

Building sustainable systems for water and sanitation in Tanzania

Background

A major focus of Sida involvement in Tanzania since 1985 has been the Government's Health through Sanitation and Water (HESAWA) programme. This is a large rural water supply, sanitation and hygiene improvement programme covering the Lake Regions of Tanzania – Kagera, Mara and Mwanza regions – with an estimated population of 5 million. Technical activities include sinking wells, constructing water supply systems using gravity-fed and other low-tech solutions, and installing hand pumps and improved household latrines. These are accompanied by a broad programme of human resource development and hygiene education, including support to and training of village HESAWA committees, health workers and traditional birth attendants, and the formation of village study groups to encourage self-help activities. As of 1995, about 600 villages and approximately 1 million people have benefited from the programme.

In order to attain long-term sustainability, a major focus of Sida's effort has been the gradual development of a decentralized, consumer-driven programme based on self-reliance. All activities have been geared to this concept, the key element of which is community participation in all stages of planning, decision making and implementation. Human resources development through various training activities is crucial to progress and sustainability, as is the integration of women in all stages of the process, since they carry the task of handling water. The issues of sustainability and self-reliance was the focus of a comprehensive evaluation of HESAWA carried out in 1992.

HESAWA is co-funded by the Governments of Tanzania and Sweden. It is managed nationally through a programme directorate at the Tanzanian Ministry of Community Development, Women's Affairs and Children (MAENDELEO), which coordinates input from other ministries, notably the ministries of Water and Health. Swedish support, channelled through Sida, includes technical assistance and advisory support as well as funding for materials, equipment and services. Total

Sida support to date is SEK 893 million, with annual investments in the order of SEK 40–50 million. Swedish financial and technical support is to be phased out no later than 2002.

The programme is currently in its third phase (1994–98), covered by a specific arrangement between the governments of Sweden and Tanzania which also provides for a mid-term evaluation for the period 1994–96.

The Evaluation

The purpose of the mid-term evaluation was threefold. First, it was to assess progress made in the first two years of Phase III, specifically regarding efforts – in keeping with recommendations in the 1992 report – to promote sustainability and community participation. Second, it was to make recommendations regarding the current implementation of the programme. And third, it was to provide a basis for discussions regarding continued Swedish support to a concluding Phase IV, covering the period 1998–2002. Important questions to answer included the following:

- Do villagers understand and apply the HESAWA concept and activities?
- Are the HESAWA water supply and sanitation systems at village level – and the supporting organizational systems at ward and district level – sustainable?
- In view of the future phasing out of external support, are the new roles of district councils, district departments, wards and villages realistic and feasible? What, if any, are the training needs?

HESAWA, Health through Sanitation and Water: Sida-supported programme in Tanzania

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Sida Evaluation 97/12

- If not, what is needed to make HESAWA a sustainable, consumer-driven programme by 2002?

The evaluation was carried out from late September to mid-October 1996 by a multi-disciplinary team consisting of social demographer Kathleen Shordt, sociologist Pauline Ikumi, public health engineer Patrick Nginya and team leader Jo Smet. In addition to meetings with programme staff and officials at the district and regional levels, a total of 19 villages were visited.

A participatory methodology was applied wherever possible. At the village level, discussions were held with focus groups (men, women, leaders, caretakers, mechanics, village health workers), and observations were made jointly with villagers. Specially designed workshops were organized at district level for all responsible and involved, to assess progress and problems, and discussions were held in various forms at the regional and zonal levels. Prior to finalizing their report, *HESAWA: Health through Sanitation and Water: Sida-supported programme in Tanzania* (Sida Evaluation 97/12), the preliminary conclusions and recommendations were presented to district and zonal HESAWA staff for a final test of feasibility.

Findings

In keeping with the recommendations of the 1992 study, more emphasis has been given in Phase III to addressing issues of sustainability and self-reliance. However, while some progress can be noted in this regard, it is also evident that it falls short of what is required if either are to be achieved by 2002.

In terms of systems installed, while output is high relative to previous phases, it remains low in absolute terms. The output of water supply systems meets the targets set, but is partly offset by the fact that only about 70 per cent of the systems installed actually function, due to organizational and managerial inefficiencies – not the least poor surveying and siting of wells – and to lack of repair capacities and spare parts. A more serious issue is the coverage of improved household latrines, which, despite good progress relative to previous years, remains as low as 1 per cent in all three regions.

In part, these difficulties reflect inadequacies in the technology selection process, with implications for the sustainability of the programme, both as it regards community participation and economic and technical self-reliance.

The fact that Sida covers the bulk of the costs for the physical investments seems to have influenced the selection process. The programme offers an unnecessarily limited range of technologies, often leaving households with an inappropriate option. Operations and maintenance costs may be affordable, but replacement costs appear to be too high and spare parts are not readily available. Furthermore, mechanics are often not available or are poorly motivated by the low wages offered by the Government.

With regard to efforts to promote consumer participation and self-reliance, the HESAWA concept is well known in the villages through the work of the district promotion teams. HESAWA's village promotion pro-

gramme, including the organization of participatory rural appraisal (PRA) activities, as well as the School Health Package, has enhanced community involvement. Participation, however, tends to concern implementation activities rather than involvement in planning and management, as would be requisite in a truly community-driven programme.

In terms of organizational and administrative support, achievements seem to fit more squarely with the intentions spelled out in the 1992 report. Good progress has been made in a number of areas: merging the programme with the decentralized government system; decentralizing the planning, management and accounting of HESAWA activities to the districts; gender awareness efforts; introducing management of water systems by end-users; and capacity building at district and village level. This said, there is clearly room for improvements with regard to cost-efficiency and effectiveness in this area as well.

Recommendations

In their recommendations, echoing those of the 1992 study, the authors argue that sustainability after 2002 depends on the extent to which programme staff, in the six years that remain of Sida's planned involvement, succeed in diminishing the donor-dependence that has developed in the course of the programme. This requires that the capacities and roles of the three key actor levels – households, local government and the private sector – are developed and defined well before 2002. The main recommendations may be summarized as follows:

Installations and maintenance

- The construction of water supply and sanitation systems should be transferred to village- and district-based contractors by July 1998.
- Households should be offered an informed choice of available technologies, with a view on cutting future operation and maintenance costs.
- Resources should be allocated to developing local maintenance and repair capacities, including mechanics' training and spare parts distribution.

Management organization and capacities

- Monitoring of the functionality and use of water and sanitation systems should be developed to assist district and water committees in strategy development, planning, management and follow-up support.
- Resources should be allocated to training district staff in planning and management to meet competence needs following Sida's withdrawal.
- The role of HESAWA's zonal coordination office should be diminished, and the posting of consultants should be decentralized and ultimately reduced.

Human resources development

- More attention should be given to training village communities in financial management and accountability.
- Greater use should be made of awareness/promotion campaigns to promote the latrine programme.
- Gender awareness should be more directly linked to specific community water and sanitation activities.

Lessons Learned

As the 1992 evaluation has already shown, sustainability of a village-centred development programme such as HESAWA is only possible through the use of simpler technologies and by the maximum possible involvement of rural people themselves, both in providing a large share of the necessary resources and in planning and controlling their own development. This means, among other things, that the role of the district authorities must change from implementing to advising/facilitating/monitoring. Greater recognition needs to be given to the importance of the private sector (including local

NGOs) in supporting households and user groups in implementing the programme, and in rechanneling payments for essential needs, such as technical support and spare parts, back into the local economy.

The fact that these shortcomings, highlighted in the 1992 evaluation, are again noted in the 1996 evaluation has implications not the least for Sida's evaluation process. Specifically, the fact that the lessons learned in 1996 is largely a repeat of those learned in 1992 suggests that there is a need to review the process by which Sida's evaluations are used in programme management. ■

The environment and Sida's evaluations

Background

The original objectives for Swedish international development cooperation were to promote economic growth, economic and social equality, economic and political independence, and democratic development. In 1988, a fifth objective was adopted by the Swedish Parliament: "the sustainable use of natural resources and protection of the environment". In 1995, the gender objective was added.

It is sometimes argued that the environment objective conflicts with the primary objective of economic growth. At the same time, it is becoming more and more apparent that without a sustainable use of natural resources, long-term economic growth will be difficult to achieve. The ultimate objective of economic growth is not growth *per se*, but human welfare – which obviously depends on the quality of the environment.

The Evaluation

To shed light on how Swedish aid organizations have addressed environmental considerations in their evaluations, Sida commissioned a study of evaluations made in 1994–95. The aim was to give a current picture of how environmental issues are addressed in a sample of representative evaluations, and to provide a basis for further analysis of how to improve the use of environmental assessments within evaluations of different types of development assistance.

The study, *The Environment and Sida's Evaluations* (Sida Studies in Evaluation 96/4) by Jessica Andersson and team leader Tom Alberts, identifies and addresses 66 evaluations that fit the criteria for the study, as defined in the Terms of Reference (ToR).

An important part of the work was to develop an appropriate methodology for analysis. As a first stage, each evaluation was tested against seven performance indicators, of which three were of special importance:

- Is the environmental impact of the intervention given importance in the evaluations' ToR?
- To what extent is environmental impact addressed in the evaluation?
- What has been the projects' environmental impact?

Findings

An initial screening of the projects shows dismal results with regard to the assessment of environmental performance. Most evaluators gave little if any attention to the environment objective. The findings may be summarized as follows:

- Of 66 projects evaluated, 37 were judged to have a significant environmental impact. However, as judged by the respective ToRs, Sida considered only 14 of them to be environmentally important.
- Almost 60% of the evaluations assessed or discussed the long-term impacts of the project, but only 13% made specific mention of environmental impacts.
- About half of the evaluations included a discussion of sustainability, but only 3 included a discussion of environmental sustainability.
- The financial analyses are poor throughout. None of the evaluations include an assessment of benefits and costs.

In part, the evaluations' lack of focus on environmental performance reflect insufficient attention to the environmental objective on the part of project management:

- None of the projects had either a functioning monitoring system or provided adequate indicators to measure environmental impacts.
- Although Sida requires that environmental impact assessments (EIAs) be carried out in all projects prior to implementation, this was done in only 3 cases.

Recommendations

The report points out a series of deficiencies in the project cycle that hamper a correct evaluation of project goal fulfilment with regard to the environmental objective. The authors suggest a number of ways in which these deficiencies may be redressed:

The Environment and Sida's Evaluations

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Sida Studies in Evaluation 96/4

- Evaluation ToRs should require, perhaps using a standard phrase, that an *ex post* EIA be carried out.
- Likewise, contracts with other actors implementing Sida-financed development cooperation (NGOs and international organizations) should include a standard clause requiring that *ex post* EIAs are carried out.
- An *ex post* EIA presupposes a cost-benefit analysis, which in turn presupposes an economic analysis. As financial data may be lacking due to practical constraints, there is a need to formulate guidelines on how to conduct an EIA with insufficient data.
- To allow correct evaluation of environmental performance, stricter rules regarding the implementation and use of EIAs, base-line studies and monitoring activities are needed for all phases in the project cycle. This applies especially to projects with a high environmental profile.
- In the case of environmentally relevant projects, a systematic collection of data on environmental effects prior to launching the full evaluation may be warranted. It is recommended that a few pilot studies be made to test the viability of this approach.
- Almost all 66 evaluations were methodologically weak. In order to develop appropriate approaches, Sida should consider inviting evaluators to discussions on ways of analysing environmental impact. Such discussions could provide a basis for formulating future guidelines.
- The implementation of these and other recommendations should be reviewed after a proper interval. One way of doing so would be to conduct a similar evaluation in a few years time. ■

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