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INTERNATIONAL REFERENCE CENTRE  
FOR COMMUNITY WATER SUPPLY AND  
SANITATION

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# LEARNING TOGETHER:

## PARTICIPATORY HYGIENE BEHAVIOUR INITIATIVES

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A REPORT ON THE WORKSHOP AT  
GANDHIGRAM, T. N., JANUARY 7TH AND 8TH, 1994

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VIJAY BHAI

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There is well known medical evidence that negligence of village folk about water hygiene is responsible for many diseases. ...Undoubtedly poverty is the reason behind high death rate in our country which is cutting the vitality of our people.. But if people are properly informed and educated about health principles (traditional and modern) this can be substantially improved.... In my opinion villages where there is personal hygiene, cleanliness of domestic and village environment, proper nutrition, and proper exercise there will be much less ill health. And if mind (chitta) is also clean then ill health is impossible..

...Cleavage that has come about in our lives between labour and mind is responsible for our neglect of villages which is reprehensible. The result is that instead of clean and beautiful villages every where we find villages in heaps of filth. The experience of walking around in any village is very unpleasant. When entering villages one has to close eyes and nose..

...It is the duty of village workers to make villages models of clean and pleasant environment. But we have not made it our motto to participate in the daily routine and activities of villagers. We neither considered the hygiene and cleanliness of environment as our national social obligation nor we worked to improve it....If village workers themselves take up the task of daily cleaning the village environment, like employed servants, and simultaneously encourage villagers to participate and gradually take responsibility for this work, then it is certain that even the surrounding villages will start cooperating in this work. If we have workers who are prepared to take broom, spade and basket in their hand, as proudly as a pen, then this enormous work will not even require much expenditure..

MAHATMA GANDHI

(Free translation of extracts from Gandhi's writings, mostly  
dating 1935, taken from an unauthorised compilation "Gram Swaraj",  
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# PROLOGUE

This document is a report of the two-day workshop at Gandhigram.

A team of researchers has been working, through the CENTRE, with the Linkoping Programme on Safe Water and Environment in organising four studies in South India to study water-use, sanitation and hygiene behaviours using observational and informal interview methods. These studies are winding up now. A seminar was contemplated way back in May 1993 to bring the participants of these studies together to interact with other scientists and agencies in the region and share experiences. We also wanted to use this opportunity to share our ideas about the next phase of studies by the CENTRE and get a feed back.

We decided to focus the next phase on action-research dealing with different approaches to hygiene interventions. We now know about methods to study hygiene behaviours and have some experience of studying hygiene behaviours in different areas in India. But we know little about the actual in-situ experiences and operational details of the process, methods and procedures by which hygiene behaviours change autonomously or can be changed through planned interventions beyond the centralised prescriptions of health education. So we decided to devote the next phase to developing some know how about hygiene interventions and hygiene change.

The twin objectives of the present workshop were:

1. To share the experiences of research and action on hygiene behaviour and discuss their relevance for rural sanitation and water supply programmes.
2. To discuss the issues and strategies for designing and implementing hygiene interventions through community participation

Apart from the participants in the Linkoping studies, two other groups were invited-- representatives from voluntary agencies in South India and resource persons from the government and bilateral agencies. Unfortunately no representative from the government agencies turned up.

Although we decided to devote time on discussions rather than paper presentations, a tentative outline of the sessions (Appendix 1) was circulated. I also prepared an open-ended inventory of topics under each session which could be taken up by the participants. About half a dozen participants had brought materials for "presentation" but we requested them politely to use the materials to make their points during the discussions. As the workshop organiser I must confess that it required a good deal of self restrain, which I betrayed a couple of times, in not making assertive statements and rather adopting a non-directive participatory posture. Some of us had to regularly ask questions or provoke responses from the participants rather than making our own statements.

The workshop was designed as an exercise in participatory learning.

This document is based on notes prepared during the discussions by four persons for each session. This was arranged on my request. When comparing the notes about the same sessions it turned out that each person was writing about the discussions in his/her own unique perspective as he or she was relating to it intellectually or pragmatically. This was a pleasant surprise. The statements, questions, discourses were being received, interpreted and absorbed (summarized) differently by each of the four participants despite commonalities of the substance. Each of the four participants was not taking notes like a tape recorder but as a thinking, responding, and interacting participant.

This is how each participant in the workshop intellectually related to the two-day deliberations, taking with him/her information and impressions shaped by their own respective synthesis in the spirit of participatory learning. I am sure that if other participants were to write an account of the deliberations they will give their own version - a good deal similar but characteristically different. Participants who think alike will draw similar picture. this is why I am describing this report as a "personalised" document rather than a faithful verbatim record of proceedings.

A good deal of mutual understanding developed during the introductory sessions (Section III and IV). Subsequently a number of issues emerging from the tentative outline were debated and contentious issues were put behind (Section VII). Sessions towards the end were devoted to collective exercises (Section VI). The basic questions were selected by the participants and responses were noted down on flip chart. These exercises were amazingly smooth in terms of collective understanding and collective decision making. This was facilitated by detailed preceding discussions. This is again reflective of PRA process.

The author has taken the liberty to systematize, reorganise, elaborate or abridge the materials. Various view points are presented in a complementary fashion rather than as contentious issues. I have worked out implications or developed interpretations further at some places in Section VI. The language is mine and I have worked out ideas further. Based on my understanding I have reached out to the minds of the participants. I have also used written or verbal materials shared by the respective participants in preparing the write up. I have taken liberty to put some of my own ideas in Section VII .

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INAUGURAL SESSION

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WELCOME TO THE PARTICIPANTS

DR. M.BALA SOUDARSSANANE, DIRECTOR,  
Gandhigram Institute of Rural Health and Family Welfare

INAUGURAL ADDRESS:

MR. K. VISWANATHAN

DIRECTOR, MITRANIKETAN,  
Vellanad, Kerala

I am thankful to the organisers of this workshop for giving me an opportunity to participate in this important workshop.

My association with Gandhigram is since I was a student. I consider health, hygiene, water and sanitation as an integral part of total development or welfare of the rural and tribal communities.

Gandhiji showed us integrated and sustainable way of development. We have come a long way. But now there is hardly much involvement of people. We can see this in various programmes in different ministries. It requires an entirely different strategy. In a democracy the government is best when people can do the most. But the system in India and other developing countries leaves much to be desired. We have to discipline ourselves - people at the top, in the middle and the lower levels, all have to question themselves, what we are doing, and ask how can we change things to enable involvement of people in the process of development.

At Sewagram Gandhiji introduced trench latrines. We seem to have forgotten the importance of simple solutions even when better things can not be provided. We need to do research on such solutions -- things that people can do themselves. How can these simple solutions be made practical? What are the problems in implementing them? Is it not possible?

We talk of decentralization but what we actually do is more and more centralization. Bottom up approach is different and ways of practicing this approach have to be carefully and sometimes painstakingly learnt. These may not be easy to begin with because we have made people dependent; they expect things to be done for them free. Besides we who take decisions and implement them tend to dictate with a closed mind. We need to be more open and flexible in pursuing programmes.

Educational approach is good but it has unfortunately been bureaucratized and compartmentalized. How can we create self confidence, self respect and self initiative among the poor village people ? Paternalistic approach is doing great harm to them and depriving them from participating in their own development. Democracy can function better by pursuing and popularizing basic education-- practical education that they can use in every day life and day to day activities. Their own needs and their own solutions should be the starting point. We can always inform educate and improve upon it.

We need to train village workers to work differently by adopting participatory approach. In schools for example there is lot of text book education but look at them and their surroundings- they have not learnt even the basic lessons of cleanliness and hygiene. Unlike our traditional education the teachers have become disassociated with the process of education. They seem to be teaching - you follow what I say, do not follow what I do. Gandhiji laid so much emphasis upon personal example. He always insisted that we should first follow lessons in our personal life then only can we have the moral right to teach others. We as workers of rural development have to evaluate our own life style- what is negative and what is positive.

Today the city youth want to emulate the west and the rural youth want to copy the urban youth. The city dwellers are setting ideals and examples for the rural folk. We have to take difficult decisions in the long term perspective and ensure that we do not set wrong examples - life styles that are wasteful, unsustainable, unhealthy, and vulgar. We should examine the consequences of our habits and choices - what these mean in the long term perspective for the country, for the future generations. Fortunately we have our good old traditions and voices of the enlightened people to guide us. But we can not go in one direction (of consumerism and affluence) and expect the village folk to be satisfied with more simple, traditional and sustainable options. We have to refrain from the allurements of harmful life styles and set better examples to our brethren in villages.

We should prepare people to think about their problems in larger perspective and ponder over the implications of their solutions. I find no other solution but to living close to nature in a life style sustaining nature. More institutes and projects unfortunately do not contribute to such education. We must adopt a holistic approach. When looked in this perspective better hygiene becomes natural. One's cleanliness can not be separated from the healthy environment. We have followed this example at Mitraniketan. We have created a clean and healthy environment with the participation of children. We do not give lectures on hygiene or conduct any programme on it. But you can see how clean are the children themselves, their living quarters, their personal habits, and their environment. When they leave they take these good habits with them and change others. It comes naturally; the nature's way.

With these few words I declare this workshop open.



**CHAIR-PERSON'S ADDRESS:**

**PROF. CARL WIDSTRAND,  
UNIV. OF LINKOPING, SWEDEN**

It may be good idea to put this workshop in historical context. I come from a small European country Sweden. I can give many examples to show that unfortunately the small countries make the same mistakes as the big countries. We have learnt our bitter lessons as well.

I have been for many years involved in a number of multi-lateral development programmes in Africa, particularly in the field of water and sanitation. The problems and issues you are facing in India are a world wide phenomena- the problems of large scale bureaucracies implementing development programmes, interaction of technological and cultural factors, importance of adopting participatory and sustainable approaches, programmes not leading to the desired results and expectations.

The School of Water and Environment Studies at the Institute of Thematic Studies in the Linkoping University is carrying out a project, mainly in East Africa. Prof.Kochar has helped us to put together small studies in India. The project deals with two basic objectives:

- i. Study of hygiene behaviours and how these get involved in transmission of pathogens.
- ii. Transport of pathogens in ground water.

Studies in India, under the direction of Prof.Kochar and with the support of collaborating scientists at four locations in South India, aim at description and comparison of hygiene behaviours. These studies will be over in June 1994.

Logically, of course, as Dr.Kochar has envisaged, attention need to be given to finding ways and procedures for promoting change in hygiene behaviours, if the rural sanitation and water supply programmes are to protect villages from the risk of communicable diseases. The issues of community involvement, particularly of women, and neglected sections, have yet to be resolved.

Studies of hygiene behaviour, particularly water use and sanitation, are important because we must first describe the behaviours that we expect to change before we can measure how much these behaviours have changed. This is how the theme of this workshop ties up with our studies of hygiene and sanitation behaviours in India. The collaborating scientists and the research staff of these studies will share their experiences and hope to learn something from the discussions during this workshop.

We hear of so many assumptions about the impact of water supply and sanitation programmes or the effect of these on behaviour patterns -- that these programmes can change the health of people ; that people will naturally prefer the best clean water and excreta disposal facilities; that people will as a result use more water and their hygiene will improve; that they will stop faecally polluting the environment, etc. As Dr.Kochar told us at a workshop in Kenya, there is reason to believe that these assumptions may not be supported in all field situations because of varying cultural situations and varying response of people to new technologies.

Local cultural knowledge and practices are seldom in the purview of programme planners or those who design and implement technologies. And yet it is precisely these that the programme managers expect people to change-knowledge, attitudes and practices, for success of their plans. The need to design programmes around the cultural practices and knowledge of people is more recognised now than it was when I was working in Africa many years ago. There is need to encourage involvement and participation of all sections of the communities in programme implementation . We have come around to what some of us have been saying since twenty years ago.

The social-cultural dynamics of the choices, decisions and actions of people are far more complex than what the programme planners and managers assume. It is important to understand what lies behind voluntary initiatives for accepting new technologies, for improving hygiene behaviours and for implementing programmes. When people take initiatives they are capable of acting upon them by learning and taking responsibilities . In the process people are able to blend the traditional and the new - knowledge, resources and technology. The theme of the workshop therefore is important from research as well as implementation point of view.

I suspect Dr. Kochar has much more in mind than what he has put in the outline of the workshop. By intensive, open-ended and informal interactions we are likely to find new ideas and reinforce what we know into personal conviction to do something about them. We will find out from Dr.Kochar how shall we conduct our business.

## INTRODUCTION TO THE WORKSHOP:

PROF. VIJAY KOCHAR

CENTRE OF APPLIED SOCIAL RESEARCH, HYDERABAD

This workshop is being organised by the Centre of Applied Social Research, Hyderabad in collaboration with the Gandhigram Institute of Rural Health and Family Welfare Trust and with the support of the Linkoping Programme on Safe Water and Environment. We are grateful to both the agencies for their support in organising this workshop.

The Centre of Applied Social Research is a private non-profit agency devoted to participatory, community-based voluntary action in the field of rural health and inter-related environment and social development. The term voluntary action means grass root level initiatives by people themselves as well as initiatives by voluntary agencies who work with people in villages in a participatory fashion. The CENTRE is committed to working with voluntary agencies.

Let me briefly list out the basic premises which guided us in organising this workshop. We are looking for low cost options for safe water and safe environment including but not limited to the standard technologies of hand-pumps, taps and latrines. We are committed to the integrated perspective in which sanitation, hygiene, health and related social development are seen as an integral part of the programme package for rural water supply and latrines. Without the former the latter do not mean much. We are committed to implementation of the programmes through community involvement and participation, particularly women, children and the neglected sections of rural communities.

Our commitment to participatory process is fundamental to planning, choice of technologies and the process of implementation. We envisage a community-based framework of programme implementation starting from the knowledge, beliefs, practices, behaviour patterns and choices of people themselves. Finally we are committed to the involvement of voluntary agencies, particularly those which have been working on sanitation and water supply programmes in villages. We are going to focus our deliberations during the two days keeping these assumptions behind us as the basic frame of reference.

We have designed the workshop itself as a participatory process. There will not be any formal presentations. The papers, if any, and the background materials, will be displayed. These can be consulted and referred. The themes suggested in the programme outline will take shape when you share thoughts and experiences through an informal discourse. We will think loudly, pool our ideas, and arrive at collective formulations. Areas of uncertainty and disagreement may also emerge during the discussions.

We have circulated a semi-structured format of different sessions. These can change in light of interest and deliberations. We expect all the participants to contribute to discussions. We will try to make a record of the discussions. The CENTRE will put together the materials in form of a report which will be circulated among those who have participated, as well as those who have not. The dialogue we hope will be a continuing process.

We are aware that there are ample literary sources dealing with the theme of the workshop and a good deal can be learnt from them. But we are not engaged in the exercise of teaching the participants about what other experts have said or suggested. There is no dearth of such generalised and abstracted prescriptions. Our exercise is directed more at learning from collective experiences by projecting our minds to the specific local settings that we are familiar with. Thereby, let us hope that we will formulate some basic ideas in the context of our own experiences and what we are doing in our respective settings. In a way the workshop is an exercise in participatory learning.

We do have our motive behind this workshop. The CENTRE would like to develop a small action-research project for encouraging participatory hygiene interventions through some voluntary agencies in different regions. We are interested in learning how do we go about creating successful participatory hygiene interventions in villages.

In the spirit of participatory process we recognise that our objectives need not be the same as that of the participants. I am convinced however that the community of participants here is also interested in successful sanitation and water supply programmes focusing on community participation and hygiene interventions. Therefore, we the organisers should be willing to learn and change in accordance with the collective wisdom of the participants working for the same goal.

We have assembled here three different groups of participants-representatives of NGOs and voluntary agencies who have some experience of involvement in water supply and sanitation programmes; the participants in the Linkoping studies on hygiene behaviour; and resource persons from bilateral programmes. Unfortunately representation of government agencies here is weakest. May be the theme of hygiene behaviour sounds off the beaten track to attract them.

I look forward to very fruitful deliberations over the two days. I thank the Gandhigram Institute of Rural Health and Family Welfare and its Director Dr. Soudarssanane for joining us in organising this event here.

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## INDIVIDUAL AND INSTITUTIONAL PROFILES

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### VISHWANATHAN:

From my college days at Shantiniketan, where I first met Kochar ji who was my room mate in the hostel, I was interested in practical work as a follower of Gandhian thought. I was impressed with the kind of work that was being done at Sriniketan started by Elmherst and Gurudev for rural development. Then I went to Sevagram to learn about the Gandhian approach to rural development. I also spent some time here at Gandhigram as a student. While abroad I learnt from World Peace Movement, Quaker movement, Christian science movement in U.S.A., and later Folk High School movement in Denmark. I came in close contact with Dr. Arthur E.Morgan of U.S.A. who shaped my mind to work in India.

Upon my return to India in 1956 I started a Community Centre in my own house amidst poor villages and barren hills of Vallanad near Trivendrum. With the help of my family and friends this grew into Mitraniketan - the abode of friends. From Mitraniketan I mobilised the neighbouring villages, particularly the socially disadvantaged groups, to take the task of development in their own hands. I realised that education is the key to empowerment and development. Gradually Mitraniketan has started a variety of educational and socially useful vocational training programmes starting from the basic education of tribal children.

In due course we effortfully changed the landscape of barren hills into lush green and productive vegetation all around. It is in such environment that children learn about cleanliness, hygiene, and healthy environment without any hygiene or sanitation programme as such. Their habits are formed in collective living in the Mitraniketan campus. They learn from each other and reinforce each other under the close supervision of resident teachers. When they go back they not only take knowledge, habits and skills with them but also an image of good life and good environment which transforms their life and those of others around them. In those days there was little awareness about sanitation, hygiene, water supply and environment. But Gandhiji had many years ago spoken and written about SAFAI- cleanliness. His ideas are still useful though not receiving much attention. He had suggested various types of simple latrines for villages such as pit latrines and trench latrines which are cheap and simple. In recent years Mitraniketan has participated in latrine construction programme of CAPPART for tribal and backward villages in our area. Mitraniketan has been recognised as a Regional Resource Centre to assist other voluntary organisations in South India. But people do not get used to these latrines and they still prefer to go in the open, particularly where sufficient water supply is not available close by.

VIJAI BHAI:

As an anthropologist I have been interested in cultural practices from the beginning of my career. My first exposure to problem of hygiene and sanitation was in 1967 when working on hookworm problem in W.Bengal. Practically everybody is infected but very few have the disease. The research problem was- why is it so? For this project I designed detailed investigations into defecation behaviour and disposal excreta. It was a socio-epidemiological and socio-ecological study which quantitatively assessed the contribution of socio-behavioural factors in regulating the relative success of hookworm parasite populations and in explaining the variance in hookworm infection. The conclusion was that a variety of socio-behavioural factors are significantly responsible for very high prevalence and yet low intensity of hookworm infection in W.Bengal villages. About 67 per cent of variance in hookworm counts was explainable in terms of socio-behavioural variables.

My second major research involvement was in Varanasi rural area where I studied folk health system and folk practitioners, and organised a number of action-research studies, through medical MD research students, for the training and involvement of indigenous practitioners in primary health care. I also studied water use and hygiene practices.

Way back in 1981 I argued at Water and Sanitation Decade Support workshop at SEARO for a more comprehensive and integrated approach to participation, communication and education. Subsequently I prepared guidelines for socio-behavioural studies on water use and sanitation for IDRC and field tested these guidelines in four villages in Andhra Pradesh.

Recently I completed analysis of national health policy and its implementation in rural sector. This study had documented systematic failure of the health bureaucracy in reorientation of primary health care as sought by the policy document.

Currently I am coordinating a series of five studies in South India on water use and sanitation for the Linkoping programme on safe water and environment in collaboration of local scientists represented here. This work is being reported separately below.

## GIRH GROUP

Dr.M.BALA SOUDARSSANANE, MR.P. SHANMUGAM, and MR.V. KANDHASAMY

The institute has been involved in the sanitation programmes of the Institute from the very beginning under the leadership of Dr. Pisharoti, and late Dr.Dharmalingam.

Way back in 1962 an action programme (with support from Ford Foundation) was started in two wards of village Chinnalpatti near Gandhigram to promote acceptance of household sanitary latrines. After four years of persistent effort the percent household having sanitary latrines increased from 2% to about 21%. The measures including formation of ward committees, identification and orientation of leaders, KAP survey, health education, training of local masons, provision of technical expertise and materials, and regular follow-up. The opinions of the households were very adverse to household latrines to begin with. Although the programme was stopped in 1967 the Institute continued

to produce and sell materials and households in the village continued to acquire latrines on their own in other wards also. A programme had also been in progress in the Athoor Block and adjoining blocks at slow pace.

These early experiences, though not very successful or persistent, demonstrated that with effort latrine programme can be initiated and acceptance can be encouraged.

In 1980-83 efforts were made in 10 villages of Athoor Block to improve environmental sanitation as a part of Integrated Development project for Improved Rural Health. The package included household and public latrines along with water supply, waste disposal, sullage water disposal, etc. About 100 household latrines and 98 public latrines were constructed in the study villages providing coverage to 32% of the population.

In 1982-83 a three year project was undertaken with the assistance of IDRC to promote community latrines and bath-house with community participation in the ten wards of Chinalpatti village which had by then grown into a small town with about 35 thousand population. This successful experience with community participation in construction and maintenance of community latrines encouraged us to extend this programme to ten villages around. We learned how people can be encouraged to take responsibility for doing things themselves. We have seen how numerous households in the Chinalpatti town have acquired household latrines constructed by local masons, and financed largely by their own resources. They came and purchased materials from the GIRH production centre.

One important lesson we have learned is that when demand exists the programmes can succeed; They make efforts on their own and are willing to pay for. They also readily come to avail facilities, resources or subsidies under various government programmes. The basic task therefore is to create demand. We have also seen that when the existing size of demand is met the programme tends to taper off. The programmes achieved 30-40% coverage only representing the level of demand generated by programme efforts. It is then that extra effort is needed to encourage, create awareness, identify the problems and limitations to push the programme further among those who have not come forward. Up to some level the programme will succeed without much problem. But to extend the programme among the hard core of non-accepters is always a challenging problem for any programme.

Another lesson we have learned is that success in sanitation programme is in some way influenced by the success of various other development programmes and contact with the communities over years. The Chinalpatti town, and other villages covered under the studies have been under various types of programmes and development activities of the Gandhigram institutions including the GIRH. Success in sanitation programme in these village is facilitated by continued contact and programme activities of various types. We have therefore used this as indicator for selecting villages for action programme. Villages which have good record of successful implementation of other programmes provide better setting for starting sanitation programme for which awareness and need is generally weak. We suspect that success of other programmes in some way represents the capabilities of the community to organise themselves and work together. This may be due to the attributes of the leadership, or group dynamics, or the social organisation of the village.

The Institute has undertaken various studies of water supply and sanitation programmes for the government agencies. We did a spot survey of household latrines under intensive sanitation programme in Pariyar district. We did an evaluation of low cost sanitation programme in town panchayats of Tamil Nadu. In this study we found that even in UNICEF supported panchayat programmes no health education activities were carried out and there was no

follow up regarding construction, maintenance and use of the latrines. As a result most of these panchayat community latrines are ill constructed, incomplete, broken and filthy. In 1990-91 we also carried out a study on water supply, handpump usage and maintenance in Tamil Nadu. We have also studied disease aspects related to handpumps and sanitation.

## FACULTY OF RURAL SANITATION

Dr. S. PONNURAJ (public health physician); Balasubramaniam (Sanitary Engineer); Yalwar (Senior Sanitarian).

We represent the faculty of Rural Health and Sanitation in the Gandhigram Rural University, another sister organisation under the parent Gandhigram Trust umbrella. This Department has emerged from the GIRH after reorganisation about ten years ago and is largely responsible for training and field service activities in rural health and sanitation. The Department has a field practice demonstration area. The faculty of Rural Health and Sanitation has adopted Participatory Health Education Technique (PET) as its basic strategy. The Department has been recognised as a resource centre for training. The Department has carried out training of masons from 96 municipalities in Tamil Nadu in handpump maintenance. We also conduct training for District level officers, public health engineers, and voluntary agencies.



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 SOME APPROACHES REPRESENTED
 

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APART FROM THESE INDIVIDUAL AND INSTITUTIONAL PROFILES THREE SETS OF APPROACHES WERE PROJECTED BY THREE GROUPS OF PARTICIPANTS:

1. APPROACH OF THE LINKOPING STUDIES RELATING TO STUDIES ON HYGIENE BEHAVIOURS
2. APPROACHES OF VOLUNTARY AGENCIES RELATING TO HYGIENE, SANITATION AND WATER SUPPLY
3. APPROACHES OF PROGRAMME ORGANISERS (BILATERAL 'PROGRAMMES ON WATER SUPPLY AND SANITATION)

EACH OF THESE ARE SUMMARISED BELOW ON THE BASIS OF STATEMENTS MADE AND/OR WRITTEN MATERIALS AVAILABLE. IN ADDITION THE APPROACH OF THE RURAL SANITATION PROGRAMME UNDER RAJIV GANDHI MISSION IS ALSO BEING SUMMARISED FROM RECORDS FOR REFERENCE AND COMPARISON.

## 1. APPROACH OF RESEARCH ON HYGIENE BEHAVIOUR

(LINKOPING PROGRAMME):

Prof. Carl Widstrand, Dr.V.Kochar, Dr. A.M. Kurup, Mr. John Devavaram, Dr. S.P.Rao, Dr.M.Bala Soudarssanane, Mr.V. Kandasamy, Mr. P. Shanmugam (and field research staff).

As indicated by Prof. Widstrand one of the objectives of the Linkoping programme is to document hygiene behaviours by using observational and interview techniques. We were also interested in documenting details of some success stories such as the experience of community latrines in Gandhigram area.

In recent years there has been a drastic change in the research techniques. The survey questionnaire technique is no more considered a reliable source of information unless it is combined with direct or indirect observations, informal interviews with individuals and groups, and participant observation. However, in India KAP type questionnaire surveys are still widely used. We are demonstrating the use of a combination of techniques for the survey of hygiene, water use and sanitation practices. Originally we started with Dr.Kurup's assumption that the health profile of Kerala is so different from the rest of the country because of unique setting and cultural practices - factors which have not been highlighted so far. Initially Dr.Kurup documented, through exploratory studies, many such practices which could be significantly contributing to better health profile of Kerala. For example the practice of drinking boiled herbal water or rice water with food, regular bathing habit, use of shoulder napkin, use of colostrum for the new born,

popularity of ayurvedic medications, the unique settlement pattern of rural Kerala quite unlike 'village' in rest of India, high percentage of latrine users, defecation away from settlement area, etc. However, some harmful practices were also noted such as non-use of soap for washing hands after defecation, and widespread use of open wells for drinking water despite availability of handpumps or taps.

However the question is how common or different are these practices from house to house, and how are these different from some other parts of the country? Therefore a comparative study of hygiene behaviour was designed and is being carried out in three regions - Trivendrum, Gandhigram, and Yavatmal. The methodology used for these studies is combination of ethnography, case study, observations, informal interviews and structured schedules. A variety of hygiene behaviours are being recorded including the use of different water sources, different water-use practices, disposal of excreta, use of latrines, use and maintenance of handpumps or taps, personal cleanliness, domestic sanitation, waste-water disposal, waste disposal, etc. Simultaneously, record is being made of diarrhoea morbidities and some health care practices.

We hope to demonstrate that hygiene, sanitation and water use practices in Kerala are qualitatively and quantitatively different from other parts. A profile of water use and sanitation practices will be available for three regions. In relation to contextual factors it will be possible to examine how these practices are changing and what are the determinants of these changes. More importantly, we hope to prepare an alternative procedure to the widely used KAP questionnaire method for study of practices and knowledge. We also hope to develop a concise and simple list of observational and interrogative items to document change in hygiene behaviours as a result of water supply and sanitation programmes or hygiene education and intervention programmes.

We are also exploring the potential of PRA technique as a participatory research tool for gathering information on water use and sanitation in some villages near Madurai with the help of Mr. Devavaram of SPEECH, a well known PRA practitioner. In this study we are hoping to identify gender specific, ethnicity specific, or caste specific perceptions and usages in relation to sanitation, hygiene and water use.

## 2. EXPERIENCES AND APPROACHES OF VOLUNTARY AGENCIES:

Apart from the standard health education and extension method two approaches were particularly identified by a number of participants. These are briefly described below.

### (1) EDUCATION AND INVOLVEMENT OF CHILDREN:

MITRANIKETAN, VALLANAD, KERALA  
Represented by Mr. K. Viswanathan

Mitraniketan's approach of development through education of children and rural youths has been mentioned above. Mitraniketan runs a variety of vocational and handicraft training programmes for rural and children. The campus and living quarters of the resident students and faculty present an ideal picture of clean and healthy environment despite the fact that there is no separate hygiene or sanitation programme undertaken. This is built into the daily routine of the residents.

INSTITUTE OF HEALTH MANAGEMENT, PACHOD (MAHARASHTRA)

represented by Mr. S.M.Shinde and Mr J.J.Rupekar.

Pachod Institute near Aurangabad has been running Balsewak programme since 1989. Under this the school going and non school going children are given training and orientation, and intensively involved in implementation and monitoring of hygiene and sanitation programmes in 65 villages. In addition, the Institute has run training programmes for construction and conversion of handpumps. A video film based on this programme, shown to the gathering, illustrated the extent of participation and involvement of children in implementation of the programmes. Two papers dealing with subjected were shared with the participants.

THE EXTENSION DEPARTMENT OF THE GANDHIGRAM RURAL UNIVERSITY  
represented by Dr. Markandeyan

illustrated the approach of educating and motivating children from his experiences over 25 years as a Sarvodaya worker. Inculcation of hygiene and health practices is a painstaking and slow educational process. He pointed out limitations of the approach of sanitary latrines in villages which can benefit only small sections of the population. He advocated trial of more simple and cheap solutions with the participation of people. Dr.Markandeyan made a distinction between personal hygiene and public hygiene. He maintained that personal hygiene in villages is relatively better but public hygiene is poor. He also made distinction between the mass approach to education through media or programmes and the individualised household and group approach for hygiene education. He cautioned that mass approach alone can not bring results unless parallel efforts to educate and involve individuals, households and groups is also pursued at village level.

RURAL SANITATION FACULTY, GANDHIGRAM RURAL UNIVERSITY:

Dr. Ponnuraj shared experiences of involving school children in hygiene and sanitation programme in their demonstration villages using PRA techniques. This has been reported below.

**(ii) PARTICIPATORY RAPID APPRAISAL TECHNIQUE-  
(PRA) FOR COMMUNITY INVOLVEMENT:**

PRA came out as a promising approach to education and involvement of rural communities in development and health programmes. This was mentioned by a number of participants particularly Mr. Devavaram of SPEECH and Dr.Ponnuraj, faculty of rural health and sanitation, Gandhigram Rural University.

SPEECH, Madurai  
Represented by Mr. Devavaram and others

Mr.Devavaram briefly described the PRA approach of SPEECH being followed in the Kamraj District of T.N. for past several years. SPEECH's major concern has been with agricultural development through tank and watershed development activities in this very arid area. SPEECH has worked with PRA techniques in encouraging people to discuss problems, find solutions and take voluntary action. SPEECH has also worked for community organisation, women and youth groups, and advocacy or activism for projecting the needs and aspirations of villages. A film was shown to the workshop participants demonstrating the PRA process. SPEECH has trained many voluntary agencies in application of PRA techniques both in India and abroad.

SPEECH has had some involvement in application of PRA for health

problems. It helped a London School of Hygiene and Tropical Medicine team in organising PRA sessions on the problem of cataract. It also helped Ms. Betty of Ford Foundation team in use of PRA techniques for discussing body image among rural women. SPEECH has assisted DANIDA programme in conducting training programme for proper maintenance of water and sanitation facilities by the village committee members through PRA sessions. SPEECH has been conducting PRA sessions in two villages for the Linkoping programme to document the perceptions of village men and women about hygiene and sanitation, and to identify gender and ethnic differences in these perceptions. Recently Mr. Devavaram has been nominated as advisor to DANIDA programme in T.N.

FACULTY OF RURAL HEALTH AND SANITATION, GANDHIGRAM RURAL UNIVERSITY  
Represented by Dr. Ponnuraj and others (noted above)

Dr. Ponnuraj, Head of the Sanitation faculty of the Gandhigram Rural University, described the Ford Foundation and National Water Mission programmes entrusted to the Department for conducting training programmes for voluntary agencies and various government functionaries for agricultural development and water supply programmes. The department has so far conducted some 45 PRA sessions and training exercises in various villages in collaboration with other departments of the Gandhigram Rural University. Dr. Ponnuraj described experiences of some PRA exercises among rural children. One of his papers on the subject was circulated to the workshop participants.

### 3. APPROACH OF BILATERAL AGENCIES:

#### (i) UNICEF Assisted Special Projects:

Mrs. Anu Dixit represented UNICEF at the workshop. She is Communication Officer directly involved in IEC programme components in the Government of India Water Mission and Rural sanitation programme. UNICEF coordinates its activities and inputs through the government infrastructure and other agencies collaborating with the government programmes.

UNICEF has a mandate to cover 84% of rural households with safe drinking water supply and 20% households with latrines by the end of 1995 in project areas. UNICEF approach emphasises cost-effective and sustainable options based upon intensive programme in Medinipur project. For example the Tara hand pump from Bangladesh has been found to be more suitable for community-based operation and maintenance. For rural sanitation 10 low cost latrine designs have been developed ranging from Rs. 250/- to 3000/-. The main components of the master plan are:

- integration of water supply and sanitation programmes;
- cost sharing by the beneficiaries;
- intensive drive for community participation;
- formation of panchayat committees for water and sanitation;
- involvement of local voluntary agencies and community polytechnics;
- offering wider choice of cost and design to the beneficiaries;
- involvement and training of women in maintenance;
- support programmes for monitoring and follow-up; special effort and inputs for IEC and health education through anganwadi workers and gram panchayat workers;
- inter-sectoral integration by involving other programme functionaries relevant to felt needs; such as ORS for

diarrhoea, water for irrigation, waste-water disposal.

The experience in Medinipur was very encouraging. Communities participated in a big way with the help of local voluntary agency. The villages were saturated with safe water supply and latrines even without subsidy in many cases. After one and half to two years of intensive effort a definite change in behaviour patterns could be noted.

The water supply and sanitation programmes bear upon the behaviour of beneficiaries in many ways. Even community participation, and involvement of women for proper use and maintenance of facilities, requires learning new behaviour patterns or changing old behaviour patterns. We are therefore very much interested in linkages between specific programme components and behaviour patterns, how hygiene behaviours can be easily documented, and how hygiene behaviours can be changed.

Another issue is common experience that community participation works out much better when voluntary agencies are involved but not so well when government agencies alone implement the programmes, as is the case in most parts of the country. Why is it so? What are the constraints? A related question is the reluctance of programme administrators, particularly engineers in involving voluntary agencies and sometimes the reluctance of voluntary agencies to work with government. What are the problems? What can be done to change the orientation of programme managers and personnel?

Recently a KAP study has been completed in 15 districts. The results show that 51-77 % of rural households still depend upon unsafe water sources. There is general lack of awareness. Many safe water sources are deemed inaccessible or are not functioning, particularly handpumps. We are now working for intensive IEC programme in these districts including a range of messages dealing with proper use and maintenance of water and latrine facilities, risks of unclean water and open defecation, safe disposal of waste and waste water, safe water storage and use, hygiene practices (washing hands), boiling or chlorinating unsafe water, etc. Attention is also being given to converting wells into sanitary wells.

#### (ii) SOCIO-ECONOMIC UNITS (SEU), KERALA

Mrs Kochurani Mathew represented the Socio-Economic Units group affiliated with the Kerala Water Authority. She has previously worked among the fishermen and agricultural communities in the coastal areas and Kottanad area of Kerala in various development programmes. Her special skills are in organising communities, creating awareness and programme organisation at the grass roots. She is now a Programme Officer of SEU (South) at Kollam.

The SEU is an affiliate of the Kerala Water Authority and primarily involved in DANIDA, INDO-DUTCH and World Bank/UNDP supported water supply programmes. There are designated areas under these programmes where SEU involvement is on continuing basis. After five years of programme development the programme operations are now being shifted to panchayat authorities and local KWA infrastructure in some areas. The SEU is gradually withdrawing its direct involvement in phases.

The SEU coordinating office at Trivendrum under the leadership of a senior sociologist Dr. Balachandar Kurup looks after the SEU programme

activities together with an advisor Ms. Shordt. The SEU publishes JAL SANDESH- the only newsletter in India devoted to rural water supply. The newsletter is very informative and useful. It often contains articles dealing with socio-economic aspects of water supply. The SEU has been able to generate a good deal of interest among the public health engineers working in the Kerala Water Authority about socio-economic aspects of the programme. This has contributed immensely to the success of its programmes.

Involvement of SEU in sanitation programmes is largely advisory since sanitation does not come under the purview of Kerala Water Authority. However SEU has significantly contributed to the rural sanitation programme in its operational areas. The rural sanitation programme is being run through panchayat functionaries and is therefore integrated with the original SEU staff at panchayat level in SEU areas.

The SEU developed operational components for hardware inputs for rural sanitation and water supply systems. Proper information about the programme and the roles and responsibilities of those involved is essential. The system gradually improved over time with increased training and involvement of community members. A water committee is constituted in each ward and training is given to committee members. Ward water committee does the mapping and takes decisions about location and distribution of facilities and supplies. However this is done as per the criteria provided by the facilitators, particularly women. The programme staff use participatory group discussion methods for mass contact, mass awareness and mobilising resources. A woman care taker is identified with each hand-pump or tap connection. She monitors proper use and refers maintenance problems to the ward water committee. Education is given to beneficiaries about handling water source. School health clubs are formed and training is given to the teachers and student leaders about proper water use as well as latrine use.

In rural sanitation programme the trained masons play an important part not only for construction but also for community participation, extension and education for proper use and maintenance. ICDS workers are also involved in education of community members. Construction materials are assembled by the beneficiaries and they provide labour. Monitoring is done according to fixed criteria by programme staff and follow-up action is taken with the help of community members. Monitoring is also done by a separate agency.

**(iii). NETHERLANDS ASSISTED PROJECTS (NAP):**  
**Andhra Pradesh**

Mrs. Rebecca Katicaran from the NAP in Andhra Pradesh participated in the workshop. She has experience in T.N. and Kerala fishermen communities. Since 1987 she has also worked on hygiene education through voluntary agencies.

The Indo-Dutch project is being implemented through the State government agencies and infrastructure. The project in Andhra Pradesh would cover about 500 'problem villages' in six selected districts in two phases. The project combines piped water supply schemes with other activities depending upon local needs or demands such as lift irrigation scheme, sanitation infrastructure, water quality monitoring, and income generating schemes (such as dairying in few districts). The project includes a number of software aspects such as implementation through people's participation (village action committees), leadership training and mass contact programme, support activities (HRD), and inter agency coordination/liaison.

The NAP coordinating and support office at Hyderabad plays an advisory

and monitoring role, facilitating coordination between the voluntary agencies and the government agencies. It is not an easy role because of built-in limitations referred by Mrs. Dixit. The bilateral agency funds, over and above the available government funds for water supply and sanitation programmes, can perhaps be more fruitfully used as additional resources for creating voluntary initiatives, for strengthening follow-up, for developing innovative approaches, and for institutionalising inter-agency and inter-sectoral integration in programme implementation.

The NAP is involving voluntary agencies to work with government agencies and personnel in implementation of water supply programmes through community participation. This will enable government agencies and personnel to acquire some experience of working with non-government agencies and of involving communities in programme implementation and follow-up. This may lead to better appreciation of the approach of non-government agencies in programme implementation. We would like to know how to institutionalise the voluntary initiatives about programme options and programme participation emerging from the communities or the NGOs. We also need to know more about interactions among the voluntary agencies and government agencies and differentials in the interaction of voluntary agencies with village communities.

Hygiene behaviour is dependent upon what is available. Proper sanitation requires sufficient water. The NAP is currently emphasising on regularity of water supply, quantity of water availability, and the quality of water acceptable to people. The NAP programme is still in the process of taking shape and it is too early to draw any general conclusions. The NAP project is currently giving priority to sustainable water supply systems in villages thereby delinking initially from sanitation because of a number of operational requirements.

One area of concern to the NAP office is of finding ways of institutionalising the two basic operational aspects - namely involvement of voluntary agencies, and implementation through community participation. The NAP office is facilitating these aspects in the field. But it is important that these procedures should become an integral part of the programme implementation through the government infrastructure itself. We are keen to learn how to institutionalise these aspects of programme implementation.

So far NAP has not focused on hygiene behaviours apart from proper maintenance of water supply systems. But NAP has adopted an integrated approach in principle and the impact of water supply on water-use practices and hygiene behaviours may have to be looked into. Another question that perhaps requires attention is-- how much effective community participation has been achieved in different villages, or by different NGOs, and what factors underlay these differences.

#### **(iv) CENTRALLY SPONSORED RURAL SANITATION PROGRAMME:**

(Based on Mission publication "General Guidelines for Implementation", Govt. of India, 1993 )

The rural sanitation programme was initiated in 1986 and it has gone through a number of changes since then. The programme includes subsidised construction of household latrines as well as "village complex" for women (including community latrines, water, bathing and washing facility, and drainage facility). The programme revised after a national workshop in 1992 lays emphasis on creating need and peoples' participation through campaigns.

It envisages State contribution at 2:1 ratio and subsidy at 80% for

households below poverty line (70% for others). The remaining 20-30% is to be provided by households and/or village panchayats. A 10% reserve is provided for health education, awareness, training and demand generation. The revised programme aims at integrated approach, involvement of voluntary agencies and creation of rural sanitary marts. Apart from CAPART funds 10% of funds are earmarked for implementation through voluntary agencies and village panchayats with State contribution of 50% subsidy.

"Another salient feature of the revised programme is to develop at least one model village covering facilities like sanitary latrines, conversion of dry latrines, garbage pits, soakage pits, drainage, pavement of lanes, sanitary latrines in village institutions (e.g. schools) cleanliness in ponds, tanks, clean surrounding around handpumps and other drinking water sources."

The technology opted is double pit pour flush latrine with estimated limit of unit cost of Rs.2500/- at 1993 prices. The implementing agencies are required to use "standards, specifications and guidelines of the recognised technical quality" although the strategy allows for encouragement of locally suitable and acceptable models of latrines. The programme is designed for clusters of 20 households in each village (10 households in dispersed tribal villages). At least 20% of allocation is earmarked for subsidy to the SC/ST households. Additional funds can be channeled through JRY programme for them. UNICEF grant of Rs.50,000 is available for sanitary marts with a turn over of at least two lakh, and additional grant of Rs.12,000 for publicity and Rs 15,000 per annum for management for two years. The cost overrun above the norms will be borne by the beneficiaries or panchayats unless otherwise so approved by the government of India. The State governments will have full powers to approve the projects in conformity with the annual action plan.

"Reputed" local "Voluntary organisations should be carefully selected based on the assessment of their ability to carry out the task" "based on clear norms" such as "good and adequate infrastructure", years and extent of good work, and extent of geographical coverage, etc. for awareness campaigns, creation and management of Marts, and construction work. The voluntary agencies are required to submit a report of activities in prescribed proforma to the nodal department in the district (implementing the rural development programme). "The nodal department (supported by a monitoring cell) should review the work of voluntary organisation every month and send a copy of such review along with progress report to government of India".

Intensive programmes in selected districts/blocks will be carried out on high priority based on certain criteria including availability of a reputed voluntary agency. Each State is required to create one model village each year under integrated rural sanitation programme.

The programme document recognises that "It is essential to train the community, particularly all the members of the family in the proper upkeep and maintenance of the sanitation facilities". Monthly supervision by field officers should "check and ensure" community involvement in construction and participation of women. Such inspection should check whether there has been "proper use of the latrines after construction. They "should ensure that the sanitary latrines are not used for any other purpose." The implementation of the programme is scheduled to be reviewed after two years.



## FINDING ANSWERS COLLECTIVELY

THREE SESSIONS WERE DEVOTED BY THE PARTICIPANTS TO POSE SPECIFIC QUESTIONS AND FIND ANSWERS COLLECTIVELY. A SUMMARY OF THESE DELIBERATIONS IS REPORTED BELOW. SECTION 2 AND 3 WERE BASED ON THE TENTATIVE SCHEDULE OF SESSIONS WHILE SECTION 1 WAS BASED ON EXTEMPORE CHOICE OF PARTICIPANTS.

### 1. CONDITIONS FOR SUCCESSFUL LATRINE PROGRAMME

#### - WHAT DO WE NEED TO KNOW ?

The workshop participants visited a successful community latrine run and managed by the community. The experience boiled down to the question- how the community latrine programme was successful? What factors have contributed to its success ? How to judge the success? The following criteria dealing with promotional procedures and inputs were discussed:

Acceptance  
Participation  
Use  
Compliance  
Maintenance  
Follow-up  
Spread

In other areas community latrine programmes have largely failed. After detailed account of the project by GIRH staff the participants mentioned a variety aspects during the discussion as possible contributory factors. These have been rearranged under three categories below.

#### 1. PROFILE OF THE ACCEPTERS AND USERS (as well as non-accepters and non-users):

- Proportion of families participating and accepting and proportion of family members actually using the community latrine regularly.
- Do they constitute a particular section of the community ? Which sections of the community have come forward and which have kept away ?
- Profile of accepters and non-accepters and of users and non-users.
- How has the acceptance and use of community latrine changed over time? Has it increased or decreased ?

- What factors lie behind non-use and non-acceptance?
- What factors lie behind change (or lack of change) in acceptance and change over time?
- Number of latrine users per unit per day in male and female sections.
- Extent of the use of other facilities at community latrine such as bathing and washing (USERS PER DAY).
- User knowledge and behaviour about proper use of community latrines (their understanding of what requires to be done).

## 2. PROFILE OF THE COMMUNITY

- Sections originally supporting the programme (and those keeping aloof).
- What kind and degree of community participation existed during construction?
- What situations or conditions in the community contributed to the success of the programme initially?
- Profile of community participation in other developmental programmes.
- Contributions and inputs made by the participating sections/families during construction phase.
- What efforts were initially or subsequently made to broad base participation and use (by others)?
- Attitude of user families for allowing other families (other sections) to use the latrines (conditions and expectations).
- How pits are serviced when these get filled up? Do they reuse the slurry in fields?
- Arrangements for servicing, cleaning and maintaining the community latrines. What care the users take after using latrine? What inputs are being made for upkeep and cleanliness? How compliance is being maintained?

## 3. PROFILE OF THE AGENCY IMPLEMENTING THE PROGRAMME:

- How long the agency was in contact with the community in development programmes before starting community latrine programme?
- What other development programmes were being promoted by the agency in the community ?

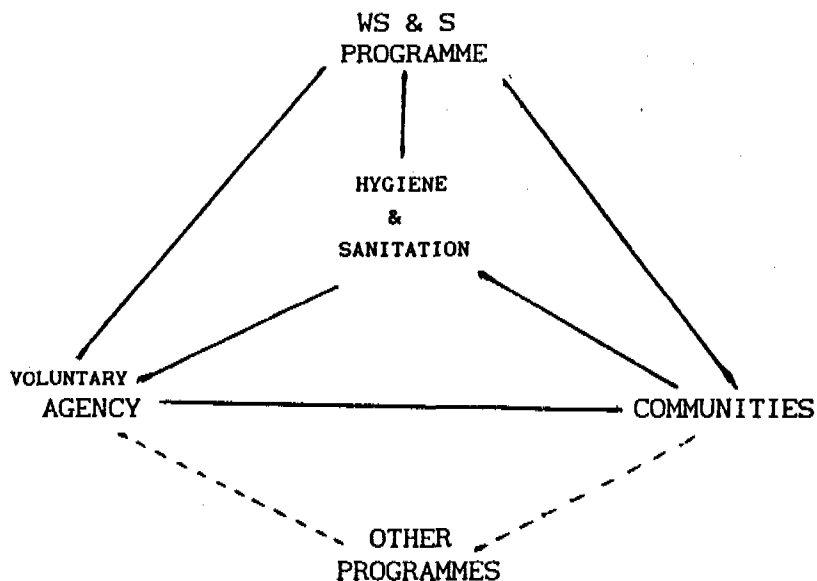
- What special procedures were adopted and what inputs were made by the agency in the community before, during and after construction of community latrine? Is documentation available of the implementation process?
- What kind of rapport and collaboration existed between the agency personnel and the community?
- What kind of technology or procedural options were given to the community?
- What kind of follow up and support existed after construction of the latrines? What kind of follow up and support exists now (e.g. for incremental effect).
- Was it a one time project or has there been continued involvement of the agency in latrine programme in other villages ?
- Any documentation, evaluation, guidelines prepared by the agency or any effort to share these with other agencies involved in latrine programme?
- The role of the funding agency which supported the programme and other inputs made by it.

## 2 PRIORITIES AND AGENDA FOR HYGIENE INTERVENTIONS

This theme was picked up by the participants after considerable discussion of the topics mentioned in the proposed schedule of the sessions. Some important issues were discussed in this process which are reported separately. A summary of suggestions directly dealing with the topic is given below.

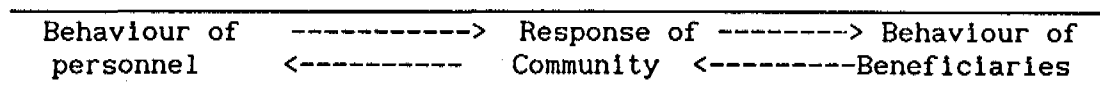
1. People's perception, practices and priorities with respect to hygiene and cleanliness have to be explored first through participatory process. Some things outsiders can not appreciate; only people can point those out. This allows for people's priorities to work.
2. People link hygiene, cleanliness and sanitation to economic needs or income generation activities. Empirically also hygiene, cleanliness and sanitation is linked to everyday routine, living standard, and quality of life (or socio-economic status).
3. Similarly most voluntary agencies do not give priority to hygiene and sanitation in their routine programme activities which largely concern with social development and economic activities. Establishing linkages between the priorities of community, the agency and the programme is very important practical question.
4. The AGENDA of hygiene and sanitation has to emerge out of these linkages. The involvement of communities and voluntary agencies for promoting hygiene and sanitation has to take shape within the framework of WS & S programme and has to be therefore built upon it. The objectives of hygiene and sanitation go beyond the program priorities of hand pumps/taps and latrines yet the hygiene and sanitation activities directly related to programme thrust must receive higher priority. Other priorities will have to be built around it.

TRIPARTITE LINKAGES BEARING UPON HYGIENE INITIATIVES



5. Referral of inter-sectoral priorities to other agencies can enable people to achieve their expectations and aspirations in other sphere of life. This will significantly contribute to their involvement in hygiene and sanitation which is known to be a low priority sector.

6. Community involvement is essential for any effort to improve hygiene and sanitation. This then becomes an operational priority. Formation of village committees and their involvement in decision making for planning, organisation and implementation is frequently mentioned. Community involvement can also be seen as a behavioural entity because involvement can be broken down to specific behaviours and activities. Responses of the community to the programme package and the behaviour or action of beneficiaries in relation to programme activities (handpumps and latrines) can also be seen as a product of the behaviour and activities of the programme personnel. The behaviour of beneficiaries is reciprocal to the behaviour of personnel and collective response of the community. Interactional framework can be helpful in operationalising software aspects of programme technology and specifications.



7. The NGOs generally pre-exist in the communities with some agenda. Their modus operandi is also pre-established. They are often selective in involving people in implementation of water supply or latrine programme in a pragmatic way in the context of pre-existing participatory patterns. When rapport and participatory interactions are well established it may be possible to implement a programme in more business like fashion which can often be mistaken by casual observers.

8. Programme specifications and requirements tend to restrict the involvement

of NGOs, as well as as the involvement of community. The attitude of those with administrative control (engineers) is often mentioned as a barrier to involvement.

9. Centrally planned programme agenda therefore needs to be appropriately modified in course of implementation to facilitate -

- Involvement of NGOs
- Involvement of leaders and beneficiaries
- Involvement of women and children
- Involvement of weaker sections

10. Community's capabilities to organise themselves, take collective decisions and implement them is reflected in the manner they relate to different programmes and are able to take advantages of the resource or services available around them. Good results in one programme are often reflected in improvement in other programmes. Therefore organising and enabling community to take maximum advantage of the social, economic and other programmes is important job for all village level programmes including water supply and sanitation. Some communities are better organised than others. Some that are bogged down with internal dissensions and conflicts, or simply inertia and lack of interest, they require special attention. Part of the task of community organisation is to energise the communities. Traditional cultural activities and social events activate and bind people in a dramatic manner.

11. Agenda for hygiene and behavioural interventions could include a variety of aspects:

(i) Hygiene behavioural interventions directly related to the package of Water Supply and Sanitation programme:

- a. Hygiene related to maintenance, care and use of hand pumps and taps.
- b. Hygiene related to maintenance, care and use of latrines.
- c. Behaviour related to participation and involvement in WS & S programmes.

(ii) Hygiene interventions related to water sources and sanitation programme:

- a. Maintenance, care and use of wells and ponds.
- b. Water use hygiene at home and at water sources
  - storage and drawal of drinking water
  - Clean surroundings of water sources
  - Safe water use activities at sources and at home
  - Safe and hygienic bathing and washing
- c. Excretal hygiene
  - safer disposal of human excreta (simple latrines)
  - defecation away from settlement, water sources, roads and public places such as play areas
  - Ablution and hand washing after defecation

- Avoidance of fecal pollution
- Socialisation and social control against indiscriminate open defecation
- Safe disposal of the stool of infants and children

(iii) General hygiene and domestic sanitation:

a. Domestic hygiene and sanitation

- Sweeping and safe disposal of domestic waste
- Safe disposal of waste water
- Upkeep of drains
- Maintenance and cleanliness of cattle shed and cattle excreta
- Ventilation and smoke in rooms/kitchen
- Moisture on floors
- Clean compound and surroundings with garden
- Plastering and decorating front, floors, walls

(iv) Public sanitation

- Cleanliness on roads, surroundings, drains
- Cleanliness of play areas, public areas
- Cleanliness of public tanks, ponds, river/stream, gardens, etc.
- Management of rain water and water pools
- Land use within and around settlement area

(v) Personal hygiene

- Bathing
- Washing clothes
- Body care
- Oral Hygiene
- Hand washing and use of soap
- Special hygiene care of infants and children
- Hygiene of the aged and sick

(vi) Food hygiene

- Clean washing of vegetables
- Clean and safe storage of cooked food
- Care in use of left over food
- Safe storage of grains and dry food stuffs
- Cleaning utensils before and after eating
- Washing hand before serving, before and after eating
- Safe disposal of waste food
- Protection of food from flies, pets, etc.
- Special care in feeding infants and children

12. Question of priorities lead to two divergent views. One approach is to select a few well targeted and scientifically relevant items with highest benefit such as use of latrines, safe water usage, hand washing, use of soap, and maintenance of water sources and upkeep of latrines. The other approach is to take a holistic, flexible and open-ended view and encourage people to select priorities for action as they deem fit in their context. Continuous education in cultural context will enable them to take more informed decisions progressively in the context of their needs and life situations. The second approach can be justified on the ground that multiple factors have additive effect in relation to health. Benefits of compliance to few selected factors

can be nullified by the adverse effect of other factors. Solution perhaps lies in adopting emphasis on selected factors and at the same time allowing varied options to the beneficiaries.

### 3. OPERATIONAL GUIDELINES FOR SMALL HYGIENE INTERVENTION PROJECTS:

Discussion on this theme proceeded in a random fashion covering a variety of suggestions. These have been reorganised below under separate headings.

#### 1. SELECTION OF VOLUNTARY AGENCIES AND SELECTION OF AREAS SUITABLE FOR ACTION-RESEARCH STUDIES.

(a) Different types of voluntary agencies should be selected for comparison of results. It was suggested that a typology of voluntary agencies should be prepared for proper representation in the study design. The criteria suggested for selection were:

- (i) Agencies already involved in S & WS activities
- (ii) Agencies which take up S & WS with high priority
- (iii) Agencies with some experience of their own in this field.

This task may require initially to prepare brief profiles of the potential voluntary agencies and document their experiences and approach over a period of time. Understanding of factors underlying their relative success or failure would be helpful in designing the proposed hygiene intervention studies.

(b) Similarly different types of areas could be selected for comparison. These could include:

- (i) Areas under special programme ( special UNICEF, SEU, NAP programme areas, etc.).
- (ii) Areas where Water supply and Rural sanitation has been integrated and areas selected for intensive programme (such as model districts programme).
- (iii) Low-key areas under rural sanitation.

#### 2. RESEARCH DESIGN AND CONTENT OF THE ACTION-RESEARCH PROCESS :

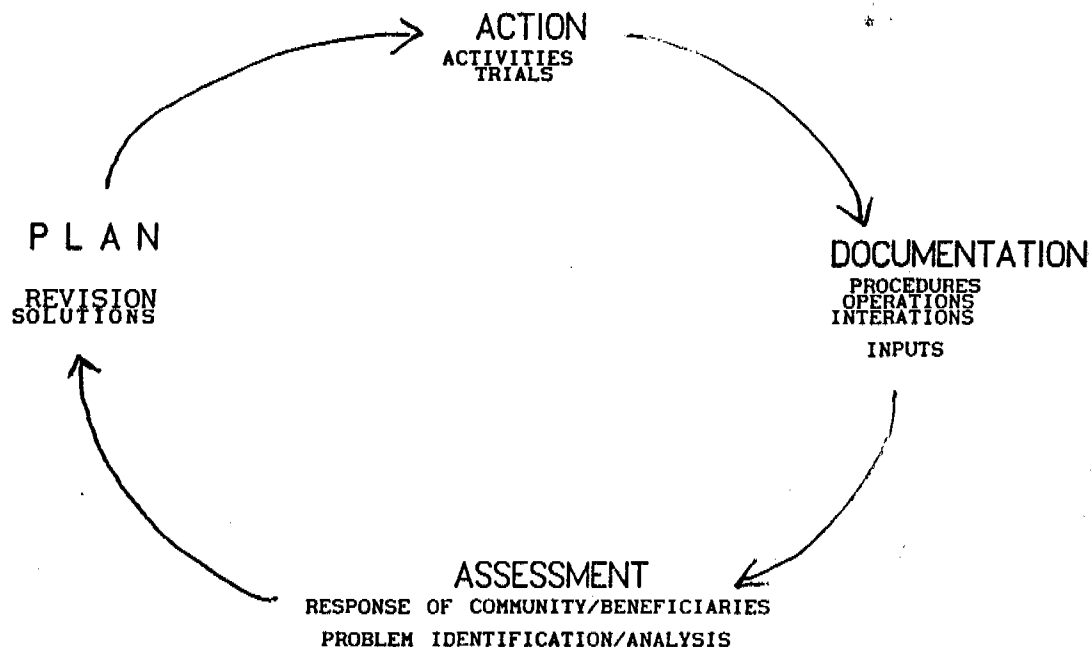
(1) Comparative analysis could focus on variations in interventions -

- (a) variations in intervention techniques and procedures in terms of degree of community participation;
- (b) variations in the programme package used by voluntary agencies - e.g. uni-sectoral versus multi-sectoral;
- (c) variations in monitoring and follow-up undertaken.

(ii) The proposal should identify suitable indicators for monitoring the inputs, work procedures and progress. Opinion was divided on whether there should be independent monitoring or whether the voluntary agency personnel could be entrusted the job. One interesting suggestion was that the agency personnel could be asked to write narratives of their ongoing experiences in their daily diaries as part of descriptive documentation rather than filling up proformas. In operations research framework monitoring should better be done by the workers themselves to involve them in making necessary inferences and devising changes in procedures. This however can not replace the importance of independent documentation of progress or change.

(iii) To ensure that hygiene interventions are participatory, a broad spectrum of possibilities should be introduced to the communities and households to choose from. They should also be encouraged to devise their own solutions and make their own choices relative to their needs, resources and life situations. To begin with these options may not be the best and safest but more likely to be acted upon and put into practice. Such an agenda would be an open-ended list of possibilities to choose from rather than a fixed list of uniform coverage in every situation irrespective of context.

This essentially means that the different sections of the community are not equally prepared to accept and use the best option designed by the experts and promoted by the programme. This process however assumes continuing inputs of information, demonstration and education to enable them to make informed choices and act upon them. A good part of this input could come from those beneficiaries who have experience with different types of choices or significant others who have set an example.





- (iv) Documentation of the participatory process, responses of the community, and behaviour of beneficiaries would require external inputs.
- v) The benefit of on going documentation (action-research) lies in prompt processing of information, learning the lessons and taking corrective action if necessary. To avoid academic technicalities the process could be spontaneous through periodic informal consultations and dialogue among the agency personnel in which a trained person could be available to give necessary direction and feed forward. One suitable person from the voluntary agency could be trained for this work.

### 3. THE APPROACH FOR HYGIENE INTERVENTIONS AND ACTION-RESEARCH

#### (a) Essential components of the approach

- Flexible open-ended approach
- Include allied activities
- Self-help approach in selection of interventions
- Participatory process of implementation
- Involvement of community at all levels
- Proceed step by step respective to the choices and situations of different sections
- focus on information, education and communication
- special attention to traditional and local solutions.

#### (b) Essential components of the programme:

- Focus on cleanliness, hygiene interventions and hygiene education;
- integration of low-cost sanitation and water supply;
- focus on participation of women, children and neglected sections;
- capacity building in voluntary agency for participatory implementation;
- capacity building in communities for full range of programme activities on hygiene and sanitation;
- involvement of local leaders, committees, groups, youth clubs, mahila mandals, teachers, students;
- activities related to handpumps, taps, latrines
- inter-sectoral coordination.

#### (c) METHODOLOGIES INVOLVED:

Basic thrust of these studies should be on hygiene interventions, participatory process and operational documentation of programme procedures. Methodologically these would deal with -

- (i) Measurement of hygiene behaviours (and change);
- (ii) Measurement of community participation and involvement of women;
- (iii) Documentation of procedures and inputs;
- (iv) Action-research for trial and error experiments;

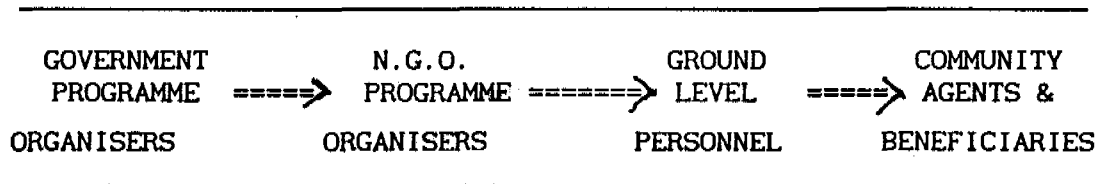
(v) Operations research for problem solving and decision making.

(vi) Assessment of organisational and contextual indicators and determinants (regulative factors) of the process of change

#### 4. TRAINING INPUTS:

These were considered important for such a project. The suggestions included the following.

- (i) Training of the personnel of voluntary agencies
- (ii) Continuous on-the-job orientation of personnel
- (iii) Training of District level, local administrators
- (iv) Training of significant local participants
- (v) Training of trainers



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**BASIC ISSUES RAISED**

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DURING VARIOUS SESSIONS OVER TWO DAYS THE DISCUSSIONS DWELT REPEATEDLY ON SOME KEY ISSUES THAT PARTICIPANTS CONSIDERED IMPORTANT. DEBATE CONCERNING FIVE SUCH ISSUES IS PRESENTED BELOW.

**1. INSTITUTIONAL ARRANGEMENTS FOR SOFTWARE INPUTS:**

One question was about the role and contribution of institutional arrangements, like SEU, in giving due emphasis to and providing inputs for the software aspects of rural water supply and sanitation. The result is better implementation, better attention to procedural details, and better follow-up of the programmes. This was considered crucial for introducing voluntary initiatives for hygiene behaviour within the rural S & WS programmes. It is one thing to reiterate some norms in programme document (e.g. community involvement, or change in hygiene behaviour) but it is quite another task to transform these expectations into operational inputs and procedures which can achieve the norms.

The government programmes are strong on hardware aspects such as design, materials and specifications for technologies but are rather weak on software aspects such as programme management, operational procedures, IEC, training methods and materials, inter-sectoral coordination, socio-cultural and behavioral adaptation, community involvement, participation of non-government agencies, monitoring and follow-up procedures, and evaluation research. Hence the importance of institutionalized arrangements to ensure due attention to these organisational, procedural and behavioral details ensuring minimum uniformly and implementation of expected norms.

It was agreed that the Socio-Economic Units in Kerala has facilitated better community orientation of the water supply and sanitation programmes implemented in their jurisdiction in Kerala. What can we learn from SEU in improving the implementation of water supply programmes in other regions? The SEU provided the software support for hardware components of the rural water supply and sanitation programmes. They translated programme guidelines into concrete details in operational terms. As a result social, community, and behavioural aspects acquired importance in KWA programmes much more so than has been possible in other States. The SEU facilitated in developing institutionalised arrangements in villages for participation, monitoring, follow-up and coordination through panchayat workers, trained masons, local leaders and village women volunteers. There is better working arrangement between the voluntary agencies, district authorities, panchayat agencies, and the KWA. The SEU created an infrastructure for implementation, monitoring and coordination. Programme implementation in Kerala has been through panchayats at the lowest level. The SEU and KWA interact with panchayat agencies for normal routine of implementation. In some areas the SEU is gradually planning to withdraw after setting up the procedures and infrastructure.

Within SEU the software aspects have been important from the very beginning. This allowed greater attention in Kerala on organisational, operational, educational and socio-behavioural components of the water supply programmes. The implementation process better reflected the basic approach of community participation and involvement of voluntary agencies. The SEU has been able to develop procedures and records in fine details incorporating the involvement of panchayat, village leaders, volunteers, and voluntary agencies. The inter-sectoral coordination has been better in Kerala because the initiatives for inter-agency collaboration were organised by SEU at various levels. Engineers in KWA are much more receptive and appreciative of these issues as a result of meetings, workshops, discussions, and orientation programmes. They are less apprehensive about community participation, non-government agencies, or collateral sectors at the district level.

There was good discussion of differences between Kerala and other States, particularly Andhra Pradesh, in implementation of rural water supply and sanitation programmes. Generally the attitude of engineer-administrators to community participation, to involvement of voluntary agencies, to the requirements of monitoring and coordination, to education and orientation, is known to be ambivalent. They may talk about these things sometimes but are reluctant to accord them the attention and importance these deserve in terms of financial and organisational inputs. When the voluntary agencies, the district authorities or panchayat agencies are involved, they tend to take a monitoring role and may question the administrative authorities. This is resented.

There is no SEU like agency in other States. The bilateral and multi-lateral programmes do have their own in-house units or advisors to informally look after the details. But this has prevented evolution of properly staffed agency with responsibility for these functions. The tendency of government to allocate these functions to some miscellaneous units with poor skills and experience has perhaps partly been responsible. The SEU gradually evolved within KWA itself, under the bilateral programme, as a focal point of reference in programme implementation. But despite good work SEU is perhaps likely to wind up with decline in bilateral funding because the government departments may consider it redundant to support such a unit.

However it was emphasised that there were so many differences in Kerala and rest of the country. Kerala model can not be applied blindly to the rest of the country. People in Kerala villages are more conscious and active because of high literacy, political awareness, urban influence, etc.

There was consensus that SEU like semi-autonomous units to look after software aspects of water supply and sanitation programmes in each State would go a long way in improving the programme implementation, monitoring, and coordination, specially for community organisation, participation, education, extension, monitoring and follow-up. Such a setting is necessary for hygiene behaviour initiatives on large scale. The substance of these discussions was that emphasis on participatory hygiene behaviour is not a matter of isolated few studies. Due importance of hygiene behaviour in rural water supply and sanitation programmes can emerge only if the programme organisation and implementation is duly oriented to software functions.

## 2. PARTICIPATORY APPROACH AND CENTRALLY PLANNED PROGRAMMES

Second question was about compatibility between the highly planned and structured programme strategies and the issues of greater participation and involvement of village communities.

The participatory hygiene interventions will be possible and practical when the programme content and functions allow greater freedom to the village communities to choose their options, find their own solutions and take their own actions using their knowledge and resources. It was repeatedly brought out that the highly structured format of the rural water supply and sanitation programmes forecloses options for participation and involvement of rural communities. The government agencies, the bilateral programmes and even the NGOs take their own priorities and agendas for implementation and require people to participate and involve without much concern for, or understanding of, people's own priorities and agenda.

The participatory approach requires some freedom to look at problems, find their own solutions and choose their options. The participatory process requires open-ended and flexible approach. If all the decisions about priorities, technology, procedures, resources, etc. are taken in advance, as these generally are, there is little room for participatory initiatives -- i.e. freedom to choose and take their own decisions. In the centrally planned top-down programme plans this freedom does not generally exist. Participation in such context merely means cooperation, acceptance and compliance with priorities and options presented to them on technical or administrative grounds.

This was illustrated by whole range of possible low cost technical solutions to relatively safe disposal of excreta or improvement of water sources and quality. Studies have shown that even in relatively better areas, such as Kerala, large sections of rural population continue to overwhelmingly depend upon wells and open 'field' defecation even when sufficient safe water sources and latrines are provided. Yet so little is done under the programmes about other low-cost solutions such as improvement of wells or defecation away from village settlement. Too selective and technical approach often violates the assumptions of low-cost, integrated, sustainable and participatory solutions.

The problem of priorities is better addressed by adopting participatory approach. In participatory approach people discuss their problems and needs among themselves in terms of day to day activities or daily routine and what they can do about it.

Discussion with villagers around their daily routine, day to day activities, cultural practices, household situations, perception of problems and solutions, etc. are much better settings for bringing out matters of hygiene, sanitation, water-use, disposal of excreta, etc. This is typical PRA approach to priorities. The situation is reversed however if the outside agencies approach villagers with their own agenda priorities and resources and want to negotiate some arrangement with villagers. In such case people would not choose what they themselves can do but would want what they can not. Their eyes are on how they can get most benefits or derive some advantage. Programmes which condition them to become dependent can seldom be sustainable. The gestures of cooperation, compliance and even vocal support, may not be more than pragmatic opportunism.

It was argued that top-down approach is also necessary. The government has responsibilities and commitments. Priorities are established on technical administrative and other considerations. A large country-wide programme effort requires uniform guidelines for implementation. Different programmes are under different departments. The programmes have to be implemented in accountable fashion.

Therefore the two approaches need to be made complementary. The mechanics of such arrangement, where by the centralised top-down approach and participatory bottom-up approach can co-exist and reinforce each other, has to be found. For such an arrangement to take shape both the centralised approaches and participatory approaches have to structurally and functionally accommodate each other. Can this be done? There were many signals in the affirmative.

Mention was made of the modus operandi of SEU or of some NGOs in translating the programme operations through community participation. Through capacity building and participatory decision making some sections of the rural communities may often reach the same priorities as of the programme or even better ones. Preference for ceramic basins for latrines is often mentioned. The two need not be contradictory. Yet it is important to allow them to examine their own problems and reach their own solutions. This way the programme priorities become their own priorities. Mention was also made of UNICEF approach of offering ten different latrine design options to choose from.

If the different segments of the rural population have different demand, needs and priorities, a cafeteria approach, such as adopted by UNICEF can accommodate a variety of need perceptions. As illustrated by SPEECH, if villagers consider cleaning and repairing their well as the priority it should be possible to mobilise internal and external resources to meet this need. This does not rule out further education and follow-up for better solutions. Similarly, if some sections of village do not want household latrines nor want to use community latrine, it should be possible to find an intermediate solution for them also.

It was often argued that sanitation and hygiene occupies low priority in the scheme of things among the poor villagers. They want food and income more. Also many voluntary agencies do not have sanitation as their priority either. They are doing developmental activities related to agriculture and income that are appreciated better by the villagers. It is impossible to enter a village, some said, with a programme of sanitation and hygiene only. This points out the need to link sanitation programme with other intersectoral programmes. This is a trade-off strategy -- offer what people appreciate better and interlink it to doing something about what they do not appreciate. People in village are well tuned to this trade-off strategy in their day to day life. This requires additional effort to make S & WS programmes more flexible and more inclusive rather than selective and targeted.

Such flexible and multi-pronged approach is supported by evidence about how change actually takes place in rural communities. Changes diffuse slowly over time in spurts and steps. Rarely does a change occur in one shot suddenly. The "S" shaped curve of change includes a lag phase, an exponential phase and a plateau phase for any change. Different section of the same community lie at different segments of this curve. For some demand and preparedness to change already exists. Some are at lag phase and require much effort to bring them into momentum. Some have fulfilled demand and are not yet ready for more unless something more and better happens. Therefore the strategy of doing the best or most appropriate may not be suited to all segments of rural communities. Some may be better prepared to accept less efficient solutions while some may hanker even for better ones than being offered. People are themselves better prepared, as they actually do, to make these decisions only if we are prepared to back their choices with technical and material support.

### 3. PROBLEMS OF VOLUNTARY AGENCIES:

Although there was some discussion about voluntary agencies and their problems during the sessions this was one of the most common theme of informal discussions after the sessions with me as well as among the participants. Sensing my enthusiasm and commitment for working with voluntary agencies they were communicating their own experiences and reservations. Suggestion to prepare a typology of voluntary agencies reported in section V for carrying out action-research research studies was partly in the spirit of differentiating between genuine and spurious agencies. These fears are well known and reflected in the summary of the approach of government rural sanitation programme given above. We also have direct experience of this in the Linköping programme as well. Some voluntary agencies are project and money oriented, fail to deliver results, have poor monitoring and follow-up, have poorly trained and poorly paid personnel, not used to research requirements of documentation, have undefined outreach and coverage, etc. More relevant to our objective, some of them do not follow a participatory approach in implementation, are poorly oriented to documentation and research requirements, do not keep the time and resource limits, and so on.

On the contrary it is important to understand the problems of voluntary agencies. They often work in very difficult conditions and are constantly struggling for survival. The demands made on them by the government programmes or research agencies are too rigid and often harsh for which they are ill equipped. Every body wants to use them but few are willing to make inputs that would enhance their capabilities or resources and ensure continued involvement. They are often committed to particular ideology and have their own approach of working among village communities. External objectives are imposed upon them which may not match with their own. Many of them are simple and modest, prefer to work quietly without fanfare, and achieve results slowly over years. Like villagers they find outside agencies too business like, rather selfish, and disruptive or intrusive (dictating things and imposing conditions). Some have learnt better to work with outside agencies and make best of the inputs they receive. Some prefer to keep distance and remain skeptical.

The spirit of collaboration requires adopting a participatory approach in working with them. Collaboration should be a genuine two way effort. There is need to know them better and actually work with them to be able to appreciate their requirements, capabilities priorities, and problems. Our objectives should not be merely to get the results we want but also to enable them and help them to do better what they want to do on their own within their constraints. Working with voluntary agencies in villages is not very different from learning to work with village communities. Collaboration should be with the spirit of trust, mutual understanding, give and take. They are generally eager to learn, improve, and expand.

Like village people they have their own agenda and priorities. They have their work routine and organisation. Hygiene and sanitation is seldom their priority. Their technical and professional orientation is different from the administrative and scientific agencies. Their interest is in doing things and getting things done. They are skeptical of research, documentation, report writing, paper work, publicity, etc.

### 4. SCOPE OF HYGIENE INTERVENTIONS:

Third question was about the scope of hygiene education and hygiene interventions beyond the narrow programmatic priorities (hand-pumps, taps, latrines). In the water and sanitation programmes focus is primarily on

hand-pumps or taps and latrines. There is tendency to define the scope of hygiene behaviour in terms of proper use and maintenance of handpumps, taps and latrines.

Important though these are, it is necessary to emphasise that the implications of hygiene behaviour and cleanliness are far more comprehensive, inter-linked and inter-dependent, both socially as well as epidemiologically. Projects deal only with installation and maintenance of hand-pumps and latrines not with hygiene behaviours, sanitation and cleanliness. Even utilisation of facilities is ignored. What is the benefit of safe water sources and latrines if people continue to use surface water sources and field defecation? The existing data on utilisation, where available, are highly unreliable. The KAP methodology, which has been questioned and discarded internationally is still being used in India indiscriminately.

Studies have shown that the assumed benefits of safe water supply and disposal of excreta are dependent upon changes in hygiene behaviour and cleanliness such as washing hands, use of soap, proper storage of drinking water, personal hygiene, food hygiene, waste water disposal, cattle-shed cleanliness, waste disposal, safe disposal of excreta, safe disposal of faeces of infants and children, etc.

Changes in hygiene behaviour require additional inputs. These inputs should be made an integral part of the water supply and sanitation programmes. As some participants mentioned, popularity of latrines requires 'latrine culture'. It is this culture of hygiene, cleanliness, and sanitation which promotes diffusion of new water and sanitation technologies. Our current studies in Kerala indicate in this direction. There is better acceptance of latrines and safe water programmes and better health profile in Kerala because of better "hygiene culture". Inputs for hygiene and cleanliness are therefore inputs for the success of water supply, sanitation and health care programmes. There is close link between hygiene and transmission of communicable diseases. Better hygiene is best preventive measure.

##### 5. LIMITS OF CONVENTIONAL HEALTH EDUCATION APPROACH:

Another issue briefly touched but important is the potential and limitations of standard health education approach and methods. The question is "Does health education change behaviour"? There was wide consensus among the participants about the necessity and usefulness of educational approach but at the same time many doubts and qualifications were mentioned about the usual approach and capacity of health education methods and programmes. The participants were including community involvement, empowerment, PRA, school education and voluntary initiatives as part of educational process. The professionals were using it to mean packaging and communicating information in terms of media and methods. The point of difference was clear-- promotion of social awareness and action vs promotion of knowledge. The debate was inclusive but indicative of compromise. The latter without former is very weak; the former becomes more strong when followed up with the latter.



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## SOME LESSONS WE HAVE LEARNT

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SOME IMPORTANT LESSONS THAT I HAVE DRAWN FROM MY OWN STUDIES AND FROM VARIOUS IDEAS COMMUNICATED DURING OR AFTER THE WORKSHOP SESSIONS ARE LISTED BELOW. I HAVE TAKEN LIBERTY TO WORK OUT THE FOLLOWING IDEAS IN MY OWN WAY PARTLY REPRESENTING DISCUSSIONS AT THE WORKSHOP.

### 1. The Logic of Social Epidemiology :

The choices, decisions and behaviour patterns of people in villages, grounded as these are in the local culture and social organisation, are the foundation on which rest the patterns of health, ill health, health care, as well as patterns of response to programme implementation.

Even in the absence of any public health or health care programmes some cultural practices and behaviour patterns of people are capable of protecting them partially (to a limited extent) from health risks. So when we look for risk factors in the habits and practices of people we should keep our eyes and minds open to look for protective factors which are always present. These protective factors are in the form of local cultural practices, social usages, hygiene behaviours, simple technique and procedures, and social situations. These may not be as efficient, tested and proved as the modern public health techniques. But since these are simple, cheap and already present in the cultural milieu, it is far easier to promote them. Village people relate to them readily and much better than to the scientific ideas of public health.

Take for example the Hindu norm of ritual purity and pollution which has many ramifications for everyday routine of individuals in villages and which has powerful potential for promoting 'cleanliness' in cultural terms. Such ideas are usually ignored by modern text book approach of public health which promotes the best scientific standards. But rejection of local beliefs, practices and life styles of the poor village folk (dubbed as superstitions) is more a matter of attitude rather than of scientific validity. Take for example the common practice of plastering floor with cow dung paste or use of folk remedies in villages. No definite evidence exists about these practice being major health risks but these are summarily abhorred and rejected by the public health professionals though villagers consider them "clean" and "good" practices.

It may surprise engineers and physicians but it is an axiom in social science that technology is culturally conditioned, culturally constructed and culturally loaded (biased). Science and technology assume a particular life style and values; a particular way of looking at things that generally fits with the 'modern' life style. It is well known that some 'modern' scientific practices fit better with urban elite life style than with the life style of rural and tribal folk. The modern public health and engineering often carries the burden of cultural lag in rural communities. Modern technology may require cultural adaptation before village people can absorb it in their life style. This can be facilitated by allowing people to rework the technology as it

suits their settings and needs. Those who have grown up with wash basin and tap in home can not understand what difficult situation "hand washing after defecation" poses for a person in village particularly when his vessel and hands are both "polluted". The common health rule "do not let children play in dust" makes sense in the concrete environment of cities but a ludicrous proposition for a villager perpetually surrounded by dust.

When the best standards are neither affordable nor practical and acceptable (such as pour flush latrines), at least by significant sections of the rural population, is it not advisable to promote less efficient solutions which are more acceptable and affordable? Some immediate benefit is better than remote high benefit.

The principle of multiple causality operates both for epidemiology (or ecology) of diseases and for health care. The risk factors as well as protective factors (i.e. negative and positive effects) simultaneously operate in clusters. Specific risk factors or impediments to programmes do not act in isolation but in combination with other factors. This is often reflected in the unexplained significance of group factors in socio-epidemiological analysis. There is 'additive effect' as well as 'bunching effect' of regularoty factors. These are more powerful than the isolated effect of one important factor. Bunching of risk factors and protective factors takes place in terms of shared socio-cultural situations of the groups of households. It is related to shared everyday routines and life style dependent on interconnected situations. The beneficial effect of one predominant factor may be depressed because of the combined harmful effect of other factors. Or, beneficial effect of six factors in combination may be more powerful than the beneficial effect of one of the predominant factor alone. Since both beneficial and harmful factors are simultaneously present in the cultural practices and social situations, and since harmful factors are more predominant in the situations of poverty and deprivation, it is important to keep in mind linkage between force of habit or life style and the quality of life.

An important implication of this is analogous to what is known as herd effect. It is not enough for a few person or households to adopt one good hygiene behaviour or sanitary practice. Until other inter-related behaviours and practices also change and until a substantial proportion of households also change in the same direction the benefits may not be visible. Studies have shown that benefits of specific hygiene or sanitation interventions manifest only above certain threshold of acceptance or compliance. This makes sense for two reasons. Firstly because if transmission of pathogens continues in the environment, one preventive measure in a few cases or households is not likely to have visible effect. Inverse proposition is that, if communities have reached a requisite threshold of primary prevention the residual population which has not been protected may also show some benefit. Secondly, by the time such a threshold of acceptance or compliance for one factor is reached the other inter-related (bunched) factors may also change.

## **2. The Logic of Participatory Approach :**

If the local practices, behaviour patterns and social situations are significant elements in the transmission process people themselves are better vehicle and agents for identifying them and taking decisions about assessing them or changing them. It will be impossible to provide programme personnel a blue-print of these local practices or situations which vary from village to village and location to location. People are capable of organising their knowledge, learning new information or skills, and taking decisions in their own interest as they perceive, particularly if the impetus for learning and change comes from within.

It is a well accepted principle that public health programmes should be founded on epidemiological understanding. But epidemiological contexts vary from milieu to milieu and locale to locale. In a large multi-ethnic plural society like India such epidemiological profiles are likely to be different in each locale and social milieu. The text-book prescriptions based on generalised universal and thereby incomplete understanding of the local practices, situations and choices are in themselves inappropriate basis for designing programmes or for implementing them. Generalised programmes, designed centrally, have to be adapted and complemented by local considerations. Since it is impossible to place researchers in different locations to unveil the complex interaction of factors involved, and to plan programmes accordingly, community-based participatory research, decision making, programme design and implementation is perhaps a better pragmatic answer.

However this requires a preparedness of the local government and non-government agencies and personnel to collaborate with each other, and work with rural communities in a participatory manner in working out milieu specific problems and finding local solutions. Simplified tools of information and analysis need to be packaged and transferred for such exploratory process to succeed. For example quantitative documentation has to be improvised by qualitative documentation which is more reliable and which the local agencies and personnel can handle better. The infrastructure of the WS & S programme can provide the back-up support for voluntary initiatives as these take shape in rural communities and change with time. Important experiences can be taken up for a systematic analysis by the regional scientific institutions.

In this vast country there are plenty of experiences, both in the government and voluntary agencies or panchayat agencies to learn from. Documenting, sharing and disseminating these experiences is one way of improving the implementation of programmes. The experiences even in this small gathering -- of Gandhigram with community latrines, of Pachod with involvement of children in gygiene interventions, of SPEECH in developing grass-root PRA initiatives, of SEU in evolving participatory procedures for implementing water supply and latrine programmes, of Mitraniketan in developing beautiful hygiene environment with participation of children, etc. - are indicative of the rich raw material to work upon and bring into the mainstream of rural WS & S programmes. Unfortunately such efforts are yet to begin. Few cases discussed at the national workshop in rural sanitation are but tip of the iceberg.

### **3. The Micro-Macro Divide and Emerging Scenario:**

When the participatory mode of programme implementation is not institutionalised it is difficult to see how things will work out, or if they will work out at all, at the macro-level. Fears of uniformity, accountability, targets, and monitoring are only few of the misgivings commonly expressed. Doubts about leaving things in the hands of voluntary agencies or even panchayat agencies are also heard. The 'successful' experiences of some voluntary agencies in small areas are brushed aside as atypical, non-replicable, or outright questionable. The participatory model involving voluntary and panchayat agencies is essentially a micro-level operational model. How the micro-level realities can be welded together structurally and functionally at the successively higher levels to provide a cohesive macro-level institutional framework is something that yet needs to be worked out.

The optimism of combining top-down approach with bottom-up approach, combining government agencies with voluntary agencies, combining macro-level policy infrastructure with diverse micro-level participatory models perhaps

deserves some caution. One perhaps can not fail to recognise built-in tensions between the two models. The dominant influence of the centralised macro-level institutions, as these percolate down the ladder to the local levels, preclude the very premises of decentralised bottom-up participatory initiatives in which voluntary agencies are the major players. On the other hand the institutional framework of participatory voluntary initiatives at the higher levels does not yet exist.

The issue is seen by some as a scenario of power struggle in which participatory initiatives of and for the poor are at a built-in disadvantage. The governmental framework of "panchayat raj" and official version of "community participation" slogan can be seen to have the effect of strengthening the top-down centralised approach at the peripheral level where it is most vulnerable. Some non-government agencies deeply committed to voluntary initiatives, empowerment and participatory development for the disadvantaged sections prefer to keep away from the government programmes. The feudal, caste/class, ethnic and factional divide within rural communities is fairly well entrenched and politicised. The policy and technology decisions are loaded in favour of the rural elites and well off sections. The open-market movement currently in progress is going to further increase the inequalities in rural communities through coalition of urban business interests with rural elites. Such coalitions will have the required political, and bureaucratic support. This scenario may seem far fetched but can be kept in view as a possible setting with which the voluntary agencies may have to cope in the rural sector, particularly if they wish to focus on the poor, neglected and socially disadvantaged sections. The powerful local panchayati raj lobbies may develop vested interests and take new postures towards the voluntary agencies in the new scenario creating new situations and problems for voluntary agencies to cope with.

In contrast to the above scenario are real possibilities that demonstrate how voluntary initiatives by the rural communities, supported by voluntary agencies, can snow-ball into powerful regional movements in rural environment resulting in significant structural modifications at the macro-level institutions. The lesson from recent anti-arrack grass-root movement in rural Andhra Pradesh is a notable example. It started from an adult literacy reading lesson which inspired one middle aged woman in a village to prevent her husband from drinking arrack. This gradually spun into a state-wide grass-root movement supported by voluntary agencies which eventually forced the State government to adopt prohibition. The large scale coordinated voluntary initiatives with people's involvement can and do influence the macro-level institutions and policies. In a democratic framework the voluntary initiatives when welded together are at distinct advantage. Without institutionalising higher level linkages and arrangements within the non-government and voluntary sector their efforts will remain isolated, localised and short-lived. Therefore a viable programme of voluntary initiatives in any sector must give attention to both micro-level and macro level interactions. One reason for the success of SEU effort is institutionalised support at the macro level.

Therefore essential message is that it is possible to generate voluntary initiatives with or without partial support of macro-level programmes, and that it is possible to change the latter in due course by persistent large scale coordinated efforts.

#### 4. The Scope of Hygiene Interventions:

It has been noted above that the concept of hygiene interventions is much broader than the WS & S programme components; that is, handpumps, taps and latrines. The former necessarily includes the latter but not vice-versa. The

duality of centralised definition and participatory definition is clearly apparant. In the centralised definition hygiene behaviour is defined in terms of priorities and activities of the WS & S programme. In participatory definition the term hygiene behaviour could mean any behaviour pattern or situation identified by the villagers to be relevant for improving hygiene, sanitation, cleanliness and environment. It refers to an open-ended agenda of informed priorities, choices and activities of villagers themselves. In the centralised approach the initiatives are dependent upon external inputs while in the participatory initiatives are sustainable.

So what is the compromise? The scope of hygiene interventions within the WS & S programmes need to be boradened to ALSO include other significant hygiene interventions that enhance the effect of the programme inputs. Conversely, the scope of participatory hygiene interventions should ALSO include use and maintenance of WS & S facilities. Steps in both directions will be required.

## 5. The Technology and the People:

The discussions repeatedly returned to the issues of technology choice. But there were more questions than answers. Who should and where should the technology be designed ? Do voluntary have the know how for meddling with technologies ? Are people in villages competent to do anything about technologies?

The UNICEF approach in Medinipur of 10 different low cost latrine options was pushed behind the desk when Prof. Widstrand listed a range of 8 different solutions to the disposal of excreta only one which was pour flush soak-pit latrine. Others mentioned about trench latrines, holes, and defecation compounds etc.

When the different segments of the rural communities have different level of demand and preparedness to accept and use different solutions why such a fuss about standard and best technology solution ? Should not people have some say in choosing, designing or modifying technologies to their convinience ? Is standardised technology more important or interaction of people with technology more important ? It is technology issues that the programme officials and engineers (include those represented in the workshop) are least flexible. This is not unexpected; so are the doctors about medical technology and social scientists about research methods !

The rigidity of technology design and options cuts at the root of participatory initiatives. It is seen merely as an engineering or at best a marketing proposition. From engineering point of veiw techology design has nothing to do with participation and choice of people.

## 6. Health Education and Health Action:

Overwhelming reliance in the centralised sector as well in bilateral sector on health education or what is now known as IEC (Information Education and Communication) invites some attention because of difficulties and uncertainties associated with this approach. Somehow it is assumed that focus on IEC is required when things do not work or go wrong. It is rarely an essential ingredient of routine of implementation from the beginning.

The IEC procedures are something like magic stick. When seriously invoked with high profile technical and advisory inputs these efforts sometimes work and sometimes do not. In the normal routine of programme implementation these either do not exist, or when exist nominally, these do not have the capacity to influence the course of the programme significantly. Long experience in family planning is blatant example.

We do not yet fully understand the underlying variables which determine the impact of IEC material and methods on the success of a programme on given target population in given situations. Implementation of IEC materials and methods is subject to wide variation from one agency, location or agent (personnel) to the other. A host of attributes related to messages, materials, methods, procedures, agents, and target groups and social context are at play in determining the success of information communication resulting in change in compliance behaviour. Many of these variables are qualitative and are rarely accounted even in experimental studies. When things work out as desired the procedures and inputs are assumed to be successful. But which aspects of the process worked well and which did not is seldom known. Contribution of other factors is unaccounted. The discredited KAP method still remains the basic tool of evaluation.

There are many examples when things work out well without IEC. Voluntary agencies for example, who do not have the know how or expertise on IEC, are able to produce results that are envied by the government sector.

Focus of health education and IEC is largely on information or knowledge. But knowledge alone is rarely enough to change behaviour. Beliefs and attitudes are well known to be important but the capacity of information of knowledge in changing attitude is recognised to be very limited. The two lie in different domains - one in cognitive domain and other in affective domain. Relationship of knowledge and attitude to actual behaviour leading to adoption of an innovation is well known to be inconsistent. There are numerous examples showing that actions are unrelated to attitude and knowledge. This brought in the counselling and marketing approach. The IEC, marketing and counselling approaches are very different. But all three are essentially manipulative; somehow influencing the behaviour of beneficiaries to comply with programme objectives with little regard to their own objectives and priorities.

The alternative approach is to focus on social action - on doing things in participatory manner by involving the beneficiaries. Change in behaviour occurs when felt need exists and the beneficiaries are themselves prepared to change. Education is part of enabling and informing process for creating capabilities to perceive problems, find solutions and acting upon them. The programme itself then becomes an instrument of social action -- to meet the needs, priorities and choices of beneficiaries in collective settings.

In final analysis, the key to change in behaviour lies in the choices, decisions and actions of the beneficiaries. The beneficiaries in rural settings perceive their choices and take actions in terms of their life conditions, their aspirations, their calculation and their priorities -- all of which are socially and culturally conditioned. The agents of change play the role of facilitation, encouragement, enablement and sometimes inducement. This again indicates to the importance of participatory process of programme implementation wherein the informed choices and actions of the beneficiaries in their own social setting, cultural idiom and their own momentum contribute to the gradual change in behaviour. Triggers of change that emerge from collective participation are much more meaningful and powerful than the inducements coming from outside either through IEC, technology, or financial inputs.

The government agencies have learnt that "camp" approach works so well but have not gone deeper into this approach. In collective social formations, energised by euphoria of collective participation, the individuals take decisions and do things which they would not think of doing, left to themselves. This was so evident in the anti-arrack movement in A.P. Many voluntary agencies effectively use folk culture events and folk media for creating awareness.

Deep commitment to charismatic or trusted leadership enhances the effect of collective action. People willingly do what their trusted leader asks them to do even at personal loss. A mass movement with charismatic or trusted leaders works like fire. But this works when people emotionally identify with the objectives and issues involved.

Changes in the routine and procedures of the programme, and interaction of programme personnel can have telling effect on the success of the programme. The key to success of voluntary agencies, in comparison to government agencies, lies in their procedures which create trust, partnership and social relationship with community.

## VIII

### OVERVIEW - LOOKING BACK

This was a low profile workshop with some 38 regular participants including 10 young field staff or students associated with the Linkoping studies. This latter group rarely interacted during the workshop unless specifically asked to. Another group which kept low profile was of 3 engineers. Their interventions were fewer and crisp. There were three physicians also among the participants. They too kept a low profile during the discussions. The three representatives of the bi-lateral programmes and the Linkoping group of participants were vocal. The representatives of the voluntary agencies were also prominent in discussions but less so. Each session had a chairperson. Dr. Kochar was giving direction to discussions through probing questions and provocative statements. On quite a few occasions the voluntary agencies engaged the bi-lateral agencies into a dialogue. Although there were no representatives of the government agencies interventions by some participants followed the line of government programmes, thus playing a very important role.

The organisers were very uncertain how the discussions will take shape and how the participatory informal process will work. Our one major worry was will we achieve our objectives ? As the sessions progressed we were encouraged to continue with the process rather than revert back to routine formal format. There was an overall sense of satisfaction expressed by the participants during the intermittent breaks.

Few example of how the participants took control of the discourse can be given. The usual introduction by the participants took two full sessions. The chairpersons encouraged expanded introductory statements. This not only served to inform but also to break the ice when many participants were unknown to each other. There were frequent cross questions during the introductory sessions. The participants were frequently posing issues for discussion and clarification. The style of interaction was more like a discourse or dialogue rather than a seminar or symposium. Those who were better informed took initiative on their own to make clarifications. Another example is unscheduled discussion about the reasons or factors behind the success of community latrines which the participants visited after lunch in a nearby village. The question was initially posed by a voluntary agency. Another related question was posed - how do we know that the community latrine has succeeded? These questions were discussed and answers were recorded on a flip chart in form of a collective exercise.

There were some problems too. After the initial exposure and interaction was over on the first day the participants looked up to the organisers for direction on the second day. The organisers instead asked the participants to examine the tentative schedule for the sessions and decide which theme they would like to take up for further deliberation. The discussion then strayed to the relative merit of one topic versus the other. Some tried to combine two themes into one. There was reluctance on the part of the participants to take a collective decision and the dialogue appeared to taper off.

Why was it so ? I suppose this was due to two inter related factors. First, although the participants had intellectually converged through the introductory sessions and informal interactions during the breaks, they had



not merged into a 'community'. Secondly, they had not come together of their own accord to achieve some objective. The vague objective of the success of integrated low cost sanitation and water supply programmes through community participation had taken shape. But what to discuss to achieve this objective was not clearly established. The collective identity and shared interests had not welded into a collective task (objective) for discussions.

This was also because we organisers had not done our home work. A good PRA session requires some preparation. This preparatory function had not been anticipated. So what was done? The organisers suggested the theme based on emerging consensus in the discussion. This was readily agreed and the discussions followed smoothly in the form of exercises. Particularly useful was the last session in which the organisers requested the participants to tell what should be done to plan and carry out hygiene interventions in villages through voluntary agencies in form of action-research. The participants had known this to be our explicit objective for the workshop and had probably thought about it and brought some ideas with them.

So how successful was the workshop in terms of its objectives? There was good sharing of experiences and learning from each other. In the process the shortcomings of water supply and sanitation programmes were brought out and a variety of issues or remedial measures were discussed. The importance of hygiene interventions was largely brought into focus and agreed upon although there remained some difference of opinion on which hygiene behaviours should be looked into. As reported above despite some differences the direction was very clear.

Our main objective to develop guidelines for designing hygiene intervention studies through community participation and involvement of NGOs received good attention. A series of useful hints and guidelines were suggested. These will have to be worked out into a concrete proposal by us. Our expectation was satisfactorily met. We could have spent another day or two giving more concrete shape to the project proposal. But that was not intended.

We had reason to be satisfied. We tried an experiment and were amply rewarded. Were the participants satisfied with the experience? From the feedback we received we believe so. Those who are used to formal workshop proceedings will probably find the report diffuse. But we were not looking for the technical expertise nor we intended to educate the participants through presentation of papers. We have learnt from the deliberations as exemplified in this report. We believe that the participants have also learnt from each other. They have taken back with them more acute awareness of various issues concerning rural water supply and sanitation programmes and relevance of participatory hygiene interventions. Only participants can tell us whether we are correct in our assumption.

Apart from our objectives what major ideas/findings emerge from the workshop? We have listed out the lessons learnt in the report. Most important perhaps is the importance of SEU like units for working out the software aspects in planning and implementation of rural S & WS programmes. The second important message is the overwhelming significance of participatory process in designing and implementing rural sanitation and water supply programmes. This essentially means a more flexible, open-ended and inter-sectoral programme strategy to allow people to exercise their options, take their own decisions, and act upon them. Third is the importance of focus on hygiene behaviour rather than merely construction of facilities. Lastly, related to these three, is heightened awareness of serious limitations of the centralised hardware-oriented government infrastructure in accommodating and promoting these three aspects.

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CONSULTATION ON HYGIENE BEHAVIOUR INITIATIVES

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TENTATIVE PROGRAMME

JANUARY 7TH 1993

SESSION I : INAUGURATION

SESSION II: BRAIN STORMING SESSION:  
WHY BOTHER ABOUT BEHAVIOUR ?  
RELEVANCE FOR PROGRAMMES?

SESSION III: FLOOR DISCUSSION:  
PRIORITIES AND AGENDA FOR HYGIENE INTERVENTION

SESSION IV: FLOOR DISCUSSION:  
WHAT MAKES S & WS PROGRAM PARTICIPATORY ?  
( FOR WOMEN, CHILDREN, NEGLECTED )

JANUARY 8TH 1993

SESSION V: CHANGE IN HYGIENE BEHAVIOURS--  
ISSUES, TECHNIQUES AND PROCEDURES

SESSION VI: GROUND WORK FOR INTEGRATING WITHIN S & WS PROGRAMS  
HYGIENE EDUCATION  
HYGIENE INTERVENTIONS  
MONITORING & ACTION-RESEARCH

SESSION VII: INPUTS AND SUPPORT ACTIVITIES FOR-  
PARTICIPATION,  
HYGIENE EDUCATION,  
HYGIENE INTERVENTION  
MONITORING

SESSION VIII: OPERATIONAL GUIDE LINES FOR SMALL FIELD TRIALS  
IN PARTICIPATORY HYGIENE INTERVENTIONS

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