

HALF YEAR REPORT
1 April 1992 - 1 September 1992

**SOCIO-ECONOMIC UNITS
KERALA WATER AUTHORITY**

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ABBREVIATIONS

ARWS.....	Accelerated Rural Water Supply programme
CE	Chief Engineer
CD	Coordinating Office of the Socio-Economic Units
DANIDA.....	Danish International Development Agency
DGIS	Directorate General for International Cooperation (Netherlands)
EC	Executive Coordinator of the Socio-Economic Units
FO.....	Field Organiser (temporary field staff of SEUs, based in panchayats)
GOI	Government of India
GOK	Government of Kerala
GON.....	Government of the Netherlands
ICDS	Integrated Child Development Scheme
I.P.D.	Investigation, Planning & Design Division of the Kerala Water Authority
IUHE	International Union for Health Education
KWA.....	Kerala Water Authority
LPCD	Liter per capita per day
MD	Managing Director of the Kerala Water Authority
MLD.....	Million liter per day
O & M	Operation and Maintenance
PASSS	Pazhakulam Social Service Society, an NGO
PANCHAYAT.....	Local Administrative Authority for a Rural Area covering a population of about 15,000 to 30,000
PMU	Project Management Unit of the KWA
PO(C).....	Programme Officer (Community Organization)
PO(H)	Programme Officer (Health Education)
POTWATS	Protection of Traditional Water Sources programme
PHC	Primary Health Centre
RNE.....	Royal Netherlands Embassy
RSM	Review and Support Mission (Sept. 1991 from RNE)
SPA	Standpost Attendants
STA	Senior Technical Adviser (Danida)
SEU	Socio-Economic Units
SEA	Socio-Economic Advisor
TLO.....	Technical Liaison Officer (DGIS)
VO/NGO	Voluntary Organization/Non-Government Organization
WARD	Each panchayat is subdivided into wards, the basic unit of local government, covering a population of 2,000 to 4,000.
WWC.....	Ward Water Committee works with the SEUs at the ward level, in charge of many activities. It is a voluntary group composed of 5 to 7 members including at least 2 women and the elected ward member who is also a member of the panchayat.
ONE LAKH	100.000
ONE CRORE	10 Million

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BACKGROUND

The Kerala Water Authority is entrusted with the provision of safe water, specifically piped water, for the entire state. It has charge of approximately 1,650 water schemes of varying size. Among these are 11 piped water schemes being implemented with the support of the Governments of The Netherlands and Denmark. The 11 piped-water schemes, number of panchayats each covers and population as of 1981 are:

Dutch-Supported

Vakkom-Anjengo-6 panchayats- 134,000 population (1981)
Kundara-7 panchayats- 160,000 population (1981) with water going to 4 more panchayats
Cheriyanaad- 1 panchayat- 20,000 population (1981)
Koipuram- 1 panchayat- 24,000 population (1981)
Thrikkunnappuzha- 5 wards -about 12,000 population with inter-connection to 5 wards and 1 other panchayat
Nattika-Firka- 10 panchayats- 231,000 population (1981)
Mala- 6 panchayats- 136,000 population (1981)
Favaratty- 18 panchayats- about 400,000 population with water going to 2 other municipalities, 1 township, 3 panchayats

Danish-supported

Eddapal- 5 panchayats- 127,000 population (1981)
Kolacherry- 8 panchayats- 170,000 population (1981)
Cheekode I- 3 panchayats- 56,000 population (1981)

As stated in the Plan of Operation, the long-term objective of the Socio-Economic Programme is to improve the health and living standards of the people. Specifically, the immediate objectives of the project are, in partnership with the KWA, to:

- a. integrate relevant socio-economic activities and methods into the KWA's current programme for water supply (*activities are improving population coverage, site selection in the community, monitoring/maintenance/drainage around standpost, fault reporting*);
- b. develop sustainable strategies which will, within the community and household--
-contribute to improved hygiene/health practices related to safe handling and use of water,
-enhance sanitation practices and essential sanitary facilities (*includes household and institutional latrines-with-education, environmental activities of local relevance*);
- c. strengthen/establish mechanisms which enable people and their local institutions to plan and participate in activities related to water supply, sanitation and hygiene education. Particular emphasis will be paid to women's involvement. (*includes Ward Water Committees, Standpost Attendants, networking with other agencies/NGOs, improving open wells and springs, monitoring activities, school health clubs, women's programmes*)

There are three Socio-Economic Units, each with three professionals, supporting administrative staff. The Units have temporary field workers. Each unit is based in a regional office of the KWA. The first Unit (called SEU-North) was established with Danish support in the northern region of Kerala in March 1987. The other units (SEU-South and SEU-Central) were set up about a year and a half later in August 1988 with Dutch support. There is a small coordinating office (CO) in Trivandrum which is also concerned with institutional aspects of the programme and integration. Although the Socio-Economic Units (SEUs) are directly funded by the donors, they are responsible to and work closely with the Kerala Water Authority. Each Unit covers a project area with a current population of 400,000 to 600,000. A Co-ordinating Committee headed by the Managing Director of the KWA meets every 3 to 4 months. The Committee oversees project development (both hardware and software) and solves problems related to both software and hardware implementation. The SEU staff are grateful to colleagues within KWA for their support and guidance.

1. This half-year report covers the five month period from 1 April 1992 through 1 September 1992. It has been prepared one month early for the Review Mission which will visit Kerala in September 1992. The report is divided into five parts relating to water, sanitation, community, education and institutionalization. This first section on water-related activities deals with: mapping and site selection; activities related to maintenance of piped water schemes; and traditional water sources. The Coordinating Committee last met on 12 June 1992 at which time the SEU Plan of Implementation was approved, with a few changes mainly limiting the work on drainage and traditional water sources. This report deals with progress toward implementing that workplan. For purposes of the Review Mission, it also provides more background than is usual in these reports.

MAPPING AND SITE SELECTION

2. The purpose of the mapping and site selection activities is to provide piped water to areas of specified population density. Detailed mapping and site selection result in a distribution nets that can be extended at a later date as population increases or when there are more resources. It also enables the construction of a new scheme which fits rationally with existing schemes. Seen from this perspective, these mapping and site selection procedures are also very relevant for centrally-funded schemes which may initially have lower coverage. Furthermore, good maps and site selection should reduce the costs per capita for the population actually served because the distribution net and size of pipes would be optimum. Good mapping and site selection should limit the need for revised estimates. Lastly, the evidence so far indicates that well-located standposts and lines giving improved population coverage lead to greater willingness to pay.

3. Accurate maps are required as well as standard criteria for locating standposts. Maps should show all roads, public paths, main features of an area, houses/population density and levels (hydraulic calculations) at 1:4000, 1:5000 or 1:10,000. "Site selection" refers to identifying the location of each public standpost with the users of that standpost (to ensure optimum use and maintenance) and with the approval of the panchayat. The criteria for site selection agreed by the Coordinating Committee for these schemes is one standpost, where technically feasible, for 15 to 40 houses within 200 to 250 meters, with a focus on the poorer households.

4. Two ways of doing the mapping and site selection are:

- (1) produce maps showing roads, houses, landmarks, hydraulic calculations.
- (2) design distribution net based on agreed coverage criteria
- (3) do site selection with the community.

OR

- (1) produce maps showing roads, houses, landmarks, hydraulic calculations and do preliminary site selection based on agreed criteria of population density
- (2) technical verification of the preliminary location of standposts
- (3) go back to the community to relocate non-feasible tap site and extension lines.

The costs of mapping and site selection for one panchayat range from about Rs. 14,000 to about Rs. 30,000 depending on the size of the panchayat and terrain (for the hydraulic calculations). The estimate assumes that an 'average' panchayat covers about 20 sq. kilometers with about 25,000 people. It excludes vehicle purchase but includes running costs.

5. Some points about the mapping:

- a. It is better not to determine a percentage of coverage before scheme design, such as 90%, but rather to apply an agreed coverage criteria (number of houses within a certain walking distance). Thus we see that the coverage of the Kundara project will be about 78% to 80%. Going above this level will give long pipelines serving few people at high cost. On the other hand, some flat, densely populated seacoast areas have higher than 90% coverage using coverage criteria.
- b. It is important to plan schemes with detailed maps showing all roads, public paths and population. Since property values tend to be higher along main roads, there is a tendency for poorer families to be located on secondary roads or paths at varying distances from the main roads.
- c. Good base maps are needed showing zones or panchayats and some roads which are drawn to scale. Ideally, the KWA should not have to produce base maps but should use existing base maps and add remaining roads, public paths, the levels and so on. Unfortunately many existing panchayat/survey maps are not accurate. The supply of accurate base maps in the correct scale is an additional pre-project expense.
- d. Our experience has shown that areas with lower population densities (for example, less than 1000 people per sq kilometer) can have very high per capita costs for provision of the distribution net. This point should be used in the selection of new schemes, among other criteria.
- e. At the beginning of the bilateral schemes, the SEUs did both the mapping and site selection. However, in 1991-92 for the Pavaratty and Kundara schemes, the base maps and hydraulic calculations have been done by the KWA while the population data, landmarks, site selection are added by the SEUs. Our long-term goal is that all these activities be undertaken by the KWA/IPD which would require more support, both in manpower, transportation and provision of base maps.
- f. The 11 Dutch-Danish-supported schemes were originally designed on the basis of GOI guidelines. These guidelines call for low per capita water provision (40 to 50 liters per capita), low estimate of water wastage (10%), with low per capita costs calculated for the entire population (design population) living in an area. This implies that the actual coverage (proportion of the population living within 200 to 300 meters of a standpost) tends to be low, particularly in less densely populated areas. The 11 bilateral schemes, which were designed on this basis, were approved by the donor appraisal missions. Thus the revised estimates were needed to cover cost increases in the original plans and to increase the level of coverage.

6. Some points about site selection:

- (a) During the process, areas not wanting or needing water appear. For example, some parts of the Mala scheme and northern schemes have less coverage as other water sources are adequate. This saves costs.
- (b) Our experience shows that use and maintenance of public taps is better if the householders are directly consulted about location of the standposts (particularly the women who use the taps) rather than only consulting elected panchayat personnel and contractors.
- (c) On the other hand, if site selection takes place too long (sometimes several years) before the particular standposts are commissioned, then there are complaints from the community as well as shifts in population.

Population coverage by public standposts in piped water schemes

Scheme	ORIGINAL ESTIMATE		REVISED ESTIMATE		
	Existing water scheme lines(km)	Distribution net (km.)	approx population coverage*	additional distribution lines (km)	approx population coverage*
Mala (6 panch)	82	192	60%	80	90%
Nattika-Firka (10 panch)	148.5	345	55%	273	85%-90%
Kundara (7 panch)		170	35%	271	80%
Vaikon-Anjengo (5 + panch)		172**	70%	22	90%-95%
Edappal (5 panch)		128	36%	97	64***
Kolacherry (8 panch)		154	22%	328	58***
Cheekode I (3 panch)		65	59%	116	75***

Notes: * Population coverage refers to the approximate proportion of the population which lives within 250 meters of a standpost.

**172 kilometers includes older existing water schemes and new pipelines of the first estimate.

***Excludes coverage from earlier, existing water schemes. For Kolacherry, the level of coverage reflects existing perennial sources and areas of low population density.

7. Progress since 1990:

Completed mapping of ten schemes. In Kundara and the first three panchayats of Pavaratty, the SEUs have worked under direction of KWA to complete the population data on the KWA maps.

8. Future plans are:

a. In view of the charge (Rs 875) being levied to the panchayats by the Government for each standpost, and also with a view to longer-term sustainability, the site selection procedures should be reviewed, with possible assistance from ETC (ref. their Review Report of Sept. 1991)

b. Undertake site selection in Kundara. Complete site selection in Pavaratty (3 panchayats) and continue putting socio-economic data on the maps of the next 2 panchayats.

c. Apply these methods to the new proposals to be submitted to the Royal Netherlands Embassy. This will involve some of the following:

i. KWA identifies prospective projects on the basis of agreed criteria (eg., water problems, population density and so on)

- ii. decision to be taken by KWA/RNE regarding support for the design phase (acquisition of base maps? investigation of source?)
- iii. provision of accurate base maps (through Survey of India, Land Use Board or own production?)
- iv. KWA completes maps, does hydraulic calculations, SEU adds population data, landmarks.
- v. KWA/IPD completes design (including distribution net according to agreed criteria population density) and, after RNE approval of a scheme, site selection to be undertaken on the basis of agreed criteria
Two to three years may be required for this.

ACTIVITIES RELATED TO MAINTENANCE OF PIPED WATER SCHEMES

Field Trials

9. Field trials are now being initiated in the Danida-supported schemes. This is a new concept in Kerala, meaning that all aspects of a new scheme are tested together, for respective zones. The field trials include operation and maintenance activities and reporting of faults and leaks by the standpost attendants. SEU(North) has also been involved in preparation/locating the new, larger standposts in the three northern schemes.

Activities around the standpost

10. Standpost attendants have been identified among the users of public taps in 20 panchayats. They are responsible, often with the Ward Water Committees for reporting faults/leaks, for cleanliness and drainage around the standposts and they work to minimize misuse of standposts. The "SPAs" are volunteers who are provided with about a day's training which incorporates some of the participatory training methods mentioned later.

11. The reporting of leaks, faults around the standpost to KWA started on a small basis about one and a half years ago. Within the past six months, the reporting has become more systematic. In each scheme the procedures and experience in this reporting differ somewhat. This reflects the suggestions of KWA staff, the physical nature of the area, location of KWA operational staff, and interest of the WWCs, SPAs and field staff. The number of faults appears higher in the certain seasons and at the initiation of reporting in some schemes. This activity needs to be refined and systematized further in the future.

12. The reporting works to assist Assistant Engineers in identifying leaks/faults, at an early time, in the large territories under their supervision. It also reduces total loss of water in the scheme and improved public relations. However, these new reporting procedures add an extra burden to already overloaded KWA field staff and are not always popular with the contracted plumbers who undertake repairs.

13. The reporting back has also highlighted the qualitative problems of the waste-not taps, providing information which is now being used to help acquire a better quality tap for the KWA.

Ward Water Committees and Standpost Attendants

Scheme	number of SPAs	Number of active Ward Water Coms.	Number of trained Ward Water Coms.
Vakkom-Anjengo	592	48	28
Cheriyamad	32	10	3
Thrikkunnapuzha	220	10	4
Mala	602	35	42
Nattika-Firka	285	41	44
Pavaratty		20	20
Eddapal	96	75	
Kolacherry	43	79	
Cheekode	38	18	
Total	1,908	336	141

Repairs at the standpost

14. In one panchayat, there are three community members who carry out simple repairs of the standposts (above the ground level). For example, of 36 repairs made in one ward, 12 were made by these trained people from the community. This might be one way of reducing the O&M costs for the KWA. In some other parts of the State, 'home-made' repairs are done, unauthorized, by the community when there are leaks at standposts. These are very rudimentary repairs done with string, rubber from inner tubes and so on. Thus, this experiment in Thrikkunnapuzha panchayat makes use of the willingness of people to do simple repairs, in their own interest, but with trained people in the correct way.

Cleanliness and drainage around the standpost

15. Standpost attendants also work with the Ward Water Committees to clean areas around standposts and improve drainage in some of the schemes. Stagnant water can often be eliminated by simple drains. The KWA and SEUs have agreed that such drainage should be undertaken by the community with the SEUs, not by the KWA. This activity will be extended in the future.

16. Thrikkunnapuzha panchayat, at the seacoast has pronounced drainage problems as brackish water is at or above the ground level for much of the year. Here the KWA, SEUs and community are collaborating in repair of standposts for improved drainage.

Cost recovery at the standpost

17. In the Eddapal and Kolacherry schemes, the SEU(North) staff have seen that people seem to be willing to pay small amounts for the use of the standpost. This is in line with the 'willingness to pay' studies undertaken by the World Bank, although those focussed on household connections. The SEU(North) therefore proposes to undertake a small trial to see if standpost users can be organized and will pay for use of a well-placed, well-functioning standpost. There are a few challenges. One is the logistics for making the payment. The procedures for paying and transmitting the funds must be fool-proof and low-cost. Another problem is that the willingness to pay is greater if the funds could be retained within the scheme for subsequent repairs. This is, however, not in keeping with government regulations. This intervention is still in the planning stage.

18. Household connections: The Coordinating Committee approved an SEU proposal last year that the Ward Water Committees could work to inform the community about household connections: the procedures, fees, ways of keeping costs lower and so on. This has been attempted, although perhaps not as systematically as might have been hoped. There are other problems, however, including the lack of clarity about the number of household connections a scheme can support and local or political interference from families eager to get a household connection before others.

19. Community-managed water schemes: The possibility of starting a small experiment in community-managed water schemes was discussed by a representative of the Netherlands Government with the Managing Director of the KWA and the SEUs. The idea was to identify a few small water schemes where the SEUs would provide training and would work with the community to manage the scheme including O&M. It unfortunately does not seem possible for the SEUs to take this up at this time because of our other heavy commitments and work to try to institutionalize existing activities. Similarly, KWA senior staff have advised us to defer this to a later date.

20. Future: The reporting of leaks and faults is a concrete but important activity which the SEUs hope can be integrated into KWA's current O&M programme. It needs to be further systematized and its impact requires monitoring. We must also try to make the system as completely self-managed as possible with little outside support. Further investigation is needed of the potential for trained people from the community to make simple repairs of leaks at the standpost. The SEU(North) will try to start a small experiment in cost recovery at the standpost. More work is needed to systematize information procedures regarding house connections.

TRADITIONAL WATER SOURCES

21. Kerala has the highest density of open dug wells in India, if not in Asia. These are preferred sources for people during the wet season (approximately June through January). Therefore the SEUs have had some activities related to traditional sources, although not as a central focus of the programme. Our goal is to establish self-sustaining activities that are executed by families, NGOs or other agencies and can be privatized without continuing external support. It should be noted that traditional water sources are not within the mandate of the KWA. However, the SEUs can not disregard open wells which are so prevalent if we are serious about our overall goal of enhancing health aspects related to water and sanitation. Furthermore, a new state policy for water has been promulgated and it highlights these traditional sources, both wells and springs. The following paragraphs describe our work in relation to traditional water sources.

22. All three Units have organized occasional well chlorination which is carried out by youth groups, health trainees or ward water committees. During the past year, the "POTWATS" pilot programme was launched by the Central Unit. This is a delivery system for the chlorination of open wells and is executed by a women's club as an income generating activity. POTWATS is working in several panchayats. The District Collector and District Medical Officer also asked the group to focus on a particular panchayat facing an outbreak of typhoid earlier this year. POTWATS door-to-door sale of small packets of bleaching powder and demonstration of chlorination for well owners was described in the last report. It should be added that we hope this delivery mechanism can be self-sustaining. Challenges at the moment are for the NGO to ensure good training of new workers and ensure the quality of the bleaching powder used.

23. In 1991, the Coordinating Office sponsored a study undertaken by the State Pollution Control Board whose purpose was (a) to test the bacterial quality of water in selected open wells and (b) ascertain if cross-pollution could be detected from the latrines being constructed under our programme. The study did not identify cross pollution from latrine pits because all the 146 open wells in the sample were contaminated with fecal coliform which could have originated from a variety of sources. However this information has been widely disseminated through the SEUs as well as other agencies and newspapers, highlighting the importance of good piped water and/or suggesting ways of in which people can improve the quality of drinking water from their own traditional sources.

24. Now the Coordinating Office is launching a follow-up study which will examine the effect of specific low-cost interventions at the open well on the bacterial quality of drinking water. This study had originally been suggested by the Netherlands Review and Support Mission of 1991. The goal is to identify low-cost actions which could be undertaken by well-owners to reduce the levels of bacterial pollution. It will be undertaken by a consultant group and an additional amount is budgeted for this.

25. In relation to traditional water sources, the Coordinating Office has also been administering a grant, on behalf of the Royal Netherlands Embassy, for a spring development pilot project planned and executed by the NGO, the Pazhakulam Social Service Society (PASSS). Seventy-five springs have been built up as safe drinking water sources for about 1200 families at an average cost of only about

Rs 100 per capita. These springs are located in the southern region, in isolated areas without access to piped water supplies. Construction is undertaken with the beneficiary families. The Coordinating Office has stimulated PASSS to enhance its community mobilization and education activities. The project has been visited by Secretary, Water Supply/Chairman of the KWA and representatives Netherlands government and has received favorable comment from both. PASSS is now completing its present work. It will complete one or two more springs based on the experience and lessons learned over the past year as well as refining its follow-up activities on existing springs. The final report is expected by the end of October. The Coordinating Office strongly recommends this project for further support and expansion in Kerala.

26. The Secretary Water Supply/Chairman of the Kerala Water Authority has approached the SEUs with a request to assist in a pilot project for the renovation of open dug wells to be funded by the Government of Kerala (about 10 lakh rupees). In this, the SEUs would identify local NGOs with proven track records and monitor their progress in undertaking renovations of wells with the community. Priority would be given to public wells and to private wells that are used by several families. The Coordinating Office has indicated that it would assist although the details of this have yet to be discussed with the Government of Kerala. A Government Order in this connection is awaited. That this activity is of high priority for the State government is shown by the fact that it has been announced on television (including the SFU involvement) by the Minister for Water and Irrigation, Government of Kerala.

LOW-COST SANITATION (latrine-with-education programmes)

27. Over the past six months we have been working to:

- improve the implementation of the present programme (75% subsidy)
- try out new programme models with a lower (50%) subsidy
- to collaborate with other agencies with a view to sustaining of all or part of our approach
- to keep costs as low as possible

28. Main features of the present programme are:

- The goal noted in the Plan of Operation (1990) is equivalent to reaching 50% of the population below the poverty line within the Dutch-Danish schemes.
- There is an important education element carried out through mobilization campaigns (meetings, exhibitions, films, camps and so on), through mandatory classes for beneficiaries, and through follow-up monitoring. This is mainly an education and mobilization programme. Therefore, of the 17 steps in the written sanitation strategy (which is something like the 'constitution' of the programme), construction is only the 13th step, scheduled about 6 months after the beginning of the programme.
- The programme is carried out by the panchayat, the Ward Water Committees and the SEUs working together. There is a high degree of community responsibility. Agreements are signed with the panchayats based on the sanitation strategy. Panchayats also contribute money into the joint bank accounts for the programme. A total of Rs 8,38,500 has been contributed by panchayats so far, which is usually used, at the end of the programme, to reach very poor people.

-Beneficiaries contribute 20% of the cost of the latrine in advance plus digging pits (or 25% in cash if the pits can not be dug as in sandy areas).

-The double-pit, pour-flush model is used, as recommended by the Government of India, the State Sanitation Cell and also used by the World Bank and Capart programmes. Its cost ranges from Rs 1700 to Rs 2374. The SEU total overhead is around 5% (about Rs. 100 per latrine), although this is not added to the cost of the latrine in the panchayat programme.

29. Progress since 1990: In 1990, at the suggestion of the last joint Review Team, a halt was called in this programme for more than six months. This programme did not pick up as expected afterwards because of (a) the district elections in February 1991, (b) the extended national election campaign in May-June 1991 and, (c) for the SEU(North), the delay in the finalization of the side letter with GOI in 1991. Up to 1 April 1991, a total of 5,887 latrines had been constructed in 11 panchayats. Because of the delays noted above, in the 12-month period from April 1991 to April 1992, only 2,617 were completed. However, over the past five months, 2,221 latrines have been constructed. Work is or has been done 23 panchayats; and new programmes are about to start up in another four. Our goal is ambitious for this year, the completion of 11,400 latrines; however, we will hopefully come near to the targets in at least two Socio-Economic Units. It should be noted that in addition to the family latrines, another 78 institutional latrines have been built, mainly in schools and anganwadis, usually with financial and labour contributions from the community.

30. Since 1990, we have developed a strategy for carrying the programme with the community and WWCs. The sanitation strategy has been revised four times. Another revision will be needed at the beginning of 1993.

31. Construction costs are kept fairly low by building demonstration latrines where all inputs, including the labour costs, are determined at the beginning in each panchayat. Therefore the cost of a latrine differs in each panchayat, depending on the availability of materials, type of soil, water table in the area, price of local labour. The SEUs have also instituted other cost-savings measures such as putting roof tiles in pit-slabs to reduce the amount of metal rods required and trying out doors of differing materials.

32. Lately we have been facing some problems because of lack of local masons thus slowing the pace of the programme in some panchayats. In the Central Unit a group of women masons have been trained and are working in the programme. This group is being transformed into a cooperative so that it might become self-supporting. In the Southern Unit, women are involved in casting slabs for the roofs and pit covers of the latrines.

33. In the Northern and Central Units, some women's groups or beneficiary families have been involved in the production of composite stone-mortar bricks. This is particularly satisfying in areas where other building materials (laterite or burnt bricks) are more expensive or are not readily available during our construction period. It also generates income for poor households. In addition, this new building material, being very regular in size, is easy to use in construction and gives a good finished product.

CONSTRUCTION : LATRINE-WITH-EDUCATION PROGRAMME

SCHEME	PANCHAYAT	NO. COMPLETED UPTO 3.91	NO. COMPLETED 4.91 - 4.92	NO. COMPLETED 4.92 - 9.92	NO. PLANNED 1992 - 1993	CURRENT COST PER UNIT	BENEF. CONTRBN.	PANCHAYAT CONTRIBUTION
CHERIYANAD	Cheriyamad	752	492	240	500	1899	356	20000
THRIKKUNNAPUZHA	Thrikkunnapuzha	143	254	104	500	Aug 2070/2800 *	500	500
VAKKOM- ANJENGO	Vakkom	63	79	77	100	1993	400/450	8000
	Kizhuvalam		79	72	400	1989	435	5000
	Anjengo	500			200			
	Chirayinkil Kadakkavoor			3	500			
KOIPURAM KUNDARA	Koipuram Kundara	500	102		250			
MALA	Mala	1188				1600	500/350	
	Vallangallera		500	159	500	1700	250+150 **	175000
	Puthenchira		144	48	400	1700	330	30000
	Poyya ***			337	2000	900	0	
NATTIKA	Valappad		200	180	600	2100	250+250 **	200000
	Edathuruthy	500			500	2100	400	50000
	Kaipamangalam		85	151	500	2100	400	30000
	Engandiyoor			50	300	2200	400	75000
KOLACHERRY	Mayyil	33	461	161	600	2000	400	100000
	Kolacherry		122	500	600	2165	500	15000
	Mundari			4	600	2165	500	5000
	Kazhhallur				100			
	Kuttiattoor				600	2165	500	25000
EDAPPAL	Vattankulam			105	150	2374	50%	
	Thavanur			1		2000	50%	
	Alancode			28	500	2374	50%	
	Nannammukku			1	500	2374	50%	
CHEEKODE	Ramanattukara	1041						
	Feroke	1162	100			2150		100000
	TOTAL:	5887	2617	2221	11400			838500

* In water - logged areas, the latrines cost Rs.2800.

** Beneficiary contribution is Rs. 150 and Rs 250, in addition to which the panchayats give Rs.250 from their contribution.

*** Poyya panchayat. This is an experimental programme with SEU construction upto plinth level only. Beneficiary contribution is about 50%.

This is an experimental programme where beneficiaries provide materials equivalent to 50% cost of latrine.

34. Experiments and studies: The SEU(North) continues the leaching study of a limited number of latrines constructed 5 years ago. This is showing that the leaching of latrine pits is more rapid than had been foreseen. The SEU(South), has built about 100 latrines of the UNDP/World Bank design for water-logged soils and the same number of another type to compare their operation in water-logged soils. The UNDP model is better but more expensive (Rs 2800 versus about Rs 2070). Now we are seeing if we can reduce costs of the UNDP/World Bank model. SEU(North) is also continuing its follow-up monitoring of more than 900 latrines built 3 to 5 years ago giving some interesting insights into the impact of the education programme. All Units continue follow-up monitoring which is carried out by the WWCs or, in a few cases NGOs/local consultants.

35. There are no factories working on sufficient scale in Kerala to provide enough rural ceramic pans and traps for our programme (or any other large programme in Kerala). The 'rural' pan, it should be noted, is narrower and has a steeper slope than the standard urban pan. Therefore it requires less water and takes less room in the latrine. The only large-scale producer (Kundara Ceramics) has closed down its kiln. The plant could produce enough to serve much of South India, however, about 15 to 20 lakh rupees are needed to make this modern plant operational. Could this be investigated as a candidate for a modern-sector grant? Meanwhile 2 Units are ordering rather expensive rural pans and traps (and paying 46% tax on them) from Tamil Nadu.

Interagency Collaboration

36. At the local level the SEU programme is linked to other agencies in three ways:

- The Ward Water Committees have members who belong to other groups (ICDS works, teachers, health staff, and so on).

- Staff of the Health Department give classes and helping us with the training activities.

- On a limited scale we are starting to link to other low-cost sanitation programmes, such as the JRY scheme (for SC/ST groups), to help the implementation of these programmes.

37. Aside from the local level, the latrine-with education programme had been carried out in relative isolation from other agencies until recently. Over the past six months there have been several developments which are summarized below.

38. Members of the Kerala Legislative Assembly in the Public Undertaking Committee visited the low-cost sanitation programme in Mayyil panchayat (Kolacherry scheme) together with the Managing Director of the Kerala Water Authority. They reported very favorably on the SEU sanitation programme. Mr. P.K. Sivanandan, Joint Secretary and Mission Director of the Technology Mission (Department of Rural Development, GOI) and Mr. I Patel, adviser on rural sanitation programmes (DRD, GOI) visited all three Units to discuss and examine our programme. They said that they were impressed with the management strategy of the programme. They then asked the Coordinating Office to prepare a paper on the management and education strategies of this programme. This paper will be delivered by the Executive Coordinator at the all-India conference on low-cost sanitation being inaugurated by the Prime Minister in New Delhi in mid-September.

39. The Rural Development Department had finally received approval for the jointly-funded (SEU/Unicef/Rural Development Department) study on the status of low-cost sanitation in Kerala. This should be starting soon. The Rural Development Department also set up district sanitation cells, inviting the SEUs to participate in them. The Cells have been generally weak with only junior personnel from relevant departments attending. However, the Department began in August trying to strengthen them and has issued new government directives for this. The State Sanitation Cell has only met twice in this year. It is hoped that it will be strengthened. The Rural Development Department also sent a circular to its district and block level officials stating that the SEUs should be considered as a resource for staff training about rural sanitation programmes. As another aspect of interagency collaboration, the SEU Executive Coordinator, Mr. Balachandra Kurup has been asked to serve on the expert committee organized by the Government of Kerala to scrutinize the proposals of voluntary organizations for financial assistance from CAPART.

40. As the Rural Development Department had not been as active as hoped in low-cost sanitation programmes, the Coordinating Office decided to investigate possibilities for collaborating with agencies that have specialized clientele. One goal was to find means for channelizing funds, without direct funding (suggested by RNE and the RSM of 1991.) As of July, the Department of Panchayats has agreed to collaborate in the Southern region (Vakkom-Anjengo scheme). In this effort, the Department will receive transfer funds to the panchayat which will undertake the education and construction programme together with the SEU. We are trying this out in one panchayat first to see if it will work without delays. As already discussed with RNE, if this develops well, an application would be made to continue this approach, based on the revised estimates presented earlier to RNE.

41. The Department of Fisheries and its social welfare organization (Matsyfed) serve a particularly deprived segment of the Kerala population: fishing families along the coast. Matsyfed has been carrying out a sanitation programme. However, the Board of Matsyfed has agreed to collaborate with the SEUs in serving fishing families. The Department will provide Rs. 750 per latrine; the SEUs will provide Rs. 750. Beneficiary contribution would be Rs. 250 and the remainder of construction costs would come from HUDCO loans to be arranged by the Fisheries Department. The SEUs will manage the programme following our sanitation strategy. The SEUs will also cover costs of education and management calculated at about Rs 100 to Rs 125 per latrine. We are delighted with this opportunity. However, there are two problems: first, we had not budgeted for this in April 1992 (line item 2.4 inter-agency collaboration). As happened last year, however, we ask to transfer some funds in the budget from one line item to another as is shown at the end of this report. Secondly, in view of the fact that the fishing communities only cover part of a panchayat and the beneficiary contribution determined by Fisheries is lower than that required by the SEUs, it would be very difficult to collaborate on this within the Dutch-Danish scheme areas. We would face complaints and political problems. Therefore, we are seeking permission from Netherlands Embassy to allocate about Rs 400,000 (4 lakh) to work with the Department of Fisheries in the construction of 500 latrines in Azhikode village by the SEU(Central). This is an area which has strong health department and NGOs. We are also seeking permission from the Danish Embassy to carry out this collaborative programme in Koyilandy Municipality for the construction of 750 latrines among fishing families with an allocation of Rs 600,000 (6 lakh). The Plan of Operation earmarked sufficient funds for this under line item 2.4 for SEU(North) although it was not included in this year's annual budget. It is hope that this can be approved as the

activity will be our first experience in bringing our education and management system into another organization's sanitation programme. Our goal in the long run is to institutionalize the education and management strategies perhaps through a separate sanitation unit.

42. There was less than one-third coverage with sanitary latrines in 8 of the 12 panchayats in which the SEUs started work. The fact that we lack sufficient funds to reach an average of 25% of the population below the poverty line (see the Plan of Operation) is one stimulus for inter-agency collaboration. There are other agencies which provide financial support to low-cost sanitation (latrines) in Kerala. The major ones are: World Bank, CAPART, CRSP, Unicef. The SEU programme differs from these in several important ways: It tends to be lower-cost per unit, emphasizing education and community involvement. It is smaller than the World Bank and CAPART programmes, at least on paper. As requested by the donors, it aims toward institutionalization. There is, unfortunately, little coordination among the donors which does not strengthen the credibility of the SEU programme.

New programme models for 50% subsidy

43. A challenge is to use resources wisely to increase latrine coverage and to demonstrate to other agencies how this can be done. At this time almost all other agencies provide 75% or more of the funds through direct grants or soft loans. In two places the SEUs are experimenting with different strategies providing about 50% subsidy. The experiments have not yet been completed.

44. In the Eddapal scheme, the beneficiaries provide 3 bags of cement and about 240 building blocks needed for the latrine on their property. All other aspects of the programme are the same, except that there are, of course, fewer commodities to be purchased in bulk. More than 2,000 latrines will be built following this strategy. It has been surprising to see some very poor, but highly motivated beneficiaries come forward for this programme. It is reported that even though the income criterion for family participation is higher (about Rs 12,000) than in the standard programme, while the per capita income is about the same as in other schemes because of the large family size in the Eddapal area. The quality of the total construction is the same high quality as in the SEU(North) latrine programmes.

45. In Poyya panchayat construction of 2000 latrines is done up to the plinth level only under supervision of the WWCs and SEU. Then the beneficiaries (and WWCs) are responsible for having the superstructure completed and, in a new development, the SEU will provide a door as an incentive. The beneficiaries must have the construction materials for the superstructure at the site before the plinth construction is started. This approach puts greater demands on the Ward Water Committee for motivation of the beneficiaries. We have also found that the masons who construct the superstructures tend to be less disciplined than in the SEU programme. This is exaggerated by the fact that there is a shortage of trained masons available for the programme in Poyya now. The quality of the superstructure differs, although the rule is that it must be a permanent superstructure that can be used when it rains. It is interesting to see that several families are also constructing bathing areas attached to the latrines.

46. In both approaches there are certain logistics problems to be ironed out. One is that the beneficiaries do not acquire materials at the same time. When this is the case, then it is difficult to deploy teams of masons in an organized way. In both programmes, the beneficiaries have a somewhat different relationship to the programme. Because their own input is greater, they tend to view the SEU as a contractor. For example, in Eddapal, it was very difficult to convince the people that giant latrine pits are not needed. By the end of this year, we hope that these problems will be sorted out and that we will be in a position to transfer the experience from these programmes to other areas, for example, possibly by undertaking lower subsidy activities in some of the areas where we have already had higher subsidy programmes.

COMMUNITY PARTICIPATION

47. Within the community, the key groups with whom the SEUs work directly are:

-Ward Water Committees: These are composed of 7 people including the elected ward member, representatives from local youth/women's groups and local institutions, with at least two women members. A ward has an average population of about 2500 people. If a WWC member misses three meetings, they are dropped from the committee. They are volunteers, unpaid.

-Standpost attendants: Also unpaid, the standpost attendants are volunteers, usually women, who use a standpost and are responsible for reporting faults, cleanliness around the standpost, working on drainage problems, trying to ensure appropriate use of the standpost. In the SEU(South) there are standpost committees. The SPAs are usually identified by the WWCs.

-Panchayat: The panchayat is the smallest level of local government with an elected president and elected ward members. The panchayat often has staff composed of an Executive Officer (employed by the Department of Panchayats) and clerical personnel.

Roles and functioning of Ward Water Committees

48. The Ward Water Committee is the local level group through which project activities are planned and executed. For the piped water schemes, the WWCs function as the basic community unit in support of the Water Authority. In the South and Central Units, they are involved in leak reporting and drainage and use of the standpost. They organize educational activities related to health and use of water (exhibitions, camps and so on) working closely with the SEUs. In many panchayats they have worked to improve the public relations of the KWA, serving as a means for disseminating correct information. They have also been active in areas threatened by outbreak of water-related diseases. At the earliest stage, they were used to organize the site selection process, although many of the WWCs had to be reorganized much later when the schemes were commissioned.

49. The Ward Water Committees are the key actors in the latrine-with-education programme and in environmental sanitation activities. Without the Committees, these activities could not be implemented.

50. In character, the Ward Water Committee lies somewhere between a pure service group (implementing only pre-planned activities) and an independent development group (identifying and managing its own activities autonomously). It should be noted that, in the Kerala context, the Ward Water Committee is not apolitical. The Ward Member is elected and belongs to a political party. The WWC also includes representatives from many groups (the youth/women's groups, elected ward members and so on), many of which are related to some of the numerous political parties. However, the complexion of the WWC is generally so mixed that the different political voices balance each other.

51. The Ward Water Committees do not, of course, undertake all project activities at the same time. Initially, the WWCs may work on the site selection and may monitor the erection of the standposts. One peak activity period spans about 6 months to one year after water begins to come into a scheme. During this time the WWCs are organized for reporting leaks, selection and training of SPAs, work for improved drainage and cleanliness around the standpost, education activities related to the new water supply, and in some cases may communicate with the public about the rules and procedures for getting household connections. The second peak activity period is that of the latrine-with-education programme, lasting 9 months to two years in a panchayat, depending on the type of programme. In addition, some special experimental activities have been undertaken with selected Ward Water Committees. These include:

- repairs of standposts (replacing taps, repairs of leaks in joints and pipes) in Thrikkunnappuzha panchayat).
- some assistance in casting and/or erecting standposts in the Eddapal/Kolacherry schemes.
- fly control programme in Nattika scheme and nearby panchayats
- support for the vegetable gardens started in a few wards in the Mala scheme
- chlorination of wells.

52. We proceed slowly in expanding most of these pilot activities until it is known how they can be sustained in the long run. Nonetheless tangible benefits could result for the Water Authority, with respect to the simple repairs at the standpost, the work in erecting/curing standposts and the experiment which we hope will start on cost recovery among users of standposts.

53. There are currently 336 active Ward Water Committees over an area having about 800,000 people. Most of these WWCs have been formed or reorganized since the last Review Mission of 1989. Similarly, much of the WWC programme, with the exception of site selection, has been created in the past two and a half years. Over the past six months, there has been an expansion in the number of panchayats having active WWCs. KWA Headquarters also issued two excellent letters via the Chief Engineers about the duties of the WWCs, one directed to the field engineering staff and the other to the Ward Water Committees, as a form of recognition. It has taken some time for these letters to circulate and the staff response has varied. The best response, from a field engineer who is very familiar with the SEUs has been to ask other panchayats (where the SEUs do not operate) to form Ward Water Committees. In other cases, there seems to have been little or no response. There have been several visitors who have seen the WWC activities and training programmes. In addition to senior KWA staff, these include: Director of Panchayats, Head of the State Sanitation Cell, staff of the Kerala Urban Development Programme, engineers in an all-India course sponsored by ODA. They have commented very favorably on the community participation and WWCs.

54. We see now that Water Committees are being started in two or three other projects outside Kerala. However, perhaps more thought should be given to the necessary and sufficient conditions for ensuring active WWCs. Over the past six months the SEU staff has considered this as we look at the issue of sustainability in the long run. Tentatively, we are finding that the quality of the WWC depends on the following:

- fairly good water service with standposts located to provide access to a meaningful proportion of the local population;
- responsiveness from local KWA staff in repairing leaks that have been reported and informing the WWCs about what is expected of them;
- membership in the WWC that reflects a fairly wide range of local vested interests and groups in the community;
- fairly good local leadership either from the panchayat leaders, or the elected ward members or a group of members within the WWC;
- one or more concrete activities to undertake;
- some external support, the level of which has yet to be determined.

With respect to the last item, external support has been largely provided by the field organizer, a young professional worker contracted on a short-term basis by the SEUs. In one panchayat, an attempt is being made to withdraw this worker slowly and to provide training to volunteers from the panchayat to continue on their own. In another panchayat the field worker was withdrawn but without preparation of the community. Here we have seen that the activity level of the WWC decreases within a year (although it doesn't cease completely).

55. With respect to future plans, the next 'test' of the stability of the WWC will come when the panchayat government is dissolved and new local election are set perhaps during the first half of 1993. If the basic WWC structure remains through this, then there are several options that might be pursued to help ensure sustainability of the Ward Water Committees.

56. The most important question, however, is not how to sustain Ward Water Committees after the SEUs cease to exist, but rather how to sustain the best of the socio-economic activities. This is described in the section on sustainability in this report.

EDUCATION AND TRAINING

57. After the SEU staff attended participatory training programmes organized by PROWESSS or PRIA, we invited a PRIA trainer to Kerala to help us organize our own participatory training activities. Nearly all field-based training in Kerala is of a lecture type where guest speakers, usually with little briefing or preparation, are invited to give lectures. In this context, the training styles we are developing (with group exercises, role playing, problem solving, group planning activities) are very unusual. Over the past 6 months, we have further developed a new set of short training programmes for WWCs, SPAs, teachers which use participatory training approaches. In the Central Unit, one-day participatory training was given to about 30 WWCs, SPAs and teachers. In the Northern Unit, participatory training was given to health staff from PHCs at the Health and Family Welfare Training Centre in Calicut. In the Southern Unit, 45 WWCs were trained using participatory methods and 'core groups' composed of one field organizer and 1 skilled WWC member were formed to provide training, thus saving the time of the professional SEU staff. The training focussed on groups formation and group self-management since this is essential for WWCs to carry out work together. Participants say they wish they had had this training when the WWCs started. Observers from other organizations were also positive. The future of this training (about 3 one-day programmes), depends in

part on our decision about the long-term prospects of the WWCs. This deserves comment from the Review Mission.

Education/training supporting SEU activities

58. Education and training activities are essential for all the SEU's on-going programmes. Details of these activities are shown for each scheme in appendix 1. A few elements of this are highlighted below.

59. Standpost Attendants:

Training was provided in all three Units, also using participatory methods, with varied activities.

60. For the low-cost sanitation programme, there are many education and training activities:

- mobilization at the beginning of a programme in a panchayat with meetings, film/slides, exhibitions
- training of masons in construction and education about health/technical aspects
- three compulsory classes for latrine beneficiaries
- follow-up monitoring undertaken by WWCs mainly also with a short-term consultant (one area in the Central Unit) or members of an NGD (Northern Unit)

61. In the Central Unit a month-long training programme and follow-up has been provided to the group of women masons who are now working in latrine construction in three panchayats. Formal training was also given to the workers in the POTWATS well chlorination group.

Other education and training activities

62. School health clubs: There are now 69 school health clubs in upper primary schools. Annual training was held to plan the activities for the new academic year, to provide orientation for teachers in new clubs or to provide classes for children and parents in household sanitation. The clubs are responsible for keeping the school clean and convincing other students of this (in classrooms, toilets, garbage, standposts) as well as providing education programmes within the club and to other students. Each club has a somewhat different set of activities, as might be expected. The SEUs have received many, many requests for the printed materials provided to the school health clubs. In addition, there has been some demand at the block and district level for training of teachers who, according to a directive from the Education Department, are setting up school health clubs in all lower primary schools around the state. Materials production for the school health clubs include name slips/time cards with health messages. It is also proposed to publish a supplementary reader on water and sanitation for the school health clubs.

63. Appendix 1 describes other training activities carried out over the past five months by scheme. Appendix 2 covers a longer timeline. For 1990-1992, it describes activities where the SEU staff served as resource people or lecturers and lists SEU materials requested and distributed to other organizations. Requests are greater than can be handled. Lastly, Appendix 2 describes requests fulfilled from other organizations for SEU support for programme development in water, sanitation and environmental health. Agencies from whom the SEUs have received such requests include the ICDS, health department at various levels, rural development institutions, literacy programme, and many NGOs and semi-governmental agencies.

INSTITUTIONALIZATION OF SOCIO-ECONOMIC ACTIVITIES

64. There are 6 SEU activities which hopefully can be sustained. This is a plan which aims toward sustainability and integration of some rather simple activities. With the possible exception of the low-cost sanitation component, it is not planned that SEU staff or the Socio-Economic Units will be integrated into any institution. The current plans for sustainability are outlined below.

65. Design of distribution nets for piped water schemes

The aim is to optimize the population coverage of piped water schemes in a way that (i) does not raise per capita costs (ii) improves consumer satisfaction, (iii) ensures that schemes can be extended efficiently in future. To do this, KWA/IPD and SEUs would work together to enhance the methods of designing distribution nets using an objective coverage criterion and improve location of standposts.

Strategy: a) determine, with KWA, source of up-to-date maps for all the schemes being submitted to Royal Netherlands Embassy, including all roads/public paths, levels and houses/population density
b) perhaps request support from RNE to carry out this work for all schemes being submitted
c) agree on coverage criteria (currently: a standpost for 15 to 40 houses within 200 m. with special attention to poor households)
d) IPD to apply these criteria in the distribution net design on the improved maps
e) reach agreement with KWA/IPD on how improved siting of standposts can be done

timeline: 1992-1995

other: (a) continue population mapping and site selection in Pavaratty scheme

(b) SEU with KWA to complete site selection Kundara scheme

66. Systematic reporting of leaks and faults around standpost

The aim is to improve O&M efficiency, save water by limiting leaks, and improve community relations and support for KWA. The plan is to integrate systematic community reporting of leak/faults around standposts into KWA's on-going programme.

Strategy: Reporting back to KWA by the community is a newer aspect of the SEU work which is still growing and needs to be reviewed and refined with KWA.

a) initiate reporting back in Eddapal, Kolacherry and expand the activity in Mala, Nattika, Vakkom-Anjengo and the smaller schemes and eventually Pavaratty and Kundara schemes

b) have joint formal evaluation of the activity with KWA staff which includes efficiency of work, if it saves water/repair costs, if it improves public relations

c) should also include obtaining better quality waste-not taps

timeline: 1992-1994 (1993-96 for schemes now being implemented)

67. Ward Water Committees

The aim is to maintain a community group in support of piped water schemes/KWA including (i) reporting back of leaks and faults around standpost for improved O&M; (ii) WWC providing information about household connections; (iii) WWC stimulate improved payback to KWA.

Strategy: a) official recognition from KWA (already given by KWA/HQ)
b) Danish-Dutch Review Mission to give special attention to WWCs and report back to KWA
c) Determine if WWCs continue to (i) operate after panchayat elections; (ii) can organize local payment for standposts; (iii) expand in number and remain active as SEU staff withdraw from a panchayat; (iv) require some type of support (in staff, not monetary terms) to continue functioning.
d) If KWA finds the WWCs useful, then it may be asked to seek sanction of a few posts at the circle or regional level for personnel who would serve as links to the communities and WWCs. KWA might request from donors either a winding down grant or a grant for dissemination of the structure to other schemes.

Other: SEU to do review of WWCs and report back to KWA
SEUs to establish WWCs in Kundara and Pavaratty scheme and expand WWCs in Nattika/Mala
Timeline: 1992-96

68. Improving traditional water sources

The aim is to stimulate private initiatives and NGOs to improve quality of drinking water in open wells (and springs). This is not a major component of the SEU workplan.

Strategy: a) RNE consultant to assess Mahila Samajan income-generating business in chlorination (Nov. 1992)
b) study of effect and costs of improvements in open wells to be completed in 1994 but with interim report 1993
c) combining (a) and (b) above, SEUs to set up independent, self-supporting activities with local women's groups for improved quality of drinking water
Timeline: 1992-95
Other: CO/SEU to continue monitoring and guidance for PASSS spring project

69. Low-cost sanitation (household latrines)

The aim is to institutionalize efficient management/administration capacity for expanding coverage of latrines in Kerala-focus on community management, lower cost, higher coverage, strong education and monitoring.

Strategy: a) expand current SEU work to 50 panchayats, continue experiments to keep costs down, raise beneficiary/panchayat contributions, refine current strategy of work, solve problem of construction in water-logged areas
b) initiate work with other government agencies and NGOs where they commit their own resources for the programme and SEU helps organize the community, manage programme, have education/monitoring activities (starting now): Dept. of Panchayats, Literacy, Fisheries, local NGOs
c) SEU to cooperate with Directorate of Panchayats in Dutch-assisted water schemes.
d) Danish-Dutch Review Mission to examine programme closely
e) institutionalize (b) in way yet to be determined.
Timeline: 1992-1997

70. Education and training which are not part of the above programmes and school health clubs Strategy not known for state/district level sustainability of current activities.

FINANCE

71. The financial year of the SEUs is the same as that of the KWA: 1 April 1992 through 31 March 1993. Therefore an account of expenditure for the six-month period 1 April 1992 through 1 October 1992 should be included in this report. However, this report is being completed before the arrival of the joint Indo-Dutch-Danish Review Mission on 22 September. Therefore, expenditures are summarized on the following pages for the five month period 1 April 1992-1 September 1992. These are also compared, percentage-wise, with the budget request for the year. For the five-month period, total expenditure was Rs 3,463,800 which represents only 15% of the total budgeted for this year (1992-93). Most of the underexpenditure is in the household latrine component (line item 2.1) which accounts for 53% of the budget. A close examination of the expenditures will show that more than 2200 latrines were constructed with only an expenditure in this five-month period of about 6 lakh (600,000) rupees. This is because most of the actual transfers were made before 1 April 1992 into the local joint bank accounts operated by the panchayats together with the SEUs. Underexpenditures also appear in activities for traditional water sources (item 1.2) and environmental sanitation (item 2.3) as several activities are being deferred as suggested by KWA at the Coordinating Meeting of June 1992. Lastly, there is underexpenditure in the health education items.

72. For the Netherlands-supported Units, some transfers among the line items in the Dutch-supported components of the budget are requested. These changes are already incorporated into the revised budget shown on the following pages. First, for the inter-agency collaboration in low-cost sanitation with the Department of Panchayats (see page 12, para 40), it is requested that an amount of 2.5 lakhs (Rs 850,000) be taken from line item 2.1 in the SEU(South) budget and transferred to line item 2.4 (inter-agency collaboration) of the Coordinating Office Budget. Secondly, for the collaboration with the Fisheries Department in Azhikode village (see page 12, para 41), it is requested that an amount of 4 lakh (Rs. 400,000) be transferred from line item 2.1 to line item 2.4 of the SEU(Central) budget.

73. In the budget for the Coordinating Office, for the follow-up to the well-study (see page 6, para 24), an additional amount of 3 lakhs (Rs. 300,000) is shifted to line item 4.0 (Studies and Monitoring) from line items 3, 5 and 6. This gives a total of Rs 540,000 in line item 4 for the Coordinating Office.

74. One transfer is requested within the budget of the SEU(North) but is not shown in the North's budget pending the visit of the Review Mission and the representative from the Embassy. This is for the collaboration with the Fisheries Department in low-cost sanitation (see page 12, para 41) for which it is requested that an amount of 6 lakh (Rs 600,000) may be transferred from line item 2.1 to 2.4 in the budget of the SEU(North).

75. For the Coordinating Office, the total expenditure for the period 1 April through 31 August 1992 was Rs. 914,965. Of this, an amount of Rs. 35,599 are being paid from Danida contributions to SGS(Bangalore) for the quality control inspection of waste-not taps, as stipulated in the agreement between Danida and SGS. Of the remaining expenditure from the Coordinating Office (Rs 879,366), two-thirds are covered from Dutch donations and one-third from Danish, as agreed

between the two Embassies.

76. From the Netherlands' donations, Rs. 3,057,316 was held on 1 April 1992. An amount of Rs.4,500,000 was received in July 1992. Expenditures total Rs.2,137,735 for SEU (South), SEU (Central) and 2/3 of the Co-ordinating Office. Thus, current holdings on 31 August 1992 were Rs.4,868,360.

77. From the Danish donations, SEU (North) expenditure for the period 1 April through 31 August 1992 was Rs. 997,350. Co-ordinating Office expenditures covered by the Danish Embassy are Rs. 35,599 for SGS, noted above, plus one-third of the remaining Coordinating Office expenditures (Rs 293,122). These amounts are covered by earlier transfers (Dec. '91 and Feb. '92) of which Rs. 364,595 was held on 1 April 1992. Thus only Rs. 35,814 remains of the Danida advance.

78. The Royal Danish Embassy held a surprise audit check in SEU(North) in May 1992. They had several suggestions which are being implemented. The external auditors continue their work and reports are sent directly from the auditor to the Embassies. The external auditor is now also checking the low-cost sanitation programme in the panchayats. The Dutch-supported Units follow staff rules and financial regulations as set out by the Danish Embassy to the extent possible. The BOS system which the Royal Danish Embassy instituted is cumbersome and has not yet been computerized in the two Dutch-supported Units as we can not figure out how to get it into the computers which were bought for that purpose. Thus these two Units still do accounts manually and sent them to the Coordinating Office.

SOCIO-ECONOMIC UNITS, KERALA

STATEMENT OF EXPENSES FOR THE PERIOD : 1 April 1992 - 31 August 1992

DESCRIPTION	SEU SOUTH	SEU CENTRAL	SEU NORTH	SEU CO	SEUs COMBINED
1. WATER RELATED ACTIVITIES					
1.1. Site Selection	256	5,488	0	0	5,744
1.2. Traditional Sources	1,155	1,322	0	1,194	3,671
TOTAL:	1,411	6,810	0	1,194	9,415
2. SANITATION					
2.1. Household Latrines	224,182	118,167	255,672	0	598,021
2.2. Institutional Latrines	851	800	0	0	1,651
2.3. Envmtl. Sanitation	0	0	0	0	0
2.4. Inter-Agency Collabn.	0	7,875	0	35,599	43,474
TOTAL:	225,033	126,842	255,672	35,599	643,146
3. HYGIENE EDUCATION	56,626	39,582	39,499	158,958	294,665
4. STUDIES & MONITORING	3,378	20,735	13,545	0	37,658
5. TRAINING & ORIENTATION	55,701	58,379	35,693	18,123	167,896
6. PUBLICATION & DOCUMENTATION	1,967	3,947	7,444	194,168	207,526
7. MANPOWER					
7.1. Loc. Staff Permanent	199,729	177,428	193,417	186,764	757,338
7.2. Loc. Staff Temporary	11,681	43,300	67,340	13,626	136,016
7.3. Work contracted	86,645	84,520	103,307	14,716	289,188
7.4. Loc. Consultants	0	10,880	0	37,190	48,070
TOTAL:	298,055	316,128	364,064	252,365	1,230,612
8. CAPITAL COSTS					
8.1. Office Equipment	2,176	0	0	16,720	18,896
8.2. Vehicles	0	0	33,450	0	33,450
8.3. Furnitures	1,393	3,000	0	0	4,393
8.4. Transport/Insurance	0	3,163	0	1,981	5,144
TOTAL:	3,569	6,163	33,450	18,701	61,883
9. OPERATIONAL EXPENSES					
9.1. Office Accommodation	1,838	7,512	7,380	1,006	17,736
9.2. O&M Office Equipment	3,234	6,024	9,394	8,029	26,681
9.3. O&M Vehicles	32,320	36,347	44,623	24,039	137,329
9.4. Office Costs	50,821	45,139	42,199	132,389	270,548
9.5. Travel & Accommodation	70,731	73,199	144,387	70,394	358,711
TOTAL:	158,944	168,221	247,983	235,857	811,005
GRAND TOTAL	804,684	746,807	997,350	914,965	3,463,806

SOCIO-ECONOMIC UNITS, KERALA

UNIT:SEU North, Calicut

STATEMENT OF EXPENSES FOR THE PERIOD : 1 April 1992 - 31 August 1992
AND REVISED BUDGET 1992-93

DESCRIPTION	ORIGINAL	EXPENDED	BALANCE	% EXPENDED	REVISED
	BUDGET	1 APRIL 92	IN	OF	BUDGET
	4.92 - 4.93	31 AUGUST 92	BUDGET	ORIGINAL	10.92 - 4.93
		TO		BUDGET	
1.WATER RELATED ACTIVITIES					
1.1.Site Selection	4,000	0	4,000	0.00%	4,000
1.2.Traditional Sources	40,000	0	40,000	0.00%	40,000
TOTAL:	44,000	0	44,000	0	44,000
2.SANITATION					
2.1.Household Latrines	3,700,000	255,672	3,444,328	6.91%	3,444,328
2.2.Institutional Latrines	36,000	0	36,000	0.00%	36,000
2.3.Envmntl.Sanitation	50,000	0	50,000	0.00%	50,000
2.4.Inter-Agency Collabn.	0	0	0	-	0
TOTAL:	3,796,000	255,672	3,540,328	6.74%	3,540,328
3.HYGIENE EDUCATION	355,000	39,499	315,501	11.13%	315,501
4.STUDIES & MONITORING	60,000	13,545	46,455	22.58%	46,455
5.TRAINING & ORIENTATION	140,000	35,693	104,307	25.50%	104,307
6.PUBLICATON&DOCUMENTATION	95,000	7,444	87,556	7.84%	87,556
7.MANPOWER					
7.1.Loc.Staff Permanent	550,000	193,417	356,583	35.17%	356,583
7.2.Loc.Staff Temporary	179,000	67,340	111,660	37.62%	111,660
7.3.Work contracted	323,000	103,307	225,693	31.40%	225,693
7.4.Loc.Consultants	0	0	0	-	0
TOTAL:	1,058,000	364,054	693,936	34.41%	693,936
8.CAPITAL COSTS					
8.1.Office Equipment	255,000	0	255,000	0.00%	255,000
8.2.Vehicles	350,000	33,450	316,550	9.56%	316,550
8.3.Furnitures	37,500	0	37,500	0.00%	37,500
8.4.Transport/Insurance	0	0	0	-	0
TOTAL:	642,500	33,450	609,050	5.21%	609,050
9.OPERATIONAL EXPENSES					
9.1.Office Accommodation	19,700	7,380	12,320	37.46%	12,320
9.2.O&M Office Equipment	24,000	9,394	14,606	39.14%	14,606
9.3.O&M Vehicles	112,500	44,623	67,877	39.66%	67,877
9.4.Office Costs	150,000	42,199	107,801	28.13%	107,801
9.5.Travel&Accommodation	342,000	144,387	197,613	42.22%	197,613
TOTAL:	648,200	247,983	400,217	38.26%	400,217
GRAND TOTAL	6,838,700	997,350	5,841,350	14.58%	5,841,350

SOCIO-ECONOMIC UNITS, KERALA

UNIT:SEU Central, Trichur

 STATEMENT OF EXPENSES FOR THE PERIOD : 1 April 1992 - 31 August 1992
 AND REVISED BUDGET 1992-93

DESCRIPTION	ORIGINAL	EXPENDED	BALANCE	% EXPENDED	
	BUDGET	1 APRIL 92	IN	OF	
	4.92 - 4.93	TO	BUDGET	ORIGINAL	
		31 AUGUST 92		BUDGET	100%
1.WATER RELATED ACTIVITIES					
1.1.Site Selection	30,000	5,488	24,512	18.29%	24,512
1.2.Traditional Sources	95,000	1,322	93,678	1.39%	93,678
TOTAL:	125,000	6,810	118,190	5.45%	118,190
2.SANITATION					
2.1.Household Latrines	4,000,000	118,167	3,881,833	2.95%	3,881,833
2.2.Institutional Latrines	45,000	800	44,200	1.78%	44,200
2.3.Envmntl Sanitation	20,000	0	20,000	0.00%	20,000
2.4.Inter-Agency Collabr.	25,000	7,875	17,125	31.50%	417,387
TOTAL:	4,090,000	126,842	3,963,158	3.10%	3,963,158
3.HYGIENE EDUCATION					
	240,000	39,582	200,418	16.49%	200,418
4.STUDIES & MONITORING					
	45,000	20,735	24,265	46.08%	24,265
5.TRAINING & ORIENTATION					
	237,000	58,379	178,621	24.63%	178,621
6.PUBLICATON&DOCUMENTATION					
	25,000	3,947	21,053	15.79%	21,053
7.MANPOWER					
7.1.Loc.Staff Permanent	350,000	177,428	472,572	27.30%	472,572
7.2.Loc.Staff Temporary	100,000	43,300	56,700	43.30%	56,700
7.3.Work contracted	400,000	84,520	315,480	21.13%	315,480
7.4.Loc.Consultants	50,000	10,880	39,120	21.76%	39,120
TOTAL:	1,200,000	316,128	883,872	26.34%	883,872
8.CAPITAL COSTS					
8.1.Office Equipment	60,000	0	60,000	0.00%	60,000
8.2.Vehicles	0	0	0	-	0
8.3.Furnitures	50,000	3,000	47,000	6.00%	47,000
8.4.Transport/Insurance	10,000	3,163	6,837	31.63%	6,837
TOTAL:	120,000	6,163	113,837	5.14%	113,837
9.OPERATIONAL EXPENSES					
9.1.Office Accommodation	40,000	7,512	32,488	18.78%	32,488
9.2.O&M Office Equipment	25,000	6,024	18,976	24.10%	18,976
9.3.O&M Vehicles	250,000	36,347	213,653	14.54%	213,653
9.4.Office Costs	250,000	45,139	204,861	18.07%	204,861
9.5.Travel&Accommodation	300,000	73,199	226,801	24.40%	226,801
TOTAL:	865,000	168,221	696,779	19.56%	696,779
GRAND TOTAL	6,947,000	746,807	6,200,193	10.61%	6,200,193

Note:

1. '-' under expended column indicates item not budgeted.
2. line item 2.4 - inter agency collaboration includes Rs.400,000 re-allocated from line item 2.1 - HH Latrines. This is for the fisheries project in Azhicode panchayat.

SOCIO-ECONOMIC UNITS, KERALA

UNIT:SEU South, Guilon

STATEMENT OF EXPENSES FOR THE PERIOD: 1 April 1992 - 31 August 1992
AND REVISED BUDGET 1992-93

DESCRIPTION	ORIGINAL BUDGET 4.92 - 4.93	EXPENDED 1 APRIL 92 TO 31 AUGUST 92	BALANCE IN BUDGET	% EXPENDED OF ORIGINAL BUDGET	REVISION 10.92
1.WATER RELATED ACTIVITIES					
1.1.Site Selection	10,000	256	9,744	2.56%	9,744
1.2.Traditional Sources	75,000	1,155	73,845	1.54%	73,845
TOTAL:	85,000	1,411	83,589	1.68%	83,589
2.SANITATION					
2.1.Household Latrines	4,700,000	224,182	4,475,818	4.77%	3,525,818
2.2.Institutional Latrines	80,000	851	79,149	1.06%	79,149
2.3.Env.mntl.Sanitation	40,000	0	40,000	0.00%	40,000
2.4.Inter-Agency Collabn.	50,000	0	50,000	0.00%	50,000
TOTAL:	4,870,000	225,033	4,544,967	4.62%	3,794,967
3.HYGIENE EDUCATION	150,000	56,626	93,374	37.75%	93,374
4.STUDIES & MONITORING	25,000	3,378	21,622	13.51%	21,622
5.TRAINING & ORIENTATION	100,000	55,701	44,299	55.70%	44,299
6.PUBLICATON&DOCUMENTATION	10,000	1,967	8,033	19.67%	8,033
7.MANPOWER					
7.1.Loc.Staff Permanent	500,000	192,729	400,271	33.29%	400,271
7.2.Loc.Staff Temporary	100,000	11,681	88,319	11.68%	88,319
7.3.Work contracted	300,000	85,645	213,355	28.88%	213,355
7.4.Loc.Consultants	12,000	0	12,000	0.00%	12,000
TOTAL:	1,012,000	290,055	719,945	29.45%	719,945
8.CAPITAL COSTS					
8.1.Office Equipment	10,000	2,176	7,824	21.76%	7,824
8.2.Vehicles	10,000	0	10,000	0.00%	10,000
8.3.Furnitures	10,000	1,393	8,607	13.93%	8,607
8.4.Transport/Insurance	5,000	0	5,000	0.00%	5,000
TOTAL:	35,000	3,569	32,431	9.91%	32,431
9.OPERATIONAL EXPENSES					
9.1.Office Accommodation	10,000	1,838	8,162	18.38%	8,162
9.2.O&M Office Equipment	20,000	3,234	16,766	16.17%	16,766
9.3.O&M Vehicles	100,000	32,320	67,680	32.32%	67,680
9.4.Office Costs	125,000	50,821	74,179	40.66%	74,179
9.5.Travel&Accommodation	260,000	70,731	189,269	27.20%	189,269
TOTAL:	515,000	158,944	356,056	30.87%	356,056
GRAND TOTAL	6,803,000	804,884	5,998,116	11.83%	5,998,116

Note:

- Rs.850,000 from line item 2.1 - H.H.Latrines of the revised budget has been re-allocated to line item 2.4 - Inter agency collaboration of the C.O. budget. This is for construction of 500 latrines in Chirayinkil.

SOCIO-ECONOMIC UNITS, KERALA

UNIT Co-ordinating Office, Trivandrum

STATEMENT OF EXPENSES FOR THE PERIOD : 1 April 1992 - 31 August 1992
AND REVISED BUDGET 1992-93

DESCRIPTION	ORIGINAL	EXPENDED	BALANCE	% EXPENDED	
	BUDGET 4.92 - 4.93	1 APRIL 92 TO 31 AUGUST 92	IN BUDGET	OF ORIGINAL BUDGET	
1.WATER RELATED ACTIVITIES					
1.1.Site Selection	0	0	0	-	
1.2.Traditional Sources	0	1,194	(1,194)	*	
TOTAL:	0	1,194	(1,194)	*	
2.SANITATION					
2.1.Household Latrines	0	0	0	-	0
2.2.Institutional Latrines	0	0	0	-	0
2.3.Envmntl.Sanitation	0	0	0	-	0
2.4.Inter-Agency Collabn.	180,000	35,599	144,401	19.76%	994,401
TOTAL:	180,000	35,599	144,401	19.76%	994,401
3.HYGIENE EDUCATION	595,000	158,958	436,042	25.72%	995,042
4.STUDIES & MONITORING	240,000	0	240,000	0.00%	540,000
5.TRAINING & ORIENTATION	250,000	18,123	231,877	7.25%	31,877
6.PUBLICATON&DOCUMENTATION	430,000	194,168	235,832	45.16%	185,832
7.MANPOWER					
7.1.Loc.Staff Permanent	325,000	185,754	139,236	57.47%	199,236
7.2.Loc.Staff Temporary	100,000	13,695	86,305	13.70%	86,305
7.3.Work contracted	35,000	14,716	20,284	42.05%	20,284
7.4.Loc.Consultants	50,000	37,190	12,810	74.38%	12,810
TOTAL:	510,000	252,365	257,635	49.48%	257,635
8.CAPITAL COSTS					
8.1.Office Equipment	20,000	16,720	3,280	83.60%	3,280
8.2.Vehicles	0	0	0	-	0
8.3.Furnitures	5,000	0	5,000	0.00%	5,000
8.4.Transport/Insurance	5,000	1,981	4,019	39.62%	4,019
TOTAL:	31,000	18,701	12,299	60.33%	12,299
9.OPERATIONAL EXPENSES					
9.1.Office Accommodation	10,000	1,006	9,994	10.06%	9,994
9.2.O&M Office Equipment	50,000	8,029	41,971	16.05%	41,971
9.3.O&M Vehicles	100,000	24,039	75,961	24.04%	75,961
9.4.Office Costs	220,000	132,389	87,611	60.18%	87,611
9.5.Travel&Accommodation	260,000	70,394	189,606	27.07%	189,606
TOTAL:	640,000	235,857	404,143	36.85%	404,143
GRAND TOTAL	2,875,000	914,965	1,961,035	31.83%	

Note:

1. '-' under expended column indicate items not budgeted.
2. '*' indicates expense incurred for PASSS project which should have been charged under inter-agency collaboration.
3. Line item 2.4 of the revised budget includes Rs.850,000 re-allocated from line item 2.1 H.H. Latrines of the SEU South budget. This is for construction of 500 latrines in Chirayinkil. Funds will be released to the Directorate of panchayats.
4. Line item 4 - Studies & Monitoring includes Rs.200,000 re-allocated from line item 5 - Training & Orientation and Rs. 100,000 re-allocated from line item 3 - Hygiene Education (Rs.50,000) and line item 6 - Publications & Documentation (Rs.50,000).

COMMUNITY ACTIVITIES BY SCHEME
for period 1 April 1992 through 1 September 1992

Edappal scheme (5 panchayats)

latrine-with-education programme in 2 panchayats

intense health education in needy colonies through WWC & literacy groups
-1 panchayat

4 school health clubs where activities are also held with mothers' groups

special activities with other departments, literacy groups and Sarvodaya
Sangham-2 panchayats

Zone 1 preparations for field testing, reporting from standposts and erection
of new design standposts

training: SPAs(2 panchayats), teachers (1 panchayat), masons, mothers' groups

Kolacherry scheme (8 panchayats)

latrine-with-education programme in 4 panchayats

special health education in colonies and schools including home visits
-2 panchayats

brick making- 2 panchayats

getting land surrendered for pipe laying- 1 panchayat

Zone 1 preparation for field testing, reporting from standposts and erection
of new design standposts

training: SPAs (2 panchayats), ICDS/mothers' groups (24 groups), school
teachers (4 panchayats), masons (3 panchayats), brick-making (3 panchayats)

Cheekode scheme (3 panchayats)

latrine monitoring- 2 panchayats

3 school health clubs where activities also held with mothers' groups

preparations for field testing, reporting from standposts and erection of new
design standposts

training: SPAs (1 panchayat), teachers, panchayat members (1 panchayat)

Mala scheme (6 panchayats)

latrine-with-education programme- 3 panchayats

latrine monitoring

reporting of faults/leaks around standposts, improved cleanliness around
standpost, some improved drainage- 4 panchayats

Mala scheme (con't)

POTWATS well chlorination through women's clubs working in several panchayats

12 school health clubs with activities including vegetable gardens, school monitoring/cleaning, colony visits

WWC arranged meetings with government officials to popularize existing services- 1 panchayat

training: WWCs (63 members), SPAs (145 people), ICDS/anganwadi (130 people), teachers, masons

Nattika scheme (10 panchayats)

latrine-with-education programme- 3 panchayats

reporting faults/leaks around standposts, cleanliness and some drainage activities around standpost

well chlorination- 3 panchayats

kitchen gardens- 1 panchayat

fly control programme (all coastal panchayats)

12 school health clubs with activities including vegetable gardens, colony adoption, school cleaning

women masons

training: WWCs (70 members), teachers, masons, intense training and follow-up for women masons, panchayat members (1 panchayat)

Pavaratty scheme (19 panchayats- current phase 6 panchayats)

site selection with WWCs in 3 panchayats

baseline survey of 3 panchayats

training: WWCs (140 members)

Vakkom-Anjengo scheme (6 panchayats)

latrine-with-education programme in 3 panchayats

reporting faults/leaks around standposts, improved cleanliness around standposts in 5 panchayats

improvements to drainage around standposts in 4 panchayats

27 school health clubs which had leadership training camps and involved in monitoring of latrines, mothers' groups, 'adopting' taps

Vakkom-Aniengo scheme (con't)

4 meetings with voluntary agencies

46 mothers' group meetings with ICDS

training: WWCs (130 members), SPAs (566 people), teachers (5 panchayats),
panchayat members (all panchayats)

Cheriyamad panchayat

latrine-with-education programme

reporting faults/leaks around standpost

seminar for youth clubs done by WWCs

training: WWCs, SPAs, teachers, panchayat members

Thrippunnapuzha panchayat

latrine-with-education programme

reporting faults/leaks around standposts

experiments: (a) community members repair standposts
(b) 2 designs for latrines in water-logged areas
(c) KWA-community work on improved drainage

Koipuram panchayat

construction of demonstration latrines

inter-agency collaboration in low-cost sanitation with the JRY programme

finalization of tap points by WWC and KWA

SEU Staff as resource people for other organizations

1. Literacy training for illiteracy instructors and trainers (all units)
2. State Rural Development Training Centre and Extension Training Centre: training of Gov't/BGO staff for low-cost sanitation
3. Kerala Institute of Local Administration (an inservice government institute): training on health and sanitation
4. Block training programmes: In more than 10 blocks, training for people from voluntary organizations, block engineers, and so on.
5. Integrated Child Development Service (ICDS): joint planning, regular monthly meetings at local level
6. Health & Family Welfare Training Centre: training on water disinfection, refuse disposal
7. Health Services staff meetings and PHC staff meetings: SEU personnel attend periodic meetings at district and local level
8. Workers Education Department: health and sanitation training
9. Nehru Yuvak Kendra: training given by all three Socio-Economic Units
10. Department of Fisheries: training for low-cost sanitation
11. All India Radio: many broadcasts by SEU and Coordinating Office staff
12. Doordarshan: programme on water and health
13. State Committee of Science, Technology and Environment: member of panel which reviews proposals from Govt/NGOs for grants in sanitation, rural development, research
14. Kerala Association for Non-formal Education and Development: organized water-and-sanitation subgroup
15. Bharat Jana Vignam (Science movement of people): water sector committee
16. Bharat scouts & Guides: resource for sanitation
17. International Union for Health Education: organized Kerala branch

Requests from other groups for sanitation and health education activities

1. NES block, Puzhakkal: for supervision/training for low-cost sanitation.
2. Matsyfed (social welfare organizations, Fisheries Department): for construction, supervision of low-cost sanitation programme
3. PHC outside project area for assistance in chlorination/health education
4. ICDS: several requests for low-cost sanitation programme in ICDS centres
5. Costford, an agency for promoting low-cost housing. request for support in planning and implementation of water and sanitation-related activities.
6. Many panchayats have requested assistance in implementing the JRY latrine programme, both within and outside SEU project areas. Many panchayats have also asked for SEU assistance (including financial) for the latrine-with-education programme.
7. Unicef-sponsored school health clubs: request for training of teachers by a few AEO's.
8. NGOs for training, supervision of latrine-with education programme, including Kottappuram Integrated Development Society, Trivandrum Social Service Society.
9. Sarvodaya Sangham: request for training in several panchayats

Materials distribution from the SEUs

Many organizations approach the SEUs for educational materials. Such requests are entertained, if possible, when it appears the materials will be used in part of an on-going programme. Some of the organizations which have received SEU materials include:

- Director of Panchayats, Department of Panchayats
- Director of Health Services, Department of Health and Health Services in all districts, and all Public Health clinics where SEUs work
- Literacy groups in more than 10 blocks and at state level
- State Institute of Education, Trivandrum
- National Service Schemes in more than 4 colleges
- Bal Sevika Training Institutes
- ICDS projects in more than 2 blocks
- People's science movement groups in more than 2 districts
- Calicut and Cochin Corporations
- Extension Training Centre for medical officers, ICDS supervisors, engineers and so on
- Health & Family Welfare Training Centres in at least 3 districts
- University of Kerala, Clinic
- Nehru Yuvak affiliate clubs in several districts
- NGOs involved in development programmes, health or literacy:
 - Kerala State Sunni Students Federation; Kottapuram Integrated development Society, Madavakkara Grama Vikasana Samithi, Vinobhanikethan Trivandrum, Nature Fraternity, Social Action Group for Science and Technology, Education & Social Action Council, Rahi Mahila Sanajan, Bharat Jan-Gyan, Bharat Sevak Samaj

The materials which are distributed are: Health Series flyers 1 through 9, SEU brochure, Lesson Plans, Ward Water Committee Manual, Jalasandesh newsletter, Jeevadhara (radio programme), and materials for children (scale, timetable, nameslips).

VISITORS AND MAJOR MEETINGS

1 April 1992 - 1 September 1992

Ms.Christine Van Wijk from International Water and Sanitation Centre visited Kerala during 29 April - 7 May,1992.

Ms.A.Braken, Project Officer, Ministry of Foreign Affairs visited Kerala from 5 - 7 May, 1992.

Mr.A.K. Sengupta,Deputy Advisor, Department of Rural Development, Government of India visited from 6-7 May 1992.

Mr.Peter Flik, First Secretary, Water and Sanitation Programme, RNE visited Kerala from 10-12 June, 1992.

Mr.Bjorn Kalmer Hansen, Counsellor Development, DANIDA visited Kerala from 10-12 June, 1992.

Mr.P.K. Sivanandan,IAS, Joint Secretary and Head of the Technology Mission, Rural Development and Mr.Ishwarbhai Patel, Advisor of the Rural Development, Government of India, New Delhi visited during 8 - 10 June, 1992.

Mr.Theo Haagsma, TLO and Ms.Thresiamma Mathew of SEU (Central) visited Ongole-Hyderabad to attend NAP Workshop on sanitation from 26-31 May 1992.

Mr.Padmanabhan Achari, Executive Engineer (Purchase),KWA and Mr.K. Balachandra Kurup, Executive Co-ordinator visited Easland Combines, Coimbatore for Inspection of Waste-Not Taps from 5-7 July 1992.

Dr.Majumdar and Mr.Subash Chandra from Bradford University, London visited on 11 August 1992.

The SEU staff meetings were held on 9 April 1992 in Kollam and 4-6 August 1992 at Calicut.

Netherlands Assisted Programme (NAP) India 1992 conference was held at Trivandrum on 4-7 May 1992.

Co-ordinating Committee meetings was held at KWA Headquarters on 12 June 1992.