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Gender Perspectives  
on Water Resources  
Management:

Domestic Water Supply and  
Environmental Sanitation

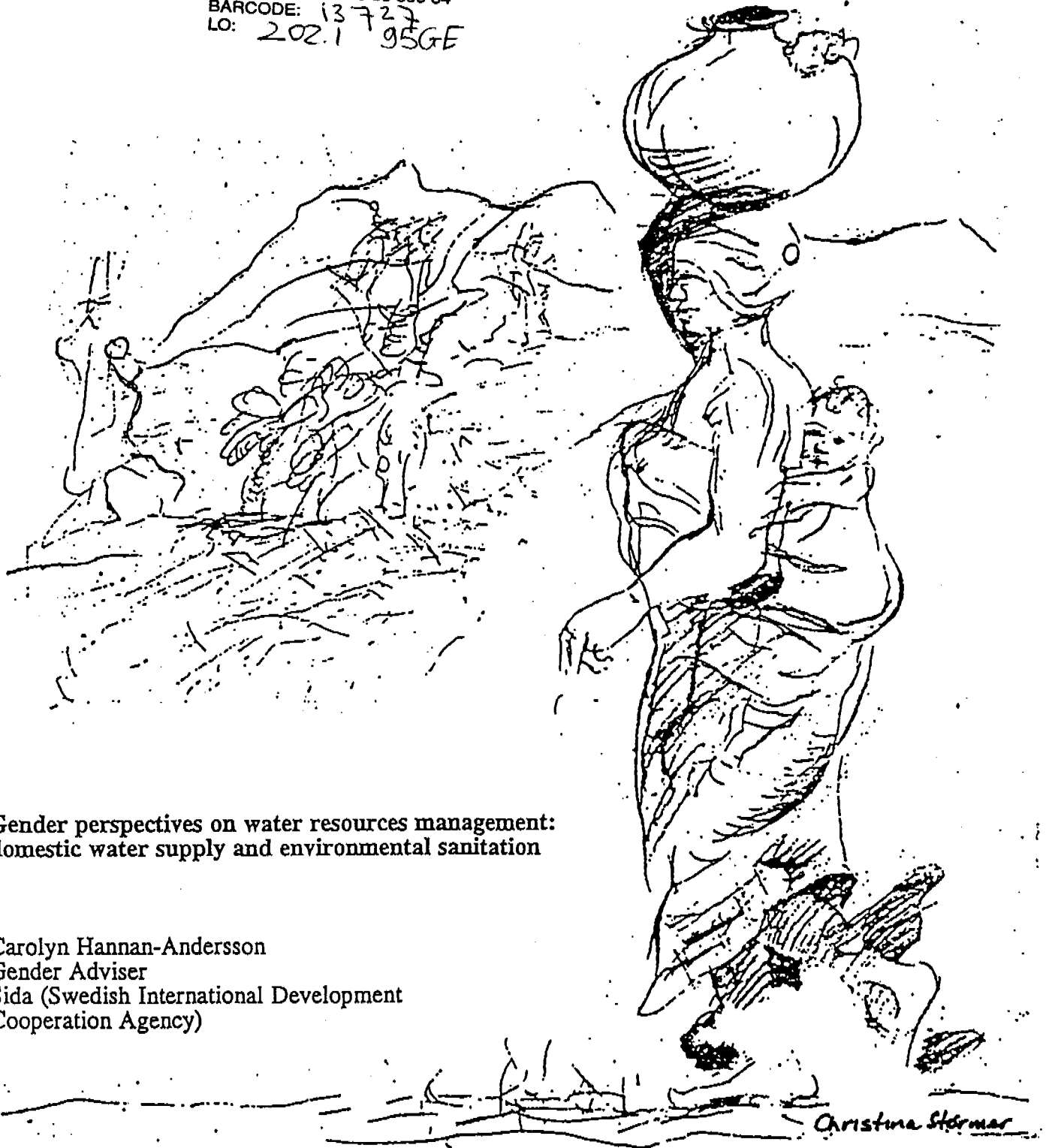
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**Gender perspectives on water resources management:  
domestic water supply and environmental sanitation**

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## Introduction

The roles of women in relation to domestic water supply in third world countries were among the first of women's roles, other than child-bearing and rearing, to be given attention in development cooperation contexts. It is actually very difficult to avoid seeing women's roles in relation to domestic water supply. Today we are used to seeing pictures of women carrying water in buckets, clay pots, calabashes on their heads and in different vessels on their backs - similar to the picture on the cover of this paper. This particular "carrying role" has been well established since the 70s. Women's other important roles in relation to management and maintenance have, however, been less well recognized.

Yet despite the fact that we have known about women's roles since the 70s there has been surprisingly little impact on policy development. There has been considerable development in relation to programme planning and implementation, but even here it has been less than adequate. There is a need to take a fresh look at domestic water supply and environmental sanitation from a gender perspective - to review and revise goals and strategies. It is important to answer the question:

**"Why has the knowledge of women's roles and responsibilities and relationship with the water resources had almost no impact on policy development and only limited impact on project and programme level?"**

To do this a historical perspective is needed - a review of policy and strategy development over the past 20 years from a gender perspective. The result of such a review shows that, while some constraints are linked to the specific situation of women (in particular in relation to hinders to participation in public life), far too many constraints are still linked to gender-blind attitudes and practices among policymakers, planners and administrators in both governments and external support agencies.

This gender-blindness takes on a completely new dimension of seriousness with the increased international consensus around water as a scarce resource, and the move to develop internationally accepted principles of water resource management and utilization. These principles while potentially positive in themselves, could be negative for women if they are developed without a gender perspective.

## A historical review

In domestic water supply programmes women were initially given attention through "*women's components*" which involved giving some special attention to women within existing programmes, often inputs related to training in health and hygiene. The focus on women here was very much as a *vulnerable group*. Women were seen as having serious problems because of distance to water and lack of clean water. They were seen simply as "carriers" of water and safeguarders of the health of their families. Their important roles in maintenance and management (and even in the improvement of local sources in many cases) were simply not recognized. Therefore women were not involved as "actors" but rather as passive beneficiaries.

While women often benefitted (when the water supplies worked) through access to water of better quality at a closer location, there was a clear risk for other negative impacts. Women were still consistently excluded from all dialogue about the priority of improved supplies, the possible improvements, the implementation, and arrangements for operation and maintenance. They were not always reached with the necessary promotion or information on use of supplies, nor with water-related health and sanitation education. Attitudes at community and household level were not conducive to involving women in a broader sense than as "beneficiaries". Even the

experts coming in from outside, from government and external support agencies, took for granted that women should play such a passive role and that the focus should be exclusively on women's reproductive roles.

An additional negative impact was that, despite the fact that domestic water supplies was recognized as "women's business", it was the men in the community who were exposed to new ideas, technologies and skills and to important new contacts outside the community. When men were trained as paid attendants and caretakers they also benefitted through increased income. Thus with the advent of new technology and impulses from outside, men were willing to enter a traditional "women's sphere" and monopolize any new resources made available. Gender roles changed in a negative sense, with men becoming the "managers" of the new supplies and women becoming mere "consumers". Women entered into a new dependency role in relation to men in an area where they previously had had important management roles.

When general interest in participation, both as an ideology and a methodology, increased in the 70s, women began to be seen more as *actors and participants*. At first efforts to *increase their active involvement in programmes* involved construction work or preparing food for those doing construction. This was, of course, not necessarily positive, since simply adding to women's already heavy physical work-load did not necessarily add to their status. Gradually more attention was given to women's roles in operation and maintenance. Efforts were made to train women as waterpoint caretakers, and then even to train women as pump mechanics. While this was a very positive move, it led to the identification of some new constraints to women's active participation, for example opposition to these "new" public roles for women which involved access to new knowledge, technologies and skills, and in some cases even involved economic remuneration. This opposition came from men who were threatened by women entering the public sphere; but it also came from women whose self-expectations did not include an active role in the public sphere. Where these new roles involved access to transport such as motor-cycles and bicycles the opposition from men was very strong in a context where men themselves did not have access to these forms of transport. In some countries special support programmes had to be developed to overcome the socio-cultural and practical constraints women pump mechanics faced. This could involve always involving women in teams of two or three, providing escorts of males or older women, providing transport, etc.

Around the middle of the 80s, attention began to be given to increasing women's *access to planning and decision-making*. This proved to be even more difficult than involving them in in operation and maintenance. This was due to the many constraints to women's involvement in community level planning and decision-making, including the simple lack of any precedent. Women were not to be found in any of the village government bodies, except perhaps, to a limited extent, in those concerning social, cultural or health matters. There were also, at times very strong, negative attitudes of men (and sometimes even of women) to women undertaking community leadership roles. In some cases women's willingness to participate in these new roles led to increased domestic violence. Some studies from the 80s showed that the women who had the most potential to participate were widows, divorcees and unmarried women - those who did not have to risk male opposition. Different strategies had to be developed which included gender sensitization of both women and men, special training for women, quota systems to get women into water committees, etc, and "support mechanisms" for those women who undertook these new roles.

## New challenges and new strategies

Considerable important changes have taken place in the domestic water supply sector during the past 10 years. These involve some potentials for integrating a gender perspective, as well as some risks. There has been a general shift from *high-cost technology to low-cost technology* approaches, and a move to *increase local involvement and responsibility* as a means to secure sustainability. This approach today often involves a long process of consultation and leaves the decision on participation to the communities to make, based on their own assessment of local priorities and needs.

Obviously the use of low-cost technology and attempts to involve communities are positive for women. However this is *conditional on the utilization of a gender approach*. If analysis does not include women's roles, needs, etc, as well as men's, and if consultation does not include women as well as men, there can be set-backs for women. In particular the leaving of the decision-making to the communities can involve problems where women have little or no say in setting priorities and making village decisions. It is not certain that the priorities and needs of women rank high on the list prepared by the village government unless concerted efforts are made to include a gender perspective.

New challenges have presented themselves, both in relation to constraints arising from the existing gender disparities at household and community levels, and in relation to attitudes and routines in governments and external support agencies. And there is thus need for a shift of strategies again.

### i) Existing gender inequalities

In relation to existing gender inequalities those related to access to power and decision-making are crucial. Ironically it is now clear that, after having made serious efforts to involve women as well as men in community water committees, these water committees do not have much real power. *The real planning and decision-making on water resources distribution and management takes place at another higher level*, a level at which women are very poorly represented, if at all.

Another development in some areas has been that *as more women take on leadership and management roles men withdraw*. It is not desirable that domestic water supplies becomes a low-status "women's sphere" in community development. The objective is to ensure that it is an area where women and men are equally involved in analysis, policy development, planning, implementation and monitoring.

One of the most important "lessons learned" in recent years is the *need to place domestic water supplies in a broader developmental context*. Some of the inputs required for moving forward in terms of promoting gender equality in domestic water supplies and sanitation programmes are outside the realm of the "water programme" as such. For example there is a need to get *more women in decision-making positions generally at all levels*, but particularly in local government at district or provincial levels. There is also a need to *ensure that the "water sector" is open to both girls and boys*, i.e. that more girls enter the water sector after completing their schooling. This requires improved career guidance in high schools - an area where some exciting initiatives have been made in Botswana through cooperation between the ministry for education and the ministry for water.

Another continuing problem is the fact that *there is little precedent at village level* for involving women in community leadership. "Women and development" at village level - for both the women and men in the community itself as well as for many government agencies - often involves *separate inputs for women*, usually income-generating

activities. It is interesting to note that "men and development" is not a terminology utilized, and that if it did exist, it would certainly not simply mean income-generating activities.

## ii) Constraints at the level of government and external support agencies

*External agencies must improve their own record with relation to utilization of women in the sector.* The rhetoric on gender equality and the need to involve women in leadership roles and in new technologies is very well developed. However a quick look at statistics over consultants and experts involved reveals, that from the external agency side, the domestic water supply and sanitation sector is still male-dominated. There is an extremely poor record on gender role models. This is related to the fact that, despite the many positive advances made in terms of emphasis on participation, local technologies, etc, there is a tendency to continue to emphasize the technological and, increasingly in the context of the economic crisis, the economic aspects of water supply and sanitation.

It is also related to the fact that in many industrial countries today the labour markets are extremely sex-segregated. There are less women than men trained and employed as engineers and other technical specialists. As a result male-networks of consultants in the water sector, as in many others, are easily established. Sida recently utilized for the first time all-female team of consultants in water resources management, a team which as well as doing a good job could give some important signals in terms of gender role models.

Discussions of gender equality in relation to domestic water supplies and environmental sanitation are still, far too often, in the form of "*add-ons*" rather than *an integral part of analyses and development of policy and programmes*. Even today a lot of discussions on participation and local involvement are gender-blind. The need to disaggregate target groups and stakeholders is clear. The failure to give serious attention to gender can also be seen in research and in conferences/workshops etc on domestic water supplies and environmental sanitation. Often gender issues are not raised at all, and if they are it is normally as an "add-on". (Bell and Ince, 1993)

One important lesson learned over the past 10 years in relation to integrating a gender perspective is the need to influence the analysis and planning processes as well as the routines for implementation and monitoring. Efforts are being made to *integrate gender into planning and monitoring documents*. The criteria developed by the OECD/DAC Expert Group on Women and Development for statistical reporting (OECD/DAC, 1989) could be utilized.

In an adapted form the OECD/DAC Expert Group on Women and Development criteria include consultation with women as well as men; developing strategies for ensuring that women as well as men participate - strategies which include identification of the constraints to women's participation and concrete means of overcoming them; and development and utilization of gender expertise.

The criteria are very rigorous and few- if any - external support agencies have been able to live up to them - i.e. ensure that they are given adequate attention in planning processes and are reported on in resulting documentation. One of the reasons why they have not been lived up to is that their utilization requires further methodology development.

Many governments and external support agencies today subscribe to the *Logical framework analysis methodology* which involves problem, participant and stakeholder

analyses and development of objectives. This analysis methodology does not automatically include a gender perspective. Efforts must be made to "genderize" this framework.

It is also clear that if planning and monitoring documents are to be genderized there is a need for *increased gender sensitization* within government agencies and external support agencies. Sensitization programmes need to be especially tailored for the water supply and environmental sanitation sector.

## Technology

As mentioned earlier the technological approach has changed considerably over the past 10-15 years. The focus today is clearly on low-cost, simple technology. This has proven *positive for women* - particularly because they can more easily be involved in operation and maintenance. Where the programmes also involve improvements to local traditional sources the situation can be even more positive for women since they have a unique knowledge on sources - their locations, quality, reliability, etc.

What is interesting to note in relation to technology in domestic water supplies is, however, that there have been no changes in means of transportation. The picture on the cover of this paper is as current today as it was 20-30 years ago. Yet the few times men are seen carrying water - usually for sale - there is evidence of technological innovation. This may be wheelbarrows or yokes or specially adapted bicycles - or even complex irrigation systems for vegetable growing. The question can therefore be asked - "*Why no attempts have been made to improve the transport technology for women?*"

Transportation is a major issue for women in rural areas in third world countries. They walk long distances to transport water, fuelwood, children to clinics, crops from the fields, produce to and from the markets, etc. Intensified efforts should be made to find ways to improve the situation, beginning perhaps with the water supply situation since water has to be collected every day, several times a day.

## Environmental sanitation

When it comes to environmental sanitation the problems faced are illustrated very nicely in this paper by simply placing this issue as an "add on", as it still is in reality in many programmes. The rhetoric has changed considerably over the past 20 years. Most programmes now talk of health education and environmental sanitation. But it is still difficult to find programmes where this is truly integrated. It has been very fittingly referred to as the "cinderella" of the water sector. (van Wijk, 1993)

The level of the development on gender and environmental sanitation is still very low - in terms of development of goals and strategies. Some small programmes in relation to washing slabs - both to help women with a tedious domestic task, and to ensure water supplies are not polluted by waste water - have been developed. But these are very much on the side-lines of the programmes and tend to fade away after a few years. Other aspects taken up for discussion sporadically include drying racks, and household waste disposal.

What is certain is that considerable morbidity and mortality can be attributed to human excreta, waste water and solid waste. The gains made through investment in water supply are limited by poor sanitation and environmental hygiene. New strategies are needed to improve the situation. A gender perspective is needed to ensure *adequate attention to women's existing solutions and their preferences for improvements*. Real

progress can only be achieved if improvements *build on what is already existing*, and on an adequate knowledge of beliefs and practices of both women and men.

As in the area of water supply, *women are key actors* - particularly in terms of keeping latrines and surroundings clean and taking care of the faeces of children. Sanitation is an area where it is, however, important to stimulate more involvement of men if real long-term changes are to be made - especially where these long-term changes require financial investment. Sanitation and environmental hygiene is essential for family well-being and it is important to promote *equal sharing of responsibilities between women and men*.

The sanitation/environmental hygiene sector is, like the water supply sector, increasing focus on issues such as increasing demand and cost-efficiency. There is a need to *ensure that the needs and demands of both women and men are included*, and that cost-efficiency does not mean that women are excluded because their needs are not considered, or they do not have the economic means to participate - particularly women in female-headed households.

A gender perspective needs to be considered in information/promotion materials, in the composition of extension teams and in relation to entrepreneurial development where private sector involvement is encouraged. In the context of programmes where individuals are expected to construct their own facilities, the *aspects of credit and land tenure need to be considered from a gender perspective*. Women in many societies may be hindered from participation because of constraints in these two areas.

### **New principles for water resources management: potentials and risks**

Another important development underway today is the move to see water supplies and environmental sanitation in the *broader context of water resources management*. And in that context, to develop internationally accepted principles for water resource management. Again there are both potentials and risks involved for women. The viewing of domestic water supplies and environmental sanitation as part of water resources management can be positive. With the *linkages between water supplies and sanitation and environmental sustainability made clearer*, women's important roles in the sector can be seen in another light and given a "lift in status". In this context the attention given to *women's management roles* in Agenda 21 is important.

On the other hand the fact that economic aspects are increasingly emphasized - particularly with the principle of "*water as an economic good*" - can involve some risks for women. At the basis of this principle is the assumption that households and communities can make just and equitable decisions on allocation of resources. However, without a clear gender perspective in analyses and dialogue, there is a risk that women's uses and needs are neglected. These uses not only include water for domestic uses - drinking, cooking, washing, bathing, etc - but also water for growing vegetables and fruit trees, brewing beer, keeping chickens, tree nurseries, etc. These latter activities are essential for family survival in terms of food security and ensuring adequate cash income for purchasing essential goods. Given the existing gender disparities at household and community levels in relation to access to economic resources and decision-making, the risk of negative effects for women is a real one.

The increasing emphasis on "*economic efficiency*" also involves costing uses of water and setting levels of payment for utilization. Efforts have to be made to ensure that women's uses are equally valued and that payment discussions take into account gender disparities in relation to economic resources. Women are disadvantaged in relation to "*ability to pay*".



In discussions of "*management by demand*" It should also be kept in mind that "*needs*" and "*demands*" are not the same thing. Those with the most urgent needs may be in no position to make demands. Women frequently find themselves in this situation, and increasingly so when economic value is put on a resources such as water.

Another important new principle with gender implications is that of "*management at the most appropriate possible level*". While a very commendable principle in itself, it must not be implemented in a gender-blind manner. It cannot be assumed that both women and men have equal access to decision-making and power over resources at household or community levels. Management at lower levels is not automatically positive for women. Implementation of this principle requires knowledge of the decision-making structures and processes - both formal and informal, and the gender inequalities therein.

### **Challenge for the next decade...**

The greatest challenge facing Water Supply and Sanitation, and indeed even Water Resources Management, is the need to include a gender perspective in the framework of common international principles being developed. This is no easy task since the framework does not, as yet, give adequate attention to people, let alone women and men.

### **A Sida-supported programme in Tanzania: HESAWA**

As the name suggests - HESAWA: Health through Sanitation and Water - the Sida-supported programme attempts to integrate water supply with health education and sanitation. The approach is low-cost technology involving both hand-pumps as well as improvements to existing traditional sources. The HESAWA concept involves a process of consultation with women and men in the communities to explain what involvement will entail in terms of both gains and responsibilities. The decision to join the programme is left to the communities themselves.

The approach to gender within the programme during the 80s involved various strategies to "integrate" a gender perspective - to see that women were involved in water committees and village meetings, and in operation and maintenance functions. These strategies included quota systems, special officers for gender within the programme, consultation with women, training for women, workshops, etc. The results have been varied.

One major problem experienced is that "involvement of women" is still too often taken by government agencies at all levels, and many of the communities themselves, to mean "special inputs for women" added onto the programme. This is the result of the historical development in Tanzania in relation to women and development. There has not been any real precedent in Tanzania for more active involvement of women in development programmes at community levels. Efforts for women have most often been at the level of separate income-generating projects.

Early in the 90s the need to develop a gender sensitization programme for both communities and regional and district level government officials was recognized. A special training package (with handbooks for both participants and teachers) was developed within the programme.

Over the past two years more efforts have been put into including attention to gender equality into the planning process. This includes, for example, ensuring that the Annual Plans for the programme, prepared by the local government bodies in consultation with the communities, include concrete plans on what will be done to improve gender equality in the programme. The same efforts are made in relation to the Annual Reports. Details must be included on what has been attempted and achieved in order to improve follow-up. In this manner gender equality is becoming a more natural part of discussions within the planning, implementation and monitoring routines of the programme.

An important next step is to further develop the capacities for gender-aware planning in order to improve the planning and monitoring efforts, and ensure real impact on the ground.

A school-based hygiene programme is included in HESAWA which links parents, teachers and children in discussing environmental sanitation. This is arranged through the PTAs - Parent Teacher Associations, and takes place after health screening of children at school for diseases related to environmental sanitation. The approach is problem-solving. A key aspect is to ensure that women as well as men are involved in making key decisions concerning environmental sanitation in the school and the wider community. The objective is that the learning through this process will also be transferred to household level.

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