to pay for handpump maintenance felt that government/panchayat should bear the expenses.

This points to a need for the education of villagers to make them aware of the fact that they are the beneficiaries of handpumps and should also therefore take the responsibility for maintaining these.

Those who said that villagers would be willing to pay were asked to give an estimate of the amount of money which a village household would be willing to pay per month for handpump maintenance.

The contribution amounts mentioned by influencers were

Base : 58	(%)
<u>Contribution amount per month</u>	
Upto Rs 1.00	21
Rs 2.00	22
Rs 3.00 - 5.00	22
Rs 6.00 - 10.00	16
More than Rs 10.00	2
Not specified	17

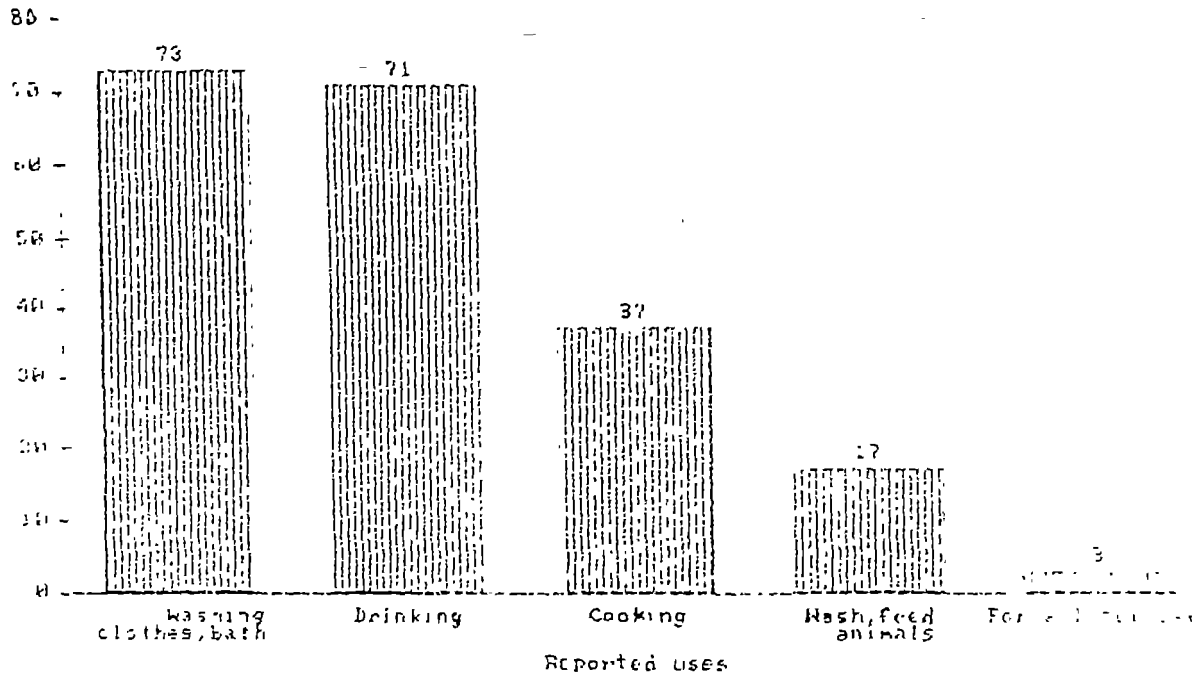
(Table 81)

Almost half the influencers said the contribution would be less than Rs 3.00.

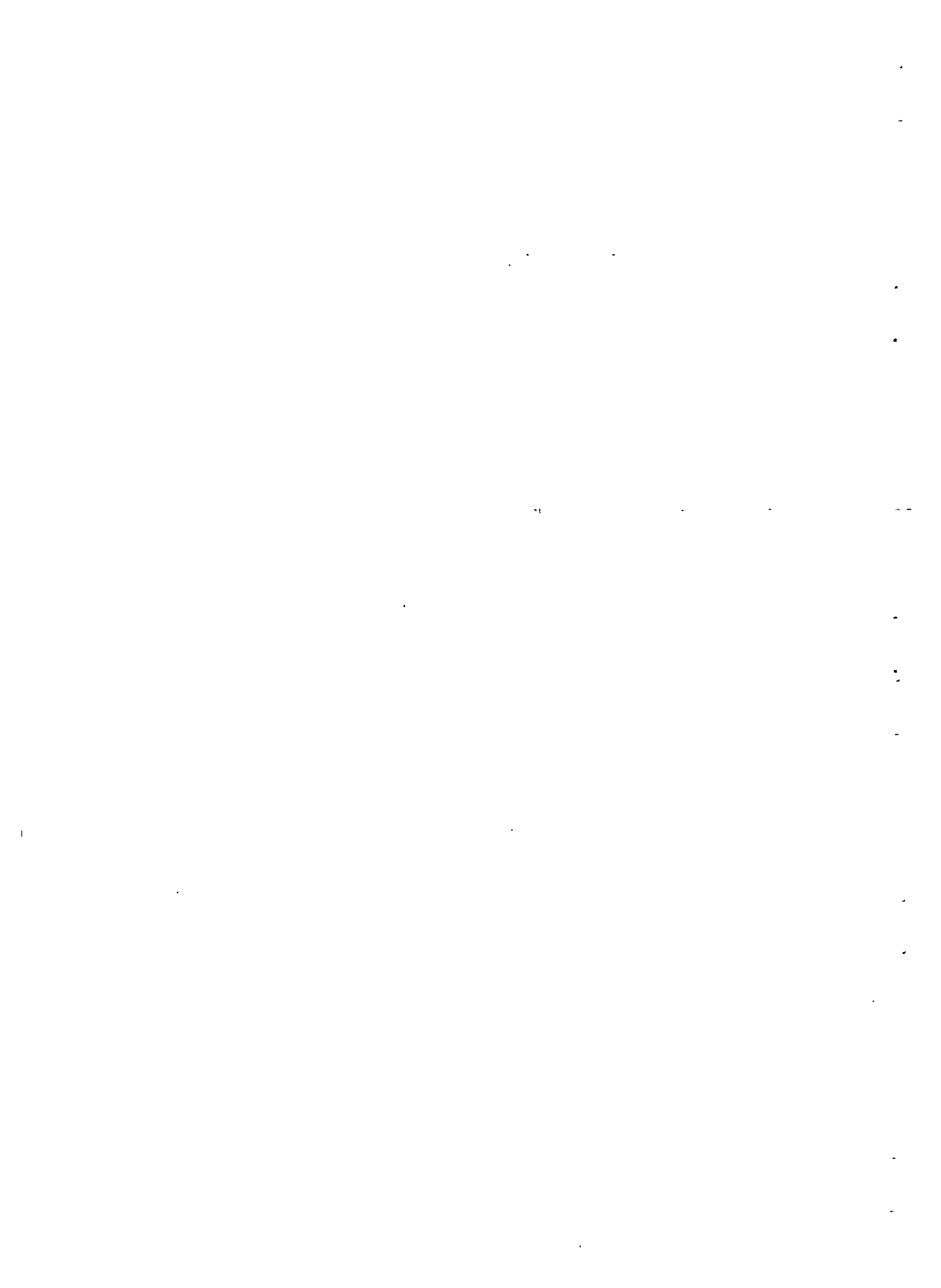
EXHIBIT 5

Base = 116

uses of handpump water



(116)



#### 1.4.2 Usage of handpump water

Influencers from the villages where public handpumps were installed reported that handpump water was being used by villagers for several purposes as is shown in Exhibit 5.

As can be observed most influencers reported the use of handpump water for washing/bathing as well as drinking purposes. The drop in the percentage of influencers who mentioned 'cooking' vis-a-vis influencers who mentioned 'drinking' was dramatic. This could either be because :

- Some respondents did not separately mention 'cooking' after having stated that handpump water was being used for drinking purposes i.e cooking was not 'top of the mind' in case of the respondent.
- In practice handpump water was not actually being used as frequently for cooking purposes as for drinking purposes.

2.0 HYGIENE

2.1 HEALTH AND CLEANLINESS

2.1.1 Factors leading to good health

Influencers were questioned about health and hygiene related factors to see whether or not water and sanitation was considered to be important issues in this context. The rationale was that if water and sanitation had a strong association with health then health could be used as a platform for persuading them to adopt more hygienic practices.

Influencers were asked to give their opinion on the factors that would lead to good health in a person and more specifically in an adult. The spontaneous responses of the influencers to this question were :

Base : 176 (%)

Factors leading to good health :

Eating habits - eating nutritionally balanced food	82
Exercise/health related activities	40
Personal cleanliness - regular bathing, wearing clean clothes	34
Drinking clean/pure water	24
Clean home, clean kitchen	20
Cleanliness outside the house	18
Doing the proper activity at proper time - sleep, eat, exercise	11
Not having bad habits like smoking, drinking, drugs etc.	10
Psychological factors - mental peace, faith in God	7

(Table 40)

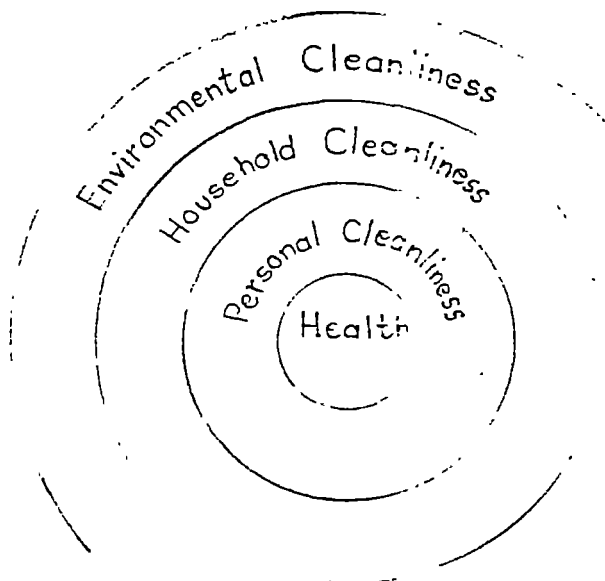
Some other factors mentioned by a few influencers were

- Proper medical facilities 6%
- Cleanliness in public places 5%
- Proper drainage facilities 3%
- Using clean latrines, avoiding outdoor defecation 2%
- Practice preventive measures 2%

The findings presented above are very interesting as they reveal the following :

1. There is a strong association of health with the personal practices of an individual such as eating habits, personal cleanliness habits, exercising habits i.e daily routine and any bad habits followed by him.
2. There is a weak association of health with environmental cleanliness - cleanliness in public places, proper drainage facilities, using clean latrines etc.

The influencers opinion of factors leading to good health can be summarised in the following chart :







### 2.1.2 Perceived areas of cleanliness

Influencers opinion was sought on aspects in which cleanliness was required in the context of the village and its people. The areas referred to by the influencers were :

Base : 176 (%)

#### Areas/aspects requiring cleanliness :

Village streets, roads, garbage disposal	52
Cleaning of house, pooja room, utensils, kitchen etc.	36
Areas surrounding the house - cow shed, backyard, garden, front of the house	33
Public places - market, hospital, temple etc.	24
Water sources - wells, ponds	20
Personal hygiene - bathing, washing, brushing teeth, wearing footwear	19

(Table 50)

Some other factors mentioned in connection with the village cleanliness were :

- Building soak pits, dust-bins, drainage system	16%
- Clean latrines	7%
- Care against flies and mosquitoes	3%

About 10% of the influencers once again emphasised the need to eat good clean food and drink clean and pure water.

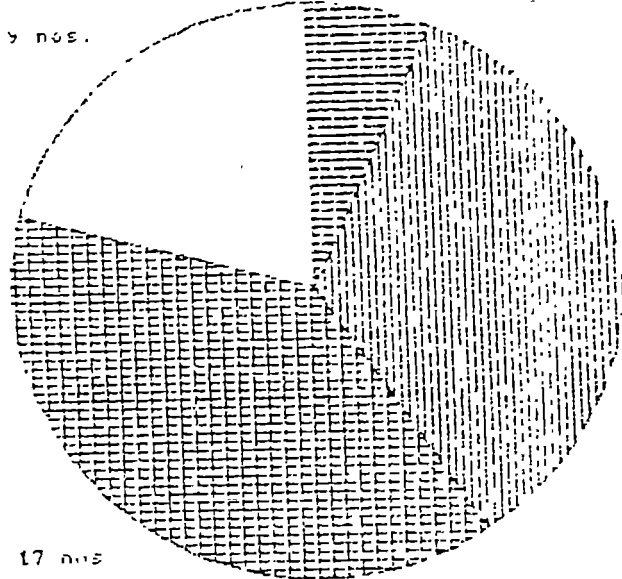
From the above discussion it emerges that the influencers felt a greater need for overall environmental cleanliness in their village rather than household or personal cleanliness. This could, to some extent, be a reflection of respondents talking in a wide context because they were being interviewed

EXHIBIT 6 (a)

Base = 44 villages

Cleanliness in village streets

3 nos.



- 5 Very clean
- 11 Quite clean
- 13 Quite dirty
- 5 Very dirty

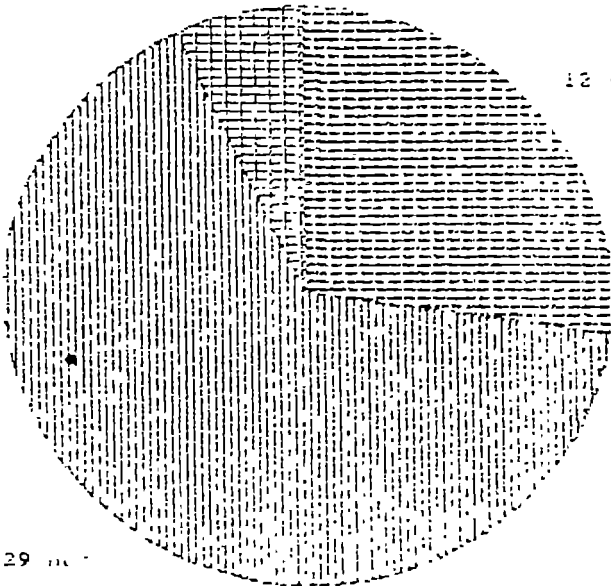
(Table 17 (d) NOS)

EXHIBIT 6 (b)

Base = 44 villages

Cleanliness in village houses

2 nos.



- 2 Clean swept neat
- 12 Some clean some dirty
- 29 Most dirty untidy with flies

(Table 17 (e) NOS)

in their capacity as 'important village person.' However, it could reflect a greater satisfaction with the state of household cleanliness than with village cleanliness. This would not be surprising since this study has shown that concern with cleanliness stems from the individual level and, when a level of satisfaction is reached there it moves to the household and moves to broader areas only thereafter.

In section 2.1.1 we had also found that environmental cleanliness had the weakest association with health in the influencers mind. It is therefore possible that because environmental cleanliness is not considered to be a very critical factor for good health, not much attention is paid to it currently. The sum total seems to be that more attention needs to be paid to creating an awareness of and need for environmental cleanliness among village persons.

This was also evident from the findings of the VOS. In the VOS we had recorded the extent of cleanliness in the village streets and the village houses. The observations made by our field team supervisors based on the brief given to them and their judgement are presented in Exhibits 6(a) and 6(b).

As can be observed from the above data most of the villages visited by us had dirty streets with slush and garbage. As against this there were only a few villages where most of the houses were dirty and untidy. This observation further supports the theory of need for attention to cleanliness moving in a ripple form from self outwards, subject to availability of time and energy to achieve satisfaction at each stage.

Some statewide differences emerged as regards cleanliness of the village streets and homes :

1. Rajasthan was the only state where villages were reported to have very clean streets.
2. In Uttar Pradesh, West Bengal, Andhra Pradesh and Tamilnadu most villages had dirty streets - 4, 5, 4, and 5 respectively.

EXHIBIT 7

Base = 176

Village areas considered to be "Clean"

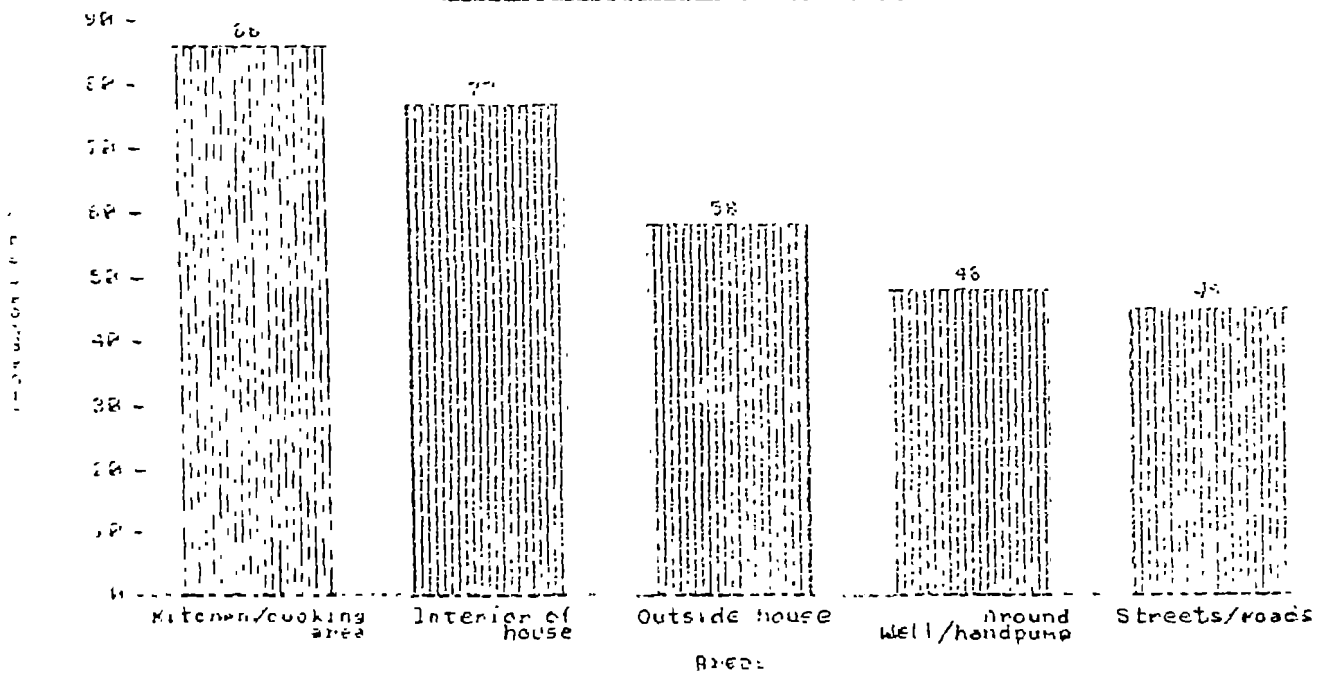


Table 51

### 2.1.3 Eating of the village cleanliness

The hypothesis expressed in the previous section that currently not much attention is paid to environmental cleanliness in villages because of its weak association with health was further corroborated when we asked the influencers to rate their village surroundings on cleanliness. The proportion of Influencers who rated each of the specified areas as clean are presented in Exhibit 7.

It is clear from Exhibit 7 that most influencers considered the village houses to be clean. As against this public areas such as village streets and the area around wells/handpumps were rated as clean by a smaller percentage of influencers.

Influencers gave the following reasons for the perceived lack of cleanliness in public areas :

Base : 97 (%)

#### Reasons for lack of cleanliness :

Poor drainage on streets, water gets collected	67
Water accumulates around water sources	43
Garbage on streets	24
People defecate on roads	18
Municipal workers do not sweep the streets	13
Kuchha roads	11

(Table 59)

These reasons indicate that the main cause of dirt was accumulated water, and the resultant slush.

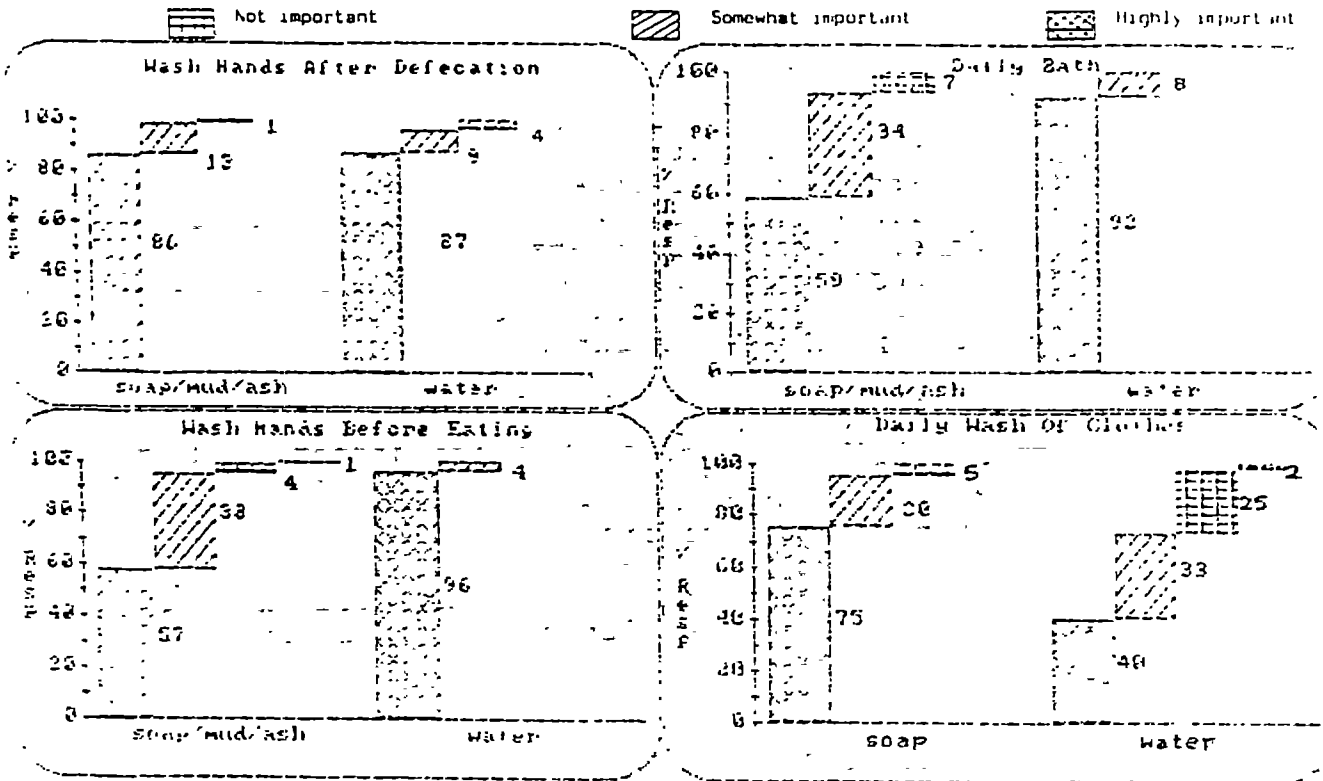
### 2.1.4 Important personal cleanliness practices

In section 2.1.1 it was pointed out that influencers considered personal cleanliness to be an important factor in overall good health. As personal cleanliness comprises of various activities, we questioned the

Base = 176

EXHIBIT 8 (a)

IMPORTANCE OF PERSONAL CLEANLINESS PRACTICES



( Table 52, 53 )

Base = 176

EXHIBIT 8 (b)

Importance of personal cleanliness practices without cleansing agents

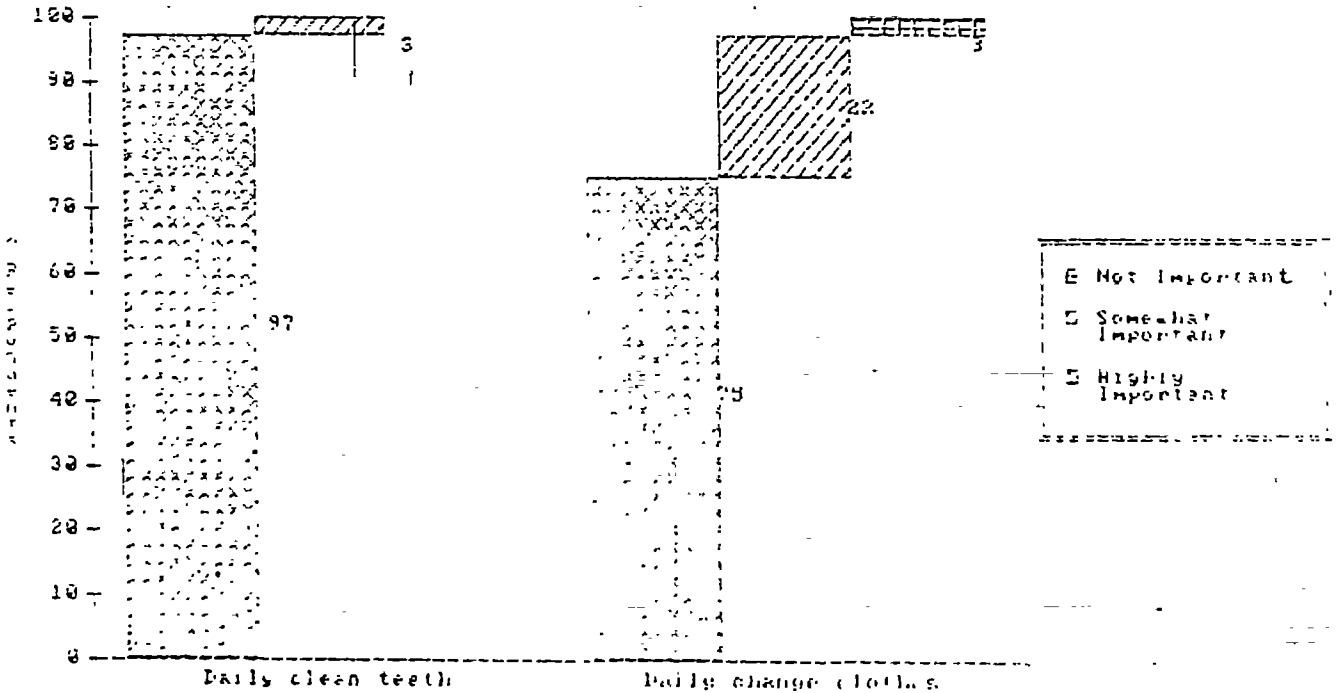


Table 52

influencers about each of these activities. The objective was to study the activities in personal cleanliness which were considered to be the more important ones. The importance ranking given by the influencers to the various personal cleanliness practices have been presented in Exhibit 8.

From Exhibit 8 it emerges that 'body cleanliness' i.e. cleaning teeth, washing hands before eating and after defecation and a daily bath was considered to be more important. As compared to this cleaning of clothes on a daily basis was not considered equally important.

It was also interesting to note that most influencers considered the use of water alone to be sufficient for washing as well as cleaning. The use of a cleansing agent such as soap, mud or ash was not considered to be that important.

However two interesting findings emerge

1. Use of a cleansing agent was considered more important for washing hands after defecation as compared to washing hands before eating.
2. While 75% of the influencers stated that washing clothes with soap was highly important only 40% said the same for washing clothes with water. A possible reason for this could be that in the opinion of influencers washing clothes with just water was not very effective and therefore not very important. However the fact that a high percentage of them considered it important to wash clothes with soap shows that it perceived to be an important activity.

Influencers were then asked whether or not the activities related to personal cleanliness were being practised by most of the villagers. The responses of the influencers are presented in Exhibit 9.

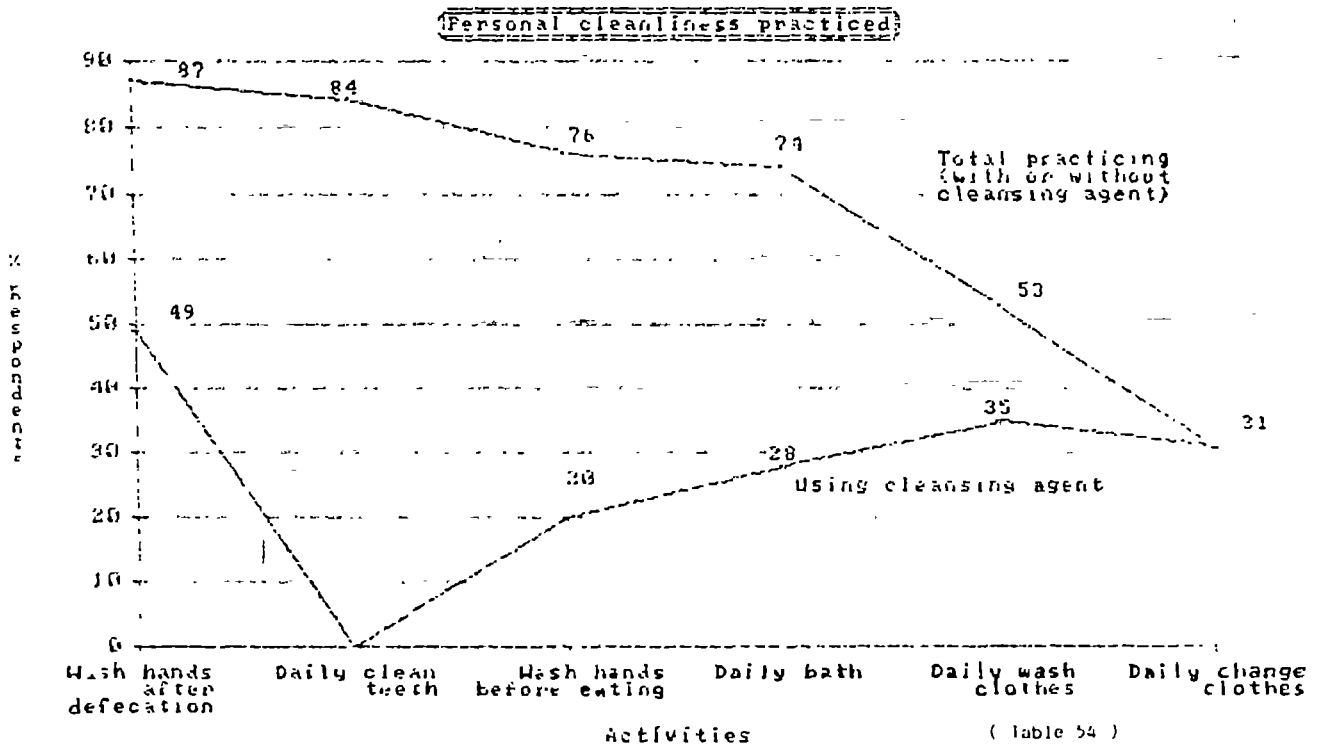
Majority of the influencers have reported that the villagers were following these practices. Here too, we can see that :

1. The practice of using a cleansing agent was mentioned by a much lower percentage of influencers.

EXHIBIT 9

Village household

Base = 176





2. The practices followed most often were - washing hands after defecation and daily cleaning of teeth.
3. A smaller percentage of influencers mentioned the practice of washing clothes daily as compared to washing hands before eating and taking a daily bath. However the use of a cleansing agent was more in case of washing of clothes than the other two.

Statewise differences also emerged in the context of personal cleanliness practices. These were :

1. In the states of Uttar Pradesh and Rajasthan the practice of taking a daily bath was reported by a comparatively lower percentage of influencers - 54% & 58% respectively.
2. The practice of daily washing clothes with soap was reported the most in Gujarat - 81% and the least in West Bengal - 8%.
3. The practice of using a cleansing agent while washing hands either before eating or after defecating was relatively low in the states of West Bengal, Andhra Pradesh and Tamilnadu.
4. In the states of Gujarat and Madhya Pradesh, a comparatively high percentage of influencers reported that the personal cleanliness practices were being followed by the majority of villagers. This was true for almost all the practices.

## 2.2 LINK BETWEEN CLEANLINESS AND HEALTH

### 2.2.1 Unclean practices considered dangerous for health

Influencers were asked to mention those unclean practices which in their opinion were the most dangerous from the point of view of health. Their spontaneous responses were :

Base : 176 (%)

#### Unclean practices :-

Improper habits - smoking, gambling	31
Eating dirty food and drinks	28
Bathing irregularly	23
Dirt and garbage lying on the streets	13
Poor drainage facilities	12
Unhygienic environment/surroundings	12
Not washing clothes	10
Defecating outside/not using latrines	9
Not brushing teeth	9
Uncovered/unclean water source	7
Defecating at all places	6
Urinating at all places	5

(Table 61)

A few influencers also mentioned the following :

- Not maintaining household cleanliness	5%
- Irregular habits/not eating, sleeping at proper times	4%
- Not washing hands after defecation	3%
- Eating with dirty hands	3%

This further reinforces the finding that most influencers mainly associated health with eating good food and keeping good habits. As regards personal cleanliness practices 'bathing' was the only practice mentioned by a significant number of influencers. The practice of washing hands before eating and after defecation was mentioned by very few influencers. This is surprising because most influencers considered these practices to be highly important. (Refer Section 2.1.4).

Similarly very few influencers spontaneously mentioned household cleanliness as being critical for good health.

Continuing on this line, the influencers were given specific instances of areas in which cleanliness could be important and they were asked to rank the first three which, in their opinion, were the most dangerous for health. Exhibit 10 presents the percentage of influencers who ranked these instances among the top three.

The following observations can be made from Exhibit 10.

1. Instances related to environmental cleanliness i.e stagnant waste, poor and open drinking water sources were mentioned more often than personal cleanliness related practices.
2. Although open human faeces was considered to dangerous by quite a few influencers, a comparatively lower percentage mentioned defecating in the open as a dangerous practice. This could be explained by a strange belief that villagers seem to hold, that emerged from group discussions which was that open air defecation and open human excreta were not directly correlated issues. The reason for this belief, inspite of the fact that excreta was neither covered up nor cleaned away, could be found in three related beliefs :
  - that excreta was eaten up by pigs
  - that excreta dried away and disintegrated into the soil

- that open air defecation away from the village would not result in open excreta in the village. The latter would be dangerous to health.

3. There was a perception that open faeces of a child was not as dangerous as that of an adult. Also, very few influencers considered cow/buffalo dung to be dangerous to health.

### 2.2.2 Cleanliness around a well

We found that most influencers felt that stagnant water and open drinking water sources were dangerous for health. Influencer's opinion was then sought on importance of maintaining cleanliness around a well. They were asked whether maintaining cleanliness around a well was as important as general village cleanliness or more important. The responses obtained were :

Base : 176 (%)

#### Maintaining cleanliness around a well is

More important than general village cleanliness	88
As important as general village cleanliness	12
Not as important as general village cleanliness	-

(Table 97)

There was almost total consensus amongst influencers that cleanliness around a well was more important than general village cleanliness. The reasons given for this opinion were :

	(%)
Base : 176	
Dirt in drinking water is injurious to health	65
If area around the well is dirty, it will lead to disease	26
Dirty water from outside the well will enter the well	26
Dirtiness around a well will breed mosquitoes	14
Slush will cause dirtiness, difficult to walk	
Cleanliness will lead to good health	7

(Table 98)

This indicates that most influencers were conscious of two links :

1. The link between water and health and therefore the need to maintain cleanliness around water sources.
2. The link between dirtiness around a well leading to dirty drinking water.

### 2.2.3 Open human faeces

As discussed in section 2.2.1, open human faeces was considered to be dangerous to health by a significant number of influencers. Influencers were therefore asked about the problems that could be caused by open human excreta. The problems mentioned by them were :

	(%)
Base : 176	
Diseases can occur - fever, diarrhoea	50
Has a bad smell, pollutes the atmosphere	28
Flies sit on excreta and then on food	24
Looks dirty	9

(Table 117)

There was a feeling among some influencers that the excreta of a sick person would spread the virus of that disease and other people could be affected. Another problem was that if one would step barefoot on the excreta or work in fields where people had defecated it would cause itching in the hand and feet.

The link between open human excreta and disease was directly drawn by 50% of the respondents. Another 24% drew the link between excreta, flies and food but it is not known whether they drew the final link between that and disease. One out of every three respondents, however, was concerned with the smell and appearance.

There were some influencers who responded that since villagers were defecating far away from the village (in fields, forests) the problems of foul smell was not felt.

## 2.3 PERSONAL CLEANLINESS

### 2.3.1 Bathing practices

Influencers were questioned about bathing practices of members of their household. The bathing practices as reported by the influencers can be observed from Exhibit 11.

As is shown in Exhibit 11 most influencer households the members were bathing within the household boundaries itself. Those who were going out for a bath were mainly doing so at or near a water source - well, taps river or pond etc.

The incidence of bathing in a courtyard, kitchen or covered area was higher in the case of 'Good' village respondents as compared to those from 'Poor' villages - 73% vs 47% in case of male members and 80% vs 61% for female members.

This difference was also reflected in the VOS data. It was found that of the 'good' villages visited, 91% had atleast a few houses with a bathing cubicle. The corresponding percentage for 'Poor' villages was only 41% (Refer Table 5a(i)). The distribution of houses with a bathing cubicle was as follows :

Base :	22 each	(%)
Houses with bathing cubicles :-	<u>Good village</u>	<u>Poor village</u>
Less than 5 houses	18	23
6 - 10 houses	14	-
11 - 50 houses	9	-
51 - 100 houses	9	-
More than 100 houses	41	18
None	9	59

[VOS Table 5a(i)]

Statewise differences were also observed as regards the place for bathing :

1. In Manipur West Bengal, the incidence of bathing at river, or pond was higher both for male members as well as female members 88% vs 54% & 50% respectively.
2. In Madhya Pradesh and West Bengal a significant percentage of influencers mentioned bathing at wells - 43% & 29% respectively for female members.
3. In Manipur and West Bengal, therefore over 80% of the people were bathing at public water sources such as wells or rivers. By comparison, this practice was lowest in Andhra Pradesh and Gujarat where only 4% of the influencers mentioned bathing at public sources.

### 2.3.2 Footwear

Influencers were also asked about the practice of wearing footwear as followed by their family members. They were first asked if the members of their family wore footwear inside the house or not. Their answers were :

Base : 176

(%)

<u>Member category :</u>	<u>Wear footwear</u>
Men	39
Women	32
Children	27

(Table 31)

As can be observed, about one third of the influencers reported that members of their family wore footwear inside the house. This does sound like a high proportion and some amount in a status-related question such as this could be attributed to a desire to sound modern/urbanized. There were some differences in the reported practice of wearing footwear across states.



1. In the Northern states of Uttar Pradesh and Rajasthan the reported practice of wearing footwear inside the house was much higher.

- 79% & 58% for men; 67% and 58% for women;  
63% vs 46% for children.

This could be attributed in some measure, to climatic conditions of extreme cold which could create a need for such a practice.

2. In the state of Tamilnadu not even a single influencer mentioned the practice of wearing footwear inside the house.

3. In the states of Gujarat and Andhra Pradesh a comparatively lower percentage of influencer reported the practice of wearing footwear inside the house - 12% & 12% for men; 12% and 16% for women; 12% and 4% for children.

4. Andhra Pradesh was the only state where the practice of wearing footwear inside the house was more for women - 16% as compared to men - 12%.

It was also found that higher percentage of influencers in category 'B' i.e health/anganwadi worker, village doctor - reported the practice of wearing footwear by their family members. The corresponding percentage was 51% for men, 49% for women and 38% for children. This is not surprising since these influencers were more educated and more aware of health related issues.

Influencers who mentioned that footwear was not being worn inside the house - by any member(s) of the family i.e, be it men, women or children - were asked if their family members wore footwear when going out. To this majority of the influencers responded 'yes' - 94% (Refer Table 32). They were further probed on whether footwear was worn everytime that the members went out or only sometimes. The responses to this question are presented below :

Base : Men (104)  
 Women (110)  
 Children (108)

<u>Member category</u>	<u>(%)</u> <u>Wear footwear</u>		
	<u>Every time</u>	<u>Sometime</u>	<u>Total</u>
Men	90	10	100
Women	80	19	99
Children	75	22	97

(Table 33)

As can be observed, of the influencers who reported the practice of wearing footwear by their family members when going outside the house, majority stated that this practice was followed almost everytime the members went outside.

Influencers who stated that footwear was worn only sometimes when going out, mentioned the following occasions on which footwear was worn :

- 'when we go outside the village'
- 'when we go to meet friends/relatives'
- 'when we go out to defecate'

As compared to the footwear was not worn in the following conditions :

- 'when we go to work in the fields'
- 'when there is slush on the streets'
- 'when it rains'
- 'when we are only going to a nearby place'

(Tables 34, 35, 36)

### 3.0 SANITATION

#### 3.1 WASTE WATER DISPOSAL

3.1.1 Influencers were asked about the manner in which village households disposed off the waste water generated by bathing and washing, at home. Their answers revealed the following :

Base : 176	(%)
Disposal method :	
Goes outside the house via a drain	40
Goes into soak pits	23
Goes to the road	21
Thrown in front of the houses/in the backyard	21
Goes into the farms/field	12
Goes to the kitchen garden	9
Thrown anywhere	3
Goes into the gutter	2

(Table 91)

As can be observed the waste water generated at home was mostly thrown somewhere around the house - either outside on the road or inside the house in the front or backyard. 40% spoke of the water going outside the house via a drain. This response reveals :

- care taken to ensure disposal of the waste water upto the point where it leaves the house.
- indifference to the issue of disposal thereafter.

Only 23% of the respondents mentioned the use of soak pits and 2% mentioned gutters. These responses reflect that in most cases there was no systematic disposal of household waste water.

This is also reinforced when we look at the answers given by influencers on what finally happened to the waste water disposed like this.

Base : 176	(%)
Disposed waste water .....	
Gets absorbed by the earth/dries up	38
Stagnates inside/outside the house	10
Flows and accumulate in low lying areas	3

(Table 91)

This shows that in most villages the waste water was thrown away without much concern for whether it dried up or stagnated.

There were some differences across states in the way household waste water was being disposed off.

1. The use of soak pits was mainly mentioned by influencers in Andhra Pradesh, Gujarat and Manipur - 48%, 39%, and 38%. As against this very few influencers in Rajasthan and Madhya Pradesh mentioned soak pits - 4% and 5% respectively.
2. The problem of water stagnating inside/outside the house was mentioned mainly by influencers in Andhra Pradesh and Tamilnadu - 28% and 17% respectively. There was no mention of this problem in Gujarat and Manipur. About 25% of the influencers in Manipur reported that waste water did not accumulate because of the sloping land terrain.

The 'good' villages were somewhat more better organised than the 'poor' villages. This is reflected in the finding that 52% of the influencers in 'good' villages reported that waste water was being disposed off through drains. The corresponding percentage for 'poor' villages was 26%. Also, whereas 28% of the influencers in 'poor' villages reported that waste water was being thrown in the front/backyard of the house the corresponding

percentage for 'good' villages was 15%. The mention of soak pits was also slightly higher in case of 'good' villages as compared to 'poor' villages - 26% vs. 19%.

### 3.1.2 Urine disposal

Influencers were also questioned about the practices being followed by village households for urine disposal. The practices reported by influencers were :

Base : 176 (%)

#### Urinating practices :

Urinate in the open/at the side of the street 25

Urinate in pits made for this purpose 15

Urinate where there is open water 3

#### Urine disposal :

Gets absorbed in the earth/dries up 51

Goes via drain 17

Goes anywhere 6

Goes to the road 5

Goes into soak pits/other pit 4

(Table 91)

From the above table it can be observed that villagers mostly urinated outside the house. The urine was then left to either dry up/get absorbed in the earth or flow anywhere. A certain indifference to the issue is reflected in the type of answers received.

### 3.1.3 Waste water at community sites

Influencers were then questioned on the issue of disposal of waste water being generated at community sites i.e, wells, handpumps and other community washing areas. Their responses are presented below :

Base : 176 ( % )

Community waste water disposal

Remains stagnant around the water source in rainy season	30
In summers naturally dries up/earth absorbs it	28
Goes to the field/farms through a drain	19
Flows through a drain into an open water-source such as lake, river, canal etc.	14
Accumulates at the roadside	14
Goes into a drain/ditch	11
Goes into a pit/hole besides the water source	5

(Table 92)

This once again shows that, as in the case of household waste water, at community sites too there was no system for disposing the waste water generated. There were some statewise differences in disposal practices namely :

1. The use of a canal or ditch for disposing the waste water had the highest mention in Manipur - 63%. As against this no influencer in Rajasthan mentioned the use of these.
2. The practice of letting the waste water flow through a drain/channel into an open water source was reported mainly by influencers in West Bengal. This practice had little mention in the states of Tamilnadu, Andhra Pradesh, Rajasthan and Manipur - 4%, 4%, 4% and nil respectively.
3. In the Southern states of Andhra Pradesh and Tamilnadu there was little mention of allowing the community waste water to flow into farms/fields - 4% and nil.

4. There was no proper system of waste water disposal in the southern states of Andhra Pradesh and Tamilnadu, as is evident by the fact that 64% and 46% of the influencers in these states mentioned that waste water would remain stagnant in rainy season.

Influencers were then asked if their village had a person specially appointed for ensuring the disposal of community waste water. Their responses were :

Base : 176	(%)
<u>Responses :</u>	
Yes	11
No	88
Don't know/Not specified	1

(Table 93)

As can be observed only a very small segment of the influencers reported that a person was specially appointed to ensure disposal of waste water generated at community sites. Being nobody's responsibility, the issue ended up being neglected. Other interesting findings were :

1. A higher percentage of influencers from the 'good' villages responded positively as compared to influencers from 'poor' villages - 17% vs 5%.
2. These were mainly influencers from Gujarat, Tamilnadu and Andhra Pradesh who reported that a person was specially appointed - 23%, 21% and 16%. As against this no influencer in West Bengal and Manipur mentioned this.

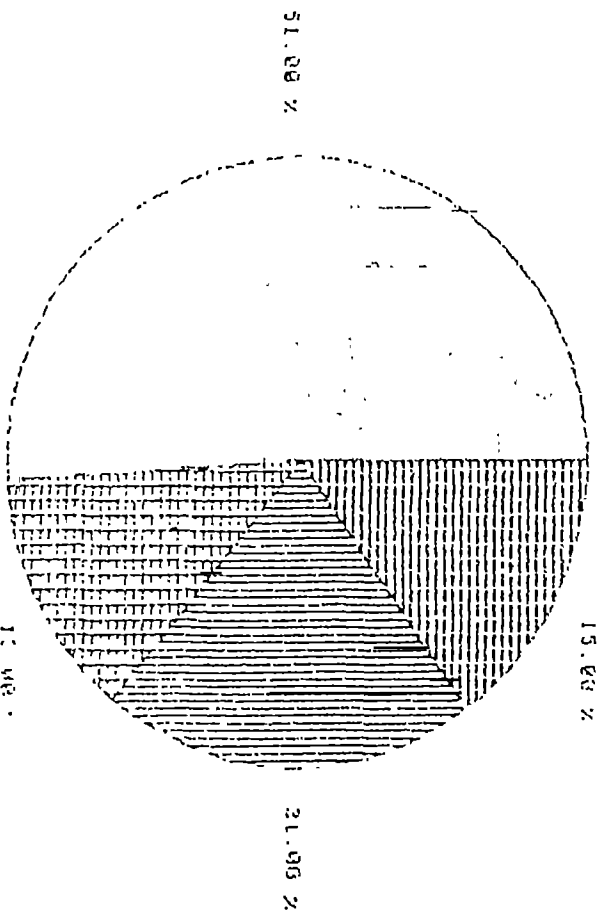
#### 3.1.4 Satisfaction with waste water disposal

Influencers were questioned on the extent of their satisfaction with the waste water disposal system being followed in their village. The response given by influencers are presented in Exhibit 12.

Base = 176

EXHIBIT 12

SATISFACTION WITH WASTE WATER DISPOSAL



- B Very Satisfactory
- f Quite Satisfactory
- 1 Not Quite Satisfactory
- C) NOT Satisfactory at all

( Table 94 )



The majority of the influencers - 64% reported being dissatisfied with the present system of disposing waste water. This indicates a felt need on the part of influencers for a better system of waste water disposal.

A surprising finding was that although 41% of the influencers in 'poor' villages found the system of waste water disposal satisfactory the corresponding figure for 'good' villages was 33%. This is interesting as one would expect the 'good' villages to have a somewhat better system than 'poor' villages.

Conversely, this could also be a reflection of the good village respondents having had greater exposure to urban water disposal methods and their dissatisfaction could be because of their awareness of the gap between urban and rural systems.

Other observations are :

1. Very few influencers in West Bengal and Andhra Pradesh were satisfied with the present system of waste water disposal - 17% and 12% respectively.
2. The states where a comparatively higher number of influencers were satisfied with the waste water disposal system were Madhya Pradesh, Rajasthan and Manipur - 57%, 50% and 50%.

### 3.1.5 Problems of accumulated waste water

As discussed in the previous section, a majority of the influencers did not find present system of waste water disposal satisfactory. Influencers were then asked their opinion on whether accumulation of waste water could lead to any problems. The influencers' reactions to this question were :

Base :	176	(%)
<u>Accumulated waste water leads to problems :</u>		
Yes		92
No		7
Don't know		1

(Table 95)



Most influencers therefore were of the opinion that accumulated waste water could lead to problems. The awareness was the highest among 'C' category influencers (school teacher, educated person, government officer) - 100% of the influencers in this category replied in the affirmative. As against this, only 87% of the influencers in 'A' and 'B' category (A - village chief/elder/priest, B - health/anganwadi worker, village doctor) said 'yes'. This is somewhat surprising as we would have expected the 'B' category influencer to have the same opinion as 'C' category influencers for this particular issue.

Similarly a higher percentage of influencers in 'good' villages said 'yes' as compared to the influencers in the 'poor' villages - 96% vs 88%. In section 3.1.4 it was found that a higher percentage of influencers from 'good' villages had expressed dissatisfaction with the present system of waste water disposal as compared to 'poor' villages - 67% vs. 58%.

Madhya Pradesh was the only state where the percentage of influencers who felt accumulated waste water could lead to problems was low - 62% as compared to 95% or more in case of other states. Here it should be noted that Madhya Pradesh also had the highest percentage of influencers who said they found the present system of waste water disposal satisfactory - 57% (Section 3.1.4).

Influencers were then asked to list down the various problems that could be caused by accumulated waste water. The problems mentioned by the influencers were:

Base : 162	(%)
<u>Problems</u> :	
Diseases are caused, cold/cough/fever etc.	92
Breeds mosquitoes which spread disease	61
Causes bad smell, pollutes the environment	29
Breeds flies	17
Creates slush/dirt which is very irritating	17
Breeds insects	13
Roads get blocked	9

(Table 96)

Some other problems mentioned were :

- Caused worms 4%
- Contaminates drinking water 3%

As can be observed accumulated waste water is strongly associated with breeding of flies, mosquitoes, insects etc. which in turn spread diseases. In addition, waste water accumulation was also directly associated with diseases by 92% of the respondents. The diseases mentioned were common cough, cold and fever. This shows that most influencers do consider accumulated waste water to be harmful to health.

The other findings were :

1. The awareness that accumulated waste water breeds mosquitoes which spread diseases was higher among 'B' and 'C' category influencers of which 66% and 68% mentioned this. As against this, 53% of the 'A' category influencers and 55% of the 'D' category influencers mentioned this problem.
2. The problem of bad smell caused by accumulated waste water was mentioned the greatest proportion of influencers in West Bengal - 57% as compared to other states.

3. In Manipur there was no mention of slush/dirt caused by accumulated waste water. A possible reason for this could be that the land terrain in this state does not allow water to stagnate in one place and cause a slush.

## 3.2 GARBAGE DISPOSAL

### 3.2.1 Village practices

Influencers were asked about the village practices for disposing garbage. The practices reported were :

Base : 176	(%)
Practices :	
Thrown in the village streets, fields, anywhere	29
Disposed into pits/heaps outside the house	24
Thrown in the fields, wasteland, forest etc.	14
Disposed into pits far from the village	11
Village cleaners take away the garbage	5
Thrown in front of the house/everyone throws at their own place	5

(Table 140, 141)

Some other practices as reported were :

- Sometimes garbage is burnt off	4%
- Disposed in cement tubs set up by the Panchayat	3%
- Gram Panchayat person removes the garbage with the help of a trailer/cart	3%
- Disposed inside the house	3%

The common practice was to throw garbage outside the house either in a pit made for the purpose or just on a heap on the street. The practice of throwing garbage outside the village in fields, forests was reported only by small percentage of respondents.

Some interesting findings in this context were :

1. The practice of throwing garbage anywhere on the village streets etc. was mostly mentioned by influencers in Rajasthan and Uttar Pradesh - 67% and 50% respectively. The practice had the lowest mention in the state of Andhra Pradesh.
2. The practice of disposing garbage in pits or heaps outside the house was mentioned mainly by influencers in West Bengal, Madhya Pradesh and Manipur - 58%, 43% and 38% respectively. This practice had the lowest mention in Andhra Pradesh - 8%.
3. The practice of comparatively more hygienic ways of garbage disposal such as use of cement tubs set up by the Panchayat; use of village cleaners and the use of a Gram Panchayat appointed person for cleaning the garbage had a higher mention in 'good' villages as against 'poor' villages - 4% vs 1%; 14% vs 1% and 5% vs nil respectively.
4. Gujarat and Andhra Pradesh were the two states where a comparatively higher percentage of influencers reported the use of more hygienic ways of garbage disposal :
  - 8% and 12% respectively reported use of cement tubs
  - 27% and 16% reported use of village cleaners
  - 8% and 4% reported a person appointed by Gram Panchayat.

The garbage so collected in pits/heaps was removed after some time and used as manure. This was spontaneously mentioned by a few influencers although a specific question was not asked on this.

Make fertiliser/manure with it	27%
Pit is cleaned once in 6 months and the manure is removed	4%

### 3.2.2 Problems of garbage disposal

Influencers opinion was sought on whether they perceived garbage disposal to be a problem or not. Majority of the influencers - 59% - responded that they did not perceive garbage disposal to be a problem. Statewise differences were observed here :

1. Majority of influencers in the Northern states of Uttar Pradesh and Rajasthan felt that garbage disposal was a problem - 71% in each state.
2. The states in which most influencers were of the opinion that garbage disposal was not a problem were Andhra Pradesh - 84%, 71% and 81% respectively.
3. More influencers in 'B' and 'C' category considered garbage disposal to be a problem as compared to influencers in 'A' and 'D' category :

A : 31%  
B : 49%  
C : 50%  
D : 34%

The problems associated with garbage disposal were :

Base : (Those who perceived garbage disposal to be a problem = 72) . (%)

#### Problems :

Spreads diseases	71
Dirty, unhygienic	36
Breeds insects, flies, mosquitoes	33
Smells bad	28
Make it difficult to walk	4

(Table 143)

Influencers who did not consider garbage disposal to be a problem, gave the following reasons :

Base : 104 (%)

Garbage disposal is not a problem because...

Make fertilizer/manure with it after collecting it in a pit	46
Disposed in pits outside the house	22
Thrown in the fields, forests, wasteland	20
Disposed into pits far from the village	11

(Table 142)

3.2.3 Improvements desired

Influencers were then asked for their views on how the problems of garbage disposal could be solved. The suggestions given by them are presented below :

Base : 176 (%)

Suggestions for improvement :

Garbage should be collected and thrown outside the village/far from the village	21
A permanent pit/ditch/fixed place should be made for disposing garbage	21
Get a cleaner to remove garbage daily/ increase number of sweepers	10
Each house/locality should have a dustbin	7

(Table 144)

Several other suggestions were made but not by substantial number of people. Some of the other suggestions were :

- Drains pucca roads should be made 2%
- Roads should be swept & cleaned regularly 2%
- There should be a pit near the house where garbage can be dumped 2%



This shows that there is a felt need for a system of garbage disposal whereby all garbage is disposed off at a specific place - preferably in a pit. Additionally, this place would have to be located at a distance from the village.

### 3.3 COW DUNG DISPOSAL

#### 3.3.1 Village practices

Following the discussion on garbage disposal influencers were asked about the village practices regarding disposal of cow dung. The practices reported by them were :

Base : 176 . (%)

#### Practices :-

Dig a pit and put cow dung in it to make manure	28
Cow dung cakes are made to be used as fuel	24
Cow dung is used a manure/fertilizer	21
Cow dung is thrown alongwith other garbage	20
Cow dung is thrown in kitchen garden	15
Cow dung is used for plastering the kuchha house	9
Cow dung is used for gobar gas plants	7

(Table 145)

Some interesting observations were :

1. The practice of making cow dung cakes (to be used as fuel) was mentioned more by influencers in 'good' villages as compared to influencers in poor villages - 32% vs 15%. This is also matched by the finding that a comparatively higher percentage of influencers in 'poor' villages reported that cow dung was thrown alongwith other garbage - 27%. The corresponding figure for 'good' villages was 14% only. This shows that villagers in 'good' villages were making better use of cow dung as compared to their counterparts in 'poor' villages. Such a situation is unfortunate and calls for community education on the subject.

2. In the states of Tamilnadu and Manipur there was no mention of making cow dung cakes for using as fuel. In Rajasthan, Gujarat and Andhra Pradesh , over 24% mentioned the use of cowdung cakes as fuel.
3. In Gujarat and Tamilnadu a very high percentage of influencers mentioned that cow dung was being thrown away with other garbage - 65% and 46% respectively.
4. In Manipur and West Bengal there was no mention of using cow dung for plastering kuchha houses.
5. The use of cow dung in Gobar gas plant was reported by influencers in 3 states namely Andhra Pradesh, Gujarat and Uttar Pradesh - 28%, 12% and 8% respectively.

### 3.3.2 Problems of cow dung disposal

Influencers were asked whether cow dung disposal was a problem in their opinion. Their answers were :

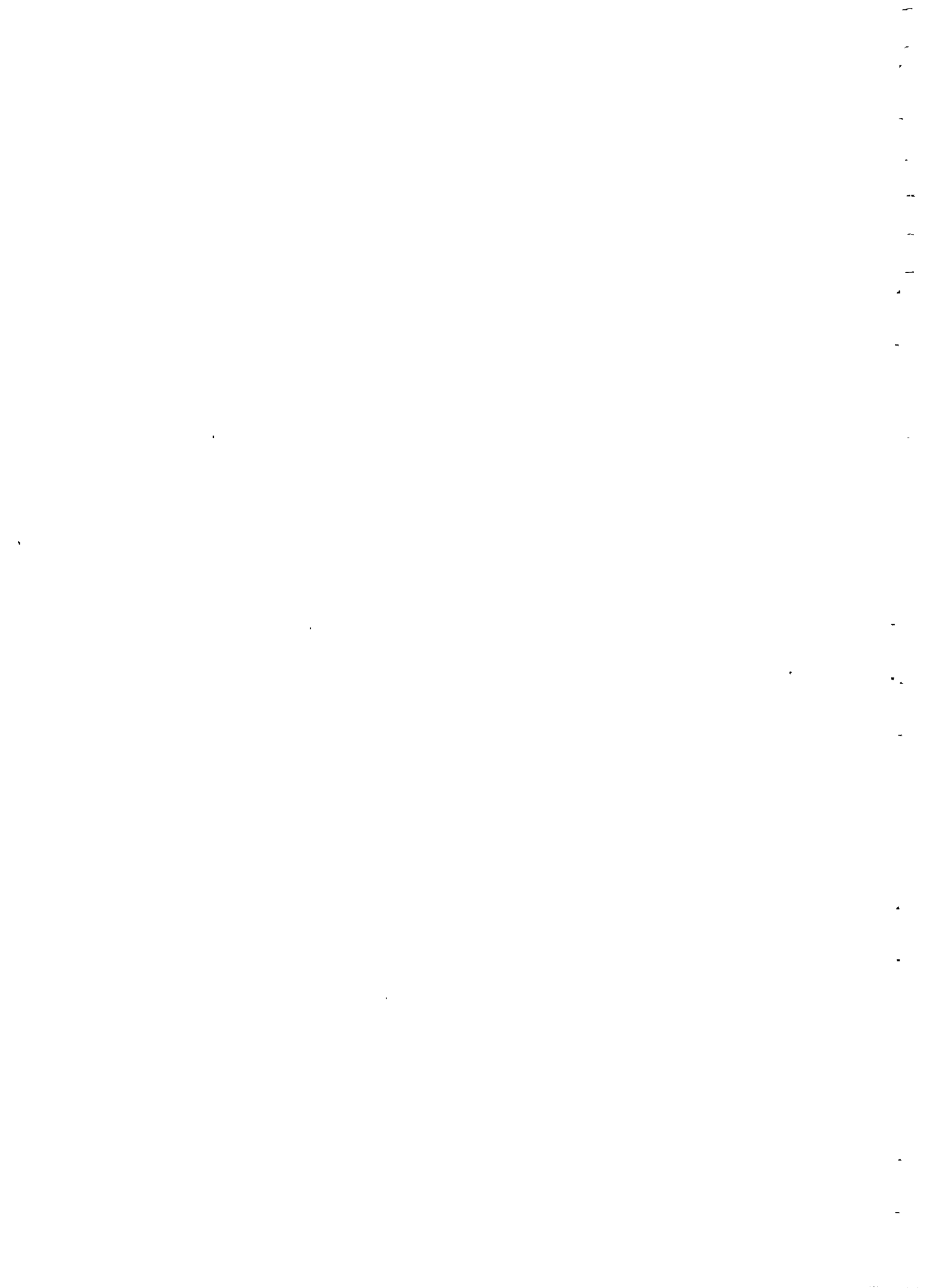
Base : 176	(%)
Response	
No, its not a problem	82
Yes, it is a problem	18

(Table 146)

As can be observed majority of the influencers did not perceive cow dung disposed to be a problem. It should also be noted that this percentage is much higher than the influencers who answered that garbage disposal was not a problem - 82% vs. 59%.

Some observations here were :

1. A very high percentage of influencers in Manipur responded that cow dung disposal was a problem - 63%.



2. In contrast to the above most influencers in Madhya Pradesh, Andhra Pradesh and Tamilnadu did not consider cow dung disposal to be a problem - 100%, 96% and 96% respectively.

The reasons given by influencers for not perceiving cow dung disposal as a problem were :

Base : 144	(%)
Useful as a manure, fuel, in Gobar gas plants	75
Used for plastering floors and walls	13
It is disposed off daily, so no problem	9

(Table 147)

A few influencers - 1% - also responded that cow dung did not smell as bad as other garbage nor did it breed insects. As against this influencers who considered cow dung disposal to be a problem gave the following reasons :

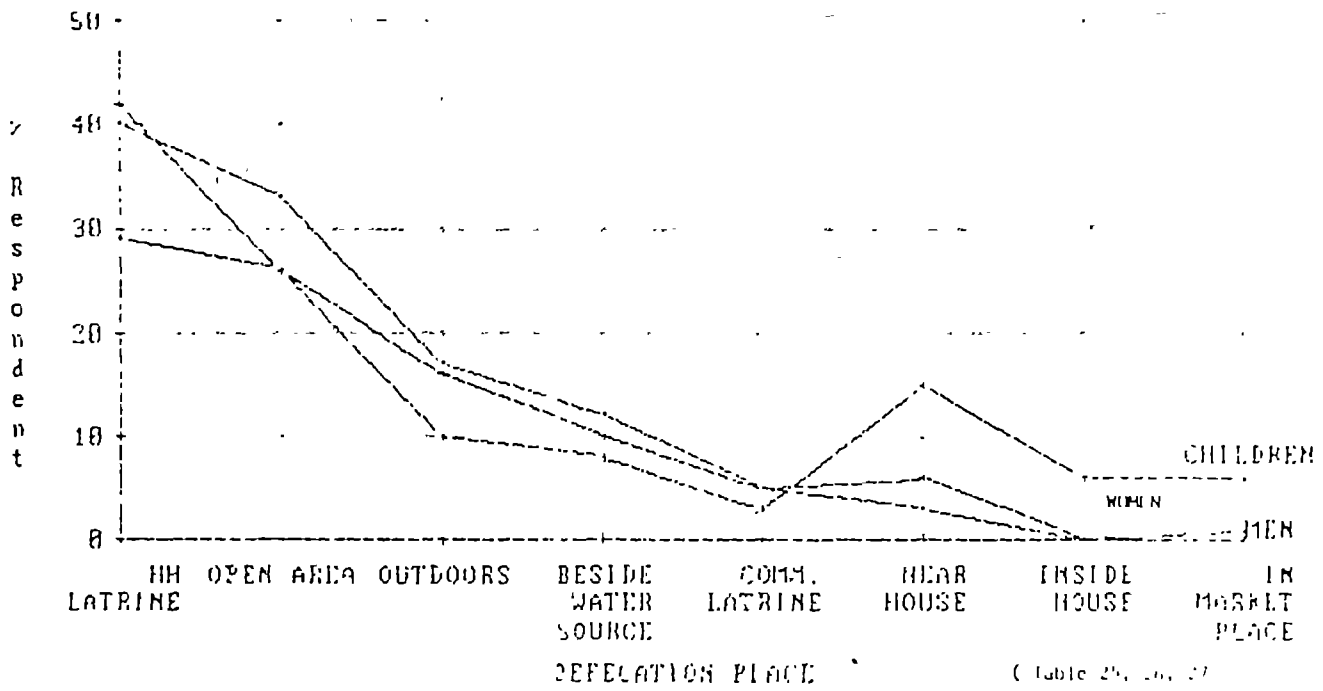
Base : 31	(%)	Nos.
<u>Problems</u> :		
Poses health hazards, causes diseases	58	18
Breeds flies/mosquitoes	39	12
Carrying and collecting it is a problem	23	7
Creates dirt	23	7

(Table 147)

Base = 176

EXHIBIT 13

**PLACE OF DEFECATION**



#### 4.0 DEFECATION

#### 4.1 PLACE OF DEFECATION

#### 4.1.1 Influencer households

Influencers were questioned about the defecation practices of their family members. To begin with they were questioned with regard to the place used for defecation purposes by their family members. The practices reported by influencers are presented in Exhibit 13.

As can be observed from Exhibit 13 the place used for defecation did not vary between men and women. Secondly, approximately the same percentage of influencers reported the use of latrines/household pits as reported going outdoors for defecation.

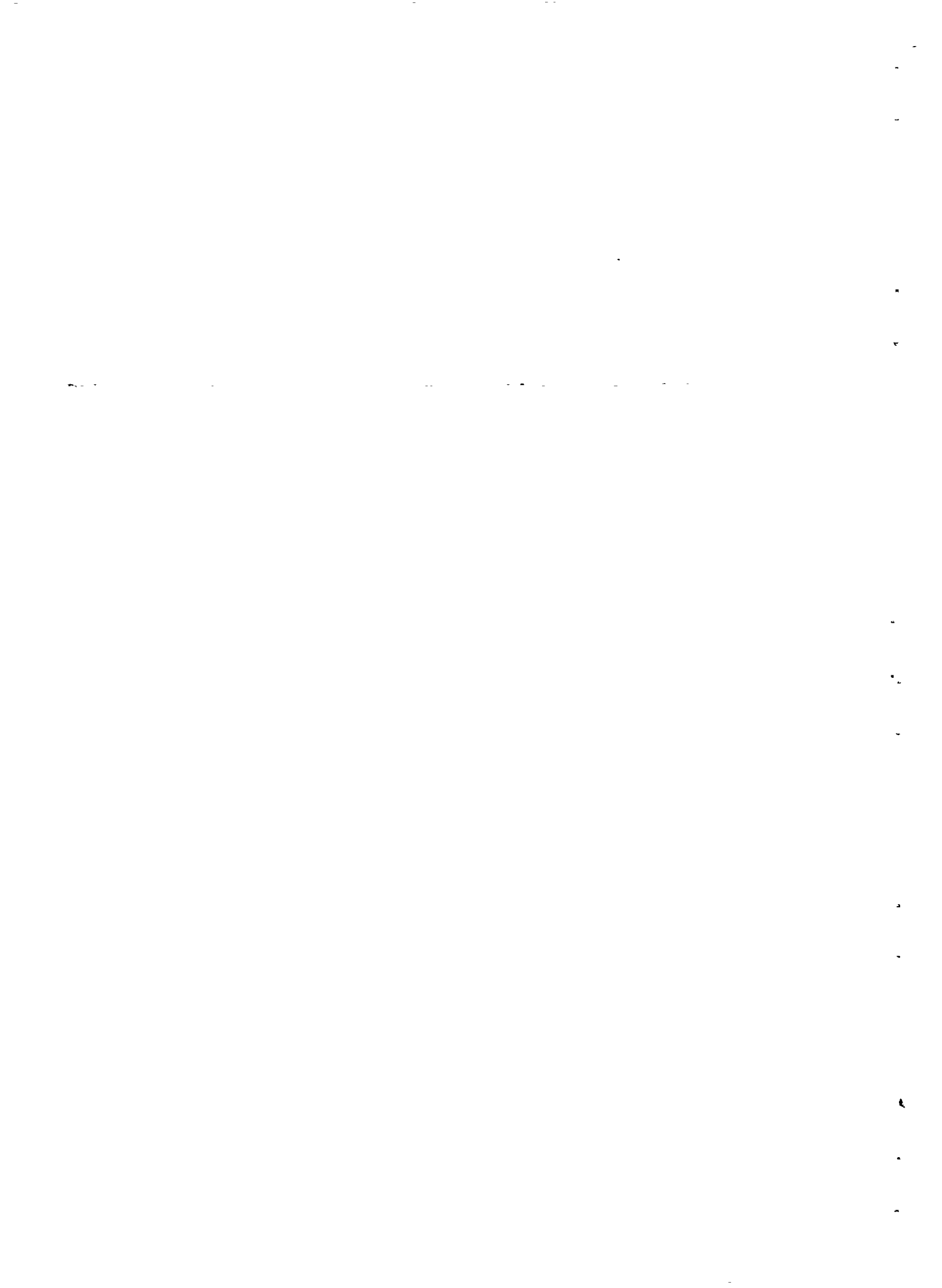
The practice of defecating in or around the house was mainly reported in case of children.

Some other observations that were made are :

(Observations based on defecation practices of male members of the influencers family)

1. Influencers in 'good' villages mainly reported the use of household pits/latrines or community latrines. As against the influencers from 'poor' villages mainly reported the practice of defecating outdoors. This is evident from the following figures.

- 57% of the influencers in 'good' villages reported the use of household pits/latrines as against 20% from 'poor' villages.
- 10% of the influencers from 'good' villages reported the use of community latrines. In 'poor' villages there was no mention of these.
- In 'good' villages only a few influencers mentioned going outdoors - 20% of all respondents mentioned defecating at hills, fields etc and 6% mentioned defecating besides a water source. The corresponding figures for poor villages were 49% and 19% respectively.





2. The use of household pits/latrines was mentioned more in the states of Manipur, West Bengal, Gujarat, Uttar Pradesh and Andhra Pradesh - 75%, 58%, 54%, 45% and 40% respectively. The other states - Tamilnadu, Madhya Pradesh and Rajasthan had a low mention of using household pits/latrines - 21%, 29% and 17% respectively.
3. The use of community latrines had the highest mention in the state of Rajasthan - 17%. As against this there was no mention of community latrines in Uttar Pradesh, Madhya Pradesh and Manipur.

As regards children, a higher percentage of influencers in the state of Tamilnadu reported the practice of children defecating near the house - 33% and defecating in the market place, garbage dumps etc - 21%.

When we compare these findings from the information obtained from the VOS some interesting differences emerge. From the, VOS we found that the distribution of latrines in the villages contacted by us was as follows :

Base : 44 (All villages)

<u>Type of latrine</u>	<u>Nos.</u>		
	<u>All</u>	<u>Good village</u>	<u>Poor village</u>
Private	30	20	10
Community	13	10	3

(Table 5a, 6a)

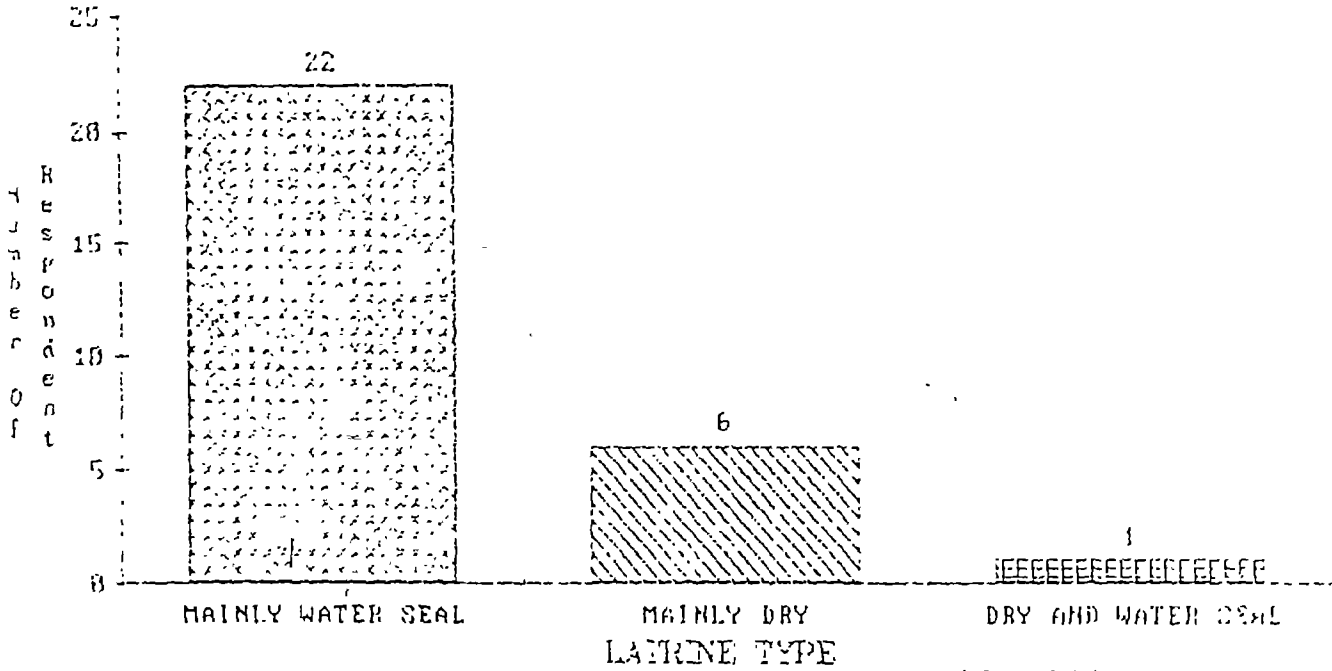
More villages had household latrines rather than community latrines. Also a larger number of 'good' villages had household or community latrines as against 'poor' villages. This seems to corroborate our earlier findings that :

- use of household latrines was mentioned more often than community latrines and
- it was mainly influencers from 'good' villages who reported the use of latrines.

EXHIBIT 14 (a)

Base = 30 Villages (with latrine)

TYPE OF LATRINE

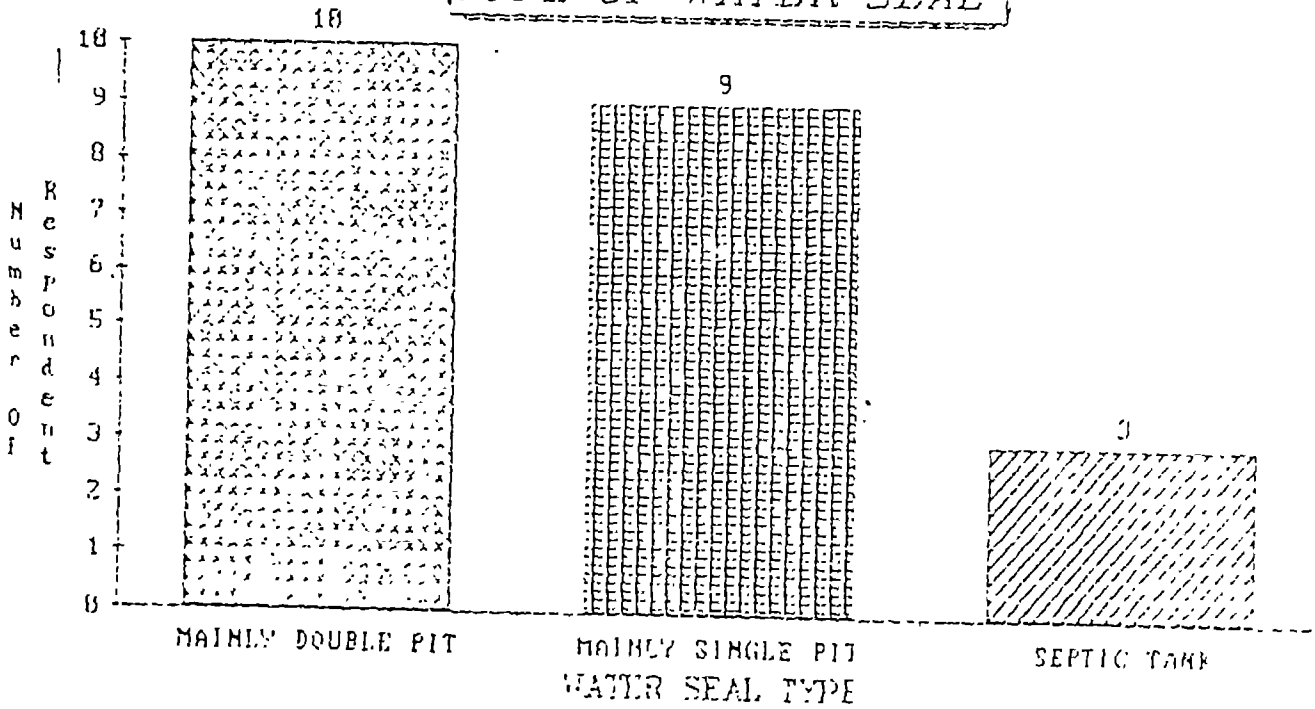


( Table 5 (c) V05 )

EXHIBIT 14 (b)

Base = 22 Villages (with waterseal latrines)

TYPE OF WATER SEAL



( Table 5 (c) V05 )

However, it is very interesting and rather revealing of community attitudes to note that whereas about 30% of the village (13 out of 44) had community latrines, only 5% of the influencers mentioned their use. The reasons for this could be ;

1. Aversion to using community latrines because of lack of proper maintenance/cleanliness
2. Aversion to using community latrines because of social status connotations.

As regards the type of private latrines installed in the village the information obtained from the VOS is presented in Exhibits 14(a) and 14(b)

Exhibit 14(a) and 14(b) show a very encouraging trend as it reflects that most villages had the comparatively more hygienic water seal latrines as against the dry type/pit latrines.

#### 4.1.2 Village households

Influencers were then asked about the defecation practices followed by the people in the village. The practices reported by influencers have been presented in Exhibit 15.

From Exhibit 15 it can be noted that majority of the villages were going outdoors for defecation purposes. Also, use of private latrine was much lower for the villagers 12%-14% as against 40% - 42% in the case of influencer household. This is not surprising since private latrines were mainly installed by the economically well off households and most influencers would fall in that category.

However even in case of community latrines a lower percentage mentioned their use by villagers - 3% as against 5% in the case of influencer family members.

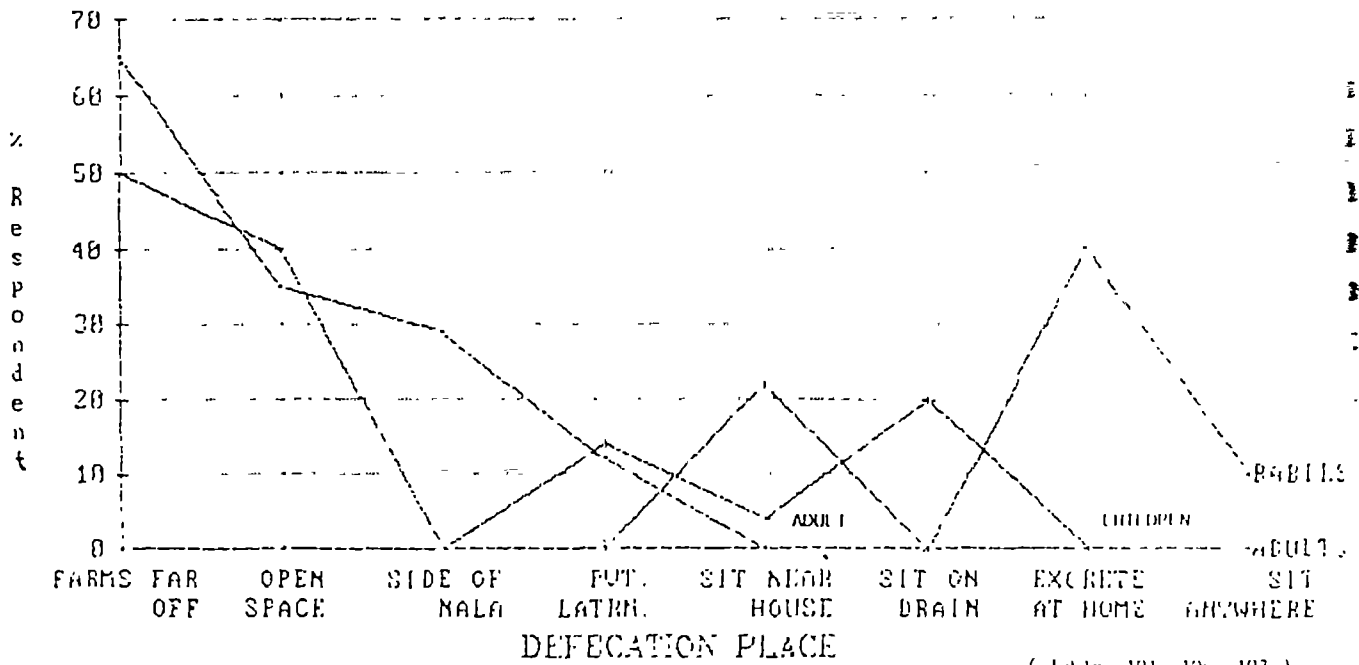
This can be explained by a preference for going outdoors rather than use latrines. It could be possible - but this is only a hypothesis - that the community latrines were usurped by influential persons in the village. Such a practice could explain the marginally higher use of community latrines by influencers.

EXHIBIT 15

Village household

Base = 176

**PLACE OF DEFECATION**



Babies were in most cases defecating inside the house. The excreta was then collected and thrown outside by the mother. The mother would also clean the area when the baby had defecated.

It is very interesting to note that no respondent spoke of children defecating at the side of the 'nala' (canal) though nearly 30% spoke of adults doing so. The reason for this is not known.

Influencers were asked if in their village any area was specifically marked where only a particular set/group of villagers could defecate. To this, the influencers replies were ;

Base : 176 (%)

Response :

Specific areas are marked	7
No specific areas are marked	92
Not specified	1

(Table 104)

Majority of the influencers responded that no areas were specifically marked for any group. Those who answered that separate areas were marked said that areas were marked for the following groups :

Base : 13 (Nos.)

Basis for segregation :

For men and women different areas are marked	7
For different village areas are marked	3
For different castes there are different areas	2

Demarcations, when spelled out, were essentially with regard to sex.



## 4.2 CLEANING PRACTICES

### 4.2.1 Cleaning self

Influencers were asked about the most common method by which people in the village would clean themselves after defecation. They were specifically probed on the item used for cleaning and the place. The answers of the influencers are presented below :

Base :	(%)
<u>Cleaning practice</u> :	
People take water alongwith them	57
Clean themselves with water	20
Sit close to a water source and clean there	20
Come back after defecation and wash themselves	9
Come to a water source after defecation and clean there	4
Clean themselves with a stone	2
Clean themselves with leaves/twigs	1

In most cases, people were reported to be cleaning themselves by using water. While a majority reported that people would carry water, some also reported the practice of sitting near a water source. This also shows that in most cases people cleaned themselves at the place of defecation itself. No separate cleaning practices were reported for men and women. Other observations were :

1. The practice of carrying water alongwith was mainly reported by influencers in Andhra Pradesh, Uttar Pradesh and Rajasthan - 96%, 92% and 83%. As compared to this only 23% of the influencers in Gujarat mentioned this practice.
2. The practice of defecating next to a water source was mainly mentioned in West Bengal by 58% of the influencers. There was no mention of the practice in Rajasthan and Gujarat.

3. Tamilnadu and Madhya Pradesh were the only states where the practice of cleaning after coming back home was reported. The practice was mentioned more in Tamilnadu - 58% as against Madhya Pradesh - 10%.

Younger children and babies were mostly cleaned by their mothers. The age upto which the mother cleaned the child was as follows :

Base :	176	(%)
Age of child :		
Upto 3 years		39
Above 3 but upto 5 years		45
Above 6 but upto 7 years		9
Above 7 years		6

(Table 108)

This shows that upto 3 years of age all the children were cleaned by their mothers. However, 84% of the influencers reported that mothers cleaned their child upto 5 years of age and 15% reported that mothers cleaned even beyond that age.

#### 4.2.2 Disposal of excreta

Influencers were asked if the village people covered the excreta after defecation or if it was left open. Their answers were :

Base :	176	(%)
<u>Human excreta is</u>		
Usually covered		2
Usually left open		95
Don't know		3

(Table 115)



Most respondents observed that human excreta was usually left uncovered. Those who answered that excreta was covered, mentioned the following ways of covering it.

- covering with leaves
- covered with sand or dust

Influencers who responded that excreta was not covered gave the following reasons for not covering it.

Base : 168 (%)

Human excreta is not covered because :

Villagers are not habituated to it	42
Villagers are not aware that the excreta should be covered	30
Figs eat away the excreta	18
No way of covering it/it is a problem to cover/involves work	18
Defecate in open space/space where no one else has to go	17
Soil absorbs excreta/excreta dries up by itself/gets converted into soil	13
Villagers don't feel it is necessary to cover it	13
No one cares/thinks about it	9
Defecate far from the house, so no need	7
Go to a water source, so it gets washed away	5
Villagers are uneducated	5
Feel dirty to cover/defecate and go off	2

(Table 116)

The main reason given for leaving the excreta uncovered was 'habit' i.e the villagers have got so used to leaving the excreta uncovered that they do not even give the matter a second thought. Quite a few influencers also mentioned the fact that the villagers were unaware/uneducated and therefore did not realise that excreta should be covered. This indicates a need for educating the villagers about the importance of covering excreta after defecation.

What is revealing in the above table is the fact that a certain segment of influencers gave a number of justifications/explanations to justify the practice of not covering excreta. This shows that the influencers themselves also did not feel it was important to cover human excreta.

#### 4.2.3 Washing hands

Influencers were asked about what the villagers normally did after defecating and cleaning of self. Their answers were :

Base : 176	(%)
After cleaning self the villagers ....	
Come home and wash hands	26
Wash hands with soap	19
Wash hands with plain water	15
Wash their hands and legs	10
Wash hands with mud/ash	9
Take a bath on coming home	8

(Table 110)

Some other practices were :

- Women wash clothes they are wearing after coming home (3%)
- Enter the house after cleaning/scrubbing their feet (2%)

The above table clearly shows that the common practice among villagers was to come home and wash hands after defecation. The influencers were then probed on how rigourously did the villagers follow this practice of washing hands after defecation. To this the influencers responded as follows :

Base : 176	(%)
<u>After defecating villagers wash hands ...</u>	
Always	69
Sometimes	3
Rarely	1
Never	1
Not specified	26

(Table 111)

A fairly large percentage of influencers reported that villagers always washed hands after defecation.

The practice of washing hands was reported strongly most in Madhya Pradesh and Gujarat where 95% and 89% of the influencers respectively responded that villagers always washed hands after defecation. As compared to this in West Bengal and Tamilnadu there was less mention of this practice - 42% and 29% respectively.

Continuing on the discussion on this issue influencers were asked about how villagers washed their hands after defecation. Specifically they were questioned on whether villagers used something else besides water to wash their hands or not. The influencers responded as follows :

Base : 176	(%)
<u>Villagers use something besides water :</u>	
Yes	66
No	31
Not specified	3

The practice of using something else along with water had very little mention in the two Southern states. In Andhra Pradesh only 8% of the respondents mentioned this while in Tamilnadu there was no mention of using a cleansing agent alongwith water.

The influencers were further questioned about the cleansing agent used by the villagers for washing hands after defecation. The cleansing agents mentioned by them are shown in Exhibit 16.

Some observations here are :

1. The use of soap was mainly reported by influencers in 'good' villages - 45% as compared to those in the 'poor' villages - 28%.
2. In the northern states of Uttar Pradesh and Rajasthan also, only a few influencers mentioned the use of soap - 9% and 12% respectively.
3. About 15% of the influencers in Madhya Pradesh mentioned specific brands of soap/washing powder like Surf and Lifebuoy.

The above discussion indicate that the villagers in most cases followed the hygienic practice of washing hands after defecation, using a cleansing agent alongwith, which however was usually not soap.

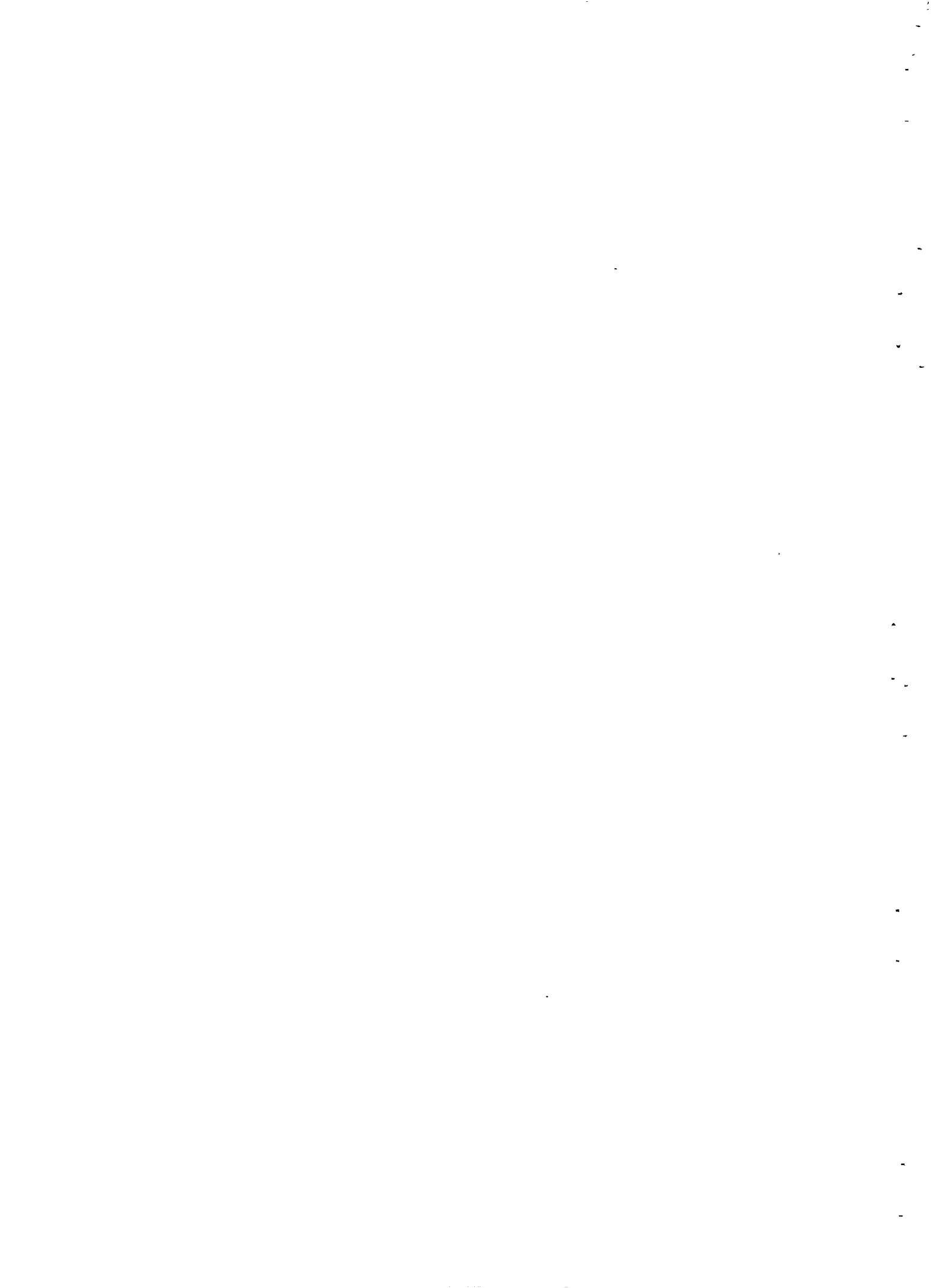
### 4.3 PROBLEMS OF DEFECACTION PRACTICES

Influencers were asked whether in their opinion, the villagers found the existing defecation practices to be a problem or not and the reasons for it. Only a small percentage of the influencers - 15% - responded that in their opinion the existing defecation practices were not perceived to be a problem by the villagers (Table 120). Most other influencers responded that they were indeed perceived to be a problem. The problems mentioned were :

Base : 176	(%)
<u>Problems :</u>	
During rainy season it is inconvenient	41
Lack of privacy	14
The place where one goes to defecate is very dirty	11
Can lead to diseases/health problems	10
Inconvenient to go out at night	10
When there is full crop in the fields then it is a problem	10
Women in the house feel shy to go out	10
Lack of open space is a problem	6
Smells bad	5

(Table 120)

The first item to be noted is that the single largest reason mentioned pertained to occasion-related inconvenience rather regular inconvenience. This could be interpreted to mean that these respondents did not really believe that outdoor defecation was a problem but said so because they were asked a specific question on this. Having said so, they could not think of explanations for this inconvenience and resorted to an occasion based reason.



Secondly, only 10% of the influencers mentioned harmful effects on health as a problem. Most others talked about the inconvenience of going outdoors for defecation.

Another interesting observation was that a comparatively higher percentage of influencers in Madhya Pradesh and Gujarat - 38% and 31% respectively - were of the opinion that the current defecation practices did not pose any problems to the villagers.

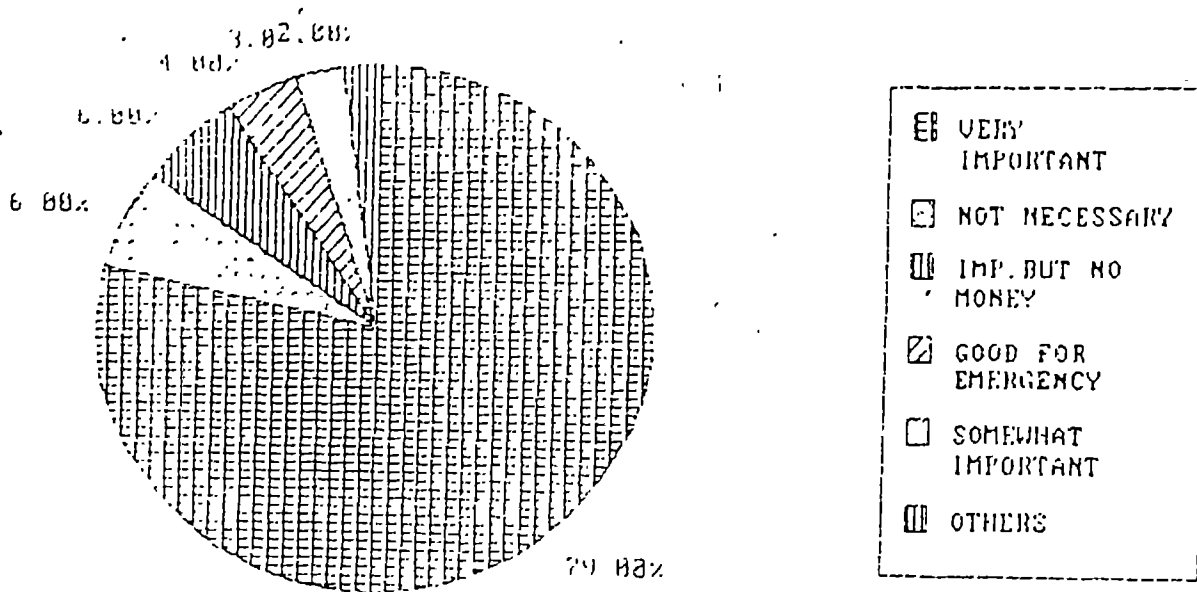
Influencers who did not find the current defecation practices to be a problem gave the following reasons :

- This is our custom, so how can it be a problem 13%
- No problem since we go out early in the morning 7%
- No problem, since there is enough open space available 3%
- There is no problem of bad smell 3%
- No problem since people defecate far from the houses 2%

(Table 120)

EXHIBIT 17

# NEED FOR HOUSEHOLD LATRINE

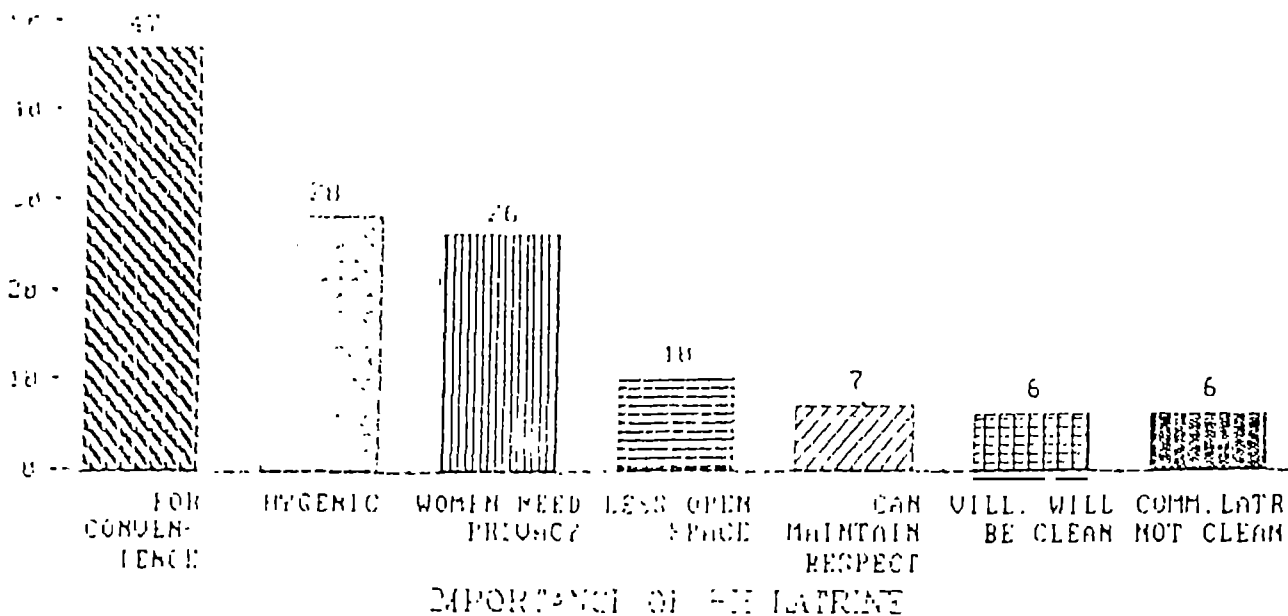


( Table 126 )

EXHIBIT 18

base : 176

# REASONS IN FAVOUR OF HOUSEHOLD LATRINE



( Table 126 )



#### 4.4 HOUSEHOLD LATRINES

##### 4.4.1 Need for household latrines

Having discussed the problem of outdoor defecation, the influencers opinion was sought on the importance of household latrines for their village. They were asked if in their opinion there was a need for every household to have a latrine or not and the reasons for their opinion. The influencers opinion is presented in Exhibit 17.

The responses in Exhibit 17 shows that most influencers felt a strong need for household latrines for all people in the village. The need for household latrines was comparatively less strongly felt by influencers in Andhra Pradesh and Tamilnadu where 64% and 63% influencers respectively mentioned that latrines were very important. The reasons given for attaching such importance to household latrines are shown in Exhibit 18.

From Exhibit 18 it can be observed that household latrines were felt to be important for three reasons - convenience, hygiene and privacy, in that order.

Interestingly, 6% of the influencers also gave the reason 'community latrines are very dirty' as a reason for installing household latrines. The perception that community latrines are dirty (and therefore may be not preferred for use) was also reflected in the low percentage reporting the use of these latrines (section 4.1.2).

It may also be noted that the problems of current defecation practices more or less match the expected benefits of household latrines.

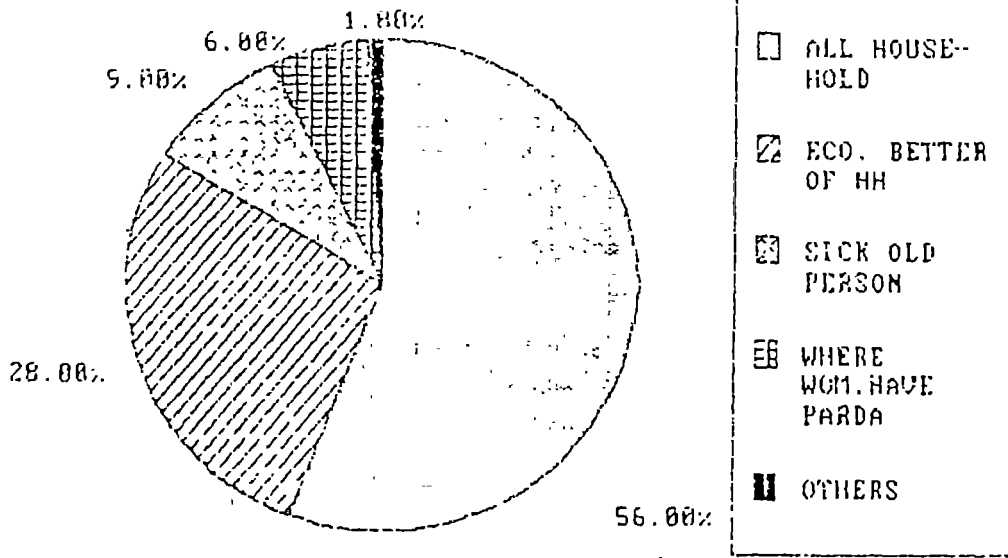
The influencers who did not consider household latrines to be an important need gave the following justifications :

- Lots of open space is available for defecation purposes 3%
- Like to go outdoors as it is healthy 2%
- It is our habit/custom to go outdoors 2%

EXHIBIT 19

Case = 176

HOUSEHOLD LATRINE ARE  
REQUIRED BY



( Table 127 )

Influencers were then asked about what type of houses needed or should have a household latrine. The answers given by them are presented in Exhibit 19.

The reply - 'houses where women live in purdah' came mostly from influencers in Uttar Pradesh - 17%. Other states where this was mentioned were Gujarat and West Bengal - 8% each and Andhra Pradesh and Tamilnadu - 4% each.

#### 4.4.2 Problems and conveniences

Influencers were asked if they were aware of any problems in the use or maintenance of household latrines. To this 49% of the influencers responded that they were not aware of any such problems. The balance 51% mentioned the following problems :

Base : 89 (%)

##### Problems :

Problem if sweepers don't clean/if people don't flush after use	24
If near the house, it stinks, creates dirtiness	10
Problem if there is no water connection	8
Problem in cleaning the pit when it gets filled up	8
Gives a bad smell if not cleaned	7
Current type of latrines break very easily	6

(Table 128)

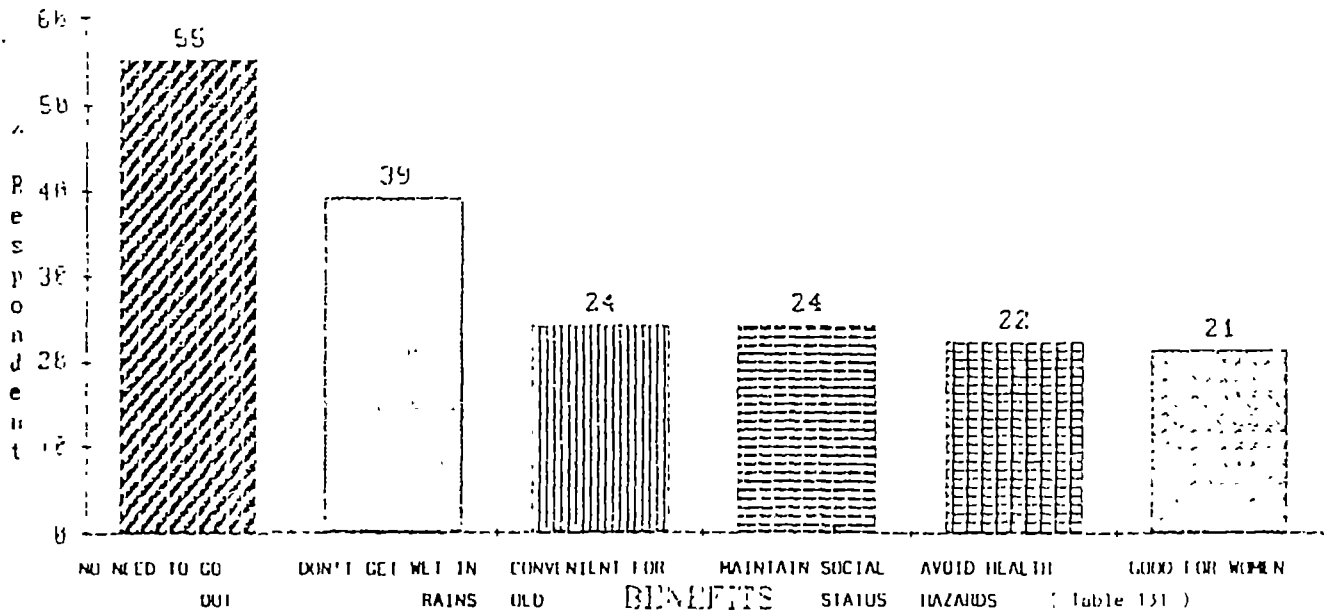
Some other problems that were mentioned were :

- Due to no gutter, flush gets covered and dirt accumulates	2%
- If its a dry type of latrine there is a problem of cleaning it up regularly	2%

EXHIBIT 20

Base = 163

PERCEIVED BENEFITS OF  
HOUSEHOLD LATRINE



However there were no major problems associated with the use or maintenance of household latrines. This was further reinforced when we asked for the influencer's opinion on whether household latrines provided more convenience or created more problems. The response obtained was :

Base : 176

<u>Household latrines</u> :	%
Provide more convenience	94
Create more problems	6

(Table 130)

Therefore majority of the influencers were of the opinion that household latrines provide convenience rather than create problems - a very favourable attitude towards household latrines. The reasons given for such an opinion were the benefits of a household latrine as perceived by the influencers. These have been presented in Exhibit 20.

Some respondents also mentioned benefits other than those shown in Exhibit 20. These were :

- No dirt	7%
- No pollution	5%
- No water contamination	3%

Interestingly the main benefits of a household latrine as felt by the influencers were - convenience, social status and hygiene in that order. In section 4.4.1 when talking about the importance of household latrines influencers had mentioned convenience, hygiene and privacy as the major reasons for installing such latrines. However when talking of perceived benefits hygiene was replaced by social status in the ranking. Privacy was not mentioned directly by any influencer.

#### 4.4.3 Paying for a household latrine

Influencers were asked if they were aware of the cost of a household latrine. Those who answered in the affirmative were asked to give their estimate of the costs involved in constructing a household latrine. 14% of the influencers were not able to give any estimates. The rest of the influencers gave the following estimates :

Base :	151	(%)
<u>Estimated cost of a household latrine :</u>		
Below RS 1000		13
Rs 1001 - 2000		14
Rs 2001 - 5000		42
Rs 5001 - 10,000		27
-AboveRs 10,000		5

(Table 133)

As many as 42% of the respondents quoted a cost between Rs 2001-5000. Only 27% believed that costs would be less than Rs 2000 while 32% expected a private household latrine to cost more than Rs 5000. Influencers were then asked of their assessment regarding the proportion of village households who would be able to pay for their own household latrine. The responses obtained were :

Base : 151 Proportion of HH's able to pay	Estimated Cost of latrine (%)		
	Below Rs 2000	Rs 2001- 5000	Rs 5001+
	None	5	11
0 - 5%	8	28	22
5 - 10%	23	14	24
10 - 25%	28	16	18
More than 50%	10	10	12

[Table 133(a)]

Less than 10% of the influencers felt that more than 50% of the village households could afford to pay for a household latrine. This is a reflection of the overall low income levels of the villagers. An obvious finding is also the fact influencers who had quoted a lower price i.e below Rs 2000 stated a comparatively higher proportion of households who could afford the latrine as against influencers who had quoted a higher price.

- 28% as against 16% - 18% who stated that 10-15% of the household would be able to pay
- 23% as against 19-12% who stated that 25-50% of the households would be able to pay.

Influencers were further questioned on their perceptions with regard to the willingness of village persons to spend on latrines. The answers were :

Base : 158	(%)
<u>Of the HH's who can afford to pay ...</u>	
Upto 20% will pay	7
20 - 40% will pay	10
40 - 60 will pay	17
60 - 80 will pay	10
80 - 100% will pay	46
Not specified	11

(Table 135)

In the opinion of influencers, a fairly large percentage of households who could afford to pay for a private latrine would also be willing to do so. The percentage once again indicates that influencers (and in thier opinion villagers), were positively inclined towards the concept of household latrine. However the major block would be the cost of the latrine and thereby its affordability.

Some observations were :

1. Influencers in 'good' villages stated that a higher percentage of 'able to pay' households would also be willing to pay as compared to influencers in 'poor' villages - 47% vs 36% mentioned that 80-100% of the able households would be willing to pay
2. In the states of Andhra Pradesh, Uttar Pradesh, and Rajasthan 70%, 68% and 59% of the influencers mentioned that 80-100% of the 'able to pay' households would also be willing to pay. The corresponding percentag: for West Bengal and Manipur were 17% and 14% only.



#### 4.5 COMMUNITY LATRINES

Influencers were questioned on the acceptability of community latrines in their village. They were asked whether in their opinion community latrines would be used by the villagers or not. Their answers were :

Base : 176 (%)

##### Use of community latrines :

Would be used (All)	74
Would be used by all	44
Would be used as it would be convenient	16
Would be used if there are adequate facilities	10
Would be used by those not having private latrines	7
Would use if near their houses	6
Would use if there is water facility	6
Will be used by a few people	6
Will be used by ladies	4
Won't be used (All)	26
People won't clear it after use	12
No one will use it	7
Troublesome to maintain	5
Village scattered, too far to come to a community latrine	3

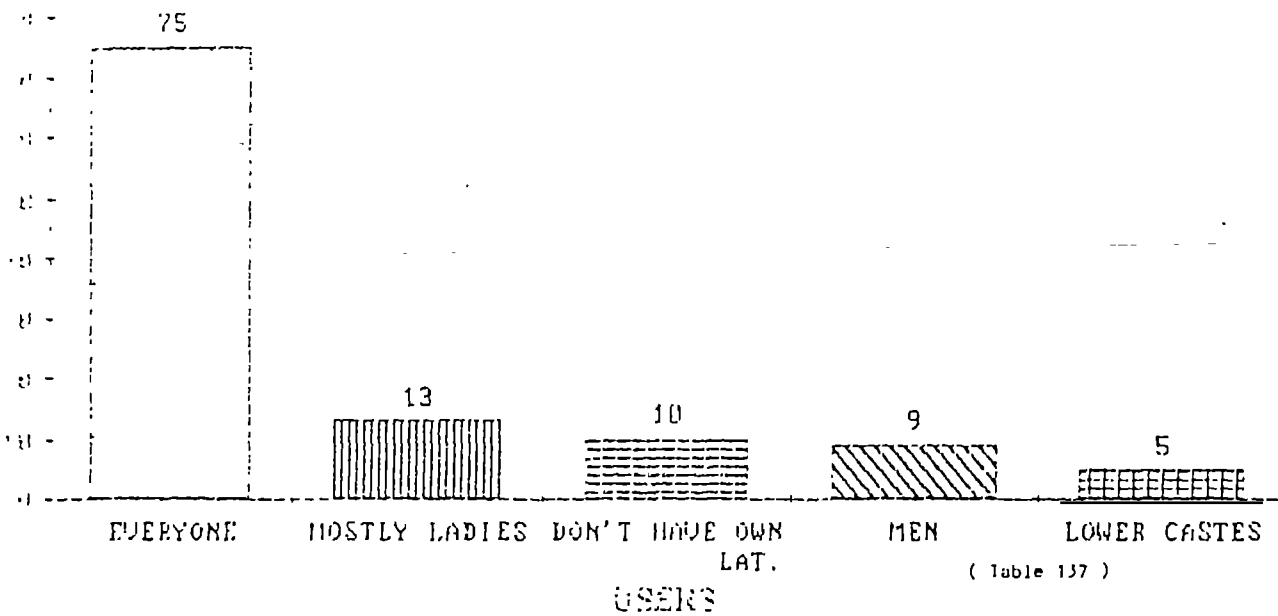
(Table 136)

The overall reaction was in favour of community latrines with 74% of the influencers stating that these would be used by the villagers. The reaction to community latrines was somewhat less enthusiastic in Rajasthan where only 54% of the influencers responded that these latrines would be used by the villagers.

EXHIBIT 21

Base = 124

PROFILE OF COMMUNITY  
LATRINE USER



In Manipur and Uttar Pradesh the reaction to community latrines was very positive with 100% and 63% of the influencers respectively saying that all villagers would use community latrines. The corresponding percentage in Tamilnadu was 17% only indicating a very lukeworm reaction. This would need to be compared with views of villagers that will be obtained from the quantitative stage of the study. Opinions of the villagers obtained in group discussions opinions of villaers inidcated that they were not as enthusiastic as influencers seemed to believe they would be.

It should be noted here that a certain set of influencers also commented that community latrines would be used if adequate facilities e.g water were provided alongwith. This is important as in the absence of adequate facilities , latrines cannot be maintained properly. This would make the villagers averse to their use.

Influencers were then asked to elaborate on the profile of the people who would use/not use community latrines. The response obtained are presented in Exhibit 21.

Some other descriptions of a community latrine user were :

- Adults/Children 4% each
- Middle income level people (Rs 250-500) 3%
- Income above Rs 500 4%
- Upper caste - brahmins, thakurs/  
Trader commuity 1% each

As can be observed, although most influencers were of the opinion that community latrines would be used by everyone in the village, there were some who differred in their opinion.



A small percentage of influencers were of the opinion that community latrines would be used by those who were not well off economically or belonged to the lower castes. Thereby implying that the well off or higher caste people would not use these latrines. This implication is further corroborated when we look at the profile of potential non-users of community latrines as given in by influencers.

Base : 176 (%)

Community latrines will not be used by ...

Those who are rich	17
Those who have their own latrines	15
Children/babies	14
Old people	12
Those who like to go out	11
Anyone	11
Ladies	8
Illiterate, poor, adivasis	7
Those who are orthodox traditional	6
Men	6

(Table 138)

Some other descriptions were :

- Unless there are separate caste based latrines, people/upper castes will not go	8%
- The young and the able won't go	3%
- People who stay far won't go	3%

Therefore the major dimensions defining a likely user or non-user of community latrine appear to be :

- Economic status
- Caste
- Social status

In addition there is some difference by sex also :

- Ladies have been mentioned more often as likely users of community latrines.

The mention of separate caste based latrines was high in the state of Rajasthan and Andhra Pradesh - 29% and 16% respectively.

Finally influencers were asked whether they themselves would use a community latrine if it was installed in their village. Their responses were :

Base : 176	%
Would you use community latrines ?	
Yes	49
No	48
Can't say	2

The above table shows a mixed response. It is also interesting to note that whereas 74% of the influencers had stated that community latrines would be used by the villagers, only 49% said that they would use these themselves. The explanation for such a difference in responses lies in influencers opinion of the profile of people who would use/not use community latrines. As has been discussed earlier some influencers were of the opinion that the economically well off/high caste people would not use such latrines. As most influencers would themselves belong to the category their willingness to use community latrines is not very high. Also it is possible that some of the influencers already had private latrines in their house and hence their response was an obvious 'No' to community latrines.

1. The person who is the author of the document is the person who is responsible for the content of the document.

