Study on
FUNCTIONALITY AND UTILISATION OF HOUSEHOLD AND INSTITUTIONAL LATRINES IN TAMIL NADU

Prepared by

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Our heartfelt acknowledgements are also due to the Project Advisory Group (PAG), DANIDA (Danish International Development Assistance) - assisted Integrated Rural Sanitation and Water Supply Project (IRS & WS), Cuddalore, especially to Mr.Karl Aage Henk, DANIDA Adviser, Miss C.Rajathi, Senior Social Scientist and Mr A.Devarajan, Socio Economic Specialist of the Project Advisory Group for their consideration and help in this study. Mr.V Subramanian, Ms.Ramuthai, Mr.Chandrasekhar, and Ms Guruvammal field team of the PAG office are also acknowledged sincerely for their valuable inputs. We are also indebted to the Royal Danish Embassy, New Delhi, and to the Government of Denmark for being instrumental for the development process related to water, sanitation and hygiene in these areas, and also to Mr.Jens Bjerre, Counsellor Development, Royal Danish Embassy. Other staff members in the project office at Cuddalore and functionaries in the related departments have also helped us in many ways which we sincerely acknowledge.

Mr M.Saravanan, Ms.S.Nandini, Mr R.Sudhir, Mr.M.N.Rangarajan and Mr.S.Murukesan were the key investigators, apart from Socio Economic Unit Foundation staff, who had put their heart and soul into the study. We owe our sincere thanks to all of them.

It had been a challenging task to the SEU Foundation to bring out this report. We hope, the study has fulfilled the objectives and would help the IRS & WS Project to facilitate future interventions in the project expansion phase.

Socio Economic Unit Foundation, Kerala

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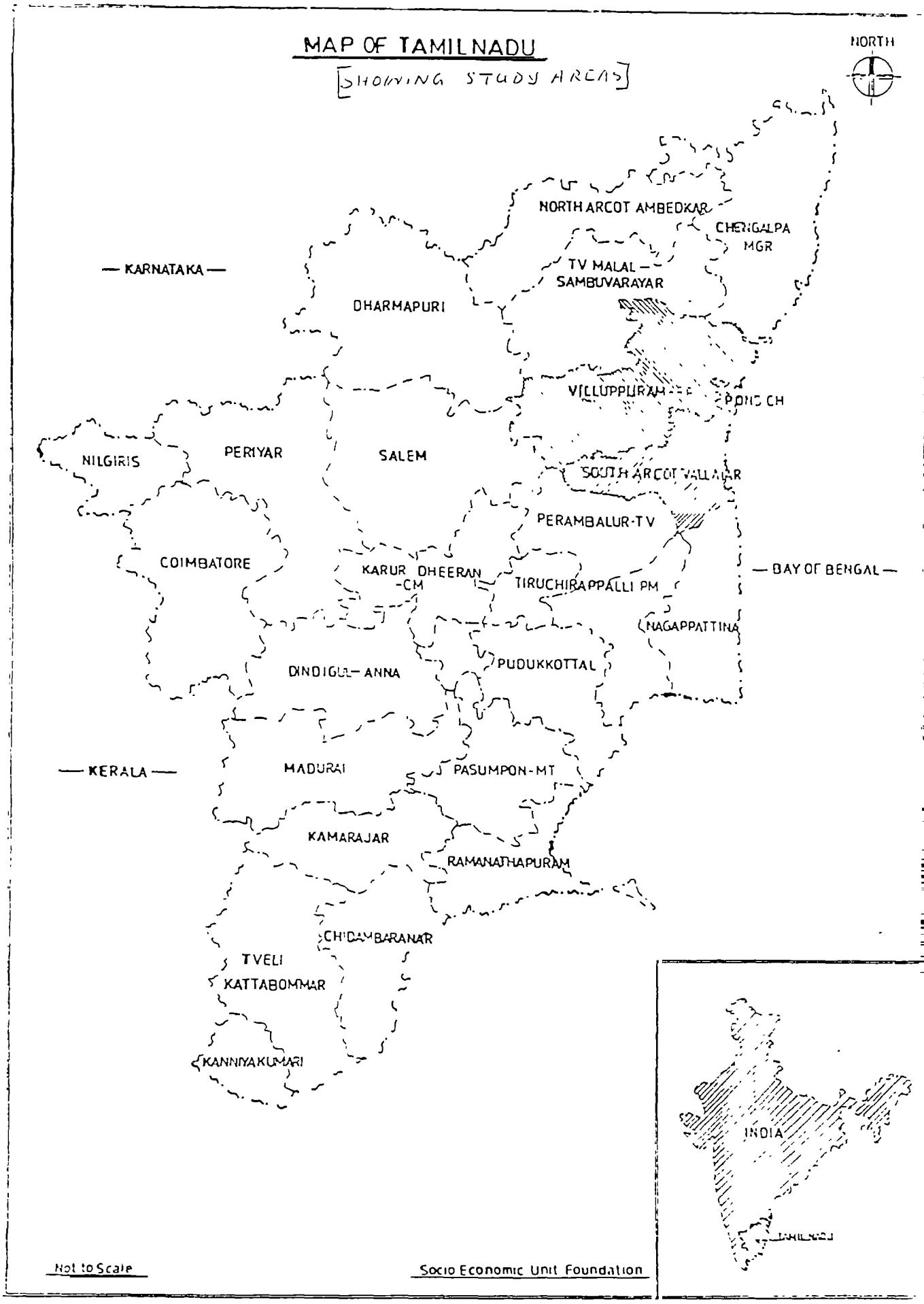
MAP OF TAMILNADU
[SHOWING STUDY AREAS]
NORTH
NORTH ARCOT AMBEDKAR
CHENGALPA MGR
TV MALAI – SAMBUVARAYAR
— KARNATAKA —
DHARMAPURI
VILLUPPURAM
PONDICH
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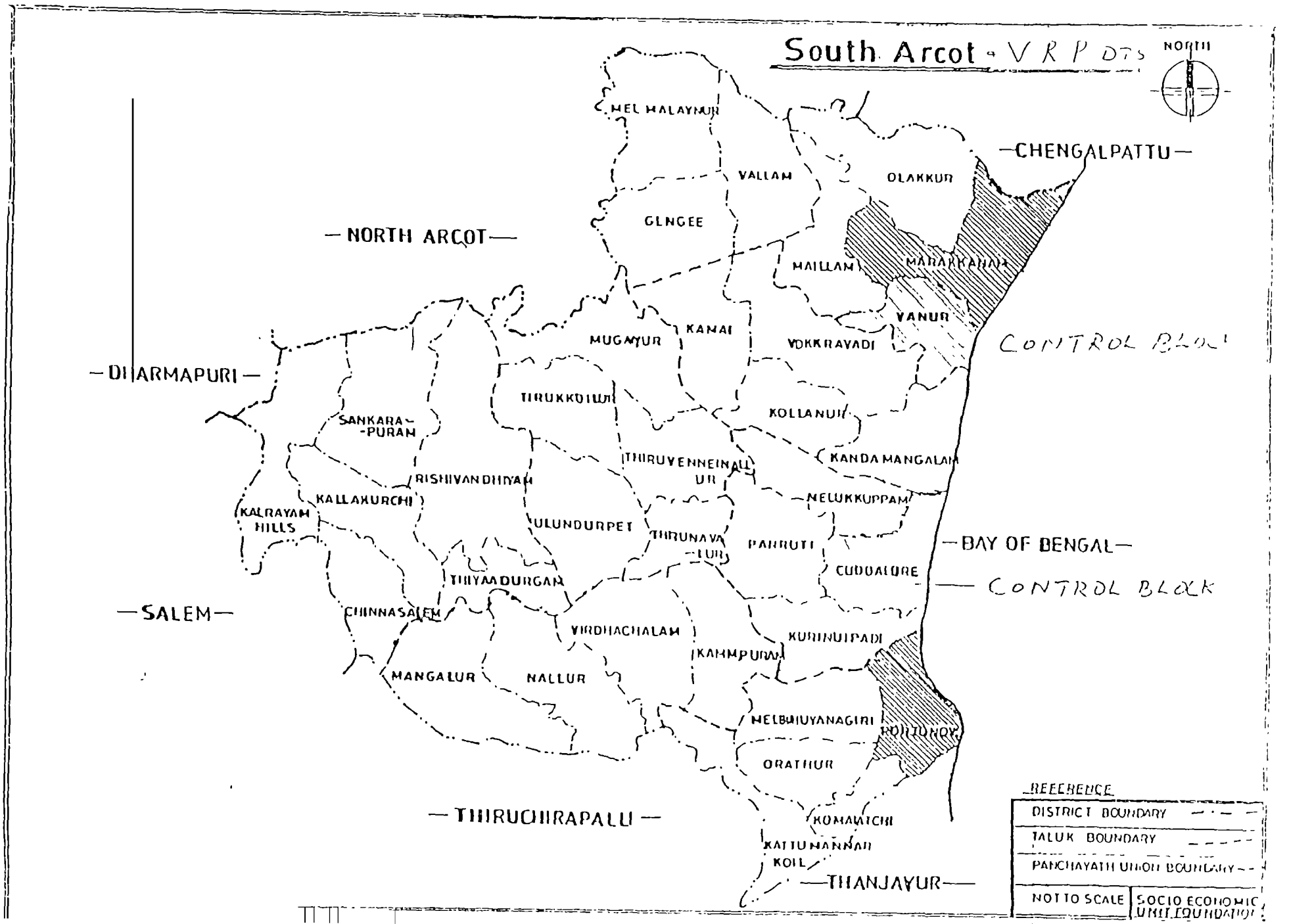
South Arcot - V R P DTS
NORTH
—NORTH ARCOT—
—DHARMAPURI—
—SALEM—
—THIRUCHIRAPALLI—
—THANJAVUR—
—CHENGALPATTU—
—BAY OF BENGAL—
CONTROL BLOCK
CONTROL BLOCK
VALLAM
OLAKKUR
GINGEE
MAILLAM
MARAKKANAM
VANUR
VIKKRAVANDI
MUGAIYUR
KANAI
TIRUKKOVILUR
KOLLANUR
SANKARAPURAM
KANDAMANGALAM
THIRUVENNAINALLUR
RISHIVANDIYAM
NELLIKKUPPAM
KALLAKURICHI
KALRAYAN HILLS
ULUNDURPET
THIRUNAVALUR
PANRUTI
CUDDALORE
THIYAGADURGAM
CHINNASALEM
VIRUDHACHALAM
KURINJIPADI
KAMMAPURAM
MANGALUR
NALLUR
MELBHUVANAGIRI
KOTTUMOY
ORATHUR
KUMAMTCHI
KATTUMANNAR KOIL
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
PANCHAYATH UNION BOUNDARY
NOT TO SCALE
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Executive Summary

This study on functionality and utilization of households and institutional latrines was undertaken in the Marakkanam Block of South Arcot Vallalar (SAV) District and Portonovo Block of Villupuram Ramasamy Padaiyatchiyar District (VRD) of Tamil Nadu State, one of the Southern States of India The pilot phase of the DANDIA (Danish International Development Assistance) assisted Integrated Rural Sanitation and Water Supply Project has been implemented in these two blocks from 1990 to 1995 The study has been undertaken in the context of a second expansion phase of the project which intends to extend the project activities in other 35 blocks of these two districts Provision of water supply at the rate of 40 litres per capita per day to all population and sanitary latrines at the rate of 15% coverage of total households is the overall project objective

The project has constructed about 5000 household latrines (12% coverage) and 112 school latrines among its various other outputs like coverage of all the habitations with water supply in the pilot blocks Various meetings and orientation programmes were conducted, many health education campaigns through video programmes using Communication Van were undertaken in majority of the habitations where latrines were constructed. Participatory and need based planning and implementation, strengthening of community participation and capacity building of local people and institutions form the key strategies of the sanitation programme.

It is in the above context, that the Socio Economic Unit Foundation was requested to undertake the present study with the objective of finding out

a The level of functionality/utilization of household and institutional latrines
b The factors that have contributed to the differences in utilization and functional quality of latrines and
c Peoples' knowledge, attitude and practice in sanitation within the project and neighbouring areas.

The study sample comprised of 905 households and 17 schools. The household sample included 525 households who had constructed latrine with project input (which formed 10% of the total household latrines constructed by the project during the pilot phase) and 380 households categorised under various groups of non-beneficiaries (those within the project area, project not supported areas and two control blocks adjacent to the pilot blocks). All sample schools had latrines and formed 15% of the total School latrines constructed with project input.

Data were collected through interviews and observations with the help of pretested and structured interview schedules and informal discussions with householders, village council members, villagers, teachers and students. Project staff also helped in the various stages of the study. A team of well experienced social scientists conducted the field investigation The entire study was supervised and guided by professionals with a decade of proven experience in Water and Sanitation Programmes in India.

The findings indicated that around 53% of the household latrines and 47% of the institutional latrines were being utilized, were in regular use and well maintained. The major factors that had contributed to the differences in utilization and functional quality of latrines in both households and schools were those related to construction(38%)

especially with reference to doors, and water scarcity. Designwise, the preference was for those having proper door, superstructure and roof. Block wise, Portonovo had higher utilization and higher level of satisfaction with the programme. Socio culturally, a higher number of households (58%) with more access to urban facilities utilized the latrines than those who do not have these access. Utilization was not related to specific age groups or gender group except in the case of school latrines, where location and size of doors and low ceiling height have limited the use by teenage girls

Analysis of Knowledge, Attitude and Practice (KAP) of the sample revealed that project interventions have helped tremendously in improving the villagers' level in these areas While there was 100% gain in knowledge level in the case of latrine owners, it ranged from 60-75% in the case of non beneficiaries Attitudewise differences still persisted among some of the latrine owners as a rationalisation for their non-use In the case of non-beneficiaries there was around 80% positive attitude and higher demand for latrines.

Unaware of low cost design and poverty were the main reasons stated by the non-beneficiary groups for not constructing latrines. Preference to open air was more related to lack of alternatives than to anything else

Two thirds of the total community in the project areas were satisfied with the projects' sanitation programme. 80% to 95% of those who do not have latrines have expressed willingness to construct latrines. Schools have started motivating the parents and other schools In short, a general momentum has been gained, greater realisation of needs have emerged and the advantages of having latrines have been penetrated to the minds of the people.

Well developed strategies with additional inputs to quality of construction, especially of doors with more durable materials, water facilities, peoples' involvement through different participatory approaches would help to effect a qualitative change Regular monitoring, in selected areas where there is extreme under utilization, feed back to the project and developing appropriate interventions to motivate usage of latrines, house visits, direct communication and participatory sessions are recommended. Collaborative efforts of other related organisations could also be extracted. Very effective and periodic training/orientation for selected women volunteers, village council members and masons are required.

With the additional capacities through these training, they could be entrusted with the supervision/construction of latrines thereby avoiding contract system which was disliked by many respondents· especially village council members.

Formation of School Health/Sanitation clubs and, suitable training for selected students (Health club members) could be planned and implemented. Training inputs to teachers could be stepped up Cost sharing for school latrines may also be considered with greater participation from the school community including Parent Teacher Association

A percolating effect was also observed in a few areas where those who could afford have started constructing latrines. This trickle-up strategy could be exploited when considerable number of latrines, specially for poor households have been built and put into use.

The revelations of this study is to be weighed from the baseline of a community for whom 'latrine was least wanted' and was a 'dirty thing' 80% of these households were not interested in owning a latrine and not even 5% were willing to share costs at the onset of the programme The task of raising their level to the present standard has been most challenging and rewarding The health behaviours have been successfully modified, though a lot are still to be done. It is also to be remembered that reverting to an earlier convenient(practice) but negative health behaviour is more easy than adopting and sustaining a more difficult positive behaviour. It is hoped that the findings of this study would facilitate the project personnel and their colleagues in other related departments to boost their efforts in improving the overall functionality, utilization and impact of the pilot phase and also of the expansion phase

1 INTRODUCTION

1.1 Background

The present study on Functionality and Utilization of Household and Institutional latrines was conducted in two pilot blocks of the DANIDA (Danish International Development Assistance) assisted Integrated Rural Sanitation and Water Supply Project (IRS&WSP), Tamil Nadu, India The pilot phase I commenced in 1990 in Marakkanam Block of Villupuram Ramaswamy Padaiyatchiyar District and in Portonovo Block of South Arcot Vallalar District and ended in 1995 The second phase of the project is likely to be extended to all 35 blocks of these two Distncts and preparations are on the anvil (A block is a sub unit of a District 12-18 Blocks constitute one District in Tamil Nadu)

These two pilot blocks of the project are located along the Bay of Bengal and some of the demographic data are given below -

Table 1- Demographic Details of the Project Blocks

Details	MARAKKANAM	PORTONOVO
No of rural Panchayats	56	41
Town Panchayats	1	2
Habitations	188	145
Area in sq kms	418 78	223.80
Population 91 census	128249	90213
Average population per habitation	682	622
Average family size	4 7	4 7
Literacy rate	39.9	47 5
Female literacy rate	14 1	29 2

1.2 Project Objectives

The long term goal of the project is to improve the health and living standards of rural people The short term and immediate objectives are.

1 To identify innovative and replicable strategies, ideas and technologies for a sustainable water and sanitation programme.

2 Provision of drinking water supply at the rate of 40 litre per capita per day to the entire population.

3. Provision of sanitary latrines at the rate of 15% coverage of total population in the pilot blocks.

1.3 Project Activities

The project activities focus mainly on four sectors viz.,

a. Provision of water supply through hand pumps and maintenance of community based water supply system.

b. Construction of household and institutional latrines of various models

c Training and capacity building activities with a view to strengthen local communities and collaborating agencies in project activities.

d. Cost effective innovations through research and development activities including windmill and solar energy based powerpump water supply schemes, traditional source improvement schemes and low cost sanitary latrines

1.4 Project Implementation of Sanitation Programme

The Block Development Officer (BDO - Government functionary) of the concerned block is the implementing officer of Sanitation and Water Supply Maintenance Programme at the field level The Project Advisory Group (PAG) of Danida assists the Government in planning, implementing and monitoring of the project. The Village Councils (VC's) and Sub Committees (SC's) at Rural Panchayat and habitation level constitute the local level institutions in assisting the local Government functionaries for mobilizing the local resources for implementing the project

1.5 Findings of the Baseline Study in the Project villages

As per the project document, the baseline study conducted in 90-91 period indicated lack of interest/motivation by 80% of the households to own and use a latrine The rest 20% were only half interested to own a latrine Out of this half interested, only 2-3% were willing to pay some contribution for latrine construction.

Overall strategies of Sanitation Programme, Project Inputs etc are given in annexure I

2 STUDY FRAME WORK

The present study was undertaken by the Socio Economic Unit Foundation, Vikas Bhavan Thiruvananthapuram, Kerala India. The period of study stretched from June 1996 to November 1996 (Including draft Report Preparation).

2.1 Broader Objective

To assess the effectiveness of sanitation strategies/activities in changing knowledge, attitude and practice of people in the project areas and also to measure the level of changes in comparison with non-project areas.

2.2 Specific Objectives

1. **To assess the utilization** \functioning level of household latrines of various models and also institutional latrines constructed with assistance from the project in two blocks of the pilot phase I.

2 To assess the Knowledge, Attitude and Practice and also social and cultural change in sanitation (latrines) among the beneficiaries in the project areas.

3. To analyze the factors (social, cultural, economic and service etc ,) which have effected utilization level of latrines.

4 To assess the level of changes in Knowledge, Attitude and Practice in Sanitation among the people in the project areas in comparison with the people in non-project areas

2.3 Sampling

Stratified random sampling techniques were used for the study. The total no of samples to be studied and the no.of households in different categories were suggested by the Project Advisory Group.

291 beneficiaries from Block I and 234 beneficiaries from Block II constituted the beneficiary sample. 85 non-beneficiaries from Block I and 55 non-beneficiaries from Block II constituted the non-beneficiary sample 30 households each were selected from these Blocks at random to form sample in the project not supported areas. 90 samples each from two Control Blocks constituted the control sample. Thus altogether the sample totalled 905 households. 17 institutional (school) latrines constituting 15% of the total latrines constructed by the project were also selected for this study Part II of this document gives details regarding the sample and analysis of school latrines

	Beneficiary	Non Beneficiary	Not Supported	Control Block	Total
Marakikanam	291	85	30	90	496
Portonovo	234	55	30	90	409
Total	525	140	60	180	905

2.3.1 List of Total Number of Beneficiary Households, Sample Beneficiary Households and Sample Non Beneficiary Households with Generation and *Socio Cultural Category - Marakkanam Block.

S#	Name of Village	Generation	SC Category	Total Beneficiary HH	Sample Beneficiary HH	Sample Non Beneficiary HH
1	ANICHAKKUPPAM	I	A	31	13	6
2	PUDUKKUPPAM	I	A	20	7	1
3	AVANAMPETTU	I	B	45	10	3
4	ANUMANTHAI	I	C	386	92	14
5	ALAPPAKKAM	I	C	111	31	8
6	KOVADI	I	C	58	31	8
7	ATHIKKUPPAM	I	C	33	3	4
8	ELLATHARASU	I	C	19	4	6
9	MANNUR COLONY	II	B	31	9	1
10	ARIYANTHANGAL	II	B	8	1	1
11	ENDIYUR	II	C	88	28	5
12	JAGGAMPETTAI	II	C	27	7	3
13	T PUDUPPAKKAM	II	C	20	4	3
14	MANNARSAMY KOIL	II	C	8	2	4
15	MANNUR COLONY	V	B	47	10	3
16	BRAMADESAM	V	B	15	6	6
17	NADUKKUPPAM	V	C	60	24	4
18	SALAVATHI	V	C	40	9	5
				1047	291	85

Definition of Socio Cultural Category

According to the project document, all the habitations in each block where the project have supported construction of latrines upto December 1995 had been stratified into 3 main groups namely A,B & C, considering the socio economic characteristics, cultural differences and, proximo-distal factor to road, town/urban facilities **Category A** was comprised of coastal villages and **Category B** was comprised of scheduled caste dominated (socio culturally & economically weaker section in the community) villages. They had only less access to road, town/urban facilities too. **Category C** was dominated by non scheduled caste households and had access to road, town/urban facilities

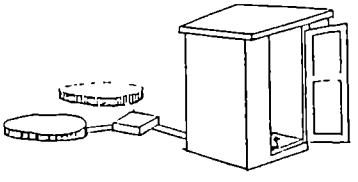
2.3.2 List of Total No.of Beneficiary Households, Sample Beneficiary Households and Sample Non Beneficiary Households with Generation and Socio Cultural Category - Portonovo Block.

S #	Name of Village	Gen	SC Category	Total Beneficiary HH	Sample Beneficiary HH	Sample Non Beneficiary HH
1	SAMIYARPETTAI	I	A	126	5	3
2	PERIYAKOMUTTI	I	B	120	35	4
3	THILLAIVIDANGAN	I	B	59	16	3
4	NEDUNJI	I	B	40	10	3
5	P-MELETHIRUKALAIPPALAI	I	B	15	7	4
6	KUMARAMANGALAM	I	C	98	33	5
7	GAWARAPPATTU	I	C	56	19	5
8	KEELACHAVADI	I	C	45	9	4
9	PUDUPETTAI	II	A	65	13	3
10	PERIYAPPATTU	II	B	33	10	1
11	SEETHALAPADI	II	B	3	1	2
12	VILLIYANALLUR	II	C	59	17	2
13	MUDAKKU ROAD	II	C	23	6	2
14	CHIDAMBARANATHAN PETTAI	II	C	10	2	2
15	VELANGIPPATTU	V	B	97	5	1
16	KOTHATTAI	V	C	62	31	4
17	ARUMOZHIDEVAN	V	C	22	12	4
18	MANALMEDU	V	C	12	3	3
	TOTAL			945	234	55

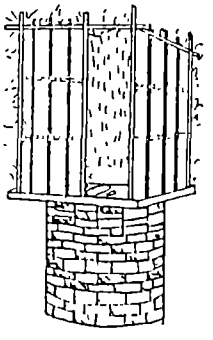
DEFINITION OF GENERATION OF HOUSEHOLD LATRINES

	GENERATION I	GENERATION II	GENERATION V
DESIGN YEAR	**1991-92**	**1992-93**	**1993-1994**
TYPE	Double pit pour flush pucca latrine - brick with cement mortar	Single pit with provision for second pit	Single pit Pre-cast Ferro cement squatting slab attached with pan and trap on top of the pit Low cost superstructure made by the user households
Estimated cost	Before 1991 - Rs 2000/- From 1991- Rs 2200/-	Rs 2200/-	Rs 1000/-
Cost sharing pattern Project share	Before 1991 Rs 1500/- After 1991 Rs 1980 +2090	Rs 1100	Rs 1000/-
User Share	Before 1991 Rs 500 After 1991 Rs 220 other caste Rs 110 Scheduled caste + digging of pits	Rs 1100 High income Rs 330 other caste Rs 220 Scheduled caste + digging of pits	Construction of superstructure and digging of pits
Assumptions	This model is probably too costly for most villages in the project area	This design is less costly as generation I But the superstructure is still too costly when compared with other structures in the village	Inexpensive design with user constructed light superstructure on top of single pit Users might be able to move the superstructure when pit is full

VIEW OF DIFFERENT GENERATIONS OF HOUSEHOLD LATRINES STUDIED



GEN I



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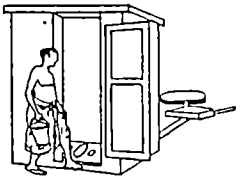


GEN II

List of villages & Socio Cultural Groups with no. of sample households in not supported project area and control blocks.

MARAKKANAM BLOCK NOT SUPPORTED PROJECT AREA	HABITATION
A - 10 B - 10 C - 10	Nochikuppam Araiyanur Kiledayalam

PORTONOVO BLOCK NOT SUPPORTED PROJECT AREA	HABITATION
A - 10 B - 10 C - 10	Pudukkuppam T.N. Pattinam Adivaraganallur

CONTROL AREA

FOR MARAKKANAM BLOCK	VANOOR
A - 10 + 10 + 10	Bommayarpalayam, Mathur, Kozhuvari
B - 10 + 10 + 10	Thiruchithrambalam, Vanur, Thenkodippakkam
C - 10 + 10 + 10	Kiliyanur, Pulichapallam, Kondannur
FOR PORTONOVO BLOCK	CUDDALORE
A - 10 + 10 + 10	Kondu Uppalavadi, Panchayankuppam, Kudikkadu
B - 10 + 10 + 10	Madalappattu, Vellappakkam, Nallattur
C - 10 + 10 + 10	Kondur, Pathirikkuppam, Cuddalore O.T.

2.4 Methods of Investigation

Interview schedules, observations and group discussions were the tools employed in order to elicit information. The interview schedule comprised of four parts. The first part dealt with assessment of knowledge level of the respondents regarding latrine, source of knowledge, its need and importance, besides the basic data regarding religion, caste income level, educational level, occupation and size of family.

The second part of the schedule dealt with assessment of positive and negative attitudes regarding latrines, its use, location, open air defecation, children's faeces and mis/conceptions regarding latrines.

The third part dealt with future perspectives regarding the programme and included the respondents' suggestions regarding the technology, programme implementation and its impact.

The fourth part included assessment of functionality, usage and maintenance, reasons for non-utilization of latrines and participation in Health Education Programmes

Actual reasons for not having latrines and assessment of their interest/motivation to construct latrine were the major areas in the case of non-beneficiaries and control groups in this section.

Besides these, facts were collected regarding knowledge level on hand washing after defecation, incidence of diarrhoeal diseases etc. The interview schedule was prepared in English and translated into Tamil for simplicity and clarity in collecting information It was discussed with the project staff, pretested in the field and modified accordingly (Please see annexure 2).

2.4.1 Team of Investigators

Five investigators from the Madras School of Social Work (Post Graduates in Social Work) were identified, oriented and employed for the specific task of investigation They were oriented on the objectives of the study, study design, sampling strategies, methods and tools to be used for the study, need for qualitative information rather than stereotype quantitative information, need of perception, observation and unbiased approaches and data collection, besides thorough field familiarization and trial data collection Sufficient acquisition of skills to conduct the particular study was made mandatory before the team commenced data collection

The Socio Economic Unit Foundation (SEU) senior staff supervised the team throughout, checked the validity, reliability of the data, guided the team members wherever necessary and facilitated the whole process by adopting appropriate measures in the field

PART I - Household latrines

3 DESCRIPTIVE ANALYSIS

This chapter gives an account of the analysis of the

a) Functionality and utilisation pattern of the different households in the two study blocks
b) Factors that have contributed to the varying levels of utilisation
c) Knowledge, Attitude and Practice (KAP), regarding latrines among the different tudy groups and
d) Other related factors such as handwashing practices after defecation, incidence of diarrheal diseases in the study blocks and impact of health education programmes

3.1 Functionality/Utilization pattern has been analysed in the following manner:

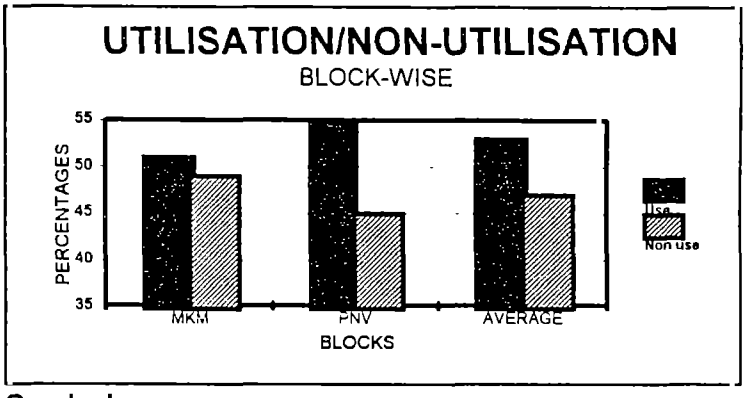
3 1 1 Utilization - non utilization - Blockwise
3.1 1.a. Utilization - non utilization - Villagewise
3.1 2 Utilization - non utilization - Generationwise
3 1 3 Utilization - non utilization - Socio Cultural Groupwise
3 1 3a Utilization and Economic status of householders
3 1.3b Age and Genderwise Utilization

3.1.1. Utilization/Non Utilization - Blockwise

Table 3 1.1

Sample Blocks	Households				Total	
	Use		Non Use		No	%
	No	%	No	%		
Marakkanam	147	51	144	49	291	100
Portonovo Block	128	55	106	45	234	100
Average % use	275	53	250	47	525	100

Table 3 1.1 and Graph 1 give % of households in the two study blocks who are utilising/non utilising the latrine facilities. Of the 525 households studied, 53% are utilising the latrine and 47% are not utilising them block wise. 51% of Marakkanam and 55% of Portonovo are utilising the latrines



Graph - I

Table 3.1.1.a LEVEL OF UTILISATION - VILLAGEWISE

Level of Utilisation >	< 25%	25-50%	51-75%	76-100%
Block Marakkanam (18 villages)	Anichakkuppam Munnar Colony Athikkuppam Brahmadesam Salavathi (5 villages)	Nadukkuppam Pudukkuppam Manur Anumanthai Ellatharasu (5 villages)	Jaggampettai Avanampetta Alappakkam Kovadi (4 villages)	Endiyur Aniyanthangal Mannarsamy Koil T Puduppakkam (4 villages)
Block Porotono (18 villages)	Arumozhidevan Periyakomutti Nedunji (3 villages)	Manalmedu Velangipattu Samiyarpettai Kothattai Chidambaranatha n Pettai (5 villages)	Padugai Keelachavadi Pudupettai Kumaramangalam Mudakku Road Gauravapettai (6 villages)	Periyappattu Thillaividangan Villiyanallur Chithalapadi (4 villages)

Table 3.1 1 a gives level of utilization in the different villages starting from lowest level of usage (<25% usage) to highest level of usage (76-100% usage).

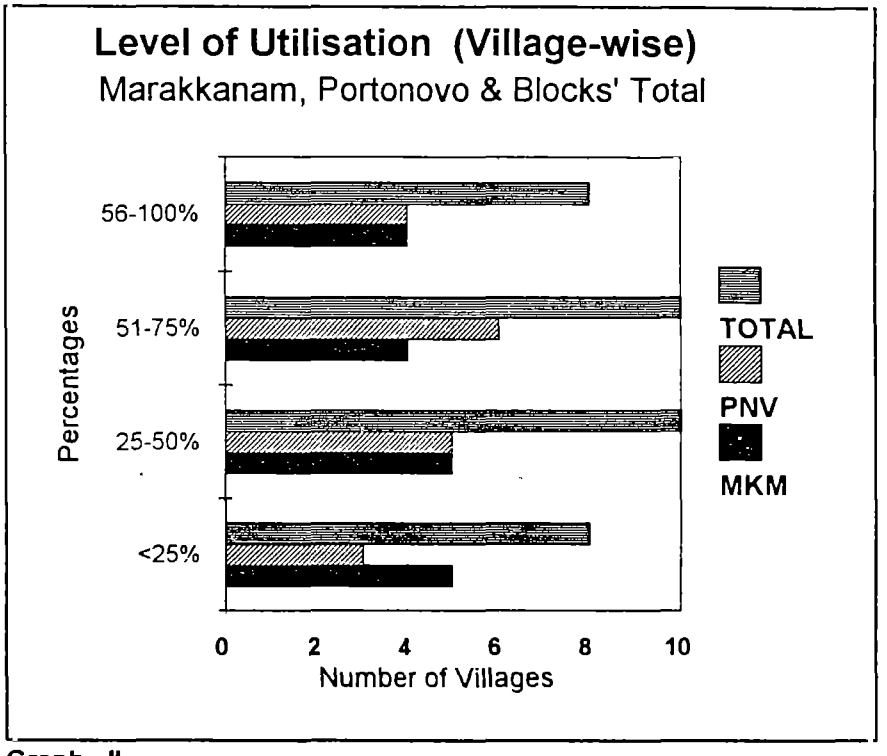
5 villages in Marakkanam and 3 villages in Portonovo came under the lowest usage level i.e. < 25% usage level group.

5 villages in each of the blocks were under the 25-50% group.

4 villages in Marakkanam and 6 villages in Portonovo established their stand in a higher level of usage i.e, 51-75% usage.

The villages that made most of the latrines were four each from Marakkanam and Portonovo with 76-100% usage level

Graph II gives an overall picture of number of villages in the different blocks and also the blocks' total in the usage level categories.



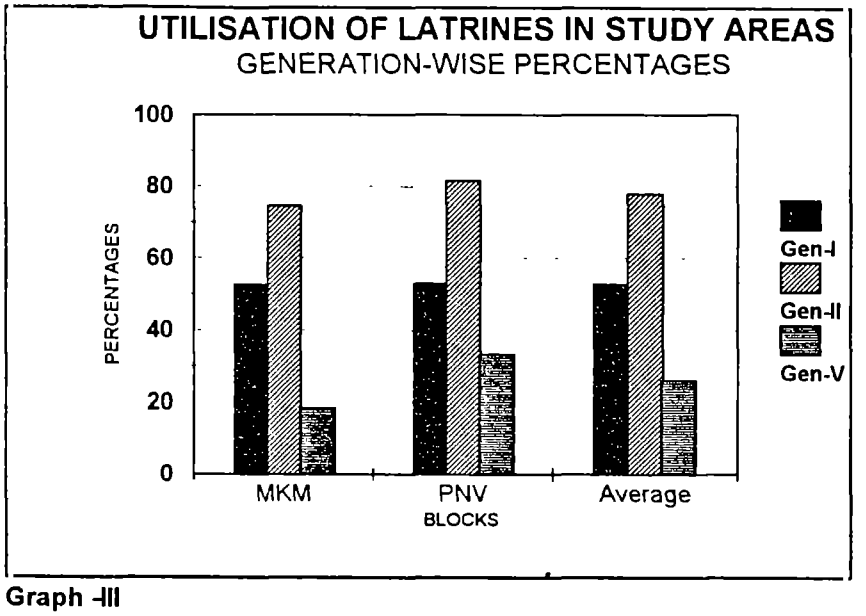
Graph - II

Table 3.1.2 Utilization/Non Utilization - Generation-wise

BLOCK >		I - MARAKKANAM		II - PORTONOVO		TOTAL - BLOCK I & II	
GENERATIONS		No	%	No	%	No	%
GEN 1	USE	100	52 4	71	52 9	171	52 6
	NONUSE	91	47 6	63	47 1	154	47 4
	TOTAL	191	100	134	100	325	100
GEN II	USE	38	74 5	40	81 6	78	78
	NONUSE	13	25 5	09	18 4	22	22
	TOTAL	51	100	49	100	100	100
GEN V	USE	09	18 4	17	33 3	26	26
	NONUSE	40	81 6	34	66 7	74	74
	TOTAL	49	100	51	100	100	100
I,II & V	USE	147	50 5	128	54 7	275	52 4
	NONUSE	144	49 5	106	45 3	250	47 6
TOTAL		291	100	234	100	525	100

Table 3.1 2 gives generation wise utilization/non utilization of latrines among the study sample

Generation I in both the blocks come around 53% usage pattern Generation II scored highest with 74 5% in Marakkanam and 82% in Portonovo Generation V had the lowest usage percentage of 18 4% and 33 3% for Marakkanam and Portonovo respectively Graph III gives a comparative view of the generationwise utilization of latrines in the study blocks



Graph -III

Table 3.1.3 Use & Non-use Socio Cultural Group-wise

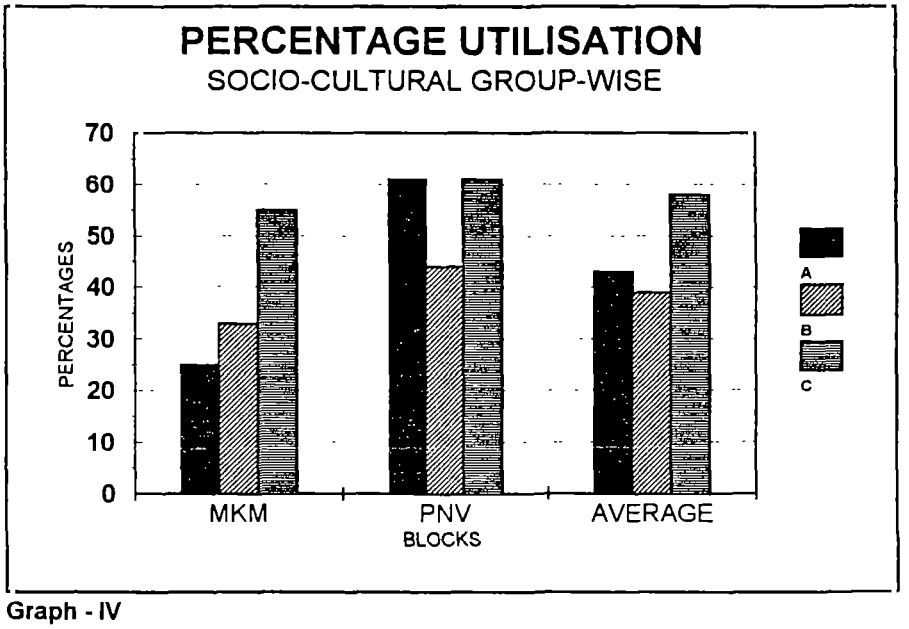
Socio Cultural Group	BLOCK I MARAKKANAM		BLOCK II PORTONOVO		TOTAL BLOCK I & II	
	NO	%	NO	%	NO	%
A - COASTAL VILLAGES						
Use	05	25	11	61.1	16	42
Nonuse	15	75	07	38.9	22	58
Total	20	100	18	100	38	100
B - SC-DOMINATED VILLAGES						
Use	12	33.3	37	44	49	40 8
Nonuse	24	66.7	47	56	71	59.1
Total	36	100	84	100	120	100

C -NON SC DOMINATED VILLAGES						
Use	130	55 3	80	60.6	210	57.2
Nonuse	105	44 7	52	39 4	157	42 8
Total	235	100	132	100	367	100
A+B+C						
Use	147	50.5	128	54.7	275	52 4
Nonuse	144	49 5	106	45 3	250	47 6
Total	291	100	234	100	525	100

Utilization/Non utilization Socio Cultural Group-wise

Table 3 1.3 gives Socio Cultural Group-wise utilization/non utilization of latrines among the sutdy sample.

Only 25% of the A category (coastal) were using the latrine in Marakkanam Block area Portonovo, on the other hand, showed about 2 ½ times the use of Marakkanam with 61% usage among this category In the case of B category (SC dominated with less access to town/urban facilities), the % figures were 33 for Marakkanam and 44 for Portonovo In the case of C category (Non SC Dominated with less access to town/urban facilities), the figures differed from 55% to 61% in the case of Marakkanam and Portonovo respectively. Graph IV depicts these differences.



Graph - IV

3.1.3 a. Utilization and economic status of householders

The economic status of the beneficiary households were grouped as follows:-

Socio Economic Status	Marakkanam		Portonovo		Total	
	No	%	No	%	No	%
High	28	9.6	10	4.3	38	7 2
Middle	139	47.8	121	51 7	260	49.5
Low	51	17.5	49	20 9	100	19 1
Poor	59	20 3	49	20.9	108	20 6
Very poor	14	4 8	05	2 1	19	3.6
Total	291	100	234	100	525	100

The assessment of economic status was done in consultation with the Village Council members. However, no correlation was found between the economic status and utilisation of latrines in the two blocks, though the non-SC group utilised the latrine at higher level than the SC group as is seen from the socio cultural group wise utilization

3.1.3.b Age and Gender wise Utilisation

Attempts to find out age wise utilization of latrines revealed that the ones that were in use were being used by all members in the family irrespective of age Only infants were not toilet practised Similarly, no gender difference was found in the use of latrines. Both male and female members in the family were using the latrines.

Table 3.1 3b shows the number of children and number of female above 13 years in the study sample of beneficaries in the two blocks

Table 3.1.3b Age and genderwise distribution of households

Numbers in the family	No of household with children				No of households with females above 13 years of age			
	Marakkanam		Portonovo		Marakkanam		Portonovo	
	No	%	No	%	No	%	No	%
1 -2	130	44 7	91	38 9	205	70 4	172	73 5
3-4	97	33 3	74	31.6	64	22 0	47	20 1
5-6	14	4 8	12	5 1	5	1 7	03	1 3
7-8	02	0 7	04	1 7	02	0 7	01	0 4
Nochild/no female above 13 years	48	16 5	53	22 7	15	5 2	11	4 7
Total	291	100	234	100	291	100	234	10000

3.1.4 Major Indicators of Functionality/Utilization among the user households

Cleanliness, water seal maintenance, condition of roof and door were the major indicators analyzed against blocks, generations of latrines and socio cultural groups The indicators selected were in line with the Minimum Evaluation Procedure (MEP) for water supply and sanitation Projects (with special reference to functionality, utilization and impact) suggested by the World Health Organization (1983)

Table 3 1 4 1 & 2 present the figures and percentages The latrines in use were taken into account for this analysis

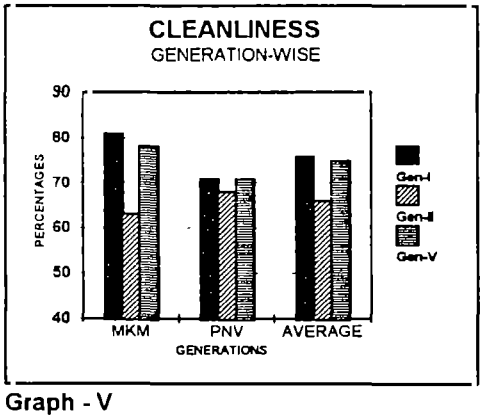
1. Cleanliness

The indicators standardised for cleanliness were,

1 No excreta in the pan
2.No excreta in the water seal area and
3 Clean floor and footrests (if any)

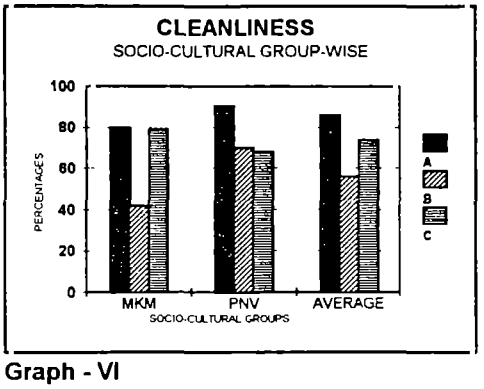
Among the users, the cleanliness maintained was relatively high with 76% of the households in Marakkanam and 70% in Portonovo keeping their latrines clean, the average sample figure being 73%

Generation wise, the cleanliness figures were, 81%, 63% and 78% for I, II and V generations in Marakkanam and 71% for generation I, 68% for generation II and 71% for generation V in Portonovo The average figures for generationwise cleanliness are 76%, 66% and 75% for I, II and V respectively (Graph V)



Graph - V

Socio cultural group wise the coastal group maintained highest degree of cleanliness in both the blocks with 80% and 91% cleanliness level for Marakkanam and Portonovo respectively SC dominated B category, observed least in cleanliness in Marakkanam with 42% but fairly higher in Portonovo with 70%. Among the non SC group, 79% latrines in Marakkanam and 68% latrines in Portonovo were clean. (Graph VI).



Graph - VI

2. Water Seal Maintenance

This relates more to the functional quality of the latrines Water only in the water seal was the indicator selected for observation. This was 81% for Marakkanam and 77% for Portonovo, average being 79%.

Generation wise, Generation V showed the best water seal maintenance with 100% in both the blocks, followed by Generation I and

Generation II Generation I had 83% water seal maintenance in Marakkanam and 81% in Portonovo. Generation II figures were 71% for Marakkanam and 80% for Portonono

Socio cultural group wise, this indicator was 100% and 91% for A category of Marakkanam and Portonovo blocks. It was 50% and 70% for B in Marakkanam and Portonovo In the case of C category, the indicator showed 83% and 87% water seal maintenance in Marakkanam and Portonovo Blocks

3. Roof in Good Condition

This indicator ranged from 73% in Marakkanam to 65% in Portonovo, the average being 69%

Generation wise, the figures were 82% (generation I), 58% (generation II) and 33.3% (generation V) in Marakkanam and 63% (generation I), 78% (generation II) and 41% (generation V) in Portonovo.

Socio cultural group wise, roof in good condition was noted from 100% in A category,50% in B and 74% in C in Marakkanam. In Portonovo, the figures were 100% in A,73% in B and 56% in C categories

4. Door in Good Condition

Good condition of door ranged from 73% in Marakkanam to 74% in Portonovo, the average figure being 73 5% Generation wise, generation I scored highest in Marakkanam (81%) Generation II & V scored equally with 55.5% in this block. In Portonovo too, generation I scored highest by 83% followed by 72.5% for generation II and 41 2 % for generation V.

Socio Cultural group wise it ranged as 100% for category (A), 42% for B category and 75% for C category in Marakkanam. In Portonovo the figures were, 73% for A, 78% for B and 75% for C categories

3.1.4.1. Major Indicators of Functionality/Utilization - Generation Wise

		Marakkanam Block				Portonovo Block			
S #	Generation > Factors	I (100) No %	II (38) No %	V (9) No %	Total % 147	I (71) No %	II (40) No %	V (17) No %	Total % 128
1	Generally clean	81 81	24 63 2	07 77 8	112 76 2	50 70 4	27 67 5	12 70 5	89 69 5
2	Water seal Maintenance	83 83	27 71	09 100	119 80 9	57 80 2	32 80	17 100	106 76 6
3	Roof in good condition	82 82	22 57 8	03 33 3	107 72 8	45 63 3	31 77 5	07 41 2	83 64 8
4	Door in good condition	81 81	21 55 3	05 55 5	107 72 8	59 83 0	29 72 5	07 41 2	95 74 2

Percentage Calculated only of those in use

3.1.4.2. Major Indicators of Functionality/Utilization - Socio Cultural Group Wise

S #	Factors	MARAKKANAM BLOCK A No 05	%	B No 12	%	C No 130	%	Total % 147	PORTONOVO BLOCK A No 11	%	B No 37	%	C No 80	%	Total % 128
1	Generally clean	4	80	5	41 7	103	79 2	112 76 2	10	90 9	26	70 2	54	67 5	89 69 5
2	Water seal Maintenance	5	100	6	50	108	83 3	119 80 9	10	90 9	26	70 2	70	87 5	106 76 6
3	Roof in good condition	5	100	6	50	96	73 8	107 72 8	11	100	27	73	45	56 2	83 64 8
4	Door in good condition	5	100	5	41 7	97	74 6	107 72 8	8	72 7	29	78 4	60	75 0	95 74 2

Percentage calculated only of those in use

3.1.5.1 Dysfunctional/Non- Utilizational Factors- Blockwise, Generationwise and Socio Cultural Groupwise

Having analyzed the use and non-use and the indicators of utilization and functionality, villagewise,generationwise and sociocultural groupwise, the next analysis was done to examine the functionality problems and other reasons leading to non-utilization of household latrines This was done blockwise, generationwise and sociocultural groupwise

The data are based on observations by the investigation team and verification of information given by the respondents. This includes multiple complaints and comments by the user and nonuser households

An over all view of the complaints show that out of the 525 households studied,, 348 had reported factors related to nonutilisation/functionality problems.This has accounted for 66% of the total sample. **Block-wise, PNV had more of these factors with 70% compared to MKM which was 63%.**

Generation-wise, 67% of Genl, 42%of Gen II and 88% of Gen.V had listed some factor or the other pertaining to non-utilisation/functionality problems.

When the generationwise factors were further analysed blockwise, it was found that 62%of MKM and 74% of PNV under Gen I had highlighted functionality/ nonutilisation factors. Similarly, 41% of MKM and 43% of PNV in Gen II had listed these and so were, 88% of Gen,V in both MKM and PNV

Socio Cultural Groupwise, 97% of beneficiaries under A category 78% under B and 59 % under C category pointed out various functionality/utilization problems. Within the blocks, the beneficiary wise complaints for Marakkanam and Portonovo were 135% and 55 % for A, 89% and 74% for B and 53% and 70% for C categories respectively The highest figure 135% is surpassing the number of beneficiaries under A category in MKM Block

Table 3 1 5 1 a presents the different groups of complaints/non utilizational factors, blockwise These groups are, 1) those related to construction, 2) those related to design, 3) those related to low motivation for use and maintenance and 4) those related to external factors

Table 3.1.5.1 a Dysfunctional and Non Utilizational Factors Blockwise.

FACTORS	BLOCKS				TOTAL	
	Marakkanam		Portonovo			
	No	%	No	%	No	%
1 Related to construction	92	50	106	64 2	198	57
2 Related to design	13	7	17	10 3	30	9
3 Low motivation for use and maintenance	35	19	17	10 3	52	15
4 External factors Water scarcity Location Problem Misuse by students Structure demolished	43	24	25	15 2	68	19
Total	183	100	165	100	348	100
Total Beneficiaries	291	100	234	100	525	100
% figures for complaints/factors		63		70		66

1. Factors related to Construction

This group included factors such as incomplete/ poor construction, poor door,roof complaints, water seal problems,pits flooded by water etc

On an average, 57% of the total complaints and 38% of the total beneficiaries came under this category.

Blockwise, 50% of MKM and 64% of PNV complaints accounted for this factor Beneficiarywise, it was 32% for MKM and 45% for PNV

Generationwise, 64% of Gen. I, 67%of Gen.II and 35% of Gen.V complaints tabled under this factor When the generationwise complaints were further analyzed blockwise, the figures for MKM and PNV were, 54% and 76% for Gen.I, 57% and 76% for Gen.II and 37% and 33% for Gen V latrines

(Beneficiarywise, the total generationwise figures were, 67% for Gen.I, 42%for Gen.II and 88% for Gen.V Blockwise, these figures differed as, 62 and 74 for Gen.I, 41 and 43 for Gen II in MKM and PNV respectively The figure was 88% for both the blocks in the case of Gen.V).

Socio-cultural groupwise analysis (3.1 5.1 C1&2) showed that 57% of the factors received for A,B and C categories related to construction problems Based on households, the

figures were, 97% for A, 78% for B and 59% for C categories.

Block figures for these categories were, 45% and 90% for A, 50% and 61% for B and 52% and 63% for C categories in MKM and PNV respectively. **'A' category PNV had the highest number of complaints related to this factor and it was double the figure for that of MKM for the same category.**

Table 3 1 5 1.b1 presents these groups generation wise (blocks' total) and b2 presents these figures for Marakkanam and Portonovo separately.

3.1.5.1.b1 Dysfunctional/Non Utilizational Factors Blocks' total Generation wise

FACTORS	GENERATIONS						TOTAL	
	Generation I		Generation II		Generation V		No	%
	No	%	No	%	No	%		
1 Related to construction	139	64	28	67	31	35	198	55
2 Related to design	0	0	0	0	30	34	30	10
3 Low motivation for use and maintenance	35	16	06	14	11	13	52	15
4 External factors	44	20	08	19	16	18	68	20
Total complaints/factors	218	100	42	100	88	100	348	100
Total No of beneficiary households under each generation	325		100		100		525	
% of complaints/factors based on households		67		42		88		66

3.1.5.1.b.2
Dysfunctional - Non Utilizational Factors Generation-wise Marakkanam & Portonovo Blocks

	Generations												Blocks' Total	
	I				II				V					
Blocks	MKM		PNV		MKM		PNV		MKM		PNV			
Factors	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1 Related to construction	64	54	75	76	12	57	16	76	16	37	15	33	198	57
2 Related to design	0	0	0	0	0	0	0	0	13	30	17	38	30	9
3 Low motivation for use and maintenance	23	19	12	12	05	24	01	05	07	16	04	09	52	15
4 External factors	32	27	12	12	04	19	04	19	07	16	09	20	68	19
Total factors	119	100	99	100	21	100	21	100	43	100	45	100	348	100
Total no of housholds under each generation	191		134		51		49		49		51		525	
% complaints based on households		62		74		41		43		88		88		66

2 Factors related to Design. Latrines were not Pucca was the main complaint under this head Nine percent of the total complaints and 6% of the total beneficiaries fell under this group

Blockwise, 7% of MKMand 10% of PNV complaints collected under this head.

(Beneficiarywise, it was 4.5% of MKM and 7% of PNV households.)

Generationwise, Only Gen. V pointed to this factor and it amounted to 34% of the total complaints as well as of total beneficiaries under this generation. Generationwise analysis within the blocks showed that 30% of MKM and 38% (highest for this factor) of PNV were unhappy with this factor under Gen V

SocioCultural groupwise, the figures were non existent for A, 11% for B and 9% for C categories. 12% of the total complaints of MKM and 10% of those in PNV under B category came under this. In C category, it differed as 7% for MKM and 12% for PNV

3. Factors related to Low Motivation for Use and Maintenance. Factors such as latrine as storage space for firewood and others, using it as bathroom, preference for open air defecation etc. were grouped under this head.

On an average, 15% of the total factors accounted under this group. Beneficiary householdwise, the figure is 10%.

Blockwise, 19% of factors in MKM and 10% of those in PNV came under this group Beneficiarywise, they were, 12% for MKM and 7% for PNV (Preference for open air was found more in MKM).

generation wise, 16% of Generation I, 14% of Generation II and 13% of Generation V non utilization factors came under this group.

Within the blocks, the figures for Marakkanam and Portonovo for the different generations were 19% and 12% for generation I, 24% and 5% for Generation II and 16% and 9% for generation V.

Socio cultural group wise, 16% of A, 15% of B and C non utilization factors culstered around this head. Blockwise, the figures for Marakkanam and Portonovo for A, B and C categories were, 22% and 0% for A, 16% and 14% for B and 19% and 9% for C categories respectively

3.1.5.1.c Dysfunctional - Non Utilizational Factors

c1.Socio Cultural Group wise - Marakkanam & Portonovo Blocks

	Socio Cultural Groups												Total	
	A				B				C					
Blocks >	MKM		PNV		MKM		PNV		MKM		PNV			
Factors	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1 Related to construction	12	45	09	90	16	50	38	61	64	52	59	63	198	57
2 Related to design	0	0	0	0	04	12	06	10	09	7	11	12	30	09
3 Low motivation for use and maintenance	6	22	0	0	05	16	09	14 5	24	19	08	09	52	15
4 External factors	9	33	01	10	07	22	09	14 5	27	22	15	16	68	19
Total factors	27	100	10	100	32	100	62	100	124	100	93	100	348	100
Total beneficiary housholds under each generation	20		18		36		84		235		132		525	
% factors based on households		135		55		89		74		53		70		66

3.1.5.1.c Dysfunctional/Non Utilizational Factors

c2 Blocks Total - Socio Cultural Group wise

FACTORS	Socio Cultural Groups						Total	
	A		B		C			
	No	%	No	%	No	%	No	%
1 Related to construction	21	57	54	57	123	57	198	57
2 Related to design	0	0	10	11	20	09	30	09
3 Low motivation for use and maintenance	6	16	14	15	32	15	52	15
4 External factors	10	27	16	17	42	19	68	19
Total factors	37	100	94	100	217	100	348	100
Total beneficiary housholds	38		120		367		525	
% factors based on households		97		78		59		66

4 External Factors

Under this head are grouped important external factors such as water scarcity, undesired location of latrines, misuse by students (where the structures are near schools), and structure demolished due to natural calamities, shift of residence, sale of land etc **19% of the total complaints/factors show this as a major impediment to latrine use** Beneficiary wise, the figure is 13% for the whole sample.

Blockwise figures show that 24% Marakkanam non utilization reasons and 15% of Portonovo non utilization reasons were due to the various problems listed under this head, among which major factor was water scarcity, especially in Marakkanam. Beneficiary wise, the figures for Marakkanam and Portonovo under this head were; 15% and 11% respectively.

Generation wise analysis showed that 20% of those under generation I, nineteen percent of those under generation II and 18% of those under generation V were non utilised because of the various external factors listed above. Blockwise figures for generations I, II and V for Marakkanam and Portonovo were, 27 and 12 percentages for generation I, nineteen percent for generation II in both the blocks and 16 and 20 percentages for generation V latrines.

Socio cultural group wise analysis showed that the percentage reasons for non utilization among the A,B and C categories were 27%, 17% and 19% respectively Within the blocks, the figures in percentages for Marakkanam and Portonovo differed as 33 and 10 for A, 22 and 14 for B and 22 and 16 for C categories

3.2 Knowledge and Attitude regarding Latrine

Knowledge and Attitude regarding latrines have been analysed blockwise, beneficiary and non beneficiary wise, project not supported area and control block wise for the following:

3 2 1 Knowledge regarding Latrines before Project interventions and after project interventions

3 2 2 Sources of knowledge regarding latrine

3 2 3 Attitude regarding necessity of latrine, its utility, proximity, open air defecation and attitude towards children's faeces

A Need & usage, gender, age and utility
B Proximity
C Positive and negative attitudes regarding latrines
D Positive and negative attitudes regarding open air defecation
E Attitude regarding menstruating women using the latrine and
F. Attitude regarding children's faeces

3.2.1 Knowledge Regarding Latrines Before Project Interventions and After Project Interventions

Knowledge regarding Latrine		Project Intervention	
		Before (%)	After (%)
Marakkanam Block	Beneficiary (BF)	17	100
	Non-Beneficiary (NBF)	12	62
	Not Supported (NS)	0	0
	Control Block(Vanur) (CBV)	1	NA
Portonovo Block	Beneficiary (BF)	13	100
	Non-Beneficiary(NBF	72	65
	Not Supported(NS)	0	70
	Control Block(Cuddalore) (CBC)	7.6	NA

Table 3.2 1 projects the knowledge level of different categories of samples, It is 100% for both the blocks' beneficiaries While the non-beneficiaries in both blocks have gained in knowledge level after project intervention the people in not supported project area of Portonovo had gained remarkably in knowledge by 62% & 65% respectively in Marakkanam and Portonovo due to project input (70% gain).

3.2.2 Sources of Knowledge (regarding latrine)

Block/Sample Category	DANIDA	Block/Gram Panchayat Office	Neighbour	Contractor/ Friends/ others	Don't remember	No Knowledge
MARAKKANAM						
Beneficiary	29 5	46 0	3.0	6 1	15 4	0
Non-Beneficiary	21 2	18 8	11 8	17.6	0	30 6
Project Not Supported area	0	0	0	0	0	100.0
Control Block - Vanur	0	0	0	01	0	99 0
PORTONOVO						
Beneficiary	58.1	18 7	0	12.3	10 9	0
Non-Beneficiary	38.2	16.4	10.9	7.2	0	27 3
Project not supported area	63 0	0	6 7	0	0	30 3
Control Block -Cuddalore	3.3	3.3	0	1.1	0	92 2

When knowledge regarding latrine was further analysed to find out the source which contributed to this knowledge, 29 5% of Marakkanam and 58% of Portonovo beneficiaries listed DANIDA as the source of knowledge, 21% Marakkanam and 38% Portonovo non beneficiaries also had DANIDA as the source of knowledge. Project not supported area of Portonovo were seemed considerably benefitted by DANIDA as knowledge source with 63% listing it as the main source 3 3% of Control Block of Portonovo (Cuddalore) also got the knowledge regarding latrine through DANIDA.

Neighbours were the source of knowledge for 3% of Marakkanam beneficiaries. 12% Marakkanam and 11% of Portonovo non-beneficiaries pointed out neighbours as their source of knowledge For 'Project not supported' group of Portonovo, neighbours' source formed 7% of their total source of knowledge regaring latrine.

Contractors and friends were the source for 15% of Marakkanam and 11% of Portonovo beneficiaries. 31% of Marakkanam and 27% Portonovo non beneficiaries, 100% of Marakkanam and 30% of Portonovo project not supported area households and 99% of

Vanur and 92% Cuddalore (Control Blocks of Marakkanam and Portonovo respectively) had no knowledge regarding latrines until the investigating team interviewed them

3.2.3 Attitude regarding necessity of latrine, its utility, proximity, open-air defecation, and attitude towards children's faeces.

Attitudes regarding latrines (Agreement, percentages)

A. Need, usage, gender & age

	Marakkanam Block				Portonovo Block			
Statement	BF	NBF	NS	CB	BF	NBF	NS	CB
1 Latrine is necessary	85 9	83 5	80 0	80 0	90 2	90 9	93 3	85 5
2 Latrine need be used only by men	8 2	8 2	0	0	4 3	0	0	0
3 Latrine need be used only by women	13 0	9 4	3 3	4 4	4 7	3 6	3 3	0
4 Latrine need be used only by children	8 5	7 1	6 6	4 4	3 4	0	3 3	0
5 Latrine need be used only by old persons	10 9	15 3	13 3	2 2	16 2	9 0	0	2 2
6 Latrine need be used by all persons	72 2	82 3	13 3	2 2	67 5	76 4	0	76 7
7 Men & women should not use the same latrine	11 7	11 8	9 9	12 2	7 7	7 2	6 6	11 1
8 Latrines are only for emergency purposes	16 5	15 3	13 3	16 7	10 3	16 2	19 8	20 0

3.2.3 Attitude regarding necessity of latrines, its utility, proximity,open air defecation and attitude towards childrens faeces

A There is positive attitude regarding the need for latrines among all the sample group the lowest percentage being 80%. This need included a multiple of factors like, for all persons, for emergency, for women, for old persons, for children etc. which is portrayed in Table 3 2.3 A. Some of the beneficiaries have felt that latrine is not necessary (14 % in Marakkanam and 10% in Portonovo) (3 2 3 A-1)

Attitude regarding usage by different members in the family (3.2.3 A - 2 - 7)

The beneficiaries in both the blocks agree that latrines are to be used by all persons (a 6 - (72 2% & 67.5% in Marakkanam and Portonovo respectively) This attitude is increased by 10% in the case of non-beneficiaries in the respective blocks. Control Blocks differ widely in this attitude. While only 13.3% of control block households of Marakkanam (Vanoor Block) agree on this, 76 7% Control Block households of Portonovo Block (Cuddalore Block) agree on this statement

B. Proximity of Latrine

	Marakkanam Block				Portonovo Block			
	BF	NBF	NS	CB	BF	NBF	NS	CB
It is not proper to have latrines attached to or near the house	26 5	30 6	13 3	12 2	20 5	23 6	16 6	20 0

Regarding latrines to be built far away from the house, (B1), the agreement % falls between 12.2 and 30 6, the highest being from Non-beneficiaries of Marakkanam Block and the lowest being from Control Block of Marakkanam, Vanoor (12 2%). In other words, people in general have favourable attitudes towards latrine being constructed near or attached to the house

C. Positive & negative attitudes regarding latrines, agreement percentage by different sample households

	Marakkanam Block				Portonovo Block			
Statement	**BF**	**NBF**	**NS**	**CB**	**BF**	**NBF**	**NS**	**CB**
C1 Positive Attitudes								
1 Latrines give social status	42 3	50 1	36 7	38 9	50 4	50 9	23 3	31 1
2 Latrines give privacy	75 3	85 9	56 7	54 4	70 9	54 5	43 3	48 9
C2 Negative Attitudes								
1 Latrine in general are dirty	25 4	22 3	0	11 1	10 7	12 7	6 6	5 5
2 Latrines in general smell badly	27 1	24.7	13.3	14 4	14 5	16 4	9 9	1 1
3 Latrine use is against religious beliefs	4 1	5 9	3 3	3 3	6 0	3 6	0	2 2
4 Latrines use is against prevalent customs	5 1	11 8	9 9	3 3	8 1	7 3	6 6	5 5

C Positive & negative Attitudes regarding latrines (C1.1 & C1.2)

C1 Positive Attitudes

Considering the positive attitudes regarding latrines, it is the privacy factor that has attracted more households than that of the social status factor. Non-beneficiaries of Marakkanam Block has shown the highest agreement percentage on this (85 9%) Regarding social status factor, it is the nonbeneficiary of Portonovo that has shown the highest agreement percentage (50 9%), followed by beneficiaries of Portonovo (50.4%) and nonbeneficiary of Marakkanam 50%. The beneficiary of Marakkanam come only the fourth in this (42%).

C2 Negative Attitude (C2-1,2, ,3&4)

It was seen that customs and religious beliefs have little influence on attitudes towards latrine. However, around 1/4th of beneficiary and nonbeneficiary in Marakkanam block agree that latrines in general are dirty and smell badly. Contradictory to this, none of the households in Not Supported area of this Block agreed on the statement that latrine in general are dirty.

D. Positive & negative attitudes regarding Open Air Defecation (Agreement percentages)

BLOCKS	MARAKKANAM				PORTONOVO			
Statements	BF	NBF	NS	CB	BF	NBF	NS	CB
Positive **Da1** *Open air defecation is good practice*	22 7	20 0	23 1	23 3	41 4	14 5	19 8	20 0
Da2 *Open air defecation is enjoyable*	17 9	17 6	19 8	21 1	13 2	12 7	23 1	14 4
Da3 *Open air defecation gives more social opportunity*	0	17 6	39 6	30 0	13 6	18 1	23 1	30 0
Negative **Db1** *Open air defecation is dangerous*	37 4	38 8	53 3	46 6	40 6	54 5	21 7	48 9

D Positive & Negative Attitudes regarding Open Air Defecation

Attempts to find out agreement on positive attitudes towards open air defecation was done by confirming agreements No Da1, Da2 & Da3. 41 4% of beneficiary in Portonovo agreed that open air defecation is a good practice. In contrast, only 14.5% nonbeneficiary of the same block agreed with this. There was not much difference between the other groups, most of them showing only around 15-20% agreement with this

Not a single household among the beneficiary group in Marakkanam agreed that open- air defecation gives more social opportunity. While 23-40% of those from the not supported areas, and control blocks agreed on this.

Negative attitude towards open air defecation (D.b.1) was shown more by project not supported areas and control block households in Marakkanam and Control Block in Portonovo (Cuddalore) with around 45-55% agreement Only 21 7% project not supported group of Portonovo believed that open air defecation is dangerous

Taking into account the attitudes of beneficiaries, it was 37% and 41% for Marakkanam and Portonovo respectively.

E Attitude regarding menstruating women using the latrine

	Attitude	Marakkanam Block				Portonovo Block			
		BF	NBF	NS	CB	BF	NBF	NS	CB
1	Menstruating women will pollute the latrine	16 1	18 8	20 0	53 3	9 8	12 7	20 0	17 8

E Attitudes towards menstruating women using the latrine (E1)

53 35 of control block Vanoor agreed that menstruating women will pollute the latrine The attitude of other group on this statement ranged from 10% to 20%

F. Attitude regarding children's faeces (agreement percentages)

	Attitude	Marakkanam Block				Portonovo Block			
		BF	NBF	NS	CB	BF	NBF	NS	CB
1	faeces are harmless	19 9	16 5	16 7	16 7	14 1	14 5	16 7	20 0

F Attitude regarding children's faeces

The statement that children's faeces are harmless (F.1) was agreed only by below 20% households in all the sample groups.

3.3 Future Perspectives of Latrine

Within this section of future perspectives of latrine, the major area covered are:

3 3.1 The most influential person/factor that had been instrumental to own a latrine (Socio Cultural Group wise, Panchayat wise and Block wise)
- a. Marakkanam Block
- b Portonovo Block

3.3 2 Assessment of beneficiaries and non-beneficiaries regarding the impact of latrine (effectiveness of project inputs)Programme.

3 3 2.1 Assessment of Project inputs through Village Council Members

3 3 3 Assessment of need based demand that had been generated among the
- a Non beneficiaries towards owning a latrine
- b. People in not supported project areas
- c. Control Block areas
- d Block wise differences if any

3 3 4 . Level of satisfaction with the latrine programme

3 3 4.1Analysis of positive and negative factors contributive to the utilization of latrines

3.3.1 Most influential person/motivating factor that had been instrumental to own a latrine

Table 3 3.1a and 3 3 1b present the block wise and socio cultural group wise figures on the most influential person/factor that had contributed towards owning a latrine by the beneficiary group

Major motivators in the two blocks were DANIDA and their volunteers, Panchayat/Block Development Office, Neighbours, Self and in few cases Friends, Visitors etc The last group was categorised as 'others' In Portonovo, besides these groups, the contractors also were motivators.

Under the caption DANIDA include volunteers, film shows and oral communication Under self motivation, the major factor stated was the usefulness of latrine for the family.

Category wise in Marakkanam, DANIDA stood as top motivating agent among Category C i e, non SC dminated area, followed by Panchayat and self motivation

Table - 3.3.1.a Most Influential person/factor that had been instrumental to own a latrine - Socio Cultural Groupwise:

S #	MOTIVATING FACTOR / PERSON	SOCIO CULTURAL GROUP						TOTAL	
		A		B		C			
	Marakkanam	No	%	No	%	No	%	No	%
1	DANIDA Volunteers	3	15	14	39	74	32	91	31
2	Self (Felt need)	8	40	15	41	54	23	77	26
3	Panchayath	4	20	6	17	57	24	67	23
4	President/Local leaders	0	0	0	0	9	4	9	3
5	Block Development Office	2	10	1	3	31	31	34	12
6	Neighbours / Others	3	15	0	0	10	10	13	5
	TOTAL	20	100	36	100	235	100	291	100
	Portonovo								
1	DANIDA	3	17	10	12	20	15	33	14
2	Self	12	67	32	38	51	39	95	41
3	Panchayath President/Local Leader	1	05	23	27	29	22	53	23
4	Contractor	0	0	4	5	4	3	8	3
5	Block Develop ment Office	1	5	4	5	8	6	13	6
6	Neighbour	0	0	1	1	7	5	8	3
7	Others	1	5	10	12	13	10	24	10
	TOTAL	18	100	84	100	132	100	234	100

Under the B category the SC group, self motivating factors dominated followed by DANIDA and neighbours Under A category also, (the coastal area) self motivating factors dominated followed by panchayat, DANIDA and others, Villagewise, Anumanthai & Alappakkam, in C category Brahmadesam & Munnar Colony in B Category and Anichakkuppam and Pudukkuppam in A category were highly influenced by Panchayat President/local leaders Kovadi in 'C' & Manur in B were highly influenced by DANIDA volunteers and film shows

In Portonovo, the most (A,B,&C) motivating factor among all the categories was self motivation followed by panchayath in C & B and DANIDA in A Category Villagewise, Kothattai & Kumaramangalam in C Category and Periyakomutti in 'B' were mostly influenced by panchayat leaders/ Kothattai and Nedunji had some influence by the contractor.

3.3.2 Assessment of beneficiaries and non beneficiaries regarding the impact of latrine programme (effectiveness of project inputs)

Table 3 3 2 presents percentage figures regarding the impact of latrine programme in the two blocks:

Table 3.3.2. Impact of latrine programme (opinions)

	Marakkanam		Portonovo	
Impact levels	Beneficiary	Non beneficiary	Beneficiary	Non beneficiary
No change	60 5	62.4	62.0	69 1
Some change	24.1	34.1	29 5	29 1
Good Impact	8 2	3.5	3.0	1 8
Don't know	7 2	0	5.5	0
Total	**100**	**100**	**100**	**100**

It is an encouraging fact that 30-40% of non beneficiaries believe that there had been some change in the villages due to the latrine programme. The explanations related to the impact were that in villages where people were using, there were positive signs of cleanliness, hygiene and absence of open air defecation

3.3.2.1.Assessment of project inputs through village council members

Project inputs were assessed through discussions with Village Council Members as well Informal discussions with five village council members from Marakkanam block and three village council members from Portonovo block were held. The villages in Marakkanam were Avanampettai, Kovadi, Pudukkuppam, T Puduppakkam and Alappakkam Villages in Portonovo were Samiyarpettai, Gauravapetta and Thillaividangan The major suggestions emerged from these discussions were as follows

1. Lot of demand had been generated by the latrine programme. People who were sceptical earlier have changed their attitude and are willing to construct latrine

2. People in general prefer latrine with superstructure
3 Poverty, lack of space, lack of know how of low cost latrines, water scarcity are the major reasons for not constructing latrines.
4 Instalment contribution might help a lot of poor people to construct latrines
5 Contract system should be avoided
6 Village Committees should be entrusted with the responsibility of latrine programme including motivation, construction and follow-up
7 Non beneficiaries must be motivated through visits to households where people use latrines regularly
8 Doors should be made with more durable materials.
9 Instead of supply driven programmes through the Block Development Officers, demand driven programmes with enhanced peoples participation should be planned and implemented. (Annexure 3 for list of village council members contacted and annexure 3 1 for list of social leaders in some of the villages)

3.3.3 Future Perspectives of Non beneficiaries in the project area/non project area

Under this are included,

a) Actual reasons for not having latrines
b) Reasons for prefering open air defecation
c) Assessment of willingness to construct latrine and
c1) Requests for supporting factors for latrine construction

3.3.3.a Actual Reasons for not having latrines*

FACTORS	MARAKKANAM			PORTONOVO		
	N.B	N.S	C.B	N.B	N.S	C.B
1 Unaware of low cost design scheme	24 7	46 7	37 8	9 1	36 7	48 2
2 No own house/land	3 5	0	0	3 6	6 7	2 2
3 No water facility	3 5	3 4	22 2	0	0	5 5
4 No space	8 2	3 4	5 5	14 5	3 3	5 5
5Out of station when the scheme was introduced	2 4	NA**	NA	5 4	NA	NA
6Traditional preference for open air	5 9	0	11 1	1 8	3 3	11 1
7 Lack of interest	9 4	16 7	4 4	5 4	26 7	1 1
8 Poverty	30 6	3 4	8 9	43.6	6 7	31 1
9 No specific reason	0	26 7	0	5 4	0	0
10 Don't know	4 7	0	10 0	1 8	0	4 4
11 New family	5 9	0	0	1 8	10 0	1 1
12 Promised not fulfilled panchayath(by Danida)	1 2	0	0	7 3	6 7	0

* There were multiple reasons NA - Not Applicable

While unaware of low cost design/scheme was highlighted by both project not supported areas and control blocks in both the districts as the prime reason for not having latrines

(35-50%), poverty was highlighted as the main factor by non beneficiaries of both Marakkanam and Portonovo blocks (30-45%). 24 7% in Marakkanam Non Beneficiary, listed unaware of low cost design as the reason for not constructing latrine

3.3.3.b Reasons for preferring open air defecation

Information gathered to ascertain why they prefer open air defecation has brought forth the following factors·

REASONS	MARAKKANAM				PORTONOVO			
	N B	N S	C B	Average	N B	N S	C B	Averag e
1 No other alternative	54 1	73 4	67 8	65 1	34 5	53 4	73 0	53 6
2 No own house to construct latrine	0	0	0	0	10 9	0	1 1	4 0
3 Need not worry about water problem	0	13	0	4 3	0	0	2 2	0 7
4 Need not worry about space problem	2 4	2 2	0	1 5	7 3	0	1 1	2 8
5 Good old practice	8 2	14 4	0	7 50	3 6	0	2 2	1 9
6 Good aeration	23 5	3 1	3 4	10 0	3 6	0	6 1	3 2
7 Poverty	1 2	1 1	3 4	1 9	1 8	0	2 2	1 3
8 Do not know	2 4	8 9	16 7	9 3	29 0	26 7	00	18 6
9 No specific reason	8 2	0	0	2 7	9 0	0	12 1	7 0

50 to 75% of the group preferred open air due to lack of alternative 23% of Marakkanam beneficianes preferred open air as it gave good aeration 25-30% of Non beneficiary and not supported group of Portonovo Block were reluctant to disclose the actual reason for preferring open air. On further probing, it was known that in certain cases, they had availed and misused the benefits of some other schemes. Some had been keenly observing the DANIDA aided scheme (Non Beneficiary PNV) but for lack of trust in Government programmes did not apply for the latrines. Poverty was stated only by less than 5% of the group under the different samples.

3.3.3 c Willingness to construct latrine

	Want to construct latrine	Do not want to construct latrine
Marakkanam	%	%
Non beneficiary	81 2	18 8
Not supported	86 6	13 4
Control Blocks	82.2	17 8
Portonovo		
Non beneficiary	91 0	09
Not supported	86 7	13 3
Control Blocks	94 4	5 6
Total	87 0	13 0

High degreee of willingness to construct latrine is displayed by all the groups (80 to 95%) It is highest in the case of Portonovo Block. Around 20% of the non beneficiaries of Marakkanam and 9% in Portonovo were not willing to construct latrine followed by Control Block Vanur of Marakkanam (18%) Control Block Cuddalore of Portonovo presented the highest willingness by 95% of its people expressing willingness to construct latrine

3.3.3.c1 Related factors for constructing latrine

The willingness of the different groups to construct latrine was related to one or more of the following conditions:

	MARAKKANAM			PORTONOVO		
RELATED FACTORS FOR WILLINGNESS TO CONSTRUCT LATRINE	NBF 81.2%	NS 86.6%	CB 82.2%	NBF 91.0%	NS 86.7%	CB 94.4%
1 If Govt Personnel had contacted	5 9	0	3 3	0	0	6 6
2 If the hosueholder had received subsidy	29 4	46 7	37 7	36 4	73 4	66 7
3 If there is any scheme by Govt or others	27 0	16 7	12 2	30 9	3 4	10 0
4 If somebody had motivated	16 9	6 7	15 5	14 4	3 4	3 3
5 If someone else in the village had constructed	0	10 0	12 2	0	6 7	7 8
6 Do not know	2 0	6 7	11 1	9 0	0	0

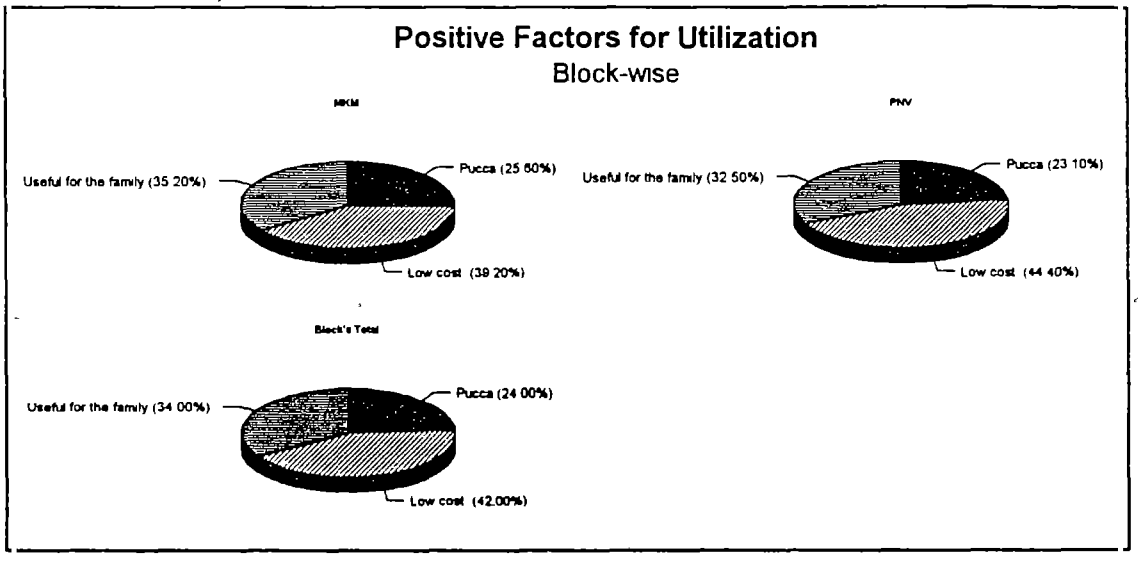
Among the supporting factors, the major factor was subsidy by Government or by other agency in all the groups Other factors were relatively of less importance. Among those who gave 'do not know' it was understood that they were afraid of any commitments made by them to an outside agency as they thought it would later be binding on them.

3.3.4. Analysis of Positive & Negative factors which have contributed to the utilization of latrines

Sl #	Utilization of latrine	Total No Satisfied & Very much satisfied with the Programme		Total No. Satisfied & Very much satisfied with the Programme		Blocks's Total	
						No	%
	Positive Factors	Marakkanam Block 176 No	60 4 %	Portonovo Block 169 NO	72 2 %	345	100
1	Pucca (proper type) with door, wall,roof etc	45	25 6	39	23 1	84	24
2	Low cost construction	69	39 2	75	44 4	144	42
3	Useful for the family	62	35 2	55	32 5	117	34

60 4% in Marakkanam and 72.2% in Portonovo reported satisfaction in the latrine programme. The major factors identified during group discussion and interviews are

grouped into three major heads as given in table 3 3.4. Twenty four percent of the positive factors attributed to good structure with proper doors and, walls and roof (pucca), 42% of the factors related to low cost construction and 34% contributed to its usefulness for the family As the major factors of dissatisfaction had already been dealt with under reasons for non-utilisation, (3 1.5.1) it is not being repeated here.



3.4Other related aspects

3.4.1 Knowledge regarding the need for Hand Washing and Attitude towards Hand Washing.

65% from Marakkanam and 52% from Portonovo had no **Knowledge** regarding the need for hand washing after defecation The following table prsents the **Attitude** towards hand washing in both the blocks. (Q,What do you think is the best way of cleaning the hand after ablution)

Handwashing after defecation/ablution	Marakkanam%	Portonovo %
1 No Idea	45 8	32 1
2 With water	22 0	25 0
3 With soap	14 1	16.0
4 With ash and soap	2 9	1 3
5 Shikkai	14 0	21 9
6 Soap & Shikkai	1 2	1 7
	100 0	100 0

(Practice regarding hand washing was not studied as it was beyond the scope of the study Responses were collected only for beneficiary households as it was collected

3.4.2 Incidence of diarrhoeal diseases

An attempt to find out the incidence of diarrheal diseases among the sample households reveals the following (The recall period was two days)

3.4.2 Incidence of Diarrhoeal Diseases in the last two days of the house visits

Incidence of Diarrhoea %

Marakkanam	No	No	%
Beneficiary	291	32	11 0
Non beneficiary	85	8	9 4
Not supported	30	6	20 0
Control Block	0	3	3 8
Portonovo			
Beneficiary	234	15	6 4
Non beneficiary	55	03	5 5
Not supported	30	02	6 7
Control Block	90	10	11 1
Total	905	79	8 7

Table 3 4 2 displays the % and number of cases of diarrhoea among the different sample groups While the cases among the beneficiaries out numbered that among the non beneficiaires in both the blocks the maximum cases were reported from not supported area in Marakkanam (20%)

3.4.3 Instruction received regarding usage of latrines

Nature of Instructions	Marakkanam		Portonovo	
	BF	NBF	BF	NBF
Film Show	26 5	5.9	33 3	3 6
Oral communication	7.9	3.5	7.7	0
Oral communication & Film show	13.5	4 7	17.1	14.5
Do not know	8.6	0	0	0
No instruction received	40.5	0	41 9	81 8

57% of Portonovo beneficiaries and 48% of Marakkanam beneficiaries reported that they had received instructions regarding usage through film shows, oral communications or both 14% non beneficiaries in Marakkanam and 18% of non beneficiaries in Portonovo also reported having benefitted by the programme.

4 DISCUSSION

This chapter deals with the significance of the findings and the possible explanations of the findings under..

a Functionality and utilization of household latrines
b Dysfunctional/Non utilizational factors
c. Knowledge and Attitude regarding latrines, open air defecation and children's faeces
d Knowledge and Attitude on hand washing practices after defecation/ablution
e Significance of diarrheal diseases .
f Significance of Health Education Programmes
g Impact and future perspectives, and also some discussions on 4 1 - monitoring of functionality, usage and impact, and 4 2 - glimpses of some of the project villages

4a Functionality and Utilization of household latrines

The results, comments and other related information indicate that the average functionality and utilization of household latrines is quite satisfactory This has to be perceived from the baseline of a community for whom latrine use was not in vogue It must have been an uphill task of the project officials, the related Govt Officials and the community leaders to transform the householders who had never practiced latrine use into those who not only practiced latrine use but also maintained it well However, the non user households could not be neglected. Now that the percentage level of utilization is 50-55%, the non user householders could be motivated to use latrines especially through the users Unless the whole group utilizes the facilities, the objective of improvement of health and living standard would remain a distant dream

Blockwise, Portonovo stands higher in utilization and functional standards Generation wise, generation II was better accepted and having less functional problems than Generation V and Generation I Generation V was the least used, and with more functional problems (18 4% use in Marakkanam, 33 3 %use in Portonovo) As one cannot expect utilization unless the latrine structure is functional, steps to rectify the functional problems might enhance the utilization level Generation I, has also been used by around 53% beneficianes Efforts to motivate the non users and encouraging the householders themselves to improve the structure might yield better results Generation II has out beaten the other two by its outstanding functionality and utilization standards - 74.5% for Marakkanam and 81.6% for Portonovo

Commendably, a few villages have displayed 100% utilization both in Marakkanam and in Portonovo Blocks. Villages like, T.Puduppakkam, Mannarsamykoil, Ariyanthangal(MKM) Chithalapadi& Villiyanallur (PNV) are examples. The special strategies or inputs if any employed by the project in these places are to be studied in detail, so also, the unparallel role of community leaders and motivation of households This has proved that even in remote rural areas, 100% utilization is possible The project could be proud of this achievement as it has proved that nothing is impossible It had to start from scratch, might have faced lot of resistances, unpredictable bottle-necks from many comers and amidst all these, they have worked with determination. Bringing forth a change in a behavioral practice is not an easy thing A habit is a result of repeated

positive action. One has to undo what had been a way of life and then learn and practice a new action. Thus to effect changes in habit involves lot of determined endeavours The success of the project should be viewed in this angle.

Collaterally, reasons for low level usage (below 25%) in some of the villages are also to be studied Munnur colony and Athikkuppam of Generation I, and Category C&B deserve serious attention in Marakkanam Block.

The difference between the blocks in socio cultural group wise utilization especially in the case of coastal community also throw light to the fact that it is not the particular group's choice or resistance as such that matters more, but it is the intervention and motivation that matters A close monitoring and support warrants the coastal groups of Marakkanam Block The SC dominated villages in both the blocks also need to be highly motivated to maintain and use the latrines effectively

Another important aspect for non utilization as understood from the field interviews were that in the initial stages, the stress was on targets It was only in the later stages that the demand driven services strategy was initiated and implemented Hence, to those whom latrines were received without much demand, the utilization was also proportionately reduced On the other hand, where latrines were constructed through self motivation and felt need, they were better utilized.

4b. Dysfunctional/Non Utilizational Factors

Both generation I and Generation V had complaints regarding various factors Lack of motivation to use was also there as was seen from the structure being used as storage for firewood, as bathroom and stated preference for open air defecation. A structure more acceptable at the same time affordable to people might be more feasible. Constructing units with more community involvement might contribute to effective and optimum utilization. People do not seem satisfied with construction through contractors The Rural Development Department Official's supervision in maintaining the quality of construction (if it is being done through them) is a key aspect to be taken care of. Ensuring quality of construction is an important factor to be attended to

Villages where there were 100% utilization had no complaints is another major factor to be noticed in this context. Major functional complaints reported were verified by the investigators, and only those found genuine were recorded and analyzed It was understood that the lack of maintenance from the beginning due to lack of motivation in using might have led to increased functionality problems. In other words, if the householders really wanted to use the latrine, at least 50-60% of the functionality problems could have been rectified Fitting door, constructing temporary superstructure etc. could have been possible by the householders themselves Whether the project should keep on spoon feeding is a matter to be seriously thought of It is significant here that some of the users also had these problems and some of them out of their own interest had rectified them.

All the four indicators of functionality/utilization were highest among the users of the coastal group for both the blocks. From the functionality/utilisation problems, it is to be understood that with structured and carefully designed educational and technical inputs all these problems could be minimisd if not overcome wholly. External factors such as

water scarcity, location problem, misuse by students etc. could be totally solved by appropriate interventions. Generally, motivation for use and maintenance could be enhanced So is it possible to have a fault free structure by giving people more responsibility in purchasing quality material and also in supervising the different construction stages This could bring down the number of complaints to less than 10%

4c. Knowledge & Attitude regarding latrines, open air defecation and children's faeces

All credit for increased awareness on latrine among the non beneficiaries and not supported area people goes to the project intervention. In one of the Control Blocks, (Vanoor) the information received were that until the time of interview they had no knowledge regarding latrine Portonovo Block had benefitted considerably than Marakkanam Block. As the project not supported area Marakkanam (PNSM) does not seem to have gained in knowledge level, more effort in this direction through the project (if it is within the scope of the project) or through other related agencies would be highly conducive

The increase in awareness level regarding latrine and the increased attitude that latrine is necessary (3 2 1 1 and 3 2.2 1A) does not seem to have changed the attitude towards utilization of latrine. While around 3/4th of the beneficiaries and non beneficiaries believe that latrine should be used by all persons, very low percentage of NSPA and control block of Marakkanam (Vanur) also think in the same line.

This factor is significant in that unless there is favourable attitude there will not be favourable behavioural change - as for any change, the WILL to change is inevitable

It is encouraging that favourable attitude has been displayed by a major group of the beneficianes and non beneficianes in the project areas. The various inputs by the project might have contributed to the positive change on this attitude factors

While there is positive attitude towards latrine, its use by all persons, its social status factor and its privacy factor, a striking revelation was that higher percentage of people in not supported, control blocks and non beneficianes believed that open air defecation is dangerous in comparison with the beneficianes in the project area (Portonovo not supported excluded) It is suggested that the dangers of open air defecation may also be disseminated more emphatically to the community through appropriate strategies.

4d. Knowledge and attitude on hand washing practices after ablution

Latrine use has to be followed by proper hand washing with appropriate and available indigenous material or soap in order to break the transmission route of faecal born diseases The information gathered indicate that more efforts on this aspect is necessary by way of intense hygiene education. The study team had collected data only with regard to knowledge and attitude on hand washing and this was limited to beneficiaries Practice regarding hand washing is an area to be studied in detail probably after more project input in this perspective.

4e. Significance of diarrheal diseases

Reduction in the number of water-borne diseases is a primary indicator of improved health standard This is especially true of water and sanitation project However before attempting any comment on this factor, the data before project intervention in the same areas is necessary as a base line Nevertheless, the figures in Marakkanam of project not supported and beneficiary and non beneficiary show that there is a positive indication showing reduction of diarrheal diseases. The presence of other contributing factors are also to be analyzed before reaching any conclusion on this

4f. Significance of health education programme

Film show through communication van was the most popular health education programme in the project area This mass media approach is quite contributory for increasing knowledge level. However, for attitudinal and behavioural changes, especially for resistant lowered literacy level groups, more action oriented participatory techniques with small group interventions are needed. It is suggested that in areas where more non utilization were reported or in new areas were possible resistances are expected, more stress on small group intervention is given.

4g. Impact and Future Perspectives

More than two thirds of Marakkanam beneficiaries and nearly 3/4th of Portonovo beneficiaries are satisfied with the latrine programme initiated by the project 30 to 40% of non beneficiaries agree positive signs of cleanliness due to latrine use.

Demand had been generated vertically from a mere 20% 'half interested' (baseline study findings year 1991) group to 80% to 90% fully interested and motivated group As is reported by the various categories other than beneficiaries, lack of knowledge on low cost latrine design and poverty were the major reasons for not constructing latrines (3.3.3a) People who were originally not interested were later willing to own a latrine. The figures rose to the range of 80% to 90% here also.(3.3.3c) Majority of the people use open air not because they prefer it but because they had no alternative. Lack of space for open air, increasing density of population, industrialisation, loss of privacy in open air were the related factors stated by them This is a very fertile ground for the project to sow the seeds of latrine. The earlier inputs have paid modest dividends. Presently, one important thing to be taken into account is more interaction with individual households and assuring good quality construction. People are willing to pay their contribution provided they got some support from outside agencies (3.3.3c). Only a very negligible percentage is still wavering about taking a positive decision regarding latrine construction.

4.1. Monitoring of Functionality, Usage and Impact

Participatory monitoring through the community (monthly basis), quarterly monitoring by the project staff and half yearly monitoring by an external agency might enhance the sustainability and credibility of the programmes

The key indicators could be:

1. Are the latrines functioning properly?
2. Is the community equipped and empowered to manage the pre and post

construction activities?

3 Do the users have convenient access to the latrines?

4 Are the latrines being used in the most effective way (visual indicators - cleanliness of latrines and surroundings, presence of cleansing materials etc.)?

5 Had there been a reduction in diarrheal diseases (recall period two days)?

4.2 Glimpses of some of the study villages

PROJECT BLOCK- MARAKKANAM

ALAPAKKAM

Alapakkam is on the way to Marakkanam from Pondicherry This village is dominated by Scheduled Caste (SC) But it has good access to road/town Marakkanam is just 3 km away from Alapakkam

Most of the inhabitants are agricultural labourers But the upper class people are owning their own lands and farms The status of the women are generally submissive in nature, i e, the men take the major role in decision and planning of programmes in the village. The ladies (SC) are also working as labourers, but are paid less than the wages paid to men

Most of the people have gone up to primary level schooling.

Lot of superstitions prevail among the inhabitants of this village They think, going out after 6 p m is not good, because they feel that, they are unnecessarily getting wrath of the evil spirits

The village does not have any Govt/Projects except the Danida IRSWS Programme and another women's upliftment programme conducted by ASSEFA (an NGO) The Danida IRSWS Programme is well accepted by the people This is due to the efforts taken by the village leader (Mr Perumal Naidu). Moreover the people are ready to take/accept any programme which the village leader recommends/gets to their village

The Magalir Sangam conducted by ASSEFA is giving training in tailoring for the women in order to uplift the economic conditions of the family. They also donate tailoring machines to the needy women.

The village needs developmental activities, a health centre with a part time Doctor because the people have to travel upto Pondicherry in case of emergency.

ANUMANTHAI

The Anumanthai village is on the way to Marakkanam from Pondicherry This village is dominated by upper class people (Gowndars), who possess their own agricultural land and farms, apart from that some of the people are also concentrating in some other trade (viz , building construction).

Most of the people in the last generation have gone only upto primary level schooling, but the present generation is studying upto matric level. This area has good access to road/Marakkanam Town.

There is a Primary Health Centre, Danida IRSWS and Schools as a part of Govt. Programmes The people are ready to accept Govt/Programmes, if it comes free of cost People request that Danida Programme should (latrines) demand only Rs 200 or less

NADUKUPPAM

Nadukuppam village is about 6 k.m of travel from KANDHADU which is on the way from Marakkanam and Thindivanam. This village is dominated by Non Scheduled Castes Though the access road is well laid, the town is bit far off Most of the Marakkanam Block inhabitants are Scheduled Castes (SC) and agricultural labourers (daily coolies) also But the upper caste people do own agriculture lands and some of the people are working in public and private sectors Few among the (SC) community are economically sound ie , they possess land, buffaloes and bullock carts

The educational level of the inhabitants is generally very low There is a middle school No upliftment programmes by any Non Government Organization (NGO) or Government Organization (G.O). The Government tries to uplift the economic conditions of the people by giving them loans and also providing needed items in subsidy (E g, Danida latrine programme), But the people are not using the amount properly. It is used for the household purposes.

KOVADI

Kovadi village is about 3 k.ms from main road running from Marakkanam and Thindivanam. Thindivanam is an easily accessable town from Kovadi This village is dominated by upper class people Most of the inhabitants possess agricultural farms

The educational level of the present generation is upto matric level There is a middle school in this village

No development programmes by any NGO or GO The people are ready to accept anything in subsidy/nonrefundable loan. The latrine programme is also accepted only because it was granted in subsidy. But usage is not upto the mark. They all prefer to go out.

ENDIUR

The Endiur village is on the way from Thindivanam and Marakkanam It is dominated by upper class people and easily accessible to road/town. Most of the inhabitants are economically sound. They possess land, cows, buffaloes and also Tractors for cultivation.

They have well furnished houses. Regarding educational level they are very low The present generation study maximum upto matric level and that too in their own regional language There is a school run by the Government to uplift the educational level

Women's status Women are not allowed to involve in community activities, their role is limited only inside their house premises The woman does not speak even a single word to others when she is with her male companion or when there is another man The attitude of the people towards Government programme is not quite favourable Only they are ready to accept loan/subsidy

Anichikuppam, Pudukuppam, in the Marakkanam block are also coastal villages. These

villages are located on the way (East coast road) to Marakkanam from Pondicherry The occupation of the inhabitants are fishing. In education, they are very low

In economic conditions, they are very poor The Government has constructed row of houses as part of shelter programme Others who were not recipient of this scheme are still staying in thatched houses The condition of the women are the same as that of the other coastal villages.

Regarding the Government programmes, only the Health Department takes some measures A Doctor visits the villages once in a week/fortnight to take blood samples to test for Malaria In terms of developmental programme implementation, there is only (latrine) sanitation programme which is nil in terms of usage In some houses the latrine room is used for bathing purpose.There is a misconception among the youths of these villages, They feel that the outsiders are exploiting them for their personal benefits

PROJECT BLOCK- PORTONOVO

PUDUPPETTAI

C Puduppetai is a coastal village, which is on the way to Parangippetai from Samiyarpetai. The village is dominated by Fishermen community Formerly their occupation was fishing in deep sea But now though some are practising the same trade, the others are working abroad (viz , Singapore, Dubai etc.) and also as seamen in ships This village gives a different picture to a stranger by its physical/geographical conditions 80% of the inhabitants are living in well constructed houses, having atleast one member in foreign country. Economically they are sound.

Though we could find some changes in their living style and standard, the educational level seems to be very low. The children in the last lap of their teenage tend to engage in different trades to contribute to their family income. The tendency and the attitude to make money seems to result in loss of interest in their education..

The people of the village go along with the local leader's words. No one tries to question him or does against what he has said in the general body meeting. Everybody sticks to rules and regulations put forth by the village committee. So a stranger can approach the people only with the President/with his permission.

The acceptance of the Government programme differ from person to person · Men having broad mind and some knowledge about the outside world are inclined to make use of the Government programme. Another important factor is that unless the programmes are acceptable to the people they would spare no effort to stop the programme. The programme package should be appealing and acceptable.

SAMIYARPETAI, another coastal village in Portonovo Block has the characteristics of both - Pudupetai as well as Anichikuppam and Pudukuppam Economically they are of middle level Most of the teenage/youth tend to move to Madras for some job The Govt. Programme is not well appreciated. The leader has a say in their life and he needs to be trained first and lots of follow up action should be carried out. -They should be made to understand the effects of defecating outside, because they feel that defecating near the seashore causes no problem to their health/environment/sea.

KUMARAMANGALAM
This village is about 5 kms from Chidambaram town. The village is dominated by non S C people The village has good access to road/town. The main occupation of the people is agriculture, some are engaged in other trades like building construction

The educational level is generally upto Matric level and there are few persons who have done Post Graduate (P G) level also. There are two schools having 1st to 5th standard. Though the S C people in this village live in different hamlet, they also fair better than the other S C hamlets.

Regarding Government programme there is good acceptance The usage and maintenance part is also good. The people are quite responsive and cooperative There is a lot of demand for the latrine.

KOTHATAI
This village is on the way to Chidambaram from Cuddalore. It is dominated by the upper caste people The main occupation of the people is agriculture while the S C people work as labourers Even though the uppercaste own their own land, they are not economically sound as that of the other villages

The educational level of the inhabitants (mostly S.C) are very poor Nearly 90% are illiterate They are afraid to speak before a stranger (a well dressed man can easily take them for a ride) They could answer the questions only when the person (interviewer) is authoritative in nature Seriousness in their part is nil.

The S C people in this village is not treated properly by the upper caste (U.C) people The upper caste people do not allow the S.C. people to walk through their fields to reach a temple worshipped by the SCs which has little straight access otherwise

CONTROL BLOCKS

Vanoor Block for Marakkanam

Being surrounded by Pondicherry and Thindivanam, Vanoor Block in SAV district has villages/habitation with not very poor access to facilities like roads, schools, hospitals etc., .
The following Habitations were studied in this block.

A - Bommiyarpalayam, Mathur, Kozhuvari
B - Thiruchittambalam, Vanur,Thenkodipakkam
C - Kiliyanur, Pulichapallam, Kondanur

However, **Kozhuvari** - Chinnakozhuvari, in particular is a bit interior and no development programme except electricity has reached this village. Water is scarce The villagers are predominantly agricultural labourers and they demand some kind of developmental intervention to take place because they hope, that will pave the way for many other programmes.

Bommiyarpalayam: a coastal habitation is on the East Coast Road to Madras, from Pondicherry Being close to roads and being a thickly populated habitation, Latrine is in

great demand People belong to mixed economic strata

Mathur is a habitation slightly interior to the East Coast road Travelling past a major chemical factory, appearance of this village at entrance proves deceptive Attractive landscape belies the reality within Water is a major problem and people are not too receptive to the idea of closed door latrine facilities. Villagers expressed their discontentment with the amount of negligence meted out by Government departments. Although description given by villagers sounded exaggerated, their voice is not to be discounted at face value.

Thiruchitrambalam is on the Pondy Thindivanam road and appeared to be an economically better off habitation Hutments situated at the entrance of the village are a highly misleading symbol contradictory to the economic status. Most houses have cattle rearing to supplement their income and people are on employment with nearby factories or towns like Pondicherry, Thindivanam and some even in Madras

Vanoor is in fact an overgrown village Government Offices, school, hospital, Police Station etc , dot the entrance and give an impression of a self-contained village . Very close dwellings do not provide for drainage facilities or the like. Most or almost all houses do not have latrine facilities and people don't seem to recognise the need for such facilities

Thenkodippakkam off the Pondy-Thindivanam route is a habitation which put off the survey team to a large extent. The first respondent plainly refused to spare some time to share information. Caste system plays an important role in the village While many agreed to the point that latrines will indeed provide privacy and safety to the women folk, they do not see any problem in continuing with their present practice of open-air defecation Upper caste families do, however, feel that latrines are a must because they do not fancy going out in the open. Irrespective of whether male or female, the younger generation feels that in future, it might become more difficult to go out in the open

Kiliyanur, a scheduled caste dominated habitation represents that latrine facility is very necessary, if only the water situation is taken care of People at present have to walk longer distances to collect water for domestic purposes. Subsidy programmes are not too attractive; for they feel, being a SC village, Government should provide facilities for free Recalling an alarming instance, people narrated a case which happened recently A ten year old boy who was sitting by the road side, some time around evening, for defecation, was hit by a truck on the road and was injured fatally This itself; they related, tells how necessary it is for them to have latrine facilities. Among other woes, they say snakes are another threat for them to go out in the open

Pulichapallam and **Kondannur** villages are quite casual in their attitude towards the intervention of a latrine programme. While they do not see latrine facility, as an imminent necessity, if such a programme is introduced for the sake of it, they are not averse to keeping one Water, here again, is a major issue Pulichappalam is already catered by DANIDA and therefore they are happy that they are coming again. Some are even sceptical about the technology of twin-pit pour flush latrines. They feel that the depth of the pit could be inadequate! People had also tried to enlighten the virtues of septic-tank technology Given a chance they would like to keep air-vents to the twin-pit latrines!

CUDDALORE BLOCK FOR PORTONOVO

Kundu Uppalavadi a habitation very near to Cuddalore is situated very close to the coast Dense dwellings and inadequate facilities make life difficult People belonging to mixed levels of economy live in this village. Proximity to Cuddalore town has its bearing on the routine and life styles of the people. Urbanization is at its threshold and latrine, most respondents agree is a necessity, especialy for the women folk

Panchayankuppam, another coastal habitation is seemingly rich with boat builders and fishermen constituting majority of the population Though people did not express any dire need for latrine facility, provided water facility is improved, they wouldn't oppose to the idea of intervention of a latrine programme.

Kudikadu the only village with abundant water supply from all the villages visited, is in an appalling state of misery! Situated in a heavily industrialised belt in the region between Cuddalore and Chidambaram, there were people - many and most of them - contemplating to leave the village for the only reason that the area is highly polluted from discharges out of the nearby factories. People complained about respiratory disorders, sustained dizzyness and even in increased numbers of impotency The entire investigation team, after spending just above an hour, experienced dizzyness, nausea and severe headaches for the rest of the day. This itself explained the genuineness of the complaints from people.

Madalappattu between Pondicherry and Cuddalore is a habitation where people are very much in demand for latrines. Villagers complained having been exploited by sub-standard facilities instead of quality output that were to reach them through various Government Departments especially the housing scheme..

Nallathur is an interior village enroute Pondicherry via Cuddalore. One portion of the village borders Pondicherry . People in this village too, sounded positive to the idea of owning latrines. Same was the case with villagers of **Vellappakkam** near to Cuddalore on the Panruthy - Cuddalore route. Water problem is severe in Vellappakkam compared with Nallathur. However latrine facility; they say is necessary.

Kondur situated on the outskirts of Cuddalore on the Cuddalore-Panruthy road is, one village which displayed keen interest in availing latrine facilities. They are even willing to contribute substantial shares for latrines (upto Rs.1000/-)

Pathirikkuppam another habitation in the outskirts of Cuddalore is a place where there have been latrines constructed as part of Government Housing Scheme Latrines have been badly constructed that even pipes from pan to pits have not been laid!. Depths of pits, as in many other places they say, is too shallow and that they fill up quite fast. They expect the implementing agency to carry out altering of pits. A generally aggressive population, posed great difficulty in even explaining why our survey team was there. They mistook our group for having been there to enlist potential beneficiaries and created a certain degree of commotion and chaos!

Yenikkaranthoppu in Cuddalore O T is near the sea and water is a very major issue. The public notice board placed at the entrance of the village displayed 'No water' as the

first entry among critical current issues. The Madras based Civic Exnora group have worked in the area and helped in the formation of civic groups to take care of sanitation problems in the village. Exnora is reputed for its civic-based activities with special emphasis to environmental sanitation and garbage disposal People were very positive in their attitude towards accepting a latrine programme in a place where dwellings, they foresee, will multiply by hundred in the future.

(The basic information collected from the respondents are given in Annexure 4)

PART II - Institutional Latrines

1.INTRODUCTION

As part of Pilot Sanitation Programme, the DANIDA (Danish International Development Assistance) project had experimented various strategies and approaches in Sanitation Programme including that of institutional latrines As per the project document, about 112 institutional (School) latrines were constructed in the blocks of Marakkanam and Portonovo during the pilot phase (These schools were also facilitated with water supply) The school teachers were trained to promote personal hygiene and sanitation practices among the children and maintain the facilities in the school.

2. STUDY SAMPLE

The details of schools furnished by the project for the study group are as follows

Table 1.

Block	Nature of Schools Primary/Middle/High School	No.of Schools	No of Seats	Year of Construction
Marakkanam	Primary Schools	36	2-3	91-94
	Welfare Schools	01	2	93-94
	Middle Schools	11	3-4	91-94
	High Schools	03	8	91-94
	Total	51		
Potonovo	Primary School	44	2-4	91-94
	Management School	07	2-4	91-94
	Welfare School	05	2-4	91-94
	Middle School	02	4	91-92
	Muslim School	01	2	93-94
	high School	02	4	93-94
	Total	61		
Grand Total Marakkanam & Partonovo		112		

15% of the schools out of the list given were selected for the study. Nine schools from Portonovo Block and 8 schools from Marakkanam Block were selected initially This selection, however had to be changed to 8 schools in Portonovo and 9 schools in Marakkanam for practical reasons in the field situation.

The names of schools with names of Headmasters, are given below:

Table -2 Block - Marakkanam

Sl.No	Name of the School	Name of the Headmaster
1	Alappakkam Middle School	M.Mannru
2	Keelputhupattu Elementary School	T.Santham
3	Kovadi Middle School	S.Natraj
4	Endiyur High School	Parandaman
5	Kanthadu Middle School	S Krishnamoorthy
6	Kurur Primary School	G.Sreenivasan
7	Nagar Primary School	B Pandurangan
8	Brahmadesam Middle School	Abdulsalam
9	Veperi High School	Ranganathan

Table-3 Block - Portonovo

Sl.No	Name of the School	Name of Headmster
1	Saniyampettai Middle School	Thonodaran
2	Kumaramangalam Management School	C S.Balasundaram
3	Silambimangalam Primary School	M Ponniyan
4	Periyapattu Elementary School	Kovindasamy
5	Periyakumathi Primary School	B Baladandayudam
9	KRC School Puduchathriram	T.Vydyabnathan
7	Sambandam Primary School	K.Krishnamoorthy
8	B Multasr High School	Sozhangan

III METHODOLOGY

In all the selected schools, Headmaster/Teacher had been interviewed. For school children, group discussion was conducted in a participatory method. A few village council members were also interviewed.

IV ANALYSIS OF DATA

The data collected were analysed in the following groups

I. KAP on latrines before and after project interventions. This included
   a) motivational agent for construction of latrines

b) attitude towards the need, usage, maintenance, design, cost and attitude towards children's faeces,
c) children's defecation practices
d)handwashing practices after defecation and
e) reasons for not constructing latrines

II. Functionality, utilisation and maintenance of latrines.

III. The third part of the analysis concentrates on children as communication media and,

IV Future perspective of latrines.

I.a Motivational agent for constructing latrine in the school

Table 4

S No	Motivational Agent	Marakkanam (9)		PortoNovo (8)		TOTAL (17)	
		No	%	No	%	No	%
1	Danida Project Staff	6	66 7	6	66 7	12	70 6
2	Rural Development Dept	0		2	33 3	2	11 8
3	Danida Projecgt Staff and village council members	2	22 2	0	0	2	11 8
4	No response	1	11 1	0	0	1	5 9

71% of the sample were motivated by Danida Project staff, 17% by Danida staff and village council members, 12% by Rural Development Department Officials They were motivated by hygienic, safety and privacy reasons through these agencies.

I. K.A.P.Before and after project intervention

I.. Attitude of Teachers towards latrine and related factors.

(Need for latrine, usage, maintenance, design, cost and attitude towards children's faeces) (Before and After project intervention).

Table 5 give attitude of teachers towards latrine and related factors before and after project intervention.

Regarding the need for latrines, 33% felt there was no need for latrines in the schools and that schools could be managed without latrines After project interventions this attitude was changed to 18% level Teachers before and after project interventions disagree that children can defecate anywhere In other words, it was not their "responsibility" (Statement I.3) This attitude too seemed to have changed to 0 level after the project intervention, as now they think it is the school's (including teachers) responsibility to provide latrine facilities to the students.

Regarding statement (I.4), i e "while we studied there was no toilet/urinal why could our

children have one", there was a shift from 53% to 23% between pre and post project interventions.

2. Usage of latrines.

Regarding usage, 60% of the teachers believed that it was not always practical to instruct the children to always use the latrines/urinals (II.1)

The post intervention attitude showed that it had come down to 35% Another attitude change noticed related to the usage was that "even if the school constructed one, children will not use it as they do not have this facility at home" (II.2). However the figures differed from 66% to 24% in this case disclosing that even if the children do not have this facility at home" they might avail of this facility at school

3. Maintenance

94% of the pre intervention attitudes denoted it would be difficult to keep the latrine in good condition, it is better to use it only in emergencies This was lowered to 12% after project intervention

Knowledge regarding adequate design to meet the school requirements revealed that 94% believed there was no adequate design to meet the requirements of the school. This was lowered to 53% after project intervention

ATTITUE OF TEACHERS TOWARDS LATRINES AND RELATED FACTORS BEFORE AND AFTER PROJECT INTERVENTION

PERCENTAGE AGREEMENT / DISAGREEMENT

Table 5.

	Statements	Before Project intervention %	After project intervention %
I	NEED FOR LATRINES		
1	Schools could be managed without latrine	33	18
2	Children can defecate anywhere	0	0
3	We do not have to bother as to where children are defecating	41	0
4	While we studied there was no toilet/urinal- Why should our children have one	53	23 5
II	USAGE		
1	It is not always practical to instruct the children to always use the latrines/urinals	60	35
2	Even if the school constructs one, children will not use it as they do not have this facility at home	66	24
III	MAINTENANCE		
1	It is very difficult to keep the latrine in good condition So better use it only in emergencies	94	12
IV	DESIGN		

1	There is no adequate design to meet our requirements	94	53
V	COST		
1	Constructing a latrine is a costly affair	100	1
VI	ATTITUDE TOWARDS CHILDREN'S FAECES		
	children's faeces are harmless	6	6

V Cost is a major factor in owning a latrine, especially in a public institution 100% believed that constructing a latrine was a costly affair However, with the introduction of low cost latrine technology by the project, this factor seemed to have been reduced to 12% (V 1)

VI Attitude towards children's faeces was the same before and after project intervention (6%) (VI 1)

I.c. Children's defecation practices before and after latrine was constructed

Table. 6.

Place of defecation	Defecation before latrine was constructed %	Parctices after latrine was constructed %
1 Road side	47.1	0
2 Paddy field/shrubs etc	35 3	17 7
3 Latrines	Not applicable	41 1
4 Convenient Place	17 6	17 7
5,Behind/nead the latrines	Not applicable	23 5
Total	100.0	100

While 41% acquired the hygienic habit of using the latrines, after project intervention, the rest were resorting to unhygienic practices for various reasons to be discussed under (I e) in this report. The fact that defecating near the roadside had been reduced to non existent level is indeed a creditable achievement.

I.d. Practice of Hand washing before and after project intervention

Table 7: Traditional Practice of washing hands after ablution

S No	Traditional Practice of Handwashing	Marakkanam		Portonovo		Total	
		No	%	No	%	No	%
1	With water	8	88 9	6	75	14	82 4
2	With sand	1	11 1	0	0	1	5 9
3	No response	0	0	2	25	2	11 8

Presently, the practice of washing hands with sand has been replaced with water Use of soap for Hand washing was not observed in any of the areas. This fact is to be given great attention in the subsequent programmes.

I.e. Reasons for not constructing latrines before project intervention.

Table 8

S. #	Reasons	Number and % ofSchools				TOTAL	
		MARAKKANAM		PORTONOVO			
		No	%	No	%	No	%
1	No initiative from Govt	0	33 3	3	37 5	5	35 4
2.	Did not feel the need	0	22 2	3	37 5	5	29.5
3	Water scarcity	11	1	0	0	1	5.9
4	Financial constraints	0	0	2	33.3	2	11 8
5	Lack of knowledge	1	11 1	0	0	1	5 9
6	No response	2	22.2	0	0	2	11.8

1e Reasons for not constructing latrines before project Intervention

Lack of initiative from Govt. was stated by 35% of the schools for not constructing latrines 29% did not feel the need to have latrines 18% cited no knowledge regarding latrine technology and construction facilities 12% pointed to financial constraints and 6% attributed to water scarcity for not having constructed latrines earlier

II Functionality/Utilization and Maintenance of Institutional (School) Latrines

a. Functionality/Utilization Status

Among the sample studied, 47% were functional and in use. One had discontinued usage one year back, but resumed use after having repaired it on their own spending around Rs.700/- for maintenance. In one case, they had started using the latrine, but subsequently as the door was stolen, they stopped using it.

Another school had used it for 2 years and stopped using it since last two years due to lack of safety as the public are using it.

In 71% of schools, which are using latrine (Alappakkam, Endiyur and Keelputtupatu in Marakkanam and Kumaamangalam, Kumaramangalam and Sambandam in Portonovo, all students and all teachers are using the latrine. Among the rest, one reported that some students and all teachers are using the latrine (Periyappattu in Portonovo) and the other reported that all teachers and only boys are using the latrine (Kovadi in Mrakkanam).

Endiyur High School had started using the latrine but discontinued it one year back as it was not in usable condition. Now after having done the repairs worth Rs 700/- on their own, they have resumed using the latrine.

Table 9 - Names of Schools, No.of Teachers and students using the latrine

Name of the School	STUDENTS		TEACHERS	
	Boys	Girls	Male	Female
Marakkanam				
1.Alappakkam Middle School	156	195	7	2
2.Keelputtu Pattu Ele School	70	81	2	1
3 Kovadi Middle School	277	248	8	1
4.Endiyur High School	NA	NA	NA	NA
Portonovo				
1 Kumaramangalam Mnagement School	27	35	1	1
2 Periyappattu Elementary School	80	95	2	1
3 Sambandam Primary School	42	56	2	0

b. Dysfunctional/Non utilizational Factors (Table - 10)

The various dysfunctional and non utilizational factors studied are presented below

I Door not strong/Fitted properly

All the non user schools and one user school complained that door was not fitted properly and hence latrine was not in its usable form. This totalled 59% of the total sample (In one case door was stolen as it was reportedly not strong - (Periyakomutti Panchayat Union Elementary School)

Table - 10

Factors	Marakkanam	Portonovo	No	Total %
I.Functional				
1. Door not strong/not fitted properly	6	5	11	65
2. Low Height	1	1	2	12
II. Water Scarcity	4	2	6	35
III. Maintenance *Poor cleanliness (pan filled with dirt & dust)*	1	1	2	12
IV Location Problem	0	1	1	6
V Public Misuse	0	1	1	6
Total	12/9	11/8	23	136*

* Many had multiple complaints

I. Facility Related: Low height and lack of privacy: This was highlighted as the main reason for non utilization because of the lack of privacy due to low height (12%).

II Water Scarcity This was reported by four from Marakkanam and two from Portonovo, forming 35% of the total sample

III Poor Cleanliness - Maintenance Related· Dusty and dirty pan were cited as reasons for non use by two schools (12%)

IV Location Problem: Latrine constructed near the ground and hence visible from the classroom was one of the reasons reported (6%) from Portonovo (Government Higher Secondary School, B-Muthur).

V Social

1 Public Misuse This was reported as one of the reasons from one school (6%) which had started using the latrine in the beginning but discontinued use since last two years The school had no compound wall and they also attribute lack of safety in using the latrine as they are used by the public as well. (Silambimangalam Primary School P N V.Block).

C.Maintenance of latrines· All those who were using the latrines had kept them clean and fairly maintained. 88% of the latrines in use were cleaned by students and 12% by sweeper.

Suggestions for improving water storage and maintenance facility

Satisfactory level of water availability was reported only by 22% of schools from Marakkanam and 38% from Portonovo totalling 30% of the study sample. Digging borewell, having water storage tank, utilising Parent Teacher Association Fund etc. were some of the suggestions given Some of the schools have already initiated steps towards this Few schools have reportedly decided to take steps for refixing of doors and rectifying construction defects through the help of panchayats, Parent Teacher Association and other departments.

Lack of initiative from Government was stated by 35% of the schools for not constructing latrines. 29% did not feel the need to have ;atromes 18% coted mp knowledge regarding latrines technology and construction facilities, 12% pointed to financial constraints and 6% attributed to water scarcity for not having constructed latrines earlier

III. Children as Communication Media:-

Students in 42% of the schools have reported that they have disseminated information regarding the importance of latrine with family members. Some of them had taken part in cultural programmes along with video show displays in the villages and schools. They had received health information on both the need and its use from the school assembly through headmasters, through filmshows, through Danida officials, and in the class rooms through teachers and others (Table-11). A few have reported as not having received any information.

Table-11 Source of information about latrine use

S.No	Source of information	MKM % Figures	PNV % Figures	Average
1	Danida Project Staff.	44	63	59
2	Danida Staff/Health Staff/Rural Devt.Staff	11	12	12
3	School Teachers	22	0	11
4	No body gave information	22	25	27

Teachers have also shared these information with their friends in other schools and could motivate them to feel the need to construct latrines in their schools

It is significant to note here that a few householders have constructed latrines in their houses, having encouraged and pressurised by their children who use latrine at school. This was stated by both students and teachers

Actions Speak better than words - where latrines are being used, children's behavioural change has resulted in feeling shy towards their earlier open-air defecation practices The insistence of teachers and other collective efforts of the project staff, gram panchayat and village council members have made this rewarding outcome

IV - FUTURE PERSPECTIVES

Viewing in terms of future perspectives, it is deemed necessary to consider the following seven aspects, namely, those related to demand generation, design and quality of construction, schools' participation and cost sharing, maintenance, water and handwashing facility, role of parents, community and related officials, and those related to hygiene education inputs.

1 Demand generation:- As the project is heading towards demand driven strategy, there should be a system for cost-sharing. The institutions should make a formal request for latrines after taking resolutions in a Parent-Teacher meeting or through education authorities. The schools' commitments regarding cost sharing, use, maintenance etc, are to be spelt out clearly before any construction activity is commenced. Motivation campaigns could be intensive so that genuine demand is generated.

2.Design and quality of construction:- Faulty doors, loose hinges, location problems, inadequate facilities in proportion to the number of students etc, are to be seriously viewed
Provision of sufficient number of urinals/toilet facilities according to the school's requirement would be ideal. However, a cafeteria approach with three or four designs suitable for varying strength of students could also be given The ultimate choice is to be given to the school committees. Doors and room size are to be sufficiently high and access to the toilet suitably designed so as to get the privacy benefit In order to prevent public misuse to the extent possible, strong doors with good locks is a must. Any compromise on these factors will result in complete underutilisation of the whole structure leading to total waste of the whole resources invested on it.

3.Participation and Cost Sharing

The collective participatory efforts of all teachers, students, Education Officers(the whole school's community including parents), were found lacking in most of the schools Only five of the 17 schools (29%) studied, were aware of the total cost of the latrine constructed in their schools Knowledge regarding the economic aspects of any social project adds to the overall utilisation and maintenance of the facility. One school reported having prepared the ground(raised the earth level) as the selected site was little low Cost sharing is another vital element to be included in the future programmes Any amount not below 10% of the total cost in the initial stages with gradual increase in the later stages could be set as a precondition for the schools to be included in the programmes. Children's and teachers' participation in different stages of the programme could be mutually discussed and worked out. Supervision could be entrusted to a joint committee formed by the Parent Teacher Association (P T.A.) and the Gram panchayath or some other relevant agency(in the case of aided schools or welfare schools) for the particular school Thus responsibilities and tasks could be spelt out clearly and jointly by all the partners concerned.

4 Maintenance

A few schools have requested for provision of scavengers to clean the toilets. Most of our schools may not be able to afford such a cost Moreover from the study itself it was observed that where the latrines were being cleaned by students they did it daily or weekly and were keeping them clean whereas those cleaned by scavengers were cleaned only once in six months. Students, both boys and girls could be trained on rotation basis to clean the latrines and urinals. This practice would be usefully extended to their homes as well One or two teachers could be entrusted with the supervision of the tasks assigned to the students. This could also be done on a rotation basis.

5.Provision of Water and Handwashing Facility

Water scarcity had been reported as a major hazard in using and maintaining the latrines in the schools. It is worth mentioning here that steps are being initiated by schools to overcome this crucial limiting factor. The project in their future endeavour can take a stand in such a manner that school latrines would be constructed only after adequate water facility is ensured. A dirty latrine at the very initial stage of usage is always a dirty and unused latrine. Therefore, it is of utmost importance that school latrines are constructed and put to use with easily accessible water facilities and adequate supply.

Hand washing facility is another prime factor. Apart from making the facility, special educational input on handwashing with soap/ash/shikkai (a locally available effective cleaning agent) is also to be given regularly and consistently over a period of time until the practice has been developed. The local health staff could be entrusted with this task once initiated by the project personnel.

6.Role of P.T.A

Other related departments, and Gram Panchayaths are to be sought throughout the programme and also after project interventions. In the present study, the collaborations of these agencies were quite minimal, limited mainly to the initial stages Very few were

involved in the implementation stage. In the post construction stage, a few have contnbuted to take steps towards rectifying nonutilisational/dysfunctional factors. These groups are to be important links in the future programmes Opportunities for valuable exchange of ideas and inputs that could enhance the effectiveness and sustainability of the programme should be encouraged and established at all levels

7.Hygiene Education Inputs

A carefully worked out and developed health education strategy suitable and adaptable to the schools in the area, translated in to Tamil and distributed to the key link persons of P T A , village council and related departments would facilitate horizontal communication, efficiency, advocacy and commitments. Regular interactions to and from the educational authorities would help support at higher levels and translate the efforts to larger areas. Formation and activation of school health clubs could be a productive and sustaining activity. Linking the School health programmes with the exiting school programmes like mid-day meal programmes is also a possibility.

Training to teachers, selected students, mothers and village council members in simple participatory planning, implementation and monitoring techniques aimed at capacity building of these groups could be of utmost use. One well motivated school in each Gram Panchayath or Block(depending on the number of schools in each gram panchayath or block), could be nominated as a nodal agency to guide and facilitate sanitation and hygiene related activities Special inputs could be given to these nodal agencies to equip them with required skills to perform this specially assigned role This would ensure more participation and sustainable impact over a period of time. Monitoring indicators could be jointly worked out and the schools themselves can share, discuss and suggest ways and means of improving the latrine construction,usage, impact and replicability towards a wider area Requesting the gram panchayaths to take resolutions and to give subsequent directives to the school authorities to make provisions for latrine facilities mandatory for all the new schools could also be suggested in the context of the new Panchayathi Raj system

5. CONCLUSION

The study findings reveal the following:

5.1 Utilization

1. There is 50-55% usage of household latrines. There were 100% utilization villages as well as below 25% utilization villages. Portonovo Block has a slightly higher level of usage than Marakkanam Block

2. Generation wise, generation II, has the highest overall utilization level with more than three fourth of the latrine owners utilizing the latrine Generation I come second and with more than half the owners utilizing it and lastly come generation V with an average utilization of less than one fourth of latrines being used.

3. Socio cultural group wise, C category has the highest utilization level followed by B and A categories respectively. Block wise, in Portonovo, both C & A category utilized above 60% while in Marakkanam B category averaged at 33% and A at 25%. The coastal category in Portonovo displayed highest utilization level.

5.2 Major Indicators of Functionality/Utilization among the user households

The indicators give encouraging results and show that those who use latrine use effectively and optimally In maintenance of latrines by users, Marakkanam block stood a step ahead of Portonovo. As for generation, paradoxically, generation V users maintained highest cleanliness standards in both the blocks. Socio cultural group wise, coastal group observed better cleanliness standards followed by non SC and SC groups respectively.

5.3 Dysfunctional and Non utilization Factors

Incomplete structure (especially of generation V, in Marakkanam and generation I in Portonovo) door and roof complaints have altogether accounted for 30-40% of the dysfunctional/non-utilization factors. Water scarcity was the factor second in this order. Provision of adequate water supply and enhancing peoples role in construction, supervision and maintenance would help ameliorate these structural and utilizational factors.

5.4 Knowledge & Attitude regarding latrines and related areas

There is considerable level of increase in knowledge, positive attitude and demand generation for latrine. Danida had been the main source of knowledge in Portonovo and Panchayat had been the main source of knowledge in Marakkanam Block. The present momentum gained should be taken advantage of It is advisable to initiate steps before this motivation subsides.

5.5 Future Perspectives of Latrines

Positive signs of cleanliness in villages where latrines were well utilized, positive influence of DANIDA and Panchayat members, assessment of Village Council Members, perspective of non beneficiaries in various areas all indicate widely opened vistas for acceptance of latrine movement. Even non beneficiaries in the project area have acknowledged that there had been positive signs of hygiene and absence of open-air defecation. There is eagerness to gain knowledge, there is positive attitude and there is willingness to share costs. Appropriate technology and strategy could work wonders here; it could change the entire scenario of these villages through concerted efforts of all the parties concerned. 66% of the total sample is satisfied with the programme. Those who were dissatisfied were so due to design and construction problems.

Incidence of diarrhoeal diseases in the study areas sound alarming, especially in not supported area of Marakkanam with 20% rate of diarrhoeal diseases.

The usage level of schools is around 50% and all those are being used are being well maintained. Dangers of open-air defecation, its privacy aspects and hygienic aspects have been well assimilated among students. Concerted efforts on the part of the school authorities and the Parent Teacher Associations, especially those concentrating mothers could help cultivate the practice of latrine use from the early childhood years. The positive knowledge and attitude generated could pave the way for favourable practice. The students who have practised better latrine use could be used as motivators for other students in other schools. Exchange visits could be congenial and fruitful. School Health/Sanitation Clubs with clearly worked out strategies could act as catalysts to raise hygienic standards at schools. Schools themselves have initiated necessary repairs in few cases which is a very promising trend.

The study has gone in depth in investigating and analysing the utilizational and functionality of household and institutional latrines in the blocks . Utmost care had been taken in all the stages of the study and it is believed that the findings would facilitate the various stake holders of the project and also individuals and institutions interested in this field.

ANNEXURES

Over all strategies of Sanitation Programmes

* Initiate demand driven services in Sanitation Programme
* Provision of household latrines at the rate of 15% coverage of total population
* Introducing low cost latrines through R&D.
* Delivery of latrines only on demand basis and ensure beneficiaries contribution either cash or labour or materials
* Participatory and need based planning and implementation through PRA
* Priority to the poor section of the society
* Strengthening of community participation in project activities
* Dissemination of health messages related to water and sanitation through trainings

Project Inputs

Vcs and Sub Committees in panchayats/habitations were formed and they were trained/oriented

Sanitation strategies and information were disseminated through meetings and orientations to the villagers.

Mass health education campaigns, through video programmes using communication van were conducted in majority of the habitations where latrines were constructed During these programmes, the school children and local villagers have participated to communicate messages or water and sanitation based on the local situations through performing songs, dances, short dramas, and small speeches etc.
VC/Sub Committees were encouraged and involved in motivation and selection of beneficiaries and collect contribution for construction of latrines.

Local masons and Government functionaries at various levels were trained on construction of latrines and health education and motivation

Experimented low cost latrines of various models using cost effective technologies.

Household latrines were delivered at high subsidy to low subsidy based on the demand.

Follow up motivation either through group meetings or individual contact were done in order to increase the utilization level.

Source: Project Document

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A

STUDY ON UTILISATION/FUNCTIONING OF HOUSEHOLD AND INSTITUTIONAL LATRINES IN DANIDA AIDED INTEGRATED RURAL SANITATION AND WATER SUPPLY PROJECT AREAS (IRSWSP), TAMIL NADU.

Name of Investigator: Name of the Respondent:

Habitation: Village:

Respondent's status in the family: (1) HdH (2) LdH:*

Category of sample: A B C

Generation of Latrine: I II V

Questionnaire I (Household)

A. GENERAL IDENTIFICATION PARTICULARS

A1. Name of District/ Block (1)VRP/MK (2)SAV/PN

A2. Area (1) Project Area (2)Non-Project Area

A3. Religion (1)Hindu (2)Christian (3)Muslim (4)Others

A4. Caste (1)S.C (2)Fishermen (3)O.B.C (4) Others(Please specify)

A5 Assessment of Income level*
(1)High (2)Medium (3)Low (4)Poor (5)Very Poor

A6. Education level @
A6.1. Educational level of head of the household
(1)Ilit (2)L.P (3)U.P (4)H.S (5)P.T (6)Gr. (7)P.G (8)T.E

A6.2 Education level of the housewife
(1)Ilit (2)L.P (3)U.P (4)H.S (5)P.T (6)Gr. (7)P.G (8)T.E

---

* HdH:Head of the household, LdH: Lady of the household
@ Ilit:Illiterate L.P:Lower Primary U.P:Upper Primary H.S:High School P.T:Plus Two Gr:Graduate P.G:Post Graduate T.E:Technical Education
# This will be assessed in consultation with the village [illegible]

A7 Occupation

A7.1 Occupation of Head of the household
(1)Own agriculture (2)Agricultural labourer (3)Govt. Employee (4)Factory Employee (5) Fishing (6)Weaving (7) Other employment (8) Unemployed

☐

A7.2 Occupation of Lady of the Household
(1)Own agriculture (2)Agricultural labourer (3)Govt. Employee (4)Factory Employee (5) Fishing (6)Weaving (7) Other employment (8) Housewife

☐

A8. Family size

A8.1 Total No.of family members:

A8.1.a Total no.of adults: A8.1.b Total No.of children:

A8.1.c Total no.of female(above 13 years):

B. KNOWLEDGE AND ATTITUDE ABOUT LATRINES

Questions
B.1 to B.13.1

B.1 Do you own a latrine (1)Y (2)N

☐

B.1.1 Is this latrine constructed by the assistance from
a.DANIDA b.Government Department c.N.G.O d.

☐

KNOWLEDGE ABOUT LATRINE:

B.2. When did you first have the idea of a latrine? Year

B.2.1. Through whom did you have the idea of a latrine.

2B.2.2 What did you understand about latrine?
(How did they convince you the need for a latrine)

B.2.3 Was there any other source of information regarding this.

KNOWLEDGE ABOUT USAGE:

B.3 Did you get any instruction from anybody regarding the usage of latrines (1)Yes (2)No

(Please try to probe) what type of instruction

who gave you instructions.

When did you get the instructions.

B.4 What do you know about the importance of latrines.

B.5 What do you know about the maintenance of latrines

ATTITUDE ABOUT LATRINES:

B.6 Do you think latrine is necessary. (1)Yes (2) No

If yes,

B.6.1 Why do you think latrine is necessary
(Please try to probe on the reason and make a small note.Also on what was their practice before they owned the latrine and how did they change)

B.6.2 If No, why do you think latrine is not necessary.

B.7.1 How do you agree with the following statements

	Agree	Disagree
(1) Latrines need be used only by men	(1)	(2)
(2) Latrines need be used only by women	(1)	(2)

	Agree	Disagree
(3) Latrines need be used only by children	(1)	(2)
(4) Latrines need be used only by old persons	(1)	(2)
(5) Latrine should be used by all persons	(1)	(2)
(6) It is not proper to have latrines inside or near the house	(1)	(2)
(7) Open air defecation is the good practice	(1)	(2)
(8) Open air defecation is enjoyable	(1)	(2)
(9) Open air defecation gives more social opportunity	(1)	(2)
(10) Latrines in general are dirty	(1)	(2)
(11) Latrines in general smell badly	(1)	(2)
(12) Men and women should not use the same latrine	(1)	(2)
(13) Childrens' faeces are harmless	(1)	(2)
(14) Latrines are only for emergency purpose	(1)	(2)
(15) Menstruating women will pollute the latrine	(1)	(2)

	Agree	Disagree
(16) It is against religious beliefs.	(1)	(2)
(17) It is against the prevalent customs	(1)	(2)
(18) Open air defecation is dangerous	(1)	(2)
(19) Latrines give social status		
(20) Latrines give privacy		

B.8 FUTURE PERSPECTIVES OF THE LATRINE

B.8.1 What motivated you to construct latrine?

B.8.2 Are you satisfied with the present programme
(1) V.much satisfied (2) Satisfied (3) Not satisfied

B.8.3 If the answer to B.8.2 is 'very much satisfied' and 'satisfied', what are the good points that gave you satisfaction.

B.8.4 If the answer to B.8.2 is 'not satisfied', why are you not satisfied.

B.8.5 Do you think there was any procedural step that should have been avoided/changed in the latrine programme.
(1) Yes (2) No

B.8.5.1 If Yes, what was the procedural step.

B.9 In case your friends wish to construct a latrine and seek your advice what advice will you give regarding the latrine model.

B.10 What are your specific suggestions for improvements of the sanitation programme.

B.11 What change have you noticed in the village after the latrine programme was implemented.

B.12 Has anybody from the project or other departments visited you and briefed you about the latrine programme (1) Yes (2) No

B.12.1 If yes, after the visit what action have you taken regarding latrine programme.

B.13 Have you been associated with any other programme in the community. (1) Yes (2) No

B.13.1 If yes, what was the programme that you have been associated with.

C. GENERATIONS OF LATRINES AND FUNCTIONING AND UTILISATION LEVEL
(TO BE COLLECTED ONLY FROM THOSE WHO HAVE LATRINES THROUGH THE PROJECT DANIDA IRSWS)

Questions C.1 to C.19

To be filled by the Interviewer after personal observations.

C.1 Is the latrine being used? 1.Yes 2.No ☐

C.1.1 Is the latrine in regular use.
a.Regular b.Irregular c.occasional d.never e.not applicable ☐

C.1.2 How many members of this family use this latrine:
No.of adults using latrine: No.of children using latrine: No.of female members using latrine:

C.1.3 When have you started using this latrine after it was completed. a.within a month b. within three months c.within six months. ☐

C.2 Is it generally clean. 1.Yes 2.No ☐

C.2.1 Is the pan clean 1.Yes 2.No ☐

C.2.2 Is the platform and the surrounding of the pan clean.
1.Yes 2.No ☐

C.2.3 Is the pan discoloured 1.Yes 2.No ☐

C.2.4 Is the excreta sticking to the pan 1.Yes 2.No ☐

C.2.5 What is the condition of the waterseal
a.only water b. some excreta c. excreta only

☐

c.2.6 Is there excreta in the surrounding area of the house
1.Yes 2.No

☐

C.3 Is the roof in good condition 1.Yes 2.No

☐

3.Is the door in good condition 1.Yes 2.No

☐

c.4 A.Presence of flies a.not at all b. one or two c.lots of
B.Mosquitoes a.not at all b.one or two c. lots of
C.Bad odour a. Nil b.little c.too much

☐

C.5 Is there additional structure built along with latrine for bathing.1.Yes 2.No

☐

C.6 How do you dispose of infant's faeces.(To be asked only to families with infants)

☐

C.7 Where do children defecate
(a) boys (b) girls (c) infants (d) not applicable

☐

C.8 Since when have you stopped using the latrine.
a.within a month b.within three months c.within six months

☐

C.8.1 Why did you discontinue using latrine?

C.9 Who cleans the latrine: 1.Male 2.Female 3.Children

C.9.1 How often is the latrine cleaned
(1)daily (2)once in two days (3)weekly (4)fortnightly (5)occasionally (6)Never

C.9.2 What do you use to clean the latrine
(a)Desirable materials:(1)brush (2)coconut brooms (3)Water (4)others
(b)Harmful materials:(1)Phenol (2)Vim (3)Bleaching Powder (4)Other chemicals

C.10 Do you have sufficient water for use in latrine(1)Yes (2)No

C.10.1 Is there a practice of water collection and storage near latrine 1.Yes 2.No

C.10.2 Have you faced any difficulty in carrying water for use in the toilet. 1.Yes 2.No

C.10.3 How is water stored in/nearby latrine

C.11 What do you think is the best way of cleaning the hands after ablution

C.11.1 What local materials are available for cleaning?

C.11.2 Why are they used?

C.12 If the latrine is not being used,
Why is the latrine not being used?

C.13 Have you undertaken any maintenance for the latrine on your own (1) Yes (2) No (3)No maintenance required (4)Not used

C.13.1 If yes,
What was the problem, how did you repair it?

C.14 Diarrhoeal diseases

C.14.1 Did anybody suffer from diarrhoeal disease@ in the last two days (1) Yes (2) No

If yes,

C.14.2 a. age of children: b. age of adults:

C.14.3 How was it treated?

C.14.4 Cost incurred for treatment if any

C.15 Actual reasons for not having latrines.

C.15.1 Why didn't you construct a latrine?

C.16 Where do you go for defecation purpose?

C.16.1 Why do you prefer open air defecation?

C.17 Would you have constructed latrine if one or more of the following were there:

1. somebody had motivated you
2. someone else in the village had constructed
3. someone else in the village had initiated
4. the Government personnel had approached you
5. you had received subsidy: 20% 50% 100%
6. there is any scheme by Govt/others
7. No. I wouldn't have constructed

C.18 Have you attended any health education programme related to latrine programme.

(1)Yes (2) No

If yes,

C.18.1 How many programmes have you attended

C.18.2 What do you remember best from these programmes

C.18.3 Did you tell what you remembered from the programme to anybody else

C.18.4 Could you briefly describe the health education programme you have attended

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@:The recall period could be extended upto 14 days(2 weeks)

C.18.5 If you happen to learn these things are you willing to share these with your friends/neighbours.
(1)Yes (2)No

C.19 Why did you not attend the health education programme.(Which of the following reasons are applicable to you)
(1) It is a waste of time (2) Not interesting
(3) Loss of wages (4) Women are not allowed to attend meetings (5) Lack of time (6) Interested, but classes are held when we have the peak household work. It should be according to our convenience.(7) Not convenient (8)Too far (9)Unfamiliar places (10)Late evenings (11)Other reasons (Please specify)

வெளிநாட்டு உதவி பெறும் ஒருங்கிணைந்த ஊர்ப்புற சுகாதாரம் மற்றும் குடிநீர் விநியோக திட்டப் பகுதிகளில் வீடுகள் மற்றும் பள்ளிகளில் கழிப்பிடங்களின் பயன்பாடு / செயல்பாடு பற்றிய ஓர் ஆய்வு.

A2-

விபரம் சேகரிப்பவர் பெயர் :

விபரம் அளிப்பவர் பெயர் :

குடியிருக்கும் இடம் :

ஊர் :

குடும்பத்தில் விபரம் அளிப்பவரது நிலை : 1, குடும்பத் தலைவர்
2, குடும்பம்பத் தலைவி

விபரம் அளிப்பவரது வகை : A B C

கழிப்பிடம் உருவான விதம் : I II V

வினாத் தொடர் I (வீட்டு உபயோகம்)

A பொதுவான விபரங்கள்

A 1 மாவட்டம் / ஒன்றியத்தின் பெயர் (1) வி.ஆர். / பி.எம்கே
(2)எஸ்.ஏ.வி. / பி.என்

A 2 பகுதி (1) திட்டத்தில் சேர்ந்த பகுதி
பகுதி (2) திட்டத்தில் சேராத பகுதி

A 3 மதம் (1) இந்து (2) கிறிஸ்துவர்
(3) முஸ்லிம் (4) மற்றவர்

A 4 ஜாதி (1) தாழ்த்தப்பட்டவர் (2) மீனவர்
(3) பிற பிறபடுத்தப்பட்ட வகுப்பினர்
(4) மற்றவர்கள் (எது என குறிப்பிடவும்)

A 5 வருமான நிலை (1) அதிகம் (2) நடுத்தரம்
(3) குறைவு (4) ஏழைகள்
(5) மிகவும் ஏழைகள்

A 6 படிப்பறிவு நிலை

A 6 1 குடும்பத் தலைவரின் படிப்பறிவு நிலை
(1) படிப்பறிவு அற்றவர் (2) ஆரம்பக் கல்வி (3) உயர் நிலை
(4) பட்டப் படிப்பு (5) பட்ட மேற் படிப்பு (6) தொழிற் கல்வி

A 6 2 குடும்பத் தலைவியின் படிப்பறிவு நிலை
(1)படிப்பறிவு அற்றவர் (2) ஆரம்பக் கல்வி (3) உயர் நிலை
(4) பட்டப் படிப்பு (5) பட்ட மேற்படிப்பு (6) தொழிற்கல்வி

A 7 **தொழில்**

A 7 1, குடும்பத் தலைவரின் தொழில் [1] சொந்த விவசாயம் [2] விவசாயக் கூலி
[3] அரசு ஊழியர் [4] தொழிற் சாலை பணியாளர்
[5] மீன்பிடித்தல் [6] நெசவுத் தொழில் [7] பிற வேலை [8] வேலையின்மை

A 7 2. குடும்பத்தலைவியின் தொழில் [1] சொந்த விவசாயம் [2] விவசாயக் கூலி
[3] அரசு ஊழியர் [4] தொழிற்சாலை பணியாளர் [5] மீன் பிடித்தல்
[6] நெசவுத் தொழில் [7] பிறவேலைகள் [8] குடும்ப நிர்வாகம்

A 8 **குடும்ப அளவு**

A 8 1. குடும்பத்தில் உள்ள மொத்த நபர்களின் எண்ணிக்கை

A 8 1 a பெரியவர்கள் எண்ணிக்கை :

A 8 1 b சிறியோர் எண்ணிக்கை :

A 8 1 c மொத்த பெண்களின் எண்ணிக்கை [13 வயதிற்கு மேல்]

B கழிப்பிடம் பற்றிய அறிவு மற்றும் மனப்பாங்கு வினாக்கள்
B 1 முதல B 13 1. முடிய

B 1. உங்களுக்கு சொந்தமாக கழிப்பிடம் உள்ளதா ?
[1] ஆம (2) இல்லை

B 1 1. இந்த கழிப்பிடம் யாருடைய உதவியால் கட்டப்பட்டது ?
a. டேவிடா b அரசுத் துறை c, அரசு சாராத நிறுவனம்

கழிப்பிடம் பற்றிய அறிவு

B 2. கழிப்பிடம பற்றிய எண்ணம் உங்களுக்கு எப்பொழுது ஏறபட்டது? ஆண்டு

B 2 1 யார் மூலமாக இந்த எண்ணம உங்களுக்கு ஏற்பட்டது ?

B 2 2. கழிப்பிடம் பற்றி நீங்கள் அறிந்து கொண்டது என்ன ?
(கழிப்பிட தேவை பற்றி உங்களுக்கு எப்படி புரிய வைத்தனர்)

B 2 3 இது பற்றி வேறு எந்த வகையில் வது விபரங்கள் கிடைத்தது ?

பயன்படுத்துதல் பற்றிய அறிவு

B 3. கழிப்பிடங்களை பயன்படுத்துவது பற்றி [illegible] அறிவுரைகள் கிடைத்தது ?

(1) ஆம (2) இல்லை

எந்த மாதிரியான அறிவுரைகள் (தயவு செய்து கண்டறியவும்)

அறிவுரைகள் கொடுத்தது யார் ?

எப்போது ?

B 5: கழிப்பிடத்தின் முக்கியதுவத்தைப் பற்றி நீங்கள் அறிந்ததென்ன ?

கழிப்பிடம் பற்றிய மனப்பாங்கு

B 6, கழிப்பிடம் தேவையானது என கருதுகிறீர்களா? ☐
(1) ஆம் (2) இல்லை

ஆம் எனில்

B 6 1. ஏன் தேவையானது என கருதுகிறீர்கள் ?

(தயவு செய்து காரணத்தை சிறு குறிப்பு வரையவும். மேலும் கழிப்பிடம் கட்டிக் கொள்வதற்கு முன் அவர்களது பழக்கம் என்ன என்பதையும் எவ்வாறு கழிப்பிடத்தை பயன்படுத்த துவங்கினார்கள் என்பதையும் கண்டறியவும்.)

B 6 2. இல்லை எனில் கழிப்பிடம் தேவையில்லை என ஏன் கருதுகிறீர்கள் ?

B 7 1. கீழ் குறிப்பிட்டுள்ளவற்றை ஒபுக்கொள்கிறீர்களா ?

	ஒபுக் கொள்கிறேன்		மறுக்கிறேன்
(1) ஆண்கள் மட்டுமே கழிப்பிடங்களை பயனபடுத்த வேண்டும்	1	☐	2
(2) பெண்கள் மட்டுமே கழிப்பிடங்களை பயன்படுத்த வேணடும்	1	☐	2
(3) குழந்தைகள் மட்டுமே கழிப்பிடங்களை பயன்படுத்த வேண்டும்	1	☐	2
(4) வயதானவர்கள் மட்டுமே கழிப்பிடங்களை பயன்படுத்த வேண்டும்	1	☐	2
(5) எல்லோரும் கழிப்பிடத்தை பயன்படுத்த வேண்டும்	1	☐	2

(6) வீட்டுக்குள்ளேயோ, வீட்டுக்கு அருகிலோ கழிப்பிடங்கள் இருப்பது சரியல்ல 1 2

(7) திறந்த வெளியில் மலம் கழிப்பதுதான் சிறந்த பழக்கமாகும் 1 2

(8) திறந்த வெளியில் மலம் கழிப்பது மகிழ்ச்சியானதாகும் 1 2

(9) திறந்த வெளியில் மலம் கழிப்பது சமூகத்துடன் கலந்து பழக வாய்ப்பளிக்கிறது 1 2

(10) பொதுவாக கழிப்பிடங்கள் அசுத்தமானவை 1 2

(11) பொதுவாகவே கழிப்பிடங்களில் துர்நாற்றம் வீசுகின்றது 1 2

(12) ஒரே கழிப்பிடத்தை ஆண் பெண் இரு பாலாரும் பயன்படுத்தப்படக் கூடாது 1 2

(13) குழந்தைகளது மலம் தீங்கற்றவை 1 2

(14) கழிப்பிடங்கள் அவசரத் தேவைக்குமட்டுமே பயன்படுத்தப்பட வேண்டும் 1 2

(15) மாத விலக்கான பெண்கள் கழிப்பிடத்தை அசுத்தப்படுத்திவிடுவர் 1 2

(16) கழிப்பிடத்தை பயன்படுத்துவது மத நம்பிக்கைகளுக்கு முரணானது 1 2

(17) இது நடைமுறை வழக்கத்திற்கு எதிரானது 1 2

(18) திறந்த வெளியில் மலம் கழிப்பது ஆபத்தானது 1 2

(19) கழிப்பிடங்கள் சமுதாய அந்தஸ்தை கொடுக்கின்றன 1 2

(20) கழிப்பிடங்கள் தனிமையைத் தருகின்றன 1 2

B 8. கழிப்பிடம் பற்றிய வருங்கால தோற்றங்கள் :

B 8 1. கழிப்பிடம் அமைக்க உங்களை தூண்டியது எது ?

B 8 2. தற்போதைய திட்டம் உங்களுக்கு திருப்தி அளிக்கிறதா ?

(1) மிகவும் திருப்திகரம் (2) திருப்திகரம் (3) திருப்தி இல்லை

B 8 3. வினா எண் 8.2 க்கு விடை மிகவும் திருப்திகரம் மற்றும் திருப்திகரம் எனில் உங்களுக்கு திருப்தி அளித்த விஷியங்கள் யாவை ?

B 8 4. வினா எண் B 8.2க்கு விடை திருப்தி இல்லை எனில் என்ன காரணம் ?

B 8 5, கழிப்பிடத்தில் ஏதேனும் நடைமுறை வழிகள் விடுபட்டோ / மாற்றப்பட்டுள்ளதோ என நினைக்கிறீர்களா ? (1) ஆம் (2) இல்லை

B 8 5 1. ஆம் எனில் எந்த நடைமுறை ?

B 9. உங்கள் நண்பர்கள் யாரேனும் உங்களிடம் கழிப்பிடம் கட்ட அறிவுரை கோரினால் கழிப்பிட மாதிரி குறித்து நீங்கள் கூறும் அறிவுரை என்ன ?

B 10. சுற்றுப்புற சுகாதாரத்தை மேம்படுத்த உங்களது ஆலோசனைகள் என்ன ?

B 11, கழிப்பிடத் திட்டம் அமுலபடுத்தபபட்ட பின்பு கிராமத்தில் நீங்கள் காணும் மாற்றம் என்ன ?

B 12. இத்திட்டத்தைச் சார்ந்தவர்களோ அல்லது வேறு துறையைச் சார்ந்தவர்களோ உங்களுக்கு இந்த கழிப்பிடத் திட்டத்தைப் பற்றிக் கூறினார்களா ?
(1) ஆம் (2) இல்லை

B 12 1. ஆம எனில அதன பின்னர் இது குறித்து நீங்கள மேற்கொண்ட நடவடிக்கை என்ன ?

B 13, பொதுஜனத் தொடர்புடைய வேறு ஏதேனும் பயிற்சியில் நீங்கள் பங்கெடுத்துள்ளீர்களா ?
(1) ஆம் (5) இல்லை

B 13 1. ஆம் எனில், எந்த மாதிரியான திட்டங்களில் பங்கெடுத்துள்ளீர்களா ?

C 14 **வயிற்றுப் போக்குத் தொடர்பான வியாதிகள் :**

C 14 1. கடந்த இரண்டு காலங்களில் (கடந்த இரண்டு வார காலத்தை கணக்கில் எடுத்துக் கொள்ளவும்) யாரேனும் வயிற்றுப்போக்கு வியாதியால் பாதிக்கப்பட்டார்களா ?

(1) ஆம் (2) இல்லை ☐

C 14 2. ஆம் எனில்

(a) சிறுவர்கள் வயது (b) பெரியவர்கள் வயது

C 14 3. அதற்கு என்ன சிகிச்சை செய்யப்பட்டது ?

C 14 4. சிகிச்சைக்கு ஏதேனும் செலவு செய்யப்பட்டதா ?

C 15. கழிப்பிடங்கள் இல்லாமைக்கு உண்மையான காரணங்கள் ?

C 15 1. நீங்கள் ஏன் ஒரு கழிப்பிடத்தை கட்டவில்லை ?

C 16. மலம் கழிக்க நீங்கள் எங்கு செல்கிறீர்கள் ?

C 16 1. ஏன் திறந்தவெளி கழிப்பிடத்தை விரும்புகிறீர்கள் ?

C 17. கீழ்கண்ட ஏதேனும் காரணங்களால் நீங்கள் கழிப்பிடம் கட்டியிருக்க வாய்ப்பு உண்டா?

1. யாரேனும் தூண்டியிருந்தால்
2. கிராமத்தில் வேறு யாரேனும் கழிப்பிடம் கட்டியிருந்தால்
3. கிராமத்தில் வேறு யாரேனும் முயற்சி செய்திருந்தால்
4. அரசாங்க பணியாளர் யாரேனும் உங்களை அணுகியிருந்தால்
5. 20 %, 50 %,100 % என்ற விகிதத்தில் மானியம் கிடைத்திருந்தால
6. அரசு அல்லது மற்ற திட்டங்கள் வாயிலாக
7. நான் கழிப்பிடம் கட்டியிருக்கமாட்டேன

☐

C 18. நீங்கள் தேக ஆரோக்கியமும் கழிப்பிடமும் பற்றிய ஏதேனும் ஆரோக்கிய பயிற்சி திட்டத்தில் பங்கெடுத்துள்ளீர்களா ?

(1) ஆம் (2) இல்லை ☐

C 18.1. எத்தனை பயிற்சிகளில் பங்கெடுத்துள்ளீர்கள் ?

C 18 2, இந்த பயிற்சிகளிலிருந்து நீங்கள் சிறப்பாகதெரிந்து கொண்டது என்ன ?

C 18 3. இந்த பயிற்சிகளில் நீங்கள் தெரிந்து கொண்டவற்றை பற்றி வேறு யாருக்கேனும் தெரிவித்தீர்களா ?

C 18 4. நீங்கள் கலந்து கொண்ட தேக ஆரோக்கிய பயிற்சியை பற்றி சுருக்கமாக கூறவும்.

C 18 5. நீங்கள் தேக ஆரோக்கியம் மற்றும் கழிப்பிடத்தை பற்றி தெரிந்து கொண்டால அதை நண்பர்களுக்கும் / அருகில் உள்ளவர்களுக்கும் தெரிவிப்பீர்களா ?

(1) ஆம் (2) இல்லை

C 19. நீங்கள் ஏன ஆரோக்கியம் தொடர்பான பயிற்சிகளில் கலந்து கொள்ளவில்லை ? (உங்களுக்கு பொருத்தமான காரணத்தை கூறவும்)

(1) அது ஒரு காலவிரயம்
(2) சுவாரஸ்யமானதாக இல்லை
(3) கூலி நஷ்டமாகிறது
(4) பெணகள அனுமதிக்கப்படுவதில்லை
(5) சமயம் இல்லை
(6) விருப்பம் உள்ளது. ஆனால் பயிற்சி நேரம் எங்களது வேலை நேரத்தில் குறுக்கிடுகிறது பயிற்சி நேரம் எங்களுக்கு வசதியானதாக இருக்க வேண்டும்
(7) வசதியாக இல்லை
(8) பயிற்சியிடம் மிகுந்த தொலைவில் உள்ளது
(9) பயிற்சி புது இடத்தில் நடைபெறுகிறது
(10) மாலை நேரங்களில அதிக நேரமாகி விடுகிறது
(11) வேறு எதேனும காரணங்கள் (தயவு செய்து தெரிப்பிடவும்)

QUESTIONNAIRRE II (for School Latrines)

Questions A to d.12.1

A. GENERAL IDENTIFICATION PARTICULARS

A.1 Name of the Block/District: (1)VRP/MK (2)SAV/PN

A.2 Area: (1)Project Area (2)Non Project Area

A.3 Name of the School: 1.LP* 2.UP 3.HS

A.4 Name of the Head Master:

A.5 Name of teacher being interviewed:

A.6 Strength of students: A.6.1 Boys: A.6.2 Girls:

A.7 Strength of Teachers: A.7.1 Male: A.7.2 Female:

A.8 No.of Latrines: A.9 No. of Urinals:

A.10 Year of construction of latrines/urinals:

a. Knowledge, Attitude and Practice of school teachers/students

a.1 What motivated you to construct latrine in this school?
(1) Danida Project Staff (2)Health Department (3)Rural Department (4)Village Council Members (5)Social Leaders (6)P.T.A (7) Well wishers (8)Others

a.2 Why was it not constructed earlier?

a.3 What was your idea about children's defecation practices before the laltrine was constructed.

a.4 From where did you first gather information about latrines.

a.5 What made you decide that the school should have a latrine.

a.6 Who gave you the information about latrine?

a.7 What was the general response initially?
(1)Favourable (2)Unfavourable

a.8 What were the different steps you had taken to make this a reality?

a.8.1 How much does the latrine cost?

a.8.2 What was your part of the contribution?

a.8.3 In which all stages of latrine programme did the school participate

---

* LP - Lower Primary UP - Upper Primary HS - High School

a.9 Where did you go for toilet purpose before this was constructed.

a.9.1 What was wrong with the earlier system.

a.9.2 Other schools are continuing the old practice. What difference do you think you have from others.

a.10 How much do you agree/disagree with the following statements?
Before project intervention:

	Agree	Disagree
1.Schools could be managed without latrines?	A	D
2.Children can defecate anywhere		
3.Children's faeces are harmless		
4.We do not have to bother as to where children are urinating		
5.It is not always practical to instruct the children to use the latrine/urinals		
6.While we studied there was no toilet/urinal - why should our children have one?		
7.Constructing a latrine is a costly affair.		
8.There is no adequate design to meet our requirements		
9.Even if the school constructs one, children will not use it as they do not have this facility at home.		
10.It is very difficult to keep the latrine in good condition. So better use it only in emergencies.		

a.11 Has any of the above attitudes changed after project intervention?
1.Yes 2.No

a.11.1 If yes, which are the ones that have changed.

b. Functioning, Utilisation and Maintenance of latlrines

b.1 Are these latrines being used Y N

b.2 Are the Urinals beings used Y N

b.3 If not why are they not being used
(Please go to question c.)

b.4 If yes, who all are using the latrines Urinals
1.All Students and All Teachers
2.Some Students and All Teachers
3.Some Students and some Teachers
4.Girl Students and Lady Teachers
5.Girl studemts and All Teachers
6.Boys and All Teachers
7.Boys and All Male Teachers
8.Boys and All Lady Teachers

b.5 Are they kept clean (1)Yes (2)No

If yes,
b.5.1 Who cleans it
b.5.2 How often b.5.3 How is it cleaned

If no,

b.5.4 Why are they not kept clean

b.5.5 Whom do you think is responsible for cleaning it.
1.Teachers 2.Students 3. Both Teachers and Students 4.Paid worker 5.Parents 6.Others (Please specify)

b.6 Is there anybody else other than school members who uses the latrine (1)Yes (2)No

b.6.1 Do they keep it clean (1)Yes (2)No

b.6.2 If not, how can you prevent them from using it?

b.7 Is there sufficient source of water inside/near the latrine to clean it.

b.7.1 How far is the water storage facility.
1.Too far 2.Not much far 3.Near

b.7.2 Can the school take measures to improve the water storage and maintenance facility? How?

b.8 Where do the children prefer to go for urination
1.Near some shrubs 2.Behind the latrine wall 3.Behind the school compound wall 4.Near the drainage 5.Wherever it is convenient (6) In the urinals

b.8.1 Why

b.9 Where do the children prefer to go for defecation?
1.Near some shrubs 2.Behind the latrine wall 3.Behind the school compound wall 4.Near the drainage 5.Wherever it is convenient (6) In the latrines

b.9.1 Why

b.10 Who gave you information about latrine use
(1) Danida Project Staff (2)Health Department (3)Rural Department (4)Village Council Members (5)Social Leaders (6)P.T.A (7) Others who had constructed latrines (8)Others (Please specify) (9)Nobody gave information

b.11 Do you think it is necessary to practice the latrine use ? 1.Yes 2.No

b.11.1 If yes, why do you think it is necessary

b.12 How do the children clean their hands after ablution?

1.With water alone
2.With soap and water
3.With ashes and water
4.With sand and water
5.With leaves
6.Wipe on the dress

b.12.1 Which way do you think is the best?(please write the number from question b.12)

b.12.2 Why do you think this is the best way?

b.12.3 What was the traditional practice of washing hands after ablution?

b.13 Have you discussed the information about latrine and latrine use with your family members. (1)Yes (2)No

If yes,

b.13.1 With whom did you discuss -
1.Parents 2.Mothers 3.Fathers 4.Colleagues 5.Friends 6.Social leaders 7.Neighbours, 8. P.T.A 9.With higher authorities 10.Others (Please specify)

b.13.2 What was their reaction

b.13.3 Have you observed any change in their behaviour related to latrine and latrine use after this discussion.

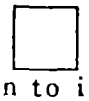
b.14 What do you think could be the dangers of open air defecation?

b.14.1 How did you get this information.

b.14.2 Have you passed this information to the students?
1.Yes 2.No

b.14.3 Have you passed this information to the colleagues?
1.Yes 2.No

b.14.4 Are you satisfied with the present level of usage of latrine in your school? 1.Yes 2.No



b.14.4.1 If not, How do you plan to improve the level of usage of latrine in your school.

c. **Reasons for non utilisation**

c.1 Why are the latrines not being used

c.1.1 Functional defects - What

c.1.2 Social reasons - what

c.1.3 Hygienic reasons - what

c.1.4 Other reasons

1.Lack of cleanliness 2.Small room 3.Lack of convenience 4.Long queue 5.Lack of time 6.Difficulty in controlling 7. Lack of water 8. Lack of container 9.Fear of teacher's punishment if kept unclean

☐

c.1.5 Is there any specific reason for a particular group not using it. 1.Yes 2.No

☐

c.1.5.1 If yes - what do you think could be the possible factors for not using the latrines.

d **Children as communication media**

d.1 Do you remember any health message related to latrine. 1.Yes 2.No

☐

d.1.1 What health message related to latrine do you remember best

d.1.2 Why is it remembered best

d.2 What do you think was the most useful programme/activity related to latrine education in the schools.

d.3 What were the other programmes related to latrine education/personal hygiene?

d.4 Could you participate in any of the health education campaigns conducted in your school related to latrine education

d.4.1 What were the key messages

d.4.2 Did you get an opportunity to share these messages with your colleagues/friends, neighbours/with the PTA.

d.4.3 If yes, with whom?

d.4.4 Where they interested to know more about these things?

d.4.5 What are your suggestions for improving the latrine maintenance

d.6 What are your suggestions for improving the latrine usage.

d.6.1 Do you think parents can play some role in this. 1.Yes 2.No

d.6.2 If yes, how.

d.6.3 Do you think the local influential leaders can play some role in this. 1.Yes 2.No

d.6.4 if yes, how.

d.7 Have you noted any misuse/vandalism by the community regarding school latrines/urinals. 1.Yes 2.No

d.7.1 If yes, please narrate specific cases.

d.8 On an average, what is the percentage attendance in a class room?

d.9 During which season are the children absent most?

d.10 What was the % attendance, yesterday.

d.10.1 Why the absentees

d.10.2 Out of the absentees of yesterday, how many were absent due to diarrheal diseases.

d.10.3 Who do you think should take some measures to control diarrheal diseases

1. Health 2.Danida Project 3. P.T.A 4. School 5. Others (Please specify)

d.11 What do you think the teachers can do in improving the situation?

d.11.1 Are they able to do these? 1.Yes 2.No

[ ]

d.11.2 If not why?

1. lack of time
2. too much assignments
3. not motivated
4. not trained in Health Education
5. All teachers not co-operative
6. Head Master not co-operative
7. Education authorities not co-operative
8. Other departments not co-operative
9. It is not their duty
10. No reward
11. No need to do

[ ]

d.11.3 How do you think teachers could be motivated

1. Training
2. Guidance
3. Through PTA
4. Any other suggestions

[ ]

d.12 Some schools have not yet constructed latrines. What could be the reason for this.

d.12.1 How do you think they could be motivated to construct latrines?

PROJECT INPUTS AND ITS IMPACT

QUESTIONNAIRRE

Questions I to VIII

(Question guidelines - to be collected from Village Committee Members abd Sub Committee Members in Panchayaths/Habitations and to persons of similar capacity in non project/non beneficiary areas)
(10% of VC=10. 1 from each VC = 10 interviews
1 from each SC = 10 ")

I. What are the major development programmes in your area.

1.Health 2.Rural Development 3.DANIDA IRWSS
4.Women & Children 5.Agriculture 6.Others (Please specify)

I.a Which of these programmes are really beneficial to you?

I.b Why do you think they are beneficial?
If the answer to question I includes No.3 i.e. DANIDA IRSWS, go to II.

II Are you associated with the DANIDA IRWSS Project?
1.Yes 2.No

If the answer is yes, go to II a.

II.a How are you associated?
(Description)

II.b Do you see any difference in this programme compared to other programmes in the village?
1.Yes 2.No

II.c If the answer is yes, continue to II.c

Could you tell us how it is different.
(Description)

III How many trainings/orientation programmes/meetings have you attended?

ACTIVITY	NO.OF MEETINGS ATTENDED		MAJOR POINTS DISCUSSED
Meetings	1-3	>3	
Training/ Orientation	1-3	>3	

How has the training helped you as a social worker/ as a Community Member/as an individual?

As a Social Worker
As a Community Member
As an individual

IV In what other programme besides trainings, meetings/orientation did you participate?

IV.1 Do you remember any health education campaign related to this?

1.Yes 2.No ☐

IV.2 What type of programme was that?

1.Film show 2.Songs 3.Dramas 4.Health Talks
5.Dances 6.Others

V. What do you think was your major role as a member of the Village Committee in the Project Sanitaiton Programme?

1. Motivation of householders to construct latrines
2. Selection of households
3. Motivating households to pay contributions by cash/by labour
4. Organizing Meetings
5. Organizing film shows
6. Conducting house visits
7. Attending group meetings
8. Procuring materials
9. Supervising quality of construction
10. Cost reduction suggestions
11. Improved designs
12. Procuring local masons
13. Ensuring women's participation

VI Some people are not constructing latrines. What do you think could be the reason for not constructing latrines. (Description)

VI.1 How do you think this attitude could be changed?

VII Has anybody come to your house to discuss Sanitation programme? (1) Y (2) NO ☐

If yes,

VII.1 Do you remember his/her name?

VII.2 For what purpose did he/she come?

VII.3 If the same person visits the households without latrines do you think she/he can convince them of the need to own a latrine. (1) Yes (2) NO ☐

If not,

VII.4 What else should be done?

VIII How do you think we can conduct an improved sanitation programme so that more people would construct latrines?

ANNEXURE - 3 1

Village Council Members Contacted

Marakkanam

1 Sri V T Amingiri	- Village Leader, T Puduppakkam
2. Mr Kuppuswamy	- Handpump Mechanic, Kovadi
3 Mr Perumal Naidu	- Alappakkam
4 Mr Kathavarayan/Gowri	- Puduppakkam
5 Mr V.Venkataraman Pillai	- Village Part time Clerk, Avanampattu

Portonovo

1 Mr Chellappa	- Ex Grama Panchayat President Thilaividayan Colony
2 Mr Govindaraj	- Ex Grama Panchayat President Gavarapattu

ANNEXURE - 3 2

Names of Influential Persons in the different Villages

Samıyarpettai	-	Mr Rajendran
Periyakomutti	-	Mr Rajendran
Thillaividangan	-	Mr Chellappa - President
Nedunji	-	Mr Munısamy
Melathirukalaipalai	-	Mr Potturaja
		Mr Karunakaran
Kumaramangalam	-	Mr Navaneethakrishnan - President
	-	Mr Karunanithi
	-	Mr.Ravıchandran
Gawarapattu	-	Mr Govindaraj
	-	Mrs Neena
	-	Miss Lalitha
Keelachavadi	-	Mr Purusothaman
Sithalapadi	-	Balwadi Teacher
	-	School Organızer
Pudupettai	-	Mr Kannan, President
Periyapattu	-	Mr.Ramachandran- Organızer
Villiyanallur	-	Mr Shanmugam - Presıdent
		Mrs Sambathkumari (Health Nurse)
Muddakku Road	-	Mr Shanmugam
Chidambaranathanpettai	-	Mrs Anbukarasi
		Mrs Thenmoli
		Mr Kadavul
Velangipattu	-	Mr Rajasegar - President
Kothattaı	-	Mr Sekar
		Mr Thillaigovindan
Arunmozhidevan	-	Mr Govindaraj- Ex Presıdent
Manalmedu	-	Mr. Sekar

BASIC INFORMATION OF THE SAMPLE HOUSEHOLDS

ANNEXURE - 4

Sl.#	Details	BF	NBF	NS	CB VANUR	TOTAL	BF	NBF	NS	CB CUDL	TOTAL	G.TOTAL
	No.of Households>	291	85	30	90	496	234	55	30	90	409	905
1	**Religion**											
	Hindu	291 (100)*	85 (100)	30 (100)	90 (100)	496 (100)	219 (93 6)	55 (100)	30 (100)	90 (100)	394 (96 3)	890 (98 3)
	Christian						10 (4 3)					10 (1 1)
	Muslim						5 (2 1)					5 (0 5)
2	**Caste**											
	Scheduled Caste	95(32 6)	20(23 5)	0	19(21 1)	134(27)	87(37 2)	17(30 9)	1(3 3)	36(40)	141 (34 4)	275 (30 3)
	Fishermen	24(8 2)	6(7)	8(26 7)	1(1 1)	39(7 86)	21(0 9)	5(9)	9(30)	1(1 1)	36 (8 8)	75 (18 3)
	OBC	96(33)	37(43 5)	17(56 7)	55(61 1)	205(41 3)	97(41 4)	24(43 6)	16(53 3)	41(45 6)	178 (43 5)	383 (42 3)
	Others	76(26 1)	22(25 9)	5(16 7)	15(16 1)	118(2 3)	29(12 4)	9(16 4)	4(13 3)	12(13 3)	54 (13 2)	172 (19 0)
3	**Income Level**											
	High	28(9 6)	2(2 6)	0	3(3 4)	33 (6 6)	10(4 3)	2(3 6)	0	0	12 (2 9)	45 (5 0)
	Medium	139(47 8)	32(37 6)	17(56 7)	54(60)	242 (48 7)	121(51 7)	18(32 7)	23(76 7)	12 (13 3)	174 (42 5)	416 (46)
	Low	51(17 5)	16(18 8)	7(23 3)	33(36 7)	107 (21 5)	49(20 9)	15(27 3)	2(6 7)	39 (43 3)	105 (25 6)	212 (23 4)
	Poor	59(20 3)	34(40)	6(20)	0	99 (19 9)	49(20 9)	17(30 9)	4(13 3)	37 (41 0)	107 (26 0)	206 (22 7)
	V Poor	14(4 8)	1(1 1)	0	0	15 (3 0)	5(2 1)	3(5 5)	1(3 3)	02 (2 2)	11 (2 6)	26 (2 9)
4	**Educational level**											
4.1	Educational level of Head of the Household											
	1 Illiterate	125(43)	31(36 5)	13(43 4)	38(42 2)	207 (41 7)	52(22 2)	17(30 9)	15(9)	39(43 3)	123 (30)	330 (36 4)
	2 Lower Primary	88(30 2)	29(34 1)	6(20)	29(32 20)	152 (30 6)	86(36 7)	20(36 4)	9(30)	27(30)	142 (34 9)	294 (32 4)
	3 Upper Primary	68(23 4)	19(22 4)	9(30)	21 (23 4)	117 (23 5)	75(32)	16(29)	6(20)	20(22 2)	117 (28 6)	234 (25 8)
	4 High School	7(2 4)	3(3 5)	0	1(1 1)	11 (2 2)	7(3)	2(3 6)	0	0	9 (2 2)	20 (2 2)
	5 Plus two	3(1)	0	0	0	03 (0 6)	2(0 8)	0	0	2(2 2)	4 (0 9)	7 (0 8)
	6 Graduate	0	0	0	0	0	2(0 8)	0	0	1(1 1)	3 (0 7)	3 (0 3)
	7 Post Graduate	0	0	0	0	0	0	0	0	0	0	0
	8 Technical Education	0	0	0	0	0	2(0 8)	0	0	0	2 (0 5)	2 (0 2)
	9 Diseased	0	0	2(6 7)	1(1 1)	6 (1 2)	8(3 4)	0	0	1(1 1)	9 (2 2)	15 (1 6)

BASIC INFORMATION OF THE SAMPLE HOUSEHOLDS

ANNEXURE - 4

Sl.#	Details	BF	NBF	NS	CB VANUR	TOTAL	BF	NBF	NS	CB CUDL	TOTAL	G.TOTAL
	No of Households>	291	85	30	90	496	234	55	30	90	409	905
4.2	**Education level of**											
	Lady of the hosuehold											
	1 Illiterate	197(67 7)	50(58 8)	18(60)	52(57 8)	317 (63 9)	95(40 6)	26(47 3)	19(63 3)	55(61 1)	195 (47 6)	512 (56 5)
	2 Lower Primary	70(24)	24(28 2)	6(20)	24(26 7)	124 (25 0)	88(37 6)	18(32 7)	6(20)	22(24 4)	134 (32 7)	258 (28 5)
	3 Upper Primary	23(7 9)	10(11 8)	4(13 4)	7(7 8)	44 (8 9)	41(17 5)	9(16 4)	4(13 3)	0(11 10)	64 (15 6)	108 (11 9)
	4 High School	1(0 3)	1(1 8)	0	1(1 1)	3 (0 6)	1(0 43)	1 (1 8)	0	2(2 2)	5 (1 2)	8 (0 9)
	5 Plus two	0	0	0	2(2 2)	2 (0 4)	1(0 43)	0	1(3 3)	0	0	2 (0 2)
	6 Graduate	0	0	0	0	0	0	0	0	0	0	0
	7 Post Graduate	0	0	0	1(1 1)	1 (0 2)	0	0	0	0	0	1 (0 1)
	8 Technical Education	0	0	0	0	0	1(0 43)	0	0	0	3 ((0 7))	3 (0 33)
	9 Diseased	0	0	2(6 7)	3(3 3)	5 (1 0)	7(2 99)	1 (1 8)	1(3 3)	1(1 1)	8 ((1 9))	13 (1 4)
5	**Occupation**											
5.1	**Occupation of Head of the**											
	Household											
	1 Own agriculture	123(42 3)	28(32 9)	5(16 7)	41(45 6)	197 (39 7)	84(35 9)	1 (1 8)	10(33 3)	5(5 5)	100 (24 4)	297 (32 8)
	2 Agricultural labour	84(28 9)	28(32 9)	4(13 4)	25(27 8)	141 (28 4)	72(30 8)	16 (29)	6(20)	42(46 7)	136 (33 2)	277 (30 6)
	3 Govt Employee	14(4 8)	2(2 6)	2(6 7)	3(3 4)	21 (4 2)	13(5 6)	21 (38)	0	2(2 2)	35 (8 5)	56 (6 2)
	4 Factory Employee	2(0 7)	4(4 7)	1(3 4)	4(4 4)	11 (2 2)	5(2 1)	2 (3 6)	0	2(2 2)	9 (2 2)	20 (2 2)
	5 Fishing	0	6 (7)	8(26 7)	22(24 4)	31 (6 7)	15(6 4)	0	9(30)	1(1 1)	25 (6 1)	56 (6 2)
	6 Weaving	1(0 3)	0	1(3 4)	0	2 (0 4)	0	3 (5 4)	0	1(1 1)	4(1 0)	6 (0 7)
	7 Other Employments	37(12 7)	11(12 9)	4(13 4)	13(14 4)	65 (13)	31(13 2)	0	2(6 7)	32(35 5)	66(16 1)	131 (14 4)
	8 Unemployed	14(4 8)	6(7)	3(10)	1(1 1)	24 (4 8)	6(2 6)	7 (12 7)	2(6 7)	2(2 20)	17 (4 1)	41 (4 5)
	9 Diseased	0	0	2(6 6)	1(1 1)	4 (0 8)	8(3 4)	5 (9)	1(3 3)	3(3 3)	17 (4 1)	21 (2 3)
5.2	**Occupation of Lady of the**											
	Household											
	1 Own agriculture	44(15)	10(0 1)	0	6(6 6)	60 (12)	12(5 1)	16(29)	1(3 4)	1(1 1)	30 (7 3)	90 (9 9)
	2 Agricultural labour	69(23 7)	28(32 9)	3(10)	20(22 2)	120 (24)	47(20 1)	21(38 2)	5(16 7)	26(28 9)	99 (24 2)	219 (24)
	3 Govt Employee	10(3 4)	0	1(3 4)	1(1 1)	11 (2 2)	4(1 71)	2(3 6)	0	0	6 (1 5)	17 (1 8)
	4 Factory Employee	1(0 3)	0	1(3 4)	0	2 (0 4)	0	0	0	0	0	2 (0 2)
	5 Fishing	3(1)	2(2 4)	2(6 7)	1(1 1)	8 (1 6)	2(0 85)	3(5 5)	0	0	5 (1 2)	13 (1 3)
	6 Weaving	2(0 7)	0	0	0	2 (0 4)	2(0 85)	0	1(3 4)	1(1 1)	4 (1 0)	6 (0 7)
	7 Other Employments	23(7 9)	10(0 1)	0	3(3 3)	36 (7 2)	10(4 3)	7(12 7)	1(3 4)	3(3 3)	21 (5 1)	57 (6 3)
	8 Unemployed	135(46 4)	35(41 2)	21(70)	57(63 3)	248 (50)	142(60 7)	3(5 5)	22(73 4)	58(64 4)	228 (55 7)	476 (52 5)
	9 Diseased	4(1 4)	0	2(6 7)	2(2 2)	8 (1 6)	15(6 4)	0	0	1(1 1)	16 (3 9)	24 (2 6)

BASIC INFORMATION OF THE SAMPLE HOUSEHOLDS

ANNEXURE - 4

Sl #	Details	BF	NBF	NS	CB VANUR	TOTAL	BF	NBF	NS	CB CUDL	TOTAL	G.TOTAL
	No of Households>	291	85	30	90	496	234	55	30	90	409	905
6	**Family size**											
	Total no.of members in the family											
	One member only	9(3)	9(10 6)	0	1(1 1)	19(3 8)	20 (8 5)	0	0	3 (3 3)	23 (5 9)	42 (4 6)
	Two members	92(31 6)	30(35 3)	12 (40)	29(32 2)	163(32 9)	72(30 8)	27(49)	11(36 7)	32(35 6)	142(34 7)	305(33 7)
	Three members	53(18 2)	18(21 2)	4 (13 4)	17(18 9)	92 ((18 5))	49(20 9)	9(16 4)	5(16 7)	10(11 1)	73 (17 8)	165(18 2)
	Four members	55(18 9)	12 (14 1)	3(10)	14(15 6)	84(16 9)	44(18 8)	9(16 4)	3(10)	21(23 3)	77 (18 8)	161(17 8)
	Five members	28(9 68)	4(4 7)	7 (23 4)	14 (15 6)	53 (10 7)	20 (8 5)	4 (7 3)	5 (16 7)	11(12 2)	40 (9 8)	93(10 3)
	Six members	20(6 9)	8 (9 4)	1(3 4)	6 (6 7)	35 (7 0)	11 (4 7)	5 (9)	3 (10)	6 (6 7)	25 (6 1)	55(6 1)
	Seven members	12(4 1)	2 (2 4)	1 (3 4)	3 (3 3)	18 (3 6)	6 (2 6)	0	1 (3 4)	1 (1 1)	08(1 9)	26(2 9)
	Eight members	14 (4 8)	0	2 (6 7)	2 (2 2)	18 (3 6)	5 (2 1)	1 (1 8)	1 (3 4)	1 (1 1)	08(1 9)	26(2 9)
	Nine members	6 (2)	1 (1 2)	0	1 (1 1)	8 (! 6)	5 (2 1)	0	0	2 (2 2)	07(1 7)	15(1 6)
	Ten members and more	1 (0 3)	1 (1 2)	0	2 (2 2)	5 (! 1)	2 (0 85)	0	1(3 4)	2 (2 2)	06(1 5)	11(1 2)
6.1	**No.of children in the family**											
	NO child in the family	48(16 5)	23(27)	7(23 4)	17(18 9)	95(19 0)	56(23 9)	12(21 8)	10 (33 4)	22(24 4)	100(24 4)	195(21 5)
	One child in the family	59(20 3)	16(18 8)	4(13 4)	21(23 3)	100 (20)	42(17 9)	13(23 6)	5(16 7)	26(26 7)	86(21 0)	186(20 5)
	Two Children in the family	71(24 4)	21(24 7)	13(43 4)	26(28 9)	131(26 4)	49(20 9)	16(29)	8 (26 7)	20(22 2)	93(22 7)	224(24 7)
	Three "	57(19 6)	14(16 5)	4(13 4)	16(17 7)	91(18 3)	52(22 2)	8(14 5)	4 (13 4)	13 (14 4)	77(18 8)	168(18 6)
	Four "	40(13 7)	7(8 2)	1 (3 4)	6 (6 7)	54(10 9)	21 (9 0)	5 (9)	3 (10)	6 (6 7)	35(8 6)	89(9 8)
	Five "	8(2 7)	4 (4 7)	1 (3 4)	3 (3 5)	16(3 2)	8 (3 4)	1 (1 8)	0	2 (2 2)	11(2 7)	27(3 0)
	Six Children and more in the family	8(2 7)	0	0	1 (1 1)	9(1 8)	6 (2 7)	0	0	1 (1 1)	06(1 5)	15(1 7)
6.2	**No.of female above 13 years**											
	No female member above 13 years	15(5 2)	5(5 9)	3(10)	0	23 (4 6)	11(4 7)	0	0	0	11 (2 7)	34(3 8)
	One female member above 13 years	115(39 5)	35(41 2)	10(33 4)	13 (14 4)	173(34 9)	89(38)	26(47 3)	4(13 4)	13(14 4)	132(32 2)	305(33 7)
	Two female members above 13 years	90(30 9)	29(34 1)	13(43 4)	28(31 1)	160(32 2)	83(35 5)	21(38 2)	8(26 7)	32(35 6)	144(35 2)	304(33 6)
	Three " "	42(14 4)	12 (14 1)	3 (10)	35(38 9)	92(18 5)	32(13 7)	5(9)	11(36 7)	28(31 1)	76(18 6)	168(18 6)
	Four " "	22(7 6)	3 (3 5)	1 (3 4)	4 (4 4)	30(6 1)	15(6 4)	2 (3 6)	3 (10)	12(13 3)	32(7 8)	62(6 8)
	Five " "	4 (1 4)	1 (1 2)	0	8 (8 9)	13(2 6)	2(0 85)	1 (1 8)	4(13 4)	4(4 4)	11(2 7)	24(2 6)
	Six " "	1 (0 3)	0	0	2 (2 2)	3(0 6)	1(0 43)	0	0	0	01(0 2)	04(0 4)
	Seven female members and more "	2 (0 6)	0	0	0	2(0 4)	1(0 43)	0	0	1(1 1)	02(0 4)	04(0 4)

* (Figures in bracket denote percentages)