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LOW COST SANITATION IN KERALA

FINAL REPORT ON STAGE-II (REVISED)

FEBRUARY 1994

Prepared For : STATE INSTITUTE OF RURAL DEVELOPMENT  
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Madras : IMRB/JR/HSG/50419



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## I. INTRODUCTION



## I. INTRODUCTION

### - Background

The issue of rural sanitation has received considerable attention from several institutions in Kerala, both Governmental and Non-Governmental agencies.

These include:

- o Centrally-aided Public Sector Programmes such as IRDP, NREP, RLGP etc.
- o State Government programmes such as those by State Rural Development Departments, Municipalities, Departments of Panchayats, etc.
- o Voluntary non-profit agencies and other private groups, some of whom obtain financial assistance from abroad.

Despite the involvement of these agencies, it is felt that the supply of sanitation facilities hardly matches the demand which has been increasing continually as a result of improved education and health awareness. However, there has been no specific evaluation done or data available, either on the need for sanitation facilities or on the capacity to supply them.





Proper use and maintenance of the sanitation facilities are as important as its provision in the final contribution to improved health standards. Some of these agencies have extended their involvement beyond construction of facilities to organising beneficiary education and other follow-up programmes but there has been no structured feedback on the effectiveness of these measures. Also, a few agencies have sought to achieve a greater commitment from beneficiaries by requiring them to contribute finances (25%) towards the cost of construction; again, it is not known whether this strategy has resulted in the better use and maintenance of facilities or if it had, on the other hand, hampered the growth in demand.

At this stage, the State Sanitation Cell - including the different implementor agencies and co-ordinated by the Rural Development department - wished to assess and review the sanitation situation in the State, in order to organise future efforts on this issue in a planned, systematic manner. The client approached Indian Market Research Bureau to survey the market situation and indicate guidelines for future action.

A report on the initial phase of this study amongst implementor agencies has already been submitted to the client in April 1993.

This is our final report on the second phase of this study conducted amongst beneficiaries and influencers.



- Research Objectives

The overall objective was to determine awareness and attitudes towards low-cost sanitation and current practices, about with regard to sanitation.

Specifically, we aimed to:

- check awareness about LCS schemes
- determine beneficiaries' attitudes to participation in such schemes through financial contribution
- study the costs involved to build LCS latrines
- ascertain non-beneficiaries' attitudes to LCS schemes
- investigate perceptions about need for proper sanitation facilities
- and study current practices on use and maintenance of sanitation facilities

- Method

In this phase, we conducted structured interviews amongst beneficiaries (with an MHI below Rs.1000). Further, we contacted an equal number of Housewives and Chief Wage Earners, in this sample.

The sample also comprised Influencers (PHC staff, Doctors, Panchayat Officials, Social Workers etc.).



- Survey Locations

A total of 18 Panchayats were covered, spread over 6 districts.

- Alleppey
- Kottayam
- Trichur
- Calicut
- Palghat
- and Cannanore

In each panchayat, we targetted to achieve:

- 46-48 interviews with beneficiaries/non-beneficiaries.
- and 8-9 interviews with influencers.

- Sample

The sample sizes achieved are detailed below:

<u>Segment</u>	<u>Target</u>	<u>Achieved</u>
Beneficiaries/ Non-beneficiaries	850	897
Influencers	150	160
	-----	-----
	1000	1057
	-----	-----

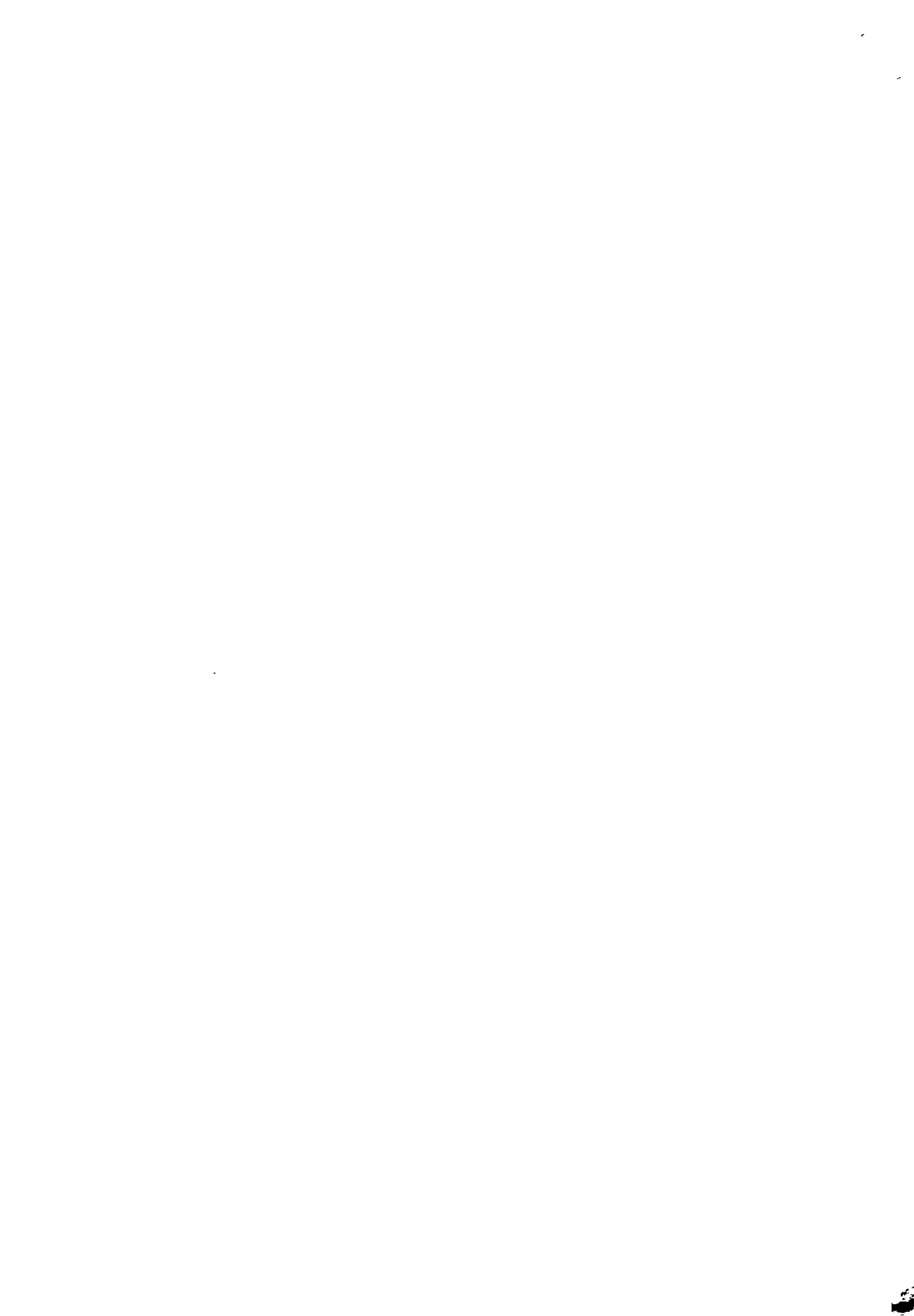


<u>District</u>	<u>Panchayat</u>	<u>Beneficiary/ Non-beneficiary</u> No.	<u>Influencers</u> No.
Alleppey	Trikunnapuzha	48	10
	Cheriyamad	53	9
	Punnappa	49	9
Kottayam	Vijayapuram	48	9
	Nattakam	48	9
	Vazhapally	49	10
Trichur	Puthenchira	48	9
	Kaipamangalam	59	8
	Nattika	50	9
Calicut	Ramanattukara	49	8
	Feroke	50	9
	Kunnamangalam	53	9
Palghat	Malempuzha	51	9
	Vellineshi	48	8
	Cheruplassery	46	9
Cannanore	Kolacherry	50	9
	Mayyil	48	9
	Panoor	50	8
	TOTAL	897	160





**II. SANITATION : CURRENT SITUATION**



## II. SANITATION : CURRENT SITUATION

Kerala is characterised by high literacy rates (91%) and therefore a heightened awareness of health standards in general.

The Census 1991 indicates that the state's total population is 29 million, with about 5.1 million households. The distribution of population in the 14 districts are:

<u>District</u>	<u>Population ('000s)</u>
Thiruvananthapuram	2939
Kollam	2398
Pathanamthitta	1187
Alappuzha	1991
Kottayam	1825
Idukki	1077
Ernakulam	2812
Thrissur	2735
Malappuram	3093
Palakkad	2377
Wyanad	671
Kozhikode	2614
Kannur	2245
Kasargode	1071
	-----
Total	29035
	-----



In most low-cost sanitation programmes, "providing adequate basic sanitation" to the impoverished sections of the society has been the primary objective. Consequently, the emphasis in these programmes has been to cover population below the poverty line (defined currently as people with an annual income less than Rs.11,000).

Whilst Census 1991 shows the proportion of households below the poverty line, a survey conducted by the IRDP shows an overall incidence of 32% of sanitary latrines amongst these households as follows :

<u>District</u>	<u>Hhs below poverty line</u> ( '000s)	<u>Rural Hhs with sanitary latrines</u> ( '000s)
Thiruvananthapuram	203	57
Kollam	186	74
Allappuzha	135	56
Pathanamthitta	69	26
Idukki	76	12
Kottayam	109	47
Ernakulam	121	54
Thrissur	176	65
Palakkad	153	22
Malappuram	171	54
Kozhikode	167	66
Wyanad	52	4
Kannur	106	25
Kasargode	64	10
	-----	-----
Total	1788	572
	-----	-----



As we have seen (refer to report on stage-I), several Government departments and NGOs are currently involved in conducting sanitation programmes. All programmes construct water-seal latrines. The UNDP design of twin pit pour flush latrine (TPPF) is the model most commonly constructed.

As we have also seen, several government agencies and NGOs are actively involved in the sanitation programmes. The main agencies involved in rural sanitation are:

o Commissionerate for Rural Development with the member programmes:

- National Rural Employment Programme\* (NREP)
- Rural Landless Employment Guarantee Program (RLEGP) (including Indira Awas Yojana)\*
- Central Rural Sanitation Programme (CRSP)
- Jawahar Rozgar Yojana (JRY)
- Development of Women And Children in Rural Areas (DWCRA)
- NGOs assisted by CAPART
- People's Action For Development (PAD) through NGOs

same }

o Socio-Economic Units (Dutch - Danish assistance)

o Directorate of Panchayats

o Directorate of Municipalities

o Directorate of schedule castes/Tribal welfare

o Department of fisheries.

\* From 1989-90, the sanitation programmes under NREP and RLEGP have been merged with the sanitation programme under JRY.





A number of voluntry agencies including Mahilasamajams are also working in the field of low-cost sanitation. Some of the important organisations are :

- Indian Red Cross Society, Kottayam
- 'Rastha', Wayanad
- Vinoba Nikethan, Nedumangad
- Mithra Nikethan, Vellanad
- Harijan Sevak Sangh, Delhi



### III. CONCLUSIONS



### III. CONCLUSIONS

This quantitative stage revealed high levels of awareness about LCS schemes, amongst beneficiaries of such schemes, non-beneficiaries and influencers (e.g. Panchayat Officers, School Teachers etc.), throughout the study.

Besides, the desire for well maintained private sanitation facilities was also quite evident across the diverse groups we contacted. In fact, a significant proportion of the non-beneficiaries were willing to take part in a scheme, involving financial participation of Rs.1000.

The influencers we contacted corroborated the high levels of interest shown by people in general. Further, these respondents were of the opinion that people should contribute to such schemes, as it would make them more responsible for both building and maintenance of latrines.

However only a small minority of the influencer sample felt that it would result in reduced contribution from the government - in other words, making such programmes more popular. This attitude amongst influencers would have to be gradually changed, over a period of time.



The study also pointed to a need to step up the communication efforts - about the function and benefits of a double - pit pour flush latrine. The majority of our respondents were not aware of the junction-box, which means that they cannot use it correctly, i.e. change the pits, nor could they associate any significant advantages, to the design.

Interestingly, the study indicated that convenience and privacy were the main motivations to own latrines in the household - and less importantly, health and protection from disease, as currently perceived by many educators.

Consequently, emphasising ownership of a latrine as a route to social dignity, could well prove an effective route, to make the scheme populist.

Furthermore, the youth and women - through Mahila Samajams - could catalyse this change, and help surmounting the challenge of providing basic sanitation facilities to those who are in every way deprived.





**IV. FINDINGS**



**ANALYSIS OF SAMPLE**



#### IV. FINDINGS

In this section, we are setting out the findings to be derived from the second stage quantitative study.

##### COMPONENT 1 : STUDY AMONGST BENEFICIARIES/NON-BENEFICIARIES

#### 1. ANALYSIS OF SAMPLE

In this section, we are detailing the demographic profile of the sample contacted.

As shown in the tables below, there were no significant differences in the profile between the beneficiaries and non-beneficiaries.

However, the non-beneficiaries were slightly more affluent and more literate than the beneficiaries.

	ANALYSIS OF SAMPLE		
	<u>Total</u>	<u>Beneficiary</u>	<u>Non-beneficiary</u>
	(897)	(453)	(444)
	%	%	%
<u>Age</u>			
15 - 25	13	12	14
26 - 30	17	15	19
31 - 35	15	15	16
36 - 40	19	19	19
41 - 45	19	20	17
46+	17	19	16
Average	36	37	36
<u>MHI</u>			
Below Rs. 500	66	72	60
Rs. 501 - 750	22	19	26
Rs. 751 - 1000	12	9	14
Average	441	414	

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## ANALYSIS OF SAMPLE (CONTD..)

	<u>Total</u> (897)	<u>Beneficiary</u> (453)	<u>Non-beneficiary</u> (444)
	%	%	%
<u>Occupation</u>			
Labourer	76	83	68
Skilled worker	7	6	9
Farmer	5	3	7
Unskilled worker	3	2	4
Petty trader	3	2	5
<u>Education</u>			
No formal edu.	12	14	9
School : 1-4 yrs	23	28	18
School : 5-9 yrs	44	41	46
9 yrs+, not Matriculate	14	10	18
Matriculate	5	5	5
Attended college, not graduate	2	1	3
<u>Literacy</u>			
Read fluently	63	57	68
Read slowly	18	20	15
Cannot read	20	23	17





## ANALYSIS OF SAMPLE (CONTD..)

	<u>Total</u> (897)	<u>Beneficiary</u> (453)	<u>Non-beneficiary</u> (444)
	%	%	%
<u>HH Size</u>			
Upto 2 members	4	4	4
3 - 4	34	33	35
5 - 6	38	38	38
7 - 8	16	18	14
9 - 10	4	3	4
11+	5	4	6
Average	5.5	5.4	5.6
<u>Earning Members</u>			
1	77	76	78
2	21	22	20
3	2	2	2
<u>Type of dwelling</u>			
Mud walls/thatched roof	13	15	11
Mud walls/Roof : tiled tin/asbestos	16	19	14
Brick wall : Thatched/tiled roof	69	66	72
Brick wall/Concrete or cement ceiling	2	1	3

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**SANITARY LATRINES**



## 2. SANITARY LATRINES

### 2.1 Year Of Building Latrines

In the study, we also determined the year in which respondents built their latrines.

Nearly three fourths (70%) of the households contacted had latrines that were built after 1989. In fact, among the beneficiaries, nine out of every ten latrines were built after 1989.

On the other hand, amongst the non-beneficiaries, years when latrines were built were spread more uniformly.

#### YEAR OF BUILDING LATRINES

<u>Year</u>	<u>Total</u> (897) %	<u>Beneficiary</u> (453) %	<u>Non-beneficiary</u> (444) %
1981 - 82	7	1	13
1983 - 84	4	1	7
1985 - 86	6	1	12
1987 - 88	9	5	12
1989 - 90	17	17	18
1991 - 92	36	<u>50</u>	22
1993	17	<u>24</u>	10

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## 2.2 Latrine Types

For classifying the latrines in the houses contacted, we asked respondents' permission to inspect the latrines. If they refused, we then showed drawings of the different latrine types, and classified the latrines.

The single pit type was found to be the most common latrine type, specially amongst non-beneficiaries. While quite a few (37%) households had double pit latrines, this was expectedly, restricted mainly to the beneficiary households.

Further, some non-beneficiaries contacted had service (hole/ pit in the ground) or septic tank type of latrines.

### LATRINE TYPE

<u>Type</u>	<u>Total</u> (897) %	<u>Beneficiary</u> (453) %	<u>Non-beneficiary</u> (444) %
Service (hole/ pit in ground with shelter	8	-	16
Single pit	50	31	68
Double pit	37	68	5
Septic tank	4	-	8





### 2.3 Maintenance Of Latrines

We checked the latrines for their cleanliness. The checks were :

- faeces/sediments sticking on pan
- unclean floor
- urine marks visible on walls of latrine

The interviewer then categorised the latrine as very clean, moderately clean or not at all clean.

More than one third (38%) of the households had latrines that were "not at all clean" and only a fifth (21%) were categorised as having very clean latrines.

Besides, a higher proportion (46%) of latrines in the non-beneficiary households were categorised as not being clean.

#### MAINTENANCE OF LATRINES

	<u>Total</u> (897)	<u>Beneficiary</u> (453)	<u>Non-beneficiary</u> (444)
	%	%	%
Very clean	21	28	15
Moderately clean	41	43	39
Not at all clean	38	30	<u>46</u>



#### 2.4 Assistance To Build Latrines

We asked respondents whether or not the government or any other agency had aided in building the latrines.

As expected, all non-beneficiaries had built the latrines themselves.

Among the beneficiaries, many (65%) of the latrines were built entirely by the government/agency. And slightly under one third (29%) were built by the respondent himself with help from the government/agency.

#### ASSISTANCE FOR BUILDING LATRINES

	<u>Total</u> (897)	<u>Beneficiary</u> (453)	<u>Non-beneficiary</u> (444)
	%	%	%
Entire latrine built by self	50	1	100
Built by self with aid from Govt. agency	15	<u>29</u>	-
Part built by self/part by agency	3	5	-
Built entirely by agency/Govt.	33	<u>65</u>	-



## 2.5 Communication Efforts By Agencies

In addition to assistance, we asked the beneficiaries whether they were given any advertising/communication material or classes about low-cost sanitation schemes.

44% said that classes and/or reading material was given about proper care and maintenance of latrines.

On the other hand, 56% of the beneficiaries said that they did not receive any guidance from the implementing agency, regarding proper maintenance of latrines.

### COMMUNICATION EFFORTS BY AGENCIES

	<u>Beneficiary</u> (450) %
Classes/special education	27
Advertising/other material	7
Both	10
None	<u>56</u>



## 2.6 Cost For Building Latrines

The average cost for building latrines was said to be Rs.2,382. There was only a marginal difference between the ones built through sanitation schemes (beneficiaries) and those built by respondents themselves (non-beneficiaries).

Interestingly, among the beneficiaries, one-third of the sample did not know the actual cost incurred in building the latrine. This could perhaps have been because these respondents were covered by the World Bank programme, which provides 100% aid to the beneficiary (part of which is a loan).

### COST FOR BUILDING LATRINES

	<u>Total</u> (897)	<u>Beneficiary</u> (453)	<u>Non-beneficiary</u> (444)
	%	%	%
Rs.1001 - 1500	23	12	<u>35</u>
Rs.1501 - 2000	10	12	9
Rs.2001 - 2500	13	<u>20</u>	6
Rs.2501 - 3000	9	10	8
Rs.3001+	19	13	<u>25</u>
Don't know	24	<u>33</u>	15
Average (Rs.)	2382	2396	2349





## 2.7 Beneficiary Participation

Amongst beneficiaries of low-cost sanitation schemes, most (87%) had made a financial contribution towards construction of the latrine.

Whilst the extent of contribution varied from below Rs.500 to Rs.2000, the majority (73%) of beneficiaries claimed to have contributed upto Rs.500.

### BENEFICIARY PARTICIPATION - FINANCIAL

	<u>Total</u>
<u>Contributed financially</u>	(451)
	%
Yes	87
No	13
 <u>Extent of contribution</u>	 (394)
	%
Upto Rs.500	<u>73</u>
Rs.501 - 1000	12
Rs.1001 - 2000	11
Rs.2001+	4



### 2.7.1 Other Contribution

Amongst the beneficiaries contacted, most (85%) had also contributed towards construction of the latrine, in ways other than finance.

These contributions were usually in the form of digging pits and transporting materials. A few others had also helped in the actual construction of latrines and by providing building materials.

While households with lower monthly incomes (below Rs.750) usually contributed by digging pits and transporting material, those with higher monthly incomes (Rs.751-1000) contributed not only by digging pits and transporting materials, but also helping in the construction of latrines and providing materials.

#### BENEFICIARY PARTICIPATION - OTHER CONTRIBUTION

Other contribution :

	%
Yes	85
No	15

Other contribution	Total	Less than Rs.500	MHI	
			Rs.501 - 750	Rs.751- - 1000
	(382)	(255)	(66)	(31)
	%	%	%	%
Digging pits	78	80	77	<u>65</u>
Transporting materials	73	73	77	<u>58</u>
Construction of latrines	20	17	24	42
Providing materials	17	13	21	36



**DOUBLE PIT POUR FLUSH LATRINES**



### 3. DOUBLE PIT POUR FLUSH LATRINES

#### 3.1 Awareness About Pits

In households that had double pit latrines, almost all (98%) respondents were aware that the excreta went into a pit in the ground.

However, there were a few (19%) non-beneficiaries who either felt that the excreta went into a drain or were not aware at all.

#### AWARENESS ABOUT PITS

	<u>Total</u> (332)	<u>CWE</u> (168)	<u>HW</u> (164)	<u>Beneficiary</u> (310)	<u>Non-beneficiary</u> (22)
	%	%	%	%	%
Into a pit in the ground	98	99	97	99	<u>82</u>
Into a drain	-	-	1	-	5
Don't know	2	1	2	1	<u>14</u>

Sample base : Respondents owning double pit latrines





### 3.2 Frequency Of Emptying Pits

We asked respondents who owned double pit latrines, about how frequently the pits had to be emptied, if used daily, by a family of 4-5 members.

More than one third (38%) of the respondents felt that the pit needed to be emptied once in two to five years.

Further, whilst almost a quarter of the non-beneficiaries mentioned that the pit needed to be emptied once in two years, only 10% of the beneficiaries shared this view.

As many as a quarter (22%) of the beneficiaries did not know the frequency with which the pits needed to be emptied.

#### FREQUENCY OF EMPTYING PITS ✓

	<u>Total</u> (332) %	<u>CWE</u> (168) %	<u>HW</u> (164) %	<u>Beneficiary</u> (310) %	<u>Non-beneficiary</u> (22) %
Once a year	9	10	8	9	14
Once in two years	11	10	12	10	23
Once in 2-5 yrs	<u>38</u>	44	32	38	41
Not necessary to empty	9	8	10	9	13
Transfer to/use another pit after 2 yrs	8	10	6	8	-
Don't know	21	16	<u>27</u>	22	9

Base : Respondents owning double pit latrines



### 3.3 Awareness Of Junction Box

The majority (60%) of the double pit latrine owners were not aware of the junction box.

Among the respondents who were aware of the junction box, we asked where they thought it was located and its perceived function.

Almost two-thirds (63%) of the respondents felt that the junction box was located below the trap.

Most respondents (78%) felt that the function of the junction box was to enable changing of the pits.

#### AWARENESS OF JUNCTION BOX

	<u>Total</u>	<u>CWE</u>	<u>HW</u>	<u>Beneficiary</u>	<u>Non-beneficiary</u>
	(332)	(168)	(164)	(310)	(22)
	%	%	%	%	%
Yes	40	54	26	43	-
No	60	46	<u>74</u>	57	<u>100</u>
Location of junction box	(134)	(91)	(43)	(134)	-
	%	%	%	%	
Below the trap	63	60	<u>70</u>	63	-
Below the pit	28	33	19	28	-
Don't know	8	7	9	8	-
Function of junction box	%	%	%	%	
Enables changing of pits	78	76	81	78	-
Connects the two pits	9	11	5	9	
Remove the block	2	3	-	2	
Don't know/Can't say	11	10	14	11	



### 3.4 Interest In Double Pit Latrines

Amongst non-beneficiaries, we assessed interest in double-pit latrines. While half the respondents said that they were very much interested in a double pit latrine being constructed near their 'homes', a few (14%) were not sure.

#### INTEREST IN DOUBLE PIT LATRINES

	<u>Total</u> (444)	<u>CWE</u> (218)	<u>HW</u> (226)
	%	%	%
Very much	50	49	50
Maybe	14	12	15
Not interested	35	<u>38</u>	33



Want a sanitary latrine

Most (87%) of those not interested in a double pit latrine already had a latrine in their homes.

**REASONS FOR NEGATIVE DISPOSITION**

	<u>Total</u> (157) %	<u>CWE</u> (83) %	<u>HW</u> (74) %
Already have a latrine	87	88	85
Do not have space in house	3	4	3
Do not wish to spend on latrine	2	2	1

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We also ascertained the price they were willing to pay for a double-pit latrine.

74% of the respondents with a positive interest were willing to pay upto Rs.500. A few others (13%) said they were willing to pay a higher price ie. Rs.751-1000.

#### PRICE WILLING TO PAY FOR TPPF LATRINE

	<u>Total</u> (281) %	<u>CWE</u> (134) %	<u>HW</u> (147) %
Upto Rs.500	74	75	74
Rs.501 - 750	4	7	1
Rs.751 - 1000	13	16	10

When we checked awareness about Subsidy Schemes, an overwhelming majority (87%) were aware of such schemes, by the government/ agency to build household latrines.

#### AWARENESS OF SUBSIDY SCHEMES

	<u>Total</u> (444) %	<u>CWE</u> (218) %	<u>HW</u> (226) %
Yes	87	90	84
No	13	10	16



### 3.5 Intention To Participate

To assess the interest levels in a participatory programme, we asked the respondents for their willingness to contribute Rs.1000 (with the government contributing an equal amount). Less than half (43%) the respondents were interested in such a scheme.

Amongst respondents who were not interested, 53% felt they could not afford it and another 35% were not interested because they already had a latrine. = 155 hrs.

#### WILLINGNESS TO PARTICIPATE IN BUILDING A LATRINE (RS.1000)

	Total	CWE	HW
	(444)	(218)	(226)
	%	%	%
Yes	43 = 100	49	36
No	51	50	52

Handwritten notes on the left side of the table:

- 1116
- No. of respondents 444
- 155
- 289
- willing to contribute 191
- or 60%

#### REASONS FOR NEGATIVE INTENTION TO PARTICIPATE

	Total	CWE	HW
	(226)	(108)	(148)
	%	%	%
Do not have money/ cannot afford	53	51	55
Already have a latrine	35	38	33
Do not have Rs.1000 for latrine	7	6	8
Do not wish to spend on latrine	3	4	



**OTHER INFORMATION**



#### 4. OTHER INFORMATION

##### 4.1 Latrine Users

In more than three-quarters of the households contacted, all members used the latrine. In addition, other members who used the latrine in the households were:

#### PERSONS USING A LATRINE

	<u>Total</u>	<u>Beneficiary</u>	<u>Non-beneficiary</u>
	(897)	(453)	(444)
	%	%	%
All	76	76	76
Male adults	23	22	23
Female adults	23	23	24
Old/sick	9	10	9
Boys	9	9	9
Girls	8	8	7





There were no significant differences among the latrine users in terms of either sex or age. This was the case, both for beneficiaries as well as non-beneficiaries.

#### PROFILE OF LATRINE USERS

	<u>Total</u>	<u>Beneficiary</u>	<u>Non-beneficiary</u>
	%	%	%
<u>Sex</u>			
Male	48	47	49
Female	52	53	51
<u>Age</u>			
Upto 15 yrs	25	27	23
16 - 25	24	23	25
26 - 35	18	17	19
36 - 45	15	15	15
45+	19	19	19



We also investigated the reasons attributed by respondents not using latrines. The predominant reason was that the household member was too young to use the latrine. Other reasons mentioned - albeit by a few - were that open-air defecation was better, and that water was not easily available.

#### REASONS FOR NOT USING LATRINE

	<u>Total</u> (219)	<u>Beneficiary</u> (110)	<u>Non-beneficiary</u> (109)
	%	%	%
Too young to use latrine	79	73	85
Not accessible ?	10	12	8
Open air is better	7	11	3
Not convenient	6	5	6
Water not available easily	5	7	2



#### 4.2 Source Of Water For The Latrine

In almost all (97%) households, water for the latrine was taken in a bucket from outside. Very few (3%) had either a tap or pot in the latrine.

##### SOURCE OF WATER FOR THE LATRINE

	<u>Total</u> (219)	<u>Beneficiary</u> (110)	<u>Non-beneficiary</u> (109)
	%	%	%
Taken in a bucket from outside	97	97	96
Tap in latrine	2	1	2
Pot	1	1	1

#### Method Of Cleaning Latrines

Most (84%) of the households were found to be using water and brush to clean their latrines. A minority (20%) mentioned cleaning products, and a small minority used phenol, soil/ash or dettol to clean the latrine.

##### METHODS OF CLEANING LATRINES

	<u>Total</u> (897)	<u>Beneficiary</u> (453)	<u>Non-beneficiary</u> (444)
	%	%	%
Water and brush	84	89	79
Use cleaning products	20	19	22
Use phenol	10	9	11
Soil/ash	3	5	2
Dettol	3	3	2
Do not clean	2	-	5



### 4.3 Reasons For Need Of A Latrine

Slightly more than half (55%) the respondents felt that a latrine in the household was convenient and provided privacy.

Other reasons stated for the need of a latrine was that it helped keep the surroundings clean, was healthier than open-air defecation and prevented diseases.

#### REASONS FOR NEED OF A LATRINE

<u>Reasons</u>	<u>Total</u> (897) %	<u>Beneficiary</u> (453) %	<u>Non-beneficiary</u> (444) %
Convenient/provides privacy	55	59	52
Keep surroundings clean	28	28	29
Healthier than open-air defecation	27	29	26
Protection from diseases	23	23	24
Prevents contamination/pollution	10	10	10





#### 4.4 Ailments Suffered

We gauged hygiene standards by asking respondents:

- the major/minor ailments they had suffered in the last 14 days
- their occasions of washing hands and the material used

For both adults and children, only a minority (1%) reported having suffered from major ailments.

The major ailments mentioned by adults were jaundice, tuberculosis, dysentery and diabetes. Children below 15 years were said to have suffered from dysentery and diabetes.

Indigestion was by far the most frequent minor ailment mentioned by both adults (31%) as well as children (29%).

Cold, cough, sickness and headaches were the other minor illnesses reported, though by only small proportions of respondents.

#### MINOR ILLNESSES SUFFERED

<u>Illnesses</u>	<u>Adult</u>	<u>Child</u>
	%	%
Indigestion	31	29
Frequent loose motion	1	2
Cold	5	3
Cough	5	4
Sickness	4	3
Headache	4	1
Asthma	1	-
Abdominal pain	1	-



#### 4.5 Hygiene Levels

Nearly the entire sample of the relevant\* population for each occasion washed their hands, before the activity.

#### HYGIENE LEVELS : OCCASIONS OF WASHING HANDS

	<u>CWE</u>	<u>HW</u>
	%	%
Before eating	99	100
Before cooking	(7)	94
Before feeding child	(8)	96
After defecation	99	99
After cleaning child's stools	-	94
After disposing child's stools	-	92

\* Note : For example, the occasion 'before feeding the child' was relevant mainly to housewives.



Most people usually washed their hands with only water, except after defecation and cleaning/disposing child's stools when significant proportions used both soap and water.

#### MATERIAL USED FOR WASHING HANDS

	<u>Total</u>	<u>CWE</u>	<u>HW</u>
	%	%	%
<u>Before eating</u>			
Water only	82	84	80
Water & soap	18	16	20
<u>Before cooking</u>			
Water only	81	85	81
Water & soap	18	12	19
<u>Before feeding child</u>			
Water only	72	71	73
Water & soap	27	27	27
<u>After defecation</u>			
Water only	41	49	34
Water & soap	58	51	66



**MATERIAL USED FOR WASHING HANDS**

	<u>Total</u> %	<u>CWE</u> %	<u>HW</u> %
<u>After cleaning child's stools</u>			
Water only	27	39	26
Water & soap	72	61	<u>74</u>
<u>After disposing child's stools</u>			
Water only	28	42	26
Water & soap	73	58	74





**COMPONENT 2 : INFLUENCERS**



5. COMPONENT 2 : INFLUENCERS

A total of 160 influencers were contacted.

These were people who are likely to influence attitudes and practices of the general population, with regard to use and maintenance of sanitation facilities.

Our sample consisted of:

<u>Segment</u>	<u>No.</u>
PHC staff	22
Doctor	11
School teacher	44
Panchayat worker	57
Social worker	16
Others	10
	-----
Total	160
	-----



### 5.1 Sample Profile

Not surprisingly, the majority of these respondents were above 35 years and educated atleast up to the matriculation level.

#### SAMPLE PROFILE

	<u>Total</u> (160)	<u>PHC staff</u> (22)	<u>Doctor</u> (11)	<u>School teacher</u> (44)	<u>Panch. officer</u> (57)	<u>Soc.worker/ Dev. officer</u> (16)
	%	%	%	%	%	%
<u>Age :</u>						
21 - 30	9	23	-	14	-	25
31 - 35	12	23	18	9	9	19
36 - 45	34	18	64	52	25	6
46 - 50	17	9	-	11	23	19
51+	28	27	18	14	44	31

#### Education :

##### School :

1-9 yrs	16	-	-	2	37	13
9 yrs+, not Matriculate	7	-	-	-	16	6
Matriculate	36	46	-	50	26	31

##### Attended college, not grad.

Graduate/PG	21	5	27	32	12	19
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## 5.2 Activities Conducted In Area

The community activities being conducted in most areas were water related education, sanitation and hygiene-related.

Almost all respondents said that sanitation related/LCS activities were being conducted in their area.

### ACTIVITIES CONDUCTED IN AREA

	<u>Total</u> (160) %
Water related/water source management	84
School education	88
Sanitation related/LCS	<u>94</u>
Hygiene/health education	87
Literacy programme	19





- Activities Respondent Involved In

About two-thirds of the respondents said they were involved in school education, sanitation related and/or hygiene/health education activities in their area. A few others were involved in water-related, health education and social work activities.

Amongst the panchayat officers contacted, almost the entire sample said that they were involved in sanitation related/LCS activities in their area.

Similarly, almost all (96%) of the PHC staff also said they were involved in health/hygiene activities in their area.

Amongst the other target groups, ie. Doctors, School Teachers etc. proportions claiming involvement in activities were in line with the average for the entire sample.

ACTIVITIES RESPONDENT INVOLVED IN

	<u>Total</u> (160)	<u>PHC staff</u> (22)	<u>Panchayat officer</u> (57)
	%	%	%
Water related/water source management	56	41	83
School education	64	18	63
Sanitation related/LCS	66	46	<u>97</u>
Hygiene/health education	69	96	72
Health education	44	50	60
Social work	40	5	65
Literacy programme	19	9	26



### Nature Of Involvement

We further checked about the kind of involvement the influencer had in the different activities.

For all activities, the respondents were involved in mainly advisory and supervisory roles.

About half of them also said that the nature of their involvement was to provide physical/manual help.

Another fact that came to light was that, most PHC officers were involved in advisory activities, the involvement of panchayat officers was in both advisory and supervisory activities.

#### NATURE OF INVOLVEMENT

	<u>Total</u>	PHC <u>staff</u>	Panchayat <u>officer</u>
<u>Sanitation</u>	(106)	(10)	(55)
	%	%	%
Financial	18	-	22
Advisory	86	90	84
Supervisory	77	40	86
Physical help	47	50	46
<u>Hygiene/health education</u>	(110)	(21)	(41)
	%	%	%
Financial	14	-	27
Advisory	81	71	85
Supervisory	72	62	78
Physical/manual help	52	57	56



### 5.3 Defecation Practices

We obtained the influencers' opinion about outdoor defecation and household latrines and also obtained reactions to the concept of pay-and-use latrines.

Nearly the entire sample was of the opinion that outdoor defecation was not a good practice.

#### DEFECATION PRACTICES

	<u>Self</u>	<u>Men</u>	<u>Women</u>	<u>Children</u>	<u>Elders</u>
	%	%	%	%	%
HH latrine	97	97	98	96	97
Outdoors	3	93	90	97	92
Outdoors, near water source	1	51	51	51	49



### Negatives Associated With Outdoor Defecation

More than half (54%) the respondents felt that outdoor defecation was an unhygienic practice. Slightly more than one-third felt that it causes ill-health, diseases and/or pollution.

Bad smell, inconvenience, problems during rains and lack of privacy were other reasons mentioned.

#### NEGATIVES ASSOCIATED WITH OUTDOOR DEFECATION

	<u>Total</u>
	(160)
	%
Causes ill-health	<u>43</u>
Not clean/unhygienic	<u>54</u>
Causes disease/infectious disease	38
Causes pollution	37
Bad smell	24
Problem during rains	8
Inconvenient	16
Lack of privacy	13

#### 5.3.1 Household Latrines

The majority (56%) of respondents felt that use of household latrines would ensure that their health remained good. Slightly more than half (54%) felt that it was clean/ hygienic.





Convenience, prevention of pollution/diseases and privacy were the other advantages associated with household latrines.

Very few of the respondents associated any particular negatives with HH latrines.

#### ADVANTAGES OF HH LATRINES

	<u>Total</u> (160) %
Maintain good health	56
Clean/hygienic	54
Convenient	33
Prevents diseases	19
More private	19
Prevents contamination/pollution	20

#### NEGATIVES ASSOCIATED WITH HH LATRINES

	<u>Total</u> (160) %
Bad smell	8
More flies/mosquitoes	3
Lack of space	3
Difficult to clean	2



#### 5.4 Opinion About Pay-and-use Latrines

Almost half (49%) of the respondents contacted were of the view that pay-and-use latrines would be very unsuccessful in their area.

In fact, only a quarter of all respondents (26%) held the view that such a facility would do well in their area.

This view was consistent across the various types of influencers, namely PHC staff, school teachers and panchayat officers of the area.

#### OPINION ABOUT PAY-AND-USE LATRINES

	<u>Total</u> <u>(160)</u>	<u>PHC</u> <u>staff</u> <u>(27)</u>	<u>School</u> <u>teacher</u> <u>(44)</u>	<u>Panchayat</u> <u>officer</u> <u>(57)</u>
	%	%	%	%
Very successful	14	5	18	16
Quite successful	11	14	5	9
Quite unsuccessful	26	14	30	32
Very unsuccessful	<u>49</u>	<u>59</u>	48	44



Negative Reactions To Pay-and-use Latrines

On the contrary, almost a third of the respondents (29%) felt that this facility would not be successful because people would not be interested in paying for a latrine.

While a few (27%) thought that the maintenance of such a facility would be poor, others (19%) were of the view that people of their area would not co-operate with such a programme.

A few others (14%) felt that such a facility was not necessary in their area, as most people already had a latrine.

**NEGATIVE REACTIONS TO PAY-AND-USE LATRINES**

	<u>Total</u> (119) %	<u>PHC staff</u> (16) %	<u>School teacher</u> (34) %	<u>Panchyat officer</u> (43) %
Not interested in paying for latrine facility	29	31	29	26
Maintenance will be poor	27	31	29	30
People may not co-operate	19	25	9	16
Not necessary/most people have a latrine	14	6	18	12



Reasons For Positive Reactions To 'Pay-and-use'

Respondents who felt that 'pay-and-use' type of latrines would do well, were asked to state reasons.

Slightly less than one third (31%) of the people were of the opinion that these facilities would provide them clean and well-maintained latrines.

Another quarter (28%) of the respondents said that more people would benefit from it whilst a few (23%) felt that it would be convenient for the poor.

REASONS FOR POSITIVE REACTIONS TO 'PAY-AND-USE'

	<u>Total</u> (39)	<u>School teacher</u> (10)*	<u>Panchyat officer</u> (14)*
Cleanliness/people to maintain latrines	31	40	36
More people will benefit	28	10	36
Convenient for the poor	23	20	29
Convenient for people who live in a community	8	10	7





**REACTIONS TO LCS SCHEMES**



## 6. REACTIONS TO LCS SCHEMES

### 6.1 Awareness About LCS Programmes

Almost all (95%) the respondents were aware of a low-cost sanitation programme being implemented in their area.

#### AWARENESS ABOUT LCS PROGRAMMES

	<u>Total</u> (160)	<u>PHC</u> (22)	<u>Doctor</u> (11)	<u>School teacher</u> (44)	<u>Panchyat officer</u> (57)	<u>Social worker</u> (16)
	%	%	%	%	%	%
Yes	95	<u>86</u>	91	93	98	100
No	4	5	9	7	2	-

#### Perceived Reactions Of People To LCS Schemes

Nearly all (95%) the respondents contacted felt that people in their area had responded positively to the provision of low-cost sanitation facilities, by the government.

This feeling was particularly high amongst school teachers and Panchayat officers.

#### PERCEIVED REACTIONS OF PEOPLE TO LCS SCHEMES

	<u>Total</u> (152)	<u>PHC</u> (19)	<u>School teacher</u> (41)	<u>Panchyat officer</u> (56)
	%	%	%	%
Very positive	83	<u>68</u>	83	86
Fairly positive	12	21	12	11
Neither +ve nor -ve	3	11	2	-
Fairly negative	2	-	2	4
Very negative	1	-	-	-



## 6.2 Opinion About Financial Contribution

A large majority (78%) felt people beneficiaries of LCS schemes should be asked to contribute financially. This was particularly so amongst doctors, school teachers and social workers.

Except for the PHC staff, most influencers also felt that the beneficiary should be asked to contribute less than half the cost.

A few (17%) of the respondents, however, felt that a beneficiary should be asked to contribute to the extent he could afford.

### OPINION ABOUT FINANCIAL CONTRIBUTION

	<u>Total</u>	<u>PHC</u>	<u>Doctor</u>	<u>School teacher</u>	<u>Panchyat officer</u>	<u>Social worker</u>
	(160)	(22)	(11)	(44)	(57)	(16)
	%	%	%	%	%	%
Should contribute:						
Yes	78	73	100	86	74	81
No	22	27	-	14	26	19
Extent of contribution :	(125)	(16)	(11)	(38)	(42)	(13)
	%	%	%	%	%	%
Less than half	65	38	64	74	64	77
Half	13	25	9	13	10	-
More than half	6	13	-	-	12	-
Extent they can afford	17	25	27	13	14	23



Reasons For Beneficiaries Financial Contribution

These respondents felt that financial contribution by the beneficiary, would ensure his participation and is then create a feeling of responsibility.

The main reason against beneficiary's contribution to the scheme, was the feeling that poor people may not be able to afford.

**REASONS FOR BENEFICIARIES' FINANCIAL CONTRIBUTION**

	<u>Total</u>
	(160)
	%
Ensures part'n of beneficiary/ creates responsibility	56
Good maintenance	6
Reduces the Govt's burden	5
Locals must also contribute	8
Poor people cannot contribute	20





### 6.3 Opinion About Non-Financial Contribution

Nearly nine out of 10 respondents contacted felt that beneficiaries could be asked to make contributions, other than finance for sanitation facilities.

However, a significant proportion (one third) of the PHC staff felt otherwise.

#### OPINION ABOUT NON-FINANCIAL CONTRIBUTION

	<u>Total</u>	<u>PHC</u>	<u>Doctor</u>	<u>School teacher</u>	<u>Panchyat officer</u>	<u>Social worker</u>
	(160)	(22)	(11)	(44)	(57)	(16)
	%	%	%	%	%	%
Yes	90	68	100	96	90	100
No	10	32	-	4	10	-



### Ways Of Non-Financial Contribution

Digging pits and providing labour was the most commonly (92%) suggested ways of non-financial contribution to the sanitation facilities.

Helping by providing and transporting materials were the other ways in which respondents felt the people could contribute towards the facility.

#### WAYS OF NON-FINANCIAL CONTRIBUTION

	<u>Total</u>	<u>PHC</u>	<u>School teacher</u>	<u>Panchyat officer</u>	<u>Social worker</u>
	(144)	(15)	(42)	(51)	(16)
	%	%	%	%	%
Provide materials	53	67	45	45	44
Dig pits/provide labour	92	93	93	90	94
Help transport materials	74	67	60	78	88



#### 6.4 Perceived Impact Of LCS Schemes

Most (81%) of the respondents felt that beneficiary contribution (financial or non-financial) would result in more people wanting latrines. A little less than a quarter (23%) felt that this would lead to better maintained latrines.

#### PERCEIVED IMPACT OF LCS SCHEMES

	<u>Total</u> (160) %
More people will want latrines	81
Latrines will be maintained better	23
Latrines will be used by more HH members	9



### 6.5 Association Of Sanitation With Health Problems

In line with the high literacy rate in Kerala, almost all the respondents were of the view that lack of sanitation facilities could lead to health problems. In fact, three fourths (74%) of the respondents were certain about this.

#### ASSOCIATION OF SANITATION WITH HEALTH PROBLEMS

	<u>Total</u>	<u>PHC</u>	<u>School</u>	<u>Panchyat</u>	<u>Social</u>
	<u>(160)</u>	<u>staff</u>	<u>teacher</u>	<u>officer</u>	<u>worker</u>
	(160)	(22)	(44)	(57)	(16)
	%	%	%	%	%
Yes, certainly	74	91	71	68	69
Yes, sometimes	23	9	27	26	31
No, not usually	1	-	-	2	-
No, never	2	-	2	4	-





### Health Problems Caused By Poor Sannitation

The most common health problems, associated with poor sanitation facilities, were loose motion/diarrhoea. About half the people felt that worms and fever were also a result of poor sanitation facilities.

A few (19%) others said that poor sanitation could also lead to cholera.

#### HEALTH PROBLEMS CAUSED BY POOR SANITATION

	<u>Total</u> (156) %	<u>PHC staff</u> (22) %	<u>School teacher</u> (43) %	<u>Panchyat officer</u> (54) %
Loose motion/ Diarrhoea	85	91	86	83
Worms	58	73	56	59
Fever	43	36	30	57
Cholera	19	32	9	20
Malaria	6	5	5	7
Jaundice	6	14	7	-



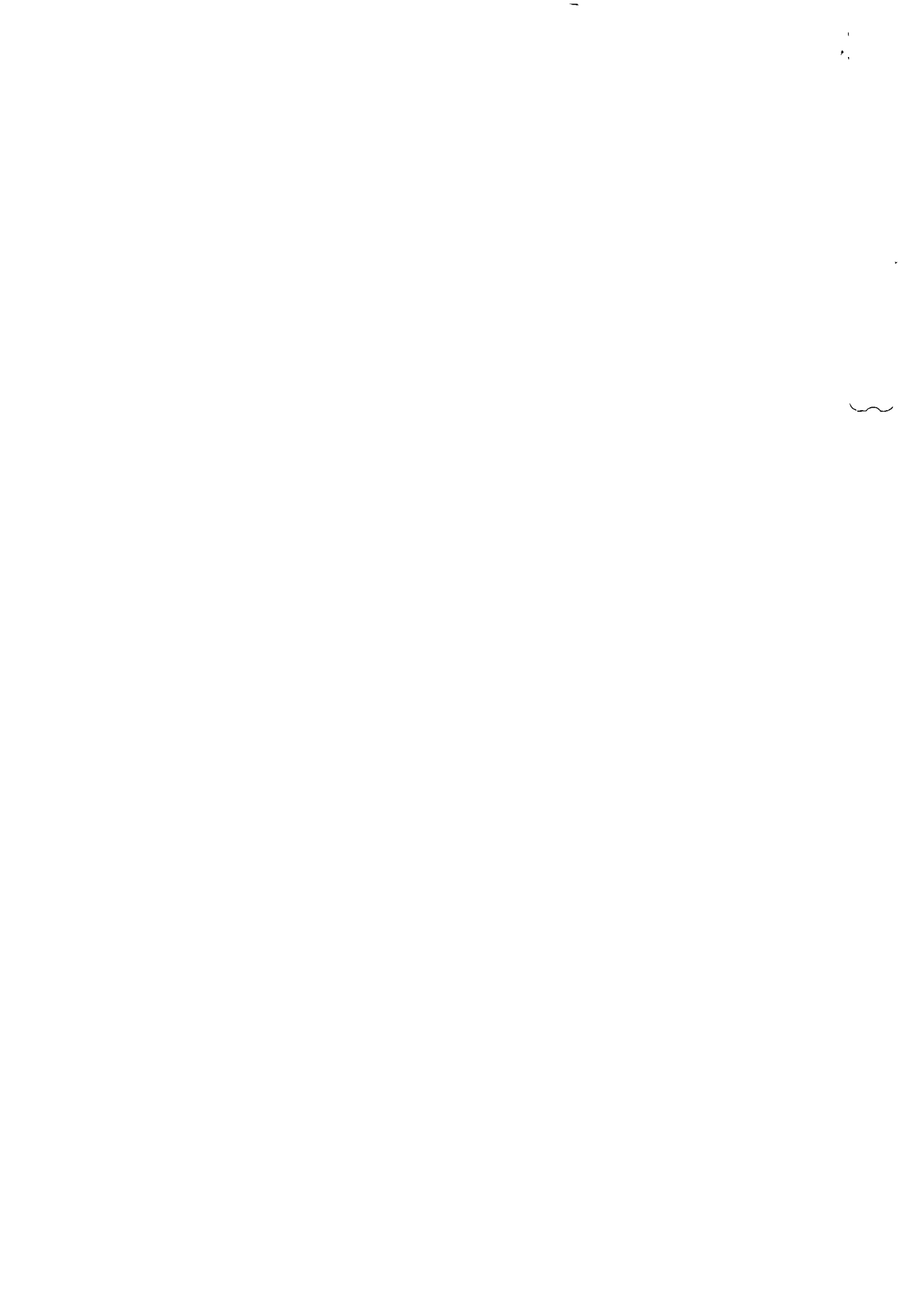
### 6.6 Perceived Need For HH Latrines

A majority (59%) of respondents felt that there was a need for household latrines in their area.

A significant proportion (39%) were also of the opinion that the current sanitation programmes were not satisfactory.

#### PERCEIVED NEED FOR HH LATRINES

	<u>Total</u>	<u>PHC</u>	<u>Doctor</u>	<u>School</u>	<u>Panchyat</u>
	<u>(160)</u>	<u>staff</u>	<u>(11)</u>	<u>teacher</u>	<u>officer</u>
	<u>(160)</u>	<u>(22)</u>	<u>(11)</u>	<u>(44)</u>	<u>(57)</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Strong need	43	41	46	50	40
Some need	16	14	-	11	19
Latrines needed, but other needs more urgent	1	-	-	2	2
Current system satisfactory	1	-	-	2	-
Current sanitation programmes not satisfactory	39	46	54	34	39



Suggested Improvements Of LCS Facilities

When asked to suggest ways to improve these facilities, slightly over a third (36%) felt the need to improve health education schemes and awareness amongst people of their area. Almost another quarter (23%) felt that the government should offer monetary help.

**SUGGESTED IMPROVEMENTS OF LCS FACILITIES**

	<u>Total</u>
	(62)
	%
Improve health education schemes/awareness	36
Govt. should offer monetary help	23
Improve water facilities	13
Increase number of latrines	13
Improve structure/strength of pit	7
Improve quality of junction box	5
One latrine per home	5

