Sida Evaluation 06/36

Health through Sanitation and Water Programme (HESAWA), Tanzania

Ex-post (Retrospective) Evaluation Study

Sanna-Leena Rautanen Osmo Seppäla Tauno Skyttä

Department for Natural Resources and Environment

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Abbreviations and Acronyms

AIDS	Acquired Immunisation Deficiency Syndrome
DAT	District Action Team
DDP	District Development Programme
DHC	District HESAWA Coordinator
DPT	District Promotion Team
DWE	District Water Engineer
DWO	District Water Office
DWST	District Water and Sanitation Team
EAC	East African Community
ESRF	Economic and Social Research Foundation
F	Female
GOT	Government of Tanzania
HBS	Household Budget Survey 2002
HES	Health and Environmental Sanitation
HESAWA	Health through Water and Sanitation
HDI	Human Development Index
HPI	Human Poverty Index
HIV	Human Immunodeficiency Virus
hh	Household
HQ	Headquarters
HRD	Human Resource Development
IFAD	International Food and Agricultural Development
IMF	International Monetary Fund
JAS	Joint Assistance Strategy
KfW	Kreditanstalt fur Wiederaufbau (German Development Bank for Reconstruction)
LAMP	Land Management Programme
LFA	Logical Framework Analysis
LGRP	Local Government Reform Programme
LVEMP	Lake Victoria Environmental Management Programme
LVRWSI	Lake Victoria Region Water and Sanitation Initiative
М	Male
MAJI	Ministry of Water (or Water Department)
MCDWC	Ministry of Community Development, Women Affairs and Children
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MKUKUTA	Mkakati wa Kukuza Uchumi na Kuondoa Umaskini Taifa (National Strategy for Growth and Reduction of Poverty)
MOH	Ministry of Health
MORALG	Ministry of Regional Administration and Local Government
MOWLD	Ministry of Water and Livestock Development

NBI	Nile Basin Initiative
NGO	Non Governmental Organisation
NORAD	Norwegian Agency for Development Cooperation
NRWDP	National Rural Water Development Program
NSGRP	National Strategy for Growth and Reduction of Poverty
NWP	National Water Policy
O&M	Operation and Maintenance
PA	Pump Attendant
PEDP	Primary Education Development Programme
POA	Plan of Action
PRA	Participatory Rural Appraisal
PRBS	Poverty Reduction Budget Support
PRS	Poverty Reduction Strategy
PRSP	Poverty Reduction Strategy Paper(s)
RIDEP	Rural Integrated Development Programme
RPISC	Regional Supervisory Committee
RWSS	Rural Water Supply and Sanitation
SHP	School Health Package
Sida	Swedish International Development Agency
SPSS	Statistical Package for Social Science
SWOT	Strengths, Weaknesses, Opportunities and Threats
TA	Technical Assistance
TANESA	Tanzania and Netherlands Project to Support HIV/AIDS Control in Mwanza Region
TASAF	Tanzania Social Action Fund
TBA	Traditional Birth Attendants
ToR	Terms of Reference
TZS	Tanzania Shilling
UDSM	University of Dar es Salaam
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNICEF	United Nations Children's Fund
URT	United Republic of Tanzania
USD	United States Dollar
VA	Village Animator
VHC	Village HESAWA Committee
VHW	Village Health Worker
VIP	Ventilated Improved Pit Latrine
WHO	World Health Organisation
WID	Women in Development
WSS	Water Supply and Sanitation
WUG	Water User Group
WUA	Water Users' Association

Preface and Acknowledgments

The Evaluation Team would like to extend its sincere thanks to all those who kindly shared their time and contributed to this evaluation study. In particular, our thanks go to the Sida officers in Stockholm, and the Embassy of Sweden in Dar es Salaam. Many Sida staff under the able leadership of Mr. Ingvar Andersson participated in review meetings and provided their comments at various stages of the assignment. In addition, Sida engaged some consultants, familiar with the HESAWA Programme, to review the draft report. The Team also interviewed a number of individuals who are prominent specialists on rural water and sanitation issues. The Team's specific thanks go to these consultants and individuals; their comments and views are much appreciated.

The Evaluation Team is grateful to a large number of HESAWA related stakeholders in the three regions of Mara, Mwanza and Kagera, including a range of people in the villages, districts and regions. Their assistance and input was invaluable for the successful execution of the study. The Team appreciates the effort of the Field Research Teams for their energy and dynamic attitude which ensured the completion of a rather extensive field work within a tight time frame. Also the Data Entry Team in Mwanza is acknowledged for their excellent work. Further thanks are extended to those who carried out additional case studies and desk studies, as well as those who kindly shared their time through interviews of key informants.

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Executive Summary

This external evaluation of the Ex-post (Retrospective) Evaluation of the Health through Sanitation and Water (HESAWA) Programme in the three Lake Zone Regions in Tanzania focuses on the sustainability and impacts three years after programme closing. Attention is also paid to human resource, environmental, institutional and financial aspects of HESAWA achievements. At the end, findings and conclusions of the study support the discussion on factors of success and failure. The purposes of the evaluation were, as spelled out in the Terms of Reference, to:

- assess the sustainability of results and impacts in terms of i) physical infrastructure and services rendered; and ii) organisational and managerial capacity, knowledge, empowerment and changes in behaviour and attitudes at the household, village and district levels;
- identify the factors of success or failure relating to the Programme and analyse why certain activities have succeeded and others have failed;
- on the basis of the assessments and analyses draw conclusions that may inform other interventions in rural and peri-urban areas in East Africa, in particular the Lake Victoria Basin.

The scope of the evaluation was to focus on the period after the phasing out of the Swedish support, i.e. the period from July 2002, but was also to link back to findings and recommendations of studies undertaken previously. In brief, the evaluation study was to:

- cover the current status of physical facilities;
- establish the extent of the programme activities to which HESAWA resulted in increased welfare, empowerment and lasting improvements in knowledge, attitudes (gender awareness), and organisation at different levels;
- analyse the preconditions for maintaining and expanding water and sanitation coverage with specific reference to conditions prevailing after programme completion, i.e. availability of financial and human resources, institutional factors, as well as the roles of community based organisations and private sector; and
- capture processes of change during programme implementation, i.e. learning from experience and adaptation to changing circumstances.

Primary field data for the evaluation was collected through consumer surveys in 36 villages in 6 districts in 3 regions bordering Lake Victoria. The village survey data was supplemented by the qualitative material obtained from various interviews and workshops with key informants at the district, regional and central levels in Tanzania, and with key informants in Sweden and other countries. Secondary data was collected through review of a number of documents, studies and other reference material relevant to HESAWA in various contexts.

HESAWA Programme was implemented in several phases from 1985 to 2002:

- Phase I (1985–91) (Experimental Phase)
- Phase II (1991–94) (Decentralisation to District Authorities)
- Phase III (1994–98) (Full Decentralisation)
- Phase IV (1998–2002) (Sustainability Phase)

HESAWA was a forerunner in applying, developing, testing and bringing real life substance for many concepts discussed internationally in the rural water and sanitation sector during the International Drinking Water Supply and Sanitation Decade in the 1980s. A number of studies and pilot exercises had been carried out in the past, and approaches such as integrating health, water and sanitation activities within a same rural development programme was not exactly a new concept. However, in the Lake Victoria Zone the concept was new, and to many local stakeholders in villages and districts, HESAWA was truly bringing in new ideas and opportunities. Cost sharing, gender equality, and Water User Groups (WUG) are examples of concepts that came up frequently in the interviews. HESAWA operated through annual reviews and as such, remained open for innovations and continuous learning.

Overall, the physical facilities stand a good chance to become *sustainable*. The financial assessment of sustainability is also linked with the progress made in cost recovery and technical improvements of the operation. The survey results show downward trend in these aspects since the programme completion and hence call for urgent attention. Especially, the cost recovery mechanism is not yet fully accepted and functional.

During HESAWA implementation and also after its phasing out there have been several other development interventions in rural and peri-urban areas of the Lake Zone. Thus, HESAWA did not operate in vacuum but in collaboration with these other programmes. Being a major intervention in the area with an integrated and multi-sectoral approach HESAWA was a forerunner having its implications to design and implementation of other programmes, be they funded by Sida or other development partners. HESAWA also had its important contributions and 'personal mark' on the National Water Policy developed in the 1990s as well as planning of the World Bank supported National Rural Water Development Program.

In brief, the following are HESAWA's main achievements and the Evaluation Team's findings on them:

Health: The overall health statistics in the Lake Zone show relatively good records of reduction in water related diseases. This can be largely merited on the HESAWA Programme, although in the study it was not possible to determine HESAWA-specific health impacts from the district-level health statistics. This would have required a carefully set village-level baseline study, because HESAWA did not operate in all villages, and there are a large number of households that still do not benefit from safe water and sanitation facilities. Furthermore, the health facilities and their capability to diagnose and report various illnesses have gradually improved over the years. Many other programmes besides HESAWA have been active with health issues. At the household and village levels people reported that HESAWA had indeed improved the health of their families.

Sanitation: Another key operational goal was to improve sanitation in the HESAWA regions and it was mainly focused through latrine construction. Sanitation was an integral aspect of HESAWA from the beginning, but gained real momentum only later on. The number of physical sanitation facilities constructed does not appear impressive when compared to the total number of households without latrines. There were rather large district-wise differences in achieving sanitation targets. The main aim was not, however, in quantitative targets, but rather in creating awareness and building skills. In this respect HESAWA succeeded even if inadequate access to water was seen to undermine the hygiene practices at the household level. Increase in sanitation coverage and households' own initiatives to improve their sanitation facilities remained lower than expected, despite the positive improvements in hygiene awareness.

Water supply: Similarly to sanitation, HESAWA did not set quantitative targets for water supply coverage, but rather aimed at the reliability and the long-term sustainability of services. This was to be further enhanced through the rehabilitation of existing traditional sources. The Programme strongly emphasised the establishment and role of WUGs as operators of the new and rehabilitated service facilities. WUGs were also envisaged to shoulder the responsibility of sufficient cost recovery to ensure adequate

maintenance and up-keep of the facilities in the future. The findings of this evaluation reveal that slightly more than half of the water supply facilities completed and rehabilitated under HESAWA were fully functioning in October 2005. Another, about one third of the facilities was partially functioning, thus leaving nearly one out of five water points either completely out of order or under repair at the time of this study. Those users with fully functional water point receive the expected level of service in terms of quantity and quality of water, but the rest of the population have, to a varying degree, less than satisfactory service.

During Phase IV HESAWA implemented an extensive 'rectification exercise' to rehabilitate and maintain the non-operational water supply facilities. The rehabilitation programme was much needed and helped maintain the already achieved coverage level, but it was mostly focused on fully non-operational facilities only. Thus, soon after phasing out several other facilities (already in need of rehabilitation during the rectification exercise) became non-operational and lowered coverage again.

Poverty and livelihoods: Poverty is the core focus of action for both Swedish and Tanzanian stakeholders. The goals for poverty alleviation as such, specifically identified, were not set in the long-term or short-term objectives, and neither in the outputs as expressed in the Plan of Action Phase IV. As a matter of fact poverty was hardly discussed in various reports and studies until a rather controversial Tanzanian study questioned whether HESAWA really was benefiting the poor, and more to it, poor women. Livelihoods problem remains and relates to the inadequate amount of water available. Improved health was acknowledged, and it could have given an opportunity for further productive activities. Yet, the lack of water had not made it possible to undertake economic activities which could have up lifted the poor households and could have further helped to improve the nutrition in the family. Two buckets per household per day do little to assist in productive uses of water. The villagers acknowledged that this was not even enough to maintain the cleanliness of their households and personal hygiene. It appears that HESAWA was not effective in poverty alleviation when it comes to livelihoods.

Good governance and capacity building: HESAWA emphasised local participation in all its activities. In reality implementation of HESAWA was rather top-down during its first phases but became more bottom-up during Phase III and IV. The concept of WUGs was one of the turning points in participatory approach. In general, the entire HESAWA's working model with Village Governments and grass-root level involvement was impressive. Governance and institutional capacity of village level organisations varied a lot, depending on the competence of the local leadership. Involvement of regional and district level stakeholders was a mixed success. Although HESAWA invested a lot in capacity building at the regional and district levels, the long-term impacts remained modest. The seeds of improved managerial and implementation capacity were laid, however, and with the ongoing extensive Local Government Reform Programme capacity building efforts the HESAWA impacts in district level organisations can be revived.

HESAWA management and implementation in the Lake Zone was considered fairly transparent and in general the principles of good governance materialised adequately well at the Programme implementation level. Financial management systems were regularly audited and no mismanagement was observed at the programme office level. On the contrary, cases of mismanagement and misuse of funds were encountered in the Ministry and Government of Tanzania (GOT) offices at various levels, although regular audits were not carried out in these. The lead GOT Ministry in charge of HESAWA was the Ministry of Community Development, Women Affairs and Children.

HESAWA has been criticised for its implementation being based on institutional structures largely parallel to the established government institutional framework although majority of the managerial local staff were actually GOT civil servants in regional and district offices. The commitment of central government was for most of the HESAWA period rather low as a result of unclear lines of responsibilities, thus causing unnecessary friction in programme implementation. In that respect, the choice of

creating a 'parallel structure' may have been largely justified. Decentralisation of GOT management and support to district level came fairly late. In addition, the district level organisations have traditionally been fairly weak in Tanzania. Currently there are efforts ongoing to strengthen local government authorities, especially District Councils, which raises hopes for improved institutional capacity at the local level also for health, sanitation and water interventions.

Women and gender mainstreaming: HESAWA was a forerunner in gender mainstreaming at the community development programmes and water sector particularly. Gender mainstreaming done through a water programme constitutes only a fragment of the many factors that shape, change, or perpetuate the socio-economic, historical, cultural, and political relations between men and women. Gender equality requires more changes in a society than those that a water and sanitation programme can bring about. Anyway, many water and sanitation programmes provide a number of encouraging examples, and so does HESAWA. Many women, both in group and individual interviews, recommended that womenfocused programmes should be encouraged in the future, which is calling for an opportunity to show that also women can plan and implement programmes.

Sustainability: About half of the water supply installations in sampled WUGs functioned satisfactorily three years after programme closing, but almost one fifth of them were completely out of order. This implies a rather bleak prospect for long-term sustainability of the investments made during the Programme. However, it should be emphasised that there are some clear reasons for the alarming situation. More extensive capacity building support for the WUGs – including establishment of WUAs – started fairly late during the Phase IV and did not have enough time to gain adequate ground for long-term sustainability.

Based on the evaluation field survey, about half of the households are willing to financially contribute to O&M of their water system on a regular basis, and only about one third of the households had fully paid their charges. In most cases the reason for low willingness to pay relates to inadequate or unreliable water supply, but there are also other reasons including genuine poverty. The prospects of economic and financial sustainability of the WUGs and water systems are still fairly discouraging. Stakeholders' contributions changed and evolved over time. In the early stages of HESAWA donor funding was over 75 per cent while the Tanzanian government and beneficiaries' share was below 25 per cent including in-kind contributions. Towards the end of the programme the shares were significantly different although Sida's share was still rather high with a view to forthcoming withdrawal from funding.

Relevance: HESAWA was undoubtedly a relevant intervention for the primary stakeholders' priorities and existing needs, as well as for the objectives of Swedish development cooperation. Although HESAWA did not initially have very specific poverty reduction approach, the Programme components were relevant in addressing the needs of the poor at least to the same degree as the needs of the general population. The conceptual design of HESAWA as a dynamic *"plan of action"* was well in line with the various national policies related to water, health, and gender. HESAWA was already in its time clearly contributing to the achievement of MDGs and was thus well in line with Tanzania's current poverty reduction objectives. Nowadays an important goal of the Swedish development cooperation is *"creating conditions that will enable the poor to improve their lives"*.

Another goal was "to apply technical and administrative solutions that facilitate local participation and minimize costs for $O \oslash M$ ". Participation was a firmly established code of practice already at the onset of HESAWA. As the field survey results show this goal was highly relevant, with about 90 per cent of the households contributed towards the construction of their water point. During the 16-years of programme implementation, a number of political and economic changes in Tanzania were witnessed. With its dynamic approach, the Programme managed to remain responsive to the changing situations at all levels and was consistent with its attempt to address the needs and priorities of its target groups. The designs of the components under various activities are assessed as largely relevant considering the conditions in the programme area and are responsive to the overall development goals. They enable efficient operation at the village level as well as provide possibilities for instance for effective cost recovery for the upkeep of the new and improved water supply facilities.

Effectiveness: It should be remembered that the programme planning was initially not based on rigid work plans and logframes but rather on Annual Reviews. Thus, when assessing the HESAWA's effectiveness it is not possible to make a clear-cut comparison between achievements and set objectives. In this evaluation, the efficiency of water supply installations is assessed by using cost effectiveness as a proxy. The starting point for efficiency of implementation in the HESAWA Programme was the fact that all facilities to be constructed were selected on the basis of appropriate technology and as least cost solutions. At the end, the total project costs of the Programme were reported at TZS 80 billion (at 2002 rates), equivalent to SEK 182 million. Technical Assistance and other support measures took 76 per cent of total programme costs, regional and district interventions took 21 per cent, and local counterpart funds 3 per cent of total costs. Overall, TA in HESAWA is assessed as *reasonably effective*.

The estimated average cost of implementing water supply facilities was about USD 50 per capita. Compared against cost information of other similar RWSS programmes, this is a quite reasonable cost level as it includes the total costs of facility construction as well as all TA and other support costs. Thus, it can be concluded that HESAWA programme implementation was efficient and per capita costs reasonable in comparison to other programmes. HESAWA constructed more than 6,400 water points over a geographically large and varied area. The achievements of the water supply activities (and components) are within the specified development goals and significant, as about one third of the total population of the three regions received new or improved water supply service. The village survey reveals that the overall water point utilization rate was at 77 per cent at the time of the evaluation study. The access to safe water and coverage are still low and vary widely between the districts. The ability and willingness to maintain these facilities is equally varied. Overall, it is concluded that the *effectiveness* of the water supply activities is *satisfactory* as nearly all targets have been achieved.

HESAWA made commendable efforts in capacity building and strengthening at all levels in human resource development and gradual decentralisation through handing over more responsibilities to the districts, villages and the WUGs. This consisted of: (i) overall human resource development, (ii) legislative support for management at the village level, (iii) improving managerial capacities at the village and other levels, (iv) imparting technical skills to the grassroots level, and (v) increasing gender awareness at all levels. To a large extent these HRD activities were successful and appreciated at the time. Technical training benefited a large number of local level *fundis*, but did not result in expected level of establishment of local private sector capacity in the long term. The concept of *"private sector"* evolved over the years as part of the dynamic HESAWA process, having been still relatively unpopular in Tanzania in general in the 1980s. Despite positive headway in some areas of developing private sector capacity the overall conclusion is that effectiveness of capacity development for the private sector participation in water supply maintenance function was fairly low.

HESAWA provided substantial technical and logistical support to districts and villages, with an aim of *"gradually transferring the responsibility from the government to the consumers (villages)"*. HESAWA brought in the concept of WUGs having first worked through Village HESAWA Committees and their sub-committees. WUGs have been a successful concept, although their registration as legal entities has been slower than anticipated. Over the 16 years HESAWA did not *gradually* transfer the responsibilities, but the changes could rather be described as incremental and concentrated towards the end of the programme, the time running out at the end.

Lessons learned, successes and failures: HESAWA provides a good number of success stories and positive experiences to be shared. Unfortunately failures and less successful processes were also discovered. Key factors for *success* and examples of innovative approaches include the following:

- Dynamic learning-by-doing process and culture used in the entire HESAWA Programme encouraged innovativeness and was receptive to new ideas.
- HESAWA implementation was dynamic to changes: it was well controlled by Annual Reviews, and responsive to changing environment.
- HESAWA's multi-sectoral and integrated approach was novel and innovative ahead of other programmes in the 1980s.
- HESAWA approach aimed at participatory implementation.
- HESAWA was a forerunner in operationalising decentralisation.
- Massive HRD and capacity building efforts were largely successful although not quite equally focused at various levels.
- Introduction of Water User Groups was a fundamental change that opened up the avenue for community management and potential for sustainability.
- School health packages enhanced hygiene awareness.
- Use of local consultants was among the most positive experiences of private sector involvement.

Areas where HESAWA interventions had difficulties to materialise its objectives include the following:

- The flexible programme planning and steering processes in their part also downplayed efficient implementation and distorted focus.
- The multi-sectoral approach was partly a burden since it was difficult to focus efforts in implementation and thus achievements remained low.
- Central government commitment was inadequate as a result of unclear lines of responsibilities, causing unnecessary friction in implementation.
- HESAWA Programme area was too vast it would have been better to focus on a fewer districts.
- HESAWA lacked specific environmental and poverty approaches.
- HESAWA was implemented largely following institutional structures parallel to the established government structure causing some confusion in implementation priorities (although majority of the managerial local staff were actually civil servants in regional and district offices).
- Mismanagement and misuse of funds occurred at all levels, especially after flow of funds was 'nationalised' and decentralised.
- Capacity building impacts especially at the regional level remained low, and district level stakeholders were involved late.
- Cost recovery was not adequately developed and was initiated late.
- Sanitation coverage remained low despite increased hygiene awareness.
- Private sector role and use of its capacity did not adequately emerge in most areas.
- Productive uses of water as a means of poverty alleviation were not adequately promoted.
- Rehabilitation: failure in the sense that it was started 'too late' and focused only on those systems which had already collapsed? Soon after HESAWA, more systems in need of rehabilitation collapsed.

• Quality control systems in implementation were inadequate to cope with large area covered and complexity of activities. Technical failures included shallow wells drying up during the dry season and high number of stolen hand pumps in some districts.

Recommendations

The following key recommendations are presented for *household and village level* action:

- Water *and* sanitation service is a local issue, and the motivation to improve these services is likely to be highest at the village level. Expanding the HESAWA initiated process of establishing WUGs and further transforming them to WUAs requires strengthening the capacity of the Village Governments as an essential next step in the decentralisation process.
- The concept of sanitation should be broadened to environmental sanitation, which would entail solid waste management, drainage, ecological and dry sanitation, and vector control. Dynamic approach is needed as not all is relevant in all places. In a typical rural village for instance solid waste disposal is not yet a felt problem, whereas malaria continues to be a severely felt problem.
- In any future RWSS intervention, a strong piloting component should be included to draw on the successful learning-by-doing legacy of HESAWA.

The following key recommendations are presented for *national and regional level* action, whether at the policy level or in the context of overall rural development:

- The principles of good governance should be operationalised, institutionalised and enforced in connection with the on-going local government reform process. This applies to all levels, and calls for tangible actions. To capture the benefit of the HESAWA experience immediate actions at the district and village levels would be most desirable.
- Capacity building activities should aim at institutionalising good practices and continuity in the skills development. Rather than aiming at impressive number of training courses and participants, future HRD programmes should pay attention to qualitative changes and sustainability. Pro-poor and gender-sensitive approaches should be emphasised.
- Develop tools for monitoring and decision making. Reliable baseline and measurable follow up indicators are needed. It is recommended that Tanzania's development partners participate actively in the dialogue to establish reliable and transparent monitoring systems.
- Programme design should have strong institutional focus and cover long-term design horizon, and should cater for demand of various service levels and specific social characteristics of user communities. Programme financing plan should include efficiency goals, a step-wise cost recovery programme, and necessary procedures for their implementation.
- Encourage the work on the national sanitation policy with a broad enough scope entailing environmental and ecological sanitation should be encouraged and translated into action. Sida has experience in this field and should actively seek to contribute into this.
- Ensure that gender mainstreaming should be continued, and related indicators should be built into the JAS and programme plans. Gender mainstreaming is a cross-sectoral issue which should not be left only to "gender sector".
- Advocate inclusion of water supply and environmental sanitation related improvements into HIV/ AIDS programmes, and generally systematically advocate the importance of safe and reliable water supply and environmental sanitation for both HIV/AIDS affected and non-affected people.

- The past programme interventions in general have been too isolated and poorly coordinated. The recent trends also in Tanzania indicate a genuine drive towards sector-wide approaches. The positive experiences and achievements of HESAWA in the Lake Zone should be utilised in further development of national and sector-wide programmes such as the National Rural Water Development Program. Interaction and cooperation between donor programmes needs to be improved.
- Several regional initiatives have recently been implemented or are under preparation in the Lake Victoria Basin and/or the Nile Basin area. Some of these initiatives include components and interventions in the health, water and sanitation sectors, and could therefore strongly build on the HESAWA experiences. In addition to regional programmes, similar water and sanitation sector support programmes have been implemented in all three Lake Victoria countries (Tanzania, Kenya and Uganda). Sida in cooperation with other participating development partners could work towards a series of workshops or other events in which the experiences and lessons from these programmes could be shared in depth.
- Poverty alleviation goals have to be more clearly spelled out and operationalised in the future water sector programmes and policies. Water sector has great potential in bringing about real changes in peoples' health and livelihoods, and thus, directly address poverty. Yet, it is crucial that the progress is also adequately monitored.

The following key recommendations are presented for Sida:

- Sida's support to "HESAWA sectors" (water and sanitation, and health) should still be extended to novel formats of co-operation. Sida's ongoing experiences from supporting the water sector reform and rural WSS development in Kenya could be adopted also in Tanzania. The current move to a sector-wide approach e.g. through the World Bank support to rural WSS development is likely to provide relevant opportunities for co-financing.
- The Swedish support for the international Nile Basin Initiative (NBI) will also be directed at the Lake Victoria Region, which should give some direction regarding the focus of future interventions. With all respect to initiatives to poverty reduction, continued and/or restructured support to multisectoral development initiatives in the Lake Victoria Zone could yet be seen as a recommendable future strategy, knowing the ground work and already achieved impacts of the HESAWA Programme and other interlinked initiatives in the region.
- New interventions, such as "HESAWA-like" innovative capacity building programmes should be gradually scaled to cope with the local capacity in order to facilitate appropriate promotion, testing, adjusting and gradual expansion of ideas and activities. It would be beneficial to organise occasional evaluative workshops on interesting programmes/projects (at mid-term, completion) to enhance and broaden the learning-by-doing process among sector professionals.
- It is strongly recommended that Sida should always include cost recovery issues in its policy and strategic dialogue with partner countries.
- Decentralisation process and local government reform could open new windows of opportunity for continuing water and sanitation work even when water or natural resources are not amongst the focus sectors of Swedish development cooperation.

1. Introduction

1.1 Purpose of the HESAWA Evaluation

The rationale of the evaluation of the Ex-post (Retrospective) Evaluation of the Health through Sanitation and Water (HESAWA) Programme in Tanzania is to assess the sustainability and impacts as well as factors of success and failure three years after closing HESAWA. Sustainability is a key crosscutting theme, and attention is paid to human, environmental, institutional and financial aspects of HESAWA achievements. The purposes of the evaluation are stipulated in the Terms of Reference (ToR), attached as Annex 1.

The intended users of the evaluation are government and non-government actors in Tanzania and the Lake Victoria Basin, who are involved in long-term poverty reduction efforts through participatory approaches, which are based on locally affordable and manageable technologies, gender equality, democratic working principles and the promotion of human rights; and Sida, as a contribution to its learning process on how to operationalise the poverty reduction objective of Swedish development cooperation a) at the level of overall policy and development of methods; and b) at the level of Swedish contributions to development programmes in East Africa in particular.¹

The methodology is explained in Annex 2, literature references in Annex 3, people met and interviewed in Annex 4 and Field Research Teams in Annex 5. Annex 6 gives an outcome from a meeting with a successful Water Users' Association and a women's group. Annex 7 represents the regional health statistics collected in October 2005. Annex 8 presents the scenarios constructed during the futures workshops with the regional and district-level stakeholders in Kagera Region. The Communication Plan in Annex 9 is an integral part of the evaluation outcome aiming at efficient dissemination of the evaluation findings.

1.2 Evaluation Questions

Sustainability and impacts of the achievements of the HESAWA Programme are the main focus of this evaluation. In addition to the sustainability, the ToR specifies the following according to the assessment criteria given by Sida: 2

- *Relevance*, with emphasis on the Programme's role in poverty reduction, in particular its contributions in terms of the main objective of Swedish development cooperation, viz. 'creating conditions that will enable the poor to improve their lives.
- *Effectiveness* and *efficiency*, with particular emphasis on the extent to which the Programme's objectives were achieved and the extent to which the implementation strategy represented a cost-effective way of reaching the objectives under the prevailing circumstances and given possible alternatives.
- *Feasibility*, with particular emphasis on the institutional environment and the capacity, resources and will for successful implementation, including efficient and transparent resource management, among the implementing parties.
- *The quality of the development cooperation* framework, with particular emphasis on the strengths and weaknesses in HESAWA's relations to, and coordination with, other development initiatives (Government and non-government ones) in the Programme area. Were appropriate consultative mechanisms in place to ensure adjustment of Programme activities in response to changing conditions?

¹ ToR 1.

² ToR 4.1 & Sida 2004a

• *Risks and risk management,* with particular emphasis on the adequacy and timeliness of Programme reactions to observed risks.

The ToR suggests assessment of the following changes and impacts on the basis of historical data and primary data collected "that could reasonably be attributed to HESAWA" with regards to:³

- the *wealth* status, especially among disadvantaged groups, at the household, village and district levels;
- the *health* status, especially among disadvantaged groups, at the household, village and districts levels, as well as at school and health facilities;
- *water and sanitation practices* at the household, village and districts levels, as well as at school and health facilities;
- *democratic working procedures* in civil and governmental organisations/ institutions at village and district levels;
- *the capability and capacity of village and district institutions* to deliver services that are in demand by the population in the Programme area;
- *the capability and capacity of the private sector* (formal as well as informal) to deliver services that are in demand by the population in the Programme area.

Specific evaluation outputs are to: ⁴

- establish the current status of physical facilities that were supported through the Programme, including both water supply and sanitation facilities;
- establish the extent to which the physical investments, combined with training and promotion activities, have resulted in increased welfare, empowerment and lasting improvements in knowledge, attitudes (in particular gender awareness) and organisation at different levels;
- analyse the preconditions for maintaining and, preferably, expanding the water and sanitation coverage under the conditions that prevail after the phasing out of Swedish support. In the latter respect, special emphasis should be given to the availability of financial and human resources, as well as institutional factors that facilitate or impede the upkeep and/or expansion of the facilities. The roles of community-based organisations and the private sector should be observed in particular;
- try to capture processes of change (relating to objectives/ outcomes/ targets, implementation
 approaches and working methods) during the Programme period. In other words, the evaluation
 should capture how Sida and other key actors have learnt from experience and adapted to changing
 circumstances.

This evaluation was also about *aid effectiveness and aid modalities*, and about institutional development, democracy and human rights, and pro-poor development. The first-hand evidence from the field is valuable for further improvements in policy implementation and ways of operationalisation of development principles.

1.3 Areas of Prioritisation

HESAWA was a complex multi-dimensional programme which necessitated a participatory, evidencebased, dynamic and futures oriented approach. Its activities and beneficiaries were numerous, and consequently the impacts are similarly diverse and multilayered. Sustainable livelihoods (SL) framework

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³ ToR 4.3.1 to 4.3.6

⁴ ToR 2.4

is used in this evaluation to sketch a holistic picture of HESAWA for impact and sustainability analysis. The study draws attention to core impacts and processes, emphasising that multiple interactions exist between the various factors, actors and impacts. Working within a sustainable livelihoods framework the study aims to clarify underlying factors affecting the present situation, highlight unintended consequences (positive and negative), recommend actions to improve performance in future programming, and generate lessons learned in a holistic manner. In this framework, the key cross-cutting themes are *poverty and sustainability*.

Poverty is the main development challenge in Tanzania with 48 per cent of the population living below the basic needs poverty line. The regional differences are clear in many respects as can be seen from the Figures 1 to 3 later on. It has also been acknowledged that most poverty in Tanzania is rural, and rural poverty is deeper. At last count, of all poor households no less than 92 per cent lived in rural areas. The incidence of poverty was around twice as high in rural areas than in urban areas, excluding Dar es Salaam, and many times the incidence in Dar es Salaam itself.⁵ Poverty is also a gender and human right issue. In the Country Strategy for 2001–2005, Swedish development co-operation focussed on three areas: pro-poor growth, human resource development and democratic development.

Sustainability is another cross-cutting theme and an area of specific attention. In the context of development programmes, sustainability refers to "an assessment of the likelihood of benefits produced by a project to continue to flow after external funding has ended, and with particular reference to factors of ownership by beneficiaries, policy support, economic and financial factors, socio-cultural aspects, gender equality, appropriate technology, environmental aspects, and institutional and management capacity."⁶ Unsustainable systems deplete or run down capital, spending assets as if they were income, and so leaving less for future generations. Sustainability has many dimensions. The following example is taken from the sustainable livelihoods approach. Livelihoods are sustainable when they: ⁷

- are resilient in the face of external shocks and stresses;
- are not dependent upon external support (or if they are, this support itself should be economically and institutionally sustainable);
- maintain the long-term productivity of natural resources; and
- do not undermine the livelihoods of, or compromise the livelihood options open to, others.

Sida recognises genuine ownership by the cooperation partner as one of the key conditions for success in development work. Without ownership, progress and impact will be limited almost no matter what resources are made available. Sida strongly advocates that *"ownership issues must be taken seriously at all stages, from strategic work to contribution management.*"⁸ Sense of ownership is crucial for sustainability. This is also relevant in Tanzania. For instance Catterson and Lindahl (1990) in their review of the sustainability of 12 development projects supported by Sida in Tanzania continually refer how unsustainable projects had problems with ownership. Ostrom et al (2002) are critical of infrastructure evaluations for paying more attention to the "survival" of the physical structures than "survival" of the institutions which are supposed to take care of them. HESAWA Mid-Term Review 1997 stands out as exemplary case having considered participation and the issue of village/user ownership.⁹ In HESAWA ownership issues gained momentum towards the end although this was one of the key policy issues agreed from the very beginning.

⁵ Cooksey, 1994; World Bank, 1996, in: Overseas Development Institute. 2000.

⁶ European Commission. 2004. p. 49

⁷ Sustainable Livelihoods Guidance Sheets, Overview 1.1. Department for International Development, UK

⁸ Sida at Work, *op.cit.* p. 39.

⁹ Ostrom, E., Gibson, C., Shivakumar, S. and Andersson, K. 2002. Aid, incentives and sustainability. An institutional analysis of development cooperation. Main Report. Workshop in Political Theory and Policy Analysis, Indiana University, Sida Studies in Evaluation 02/01. Sida, Stockholm. p.153

Poverty reduction and sustainability are not possible without empowerment of the primary stakeholders, the poor themselves included. Empowerment is an important aspect of sustainable livelihoods and human development. This evaluation focuses on the empowerment of the various local stakeholders and individuals in the HESAWA programme area to sustain the facilities and approaches developed. United Nations Development Programme (UNDP) defines empowerment as something that "build's people's assets and capacity to gain understanding and control over personal, social, economic and political forces to act individually as well as collectively to make choices about the way they want to be and do things in their best interest to improve their life situation"¹⁰

Two more definitions related to the priority areas are increased welfare and lasting positive change. In this evaluation study welfare is seen as the respondents' subjective assessment of their own or their village's well-being. Aspects on well-being include such as health, education, access to safe water and sanitation facilities, and housing. Lasting improvements in knowledge, attitudes (in particular gender awareness) and organisation at different levels is a dimension of sustainability which has to be discussed with caution: nothing remains as it was. Real life systems are complex webs of causal relationships, and as time goes by and knowledge increases, even the understanding of what is sustainable changes.

1.4 Scope, Methodology and Limitations

HESAWA Programme was active in a large geographical area in numerous places. Therefore, the selection of the most representative cross-section of activities and people to be re-visited was a challenging task. There was a vast number of potential information elements, and multiple data sources for both primary and secondary data. The methodology used in the evaluation included the following:

- *Observations* done by the Field Research Team supervisors, interviewers, and the Core Team members during the field visits.
- Focus group discussions among Water Users Groups, women's groups, district and regional officers.
- In depth discussions with the district, regional and central level key informants.
- *Participatory futures workshop* utilising futures research tools to capture the changes from the past to present and suggest scenarios for the future.
- Structured interviews among selected households and schools and Health Posts.
- Semi-structured interviews among the Village Governments and Water Users Groups.

The field data was arranged and analysed using the Statistical Package for Social Science (SPSS) computer program. The methodology is further elaborated in Annex 2. The ToR suggested that 36 villages in six districts should have been covered. This evaluation chose to focus on the following districts: Karagwe District and Bukoba Rural District in Kagera Region, Kwimba District and Mwanza Municipality in Mwanza Region, and Bunda Rural District and Serengeti District in Mara Region. The Field Research Teams collected new primary data from 36 villages. The core evaluation team visited additional locations such as Kemondo gravity scheme and Juhudi women group in Bukoba rural district, and other women groups in Bunda district.

The evaluation was started in the beginning of October 2005 (later than anticipated) and Tanzania's general elections were scheduled to take place on the 30th October 2005. Consequently, the field work had to be completed within a very tight timeframe to avoid interference caused by the political rallying and other election activities in the study area. As a result of an intensive planning meeting with the local Field Research Team supervisors and interviewers, it was envisaged to complete the field research phase in ten days, at the maximum. The Field Research Teams were trained and immediately mobi-

¹⁰ UNDP 2003b in: UNDP 2004

lised to complete their task within this timeframe. To make this possible, the household sample size was modified to allow for a one-village-per-day progress without compromising the quality of the data. The Field Research Teams completed their tasks in the given timeframe; this achievement stands out as an example of the commitment created through a participatory approach to action planning. The data was entered to the Statistical Package for Social Science (SPSS) by the local Data Entry Team in Mwanza for further analysis.

Despite time limitations, the Field Research Teams managed to obtain representative primary data to support the findings gleaned from literature reviews, focus group discussions, workshops and interviews. The scope of the primary data collection covered 36 villages in six districts as defined in the ToR, as well as the key informant interviews and workshops at the village, district, regional and central levels. The number of household surveys (722) is statistically relevant at the district level and the number of villages, statistically acceptable at the Regional level.

The evaluation field research sample size¹¹ compares favourably with similar evaluation and impact studies done elsewhere. The statistical significance of the field research data is, however, indicative. The key justification for the representative validity of the data is the *random selection of sample*.

A workshop was arranged in Dar es Salaam in May 2006 to discuss the evaluation draft report and to collect further views of people who had been closely involved in the HESAWA Programme. There were altogether 20 participants in this workshop (Annex 4).

2 The Evaluated Intervention

2.1 Tanzania Country Context – the Three Phases of Development

The United Republic of Tanzania is the largest country in East Africa in terms of land area. The population has grown from about 26 million in 1990 to 36 million in 2002.¹² Tanzania's post-independence economic history is typically divided into three distinct phases. The first phase (1961 to 1986) is characterised by state socialism, the second phase (1986 to 1995) by structural adjustments, and the third phase (1995 to the present) by renewed macroeconomic reforms.¹³

The first phase witnessed post-independence state socialism in Tanzania, known as *Ujamaa*. It was formally launched in 1967 with the Arusha Declaration which stated that all major means of production and exchange were to be owned by the peasants and workers through their government. It effectively nationalised many capital assets, and during this period, the country operated a centrally planned command economy. The ruling party, the state and government institutions operated as a single intertwined vertical entity and controlled both prices and the distribution of all-essential goods and services. Many basic services such as health, education, agricultural extension and water were delivered free of charge or at subsided prices. At the same time the economy suffered from external shocks such as accelerating oil prices, the collapse of commodity prices, droughts, the break-up of the East African Community and the Ugandan war. A severe economic crisis culminated in the early 1980s, and eventually *Ujamaa* was ended in 1986 with the signing of an International Monetary Fund (IMF)/World Bank Structural Adjustment Programme.¹⁴

¹¹ 36 villages out of about 1,120 total, 722 households out of about 482,000 total and 35 WUGs out of about 5,760 total.

¹² WHO/UNICEF - Country, regional and global estimates on water and sanitation

¹³ ESRF April 2000, in King, K. and Kirjavainen, L. 2000. pp 4–10

¹⁴ *ibid*.

The second phase of development was marked by an externally supervised economy where economic and public sector reforms were implemented to dismantle the state-controlled economy and replace it with a market economy. At this time, user fees, cost sharing and co-financing on health, education and water was introduced. Yet, it is claimed that *"rather than improvement, these changes brought profound deterioration in health and education services delivery.*"¹⁵ Furthermore, basic needs poverty levels rose significantly in mainland Tanzania to just below 53 per cent of the population. Also serious policy differences between donors and the Tanzanian government emerged, and in 1995 the IMF and World Bank decided to withdraw support to the country. This was immediately resolved and led to the third and ongoing development phase.

The third phase witnessed massive public expenditure cuts. Macro-economic stability set in, with inflation dropping from 30 per cent in 1995 to 6.6 per cent in early 2000. The Government moved to a cash budgeting system which brought public sector finances under the strict control of the Treasury and Bank of Tanzania. Yet, it is claimed that *"the stringent fiscal regime however left public services with virtually no funds for development while access to loan capital for major infrastructure investment is tightly regulated and rationed."* ¹⁶ Public and Local Government Reform was implemented, which meant rationalisation, streamlining and decentralisation of functions, structures and staff. With this new budgeting and financial management systems were set up to both central and local government to enable better tracking of public expenditure.

The cooperation between Tanzania and Sweden dates back more than 40 years and Tanzania is now one of the main recipients of Swedish support. The overall objective of all interventions is poverty alleviation. This is guided by the Tanzanian Poverty Reduction Strategy (PRS) which lays out the issues to be given priority in all poverty reduction efforts. The new National Strategy for Growth and Reduction of Poverty is a five-year plan that focuses mainly on economic growth and result orientation, which should permeate activities in all sectors. The keyword of cooperation between Sweden and Tanzania is partnership, which implies that Tanzania is responsible for its own development and decides on which initiatives should be prioritised.¹⁷ Sweden is making its Country Strategy for Development Cooperation with Tanzania on a five year basis.¹⁸

The Government of Tanzania has since the mid-2004 led the process to develop a Tanzania Joint Assistance Strategy. This is set in the global context of the Rome and Paris Declarations on aid effectiveness. It is intended to deepen the impact of the relationship between Tanzania and its many development partners. The JAS "aims to embed fundamental principles that strengthen national ownership of the development process, and harmonise donor and government processes and procedures in ways that make aid more effective, and simpler to manage."¹⁹

2.2 Rural Water Supply and Sanitation in the National Context

Goal 7 of the Millennium Development Goals (MDG) in Tanzania aims at expanding the access to safe water in rural areas from 49 per cent in 2000 to 85 per cent by 2010. Tanzania's 2025 Development Vision goes further aiming at achieving a high quality livelihood for its people, with universal access to safe water as one of its specific targets. The revised National Water Policy (NWP) was launched in 2003 to respond to the changing circumstances. Its *Section II Rural Water Supply* states that about 80 per cent of Tanzania's population live in the rural areas, and only about half of them have access to a reliable water source. However, about one third of these facilities are not functioning properly. ²⁰ The coverage

¹⁵ *ibid*.

¹⁶ *ibid*.

 $^{^{\}rm 17}$ Sida at www.Sida.se

¹⁸ Sida. 2000b. Country Strategy for Development Cooperation. Tanzania. 1 January 2001 – 31 December 2005.

¹⁹ Embassy of Sweden. 2005. Sida Country Report 2004 Tanzania. Department for Africa, Sida, May 2005. 36 p

²⁰ Ministry of Water and Livestock Development. 2003. National Water Policy, July 2002. The United Republic of Tanzania. Internet version. p.32–36.

figures for water supply and sanitation vary. For instance, recent WHO/UNICEF data shows that the coverage of rural water supply has grown from 27 per cent in 1990 to 62 per cent in 2002. The corresponding figures for rural sanitation show a decrease from 45 per cent in 1990 to 41 per cent in 2002. These figures compare favourably with the other developing regions globally and Sub-Saharan Africa more specifically.²¹

The NWP framework strategies and financial planning are embedded in the 2025 Development Vision and the PRS papers. The water sector is one of the priority sectors in the Tanzanian poverty reduction strategy. The PRS paper for 2000 recognised the role of safe water under the main heading "B: Human Capabilities, Survival and Well-being", and its sub-chapter b) Health, where by the following are listed within actions to reach the set goals for health: "Rehabilitation of malfunctioning water supply schemes, protection of water sources, and some expansion of new schemes (to be determined by local communities); and Raising the proportion of the rural population that has access to safe and clean water."²² Under Chapter VI: Monitoring and Evaluation of the PRS, the main indicator for water and sanitation is given as the proportion of households with access to safe drinking water in rural and urban areas.

In the PRS Progress Report for 2000/01, the Ministry of Water and Livestock Development (MOWLD) had revised the NWP and developed a vision, building up on the goals of the original PRS with an immediate goal to raise the proportion of the rural population with access to safe and clean water to 53 per cent in 2004. In addition, it aimed at reinforcing involvement of local communities and the private sector in developing water resources.²³ The lack of accessible, good quality water was also recognised as one of the six major problem areas related to the environment. The third PRS Progress Report (in 2003) noted that distinct effort had been made in improving "*delivery of social services such as education, health and water.*"²⁴ The report has a different coverage target compared to earlier PRS Progress Reports, i.e. a target of achieving 55 per cent water supply coverage for the rural population by 2003. It also boldly states that "*no specific targets for sanitation were set.*" ²⁵

The same report reviewed the implementation status, and acknowledged the contribution made by HESAWA: "Completion of impact evaluation of the Health through Sanitation and Water Project (HESAWA) that covered 17 districts in three regions (five in Kagera, eight in Mwanza and four in Mara). The project serves 3,248,000 rural inhabitants. This coverage is equivalent to 61 per cent of the total population."²⁶ As lessons learned and future challenges, the third PRS paper recognised the importance of building the capacity of village water funds management and the need to sensitise both the water users and local authorities concerning the need for increased participation with the ultimate goal of reducing donor dependency. Furthermore, the capacity at the local government level needs to be strengthened, including systematic monitoring and evaluation of sanitation activities. Fragmentation of financing and donor support channelled to projects of various scale is still the reality, and there is "the need for a coordinated approach through a Sector wide approach in planning"²⁷ The planned actions under section 'A.III Water' include to "replicate rural water supply and sanitation project to 50 districts by 2005".²⁸

The National Water Policy 2002 goals cover several policy issues recognizable also in the HESAWA concept: community participation with legal ownership issues and appropriate technology choices, private sector participation, gender sensitivity and gender mainstreaming, and integration of water supply and sanitation and hygiene education. One of the goals is also to have an appropriate institu-

²¹ WHO/UNICEF - Country, regional and global estimates on water and sanitation.

²² The United Republic of Tanzania. 2000. Poverty Reduction Strategy Paper (PRSP), Dar es Salaam. p.20.

²³ The United Republic of Tanzania. 2001. Poverty Reduction Strategy. Progress Report 2000/01, Dar es Salaam. p.25.

²⁴ The United Republic of Tanzania. 2004. Poverty Reduction Strategy. Third Progress Report 2002/03, Dar es Salaam p.1

²⁵ *ibid.* p.10

²⁶ *ibid.* p. 28

²⁷ *ibid.* p. 28–29

²⁸ *ibid*. p.64

tional and regulatory framework and that the communities participate in financing their water supply programmes.²⁹ The draft report for the National Water Sector Development Strategy in 2004 summarises similar elements as means of achieving the targets set in Vision 2025: *"involvement of the private sector, empowering local government and communities, and promotion of broad based grass root participation in mobilisation of resources, knowledge and experiences with a view to stimulating initiatives at all levels of the society."* ³⁰ It also defines two concepts which caused some degree of confusion during this evaluation process: ³¹

- *Water Consumers Association (Vikundi vya Huduma ya Maji):* A legal entity established by communities for the ownership, management, operation and maintenance of water supply services.
- *Water Users' Association (Vikundi vya Watumiaji Maji):* A legal entity established by the users of water resources within a specific area to manage the allocation of water resources and resolve conflicts amongst water users within that area. Manage allocation of water resources at local level. Manage equitable allocation of resources during drought. Mediate in local disputes.

Figure 1 shows the regional differences in percentage of households using improved water sources, Figure 2 for sanitation and Figure 3 for the population living below the basic-needs poverty line. There is notable variation in these percentages within the three HESAWA regions bordering Lake Victoria.



²⁹ Ministry of Water and Livestock Development. 2003. National Water Policy – July 2002. The United Republic of Tanzania. Internet version. p.32–36.

³⁰ Ministry of Water and Livestock Development. 2003. National Water Sector Development Strategy – June 2004.

Circulation Draft. The United Republic of Tanzania. p. 2

³¹ *ibid.* p. 6 and 16

Figure 3. Percentage of the population below the basic needs poverty line (Household Budget Survey 2002).



2.3 Phases of the HESAWA Programme

'Prehistory' of HESAWA

Sida had gained several years of experience in supporting the water sector in Tanzania in the 1960s and 1970s. That time the approach was to transfer conventional Swedish technologies to Tanzania. An evaluation in mid-1970s questioned this approach. The Lake Zone had already been subject to a comprehensive Sida supported study for integrated rural development and an elaborated Water Master Plan. The Regional Integrated Rural Development Plan (RIDEP) was in a phasing out stage. The Water Master Plan which should have led to the development of the future programme was prepared during a time when the economy of Tanzania was still rather strong. Due to political reasons and the Uganda war the economic and social situation changed drastically during the 1970s and continued poor until about 1986. The Water Master Plan lacked hygiene and sanitation components but included surveys for mineral exploration.

Water supply systems that time were based on traditional piped schemes most often using diesel for running pumping units. The Netherlands government had since the mid-1970s supported a shallow wells programme in Shinyanga Region with relatively poor results (about 80 per cent of the wells dried up during the dry season). The lack of pipes, fittings and other materials that time in Tanzania made most of the applied water supply technologies inappropriate.

The local government system including the grass-root oriented community development department had been abolished in the early 1970s and emphasised the regional administrative concept responsible for planning and implementation of development activities. The political opinion made planning, implementation, operation and maintenance of water systems the task of the central and regional governments with little or no community involvement other than digging pipe trenches.

The overall financial, logistical and political situation in Tanzania was getting so poor that Sida considered during the Annual Review between the governments of Tanzania and Sweden in 1982 to more or less terminate the support to the water sector. However, eventually a budget of SEK 45 million was approved for the period 1982/83. A proposal was initially made for a 'turn-key project' to be run by Swedish consultancy companies, but during programme preparation a much more participatory and diversified approach was selected.

Preparation of HESAWA

At the time HESAWA was being prepared, it was clear that the scale and aims of the proposed programme were ambitious and possibly difficult to achieve. During the preparation of the draft proposal, the preparation team visited several other projects and programme areas, observing among other things; participation, contributions, O&M, as well as sanitation and health education aspects of these ongoing programmes. Sanitation and health education were only nominally present in the water programmes at the time. Where the Dutch programme did not address sanitation at all, the Danish programme had suggested a study to be carried out; a similar study was already in progress in the Finnish supported programme. The Norwegians had constructed some demonstration latrines. Neither was health education part of any programme, except for *"some basic education given by the staff at village meetings"* in the Finnish programme and a handbook for village participation in health education in the Danish. The Australians had suggested both sanitation and health education to be introduced *"later in the programme."* ³² The HESAWA Draft Proposal recognised that sanitation was poor, and practically all households were in need of the improved facilities. Furthermore, due to beliefs and taboos, many of these households will need more than one toilet to ensure that all members of the household can use the facility. Poverty was not an issue at the time. Interestingly though, the Dutch awareness posters had a topic *"Productive use of water"* ³³

The HESAWA Programme was preceded by a *preparatory phase* in 1983, although the term "HESAWA" was used only from 1984 onwards. It was followed by the first implementation phase beginning in 1985 which was based on Specific Agreements between Tanzania and Sweden on cooperation concerning rural water supply, environmental sanitation and health education, agreed upon in 1982. In this agreement the following long term objectives were stated:³⁴

- to gradually transfer responsibility from the government to the consumers (villages);
- to increase knowledge and awareness among the rural population of the linkage between better health and improvements in safe water provision, hygiene and sanitation;
- to reduce Tanzania's dependence on external support in the field of rural water supply development;
- to apply technical and administrative solutions that facilitate local participation and minimize costs for operation and maintenance (O&M) and
- to shift development towards self-reliance so that the external financial assistance could be phased out towards the end of the programme period.

The short term objectives were formulated as: ³⁵

- rehabilitation of existing water supply schemes;
- completion of on-going works;
- improvements in O&M;
- increased utilisation of cost effective systems and methods in both technical and administrative areas;
- · increased local participation and hygiene and sanitation awareness and
- construction of new water supply facilities with priority to be given for the "crisis villages".

During the overall programme period from 1985 to 2002, HESAWA grew large and complex. HESAWA was described as *"the most ambitious among donor funded projects, based on participation and integration of health, sanitation and water activities"* in a review of the water sector in the mid 1980s.³⁶ It encompassed essentially all the Swedish assistance in water and sanitation since 1985, accounting for about 10 per

³² *ibid.* p.28–41

³³ *ibid.* p.31

³⁴ Water Master Planning Coordination Unit (MAJI) & Institute of Resource Assessment (UDSM). 1983

³⁵ *ibid.* p.1

³⁶ Therkildsen, 1988, in: Catterson, J. and Lindahl, C. 1999. p.108–113

cent of all Swedish sector-specific assistance (1985/86–94/95). It covered a wide geographic area of the Lake Zone made up of Kagera, Mara and Mwanza Regions, which border Lake Victoria, and covered nearly 68,000 km². HESAWA had activities to some degree in 16 districts in more than 1000 villages. HESAWA provided water to about 30 per cent of the rural population, the sanitation contributing less to the sanitation coverage but more to the overall hygiene and sanitation awareness. In total, about 1.5 million people were reached, with the number expanding towards the end. The sanitation coverage was much lower, estimated only at about one to two percent.

The following overview of the various HESAWA phases is based on the Final Completion Reports 1983–2002 of the Zonal Office, the Regional Offices and information received from the districts covered in this evaluation. It is also claimed that especially the earlier phases were not strictly defined as HESAWA operated through Annual Reviews. Consequently its approaches and activities evolved on an annual basis rather than on the basis of rigid "Plans of Action" prepared phase-wise. It is important to note that many of the basic approaches and concepts of HESAWA (such as community participation, local involvement and contribution, cost sharing, bottom-up planning, etc.) were initially introduced at the very beginning of the programme. For various reasons these took a lot of time to root and mature along the implementation period.

HESAWA Phase I (1985–1990) was meant to be an interim *experimental phase*. It covered six districts, of which Bukoba Rural and Mwanza were the two districts covered in this evaluation research. Only Biharamulo and Bukoba Rural were considered as "integrated", and the rest were part of selected water interventions only. Phase I was characterised by heavy external consultant input with little local participation or local financing, although the Participatory Rural Appraisal (PRA) concept was initially introduced already in Phase I. Rural development in Tanzania was that time still decentralised only to the regional level and districts did not yet play a major role. Programme management was mainly run by the Regional Officers and consultants. One of the district completion reports also claims that the phase was run without a programme document. It focused on rehabilitation and construction of large schemes (mainly gravity). Also solar power, high tech drilling, rainwater harvesting and shallow wells were among the technology options. The following concepts were introduced already at this phase: decentralisation, capacity building, affordability, credibility, replicability, sustenance and cost-efficiency. However, it appears that these were not actually operationalised as they were not reflected in the actual activities. Still, even the principle of cost sharing was officially recognised in the Agreed Minutes between Sida, the Prime Minister's Office and MAJI.

HESAWA Phase II (1990/1991–1993/94), also referred to as 'Decentralisation to District Authorities', shifted the implementation towards using more Tanzanian human resources and less expatriate consultants. The district authorities were now more involved, and the expatriate and Tanzanian consultants roles shifted and became more that of advisory. Still, little was demanded from the communities except labour for construction of facilities. The strategy for phasing in and out of villages gradually evolved towards the end of Phase I and was more adopted in Phase II.

HESAWA Phase III (1994/1995–1997/98) witnessed *full decentralisation* of the administration and implementation of the programme activities. The PRA method became more effectively introduced and was accepted as a regular and popular practice. Appropriate, affordable technology choices were emphasised, although high tech drilling was resorted to in difficult hydro-geological conditions in Biharamulo District. The concept of Water User Groups (WUGs) was introduced towards the end of Phase III.

HESAWA Phase IV (1998/1998–2001/2002) focused on *consolidation and sustainability* of the previous achievements. Logical Framework Approach was applied in the Plan of Action in Phase IV. For the first time, also the districts applied this in their planning, budget reviews and annual reviews. Rehabilitation and rectification of the problem schemes were on the agenda, and only a few new interventions received financial support from the donor. Formation and training of the WUGs was vigorously encour-

aged. Cost sharing became a pre-condition for any donor funds release. Positive impacts were identified as some districts accelerated the pace of implementation, but some others got frustrated because of the lack of adequate local funds. The aim was to reduce donor input and increase local funding, and eventually the local contributions increased from 5 to 25 per cent.

In order to assess HESAWA's impact, it is important to conceptualize its activities and processes in relation to the systemic factors of macro economic and against socio-political realities in Tanzania at the time. In the first three phases, HESAWA focused largely on the provision of water and operational efficiency. The approach was rather input-output oriented, directed at procurement, storage and distribution of equipment and supplies. Hence, it was basically a construction programme with heavy inputs in physical infrastructure. The main focus was more on the establishment of physical infrastructure rather than participatory infrastructure. As Hifab report concludes: *"the programme operated in a rather top-down manner promoting construction of improved latrines, stressing the importance of safe drinking water and the relation between sanitation and good health."* ³⁷

Despite the mentioned input-oriented approach in the first three phases, HESAWA was strongly emphasising human resource development and training activities throughout all phases. In the earlier phases the HRD activities were extensively focused on the programme implementing staff and later more on the community and district level resource persons.

The first two phases have to be seen against the prevailing Tanzanian political situation at the time which was highly centralised and steered by a single-party system. Under the realm of a monopolistic state in the political and economic sphere, bottom-up participatory strategies did not feature much in the policy-making process. After all, provision of social services such as free water was the exclusive domain of the state. The people were recipients expecting to enjoy the free social services. Moreover, guided by the thinking of the modernization school that concentrated on the transfer of technology, even the donors' approach to development perpetuated the top-down approach. As a consequence, the modality of implementation of HESAWA activities in the beginning left little room, if any, for direct community participation, transparency, openness, and inclusiveness.

As a result of changing political and policy environment in Tanzania there was a fundamental change in approaches and implementation methodologies of the HESAWA Programme during Phase III (1994–1998) and in the whole of Phase IV (1998–2002), favouring direct community involvement in the management of water, health and sanitation. This period coincided with an era of far-reaching reforms of political and economic liberalization in Tanzania witnessed by political pluralism, flourishing civil society organisations, emergence of private sector and decentralized local government structures. With the existence of the enabling systematic environment, it became feasible for HESAWA to embark on capacity building, promotion of a participatory methodology, and grassroots institutional building. Opinions emerged that it was time for HESAWA to phase out completely as it was felt that consultants as the main implementers did not correspond to the decentralisation process and partnership cooperation which had become the foundation of the Sweden-Tanzania cooperation.³⁸

2.4 HESAWA Concept at the Final Phase

The overall aim of the HESAWA Programme was to improve the welfare of the rural population through improved health education, environmental sanitation, drinking water supply, community participation, and capability and capacity building at village and district levels. Key principles on which HESAWA activities were founded included affordability, sustainability, replicability, credibility and cost-efficiency. The "HESAWA concept" was composed of five key elements:

³⁷ Hifab. 2003 Consultant's Final Report 1983–2002, p.9.

³⁸ Sida. 2000. Result Analysis for the Development Cooperation between Sweden and Tanzania 1997–2000. p.19.

- linking health with water, by highlighting the importance of sanitation as well as safe drinking water;
- local ownership, demonstrated through cost-sharing;
- villagers' taking the lead role in deciding development priorities and responsibility for maintenance of water facilities;
- emphasis on human-resource development through training; and
- sustainability and replicability of water supply installations.

On the basis of village and other earlier studies carried out, the major achievements of the HESAWA Programme can be summarised as follows:³⁹

- the creation of an improved potential for the reduction of diseases and the achievement of general health and hygiene improvement, recognised and acknowledged by the villages themselves;
- increase coverage of improved water supply in the Lake Zone;
- acceptance by both government workers and villagers of more appropriate, affordable, and sustainable water supply technologies, including rainwater harvesting systems and improved traditional water sources;
- positive steps forward in promoting and operationalising a community-based approach;
- impacts at village level in terms of greater convenience and quantity of water supply, safer water, time gains, reductions in the workload of women, and opportunities to improve nutrition through garden watering;
- increases in knowledge, skills and capacities at regional, district and village level for planning implementing and operating and maintaining water supply improvements and, to a lesser extent, hygiene and health activities; and
- progress in transferring implementation responsibility from regions to districts, through the use of inter-departmental promotion teams working at village level.

HESAWA was successful in fulfilling some of its key objectives, such as to establish a new mode of service delivery and to provide water and sanitation through simple technologies to a large number of rural households. HESAWA had a learning-by-doing culture which operated through annual programme reviews and related annual planning. This encouraged innovativeness and the system was considered as responsive, dynamic and sensitive to changes.

The Mid-Term Review of Phase II (1992) concluded that HESAWA had achieved "a great deal under very difficult macro-economic circumstances and contributed to new directions in the Tanzanian water and sanitation sector as a whole." ⁴⁰ The HESAWA Programme was evaluated second time in 1996. The evaluation found that HESAWA had performed well in terms of physical outputs (in water supply, but less so in sanitation). Another major achievement had been greater integration of the HESAWA Programme with the existing administration and decentralisation in the districts.⁴¹ Box 1 shows the Programme objectives and activities as set in the Plan of Action for Phase IV.

Both evaluations, however, criticised HESAWA for paying too little attention to sustainability. Maintenance of the water supply facilities was not adequate and there was reluctance in many villages to take over the responsibility on the facilities. The old culture of expecting the government to provide the needed services had not been broken. The 1996 evaluation found that about 30 per cent of the

³⁹ HESAWA Best Practice is one of the *Best Practices for Human Settlements*, presented in the MOST Clearing House, Best Practices Database.

⁴⁰ Smet et al, 1997, *in*: Catterson, J. and Lindahl, C. 1999.

⁴¹ ibid

water supply facilities in phased out villages had broken down, been stolen or dried out, and that the capacity for regular operation and maintenance was still poorly organised.⁴²

Programme statistics verification and Water User Groups (WUG) analysis was done at the end of HESAWA. The verified figures for year 2002/2003 are as follows:⁴³

- There were 3.3 million people or 481,802 households in 1,121 villages in the HESAWA Programme area.
- An estimated 1.6 million people benefited directly from the new or improved water supply services.
- 3,374 shallow wells, 300 boreholes, 957 domestic water points in piped schemes, 1,110 improved traditional water sources, 257 institutional rainwater harvesting tanks and 394 household rainwater harvesting tanks were constructed. The total number of constructed or improved water facilities was 6,412 (although the Zonal Final Report states 6,431 water points).
- Total number of 926 institutional latrines and 35,026 household latrines covering about 7 per cent of the household was constructed.
- There was the total number of 5,761 WUGs of which 5,517 received training.

Box 1. HESAWA Programme objectives and activities in Phase IV.

Programme Objectives and Activities

The Plan of Action (POA) 1990–93 the operational goals of the programme were:

Improved Water Supply

Make water supply reliable and continuous, of improved quality of greater quantity, more accessible and valuable for various household purposes (also financially self-sustained: 1994–95 POA).

Activities:

Construction of improved water supplies using the most appropriate and affordable technologies at the time.

Improved Health and Environmental Sanitation

This was to be achieved by:

- i) increasing people's awareness as to how to maintain the quality of water from source to consumption,
- ii) increasing popular participation, especially the participation of women,
- iii) health and environmental sanitation education directed towards water and hygiene-related diseases,
- iv) construction of sanitary latrines which are socially and culturally acceptable,
- v) improving vector control through improved drainage and waste disposal (also promoting full village coverage of household latrines 1994/98 Plan of Action)

Activities: Construction of institution (school) latrines and support to villagers in the construction of improved household latrines; Carrying out promotion, group dynamics and training at different levels (from village to district level); health and sanitation education to communities and schools.

Capacity and Capacity Building and Strengthening at All Levels

This was to be done by:

- i) Overall human resources development (especially with emphasis on women 1994/98 Plan of Action),
- ii) legislative backing for management at village level,
- iii) improving managerial capacities at village and other levels,
- iv) imparting technical skills to the grassroots level

(Also increasing gender awareness at all levels – 1994/98 Plan of Action)

Activities:

Technical and logistical support to districts and villages, Capacity development for the private sector to participate in programme implementation.

⁴² Catterson, J. and Lindahl, C. 1999. *op.cit.* p.108

⁴³ ORGUT Consulting AB. 2003. HESAWA Programme statistics verification and Water User Groups analysis.

3. Findings

3.1 Health and Environmental Sanitation

3.1.1 Background to health and environmental sanitation

Diarrhoeal diseases are the second most common causes of illness in Tanzania.⁴⁴ Eye and skin diseases are also among the top illnesses, especially among the children. The number one disease in the country is malaria. Vector control for malaria and other vector-borne diseases is still not adequately emphasised in water and sanitation programmes. The National Water Sector Development Strategy⁴⁵ sets a number of specific targets for both integrated water resources management and improvement of water supply and sanitation services. There is no separate sanitation policy, but the water policy set operational targets for sanitation for 2010:

- 95 per cent people with access to basic sanitation.
- Adequate sanitary facilities in 100 per cent of the schools.
- Reduction of number of cholera outbreaks by 50 per cent.

These equal to the Millennium Development Goals for 2015. The National Health Policy of Tanzania stipulates that every household shall have a functioning latrine and all public buildings (schools, dispensaries, etc.) shall have institutional latrines. Tanzania does not have a separate sanitation policy.

3.1.2 HESAWA, health and environmental sanitation

In HESAWA, one of the operational goals was improved health and environmental sanitation, see Box 1 above for related activities. Although the actual experimenting got underway later, the principles for health education and sanitation were already set in 1983, stating among other issues the following: ⁴⁶

- Promotion activities for improved sanitation should be initiated at the latest during the construction phase of the village water project.
- Promotion activities should aim at attaining full coverage for latrines.
- Village health education campaigns should be launched.
- Efforts should be made to develop and upgrade existing latrine types.
- To promote a good future latrine standard, demonstration latrines (VIP) should be built at public institutions.
- Health education activities should be initiated, at the latest, during the construction phase of the village water projects.
- Village health education is supposed to be a continuous process under the primary health care programme.
- Local resources (Village Health Workers, Environmental Health Assistants, Primary School Teachers etc.) should be mobilised to the extent possible.

⁴⁴ National Bureau of Statistics Tanzania, Household Budget Survey 2000/01, Dar es Salaam, July 2002

⁴⁵ National Water Sector Development Strategy. Ministry of Water and Livestock Development. 2004.

⁴⁶ Rural Water Supply and Sanitation Programme for the Lake Regions: Principles and Procedures for Community Participation, Health Education and Sanitation, Water Master Planning Coordination Unit (MAJI), Institute of Resource Assessment (UDSM). November 1983.

The same document also spelled out steps for village participation and pollution prevention.

Sanitation was a novelty, but easier to discuss than to implement in terms of physical facilities and their continued use and maintenance. In practice, sanitation in the beginning simply meant "how to construct a Ventilated Improved Pit Latrine (VIP latrine)", and focused mainly on slab construction (subsidies for slabs). People were aware that they should have a latrine, and that there was a connection between sanitation and the frequent cholera outbreaks. Yet, there was no real demand which obscured the sanitation efforts all the way through.

3.1.3 The latrine coverage issues

According to the Household Budget Survey in 2000/2001 (HBS 2002) there has been little change in the use of latrines over the 1990s. In rural areas, 91 per cent reported using a toilet of some type in 1990/91. The corresponding figure for 2000/2001 was 92 per cent. In rural areas, the use of toilets has slightly increased whereas for example in Dar es Salaam it has decreased. The proportion of households *not using* a toilet varies by region, the highest proportions not using latrines being in Tanga, Arusha and Mara Regions.⁴⁷ Figure 2 earlier shows the map of those not using latrines, and Table 1 below shows the progress made in sanitation coverage over the years.

According to the HESAWA Evaluation Field Survey (October 2005) 87 per cent of the households have a latrine. These figures compare well with the HBS (2002) figures, the results of Kagera Region being very close to HBS figures, and those of Mwanza Region exactly the same in both surveys. Mara Region is different, the HESAWA Evaluation Field Survey (October 2005) having even lower figures than the already low HBS (2002) figure. Both surveys show that the situation in Mara Region is quite unsatisfactory, and is worst in Serengeti district where only 62 per cent of households have latrines. Bukoba Rural stands out as the one with least latrines in the 1997 statistics (Figure 4), but in 2002 it stands out as the district with the highest HESAWA latrine coverage per household (Figure 5). Note that Figure 4 applies to the onset of Phase IV, and Figure 5 applies to the end of the same phase.

Region/	1978	1978	2000/01	2005 (HESAWA evaluation household survey)			
% latrines	(Census)	(Health Authorities)	(HBS Census)				
Kagera	75	60	95	97			
Mwanza	75	75	92	92			
Mara	68	45	86	71			

Table	1. Regional	sanitation	coverage	1978,	2001,	2005	(various	sources
				,	,			

The progress in latrine construction in HESAWA was slow in the beginning, but was catching up in Phase III. Yet, even in Phase III, the coverage remained low and the Mid-Term Review (1997) called for new strategies and emphasis on sanitation. At that time, the latrinisation programme used three approaches: (a) entry through the school screening programme, (b) requiring 90 per cent coverage with (improved) latrines before a water intervention can be undertaken, and (c) beginning with early acceptors who are more influential or affluent. Subsidisation of latrine slabs was the main household latrine construction promotion method in HESAWA during Phase IV.

The 90 per cent rule that required new improved or VIP latrines, was not adhered to, and consequently the Mid-Term Evaluation 1997 recommended that this rule be dropped. Since only some 7 per cent of the households built improved latrine, a new approach was introduced. It suggested different types of latrines for households of different income groups, thus allowing more rudimentary types of latrines for those who found the improved type unfeasible. It was also considered that the latrine construction shall be based on awareness, not on conditionality.

⁴⁷ Household Budget Survey 2002 op.cit.



Figure 4. Households with and without latrines in all HESAWA districts at the beginning of Phase IV (Village Survey, Annex to Plan of Action Phase IV 1997).



Figure 5. Total number of households and latrines constructed in HESAWA (ORGUT 2003 & Hifab 2002).

3.1.4 Latrines, their users and the environment

Most of the latrines whose construction was supported by HESAWA were VIP latrines (in Phase IV) or traditional pit latrines. Ecological sanitation options were introduced in earlier stages and double-vault composting latrines were tested already in the early 1990s in Kwimba, Magu and Mwanza districts.

They were reintroduced in Phase IV and the Mid-Term Evaluation (2000) recommended initiation of ecological sanitation efforts in some districts. Yet, there were health and safety concerns, and ecological sanitation was not widely advocated. Figure 6 shows the types of latrines observed in the HESAWA Evaluation Field Survey (October 2005). The VIP latrine proportion is fairly high compared to the national levels as reported in the HBS 2002, where the VIP latrine coverage is very low at 0.6 per cent in 1990/91 and even less at 0.4 per cent in 2000/01.



Figure 6. Types of latrine (HESAWA Evaluation Field Survey, October 2005).

Having a reasonable latrine, a clean and healthy housing compound and using water from a protected water source are all factors strongly contributing to better health. Health improvements cannot be achieved through improved water supply or sanitation only. Neither can wider health improvements be achieved if only some people use these facilities. In the evaluation field survey it was found that there was a significant correlation between a household using a "HESAWA water source" and having a latrine, but a lower correlation if the household was not using a "HESAWA water source".

Similar strong correlation was observed between the condition of the house, the observed environmental sanitation in the housing compound, and support from HESAWA for latrine construction. Unfortunately the condition of the latrines was not satisfactory in all places, and especially the Mwanza Region is standing out with most flimsily constructed, possibly unsafe latrines (Figure 7). This is also reflected in the overall environmental condition of the housing compounds (Figure 8).

The condition of the latrine correlates well with the condition of the house. There was also a significant correlation between the household using a "HESAWA water source" and participation in HESAWA activities, being a member in a WUG, paying a tariff and having a latrine. From this finding it can be concluded that participation in HESAWA activities did indeed increase the latrine coverage and improved environmental sanitation at the household level.




Figure 7. Condition of the latrines (HESAWA Evaluation Field Survey, October 2005).

Figure 8. Environmental sanitation: condition of the housing compound (HESAWA Evaluation Field Survey, October 2005).

Full health benefits through improved sanitation can be achieved only if everyone uses the latrines. Constructing more latrines and aiming at defined latrine coverage does not yet ensure health improvements. All houses should have a safe and clean latrine, and all household members should be able to use it. The HESAWA Evaluation Field Survey (October 2005) verified the presumption that all household members cannot use the latrine. Cultural taboos and old traditions may prevent some household members from using a particular latrine and thus, a latrine per household is not enough. In Serengeti District, for instance, in only 40 per cent of the households, the latrines can be used by all household members.

The situation is reasonably better in Karagwe and Mwanza Districts as can be seen in Table 2. Kwimba District stands out as a district where children cannot use the latrine and Serengeti District as a district where neither children nor old people can use the facility. The percentage of old age people is particularly alarming because in other nearby districts similar behaviour was not observed. However, some interviewed people acknowledged that HESAWA had done a good job in breaking the cultural taboos and bringing these taboos into daylight.

Region		Kagera		М	Mwanza		Mara	
District		Karagwe	Bukoba	Mwanza	Kwimba	Bunda	Serenge	eti
Households with late	rines (%)	98.3	97.5	91.7	92.6	79.8	62.2	87.0
Construction of latri by HESAWA (%)	nes supported	38.8	28.3	8.3	11.6	23.5	28.3	23.2
Accessibility of latrin members of the hou	ne to all isehold (%)	89.2	68.9	83.3	61.0	68.1	39.5	68.4
Who can not use	Children	10.7	28.3	8.3	39.7	14.3	26.1	21.4
latrines (%)*	Old people	0	0	0	0.8	5.8	24.4	5.2
	Undisclosed	4.1	0	0	0	2.5	0.8	1.3

Table 2. Household sanitary facilities in the study area (HESAWA Evaluation Field Survey, October 2005).

* Of those who stated that not all can use the latrine

3.1.5 School Health Package

Already in 1992 sanitation interventions focused on school improvements in the HESAWA Programme. This was based on the concept of School Health Package, developed by a Tanzanian medical doctor. Screening of the school children for common diseases was not a new concept as such. Integrating this strongly into water and especially sanitation issues was a new concept. The School Health Package was a special component in HESAWA, and consisted of three basic concepts:

- 1) Community participation characterised by a bottom-up planning approach;
- 2) Problem based learning as an approach for adult (parent) education; and
- 3) Inter-sectoral collaboration between the key departments at district level.

The School Health Package (SHP) carefully followed the set steps, the order of these steps being of utmost importance. The concept was that adults learn better and faster when they are solving real life problems. The learning process of the parents took place after health screening of the pupils, in the following order:

- 1) Introduction of SHP to the district;
- 2) introduction of SHP to village councils and teachers;
- 3) screening of pupils;
- 4) parents' meetings;
- 5) formation of school health clubs; and
- 6) training of teachers. 48

⁴⁸ Study on School Health Activities of HESAWA Programme. Final Report. ORGUT Consulting AB, November 2003.

In practice, this meant that the members of the Public Health Committee and Village Health Workers, who were trained through the Programme, discussed the reasons for the diseases in School Health Clubs comprising pupils, teachers and parents. School latrine blocs with rainwater roof catchments for hand washing were constructed. The order of every step was the key to the success. Health screening and awareness had to come first and latrines next. Total number of 642 schools was screened. The Mid-Term Evaluation (1997) reported good progress with the School Health Package. In addition, it was observed that a strong link exists between new latrines and the health of school children, if the construction of the school latrines was coupled with formation of active school health club. School screening was appreciated even though considered expensive.

The HESAWA Evaluation Field Survey (October 2005) covered 36 Primary schools, six in each of the six districts. Altogether four HESAWA trained teachers and 30 others were interviewed using structured questionnaires. The number of pupils range from 149 to 1018 with an average of 598 pupils per school. The average number of teachers per school is 12 (varying between 6 and 27).

One third of these schools had an active HESAWA School Health Club (31 per cent), and another 25 per cent some other active health club. At a closer look, two out of four HESAWA trained teachers were running an active HESAWA School Health Club. The rest had no active clubs. Out of 11 active health clubs, six received financial assistance from the school's annual budget, but none from the district level. Two reported other forms of support, including a coffee farm. Two reported not receiving any financial assistance. Out of 11 active health clubs, six had more than three meetings in 2005 while four health clubs had one or two meetings, and two health clubs held no meetings at all. The two HESAWA School Health Club cases reported having held one to two meetings in 2005, and that they received financial assistance from the school annual budgets. Interestingly, both of these cases had latrines, and the school compound environmental sanitation situation was in average condition.

Schools are important venues for hygiene education, but even here the water and sanitation situation is not satisfactory. One third of the schools had a water supply facility within the school compound, and nearly one-fifth a source nearby, but outside the school compound. Half of the schools depended on water supply located more than 15 minutes away from the school compound. In many cases the water supply (rain water harvesting) attached to the school latrine was not in use. By observation the enumerators reported that third of the school compounds looked very good from the environmental sanitation point of view, half were in an average condition and 6 per cent were described as "not healthy, there is clearly a problem."

The latrine facilities were in better shape than the water supply facilities, and 97 per cent of the latrines looked as if they were in a regular use. Half of the facilities showed minor disrepair and less than half of them were in poor condition. Yet, only one case was in complete disrepair. Furthermore, when reflected against the total number of potential users, the total number of latrines per school appears low. The 36 schools had the total number of 295 HESAWA supported latrines and 122 other latrines, the total number of latrine units being 417.

The average number of pupils per latrine was 78 (the median is 48) with the worst case having 731 pupils per one latrine. The best case, 12 pupils per latrine, had ten HESAWA supported latrines which all were in a good condition and in a regular use; the school compound was in good sanitary condition with a water supply facility nearby (and the lowest pupils/teacher ratio), but it, however, had no active school health club. All, but four schools had at least one HESAWA supported latrine; the average number was eight and the maximum number of HESAWA latrines was 16.

To conclude, the following observations were made during the evaluation field survey concerning the SHPs:

- There were more active School Health Clubs than expected. It was hypothesised before the survey that perhaps, after the external interest and funding was fading out, the enthusiasm might have been dropped.
- This level of activity was not reflected in the number of latrines in good condition. Half of the active health club schools had latrines in good condition and the other half in minor disrepair. Furthermore, eight out of 11 active health club schools had the school compound in "an average" condition from the environmental sanitation point of view, indicating problems with solid waste management and drainage.
- Eight out of nine schools that had "another health club" had latrines in good condition, but in six out of nine they were in average condition and in one the latrines were in poor environmental sanitation condition.
- Half of the schools encounter a water supply problem and they have to spend valuable school time in fetching water from a distance of 15 minutes or more, totalling 30 minutes plus the time spent at the source. Under these conditions, it is very difficult to promote such hygiene practices as hand washing and cleaning of latrines.
- However, it was observed that in many schools the gutters were not maintained and the rainwater harvesting tanks were getting derelict. The operation and maintenance aspect, rooted in the sense of ownership, should be equally emphasised at the schools as with the Water User Groups in the community.
- During the later phases of HESAWA the Primary Education Development Programme (PEDP) also brought a lot of resources to schools including health and sanitation facilities.
- Schools are dynamic units. The pupils change when they advance through school and often also teachers change. The operation and maintenance as well as hygiene practices and awareness concerning environmental sanitation in the school compound should be better institutionalised within the school maintenance system at large. During Phase IV there were attempts to integrate monitoring of school health into the normal monitoring framework of the school inspectors.
- In future schools, water and sanitation interventions should be built on the idea that people and situations change, that sustainability is not reflected in "the number of trained teachers active in the area" or in their existence in any other way, or in the existence of School Health Clubs (since their members will have moved on anyway, it cannot be the same group year after year). The ultimate target is to have healthier and happier pupils and teachers, to create environment conducive for education, and the sustainability would stem from here.

3.1.6 Health impacts

The health impact analysis in this study focuses on the typical water and sanitation related health problems which can be classified as:

- Water-borne diseases, including diarrhoea, dysentery, typhoid, and other diseases caused by unsafe quality of water;
- Water-washed diseases, including skin and eye infections such as trachoma, and other diseases caused by inadequate quantity of water;
- Water-based and other water and sanitation related, including malaria, bilharzia and other diseases spread by mosquitoes and flies.

In addition, there are other general health indicators which can be linked to water supply and sanitation. Since infants and children are especially vulnerable to diarrhoea and other diseases listed above, this evaluation searched case records also for the infant mortality rate and the under-five mortality rate. Furthermore, "the main objective of the water supply sector has always been to improve people's health by providing access to safe water supply and sanitation. This is even more urgent in case of HIV/AIDS as diarrhoea and skin diseases are among the most common opportunistic infections. Clean water is needed to safe infant feeding and to take medicines. From a human rights perspective, water and sanitation provision increases the sense of dignity of both patients and caregivers." ⁴⁹ Since it is well established that access to safe water and sanitation is indispensable for people living with HIV/AIDS, and for their home-based care, as well as for ensuring a healthy environment to combat opportunistic infections, some persons interviewed wondered how and why HESAWA did not cover these issues.

HESAWA was by no means the only programme providing health and hygiene education. Therefore, the possible positive changes cannot immediately be associated with HESAWA alone. A number of local non-governmental and community-based organisations are actively involved in health issues, each approaching from their specific point of view. There are also a number of faithbased organisations dealing with health, especially with HIV/AIDS. The following larger development programmes were identified to be active in the Mwanza Region alone, all having health-related activities:

- 1. Child Survival Protection and Development Programme, 1995-ongoing
- 2. International Food and Agricultural Development (IFAD), 2001-ongoing
- 3. Tanzania and Netherlands Project to Support HIV/AIDS Control in Mwanza Region (TANESA), 2004–ongoing
- 4. Rural Integrated Development Programme (RIDEP), 1978–1981
- 5. TASAF (Tanzania Social Action Fund), 2003-ongoing
- 6. Plan International, 1992–ongoing
- 7. DDP (District Development Programme), 2004-ongoing
- 8. Kahangara water supply project
- 9. Nassa water supply project
- 10.Kabila water supply project
- 11.Urban water supply project.

The health impact data in the districts are presented in Annex 7 through various charts which were compiled to identify the trends of the common water and sanitation related diseases. The case records are based on the Mwanza Regional data. The HIV/AIDS figures were not available at the district level records as the districts lack the necessary facilities to test this.

Figure 9 below shows as an example the case records for diarrhoea, with trend lines for four districts. The situation is similar with respect to worm infestation cases, eye and skin infections, bilharzia and malaria. The only clear downward trend between 1985 and 2002 can be seen in Mwanza Municipality. The other districts of Mwanza Region tend to have an upward or stagnant trend which may explain the overall downward trend in Mwanza Region. It is possible that the health services and recording of the cases at these facilities have improved over the years to allow the figures to reflect a more realistic situation in the districts. The population growth in the area is also rapid, the population having grown by almost a million people during the years of HESAWA's operation. Thus, even a trend line for absolute number of cases remains stagnant, there is an improvement as the total number of population

⁴⁹ Kamminga, E. and Wegelin-Schuringa, M. 2003. p.15–18.

has grown. Another explanation could be that the health facilities in the districts have improved enough to be able to deal with the patients locally and thus, there is less need to go to Mwanza for medical reasons. Two districts were looked at in more detail for the infant mortality and under-five mortality rates. Whereas the infant mortality rate did not seem to have changed over the years, the under-five mortality rate showed a clear and encouraging downward trend (Annex 7).



Figure 9. Trends in diarrhoea cases in Mwanza Region (Regional Health Statistics, November 2005).

Some key informants in the districts also pointed out that since there were more pharmacies now available than before, many people treat themselves without reporting at the health facilities. It was felt that the over-the-counter medicines were more easily available than before. Better economic standing had also helped people to practice better household hygiene and buy fuel (charcoal) for boiling water, among other things. Some also mentioned the improved waste management and sanitation, especially in Mwanza. This could also explain the clear downward trend of many water and sanitation related diseases.

3.1.7 Health issues and impacts today

In connection with the HESAWA Evaluation Field Survey (October 2005) a total number of 31 health facilities were visited. The Head of the Health Post was interviewed in 65 per cent of the cases. Four Health Posts served only one village each, the majority served two to six villages. One Health Post served eight villages and one served ten. The number of people served ranged between 1,800 and 18,253 people, and the number of households covered between 273 and 7,500 households (the mean is 1586 households). Records were available in 28 of 31 health facilities. Malaria is the most common disease accounting for nearly 70 per cent of the reported cases both in 2003 and 2004. The second most common disease is diarrhoea, followed by worms, both of which accounted for about 10 per cent.

Water and sanitation related diseases continue to be reported frequently at the Health Posts. The most usual reason for a visit to the Health Post was malaria (90%), followed by worms (74%), diarrhoea (74%), eye diseases (45%), skin diseases (48%) and bilharzia (26%). The differences between the districts are clear. In Mara Region neither of the districts, Bunda Rural or Serengeti District, reported bilharzia, but in Kwimba District in Mwanza Region five out of six did. As a matter of fact, in Kwimba District, all six health posts reported diarrhoea, skin and eye diseases and worms, when in Serengeti District none reported bilharzia, skin or eye diseases as frequent reasons to visit the health post. There were also

random reports of typhoid, dysentery, and amoeba. In the case of diarrhoea, malaria or eye diseases, the number of cases reported did not seem to correlate very strongly with the number of people served. (Annex 7).

3.1.8 Health, HESAWA and the views of the people

Interviewed people at various levels shared the opinion that water related diseases have decreased in the "HESAWA villages" though the trend is not clear in the health statistics. All attitudinal data support this view based on both qualitative and quantitative primary data. For instance in the women group discussion in Balili village, it was especially stated that households that used the "HESAWA deep well" had less diarrhoeal diseases than prior to HESAWA – this well was the sole water source for 318 households. It was also mentioned that, in this specific case, the health improvement was apparent for both those who boiled the water and for those who did not. The vast majority (77%) of the health staff interviewed believed that the health situation had improved in their working area, with only a small minority (5%) feeling that it was worse. This opinion was shared by the majority of the 36 Village Government interviewees (78%) who thought that the health was now better in their villages.

The household respondents were even more positive with 91 per cent believing that HESAWA had contributed in reducing water related diseases. The region- and district-wise differences are shown in Table 3. The household respondents were also very specific in naming the diseases which they believed were reduced due to HESAWA. For instance, 80 per cent of the respondents considered that there was less diarrhoea now than prior to HESAWA. Table 6 shows the results for diarrhoea, *Schistosomiasis*, skin and eye diseases.

Region	Kagera		Mwanza			Mara	Total
District	Karagwe	Bukoba	Mwanza	Kwimba	Bunda	Serenget	i
Number of households who	92	110	103	115	88	103	611
water related diseases	91%	98%	88%	98%	78%	90%	91%
Total sample size	101	112	117	117	113	115	675

Table 3. Percentage of household respondents who believe HESAWA reduced water related diseases generally (HESAWA Evaluation Field Survey, October 2005).

The residents in the villages in Mwanza Region appreciated relatively more the contribution of the HESAWA Programme in the reduction of diarrhoea, *Schistosomiasis*, and skin diseases than respondents from Mara and Kagera Regions (Table 4). The fact that skin and eye diseases are not recognised may have at least two explanations: either these diseases have not been reduced, or if they have, it is not attributed to HESAWA. It may also be that people do not see the link between water, sanitation, and eye and skin infections. The health messages focused more on diarrhoeal diseases and bilharzias *(Schistosomiasis)*.

Table 4. Percentage of household respondents who believe HESAWA reduced diarrhoea, *Schistosomiasis*, skin and eye diseases (HESAWA Evaluation Field Survey, October 2005).

Region	Kagera		Mwanza			Mara	Total
District	Karagwe	Bukoba	Mwanza	Kwimba	Bunda	Serengeti	
Diarrhoea	75%	90%	77%	93%	70%	76%	80%
Schistosomiasis	20%	21%	64%	91%	56%	38%	48%
Skin diseases	12%	12%	24%	48%	18%	5%	20%
Eye diseases	8%	0.9%	0	4%	2%	6%	3%

3.1.9 The HIV/AIDS concern

The HIV/AIDS situation was discussed e.g. in the professional women's workshop in Bunda. According to the representatives of the workshop, HESAWA did indirectly address the HIV/AIDS problem since HIV is linked to poverty and HESAWA aimed at raising the standard of living. The district survey shows that the rate of HIV had decreased from 6 per cent in 2004 to 5 per cent in 2005.⁵⁰ However, these figures can be questioned, since for instance Cooksey and Mamdani⁵¹ have concluded that the HIV/AIDS prevalence rate as evidenced among blood donors in Tanzania had grown from 1991 (5.3% for men, 5.9% for women) to 2002 (9.1% for men, 12.3% for women).

National statistics indicate that the percentage of people with HIV/AIDS in the age group 15–49 years in Tanzania on average was 8.8. per cent in 2005⁵² (Sida, 2006). It has been estimated that more than 700,000 Tanzanians are currently suffering from AIDS. By 2001, about 2.2 million Tanzanians above the age of 15 were HIV positive. By 2002, about 1.9 million Tanzanians above the age of 15 were HIV positive. The infection rate does not appear to have peaked. However, health facilities are overstretched, and HIV infected patients occupy more than half of all beds in urban hospitals.⁵³ The District Councils have a multi-sectoral program that involves every department and other stakeholders in raising HIV/AIDS awareness and it provides funds for awareness creation through the District Development Program (DDP).

No programme has so far recognised the relation of safe water in dealing with HIV/AIDS.

3.1.10 Women's voice on health, hygiene and sanitation

This section captures the qualitative dimension of health, hygiene and sanitation, and the respective role of HESAWA. The outcome is based on a workshop organised for women working in the district offices in Bunda District. They were requested to describe the selected location (i) 20 years earlier, (ii) as it is now, and predict (iii) how the same location would look after 20 years. The past pictures had no toilets, poor housing (no ventilation, no kitchen, no bathrooms), people squatting behind the houses rather than in the latrines, animals everywhere around the yard, people and animals sharing the same water source and cutting down of trees taking place. They further explained that communities in those days depended on traditional healers and that the mortality rate was high due to water borne diseases.

The scene *today* is different with "modern" houses with appropriate doors and windows, pit latrines with water for washing, new wells, tree planting, cleanliness and hygiene. Shallow wells have a separate extension drain for animals and a health facility with well trained people is to be found near by, and water borne diseases have decreased The *"future* picture" (after 20 years) according to them is to have better designed houses and latrines and electricity. The women will be educated and go to health facilities for deliveries and for improved maternal care. Disease outbreaks are cut down. The fear, however, is that due to the drought water availability will decrease even more compared to today's situation. This would also affect the sanitation and hygiene behaviour.

They described the school sanitation situation in the past with a picture showing a school compound with no proper toilet, pupils going to the bush, and sick children. The present situation was illustrated with more toilets with separate urinary. Toilets were provided with rainwater tanks. In the future, they would like to see boys' and girls' toilets in different buildings equipped even with showers (especially for girls). They would also like schools in the future to have functioning health schemes/health clubs and the peer education activities; pupils educating each other.

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⁵⁰ This is according to the District Administrative Secretary's representative who is also a district HIV/AIDS mratibu.

⁵¹ Cooksey, B. and Mamdani, M. 2004. Summary of conclusions from recent research and synthesis of key issues on poverty in Tanzania. Research on Poverty Alleviation (REPOA). May 2004.

⁵² Sida. 2006.

⁵³ Cooksey and Mamdani 2004.

Box 2. Women's voice on health, environmental sanitation and HESAWA.

Source: Field notes from visits to women's groups in Balili, Bukore, and Nyambehu villages in Bunda district, and Juhudi village in Bukoba district, November/December 2005.

"Compared to the time before HESAWA the health condition has improved but is still unacceptable. Currently, only one HESAWA well is working, the other one dries during dry season. Even the traditional wells that were improved have dried up except one. The village has a critical problem of water now because all 318 households use the only one water point (they claim it dries after 5 buckets but the team counted more than 10 and the water was still available). Thus, water is not enough and women use too much time at the well to get only two buckets per day. They have no time for other activities. The situation is becoming worse due to the growing population." (Balili Women Group, Bunda District, 1.12.2005).

"Villagers benefited a lot from HESAWA trainings and water provision. They even have a Swahili saying that "JIWEKE SAWA NA HESAWA" simply means "make yourself fit with HESAWA." Before HESAWA, there were many water related diseases such as worms, skin diseases, eye and diarrhoea. These diseases have now reduced significantly. Before HESAWA, women were fetching water from the river. The water was unsafe and the distance to river was long. Now they have tap water available close to their homes which saves time." (Juhudi Women Group, Bukoba District, 1.11.2005).

"People had no latrines, but HESAWA trained and supported them to get platforms for latrines although not everybody could afford. The cost was too high and only 15 families could afford to do it. However, water borne diseases have decreased greatly since 2000 when HESAWA built a water well and provided sanitation education". (Nyambehu Women Group, Bunda District, 1.12.2005)

"Although HESAWA did awareness creation on importance of latrines through training events, none of the villagers was ready to contribute for the latrine platforms. There is no single latrine, which was built through HESAWA and the situation with latrines is still poor. About 50% of villagers have traditional latrines while others are still using the bushes around." (Bukore Village Government members, Bunda District, 1.12.2005).

3.2 Water Supply

3.2.1 Background to water supply

The rural water supply policy is discussed in Section 2.2 "Rural water supply and sanitation in the national context". Overall, 43 per cent of Tanzanian households still use unprotected sources for domestic water supply, including unprotected wells and springs and surface water such as rivers and lakes. The urban population has access to better water supply services than populations in rural areas. However, in rural areas, the water sources have been improved over the last several decades, with the share of the households using protected supplies rising from 46 per cent in 1991/92 to 55 per cent in 2000/01.⁵⁴ Distance to a source varies widely; as an example, in Mara and Shinyanga Regions, only about one third of households are within a kilometre of a safe water source, while over 80 per cent are within that distance in Ruvuma and Dar es Salaam.⁵⁵

In the 20 regions of Tanzania, rural water supply coverage varies from the low 20 to 25 per cent (in Lindi and Tabora Regions) to the high 70 to 77 per cent (in Kilimanjaro, Kigoma, Mbeya, and Morogoro Regions). In the remaining regions, the coverage varies between 35 and 65 per cent, based on the information presented in the HBS 2002 (Figure 1). In the three Lake Victoria regions, the rural water supply coverage is 31 per cent for Kagera, 40 per cent for Mara, and 53 per cent for Mwanza.

The HESAWA Programme constructed a total of 6431 water points⁵⁶. The majority of the water points, or 3724 (58%), are hand dug or drilled wells equipped with hand pumps. The water systems also include some 40 piped schemes with a total of 915 (14%) water distribution points (stand pipes), 1157 water points (18%) at improved traditional water sources, and 635 rainwater harvesting facilities (10%). All these types of water points are considered as appropriate technology and least cost solutions to ensure efficient implementation of the water supply components within the Programme.

⁵⁴ HBS 2002, key indicators

⁵⁵ Household Budget Survey 2002 op.cit.

⁵⁶ Zonal HESAWA Coordination Office 2002.

It is reported that the Programme covered 1062 villages or 63 per cent of the villages in the Lake Victoria regions, i.e. an estimated population of over 3.2 million (61% of the total population in the three regions). Assuming that one water point provides adequate and reliable service to 200–250 people, the number of population directly benefiting from the new and improved HESAWA water facilities is in the order of 1.3–1.6 million, or 25–30 per cent of the total population in the three regions. While the coverage in the three HESAWA regions did perhaps not increase significantly because of the HESAWA Programme, it should, however, be pointed out that the reliability and the long-term sustainability of service were the key goals of the Programme. This was to be further enhanced through the rehabilitation of existing traditional sources. The Programme strongly emphasized the role of the Water User Groups (WUG) as operators of the new and rehabilitated facilities. WUGs were also envisaged to shoulder the responsibility of sufficient cost recovery to ensure adequate maintenance and up-keep of the facilities in the future.

Funding of all activities in the HESAWA Programme came mainly from Sida, up to 90 per cent, including funding of water supply facilities and necessary technical assistance and promotion. The remaining 10 per cent of funding was covered by local funds from the central and Regional/ District Government coffers as well as through beneficiary contributions.

This section presents the current operational status of the water supply facilities constructed under the HESAWA Programme. The main findings are based on the field survey of 36 villages in the three study regions. The survey covered operational topics such as current utilization of water systems, choice of water source location, quantity and reliability of water supply, quality of water, functioning of water facility, maintenance of water systems, and management of water system finances. Special focus was given to cost recovery principles and success (or lack thereof) of their implementation through a case study in two districts.

3.2.2 Water sources and locations

Shallow wells with hand pumps are common in Bunda, Serengeti, Kwimba, and Bukoba Districts. Boreholes are common in Kwimba, Bunda and Serengeti, although much fewer than shallow wells. Most piped gravity schemes are to be found in Karagwe and Bukoba Districts. Nearly all the pumped piped schemes in the study area are in the Mwanza Municipality. The majority of rainwater harvesting systems is concentrated in Karagwe District. Boreholes, gravity and pumped piped schemes, and improved traditional water systems are the most effectively used sources. The other main findings are that (Table 5):

- Majority of the users in Kwimba District use shallow wells. In Bunda and Serengeti Districts half of the users use shallow wells.
- Rainwater harvesting is most common in Karagwe District, but is not at all practiced in Serengeti District.
- Karagwe and Kwimba Districts utilize water sources constructed during HESAWA most effectively, the lowest use being in Serengeti District (57%) and the highest in Kwimba (93%).
- Serengeti District has the highest number of households in relative terms that still use water from unimproved sources (43%). This is significantly higher than in Karagwe District (12%) and in Kwimba District (7%)

Region	Ka	igera	Mv	vanza	I	Mara	To	tal
District	Karagwe	Bukoba	Mwanza	Kwimba	Bunda	Serengeti	#	%
Shallow well with hand pump	20	70	16	85	54	52	297	41
Shallow well, open, no hand pump	0	0	18	0	10	2	30	4
Borehole	0	0	5	28	32	17	82	11
Improved traditional water source	9	24	19	1	12	10	75	10
Piped gravity scheme	61	9	2	0	1	3	76	11
Piped pumped scheme	0	0	56	0	0	2	58	8
Rainwater harvesting	30	1	0	1	0	0	32	4
Traditional water sources (river, ponds, trad. wells)	3	12	27	3	16	31	92	13
Others	3	6	0	11	0	9	29	4
Total	121	120	120	121	120	120	722	100
HESAWA source users	88%	85%	66%	93%	73%	57%	77%	

Table 5. Number of households using different types of water sources (HESAWA Evaluation Field Survey, October 2005).

Respondents who do not use water sources developed by HESAWA gave various reasons for this. These included unavailability of water at the source, the source being too far, the quality of water being poor or a better alternative being available. Only in a very small number of cases it was felt that the HESAWA source was "not constructed for us." The major problems facing water users in Serengeti District are that the sources are too far or that the water sources are not functioning because of drought or technical problems. For instance drought was indicated by 61 per cent of respondents in Serengeti District, but only 27 per cent of respondents in Kwimba District. As a result, tapping of traditional water sources is the highest in Serengeti. It should be noted that 67 per cent of respondents who do not use HESAWA water sources complained that the source is too distant. (Table 6)

Region	Ka	agera	M	wanza		Mara	Total	
District	Karagwe	Bukoba	Mwanza	Kwimba	Bunda	Serengeti	#	%
The source is too far	10	0	2	1	2	24	39	5
The source was not constructed for us	0	3	0	2	4	1	10	1
The quality of water is poor	1	0	12	0	4	3	20	3
The source is not functioning	0	12	9	0	18	16	55	8
There is better alternative	2	1	7	1	6	3	20	3
Households not using water from HESAWA source	15	19	41	8	32	52	167	23
Households interviewed	121	120	120	121	120	120	722	100

Table 6. Reasons for not using water from HESAWA sources (HESAWA Evaluation Field Survey, October 2005).

The October 2005 survey shows that the location of water source was most often chosen by the Village Government and the Village HESAWA Committee. It was also acknowledged, however, that water users themselves and district government officials, alone or together with village government officials, were involved. Influential villagers and WUGs seem to have less to say in this matter. The relatively

minor role of WUGs may be explained by the fact that most WUGs were established only during the last phase of the Programme when the majority of the wells had already been constructed. It is also noted that the gender was not a factor in the selection of water source location. In general, it appears that each district had its own way of selecting the location of water sources. The influence of the Village Governments and the Village HESAWA Committees was most profound in Mwanza Region and lowest in Kagera Region (Table 7).

There was no evidence that the suitability (or quality) of water source location was influenced by the group responsible for its selection. It was observed that about 80 per cent of the respondents were satisfied with the location of the water source. (Table 8).

Respondents who were dissatisfied with the location of water source largely complained of the sources being too distant, water quality problems, water source not functioning, or water source developed on private land which is likely to cause future restrictions in the use of the source. However, reasons for unsatisfactory location of water source differ from district to district (Table 9).

Region	Ка	gera	Мv	vanza	I	Mara	То	tal
District	Karagwe	Bukoba	Mwanza	Kwimba	Bunda	Serengeti	#	%
District government officials	11			2	5	6	24	3
Village government and HESAWA committee	23	9	75	80	25	21	233	32
District and village government officials together	31	2	10	7	70	3	123	17
Water User Group	19	1	0	6	8	6	40	6
The rich/ Powerful/ Elite/ Influential villagers		3			2	2	7	1
The users	26	91	20	11	3	38	189	26
Women	0	0	0	0	0	1	1	0
Men	2	0	0	0	2	0	4	1
l don't know	8	12	14	13	5	38	90	12
Others, natural source	1	2	1	2	0	5	11	2
Total	121	120	120	121	120	120	722	100

Table 7. Choice of water location (HESAWA Evaluation Field Survey, October 2005).

Table 8. Respondent's opinion on the water source location (HESAWA Evaluation Field Survey, October 2005).

Region	Ka	gera	M	vanza		Mara	-	[otal
District	Karagwo	Bukoba	Mwanza	Kwimba	Bunda	Sorongoti	#	%
Good location	102	100	84	107	97	85	‴ 575	81
Bad location	18	15	32	10	14	23	112	16
l do not know	1	4	1	3	7	11	27	4
Total	121	119	117	120	118	119	714	100

Region	Ka	agera	M	wanza		Mara	•	Total
District	Karagwe	Bukoba	Mwanza	Kwimba	Bunda	Serengeti	#	%
It is too far	17	3	6	1	3	16	46	39
Source was constructed on private land	0	6	0	0	4	3	13	11
The quality of water is poor	0	4	15	7	3	2	31	26
Water source is not functioning	0	5	11	1	10	1	28	24
Total	17	18	32	9	20	22	118	100

Table 9. Reasons for unsatisfactory location of a water source (HESAWA Evaluation Field Survey, October 2005).

3.2.3 Reliability and quality of water supply

Overall, only 38 per cent of the respondents are satisfied with the quantity of water available in the water supply system. The remaining get their water from the source, but they experience problems with the amount of water or there are seasonal problems during the dry season. Again the district-wise differences are clear with slightly over half of residents in Karagwe, Bukoba and Kwimba Districts enjoying good sources of water, while the majority of respondents from Bunda, Mwanza and Serengeti District face the problem of insufficient water. Serengeti District is most disadvantaged (Table 10).

The majority of the households perceive the quality of water acceptable for domestic consumption. Particularly in Kagera Region the respondents were most satisfied with the subjective assessment of the water quality, Serengeti District being again the worst off also in this respect. It should be remembered here that the users' perception about good quality water may usually be different from the 'professional' water quality criteria. Yet, the users' perception is important dimension of water use satisfaction. (Table 11).

Region	Ka	igera	Mv	vanza	Ν	lara	٦	otal
District	Karagwe	Bukoba	Mwanza	Kwimba	Bunda	Serengeti	#	%
Water is adequate	66	68	30	64	40	8	276	38
Water is available, but inadequate	17	35	88	48	53	58	299	41
Water is available, but unreliable	13	2	0	3	1	0	19	3
Water is sometimes enough, but there are problems during dry season	25	14	2	3	25	52	121	17
Water is not available at all in the village	0	0	0	0	0	2	2	0
Total	121	120	120	121	120	120	722	100

Table 10. Response on the adequacy of water (HESAWA Evaluation Field Survey, October 2005).

Region	Ka	agera	M	wanza		Mara	-	Total
District	Karagwe	Bukoba	Mwanza	Kwimba	Bunda	Serengeti	#	%
It is good (clear, no smell, good test)	109	113	98	89	95	83	587	82
Fairly good (slightly turbid, slightly salty)	10	2	13	28	14	19	86	12
Not good (turbid, saline)	2	3	9	1	5	2	22	3
lt is not always good (seasonal problems)		1		1	5	16	23	3
Total	121	119	120	119	119	120	718	100

Table 11. Quality of water in villages covered by the study (HESAWA Evaluation Field Survey, October 2005).

3.2.4 Functioning and maintenance of water systems

Over half of sampled 33 WUGs operate shallow wells equipped with hand pumps, the next most common water facility being boreholes. The sample included only one gravity flow system and two rainwater harvesting systems, and thus, the cost recovery study conducted later focused on gravity systems. Slightly more than half of the October 2005 sample functioned fully satisfactorily, with nearly one fifth being completely out of order. It can be assumed that the remaining about one third are operating below their design capacity or are under repair. Only seven out of 33 WUGs had no operational problems with their water supply systems, the most common problems reported being technology (30%), drought (24%), or vandalism (12%). Other less significant problems include lack of adequate involvement of water users, low contribution for maintenance funds, and environmental degradation.

About 40 per cent of the 35 WUGs studied in October 2005 reported no significant maintenance problems. Nearly half of the WUGs had the tools for maintenance, but alas, one third had no tools at all. The additional study carried out in 18 villages (WUGs) in December 2005/January 2006, on the other hand, confirmed that the vast majority of these WUGs (97%) were either fully capable of operating and maintaining their water supply systems or encountered only minor problems. Unavailability of tools has been the reason for inadequate O&M only in three out of 91 WUGs visited (See 3.2.5 below and the Box 3 for further outcome from this case study).

An alarming finding from the sustainability point of view is that three out of five WUGs do not have the necessary spare parts available. The necessary spare parts to undertake maintenance of water systems are available to only 24 per cent of the WUGs. Some key informants challenged this by questioning how is it possible that the maize mills and bicycles are working, but a simple hand pump is not. Is the lack-ofspare-parts problem rather an implication of the "water should be free" thinking? Or is this a gender question: a broken water facility is more a problem for women than for men, whereas a broken bicycle is a man's problem. On the other hand, reasonable access to spare parts from any dealer – and funds available for purchasing them – is a more crucial issue than whether the WUGs have the spare parts stored with them. About 70 per cent of the WUGs had the necessary manpower for the maintenance. A small number of WUGs reported that, so far, they had not experienced any need for maintenance of their facilities. Maintenance records are well kept by 77 per cent of the WUGs, but the remaining have no records at all. It was further found that nearly 80 percent of WUGs take less than a week, on average, to maintain their water supply system, although 25 per cent of WUGs can accomplish normal maintenance needs in a day. At the other end of the scale, maintenance of water systems may sometimes take months or even years (experienced in one WUG). In over 60 per cent of all cases, the maintenance of water supply systems is carried out by WUGs and nearly all the rest is carried out by the village fundi. Only one WUG reported that they depend on the district to maintain their water system.

It must be noted that when HESAWA started, the concept of *private sector participation* was not yet appreciated in Tanzania. As the situation began to change, HESAWA followed: vehicle maintenance, transportation services (lorries), spare parts, and local human resources from artisans to consultants were hired. Key informants involved in HESAWA implementation acknowledged that the local hardware stores should have been involved earlier instead of establishing "HESAWA shops" to keep a stock of spares (in containers) in the DWE office compounds. In October 2005, these containers were still evident in the districts, and functioning as revolving tool "shops." Apparently local procurement was functioning well at the end of Phase IV.

3.2.5 Management of water system finances – outcome from cost recovery study

Cost sharing was first considered at the policy level in the Agreed Minutes of April 27, 1983 between Sida, the Prime Minister's Office and MAJI. As a matter of fact, the villages' willingness to contribute was prerequisite to be selected into HESAWA. The villages were to be the owners of the facilities, and thus they should also bear the full cost of operation and maintenance. It was also noted that water for livestock through construction of dams would only be provided if the beneficiaries were ready to pay the full capital cost.⁵⁷ In the beginning, an up to 25 per cent local contribution was acceptable, but after the devaluation of the shilling this became insurmountable, and the local contribution was dropped down to 5 per cent. With the extremely high annual inflation rates, expecting a WUG to save cash in a bank was unreasonable when, at the same time, the rural water supply policy was based on the free-water principle. Cost sharing was certainly something new and much debated.

WUGs have to be financially viable to sustain their water systems. Therefore, the evaluation study carried out a specifically focused *case study on the cost recovery status* of a sample group of WUGs in Karagwe, Mwanza, and Kwimba Districts in December 2005/January 2006. The results of this case study are used in the analysis of the financial status of current WUG operations. Box 3 contains an overall summary of findings from this study. It was found that only about one-third of WUGs worked out financial plans, although about two-thirds do keep financial records and also make the records available to the water users. The fact that financial records are not kept and made available, suggests that accountability may be in question. This will likely affect cost recovery, and thus sustainability, of water systems in the future. Overall, the water charge collection mechanisms of WUGs are weak. Interestingly, about one-fourth of WUGs collect water charges on a regular basis, and nearly as many prepare financial plans. Another one-fourth collects water charges irregularly. The most common revenue collection modes include annual payments (21%), monthly charges (18%), collection of charges when needed (12%), payment per bucket (6%), and interest from revolving funds (3%). Collection per bucket is usually TZS 50 per bucket, and annual payments vary from TZS 500 to 1,200. Fifteen WUGs reported that their annual collection amounts to between TZS 4,000 to TZS 403,200, an average of TZS 99,300.

Only about half of the households are willing to contribute on a regular basis. In fact only third of the households where water charges are collected, had fully paid their dues. In nine per cent of WUGs, households are not willing to contribute to water services largely because the water supply is not adequate or otherwise reliable. In some cases, unwillingness to pay is reasoned on the basis that the need for funds is not immediate. Alternative sources of income for financing the water systems operation and maintenance are reported only by 15 per cent of the WUGs. Such alternative sources used by WUGs include micro credit (3%), donors, including NGOs (6%), entry fees for migrants (3%), and *Ifogong'ho*⁵⁸ (3%), which is a traditional fund raising system used by the Sukuma tribe. A number of WUGs (13) that have kept records of operation and maintenance costs report that an amount between TZS 2,400 and TZS 400,000 was used in 2005. The average operation and maintenance cost is estimated to be in the order of TZS 96,300 per WUG. Assuming that the above mentioned average

⁵⁷ Water Master Planning Coordination Unit (MAJI) & Institute of Resource Assessment (UDSM). 1983. p. 9
⁵⁸ Informal credit system.

collection (by 15 WUGs) is a valid base, the estimated average operating ratio⁵⁹ is about 97 per cent. This is an adequately ambitious goal for all WUGs. These average figures for annual O&M costs and water charge collection give a reasonably healthy operating ratio for the small group of WUGs (studied in the cost recovery case study), showing that WUGs are capable to operate effectively and provide water service on a sustainable basis.

Box 3. Cost Recovery – a brief note on the case study (December 2005/January 2006).

A specific focused cost recovery study was carried out covering 21 villages -13 in Karagwe District, 7 in Kwimba District, and 1 in Mwanza Municipality. Altogether 91 WUGs were visited during the study. They all enjoy water sources that were constructed by the HESAWA Programme. This is a clear proof of the HESAWA Programme's ascendancy in the three Lake Victoria regions.

Most of the WUGs in the programme area were established between 1999 and 2002, i.e. during the final phase of the Programme. The majority (88%) of WUGs in Karagwe District were established in 2000 while in Kwimba the majority (81%) were established in 2001. However, in Karagwe, 25 new WUGs have been established after HESAWA Phase IV between 2002 and 2005. Similarly in Kwimba, 31 new WUGs have been established since Phase IV, but none in Mwanza.

The population served by each water user group varies widely between the districts. In Karagwe, the smallest WUG serves 12 households with 69 people and the largest about 2000 households with an estimated population of 12,000 people. In Kwimba, the smallest WUG serves 18 households with 108 people, while the largest covers about 100 households and 600 people. The population served by one WUG averages 311 people in Kwimba and 538 people in Karagwe. The main reason for the relatively large population of water users per WUG in Karagwe is due to the presence of large gravity piped schemes which spread over a large area and serve large populations.

For all practical purposes, all WUGs covered in this case study prepare regular annual plans for operation, maintenance and improvement of water supply system; the plans typically cover (i) expansion of water supply system (88%) and (ii) replacement of hand pumps (47%), as well as (iii) purchase and stocking of hand pump spares (8%), (iv) maintenance of hand pumps (6%), and (v) replacement of pipe fittings (6%).

Financing of the future plans is chiefly expected through one time contributions from water users (98% of WUGs), financial support from the district councils (91% of WUGs) and savings from water tariff collected from the users (80% of WUGs). In addition, all 91 WUGs visited report preparing financial plans annually.

The regular financial requirements (O&M) are covered largely through contribution from water users in 98% of WUGs. The financial requirement for O&M ranges from TZS 25,000 to 340,000 annually. WUGs have had varying degree of success in raising funds for regular O&M; for instance in Karagwe, the average collection rate is 83%. All 91 WUGs visited (except for one) have instituted water fee or tariff in their area. The cost components considered in the tariff structure are most commonly the cost of spare parts and O&M tools; some have even made a provision for future expansions and replacements of existing facilities.

All WUGs in Kwimba and 91% in Karagwe have adopted annual water fee payments, which vary from as low as TZS 500/hh to as high as TZS 4160/hh, with an average rate of TZS 1382/hh in Kwimba and TZS 1064/hh in Karagwe. Some WUGs in Karagwe are using monthly water fee payments ranging from TZS 200/hh to TZS 500/hh. Only one of the visited WUGs applies a payment of TZS 50/per bucket.

The financial status of WUGs visited seems to be sound; WUGs in Kwimba are clearly ahead of those in Karagwe in collection of water tariff. In general, it was noted that the majority of WUGs (73%) have been successful in having reserved reasonable amounts of funds that can be used during times of emergency. The rest of WUGs have some reserves, but not enough for replacement of broken hand pumps, for instance. In general, WUGs seem to have collected water fees in the order of TZS 270,000 to over TZS 500,000 annually since the completion of the Programme. The money collected by WUGs is kept in the till by the treasurer or another selected member, or is deposited on the WUG bank account. In Kwimba, traditional revolving funds, widely accepted by the Sukuma tribe communities known as *lfoghong'ho*, are practiced.

Willingness to pay among WUG members appears to be relatively good with 70% of WUGs indicating that all households are willing to pay for their water supplies. WUGs have instituted various methods to enforce payment of water fees, including fines and not allowing defaulters to use water from the source; in some cases defaulters are isolated from participating in other social activities in the community.

 $^{^{\}rm 59}$ The total O&M costs as a percentage of the total revenue (i.e. collected water fees).

3.3 Poverty and Livelihoods

3.3.1 Background to poverty, water and sanitation

The water supply and sanitation sector has typically focused on health benefits during the past three decades. During the United Nations International Drinking Water Supply and Sanitation Decade (1981–1990) the approach was health-based and supply-oriented, but the scope was broadened from basic water supply to sanitation and health as well as hygiene education. It was considered that poor health caused by unsafe water quality, inadequate sanitation and hygienic practices was both a symptom and a cause of poverty.⁶⁰ This was the time when HESAWA, which by definition was a health-based programme (Health through Sanitation and Water), entered the scene.

The problem of access to safe and adequate water for the poor is now well known. The Sida Strategy for Water Supply and Sanitation⁶¹ (2004) states *"the main objective for supporting activities in water supply and sanitation is to improve the livelihoods of the poor people."* The Tanzanian Vision 2025 also acknowledges the importance of water in aiming at a high quality livelihood, one of the specific targets is universal access to water, but sanitation is not mentioned. The MDG targets, however, include also sanitation.

Especially in the rural context, water resources are critical for the viability of the ecosystems through which the poor access the natural resources. The Tanzanian PRSP (1998) recognises that the poor depend heavily on the environmental resources for income generation. It considers water a key factor in the socio-economic development in the fight against poverty.⁶² In the National Water Sector Development Strategy (2004) the goal is stated as *"improving water and sanitation services in rural and urban areas contributes to reducing poverty"* leaning heavily on the earlier health-centred paradigms and stating such rather vague strategies as "build capacity for poverty alleviation".⁶³ It is also claimed that the PRSP does not address the productive use of water, particularly for livestock and agriculture.⁶⁴ This issue was brought up by many district level interviewees and is of particular relevance in Tanzania where about 87 per cent of the population live in rural areas and depend on agricultural activities. The incidence of poverty is twice as high in the rural areas compared to urban areas.⁶⁵

The Household Budget Survey (HBS-2002) showed a modest decline in poverty over the preceding decade. Between 1991 and 2001 the basic needs poverty decreased from 39 per cent to 36 per cent, and food poverty from 22 to 19 per cent.⁶⁶ Figure 3 presented earlier shows the regional differences in basic needs poverty. In other poverty ranking by single PRSP indicators, Mwanza Region and Mara Region ranked as "moderately performing" and Kagera Region as "poor performing". Measured by the Human Development Index (HDI) as defined by the UNDP, Mwanza Region and Kagera Region ranke in the low HDI group and Mara Region in the medium group.

Ranked according to Human Poverty Index (HPI), Kagera Region scores the lowest among Tanzania's 20 Regions, Mwanza Region being the 14th and Mara Region the 15th on this scale. HPI also considers population without access to safe drinking water as one of its indicators.⁶⁷ Poverty is also a gender issue as poverty is experienced differently and in different degree by women. Hanson (2005) for example reported to have seen many women and children walking long distances with buckets of water balanced on their heads. Although the grace with which they do carry their buckets betrays the real pain of this backbreaking work it saps too much time and energy.⁶⁸

⁶⁰ Nicol, A. 2000. Adopting a Sustainable Livelihoods Approach to Water Projects: Implications for Policy and Practice. ODI Sustainable Livelihoods Working Paper 133, Overseas Development Institute, London. p. 8.

⁶¹ Sida. 2004. Pure water – Strategy for Water Supply and Sanitation.

⁶² National Water Policy 2002; The National Poverty Eradication Strategy 1998, Vice-Presidents Office, Dar es Salaam.

⁶³ National Water Sector Development Strategy (Circulation Draft, June 2004

⁶⁴ Research and Analysis Working Group (R&AWG). 2002..

⁶⁵ Tanzanian Household Budget Survey 2000/01 (HBS). 2002.

⁶⁶ HBS 2002 op.cit.

⁶⁷ R&AWG op.cit. Chapter 2, pp. 5-60

⁶⁸ Hanson, M. 2005.

3.3.2 Poverty and household surveys

Poverty is complex and has many faces. This chapter compares the findings from the HESAWA Evaluation Field Survey (October 2005) with the indicators used in the HBS 2000/2001. The HBS sampled between 12 and 24 households in each sampled area, around 1,000 in each of mainland Tanzania's 20 regions. The HESAWA Evaluation Field Survey (October 2005) was about 20 households per village in six districts in three regions, altogether 722. Compared to the previous HBS figures, this sample had larger families, more female-headed households, but also more houses with "modern" roofs and "modern" walls, and compared to other rural areas in Tanzania, also modern floors (Table 12). This Lake Zone sample compares favourably with the rest of Tanzanian rural areas.

Households %	1991/92 Mainland TZ HBS	2000/01 Mainland TZ HBS	1991/92 RURAL HBS	2000/01 RURAL HBS	2005 HESAWA survey Oct '05
Sample size	4,823	22,178			722
Average hh size	5,7	4,9	5,9	5,1	7,6
% female headed hh	18	23	17	22	31 (1)
% hh with a modern roof	36	43	24	31	55
Galvanised iron sheets	35	43	24	31	55
Thatch	53	46	63	56	42
% hh with a modern walls	16	25	10	17	30
Concrete bricks, cement	7,6	12	1,5	3	4,4
Burnt bricks	9	13	8	14	26
Mud bricks	25	23	24	24	49
Mud & poles			28	22	19 (2)
Grass	20	16	24	19	1,2
% hh with a modern floor (other than compacted earth)	91	87	9	13	23

Table 12. Household characteristics (HBS 2002 and HESAWA Evaluation Field Survey, October 2005).

⁽¹⁾ Of the total number of 381 female respondents 222 reported that they were the head of household. Total number of respondents was 722. However, it was not asked that if you are not the head of the household, who is. Thus, the number of female heads of household is probably bigger.

⁽²⁾ Under "other" the enumerators observed various combinations of mud, tree and other materials, even glass.

The above description of the houses was used as leading indicators in this evaluation to identify whether there were differences between the poor, the average and the well-to-do households in terms of HESAWA's benefits and impacts. The enumerators, recruited from the local district headquarters in each six district, were requested to observe the household they interviewed. According to their subjective assessment, out of the total 722 households observed, 144 were described as "poor." The following characteristics apply to these households: 73 per cent were constructed using mud bricks, but also grass and other local materials were used, and 83 per cent had thatch roof. Out of these poor households 55 per cent were observed in Mwanza Region, and only nine percent in Kagera Region. Interestingly the Mwanza Municipality stands out with 38 per cent of the total number of poor households. The following chapters and tables use this as a point of departure in making the difference between the households.

The HESAWA Evaluation Field Survey (October 2005) compares favourably with the HBS figures also when it comes to education: there are less adults with no education at all compared to the rest of Tanzania. At a closer look at the HESAWA Evaluation Field Survey (October 2005) out of the 144 poor households 38 per cent were female headed (in all samples 31 per cent were female headed).

Of all respondents in this female-headed "poor" households group, 30 per cent had never been to school, compared to 11 per cent out of the female-headed "well-to-do" households. Thus, it can be concluded that access to basic education and poverty are clearly linked to each other.

3.3.3. Physical capital: access to water and sanitation facilities

Water scarcity is more critical in rural areas compared to urban areas in Tanzania. The question is whether water scarcity, i.e. inadequate water supply, hit the poor harder in a village, and whether those identified as "poor" benefited from the improvements brought by HESAWA. The overview in the sampled area is in favour of HESAWA in general terms: where 55 per cent of Tanzanian households use a protected drinking water source, the same figure is 84 per cent in the HESAWA Evaluation Field Survey (October 2005) covering the three regions. This is clearly not in line with the overall coverage figures for the three regions as can be seen from the maps (Figures 1 and 2). Some 39 per cent use piped water and another 16 per cent protected wells or springs.

Rural households must travel farther to their supply, with only half living within a kilometre of the source compared to 73 per cent of households in urban areas.⁶⁹ Sanitation coverage is still low in rural Tanzania, and the regional differences are clear (Table 13). In the HESAWA Evaluation Field Survey (October 2005) the percentage of households with no latrine was higher than in the HBS figures for rural Tanzania, with Mara Region standing out also in this sample. Access to protected water source has certainly improved, but there is a difference between "good" and "poor" households: when 81 per cent of the "good" houses use the water facility constructed during HESAWA, only 69 per cent of the "poor" houses use the same (Table 13).

Sanitation %	1991/92 Mainland TZ HBS	2000/01 Mainland TZ HBS	1991/92 RURAL HBS	2000/01 RURAL HBS	2005 HESAWA survey Oct '05
Sample size	4,823	22,178			722
% of hh with a protected water source	46	55	35	46	83.7 (2)
% of hh within 1 km of drinking water	50	55	44	49	80 (3)
% of hh with toilet	93	93	91.3	91.9	90
No toilet	7.2	7.1	8.7	8.1	10.2
Flush toilet	1,3	2,2	0,2	0,5	1,4
Pit latrine	90.9	89.7	90.3	90.8	76.7
VIP	0.5	0.8	0.6	0.4	10.8
Other	0.1	0.1	0.2	0.1	0.9 (1)

Table 13. Water supply and sanitation coverage (HBS 2002 and HESAWA Evaluation Field Survey, October 2005).

⁽¹⁾ Could not be observed

⁽²⁾ 13 per cent reported using a traditional water source (not improved), and additional random respondents referred to rivers and "rambos". These are all counted as "not protected water sources". 23 per cent reported not using the HESAWA source.

⁽³⁾ The actual distance was not enquired, but two questions in this direction were made. Out of 722, total of 21per cent reported that it took a lot of time to walk, wait and fetch, more than 1 hour, and 20 per cent that the water source was "too far, a big problem".

There is also a striking difference in the use of traditional (not improved) water sources: 21 per cent of the "poor" state this as their water source compared to only 9 per cent of the "good" and 11 per cent of the "average" households. Similarly the responses to the question about whether there is enough water or not varies. Where half of the "good" households state that they do have enough water, only one-fourth of the "poor" have adequate water supply. In all groups, what stands out as a major reason

⁶⁹ Tanzanian Household Budget Survey 2000/01. 2002. National Bureau of Statistics Tanzania, Dar es Salaam. Key Findings.

for water supply problems is drought, although the differences are clear again: one third of the "good" houses, compared to half of the "poor" houses consider drought as one of the reasons for having insufficient water.

Sanitation is another matter. Table 14 shows how the households described as "good" have more latrines and have also received more HESAWA support for the construction of facilities. Only 13 per cent of the "poor" houses have a latrine. These houses were in unsanitary condition in other ways as well, all these aspects contributing to the enumerators' assessment of these households as "poor". For instance, of the "poor" households, half of the housing compounds were described as "not clean, solid waste problems, mosquitoes or flies". Of these, one out of four did not have a latrine, and those who did, had a pit latrine with no roof.

The latrines were described as *'flimsily constructed, breaking down, maybe not safe for children*" in 60 per cent of the latrines in the "poor" houses, compared to only 7 per cent of the latrines of the "good" houses and 22 per cent of the latrines of the "average" houses. The latrines were also described as looking worse than the house which was already observed to be poor (62%). The condition of the latrines was comparable with the condition of the house, as 66 per cent of the houses describes as "good" had also a latrine described as good, compared to only 6 per cent of good latrines observed in the households observed as "poor".

Condition of the house	Do you have a latrine?	Frequency	Percentage
Good	Yes	168	93.3
	No	12	6.7
	Total	180	100.0
Medium/average	Yes	344	86.6
	No	52	13.1
	Total	397	100.0
Poor	Yes	114	79.2
	No	29	20.1
	Total	144	100.0
Condition of the house	Did you get support from HESAWA for construction of this latrine?	Frequency	Percentage
Good	Yes	55	30.6
	No	125	69.4
	Total	180	100.0
Medium/average	Yes	94	23.7
	No	303	76.3
	Total	397	100.0
Poor	Yes	18	12.5
	No	125	86.8
	Total	144	100.0
Female, head of household and never went to school	Yes	7	11.7
	No	52	86.7
	Total	60	100.0

Table 14. Latrines and HESAWA by condition of the house (HESAWA Evaluation Field Survey, October 2005).

In the case of the female headed households where the head of the household never went to school, 73 per cent had a latrine but only 12 per cent had had support from HESAWA in its construction. HESAWA support for households was mainly subsidies in form of a latrine slab. In these households, only 59 per cent of the inhabitants may use this latrine. Those who cannot use the latrine, include children (18%) and old people (10%). Lack of latrines and poor environmental sanitation have, without doubt, influenced the assessment done by the enumerators. Thus, these findings could have been expected to be as they are: poor house, poor facilities.

Some key informants stated in their interview that "people in the Lake Zone are not actually that poor but they live very poor life". For instance, a household can have more than 1,000 cattle being still "poor" because of the local perception of cattle and its meaning to people. Even if water is highly prioritised and important for livestock people are not ready to sell their cattle to sustain their deteriorated water system.

3.3.4 Natural capital: drought matters

The main income of 98 per cent of the household respondents in the HESAWA Evaluation Field Survey (October 2005) was farming and animal husbandry. Water and environment in a broader sense are prerequisites for these activities. The Regions surrounding Lake Victoria are diverse from the geohydrological point of view. Villages even fairly close to the shores of Lake Victoria have encountered drought and insufficient water.

The Village Governments were requested to assess certain environmental characteristics of their respective villages. All Village Governments reported drought as one of the problems. Drought was reported in all interviews and discussions, and also acknowledged in the household surveys as a major reason for water shortage. One-fifth of all WUGs interviewed considered drought as the major cause of the problems in their water supply. Deforestation was also brought up in the meetings and workshops. A number of environmental concerns, of which some were only seasonal, are given in Figure 10. The Village Governments were further asked whether these concerns were taken into account when planning the activities and choosing the technology for the construction of the HESAWA facilities. The majority stated that no, they were not.



Figure 10. Environmental concerns expressed by the Village Governments (HESAWA Evaluation Field Survey, October 2005).

The survey outcome raises questions whether HESAWA succeeded in being environmentally sensitive in its own operation. Environmental awareness was an aspect of overall hygiene and sanitation education, but it did not translate into practice in the physical construction of the facilities. Even if, as a water supply programme, HESAWA on purpose did not touch the broader water resource management issues, environmental factors affecting the quantity and quality of drinking water should have warranted more attention. The awareness of links between forest coverage and local water resources would certainly have been an important point to make. HESAWA could have promoted reforestation, water source protection and overall watershed management as an integral part of its operations.

3.3.5 Human capital: health, skills and well-being

Human capital in livelihoods context represents the skills, knowledge, availability of labour and good health. It is about the quality and level of human capital available in a household to plan and work for better livelihoods. Note that in houses observed as "good" by the enumerators, only nine percent stated that they never went to school compared to 30 per cent of those whose house was observed as "poor". In "good" houses the main sources of income were more varied although the majority, 87 per cent, were farmers.

Human resource development was one of the corner stones of HESAWA. A significant number of individuals and institutions, including WUGs, were trained as is evident from the various reports. Training activities targeting the WUGs were extensive, since 5517 WUGs were trained out of the total number of 5761 (96%). It seems that the capacity building activities were targeted more on awareness and promotion issues than actual technical or implementation related issues. Still there was quite a lot of technical training for various village resource persons and financial management training for WUG Management Committees and staff. Training for village resource person covered village *fundis* (technicians), pump attendants (PAs), village health workers (VHWs), traditional birth attendants (TBAs) and village animators (VAs). VHWs became instrumental in promoting improved hygiene and the development of household latrines. Village Animators (VAs) and Traditional Birth Attendants (TBAs) were equally used to mobilize people to participate in HESAWA activities.

Well-being is a subjective matter and difficult to measure as it may constantly change over time and within a household. In the household surveys, 84 per cent agreed that HESAWA had contributed in raising their well-being. At a closer look, the difference is clear between "good" and "poor" houses. Whereas about 90 per cent of both the "good" and the "average" agreed that HESAWA had improved their well being, 67 per cent of the "poor" shared this view (Table 15). The follow up questions on how their well-being had improved, follow a similar pattern, the "poor" continue to stand out. For instance, 36 per cent of the "good" households recognised the provision of education as an aspect of the increased well-being, compared to only 15 per cent of the "poor". These are analogous with the "poor" using unprotected water sources, having less latrines and generally having participated less in HESAWA. The causal relationships are numerous. Yet, the overall outlook is positive.

Condition of the house	Did HESAWA improve your well-being?	Frequency	Percentage
Good	Yes	161	89.4
	No	18	10.0
	Total	179	99.4
Medium/average	Yes	348	87.7
	No	46	11.6
	Total	394	99.2

Table 15. Do you think HESAWA have had any contribution in raising your well-being?(HESAWA Evaluation Field Survey, October 2005).

Poor	Yes	96	66.7
	No	48	33.3
	Total	144	100.0

3.3.6 Social capital: participation and networking

In this evaluation the term 'social capital' is used in the context of the sustainable livelihoods framework where it is taken to mean the social resources upon which people draw in the pursuit of their livelihood objectives. These are developed through:⁷⁰

- Networks and connectedness, either vertical (patron/client) or horizontal (between individuals with shared interests) that increase people's trust and ability to work together and expand their access to wider institutions, such as political or civic bodies;
- Membership in formalised groups which often entails adherence to mutually agreed or commonly accepted rules, norms and sanctions; and
- Relationships of trust, reciprocity and exchanges that facilitate co-operation, reduce transaction costs and may provide the basis for informal safety nets amongst the poor.

One key aspect of social capital is group formation. The main point of interest here is on the WUGs, in other words, whether legally formal entities or informal groups of users were formed to take care of water points and sources. Good governance dimensions apply to this equation, and are discussed in further detail in the following Chapter 3.4. This chapter captures how those whose house was observed as "poor" participated or otherwise contributed to the HESAWA schemes. In addition to the quantitative findings from the Evaluation Field Survey (October 2005), the evaluation team held meetings with groups of women in several villages. In Bunda District, four women groups were met, of which one group of professional women in Bunda town and three groups of rural women from different villages. In Kagera Region the discussion was held with one women group in Kemondo Bay in Bukoba Rural District.

The relationship between water and poverty stood out very clearly in all interactions, especially in meetings with women. Women are the ones who deal directly with water at the household level, they are the ones who work most on the farms and who are responsible for the family's health and well being most closely. In their opinion, the women's workload increases when there is a shortage of water. Any effort to provide water translates directly into efforts to alleviate poverty and improve the standard of living. In their own way of defining poverty, women indicated that to them poverty is not only about low income but also about lack of involvement in planning and decision making as well as lack of information/education.

The Evaluation Field Survey (October 2005) shows that again there is a difference between those whose house is classified as "poor" and those who are classified as "good" or "average". Where nearly two out of three respondents from the "good" or "average" households were members of WUGs, only one of three of the "poor" household was a member. A similar ratio can be observed in the answers whether the respondents know how the WUG members were selected and whether they know what the WUG is doing. Yet, the ratings of WUG performance were fairly similar in all groups, with about 40 per cent in each group rating WUG performance as "good" and about 20 per cent as "fair". The "good" household respondents gave a better rating for the Village HESAWA Committees than the other two (Tables 16 and 17).

⁷⁰ DfID Sustainable Livelihoods Guidance Sheets 2.3.2.

Condition of the house		Frequency	Percentage
Good	Yes	106	58.9
	No	71	39.4
	I don't know what is water users group	3	1.7
	Total	180	100.0
Medium/average	Yes	226	56.9
	No	156	39.3
	I don't know what is water users group	12	3.0
	Total	394	99.2
Poor	Yes	49	34.0
	No	93	64.6
	I don't know what is water users group	2	1.4
	Total	144	100.0

Table 16. Are you a member of the Water Users Group/Committee who looks after the water point/well/tap?(HESAWA Evaluation Field Survey, October 2005).

Table 17. Do you know how the Water Users Group/Committee members were selected?(HESAWA Evaluation Field Survey, October 2005).

Condition of the house		Frequency	Percentage
Good	Yes	131	72.8
	No	35	19.4
	Not applicable, answered [2] or [3] in Q29)	13	7.2
	Total	179	99.4
Medium/average	Yes	280	70.5
	No	89	22.4
	Not applicable, answered [2] or [3] in Q29)	24	6.0
	Total	393	99.0
Poor	Yes	79	54.9
	No	42	29.2
	Not applicable, answered [2] or [3] in Q29)	22	15.3
	Total	143	99.3

3.3.7 Financial capital: cash and contributions

The financial details enquired of the households in the October 2005 survey related to water and sanitation, rather than household assets and cash income. The key question was whether the household contributed to the construction of the water facilities in HESAWA, and whether they were still contributing and considered it affordable. When about 60 percent of the "good" and "average" households stated that yes, they had contributed; the corresponding figure for a "poor" household is 50 per cent.

It is clear that the "poor" households do not contribute to the same extent as the rest. The evaluation team visited also one WUG which had a no-pay-policy for the poor and the elderly. There are very clear region-wise differences, with Karagwe and Kwimba Districts standing out with clearly more

households paying the water charges, Mwanza Municipality having five times less households paying water charges than Kwimba District. Those who paid water charges also rated WUG performance higher. Interestingly, only one-third of the "non-HESAWA water source" users stated that they have a water charge, compared to two-thirds in the "HESAWA water source" users' only group. HESAWA appears to have had a positive impact on advocating cost recovery. As can be seen in Table 18, if the water charges were paid, it was also affordable. Only a cases in the "average" and "poor" household groups stated that the tariff was absolutely unaffordable. HESAWA clearly made the correct assumption that cost recovery is possible.

Condition of the house	Is your water tariff affordable?	Frequency	Percentage
Good	Yes, it is affordable	118	65.6
	No, it is slightly expensive	7	3.9
	l do not know	5	2.8
	Not applicable (no water tariff or do not know)	50	27.8
	Total	180	100.0
Medium/average	Yes, it is affordable	217	54.7
	No, it is slightly expensive	21	5.3
	No, it is absolutely unaffordable, it is too expensive	9	2.3
	l do not know	3	0.8
	Not applicable (no water tariff or do not know)	146	36.8
	Total	396	99.7
Poor	Yes, it is affordable	48	33.3
	No, it is slightly expensive	10	6.9
	No, it is absolutely unaffordable, it is too expensive	5	3.5
	l do not know	2	1.4
	Not applicable (no water tariff or do not know)	79	54.9
	Total	144	100.0

Table 18. Do you think that this payment is affordable for your household?

 (HESAWA Evaluation Field Survey, October 2005).

* No monthly payments. Alternatives: annual, per bucket, paid once, never paid

3.3.8 Views on poverty from the districts

Poverty and livelihoods were topics in all interviews held in the villages and with the district-level stakeholders. Although some of the interviewees were not able to identify direct impacts of HESAWA on poverty, indirect links could be made through improved health, water availability and saved time through shortened distance and queues at water points. According to the district-level interviewees, HESAWA brought health, water and sanitation strongly together. Although there are differences in the rate of acceptability and response from one place to another, the introduction of latrines both at household and institutional level improved sanitation which was reinforced through health education. There are no exact records to show the impact of family health on the economy, but families have fewer cases of sickness, and thus less lost work days, now than before the HESAWA intervention. Water borne diseases have been reduced to a large extent. Due to improved health family incomes and time for taking care of sick people have been saved for other economic activities. In this respect there were more positive impacts, from health to generally better life.

The three District Water Engineers interviewed commented generally that HESAWA has done a lot to improve the water supply in the districts. Yet, they acknowledged that there is still an acute water shortage. The main reason for the shortage of water was drying or breakdown of the water facilities (the underlying reasons for the breakdown of water facilities are covered in other sections of the report). In Serengeti, for example, the water engineer reported that nearly 50 per cent of the installed HESAWA water facilities are not working. The most recent status evaluation for Bunda also indicated that 241 out of 269 HESAWA installed shallow wells are working while only 10 out of 23 boreholes are operational. The water shortage is also evident in Kwimba and the District Water Engineer's office has already received a minimum of 13 new applications for water facilities. As it now stands, people still travel long distances and use a lot of time on fetching for water.

With the exception of one district where the water engineer reported that the rate of migration among pastoralists had been reduced due to the availability of water, no impact of HESAWA has been felt on the side of livestock in other areas. In areas such as Serengeti, Bunda, and even Kwimba, livestock is still the measure of wealth dividing households between wealthy or less wealthy. It was suggested that a herd of "five cows" is the poverty line, below which the families had worse health and other unfavourable conditions. Water for poverty alleviation was not only about water for people and health of people; it was also and equally important that there was water for a healthy livestock. HESAWA did not consider water for livestock as a solution for poverty alleviation and people interviewed at district level viewed small dams for rainwater harvesting efficient to serve the livestock and increase the wealth. In a way, the contribution of water in improving direct economic benefits through livestock, which is one of the most important economic activities, has not been realized.

During the meetings with the women's groups, the relationship between water and poverty stood out very clearly as women are the ones who deal directly with water at the household level. They are the ones who work most on the farms and the ones who are most affected by poverty. In their opinion, women's workload increases when there is shortage of water and thus any effort to provide water can directly be translated into efforts to alleviate poverty and improvement of the standard of living. In their own way of defining poverty, women indicated that to them poverty is not only low income below standards but also lack of involvement in planning and decision making as well as lack of information/ education.

Like in other discussions, the role of water in poverty alleviation could hardly be mentioned directly due to the fact that there is still shortage of water for household use that cannot be used for other economic activities such as gardening. Water shortage complicates the situation in many other ways as women cannot wash and cook for their children in time they cannot go to their farms or do any other economic activities. Women acknowledged, however, that the availability of water is much better now compared to the situation before HESAWA intervention although in some cases such as Balili village in Bunda district women still spend 4–6 hours in the queue for water. In their opinion, the situation in future will be worse and they even projected that women will be spending their nights in the queue, come 2025, if the situation will not be changed.

3.4 Good Governance and Institutional Capacity

3.4.1 Background to good governance and institutional capacity

Governance entails collective management of people's lives in their interaction with the state, private sector and civil society. Good governance goes beyond technical management of public affairs and includes political and democratic aspects focusing on people's participation in running public affairs. According to the United Nations Economic and Social Commission for Asia and the Pacific (UNES-CAP), good governance is participatory, communicative and inclusive, taking into account the views of minorities and hearing the voices of the most vulnerable in society in decision-making. It is consensus-

oriented, open, transparent, accountable and anti-corrupt. It is coherent and integrative, responsive and sustainable to both the present and future needs of society. It is equitable and ethical, effective and efficient, and is enforced by law.⁷¹

Box 4. Women's view on sustainable livelihoods, poverty and water.

Source: Field notes from women's groups in Kemondo Bay in Bukoba Rural District and Balili and Nyambehu villages in Bunda district, October/November 2005.

Water Sources and Other natural resources (natural capital): There was no water before HESAWA. In one case there is now one water facility available in the village, which is not enough because the population has increased and there are no other sources of clean water. Women spend up to 4 hours in the queues and as a result they have little time for farming, washing and preparing food for their children. Their children are not growing well because they lack enough food, fruits and vegetables, which makes them perform poorly in the schools. However, the well has helped them very much because the water is clean for drinking and they can still use the far away lake water for other activities. The women have planted trees and the environment is clean now than before but the drought has caused more trees to dry and because the water is not enough they cant grow more.

Water and sanitation facilities (physical capital): Water is salty but when boiled can be used for drinking. HESAWA water is considered safer than the lake water only that is not enough. People had no latrines but HESAWA trained and support them to get bumpers for latrines although not everybody could afford. The cost was too high and only 15 families could afford. However, water borne diseases have decreased tremendously since 2000 when HESAWA built a water well and give sanitation education.

Contributions (financial capital): Every water user in the household (who are women) pays 200 TZS every month except for the older women. The water users have TZS 460,000 in the bank account and they hold meetings to budget and fine those who have not paid their contributions. The money is used for repairing the facility, paying for the watchman and now they are accumulating to get additional well. Although women are the ones who pay, a chairperson for the well is a man. During physical works both men and women provided labour.

Health, skills, knowledge and awareness (human capital): HESAWA trained villagers on boiling water, environmental sanitation including how to arrange the house and the cleanness in and outside house. On gender, HESAWA raised awareness. Trainings were done three times but the tradition here is very strong. Women have no power, they can't make decisions on: e.g. they are not involved at all in selling and budgeting for livestock or crops and if they dare to ask they are bitten badly. Men do not buy food for children, pay for their education or health costs. Women are given milk to sell and get all these but the milk is not enough for children and selling to get money for other things. They can't even sell the grains they grew to get money for milling; sometimes they are forced to steal and sell to get the grains milled for children. This was there before HESAWA and is there today (Wakurya men are difficult!).

At the village level women are now involved after 2000 when HESAWA started but their participation is still limited because traditionally women cannot talk in front of men. If they dared, their husbands got embarrassed and that affects their relations. Even women themselves would not like to see their fellow misbehaving so they kind of disappoint those who talk. But generally, HESAWA helped women to get confidence and they even got membership in the village government. Polygamy is common. On average a man can have 6-10 wives depending on how his ability to pay for bridewealth. Due to too many wives, many families lack harmony and that affects children because the husband tends to listen to his most recent wife or any other but who can cause other wives to be hated. Children of the hated wives are not taken to school, which affects women because their children migrate to town where they start using drugs and others become street children etc.

With regard to the evaluation of the HESAWA Programme and its linkage with the governance structures in the Tanzanian context, this study focuses mainly on assessing the following components and indicators of good governance and their application on various levels:

- Participatory, communicative and inclusive;
- taking into account the views of minorities and the most vulnerable in society in decision-making;
- open, transparent, accountable and
- integrative, responsive and sustainable to both the present and future needs of society.

⁷¹ UNESCAP (See concept paper on good governance.)

With regard to institutional development, in this evaluation institutional development or capacity development are understood as the *processes by which individuals, organisations and social systems increase their capacities and performance in relation to goals, resources and environment.* This thinking is largely based on the NORAD's "Handbook in Assessment of Institutional Sustainability"⁷². Institutional development includes but is not limited to human resources and organisational development. It also involves change in and transformation of social systems. In general, institutional development embraces three levels: individual actors, organisations, and social systems, and consists of a broad range of activities at each of these levels. Capacity can be defined as the ability of individuals, organisations and broader systems to perform their functions effectively, efficiently and in a sustainable way. Capacity is then the power or energy which determines performance and sustainability and becomes as such the target for institutional development efforts.

This evaluation follows the conceptual framework of new institutional economics, which means that the concepts of institution and organisation are related, but not identical. Institutions refer mostly to the system level and the norms, values and regulations which guide and constrain the behaviour of individuals and organisations in a society ("the rules of the game"), while organisations are the actors or "players" within a system. The levels of institutional development, capacity and sustainability in this evaluation can be categorised to several levels: (1) village level, including Water User Groups (WUGs), Village Governments (VGs) and their various committees, (2) local administrative level, which can further be differentiated at (a) District and (b) Regional levels, and (3) national level, which includes various ministries at the national level. This chapter presents the findings from documentary review and the field survey carried out in the six selected districts. In assessing the impact on institutional development and governance issues, the focus is placed on the following key indicators; the extent of institutional continuity (or discontinuity), levels of participation and inclusiveness, extent of transparency and accountability and effectiveness as well as institutional capacity. Based on the Rapid Institutional Assessment dimensions, certain key indicators of governance and institutional development are used in the analysis.

3.4.2 A start with the Village HESAWA Committees

In the HESAWA Programme, the Village Government was the key implementing agency at the village level. The Village Government is an elected body composed of four committees, of which the social welfare committee is, among others, responsible for all matters related to water and health. During the first three phases, a Village HESAWA Committee (VHC) was in charge of supervising all HESAWA activities. The VHCs were established to coordinate, supervise and monitor all the HESAWA related activities at the village level. The VHCs were also responsible for identifying the locations of the water points or installations. The VHC also identified individuals to be trained by the programme and required to perform village level activities.

The Village HESAWA Committees' effectiveness tended to vary. In Kagera Region for instance, only one third of the planned latrines were constructed.⁷³ In certain districts such as Kwimba, Magu and Ukerewe, the TBAs were not required to send their reports to the districts, making it difficult to assess their effectiveness and impact.⁷⁴ VHWs were assessed as being "very resourceful" for their communities. Under their supervision, a total of 8,620 household latrines were constructed in the three districts of Magu (4987), Kwimba (2643) and Ukerewe (990) by the end of June 2002.⁷⁵ One major reported limitation for both TBAs and VAs was the lack of incentives of some of them as they were operating solely as volunteers. Figures 13 and 14 in the following gender section elaborate on these issues from the gender perspective. Although the VAs were volunteers, to enhance sustainability it was suggested that they should have been linked up with the local level departments of the MCDWC.

⁷² NORAD. 2000. Handbook in Assessment of Institutional Sustainability. June 2000

⁷³ Final Progress Report, Kagera Region, p. 15.

⁷⁴ ibid, p. 8.

⁷⁵ ibid, p.9.

Notwithstanding the impressive number of trained staff, the amount of the personnel was still far from adequate. In the Programme Document for Phase IV (1998), the need for an increased number of trained personnel for various posts was highly emphasised. Moreover, the effectiveness of the VHCs in supervising HESAWA activities in their respective villages was rather mixed. The first limitation was an inherently institutional defect emanating from the presence of weak district councils which were just being re-instituted. VHCs were supposed to report to district councils which by then were still new and suffered from low capacity and meagre resources.⁷⁶ As a result, the VHCs ceased to exist in most villages.⁷⁷ For instance, in Mwanza Region only 20–25 per cent of VHCs existed by the year 2002.⁷⁸ Being in charge of all HESAWA activities in the village, the VHCs lacked direct ownership of specific water point systems. The formation of Water User Groups (WUGs) made the continuation of VHCs difficult, and perhaps unnecessary. The WUGs became highly active and largely took over VHCs' function. Thus, while they seem to have played a role in the identification of water points' location particularly in the first two phases, the VHCs are no longer key organs in dealing with water system operation and maintenance.

3.4.3 A closer look at the Water User Groups

Water User Groups (WUGs) were formed beginning in the mid-1997 and further consolidation took place in the last phase between 1998 and 2002. WUGs were created in response to the challenges encountered in the previous phases, and considered by many key informants as a turning point. The WUGs transferred ownership and management of water facilities from the village government to the users themselves. This was intended to empower the local community to take a proactive role in operating, maintaining and safeguarding the water installations. More importantly, WUGs were the corner stone for sustainability of the Programme. The formation of WUGs coincided with the adoption of the "Rural Water Policy" (1997), which emphasised community management and ownership of water supply schemes. By the end of the programme, a total of about 5,700 WUGs with estimated committee members of about 66,000 had been formed and trained.⁷⁹

The mode of WUGs formation provided room for participation of water users in a specific neighbourhood, a level even lower than a village.⁸⁰ A WUG committee consists of 12 members divided into three sub-committees of four members each. The sub-committees include finance, security and technical. A meeting of all neighbourhood residents selects the 12 WUG committee members. A WUG is led by a chairperson, secretary and treasurer who are also selected by the neighbourhood assembly. Each sub-committee has to ensure a gender balance in its composition.

Members of the WUG committee were trained for three days on how to manage water facilities including hygiene, education and skills on pump repair and provided with necessary tools. In addition, the village and ward leadership was given training on participatory monitoring, management skills, vision and leadership. According to the WUG guidelines, a WUG is supposed to hold a meeting with all users once every three months and when deemed necessary. The sub-committees are supposed to meet once every month.⁸¹ In order to maximise efficiency, the WUGs were supposed to collect operational and maintenance funds and deposit them to a bank account for the maintenance of the water facility.

In order to enhance sustainability, the formation of WUGs was combined with the enforcement of so called "mandatory matching" whereby district councils and the beneficiaries were required to contribute 25 per cent of the total installation costs.⁸² The local contribution enhanced the sense of ownership among the users.

⁷⁶ Hifab, p.6.

⁷⁷ HESAWA (2002), Final Hesawa Programme Progress Report (1985–2002): Mwanza Region, p.5.

⁷⁸ HESAWA (2002), District Promotion Advisor's Annual Report for Mwanza region, p.25.

⁷⁹ HESAWA (2002) Final Progress Report: Kagera, Introduction Section.

⁸⁰ A village comprises of several neighbourhoods, or popularly known in Swahili as 'Vitongoji'.

⁸¹ HESAWA – Guidelines for WUGs, p.7.

⁸² Kagera Region Final Completion Report. 2000. p.25

Figure 12 is based on the final completion report of Mara Region, where Tarime District appears to be the only district able to report all funds budgeted and utilised over the course of action from beneficiaries, district councils, the central government and donor funds. The proportion of the contribution from the districts becomes gradually larger, and during the last two years also the beneficiaries' share is proportionally larger. There has been a considerable fluctuation in the utilisation of annual budgets (Figure 11).⁸³



Figure 11. Funds released for HESAWA programme in Tarime District 1991/92–2001/02 (Mara Region Completion Report 2002).

As verified from various studies the overall effectiveness and performance of the WUGs varied significantly from one district to another. An internal evaluation done between August 2000 and April 2001 involved a hundred WUGs in Mwanza and Mara Regions.⁸⁴ Only 46 per cent of the WUGs had regular meetings with all users, and about 60 per cent had regular meetings of the WUG committee. Also, only half of the visited WUGs collected regular household contributions for O&M. The adequacy of the funds collected to cover O&M costs depended on the functionality of the water facility. If the water facility was functional, some WUGs (22%) were able to use the money as a revolving fund called *'Ifogong'ho'*. This is an informal credit system whereby the members could borrow and return money with a specified interest rate.

The findings indicate that there was a relationship between the WUGs' frequency in holding regular meetings and their ability to boost monthly contributions from the users. Among the WUGs that held regular meetings, 62 per cent collected monthly fees. Among those that did not hold regular meetings, only 45 per cent were able to collect monthly fees. Another internal reviews done in Kwimba (2001) and Magu (2002) provide information about the effectiveness of the WUGs.⁸⁵ The average amount of O&M funds per WUG was TZS 96,955 and 46,253 in Kwimba and Magu respectively. The proportion of WUGs with proper funds management was 78 per cent in Kwimba and 36 per cent in Magu. Only

⁸⁴ Maria Cedmert and Malin Dahlberg. 2001. A Study of Water User Groups in Mwanza and Mara Region, p.13.

⁸⁵ The number of WUGs assessed were drawn from Kwimba (571), Ukerewe (258) and Magu (825).

⁸³ Mara Region Final Completion Report, 2002

about 8 per cent of the WUGs did not hold meetings with all users in the past one year in Kwimba compared to 21 per cent in Magu.⁸⁶

Furthermore, in the course of Programme implementation, the effectiveness of the WUGs seemed to depend on the district's continued technical support and promotion to the WUGs. As the VHCs proved to be weaker, the institutional gap at the village level was reflected also at the district level. Inactive WUGs lacked continued support and coordination from the districts. At the end of Phase IV plans were underway to revive the VHCs as organs "which can link the district and the village and for coordinating all HESAWA activities within the village set up".⁸⁷ These revived VHCs were to consist of six to ten members including a village animator, two VHWs, two to four WUG members and a school health teacher. However, in many districts, the re-establishment of the VHCs was hampered by limited resources.⁸⁸ In the following sections, the findings from the HESAWA Evaluation Field Survey (October 2005) provide information on the current state of WUGs three years after the end of Sida support. This analysis aims also at assessing the institutional continuity or discontinuity and how well elements of good governance have been put into practice at the village level.

2.4.4 The Water User Groups today

Community participation in managing water facilities was the cornerstone for sustainability of the HESAWA Programme. This survey intended to assess the extent to which the users are involved in HESAWA activities and their opinion about efficiency and effectiveness of the ongoing activities during the post-Sida period. HESAWA's name recognition is still very high in the three regions. All 722 house-hold respondents still remembered HESAWA. However, the VHCs that were established during the first three phases do not seem to be active in the decision-making process. About one out of five respondents mentioned the VHC as the organ that makes decisions concerning the maintenance of water installations. Overall, the performance of WUGs is rated by the users as *satisfactory* (Table 19).

Ownership of water facilities is also demonstrated by the rate of participation in making key decisions concerning maintenance of water installations. More than half of the household respondents reported that they are members of a WUG in the village (53%). There are variations across districts. More than half of those who said that they are members of a WUGs come from Kwimba and Karagwe Districts. About 62 per cent reported that they have selected their leaders through voting and only 7 per cent said that their leaders were appointed, and many of these are from Mwanza and Serengeti Districts. This finding coincides with the opinion of the WUG members. About 87 per cent of the WUGs reported that they voted for their leadership.

Response	VHCs	WUGs	
	Percentage/(Counts)		
Good [satisfactory]	35% (249)	44% (313)	
Fair	21% (147)	24% (173)	
Poor	8% (56)	6% (45)	
Don't Know what they are doing	23% (162)	14% (99)	
No VHCs	15% (104)	12% (87)	
Total	100% (718)	100% (717)	

Table 19. Household respondents' opinion of the VHCs and the WUGs (HESAWA Evaluation Field Survey, October 2005).

⁸⁶ District Promotion Advisor's Annual Report, Mwanza, June 2002, p.4.

⁸⁷ District Promotion Advisor's Annual Report for Kwimba, Magu and Ukerewe districts, p. 25.

⁸⁸ ibid, p. 25.

About 70 per cent of the WUGs reported that they keep financial records and that they show the records to the users. While the WUG committee members seem to be informed of the financial records among themselves, the rest of the users are not. The findings from the household survey indicate that half of the respondents did not know how the WUGs use the money. Information about expenditure is largely shared among the WUG committee members, but not among the users in general. Also, only eight per cent of the WUG members attend meetings regularly, and a majority of those who do not attend meetings frequently may not have any information on the management of the water facility.

Moreover, users were asked whether or not they make contributions for the maintenance of their water facilities. About two thirds of household respondents reported that they have made contributions in cash and one third in kind. These contributions can be infrequently done. As the field survey also indicates, willingness to contribute was a problem even during Phase IV. Only 11 of 34 WUGs reported that their members are willing to make contributions. Asked whether or not the users have paid water tariffs this year, only 23 per cent of WUGs responded affirmatively, with 74 per cent reporting problems in receiving regular payments. Yet, the WUGs have their own ways of enforcing accountability among themselves. 49 per cent of the WUGs reported that they use punishment practices and 40 per cent prefer to hold conflict management meetings to resolve any dispute or managerial issue. The formulation of by-laws has assisted the WUGs to manage and resolve misunderstanding or conflicts.

Effective community ownership and management depend on the legal status of the group to own both land and acquire water rights. The process of WUGs legal registration has been rather slow. Among the 36 WUGs visited, only six WUGs (17%) reported that they have been registered as associations to acquire the certificate of land right (three WUGs) and to acquire the certificate of water right (three WUGs). For many of these, the process of acquiring associational status took more than a year. 23 WUGs reported that they are not registered (66%) and four WUGs were in the process of registering (11%).

WUGs were also encouraged to work out by-laws and get them approved by the relevant Ministry. By the end of the Sida support, WUGs in Bukoba rural district had already received their by-law approved by the Ministry.⁸⁹ In Mwanza Region, WUGs in Geita District had their by-laws signed by the Minister by June 2002. In other districts such as Magu, Ukerewe, Kwimba, Mwanza City, Sengerema and Misungwi WUGs had already drafted their by-laws.⁹⁰ While many WUGs were able to formulate their own by-laws, and a few were able to form Water Users' Associations, only seven schemes were able to secure full registration by the Ministry of Water. By the end of the programme, more than 1,000 WUGs were waiting to be registered.⁹¹ A number of WUGs in several districts had still not yet even drafted their by-laws. In Mwanza Region only WUGs in Misungwi District had received Minister's approval of their by-laws. Other districts including Magu, Ukerewe and Sengerema were still lagging far behind.⁹² Thus, it seems that without any external 'pushing force' the continued development of WUGs and their registration as WUAs would stagnate.

Effective and efficient management of water installations by the WUGs largely depends on the group's ability to plan, implement and monitor their activities. Only 14 WUGs (40%) reported that they do have annual work plans. 9 of these WUGs are in Karagwe (5) and Bukoba rural (4) districts. Many of the visited WUGs reported that they do not have the annual work plans (46%). Mwanza municipality is in worst shape; it has a large number of WUGs with no annual plans (4) followed by Bunda (3) and Serengeti (3). Furthermore, continued contacts and linkages with district officials are regarded as a critical instrument for monitoring and problem-solving with regard to maintenance and repair of non-functional water facilities. WUGs have been more in contact with District HESAWA Coordinators (DHCs) than other district offices. Also, WUGs seem to be more in contact with each other than with

⁸⁹ Ibid.

⁹⁰ Mwanza Regional Final Report. 2002. p.9.

⁹¹ Hifab 2003 op. cit., p. 17.

 $^{^{\}rm 92}$ RPISC Minutes for the Meeting held on the 3rd May 2005, p.2.

the district officials: 21 WUGs (60%) reported that they maintain contact with other WUGs in the village. It is striking to note that none of the six WUGs in Mwanza Municipality have had contacts with any of the district offices.

All interviewed WUGs in Kwimba district and all but one interviewed WUGs in Karagwe district have annual plans for operation, maintenance and improvement of their water supply systems. The cost recovery study also showed a somewhat higher level of interaction between the WUGs and the district offices. In Karagwe and Kwimba districts the district offices have continued providing technical assistance to WUGs. For instance in Karagwe, 11 interviewed WUGs were visited in 2003–2005 by district water officials.

3.4.5 Village level governance and institutional capacity

Village Governments (VGs) played a key role in HESAWA which operated through Village HESAWA Committees (VHCs). Based on the interviews of Village Government representatives and some district level personnel, one of the key positive features of HESAWA was the good integration into the existing government systems, which also enhanced the capacity building at the local level. Village HESAWA Committees – discussed in section 3.4.2 – were basically answerable to the Village Governments. In almost all villages VHCs were established during the Programme (92%). During the existence of the HESAWA Programme, VHCs were crucial for sustenance of the programme results in the communities. After the HESAWA Programme many VHCs still exist (64%) and some VHCs are also still active (44%), although some of them have ceased to exist as described in 3.4.2. Somehow VHCs did get mixed up with the WUGs and in some areas people still associate HESAWA with the Village Government. The institutional performance and sustainability of the Village Governments has varied and depends largely on the overall leadership. In cases where the Village Government Chair has been a strong individual with good (political) leadership qualities, also the Village Government's performance and interaction with VHCs and WUGs has been successful.

Financial management performance at the village level (Village Government, VHCs, WUGs) also varied a lot. Some 67 per cent of the Village Governments operated their own bank accounts, but 44 per cent of them had no accounting system or record keeping on HESAWA funds. Over 70 per cent of the Village Governments confirmed that they have continued supporting WSS activities in their village after HESAWA, but only one Village Government had received financial support from the District Council and half of them had collected funds from users. No funding was received from the central government in the sampled villages. In general, 31 per cent of the Village Governments had difficulties in contributing their agreed share of funding to HESAWA activities. Box 5 shows an example from Mwanza Region, indicating that there seems to be a discrepancy between reported HESAWA activities and the level of WUGs activeness in a particular district as observed in the October 2005 field survey. It also shows that in some areas funding from the districts or central government to WUGs continued after HESAWA, although at a low rate similar to the level of central government funding during the programme. Thus, it indicates certain continuity but shows that the local funding was not even closely able to fill in the funding gap after withdrawal of donor funding.

The cost recovery field study in December 2005 confirmed that the financing plans of WUGs were based mainly on one-time contributions by the water users (98 per cent of interviewed WUGs), funding through district councils (91%), and on savings from water charges collected from users (80%). In practice, financing was done through contributions by water users in 89 cases of 90 interviewed WUGs, and in one case through district funding. No support was obtained from village governments or external donors.

Box 5. Financing WUGs in Mwanza Region in the post-Sida period.

The Mwanza Regional Report reveals that during the financial year 2003/04, a total of 100 WUGs were trained and re-promoted and six Village Water and Sanitation Committees were revived and re-promoted. However, as demonstrated by the findings from the October 2005 survey, Mwanza Municipality ranks very low in various aspects. It has a high number of non-functional water systems, large number of vandalism, and lack of WUGs contacts with district officials.

The total funding for WUGs in Mwanza Region released from the district and central government after the Sida support for HESAWA expired has been as follows:

2002/2003	-	USD 60,000
2003/2004	_	USD 73,000
2004/2005	_	USD 83,000

This level of annual funding roughly represents the local contribution during the programme implementation.

Source: Inception meeting with the Mwanza Regional HESAWA Coordinator, Mwanza, October 2005.

Poorly managed and under-resourced Village Governments often failed to contribute to the Village Water Fund. Many Village Governments had not generated any income or revenue of their own and in many cases did not even operate a bank account. This was further aggravated by poor monitoring and management of funds received from the District Council. The interviews during the cost recovery field study in December 2005 among 91 WUGs in Karagwe and Kwimba Districts revealed that total financial assistance received by 89 WUGs in 2003–2005 was almost TZS 22.6 million. This confirms that the level of support per each WUG has been low compared to actual requirements.

In general, the Village Governments felt that the principles of the HESAWA approach through the overall village level promotion activities were fully (50%) or partly (47%) achieved. Similar perception exists on the application of good governance principles at the village level (50% fully achieved and 44% partly achieved). In terms of technical skills at the village level the impact of HESAWA was considered high (58% fully achieved and 28% partly achieved). Slightly lower – but yet satisfactory – perception was observed regarding HESAWA's impact on improving managerial practices at the village level (39% fully achieved and 50% partly achieved).

In conclusion, the HESAWA Programme succeeded in building up and strengthening the capacity of the village level institutions and organisations, but their situation regarding long-term sustainability is still very vulnerable. Despite the extensive human resource development efforts the institutional performance and capacity of village level organisations in general seems to have slightly declined after the completion of the HESAWA Programme. This sounds at first alarming, but on the other hand it clearly reflects the extensive and successful institutional and capacity building efforts of HESAWA especially at the village and user levels. It is understandable that after withdrawal of this support a "relapse" of the institutional capacity could be experienced.

Many of the village level institutions created during the HESAWA Programme still exist but their activeness varies a lot. In places where the trained Village Resource Persons and Village Animators have still remained active, also the WUGs seem to have managed better. This has also often stimulated other development activities in these villages. The recent efforts of the Local Government Reform Programme to strengthen also the Village Government structures and their institutional capacity are building on the achievements of HESAWA and can be expected to improve Village Governments' institutional performance significantly.

3.4.6 Institutional capacity at the district and regional levels

At the district and regional levels the HESAWA Programme had an impact in improving the managerial capacity and skills of those officers who were directly involved in the Programme (such as HESAWA Coordinators), but the overall impact may have been lower. The capacity building activities through training and meetings for programme implementers and government leaders at district and regional levels were rather extensive, but benefited mainly a fairly narrow section of the administration. However, most of the persons involved at the district and regional level were still permanent civil servants who were seconded to the HESAWA Programme and thus provided institutional continuity.

The capacity building and training activities in the Phase III included initial and preparatory promotion meetings for villagers, village and ward authorities, promotion meetings for parents of primary school children, promotion workshops on HESAWA concept and gender awareness for village leaders, promotion workshops on environmental sanitation for village leaders and actors. (Consultant's 1995/96 Annual Report on Capability/Capacity Building, BDC Ltd).

The basic institutional structure at the district level did not change at all during the HESAWA Programme period. Only in December 2004 – after withdrawal of the Sida support – the district structure was changed as a result of the Local Government Reform Programme (LGRP). All districts have not yet been restructured, but Bukoba Rural District was among the first. In Bukoba Rural District the restructuring has not really changed the organisation much, and also staff transfers have been very few. During the HESAWA Programme people from five district departments were attached to the Programme, and they resumed their normal district work after HESAWA.

The complex bureaucratic structure during the programme cycle was streamlined after the end of the programme. At the regional level, the Regional Supervisory Committee (RPISC) for HESAWA activities is still in place. The district level administration is now supposed to monitor, coordinate and make financial contributions to HESAWA at the village and users' level. District HESAWA Coordinators (DHCs) and the District Action Teams (DATs) are also still in place for the management and coordination of the HESAWA activities. However, with all these structures, the district monitoring and coordination of the HESAWA activities at the villages was considered rather poor.

In some districts, the role of the DHCs has been made redundant following the establishment of District Water and Sanitation Teams (DWSTs) which consist of professionals from several sectors such as water, sanitation, health, community development, and planning. They support communities in planning water and sanitation systems, to carry out community sensitisation, and to monitor and evaluate existing community-based projects. The HESAWA activities fall into the jurisdiction of this team. However, the inclusion of the HESAWA activities was neither systematic nor clearly monitored. It largely depended on district commitment. However, the experience of District Action Teams (DATs) was to some extent utilised when establishing DWSTs. On the other hand, District Promotion Teams (DPTs) are no longer widely active in the existing structure, except in only a few areas.

There seems to be some kind of an 'institutional gap' between districts and WUGs at the village level after Sida support to HESAWA. This situation is well documented in the Mwanza Regional Implementation Reports. According to the Annual HESAWA Implementation Report 2003/2004, District Action Teams are supposed to meet four times a year. However, District Action Teams meetings were not held for the whole year in all districts except in Geita and Sengerema Districts where four and one meeting(s) were held respectively.⁹³ The situation deteriorated in the year 2004/2005, it is reported that District Action Teams meetings were not held in all the districts for the whole year. Similarly RPISC was supposed to meet four times a year but has managed to meet only once.⁹⁴

Despite the withdrawal of Sida support to HESAWA and some of the discouraging experiences about "post-Sida sustainability" it should, however, be acknowledged that a number of "HESAWA activities" have still continued after 2002 both at the village, district and regional levels.⁹⁵ These include training

⁹³ HESAWA Annual Implementation Report (2004), September, p.11.

⁹⁴ RPISC Minutes – Meeting held on the 3rd May 2005, p.6.

⁹⁵ Bunduki et al. 2005. Sustaining HESAWA in Mwanza Region, Tanzania. 31st WEDC International Conference, Kampala, Uganda. 4 p.

of WUGs, strengthening of village committees, training of pump attendants, health education to school committees, construction of new wells and rectification of wells, rehabilitation of pumped water schemes, subsidisation for household latrine construction, school latrine construction, and chlorination of wells.

The culture of public administration in Tanzania has been a stumbling block not only to effective and sustainable economic reforms but also to democratic governance. The ongoing donor interventions on the Public Service Reform Programme and the Local Government Reform Programme (LGRP) are expected to improve the district and regional level governance in the future. LGRP is expected to have a substantial impact on the delivery of social and infrastructure services. It also has the potential to facilitate the development of local democracy as decision making and resource allocation will be moved nearer to the communities. Box 6 at end of this Chapter 3.4 summarises the various views expressed during the evaluation field survey by the district-level stakeholders concerning expected and unexpected positive and negative outcome.

3.4.7 Programme management and coordination at the national level

HESAWA was implemented as a multi-sectoral programme in collaboration with four different ministries: (1) Ministry of Community Development, Women Affairs and Children (MCDWC), (2) Ministry of Regional Administration and Local Government (MORALG), (3) Ministry of Health (MOH), and (4) Ministry of Water (and Livestock Development) (MOWLD). In terms of programme management, HESAWA was organised under the Ministry of Community Development, Women Affairs and Children. However, the "lead ministry" was also changed a few times during the programme life – being Ministry of Water, the Prime Minister's Office and eventually MCDWC. Although the overall objective of involving all the three/four ministries in the programme management and implementation and integration of several inter-related sectors is commendable, the practical execution was not perhaps done in the most successful manner. Anyway, experiences from almost any country confirm that development programmes involving several ministries in programme management and supervision always face difficulties and power struggle between ministries.

Changing from the Ministry of Water (MAJI) to the Ministry of Community Development was certainly one of the turning points. Interviews with representative of the Ministry of Water and Livestock (MOWLD) indicated that the water sector ministry was not very happy about the programme management structure. The role of MOWLD was mainly just to participate in the programme reviews and the national steering committee, but not in the actual implementation or management. Moreover, MOWLD representatives felt that HESAWA was not well integrated into the existing government institutional structures, but rather implemented through a completely parallel structure. On the other hand, obviously the MCDWC gave much more room in HESAWA for community development and software aspects than MOWLD. Some of the key informants concluded that probably it would have been best to implement HESAWA from the very beginning within the establishment of the Ministry of Regional Administration and Local Government (MORALG). However, it should be remembered that MORALG and especially the districts were still rather weak before the Local Government Support Programme started.

It has been commonly felt that the collaboration and co-planning of HESAWA between Sida and the Government of Tanzania was not very smooth and equally participative in the early stages of the programme. Sida's own plans may have been different from GOT's plans, which caused misunder-standings and delays in planning and implementation. Commitment of the GOT's central level stake-holders may also have been fairly low in the beginning. Because the District Councils were not involved in work planning and management in the early stages – and the central government may not have been adequately committed or familiar with details – the local (district level) participation and coordination was inadequate for long. Later this was improved when District Councils were more involved, but still
districts' own plans and HESAWA plans could have been better coordinated. Some programme implementers strongly view that the GOT central government did not fulfil their tasks – neither in terms of providing the local funding nor participating adequately in the programme management, coordination and supervision.

3.4.8 Governance and transparency at the programme level

Views about the governance and transparency at the programme management level have been collected through interviews of several Swedish and Tanzanian advisors and managers with long-term involvement in the HESAWA Programme.

Programme planning was initially based on Annual Reviews and was done in a very flexible manner. Later on long-term work plans were prepared. These long-term plans (4 years) were mainly done through involvement of Sida and the Swedish consultant, but the participation of Tanzanian authorities was less active. It was considered a problem in strategic programme planning that the Sida Programme Officers were changing every 3–4 years, because continuity and institutional memory was not adequate. Programme progress reviews were done on quarterly and annual basis at the district and national levels and by Sida, and in general the monitoring, evaluation and progress review process was working well.

Funding and financial management is usually a delicate and difficult part of development programme management. The release of funds to HESAWA was never perceived especially problematic when it comes to donor funding. Availability of local funding was, on the other hand, usually difficult. Until 1998 Sida funds were released directly through the implementing Swedish consultant and no mismanagement of funds were observed. Sida was properly informed on a quarterly basis about the programme progress and utilisation of funds before any new funding allocations were released.

During Phase IV (after mid-1998) the Sida funding was channelled through the Ministry of Finance of Tanzania and forwarded to the implementing Tanzanian ministry (MCDWC) and further to implementing districts without passing through the Programme office. This arrangement resulted in delays in receiving the funds and mismanagement. The Programme office did not have adequate means of following up the funds allocation and utilisation within this localised and decentralised arrangement. The funding released from the Ministry to districts was, however, known by the HESAWA Zonal Office. Thus, differences could eventually be traced to the Ministry level. To avoid the encountered misuse and mismanagement of funds at the central level, it would have been advisable to have at least the HESAWA Financial Adviser stationed in the Ministry. After the observed mismanagement cases the funds allocation system was reversed and Sida funds were transferred to a HESAWA bank account in Mwanza.

HESAWA has its own internal auditors who carried out regular audits at the district and regional offices and at the HESAWA Zonal Office. In addition, the Ministry (MCDWC) organised its separate annual audit, which usually took a long time and audit reports came very late. Thus, these annual Ministry audits did not assist in the actual financial management of the Programme. The HESAWA bank account in the Ministry (MCDWC) was never audited.

3.4.9 Role and capacity of the private sector and NGOs

The private sector was involved in the programme from the early stages, but its role and intensity evolved over time. In Phases I–III the private sector was largely involved in providing support services in programme implementation, such as provision of construction materials and actual construction of some of the facilities (latrine slabs, etc.). In mid-term review of Phase III (1997) concern was raised on more active role and increased capacity of private sector. Consequently, during 1996–98 HESAWA started emphasising involvement of private sector. In addition to construction activities, private sector capacity was promoted for operations and maintenance and spare parts supply. Private spare parts dealers never emerged strongly. Several key informants were of the opinion that it would have been best

Box 6. Expected and unexpected positive and negative impacts of HESAWA.

"Expected and Unexpected"

Source: Field notes from interviews with the district-level stakeholders 17.10-21.10.2005.

Expected positive

- More water facilities (Kwimba); Availability of safe and clean water (Karagwe)
- Water-borne diseases reduced (Bunda); Better health (Serengeti)
- Staff involvement in HESAWA programme (Bunda)
- Tools for O&M (Bunda)
- Household latrines introduced in HESAWA constructed also in non-HESAWA villages (Bunda)
- Household latrines used in the villages (Kwimba)
- Institutional latrines at the schools very significant improvement (Serengeti)
- HESAWA concept can be repeated in other programmes/many others have adopted HESAWA technology and participatory approaches/users groups (Kwimba, Serengeti).

Expected negative

- Water sources dried out (Bunda)
- Not all villages in the district could be covered by HESAWA (Karagwe)
- Household latrine construction was not entirely good in HESAWA, especially the superstructure (Bunda)
- HESAWA asset was held by the higher authorities in the zonal office (Bunda)
- People accepted the idea of local contributions for the construction, but not for operation and maintenance. (Serengeti).

Unexpected positive

- Pupils in Primary Schools enjoyed better health through getting water from rainwater harvesting (Bunda)
- Technology used in HESAWA was simple and affordable (Karagwe)
- School health clubs were as good as they could be (Bunda)
- Pupils had breakfast at school (Bunda)
- Villagers know now how to use banks (Kwimba)
- Villagers come to the local meetings (Kwimba)
- Villagers/WUCs started revolving funds (Kwimba)
- Many gained experience in health matters (Serengeti)
- Latrines used by all, previously tradition prevented this (Serengeti)
- · People's life is generally improved (Serengeti)
- Rehabilitation of facilities (Serengeti)
- Three-wheel bicycle is now highly appreciated as local transport & "ambulance" at the Health Post (Kwimba).

Unexpected negative

- Water committees could not function although people were trained (Bunda)
- Technical problems with the drilled wells (Kwimba)
- Dried shallow wells (Serengeti)
- Routine operation and maintenance could not be done (Bunda)
- Bank accounts opened but not used (Bunda)
- People do not know that HESAWA has been phased out and still rely on HESAWA to come and help with spare parts, repairs etc. (Serengeti)
- Difficulty in establishing a spare parts system. People travel long distances to look for them, many spare parts are not available at the district level (Serengeti, Karagwe)
- HESAWA made a good effort but there is still an acute shortage of water (Kwimba)/many communities are not covered and now request water schemes (Karagwe, Serengeti)
- People have a strong, deep rooted belief that water should be free. This made the cost sharing more difficult that was anticipated. Water for free-thinking is still undermining the sustainability, there is still the lack of ownership. (Serengeti).

to involve the local hardware stores in spare parts supply from the very beginning. However, this was not possible, perhaps mainly due to the fact that the current Tanzanian policies regarding the role of private sector were not yet at all conceiving that time. In practice, the local private capacity was also very low and the few local dealers did not have the resources to maintain their stocks due to high storage costs and slow moving of stock items.

The HESAWA stores and workshops were phased out towards the end of Phase III with an anticipation that the districts or private sector could take them over, but the phasing out had several problems. Private vehicle repair and maintenance businesses did never take off. In Phase III the local consultant made a study and proposal on the privatisation of the central stores and workshop, but it was considered unrealistic and the plan was discarded.

There were good experiences from private people digging shallow wells and constructing institutional latrines. In the later stages the use of local consultants in planning and training activities was a positive experience and created potential capacity for the districts and regions to utilise in the future. Local water pump industry in Bunda and Magu Districts are examples of emerging private sector capacity. Local factories manufactured Majengo pumps to be used especially in improved traditional water sources. The pumps were also used in HESAWA programme although in small quantity. Majengo pumps were affordable and easy to replicate, but their technical quality was too low, which prevented their wider breakthrough. Despite seemingly promising, this private sector initiative eventually became a failure. Gradually local private consultants were more involved into HESAWA in advisory and expert roles, which was commendable with a view to building up the local consulting capacity. During Phase III the local consultancy services were outsourced through a separate contract from the main Swedish consultant's contract, which led to very limited control over the local consultancies and affected the quality of work adversely. Non-Governmental Organisations (NGOs) and/or Community-Based Organisations (CBOs) - other than WUGs and other Village Government based - were not really directly involved in HESAWA implementation. On the other hand, the critical mass and capacity of NGOs was not probably available in the Lake Zone during the early stages of HESAWA.

3.5 Gender and Participation

3.5.1 Background to gender and participation

Gender equality as a goal in of Swedish development co-operation refers to the "equality between women and men to the equal rights, responsibilities and opportunities of women and men and girls and boys".⁹⁶ Gender equality has been firmly part of the Swedish development cooperation since the 1960s. Today, Sida's work is based on the philosophy that an equal society can only be achieved if women and men work together. Men's roles, responsibilities and behaviour must be changed, just as women need to be empowered to exercise their rights and take control of their lives.⁹⁷ Gender issues were intensified within Sida in the 1980s, and became formalized and structured within the development cooperation. In 1996 gender equality was established as a goal for Swedish development cooperation. In 1997, Sida formulated an action programme for promoting gender equality. The Action Programme focuses on a mainstreaming strategy for working towards a gender equality goal which aims to contribute to equal opportunities, responsibilities for men and women, girls and boys.

In Tanzania as in many other African Countries, illiteracy, customs and taboos contribute significantly to women's inability to participate in development activities. Also the low education level of men

⁹⁶ Action Programme, *in*: Mikkelsen, B., Freeman, T., Keller, B. et.al. 2002. Mainstreaming Gender Equality. Sida Evaluation Report 02/01. *p.26*

⁹⁷ Sida's policy: Promoting Gender Equality in Development Cooperation, Sida 2005 and Sida's Action for Promoting Equality between Women and Men in Partner Countries – Experience Analysis. Policy. 1997. Action Programme for Promoting Equality between Women and Men in Partner Countries. Department for Policy and Legal Services, Swedish International Development Cooperation Agency.

prevents the participation of women in development activities and hinders the development of gender equality. In 1990, Tanzania gazetted the Ministry of Women's Affairs as a full-fledged Ministry. The responsibilities of the Ministry are to ensure implementation of women's policy, with structured support for women's rights and their access to the resources of the country. The priority areas include the improvement of living standards and economic empowerment. The Policy on Women's Development and Gender (2000) called for all government ministries to mainstream gender in their operations. There are numerous examples of how gender-sensitive water and sanitation programmes have become more sustainable and efficient in meeting the real needs of the people through systematic application of a gender policy. Community participation was one of the initial corner stones of HESAWA, and a cross-cutting issue in all the findings.

3.5.2 HESAWA, gender and participation

HESAWA appears to have been a major actor in the Lake Victoria zone to bring gender issues into the open. HESAWA helped in creating awareness about the rights of women and helped women to become more confident. The HESAWA gender strategy changed over the years. In the beginning the HESAWA gender policies were based on the *Women in Development (WID)* thinking, focusing more on creating general gender awareness. After 1995 the HESAWA Programme became decentralised, and participatory rural appraisal (PRA) and other participatory tools were introduced and commonly used. At that time the gender emphasis shifted towards water and sanitation issues. Phase III Mid-Term Evaluation (1997) advised HESAWA gave more specific attention on how and when to involve women (and when men) in concrete activities. It recommended that to link gender strategies more directly into water and sanitation, HESAWA should ensure women's participation in site selection and attendance in the meetings. A HESAWA specific gender evaluation took place in 1998, but reportedly it did not have much effect on the activities and was considered somehow theoretical and an "all-too-quick" exercise. The study also suggested that "the gender concept could be reviewed in an interactive fashion" and "there is scope for the generation of more contextual complex awareness of the gendered impacts of the programme. ⁹⁸

The Plan of Action of Phase IV in 2000 appears to be still vague on gender issues, recognising imbalance in gender roles as one problem area to be addressed. Gender objectives can be found in its Annex Framework for Plan of Action Phase IV where it is finally stated that *"women will be the most important target group during Phase IV."* The new gender strategy of HESAWA consisted of the following:

- Creation of awareness on gender equality and imparting positive attitudes on behaviour towards gender equality among people;
- Promoting gender equality in terms of encouraging both men and women in carrying out domestic chores;
- Participation in socio-economic activities, decision making, improvement of women's and children's health status;
- Improving women's economic status.

According to the various evaluation reports and other documents, HESAWA's approach had some positive effects on the lives of women. This was confirmed during the field interviews. Compared to many other programmes, HESAWA was a fore-runner in integrating gender aspects in its programme activities. The consultants were committed to the gender concept and at the national level women were employed in senior positions. The interventions at all levels were done from a gender perspective. One person interviewed stated that women's involvement in HESAWA was exceptionally good due to the organisational set up at all levels: national, regional, district, ward and village.

⁹⁸ HESAWA Phase IV Mid-Term Review (2000), p.29

At the village level, both men and women participated in HESAWA efforts to improve water and sanitation facilities. The labour provided was influenced by the traditional gender roles. Men were involved in the construction activities, while women participated in fetching water that was used in the construction and cleaning up the sites throughout the construction process. On the other hand, according to many women interviewed, women were called when physical labour was needed. Women's contributions included such as collection of sand and stones for the construction of water and sanitation facilities, emptying water from sites, and bringing food to the sites. Men's participation in the construction involved clearing sites and digging the water facilities. In addition, men participated in the planning. Participation of women increased when the WUGs were established and a gender-balanced policy had been introduced. It should also be mentioned that in its earlier stages HESAWA had been criticised for having used PRA, because it was used as a one-off event to extract information and not necessarily as a participatory planning tool.

3.5.3 Gender and human resource development

In training, men were generally viewed as the group whose attitudes need to be changed, and therefore they were specially targeted. Selected individuals of groups working together with HESAWA were also given the opportunity to participate in seminars focusing on gender issues. The education materials used during these seminars and other training sessions drew attention to such issues as inequalities concerning work, assets, and legal issues. Generally, people were well aware of the legal rights of women regarding divorce or inheritance according to civil law. The awareness was created through collaboration with the Law Reform Commission and the Ministry for Women's Affairs.

During Phase IV, it was a must for women to participate in various training activities to acquire skills to sustain the water and sanitation facilities. The following skills were imparted to the women: hygiene education, skills in construction of water and sanitation facilities, TBAs' training, pump attendants for repair of pumps, WUGs' management training and promotion skills, leadership and participatory monitoring.



Figure 12. HESAWA personnel trained in various training events gender-wise (POA 2000).



Figure 13. People in the villages trained in various training events gender-wise (POA 2000).

Interestingly, the completion reports from regions, zonal office and the consultant pay more attention to the gender balance of the WUGs than gender balance in the training events. The total final figures for people trained in various skills are not gender disaggregated. Even the final Programme Statistics Verification report (2002) does not seem to consider it important to verify whether the impressive total number of people trained was actually a gender balanced. Thus, Figures 12 and 13 rely on the Village Survey figures given in Annex of the Plan of Action for Phase IV. Figure 13 shows those training events which had participants listed gender-wise. In addition, the same table also shows storekeepers and village accountants.

Figure 12, illustrates the number of HESAWA related personnel trained in the districts, the women's share being 39 per cent. In all training events more men than women received training, and the total number of people trained region-wise show unbalanced numbers also in this respect. Mwanza Region stands out. Figure 13 shows the village-level professional people trained by HESAWA. At this level the gender balance is more evident with 45 per cent of the total number being women; the region-wise balance is even better.

3.5.4 Water and daily realities

Women play a central role in provision, management and safeguarding water, and maintaining hygienic behaviour within the families. It is the women's responsibility to collect water, to look after their families, collect firewood, and to look after the sick, the elderly and so on. They are also the ones looking after the maintenance of water supply and sanitation facilities. Men and women performed specific tasks to ensure the sustainability of the water facilities, and both were involved in monitoring, cleaning around the water points and controlling the water usage. Men repaired broken facilities, rationed water and provided security at water points. Women reported breakages, collected contributions and were responsible for cleaning around the water and sanitation facilities.

In the household survey out of the 722 respondents 381 were female and out of them 222 represented heads of household in a female-headed household. This section compares these two groups of respondents. Time for fetching water depends on both the distance to walk, but also on how much time it takes

to wait to get water. In many locations, especially during the dry season, the pumps remain locked for most of the day. When the pump is open, the queues are long. The difference between women and men in this respect becomes clear. Perhaps because there are less men than women who fetch water, their view on whether it takes time or not is different. To the direct question whether the distance was a problem, 41 per cent of women and 51 per cent of men stated that it was not a problem. As a comparison to the previous studies, Tables 20 and 21 show also the figures from a study made in 1999. The outcome is very contradictory. ⁹⁹

District	Gender	How is this distance from your point of view?						
		lt is near (no problem)	It is a little bit far (small problem)	lt is too far (big problem)	It is far in dry season when we have to use other so			
Mwanza Municipality	Female	13	25	13	4			
	Male	17	37	11	0			
Kwimba	Female	18	26	13	5			
	Male	25	23	6	2			
Bunda	Female	27	28	10	0			
	Male	30	18	4	2			
Serengeti	Female	12	25	37	2			
	Male	8	12	21	3			
Bukoba Rural	Female	48	9	5	0			
	Male	36	14	7	0			
Karagwe	Female	38	13	8	0			
	Male	47	5	8	1			
Total N-722	Female (% of f.)	156 (41%)	126 (33%)	86 (23%)	11 (3%)			
	Male (% of m.)	163 (50%)	109 (32%)	57 (17%)	8 (2%)			
	Both (% of total)	320 (44%)	235 (33%)	143 (20%)	19 (3%)			
Rugumamu 19991	N-648 women (%)	8%	36%	56%	-			

Table 20. Distance to fetch water by gender and district (HESAWA Evaluation Field Survey, October 2005).

⁹⁹ Rugumamu 1999. Foreign aid, grassroots participation and poverty alleviation: The HESAWA Fiasco. Research Report No.00.1

¹⁰⁰Rugumamu 1999. op.cit.

District	Gender	In your view how is the quality of HESAWA water for domestic use? (drinking, cooking)					
		lt is good (no problem)	Fairly good (slightly turbid, slightly salty)	Not good (turbid, salty)	lt is not always good (seasonal problem)		
MWANZA	Female	45	6	4	0		
MUNICIPALITY	Male	53	7	5	0		
KWIMBA	Female	42	17	1	0		
	Male	47	11	0	1		
BUNDA	Female	54	7	2	2		
	Male	41	7	3	3		
SERENGETI	Female	53	9	0	14		
	Male	30	10	2	2		
BUKOBA RURAL	Female	60	0	1	1		
	Male	53	2	2	0		
KARAGWE	Female	52	6	1	0		
	Male	56	4	1	0		
TOTAL N-722	Female (% of f.)	306 (80%)	45 (12%)	9 (2%)	17 (5%)		
	Male (% of m.)	280 (82%)	41 (12%)	13 (4%)	6 (2%)		
	Both (% of total)	587 (81%)	86 (12%)	22 (3%)	23 (3%)		
Rugumamu 19992	N-648 women (%)	4%	28%	68%	-		

Table 21. Water quality by gender and district (HESAWA Evaluation Field Survey, October 2005).

The quality of water in terms of people's perception on cleanliness of the water and its acceptance for domestic use is shown in Table 21. The majority of both women and men agreed that the water was good (clear, with no strange smell or taste), with a minority who considered the quality saline, turbid or otherwise not acceptable. Women were more aware of the seasonal differences. Generally the views on water quality are balanced with about 80 per cent in both groups being satisfied with it, which is very contradictory to the 1999 study where only four per cent of the sampled 648 women considered the water quality as not a problem.¹⁰²

3.5.5 Gender and Water User Groups

In the October 2005 Field Survey, 64 per cent of the respondents stated that they had participated in some HESAWA activity in the past, and 39 per cent of women and 42 per cent of men responded that they were members in the WUG. The difference becomes evident in participation in the meetings with only 4 per cent of men stating that they never participate even if they are members, compared to 11 per cent for women. There is also a difference in knowing how the WUG members were selected, with 73 per cent of men and 48 per cent of women stating that they do know how they were selected. This is also reflected in the question about whether they knew what the WUG was doing, with 72 per cent of men and 50 per cent of women stating that they do know. Gender differences are also clear in the question about rating the performance of the WUGs (Table 22). Interestingly, the answers to the question whether the respondents knew what the WUG is doing with the money were balanced between the genders. 59 per cent of all respondents considered that the WUG makes decisions concern-

¹⁰¹Rugumamu 1999. op.cit.

¹⁰²Note that missing data is not shown in the tables and thus, the percentage does not necessarily add up to 100%.

ing the water point, and another 12 per cent that they as users did. These views were shared by both men and women.

District	Gender	How would you rate the performance of the Water User Group?					
		Good	Fair	Poor	No opinion*	Not applicable**	
Mwanza Municipality	Female	31	8	1	6	9	
	Male	39	15		6	5	
Kwimba	Female	43	11		6	2	
	Male	44	10	3	1	1	
Bunda	Female	25	11	6	18	6	
	Male	12	7	12	11	12	
Serengeti	Female	18	15	3	21	19	
	Male	15	8	2	7	12	
Bukoba Rural	Female	23	17	5	7	9	
	Male	24	13	8	7	3	
Karagwe	Female	17	29	1	5	6	
	Male	22	29	4	4	2	
Total	Female	157 (41%)	91 (24%)	16 (4%)	63 (17%)	51 (13%)	
	Male	156 (46%)	82 (24%)	29 (9%)	36 (11%)	35 (10%)	
	Both	313 (43%)	173 (24%)	45 (6%)	99 (14%)	87 (12%)	

Table 22	Rating WLIG	performance h	v gender a	and district	(HESAWA	Evaluation	Field Survey	October	2005)
	Nating WOU		y genuer a			Lvaluation	i iciu Juivey,	OCIODEI	2000).

* Do not know what the WUG is doing

** No WUG

Many previous evaluation, progress and completion reports have paid attention to the gender balance in the WUGs. The final figures as verified in the end of the Programme show gender balanced WUGs with very even regional distribution.¹⁰³ The problem still is that in meetings where both women and men are present, women hesitate to express themselves in official meeting situation due to old tradition (and also sometimes due to seating arrangements).At the time, 16 per cent of the WUGs had a female Chairperson, 50 per cent a female Secretary and 44 per cent a female Treasurer.

The situation was somewhat similar in the 34 WUGs interviewed in October 2005 except for the Secretary: 18 per cent had a female Chairperson, 35 per cent a female Secretary, 54 per cent a female Treasurer, with 53 per cent of the members being female (Figure 14). Out of the six cases where the Chairperson was female, the facilities were fully operational in four cases and completely broken down in one case. Four cases also had an active fund with regular collection of water tariff, all had future plans and of these, five female headed WUGs were planning to construct an additional water source. Four of these were collecting funds which could be described as rather substantial, with a maximum of TZS 140,000 annual income from the water tariffs. Gender balance has been maintained in this small, but random sample, and women still hold positions as chairpersons, secretaries and treasurers as they had before.

¹⁰³ORGUT 2003 op.cit. p.31



Figure 14. Gender balance in the WUG samples (HESAWA Evaluation Field Survey, October 2005).

3.5.6 What do women say?

On many occasions during the evaluation, it was observed that women stressed the importance of involving men and empowering women. In other words, they were repeating the principles of Sida, which may indicate that HESAWA had got its messages through. It was obvious in many ways that this was not the first time the women talked about these issues. A small but significant message was expressed by a female water technician in a District Water Office who noted that because of HESAWA, it was now possible to interview also women in the household survey. Women still hesitate to talk in front of men and consequently they have very little decision making power in any meeting. Out of about 200 WUGs the technician knew, she could remember only very few with strong female characters in the lead. Box 7 shows the various views expressed by women during the field visits.

Awareness of the need to involve women in the water and sanitation related processes still seemed to have come quite late, i.e. the final phases of HESAWA. The main constraints and obstacles to women's participation are mainly the men who see themselves as superior. The men own all the family assets while women have access to such assets as land. Women grow cash and food crops, but once harvested, the men are responsible for marketing and eventually keep and spend the money without women's consent. On the other hand, although men own animals, women are allowed to sell milk, which they utilize for the upkeep of the family. This custom has rendered women helpless. The second constraint concerns girls and boys education, which is felt at both the primary and secondary levels. Due to polygamy where a man can have 3–10 wives, many families lack harmony and that has an impact on children who have to drop out of school because of family wrangles or father's inability to support a large number of children to school. Although HESAWA has created awareness in many gender related issues, the traditions are difficult to break. Yet, all small steps are steps forward, and the work should continue.

Box 7. Gender perspectives from the villages.

Source: Field notes from meetings with the women's groups, November/December 2005.

"On gender, HESAWA raised awareness. (Gender) trainings were conducted three times, but the tradition here is very strong. Women have no power, they can't make decisions. For instance women are not involved at all in selling and budgeting for livestock or crops. Men do not buy food for children, pay for their education or health costs. Women are given milk to sell and get all these but the milk is not enough for children and selling to get money for other things. They can't even sell the grains they grew to get money for milling. Sometimes women are forced to steal and sell to get the grains milled for children. This was there before HESAWA and is there today." (Nyambehu Women Group, Bunda District 1.12.2005)

"At the village level women are now involved after HESAWA started, but their participation is still limited because traditionally women cannot talk in front of men. If they dared, their husbands got embarrassed and that affects their relations. Even women themselves would not like to see their fellow women misbehaving so they kind of disappoint those who talk. But generally, HESAWA helped women to get confidence and they even got membership in the village government." (Nyambehu Women Group, Bunda District 1.12.2005)

"Water is still not enough. Women cannot use the available water for economic activities such as gardening etc. Women tried vegetable garden, but they failed because there was not enough water. However, there is a possibility of using lake water but it is far. A group of men and women has a project close to the lake now where they use motor pump to irrigate their cassava and vegetable garden." (Nyambehu Women Group, Bunda District 1.12.2005)

"During HESAWA villagers were trained on the importance of latrines, but few women attended these trainings. Women participated more when it came to actual construction of the wells when they were required to contribute labour. This was associated with the traditions that women are not supposed to talk in front of men and even if they do their ideas are never considered important. That made women to go to their farms while men were going to the meetings. So, women were not involved in planning because they were not attending these meetings." (Balili Women Group, Bunda District 1.12.2005)

"They all appreciate that HESAWA brought changes in their lives through sanitation and environment education (tree planting, fencing the water point, latrines and water jars in the schools). However, they also feel that women were ignored during planning of the project because they were not involved in decision-making. As usual, this was related to the tradition that women have no ideas to contribute and they could not talk anyway. Both men and their fellow women hate those who talk in the meetings and their husbands feel embarrassed that their wives are shouting in front of men. Women are, therefore, forced to keep quiet and even after HESAWA the situation has not changed much." (*Balili Women Group, Bunda District 1.12.2005*)

4. Evaluative Conclusions

4.1 Assessment Criteria

The assessment of the evaluation results is presented in accordance with Sida's assessment criteria, as defined in "Sida at Work" and as further stipulated in the ToR. Particular attention is given to *sustainability*, with emphasis on the extent to which the HESAWA Programme achievements are maintained in terms of i) physical facilities; ii) organisational and managerial capacity; and iii) impact on the health and welfare of the population in the programme area. In the above context, human, environmental, institutional, gender, and financial aspects are considered, as well as the ownership and influence exercised by the population (empowerment). *Other assessment criteria* include relevance, effectiveness, and feasibility. In this chapter, the above mentioned "other criteria" are assessed first to form the basis for the assessment of sustainability. In addition, the quality of the development cooperation framework, and risks and risk management are assessed separately. In this report HESAWA achievements, performance and relevance are assessed primarily against the original HESAWA objectives. It should be, however, recognised that the Programme itself was a key factor in the development process resulting in the current Sida rural WSS objectives.

4.2 Relevance

The HESAWA Programme was, without a question, a *relevant intervention* for the primary stakeholders' priorities and existing needs, as well as for the objectives of Swedish development cooperation. Improvements in health, sanitation and water supply are commonly regarded as priority issues in rural communities, and recognised as such both in Sweden and in Tanzania. The conceptual design of the Programme as a dynamic *"plan of action"* was well in line with the various national policies that cover water, health, and gender as part of the rural development needs. Today, Tanzania's PRSP (also known as *MKUKUTA*, approved in February 2005) is based on MDGs in respect to the water supply and sanitation targets and, continues along the lines focused on in the HESAWA Programme and included in its implementation concepts.

An important goal of the Swedish development cooperation is "creating conditions that will enable the poor to improve their lives". Better health and basic services, such as water and sanitation, do create these conditions. The assumption was that the poor will benefit as the rural communities at large were seen as poor. The HESAWA Programme did not actually identify the poor from the rest of the rural population, and the various reports and studies usually did not even address this issue. Therefore, it may be concluded that the Programme components are *relevant* in addressing the needs of the poor to the same degree as the needs of the general population.

Another goal is "to apply technical and administrative solutions that facilitate local participation and minimize costs for OGM". Participation was a firmly established code of practice already at the onset of the Programme. As the survey results show this goal was *highly relevant*, as about 90 per cent of the households that used "HESAWA source" contributed towards the construction of the water point.¹⁰⁴ During the 16-years of programme implementation, a number of political and economic changes in Tanzania were witnessed. With its dynamic approach, the Programme managed to remain responsive to the changing situations at all levels and was consistent in its attempt to address the needs and priorities of its target groups.

The designs of the components under various activities are assessed as *largely relevant* considering the conditions in the programme area. The designs are also responsive to the overall development goals, enable efficient operation at the village level, and provide possibilities for effective cost recovery for the up-keep of the new and improved water supply facilities.

4.3 Effectiveness

Effectiveness is defined in Sida's evaluation criteria as "the extent to which the development intervention's objectives were achieved, (...), taking into account their relative importance". Effectiveness also contains as an aggregate judgement on "the extent to which major relevant objectives were achieved efficiently in a sustainable fashion."¹⁰⁵ The following assessment of the extent of achievements is presented against the overall objective and the operational goals set in the draft proposal in 1983 and later in the Plan of Action (POA 1990–93). It is noteworthy that during the early phases, no rigid targets were set as such, but rather the Programme operated through the annual progress reviews and subsequent annual plans of action. In terms of overall effectiveness, the HESAWA Programme went a long way towards achieving its long-term objectives; the following details are presented through the Programme's core activities as in the Phase IV.¹⁰⁶

(i) Construction of improved water supplies

The operational goal for improved water supply in the HESAWA Programme was to "make water supply reliable and continuous, of improved quality of greater quantity, more accessible and valuable

¹⁰⁴Interestingly also nearly 20 per cent of those household who are not, at the moment, using a water source constructed during the HESAWA, had also contributed something towards the construction of a HESAWA source.

¹⁰⁵Sida Evaluation Manual, 2004. Annex C.

¹⁰⁶as per the TOR, Section 2.2, page 2

for various household purposes." Later on, it was stipulated that the service should also be financially self-sustained (POA 1994–95). The Programme constructed a large number of facilities comprising more than 6,400 water points over a geographically large and varied area. The survey of WUGs that are responsible for the O&M of the facilities reveals that slightly more than half of the water supply facilities are fully operational and about one third partly functional. This leaves slightly less than one out of five water points as completely broken down (with some under repair).

The achievements of the water supply activities (and components) are within the specified development goals and significant, as about one third of the total population of the three regions received new or improved water supply service. The village survey reveals that the overall water point utilization rate was at 77 per cent at the time of the evaluation study. Some typical reasons for some water points dropping out of service are e.g. shallow wells drying up (at least seasonally), and the lack of spare parts and in some villages also the lack of maintenance tools. One fifth of the 722 household respondents were not using the water sources constructed or improved during the HESAWA Programme. The responses between "HESAWA source" and "non-HESAWA source" users were clearly different in many respects, the "HESAWA source users" being more satisfied with their water and having more latrines.

The water supply facilities provided during the Programme are good examples of appropriate technology and least cost solution. More than half of the water supply facilities were shallow wells equipped with hand pumps, next common types being improved traditional sources, various types of piped schemes and rainwater harvesting. About half of the WUGs and more than third of the household respondents reported that they have enough water, and one fifth of both household respondents and WUGs considered that there is enough water now. More than three out of four WUGs and four out of five households considered the quality of water good. From this sample it appears that the improved water supply facilities have made it possible for the beneficiaries to get access to good quality water. However, the quantity of water is inadequate and the distance from households to water sources is still too long. Water fetching continues to be time consuming women's activity.

Access to improved safe water supply is still lower than anticipated and varies widely between the districts. The ability and willingness to maintain these facilities is equally varied. Many WUGs, according to the survey about one-third, show reasonably positive progress in fully covering O&M costs, but the same remains an ambitious and perhaps still a distant goal for others.

Overall, it is concluded that the *effectiveness* of the water supply activities is *satisfactory* as nearly all targets have been achieved.

(ii) Carrying out promotion and training at the village and district levels

The activities for achieving the operational goal for capacity building and strengthening at all levels included human resource development and gradual decentralisation through handing over more responsibilities to the districts, villages and the WUGs. This was to be done by:

Overall human resources development (especially with emphasis on women, 1994/98 Plan of Action):
 A large number of people were trained during HESAWA. Many got an opportunity to work directly or indirectly with HESAWA gaining valuable experience and opportunities for further skills development. The indirect positive spin-offs to the extended families of these people in terms of such as children's education cannot be ignored. In plain figures, there appears to be fairly balanced representation of both genders in the various training events as reported in the Plan of Action for Phase IV. For some reasons, though, most documents and studies focus on gender balance in WUGs rather than in overall HRD, thus, data is not consistently available to verify whether the gender balance was maintained after the extensive capacity building efforts in Phase IV. Also the quality of all HRD activities cannot be verified as a large number of training events and seminars were carried out in the districts.

- Legislative support for management at the village level: Less than one fifth of the WUGs interviewed were
 registered and an encouraging number was "in process" of doing so. Of those six WUGs who
 reported having registered, four had registered by acquiring certificate of land right and two by
 acquiring a certificate of water rights. It is well recognised that the formal registration of WUGs as
 Water Users' Associations (WUAs) is a time taking process that often requires external support.
 Its contribution to the ownership attitude can yet be significant in the long run. HESAWA put effort
 on legislative framework in Phase IV but in many districts the process is still not clear.
 However, HESAWA was one of the first programmes to acknowledge the importance of legal
 ownership of the various assets.
- *Improving managerial capacities at the village and other levels:* The WUG concept gradually replaced the previous Village HESAWA Committees and became a popular practice now utilised by most development programmes in the area. WUGs were trained for operation and maintenance of the water points, and as such, are the foundations of future sustainability and the most obvious example of institution-building at grassroots level. The institutional continuity is evident largely through the operation of the WUGs in various villages. A significant segment of the household respondents ranked the performance of the WUGs as being good. Also, the WUGs are regarded as key organisations in making important decisions concerning the maintenance of water installations. On the other hand, many of the district and regional level staff trained during HESAWA have moved to other locations and have been able to utilise the skills acquired during HESAWA it was common that resource persons trained in HESAWA were transferred to other locations in the country, which was challenging sustainability. However, later the government policy on staff transfers changed and it was no longer a major constraint.
- *Imparting technical skills to the grassroots level:* Nearly half of the WUGs reported that they do not have problems with the maintenance of the facilities. These were very district-specific, Mwanza Municipality and Serengeti standing out as the most problematic of all. According to the available reports on capacity building activities there were substantial training activities in technical issues for village fundis. We have concluded from the training records that the capacity building activities were targeted much more of awareness and promotion issues than actual technical or implementation related issues.
- *Increasing gender awareness at all levels:* Gender was a cross-cutting issue in HESAWA from the beginning. Gender received more attention throughout HESAWA and the substance for it gradually evolved from the Women in Development (WID) towards more comprehensive gender mainstreaming. The various persons interviewed, including also women in the villages, agreed that HESAWA was effective in creating gender awareness. Behavioural change is yet to be observed though traditions are not easy to break. Despite widespread support for women during the HESAWA era, women remain largely underrepresented at all levels of decision making. For example, there is equal number of women and men in the WUGs, but women are not free to talk in front of men and also men do not believe women can talk in front of them. Women in the villages indicated that women's participation in HESAWA just meant participation when physical labour or cash/kind contributions were needed.

At the district and regional levels the HESAWA Programme had an impact in improving the managerial capacity and skills of those officers who were directly involved in the Programme (such as HESAWA Coordinators), but the overall impact may have been lower. The capacity building activities through training and meetings for programme implementers and government leaders at district and regional levels were fairly extensive, but benefited a rather narrow section of the administration. With regards to gender awareness, related campaigns and workshops may be easy to carry out, but getting tangible results in the real life may require a new generation? Anyway, small steps have been taken and practically all women interviewed considered that HESAWA did a good job in bringing the issues into open and giving also women a chance.

Overall, it is concluded that the *effectiveness* of training and promotion activities is *satisfactory:* a large number of people were trained and HESAWA concept effectively promoted, but further support is necessary to fully achieve the intended operational goal.

(iii) Providing technical and logistical support to districts and villages

HESAWA started with immense technical and logistic support. HESAWA stores and workshops were established, and equipment and construction materials were mainly procured from Dar es Salaam through HESAWA's own channels. These were phased out towards the end of Phase III with an anticipation that the districts and private sector would take over most of the functions. However, there were several challenges as elaborated later in 4.3 *(vi) Capacity development for the private sector.*

The HESAWA Programme worked towards "gradually transferring the responsibility from the government to the consumers (villages)". The Programme brought in the concept of WUG having first worked through Village HESAWA Committees and their sub-committees. Many, if not all, of the people interviewed considered that the WUG concept is very good but came in too late to have been firmly established. At the community level there was still confusion over the roles and responsibilities of various groups. Many felt that the WUGs should have been more formally and legally established, the WUG registration process still being cumbersome and problematic. Such as land rights and water rights should have been firmly established to ensure the true ownership of the assets. Registration as a legal entity (such as WUA) is also important to facilitate ownership of physical water supply assets and eligibility for commercial financing through bank loans usually requiring tangible loan securities. Ownership is critical for sustainability (see section 4.4 for sustainability). Thus, over the 16 years HESAWA did not gradually transfer the responsibilities, but the changes could rather be described as incremental and concentrated towards the end of the programme, the time running out at the end.

Overall, it is concluded that the *effectiveness* of providing technical and logistical support to districts and villages is only *partially satisfactory*.

(iv) Providing health and sanitation education to communities and schools

It is well evidenced through the survey results that the HESAWA Programme brought a significant change in the hygiene awareness of the villagers. Almost nine out of ten respondents of the household survey felt that HESAWA contributed to their well being and health of their families. Generally people are aware of hygiene habits and follow them up in their homes. A significant problem however is shortage of water which undermines benefits gained in raising hygiene awareness: people know that all, also children, should wash their hands but there is no water to wash with. This was evident in a meetings held with the women's groups by the shallow wells in Bunda District. Unfortunately, sanitation is still not felt as a priority even if the attitudes were changing towards the end of the programme.

Some people in the districts felt that the sanitation components should have continued. At the same time there are no national sanitation policies or separate sanitation focused budgets, and sanitation continues to be just an addition to anything to do with water. This is reflected in the daily realities in the districts where the local governments do not have separate sanitation-focused programmes and budgets, but latrines are rather constructed on *ad hoc* basis in various other programmes.

School Health Package was highly appreciated as is evident from both previous studies and interviews done for this evaluation. At the time it was an effective way of improving health, raising awareness and getting improved physical facilities done and used. However, as the package had several steps and required external attention, it is not something that can carry on by local resources alone.

The goal of the health and sanitation education was to increase knowledge and awareness among the rural population of the linkage between better health and the provision of safe water, hygiene and sanitation. This goal was *achieved effectively to the extent possible* considering that awareness was certainly increased, but that change in attitudes and behaviour is a time consuming process and requires continuity.

(v) Construction of institutional (school) latrines and (sanitation) support to villagers in construction of improved household latrines

The most central operational goal was to improve sanitation in the HESAWA regions and it was mainly focused through latrine construction. However, even if sanitation was recognised as an important issue already from the beginning, sanitation emphasis varied in different phases of the Programme. Even if majority of the households had a latrine, there are clear district-wise differences. As could be seen from Figure 2 earlier, the percentages of population who do *not* use toilets are still high in the Lake Zone Regions, especially in Mara. However, there is an interesting difference between the "HESAWA source" users and the "non-HESAWA source" users, possibly indicating that those who were more involved with HESAWA and use the water source constructed during HESAWA became also more aware of sanitation issues. These "HESAWA source" users had more latrines with less limitation on who could use them. In both "HESAWA source users" and "non-HESAWA" users groups about one fifth had received support from HESAWA for latrine construction.

As concluded earlier, HESAWA succeeded in raising awareness on the links between water and health, and to lesser extent, between sanitation and health. Yet, the impacts of improved awareness seem not to have adequately been reflected in the actual sanitation practices and latrine coverage, which remain low compared to the efforts in promotion and other support activities. Thus, this activity was *partially effective*.

(vi) Capacity development for the private sector to participate in programme implementation (introduced at a later stage of the Programme)

The concept of *"private sector"* in HESAWA evolved over the years as part of the dynamic process. Gradually more experience was gained as various options were tested. Private sector involvement featured in several ways, including construction work (shallow wells, school latrines, providing construction materials etc.) and surveying and training activities. In some areas the emerged private sector continues to provide services. During the evaluation it was not possible to establish a thorough picture of the current private sector potential, but obviously in some areas the basic capacity is available and could be further utilised and developed in connection with forthcoming development initiatives, such as projects emerging within the National Rural Water Development Program.

The success of private sector involvement in selling spare parts and providing pump maintenance service has been rather meagre. Possibly it should have received more support through promotion for local entrepreneurship, more local thinking, and linking these local suppliers/*fundis* functionally with the programme structure early during the programme implementation. The WUGs should have also had some opportunities to order this service through these test cases.

At the end, the goal of establishing spare part delivery systems through private sector enterprises did not really materialise. Eventually, the regional and district level organisations had to arrange a partly subsidised delivery system on their own. This was largely an implication of the GOT's resistance towards private sector suppliers. In some areas, such as in Karagwe District, the spare part availability was never a problem as they could be ordered through regular hardware shops in Bukoba. In other districts, the role of private sector was seen rather as a *fundis* who can make a full time living out of hand pump maintenance including selling of spare parts.

Despite positive headway in some areas of developing private sector capacity, the overall conclusion is that *effectiveness* of capacity development for the private sector participation is *fairly low*.

(vii) Cost Effectiveness

The aggregate judgement of *efficiency* of water supply installations is assessed by using cost effectiveness as a proxy. For this purpose, the total cost of the Programme is used as presented in the Zonal Final Progress Report. The starting point for efficiency of implementation in the HESAWA Programme was the fact that all facilities to be constructed were selected on the basis of appropriate technology and as least cost solutions. At the end, the total project costs of the Programme were reported at TZS 80 billion (at 2002 rates).¹⁰⁷ The breakdown of the costs is as follows:

- all TA and other support 76% of total costs (major share of D-funds)
- regional and district interventions

21% of total costs (the rest of D-funds)

3% of total costs (L-funds)

local counterpart funds Note: D - Direct funds/changed to donor funds L - Local funds (from the districts)

Using the number of beneficiaries as estimated at 1.6 million, the estimated average costs of the facilities is in the order of USD 50 per capita. Compared against cost information of other similar RWSS programmes, this is a quite reasonable cost level as it includes the total costs of facility construction as well as all TA and other support costs. In comparison, for instance in some of the Finnish supported programmes, per capita costs were the following: (1) Kenya (1994 prices): USD 20-27 for largely hand pump well systems, (2) Sri Lanka (1992–95) for small-scale gravity schemes about USD 40 per capita, and (3) Sri Lanka for the World Bank funded gravity schemes (1998 prices) USD 38-56 per capita¹⁰⁸. The worldwide average cost for all types of schemes funded by the World Bank (1998 prices) was USD 53 per capita¹⁰⁹.

On this basis, it is assessed that HESAWA programme implementation was *efficient* and per capita costs reasonable in comparison to other similar programmes.

(viii) Effectiveness of Technical Assistance

HESAWA Programme used a significant amount of Technical Assistance resources over its nearly 20 years of existence. The number of expatriate consultants (international specialists) varied between 4 and 18, being highest during the end of the Preparatory Phase and beginning of Phase I, and thereafter being fairly even at 4-5 experts. The number of national HESAWA advisors employed by the Consultant (Hifab International AB) was highest during Phase IV, being at maximum 34 advisors. During Phase II and III the national specialists were contracted through Business Care Services Ltd.¹¹⁰

Total costs of Technical Assistance during the HESAWA Programme (1983-2002) were about SEK 182 million, of which the Consultants' fees were about SEK 112.6 million. This excludes the period (1991– 98) when national advisors were not employed by Hifab. The annual average cost for Technical Assistance was about SEK 9 million, whereas the average annual expenditure of the Programme was about SEK 31 million. Thus, Technical Assistance costs were about 18 per cent (fees only) to 29 per cent (fees + reimbursables) of the total Programme costs. This is rather high as such, but considering that HESAWA Programme did not include heavy investments into infrastructure but focused on health and capacity building, the programme is considered as reasonably effective. It is common that in similar rural WSS programmes the Technical Assistance costs may exceed 40 per cent of the total programme costs.

¹⁰⁷As per the Zonal Final Progress Report of December 2002.

¹⁰⁸Skyttä et al 2001, p. 47.

¹⁰⁹Parker and Skyttä 2000.

¹¹⁰Hifab 2003. Consultant's Final Report 1983–2002.

4.4 Feasibility

Selected approaches and institutional arrangements in practice are always reflections of the policies and strategies of the concerned period. At the time of programme preparation (1983–85), technical aspects and the guiding principles of the programme components, such as local participation, appropriate technology, cost sharing and gender, appear to have been *feasible* and ahead of its time: similar principles were later articulated in the guiding principles of the Dublin Statement (1992).

During programme implementation institutional arrangements changed and created some friction, at least occasionally, between the parties concerned especially at the central level. Some criticism has been voiced about the fact that the programme was implemented through institutional and organisational structures that were largely parallel to the existing Tanzanian government structures. Utilising the parallel structure outside the established government structure might have enhanced flexibility and effectiveness, but did not necessarily ensure sustainability. Several reports and previous assessments of the HESAWA Programme have also concluded that HESAWA did not adequately draw on the involvement and experience of people in local organisations. This statement may be valid especially concerning utilisation of local NGOs and other support organisations in programme implementation, but overall HESAWA was considered an exemplary programme with regard to participation at the grassroots level.

HESAWA's *"learning by doing"* culture allowed avoiding possible negative effects of the institutional friction by gradually adjusting the arrangements to become part of the current governmental structures. The original consultant-driven process shifted towards involving local actors, and eventually enhanced decentralisation that is now taking place.

The operational legal framework was not fully conducive to the effective performance of the WUGs, in fact the concept of consumer associations was quite a new approach to operating water supply systems. Although it is now possible for associations to formally register as legal entities, only 17 per cent of the WUGs included in the survey reported having registered, while still waiting for certification of land rights or water rights. This process has turned out to be very slow and it therefore hinders community legal ownership and management of water facilities.

In general, it can be concluded that the adjustments in the institutional set-up and management arrangements of the HESAWA Programme were appropriate and thus *feasible*. The future programmes should not establish parallel structures anymore, and should pay systematic attention to sustainability from the beginning.

4.5 Sustainability

Sida's basic aim is to promote conditions and processes that lead to long-term and sustainable poverty reduction. This evaluation determines the likelihood that the benefit flow from the Programme will remain sustainable. The sections below discuss the sustainability issues with regard to (i) physical facilities and services rendered, (ii) organisational and managerial capacity, and (iii) impact on the health and welfare of the population in the programme area.

(i) Physical facilities and services rendered

Technological solutions used in HESAWA represent appropriate technology utilising local materials and skills as far as possible. The point of departure for HESAWA was to apply alternatives such as shallow wells, boreholes, gravity flow systems, rainwater harvesting and improvement of traditional water sources instead of the previously failed, investment intensive and large-scale technology. During Phase IV HESAWA implemented an extensive 'rectification exercise' to rehabilitate and maintain the non-operational water supply facilities. The rehabilitation and rectification work included some 25 piped

schemes, 500 wells and 90 traditional water sources. The rehabilitation programme was much needed and helped maintain the already achieved coverage level, but it was likely focused on fully non-operational facilities only. Thus, soon after phasing out several other facilities (already in need of rehabilitation during the rectification exercise) became non-operational and lowered coverage again.

The most common problem reported was the drying up of shallow wells, which is a common problem in many areas in Tanzania. Reasons for this vary from site to site from too shallow well depth to the wrong construction time at the peak of the rainy season. These problems could have been avoided by more reliable quality control. Another and more serious question is whether the ground water table is truly dropping. There were also cases where the improved traditional water sources had been drying up after the "improvement."

Future population growth was anticipated already in the Draft Proposal of 1983 as it predicted fairly accurately the expected changes. In some instances, however, they did not seem to be reliable enough as evidenced by some water points, for instance a shallow well, serving much larger population than the specified design standard. It should be noted that the overall population growth is one of the greatest challenges to sustainability of facilities and services. During the HESAWA period 1985–2002 the population grew by 1.2 million only in Mwanza Region.

Reliable operation and maintenance function is a key factor when building up sustainable systems. The capacity of WUGs to maintain existing water and sanitation systems still varies widely. More than half of WUGs report problems with the maintenance of their water systems; the lack of maintenance tools and spare parts is still today a surprisingly common problem. The situation seems to be worse today than it was at the time of the phasing out in June 2002. As a result, the share of fully functional water points has gone down to about 54 per cent, although nearly half of the rest of the water points are still producing water or undergoing repair. The lack of spare parts and tools are a serious impediment for the long-term sustainability of water supply systems. Further, initiatives to establish spare parts delivery systems based on private sector participation largely failed and thus the government offices had to intervene. The maintenance of rainwater harvesting facilities is also a common problem especially at the institutional rainwater harvesting tanks. The users, including the schools, should have received specific awareness training concerning the water quality and maintenance of the rainwater harvesting systems.

In summary, despite its many achievements in constructing the necessary physical facilities for water supply and sanitation, the HESAWA Programme did not manage to establish a sustained process of maintaining them, Even if the physical facilities stand a good chance to be *sustainable*, the cost recovery mechanism is not yet fully accepted and functional. Survey results show downward trend in number of operational water systems which calls for urgent attention.

(ii) Organisational and managerial capacity

There were a number of differences between the districts. Institutional issues, such as lack of annual plans, coordination and monitoring and regular meetings, seem to be the main determinant factors that account for the varied performance across the studied districts. This applies to both local government institutions and WUGs. According to the survey findings, operational and functional water installations are largely found in those districts that have a high number of WUGs which hold regular meetings, prepare annual plans and maintain contacts and linkages with the district officials. For instance, Mwanza Municipality and Bunda District are leading for having a large number of WUGs with no annual plans and minimal contacts with the district officials. Mwanza Municipality is also leading for having a high number of non-functional water facilities, cases of vandalism done to the water facilities as well as high number of WUGs reporting not to have tools to undertake maintenance.

The field survey confirmed that some districts have continued to provide financial support to WUGs and have offered technical assistance, including training of pump mechanics and technical advice to

WUGs. It is also recognised that "where there is inadequate district level commitment, WUGs performance has also been low".¹¹¹ In the 2003/04 Regional Supervisory meeting for the HESAWA activities, it was reported that the overall performance of WUGs was unsatisfactory. Other problems were also cited such as poor reporting and monitoring of the implementation activities at the district level and lack of financial contributions by some districts. Often even in those districts that had contributed funds to the HESAWA activities, such funds were not always deposited to the HESAWA accounts.

The establishment of WUGs and especially their registration as Water Users' Associations (WUAs) to become legal entities seemed to have ensured a higher level of sustainability. The process of WUGs attaining legal ownership of installations as WUAs was initiated in HESAWA, although mainly implemented at a fairly late stage during the final sustainability phase (1998–2002). With the absence of support, practically no new WUAs have been established after 2002. Thus, the operational legal framework is not yet conducive for the effective performance of the WUGs. Many people interviewed felt that at the WUG re-promotion started too late in a sense that the legal framework and supporting institutional structures at the district level were not strongly established.

In conclusion, while a certain degree of institutional continuity for the HESAWA activities exists at the village level, some discontinuity is evident at the district and regional levels. There seems to be an 'institutional gap' between the districts and the WUGs at the village level. It is clear from the above that organisational and managerial capacity is not yet strong enough to ensure sustainable services.

(iii) Replicability and post-programme expansions

One of the original long-term objectives as stated in the draft proposal in 1983 was to reduce Tanzania's dependence on external support in the field of rural water supply development: The question of replicability was discussed with key informants both in Tanzania and in Sweden. It was noted how this concept had different connotations with different people: where the Swedish actors consider replicability as something that can be replicated without the external support, many Tanzanian actors see it as something worthwhile replicating but which may not be possible without an external support. For instance, a District Water Engineer may consider the technology options introduced in HESAWA as appropriate and affordable and thus, replicable, yet adding that it needs "HESAWA to come back to cover also those who are still not covered." The same situation was also reflected in a small number of new water supply facilities or extensions constructed using self-financing by the respective WUGs.

HESAWA did reduce the dependence, but did not manage to create completely self-sustained systems. The financial ability to cover operational and maintenance costs has proved to be low among the majority of WUGs. As the survey findings show, only one third of the WUGs interviewed reported that their members are willing to make regular financial contributions. Others face some difficulties in collecting regular fee from their users. On the other hand, the findings from household surveys indicated that half of the respondents did not know how the WUG committees are using the money collected from the users. Information about expenditure is largely shared among the WUG committee members rather than among the general public. Lack of information on financial expenditure can be a contributing factor for the users' unwillingness to pay regular water fees. The current system is designed in such a way that WUGs are responsible for day to day operation and maintenance of the water facilities including rehabilitation, replacement of broken and/or stolen pumps or even expansion of new water facilities. Fulfilling all these tasks become quite challenging given the low rate of users' contributions, as well as unavailability of affordable spare parts and tools.

In the long run, the low financial ability to cover operational and maintenance costs will have serious negative repercussions on the sustainability of the water installations. Financial contributions from

¹¹¹HESAWA Regional Office, Mwanza, October 2005, p.4.

central and district levels have been inadequate to facilitate post-programme expansions although some WUGs have also demonstrated what is possible at the local level.

(iv) Impact on the health and welfare of the population in the programme area

Malaria continues to be the number one disease reported in Tanzania, also in the Lake Victoria Zone. In HESAWA vector control focused on bilharzia. Also such serious yet fairly small outbreaks as cholera received a lot of attention. Health statistics were reviewed using Mwanza Region as an example (Annex 7) but it was not possible to identify HESAWA specific impacts. At the household level HESAWA's beneficial impact on health was recognised.

HESAWA raised environmental awareness and managed to ignite some local action, yet, many aspects of healthy and productive environment were not considered when it came to scheme implementation.

Poverty is the core focus of action for both Swedish and Tanzanian stakeholders. The goals for poverty alleviation as such, specifically identified, were not set in the long-term or short-term objectives, and neither in the outputs as expressed in the Plan of Action Phase IV. As a matter of fact poverty was hardly discussed in various reports and studies until a rather controversial Tanzanian study questioned whether HESAWA really was benefiting the poor, and more to it, poor women. Livelihoods problem remains and relates to the inadequate amount of water available. Improved health was acknowledged, and it could have given an opportunity for further productive activities. Yet, the lack of water had not made it possible to undertake economic activities which could have up lifted the poor households and could have further helped to improve the nutrition in the family. Two buckets per household per day do little to assist in productive uses of water. The villagers acknowledged that this was not even enough to maintain the cleanliness of their households and personal hygiene.

It appears that HESAWA *was not effective in poverty alleviation* when it comes to livelihoods. In addition, women suffer from adverse economic effects and often bear the brunt of increasing poverty. The households are still not resilient in the face of shocks and environmental stress, including drought that has undermined the efforts of many families to come out of poverty.

4.6 Factors of Successes and Failures

On the basis of the evaluative conclusions above, HESAWA provides a good number of success stories that are further elaborated under lessons learned. Unfortunately failures have also been discovered. Key factors for success and failure, as well as some examples of innovative approaches include the following:

+ Factors for success and positive features	- Factors for failures and negative features
+ Dynamic learning-by-doing process and culture used in the entire HESAWA Programme encouraged innovative- ness and was receptive to new ideas and responsive to changes: it was well controlled by Annual Reviews.	 The flexible programme planning and steering processes in their part also downplayed efficient implementation and distorted focus. HESAWA lacked specific environmental and poverty goals and related approaches. Such as productive uses of water as a means of poverty alleviation were not promoted.
+ HESAWA's multi-sectoral and integrated approach was novel and innovative – ahead of other programmes in the 1980s.	 The multi-sectoral approach was partly a burden since it was difficult to focus efforts in implementation and thus achievements remained low.
	 Central government commitment was inadequate as a result of unclear lines of responsibilities, causing unnecessary friction in implementation. HESAWA Programme area was too vast – it would have been better to focus on a fewer districts.

+ Factors for success and positive features	 Factors for failures and negative features
+ HESAWA was a forerunner in operationalising decentralisation.	 HESAWA was implemented largely following institutional structures parallel to the established government structure causing some confusion in implementation priorities (although majority of the managerial local staff were actually civil servants in regional and district offices). Mismanagement and misuse of funds occurred especially after fund flow was 'nationalised'.
+ Massive HRD and capacity building efforts were largely successful although not quite equally focused at various levels.	 Capacity building impacts especially at the regional level remained low, and district-level stakeholders were involved late.
 + HESAWA approach aimed at participatory planning and implementation. + Introduction of Water User Groups was a fundamental change that opened up the avenue for community management and potential for sustainability. 	 Cost recovery was not adequately developed and was initiated late.
+ Use of local consultants was among the most positive experiences of private sector involvement.	 Private sector role and use of its capacity did not adequately emerge in most areas
+ School health packages enhanced hygiene awareness.	 Sanitation coverage remained low despite increased hygiene awareness.
+ HESAWA introduced appropriate technology options.	 Rehabilitation was started 'too late' and focused mainly on those systems which had already collapsed. Soon after HESAWA, more systems are in need for rehabilitation. Quality control systems in implementation were inad- equate to cope with large area covered and complexity of activities. Technical problems included shallow wells
	drying up during the dry season and high number of stolen hand pumps in some districts.

4.7 The Quality of the Development Cooperation Framework

In the first few years of the HESAWA Programme, planning, monitoring and evaluation practices were still fairly lenient (and almost *ad hoc*). Although this was probably justified in many ways, it also had its consequences on the quality of co-operation. For instance, in the absence of detailed and comprehensive project documents and log-frames, elements such as risk identification and plans for risk management were also weaker. This was substantially improved during the later stages, and HESAWA's practice of drawing up work plans based on annual progress reviews and participatory planning, and the courage to introduce and pilot new approaches through learning-by-doing ensured that HESAWA remained responsive to the changing environment. For instance, the Programme closely followed the local government reforms and decentralisation process in Tanzania, decentralising the programme responsibilities to the districts at an early stage even if some districts may not have been exactly capacitated to take on all these responsibilities. Another example of the new approaches that HESAWA slowly, but effectively managed to operationalise, was gender mainstreaming. The attempts were of utmost relevance for the overall gender mainstreaming efforts in Tanzania, however small the steps in real life towards gender equality have been.

Sida's approach to decentralise programme management functions to district level – and delegating much of the financial management and control to Tanzanian authorities – was a genuine attempt to promote local ownership of the Programme, and as such is commendable. Yet, this has not happened without problems and risks of mismanagement and inefficiency as verified by key informant interviews.

Cases of mismanagement had been encountered both at the lower implementation level and at the national level. In any case, Sida appropriately engaged proper auditing procedures to rectify the situation before it became too critical. However, there were mismanagement cases at the ministry level of GOT which caused some implementation delays due to time spent on auditing mismatching accounts.

Sida's own inputs into HESAWA's supervision and steering have been rather extensive, both at the HQ's level and through the Embassy. Given the large volume and diversity of the HESAWA interventions this has definitely been justified. In comparison to many other donor interventions, Sida's active supervision role – including the field presence – has been significant. This has undoubtedly enhanced the quality of co-operation.

In summary, the quality of Sida's cooperation framework has proven satisfactory.

4.8 Risks and Risk Management

In the early stages, the programme implementation was based on lean and flexible programme planning procedures – without formal programme documents and logical frameworks. Thus, also the identification of risks and assumptions was not necessarily yet very systematic, but rather "a trial and error system". Consequently, the risk management procedures and precautions to minimise the risks with appropriate remedial actions were not given adequate attention. Even without a structured LFA planning process – which was adopted in Sida programmes in mid-1990s – some of the programme risks and assumptions were rather well taken into account already during the earlier phases of HESAWA. In the earlier stages risks were identified during the process of implementation and managed *ad hoc* to the best knowledge of the programme implementation team.

Some practical risks encountered in implementation and measures to deal with them included for instance the following issues as mentioned by some interviewed key informants:

- Drought: Risk management measures included (i) construction of deeper shallow wells (up to 18 m),
 (ii) construction of boreholes in every village in addition to shallow wells, and (3) construction of rainwater harvesting tanks.
- *Un-acceptance of latrines:* Risk management measures included strengthening sanitation and hygiene awareness through mobilisation teams.
- *Contamination (institutional latrines):* Risk management measures included construction of rainwater harvesting tanks close to institutional latrines to avail hand washing facilities).
- Inadequate *user contributions* for O&M: HESAWA effectively promoted cost recovery principles which proved successful in a number of WUGs, but the majority of them are yet to achieve this goal. In addition, many more WUGs remain to be established.
- *Central government allocation of funds* to district councils: Originally established procedures were modified to better facilitate the timely and adequate transfer of funds thus improving the situation towards the end of the Programme.
- *Retirement and movement* of Programme trained staff: This chiefly concerned TBAs and village *fundis* and was, to a large extent, beyond the control of the Programme.

The risk and effects of corruption were anticipated in work planning, and in some cases districts with higher incidences of corruption were phased out from the following phase.

In Phase III and especially in Phase IV, identification of potential internal and external risks was done more comprehensively and better documented. Typical risks and assumptions anticipated in log-frames

included e.g. adequate and timely contribution of funds by the Tanzanian government. Although in most cases this assumption was fairly well materialised (for example Mara Regional report for Phase III), timely financial disbursements by the local counterpart organisations and even the factual mismanagement of local funds were strongly mentioned as potential risks that often also materialised.

The evaluation study concludes that the assessment and anticipation of potential risks and assumptions in the programme design have not been done to the extent that they could be – against the present understanding and standards. The likelihood of external factors and risks to affect negatively the proposed strategy, and the likelihood of materialising the expected positive assumptions could have been analysed in a more comprehensive and systematic manner for instance by utilising futures research methodologies such as scenario work. This was done to some extent during the mid-term review process, but not adequately in programme design. It should be noted, however, that the dynamic implementation approach has helped identify potential risks at an early stage. Thus many risks have been remedied, before they had any adverse effect on programme implementation.

5. Lessons Learned and Recommendations

5.1 Key Lessons Learned and Recommendations

Water sector development is an integral part of Tanzania's poverty reduction strategy and a key prerequisite for achieving Millennium Development Goals. This in turn means that specific RWSS programmes and projects continue to be crucial components of the rural development framework. HESAWA shows that given a chance, rural communities can do a lot, and women play an active constructive role in the development of their communities.

Although HESAWA had enabled thousands of communities to access clean water, the programme design was not easily adapted to a partnership with local authorities. During the phasing out period, the emphasis was on local capacity development for the future management of the installations and capacity development of local officials and end-users for the continued expansion and maintenance of the installations.

HESAWA had the courage to try new approaches and develop substance to concepts, giving people at many levels from villages to central level a chance to develop these further and in the process, gain valuable first hand experience from these. Without real life experience, concepts such as gender main-streaming live on paper only.

HESAWA was innovative and participatory programme which had become well known and widely appreciated in the Lake Zone. The programme achieved many of its goals but had not yet reached the required level of sustainability and replicability that would have justified termination or withdrawal of donor support. Thus, Sida's withdrawal from supporting the HESAWA Programme was not yet well justified. Similar "abrupt" withdrawals have happened in other programmes, for instance the withdrawal of the Finnish support from Mtwara-Lindi programme in 1993. It would have been recommendable to continue Sida assistance based on the HESAWA experiences in the Lake Zone, even geared more towards budget support for poverty reduction but perhaps with some earmarking for RWSS.

Future development cooperation should be specific on how poverty is addressed in real terms. Strategies should be clear on who the poor are and how they are targeted to benefit from planned activities. HESAWA, like many other water and sanitation programmes all over the world, assumed that improved water and sanitation services will improve health and alleviate poverty. There was no focus on poverty or the poor as such. Yet, as an essentially integrated and participatory programme HESAWA's efforts were expected to improve also the lives of the poor.

Sections 5.2 through 5.5 present lessons learned and respective key recommendations focusing on various perspectives. Some of these recommendations may apply to more than one perspective.

5.2 Household/village Perspective

The following lessons learned have been identified:

- *Health:* Without clear village-specific, even household-specific baseline data, it is not possible to identify the health impacts or distinguish them from the district-wise statistics although at the household level HESAWA's beneficial impact on health was recognised.
- *Sanitation:* Sanitation awareness was gaining momentum towards the end of the programme. Sanitation activities should definitely continue, but not as an annex to water supply related projects and programmes, but as an issue of its own right.
- *Rural water supply and sanitation* continue to be among the priority needs. Service coverage remains low and especially sanitation improvements have a long way to go before an adequate access level of sanitation is achieved. In fact, due to the population growth, the sanitation coverage appears to have decreased. The HESAWA Programme set a good example of how to tackle the challenge by developing its approaches towards more participatory and demand responsive working modalities.
- *Poverty:* The assumption that all households within a village are "poor" may actually overlook the genuinely poor in the development activities. There is a limit to which a demand-driven approach can encourage the poor and the marginalised to come forward. HESAWA did not target the poorest households specifically. Future programmes could consider participatory poverty ranking and monitoring at the village level to identify the poor.
- *Water User Groups and Water Users' Associations:* The WUG concept was developed in 1997 and thus it gained good success in a relatively short period. The WUG concept was a success and well appreciated in the villages and districts. However, WUGs cannot yet operate alone and therefore supportive institutional frameworks are needed at the village and district levels. A lot of responsibility and expectations fall on the districts to continue supporting WUGs including their further transformation to WUAs.
- *Strengthening village level local government* will be the next challenge in the decentralisation process. Institutional capacity building is a time demanding task and requires a systematic long-term effort. Village Councils and their advisory committees (such as Village HESAWA Committees initially) as umbrella organisations and an institutional link to the district level should be strengthened and receive adequate resources.
- *Stakeholder participation:* HESAWA demonstrated that through innovative and dynamic process, a topdown consultant driven system can indeed be transformed into a bottom-up participatory system driven by local stakeholders. The evaluation findings show that much effort was spent on making the processes truly participatory, and eventually such concepts as WUGs were introduced to bring in the water users in to a more descript role.
- *Women and gender mainstreaming:* Many water and sanitation programmes have provided a number of encouraging examples, and so does HESAWA. Women's participation increased and some barriers regarding traditional women's roles were broken. On the other hand, achieving a certain percentage of women's participation in a meeting, training session, or as members in Water User Groups does not yet ensure gender equality. Gender equality requires more changes in a society than those that a

water and sanitation programme can bring about. Women-focused programmes should be encouraged in the future to enable the implementation of more sustainable water and sanitation systems.

The following key recommendations are presented for household and village level action:

- Water *and* sanitation service is a local issue, and the motivation to improve these services is likely to be highest at the village level. Expanding the HESAWA initiated process of establishing WUGs and further transforming them to WUAs requires strengthening the capacity of the Village Governments as an essential next step in the decentralisation process.
- In any future RWSS intervention, a strong piloting component should be included to draw on the successful learning-by-doing legacy of HESAWA.

5.3 Tanzanian Perspective

The following lessons learned have been identified:

- *Health* concerns still prevail. Malaria is still the number one disease reported at the health facilities. As water and sanitation programmes go together, a comprehensive vector control component is recommended. Vector control is similar to control of bacterial diseases already familiar in a number of sanitation programmes. The key message is that everyone must do their part – one "culprit" can undermine the efforts of the rest of the neighbourhood.
- *Sanitation* concept could be broadened to cover environmental sanitation in a more comprehensive manner, thus bringing in such as vector control and ecological sanitation. Piloting new approaches and technologies is a must before advocating anything in a broader scale.
- *Tanzanian national policies* on (rural) water supply (and sanitation) have evolved and developed tremendously during the HESAWA implementation period although there is still no national sanitation policy. Undoubtedly HESAWA's novel approaches and concepts of grass-root awareness creation and participation have on their part largely influenced and being instilled into revised policies and approaches of other key stakeholders. It can be recognised that for instance the National Water Policy of 1997 was largely based on HESAWA experiences.
- *Sector-wide approaches:* There are good intentions in Tanzania towards a sector-wide approach in the water and sanitation sector. In the current RWSS context, this trend is spearheaded by the World Bank supported National Rural Water Development Program (NRWDP). Interested donors should preferably contribute to the rural WSS sector development through this coordinated initiative or at least in adequate collaboration with it. The rural water supply and sanitation sector is relevant and is working on important priority needs even if sanitation may not be acknowledged as such at the local level.
- *Poverty and livelihoods:* Poverty alleviation assumes that poverty can be characterised and the poor can be identified. Only then can poverty alleviation efforts be consciously targeted. Rural villages are not homogeneous although HESAWA, as many other development programmes, assumed so. Reliable baseline data and (participatory) monitoring process are the key focus areas.
- *Tanzanian Poverty Reduction Strategies:* Although HESAWA did not initially have very specific poverty reduction objectives, its main achievements eventually complied well with the national PRS objectives and MDGs. It is important that any future water and sanitation programme should clearly adopt the poverty reduction focus while it recognises the objectives towards achieving the MDGs.
- *Good governance* including accountability and financial transparency are on the present development agenda. There have been improvements in the governance systems in Tanzania in general, and

corruption has decreased. In HESAWA implementation processes in general were transparent, but some cases of financial mismanagement were observed. Financial management at the lowest appropriate local government level increases transparency and accountability, because tangible results of funding are felt at the local level. Good practices such as public audits should be encouraged.

- Decentralisation and the role of the local government: Local governments are the main actors involved in
 rural water supply. HESAWA Programme was among the first to decentralise programme management and finances to the district level even when these functions were only in their infancy.
 The capacity of local government especially district administration is expected to increase with
 the ongoing support programmes. The next challenge will be the strengthening the village-level local
 governments, many of which still do not have the basic tools for successful local development, such
 as their own bank account or offices.
- *Ownership:* HESAWA recognised from the beginning that genuine ownership by the local stakeholders is the key to sustainability. The concept of 'ownership' evolved over the years, and for instance the 'legal ownership' of WSS facilities by the communities was not yet on the agenda during the first phases of HESAWA. More attention was given to this aspect in Phase III. Decentralising responsibilities to districts and villages ultimately aimed at making it possible for the various local stakeholders to take control over development activities. The extensive HRD and other components of institutional capacity building aimed at strengthening the local capacity to exercise this control and ownership. The process is slow as many districts started practically from the scratch.
- *Gender mainstreaming* has taken small but visible steps. The continuity of gender mainstreaming and safeguarding tangible changes must be ensured in the midst of shifting the support towards budget support. Water supply and sanitation initiatives offer excellent entry points for gender mainstreaming, as the HESAWA Programme has proven. However, the change towards a more equal society takes time and cannot be achieved through short-term stints.
- HESAWA did not deal directly with HIV/AIDS issues, but rising prevalence of HIV/AIDS will show in the health statistics, diarrhoea being just one of the manifestations of affected people being more prone to diseases than non-affected people. The future efforts in the HIV/AIDS sector should bring in the water supply and sanitation component urgently. Health and hygiene education and other sanitation advocacy material should include the HIV/AIDS dimension as part of increasing people's awareness on HIV/AIDS. Failure to deal with this can undermine all other development efforts.

The following *key recommendations* are presented for national action, whether at the policy level or in the context of overall rural development:

- The principles of good governance should be operationalised, institutionalised and enforced in connection with the on-going local government reform process. This applies to all levels, and calls for tangible actions. To capture the benefit of the HESAWA experience immediate actions at the district and village levels would be most desirable.
- Develop tools for monitoring and decision making. With reference to all of the above mentioned points reliable baseline and measurable follow up indicators are needed. It is recommended that Tanzania's development partners participate actively in the dialogue to establish reliable and transparent monitoring systems.
- Programme design should have strong institutional focus and cover long-term design horizon, and should cater for demand of various service levels and specific social characteristics of user communities. Programme financing plan should include efficiency goals, a step-wise cost recovery programme, and necessary procedures for their implementation.

- The work on the national sanitation policy with a broad enough scope entailing environmental and ecological sanitation should be encouraged and translated into action. Sida has experience in this field and should actively seek to contribute into this.
- Gender mainstreaming should be continued, and related indicators should be built into the JAS and programme plans. Gender mainstreaming is a cross-sectoral issue which should not be left only to "gender sector".
- Inclusion of water supply and environmental sanitation related improvements into HIV/AIDS programmes should be advocated, as well as the importance of safe and reliable water supply and environmental sanitation in general for both HIV/AIDS affected and non-affected people.

5.4 Lake Victoria Basin/Nile Basin Perspective

Water supply services provision is an important aspect of integrated water resource management even if the volume of water is often insignificant compared to large-scale water resource development needs such as irrigation or hydro power. Rural water supply appears even more "insignificant" compared to urban aspect of integrated water resource management.

Protection of local water supply catchments should be seen as an entry point to accelerated community action in natural resources management in general. For instance, the Sida funded VI Agro-forestry Project is still active in reforestation and soil management within the same area as HESAWA was implemented.

As the Strategy for Swedish support to the Lake Victoria Basin¹¹² defines, the priority will be given to efforts in five areas of activity relevant to policy areas identified by the East African Community (EAC):

- i) Capacity building for sustainable development
- ii) Empowering communities and individuals
- iii) A sound environment and sustainable use of natural resources
- iv) Combating HIV/AIDS
- v) Private sector development for economic growth.

There are several regional initiatives being implemented or under preparation in the Lake Victoria Basin area. Some of these initiatives include components and interventions in the health, water and sanitation sectors, and could therefore strongly build on the HESAWA experiences. Phase 2 of the Lake Victoria Environmental Management Project (LVEMP-2) includes an Institutional Component, which in Tanzania focuses largely also on freshwater resources, water supply and sanitation services, and waste management. Experiences and lessons of the HESAWA Programme regarding the village and district level institutional arrangements and implementation approaches should be fully utilised in planning and implementing LVEMP-2 activities.

The Lake Victoria Region Water and Sanitation Initiative (LVWATSAN) aims at "supporting secondary urban centres in the Lake Victoria Region to achieve the Millennium Development Goals". This programme is undertaken by UN-Habitat, but it has not yet finally secured all required funding and its implementation is still on hold. Although this initiative focuses on the water and sanitation services in urban areas, it also has its clear linkage and synergy with rural water supply and sanitation interventions.

The three countries in the Lake Victoria Region are distinctly different. Whereas Kenya's and Uganda's concerns are more urban, the emphasis in the Tanzanian Lake Victoria Basin is specifically on rural

¹¹²Sida 2004. Strategy for Swedish support to the Lake Victoria Basin (September 2004–December 2006).

development. However, it may be worthwhile questioning the traditional distinction between rural and urban WSS, since the borderline between urban and rural seems to become increasingly blurred.

The Nile Basin Initiative includes a number of transboundary river basin projects, including the Sida supported Kagera and Mara Transboundary Integrated Water Resources Management and Development Projects. These projects include institutional support for the Water Users Associations which should be linked and built on the HESAWA experience in working with the WUGs.

There are (or have been) many other comprehensive water and sanitation sector support programmes ongoing in three Lake Victoria countries (Tanzania, Kenya and Uganda), many of them financed or co-financed by Sida. There are a lot of similarities in the challenges and approaches of these programmes – largely related to reforming and restructuring the rural and urban WSS policy, institutional and implementation arrangements. This fact provides an excellent opportunity and demand for even closer collaboration and exchange of experiences and lessons between the three countries and programmes. Sida – in cooperation with other participating development partners – could work towards a series of workshops or other events in which the lessons could be shared in depth.

The above mentioned policy areas are broad, but they can be interpreted to match well with the key objective areas of HESAWA. Although no specific recommendations are presented here, the above discussed lessons learned from HESAWA should be fully utilised in preparation of future interventions.

5.5 Swedish Development cCooperation/Sida Perspective

The following *lessons learned* have been identified:

- Integrated rural development: the HESAWA Programme was an early example of an integrated rural development project. As such it had novelty value and gained the interest of many of its stakeholders. At the same time, the broad and complex sector-wide and multi-sectoral approach also had its side-effects that made it difficult to achieve all the ambitious targets and complicated coordination at the national level.
- Although HESAWA applied a dynamic and innovative approach and provided many new ideas for further development strategies, the programme perhaps expanded too rapidly for a large area. This caused limitations in focusing on key aspects and testing, promoting and applying the novel ideas appropriately.
- Sida is engaged in a successful and long-term co-operation with Tanzania in sectors that have improved the living conditions of especially the rural population in the Lake Zone and other regions (HESAWA, LAMP, DDP, to mention a few of the most interesting ones). This experience should be adequately utilised also in the future, when bilateral co-operation is largely shifting towards the direction of sector-wide approaches and budget support.
- Rural water supply and sanitation are still important. Women and children are still carrying water, lack of access to sufficient and safe water is still limiting the income generation opportunities, and people still do get sick from preventable water and sanitation related diseases. Good quality potable water and safe sanitation should also be more strongly recognised in connection with the HIV/ AIDS programmes as key environmental factors helping those affected to stay healthy as long as possible.

The following key recommendations are presented for action:

• Sida's support to "HESAWA sectors" (water and sanitation, and health) should still be extended to novel formats of co-operation. Sida's ongoing experiences from supporting the water sector reform and rural WSS development in Kenya could be adopted also in Tanzania. The current move to a

sector-wide approach e.g. through the World Bank support to rural WSS development is likely to provide relevant opportunities for co-financing.

- The Swedish support for the international Nile Basin Initiative (NBI) will also be directed at the Lake Victoria Region, which should give some direction regarding the focus of future interventions. With all respect to initiatives to poverty reduction, continued and/or restructured support to multi-sectoral development initiatives in the Lake Victoria Zone could yet be seen as a recommendable future strategy, knowing the ground work and already achieved impacts of the HESAWA Programme and other interlinked initiatives in the region.
- New interventions, such as "HESAWA-like" innovative capacity building programmes should be gradually scaled to cope with the local capacity in order to facilitate appropriate promotion, testing, adjusting and gradual expansion of ideas and activities. It would be beneficial to organise occasional evaluative workshops on interesting programmes/projects (at mid-term, completion) to enhance and broaden the learning-by-doing process among sector professionals.
- It is strongly recommended that Sida should always include cost recovery issues in its policy and strategic dialogue with partner countries.
- Decentralisation process and local government reform could open new windows of opportunity for continuing water and sanitation work even when water or natural resources are not amongst the focus sectors of Swedish development cooperation.

Annex 1 Terms of Reference

1. Evaluation Purposes

Approximately three years after the phasing out of Swedish support to HESAWA, an ex-post, or retrospective, evaluation is to be carried out. The purposes of the evaluation are to:

- assess the sustainability of results and impacts in terms of i) physical infrastructure and services rendered; and ii) organisational and managerial capacity, knowledge, empowerment and changes in behaviour and attitudes at the household, village and district levels;
- identify the factors of success or failure relating to the Programme and analyse why certain activities have succeeded and others have failed;
- on the basis of the assessments and analyses draw conclusions that may inform other interventions in rural and peri-urban areas in East Africa, in particular the Lake Victoria Basin.

The intended users of the evaluation are:

- Government and non-government actors in a) Tanzania and b) the Lake Victoria Basin, who are involved in long-term poverty reduction efforts through participatory approaches, which are based on locally affordable and manageable technologies, gender equality, democratic working principles and the promotion of human rights;
- Sida, as a contribution to its learning process on how to operationalise the poverty reduction objective of Swedish development cooperation a) at the level of overall policy and development of methods; and b) at the level of Swedish contributions to development programmes, in particular in East Africa.

2. Background

2.1 History

In the period 1985–2002, the Government of Sweden, through the Swedish International Development Cooperation Agency (Sida), supported the Government of Tanzania's Health through Sanitation and Water (HESAWA) Programme, which was an integrated rural water supply, sanitation and health improvement programme covering the Lake regions of Tanzania, i.e. the Kagera, Mara and Mwanza regions.

Preparations for the HESAWA Programme started in 1983. Since then, the Programme has gone through several phases, based on gradually changing approaches and organisational structures, and formalised in a sequence of Specific Agreements. Although not strictly defined, the phases could be classified as:

- Preparatory Phase (1983–1985)
- Phase I: First Implementation Phase (1985–1991)
- Phase II: Decentralisation to District Authorities (1991–1994)
- Phase III: Full Decentralisation (1994–1998)
- Phase IV: Sustainability Phase (1998–2002)

2.2 HESAWA's objectives, approaches and activities

The overall objective of the Programme was to improve the health and welfare of the rural population through improved water supply, health education, environmental sanitation, community participation and capacity development at the village and district levels in the three regions.

HESAWA aimed at introducing participatory approaches to achieving improved health and welfare through affordable, sustainable, replicable, cost efficient and credible/acceptable solutions.

For further information on the initial intentions for HESAWA, please refer to 'Rural Water Supply and Sanitation Programme in the Lake Regions: Principles and Procedures for Community Participation, Health Education and Sanitation; by Andersson/ Brandstrom/ Shirima; November 1983.

Main activities included:

- Construction of improved water supplies using the most appropriate and affordable technologies at the time;
- Carrying out promotion, group dynamics and training at different levels (from village to district level);
- Providing both technical and logistical support to districts and villages;
- Providing health and sanitation education to communities and schools;
- Construction of institution (school) latrines and support to villagers in the construction of improved household latrines;
- Capacity development for the private sector to participate in programme implementation (only introduced at a late stage of the Programme)

2.3 HESAWA's outputs, achievements and impact

The HESAWA Programme was large-scale. It affected some 3 million people in almost half a million households and involved some 1,000 villages in 16 districts in three regions. Further information on outputs, achievements and impact will be found in a number of evaluations and studies, such as

- 'HESAWA Programme: Programme Statistics Verification and Water User Groups Analysis'; ORGUT, November 2003;
- 'HESAWA Programme: Study on School Health Activities'; ORGUT, November 2003;
- 'Consultant's Final Report 1983–2002: Health for Sanitation and Water (HESAWA) Programme, Tanzania'; Hifab, March 2003;
- 'Final Report for HESAWA Programme 1982-2002'; Mara Region, 2002;
- 'Final HESAWA Programme Progress Report (Fys 1985/86–2001/02), Mwanza Region, August 2002;
- 'The HESAWA Programme, final Progress Report July, 1985 to June, 2002'; Kagera Region, 2002;
- 'HESAWA Plan of Action, Phase IV, for the Period FY 1998/99 to 2001/02'; Mwanza, March 1998;
- 'HESAWA, Health through Sanitation and Water: Sida-supported programme in Tanzania; Smet/ Shordt/Ikumi/Nginya, Sida Evaluation 97/12;
- A comprehensive evaluation of HESAWA, carried out in 1992;
- 'Phase IV Mid-Term Review of the HESAWA Programme in Tanzania; March 2000;

- Final Programme Report, HESAWA
- REPOA Research Report No. 00.1: Foreign Aid, Grassroots Participation and Poverty Alleviation in Tanzania: The HESAWA Fiasco; by S. Rugumamu.

Additional information will be found in a variety of reports from the districts/regions, the HESAWA Zonal Office and the Ministry of Community Development, Women and Children, as well as in special studies made on various aspects of the Programme.

2.4 Scope of the Evaluation

The evaluation shall focus on the period after the phasing out of Swedish support, i.e. the period from July 2002 but shall link back to findings and recommendations in studies that were undertaken in previous periods. The evaluation shall:

- a) Establish the current status of physical facilities that were supported through the Programme;
- b) Establish the extent to which the physical investments, combined with training and promotion activities, have resulted in increased welfare, empowerment and lasting improvements in knowledge, attitudes (in particular gender awareness) and organisation at different levels;
- c) Analyse the preconditions for maintaining and, preferably, expanding the water and sanitation coverage under the conditions that prevail after the phasing out of Swedish support. In the latter respect, special emphasis should be given to the availability of financial and human resources, as well as institutional factors that facilitate or impede the upkeep and/or expansion of the facilities. The roles of community-based organisations and the private sector should be observed in particular;
- d) Try to capture processes of change (relating to objectives/outcomes/targets, implementation approaches and working methods)during the Programme period. In other words, the evaluation should capture how Sida and other key actors have learnt from experience and adapted to changing circumstances.

It will be necessary to gather new data for the period after June 2002. The data should be on a representative sample basis. To the largest extent possible, such data should be collected for geographical and subject areas, where historical information is available and could serve as reliable baseline information. Selection criteria and guidelines will be found in Annex 1 The criteria and guidelines aim to limit the scope of work, but further prioritization may be required. Those interested in tendering for the evaluation are encouraged to propose areas of prioritisation. Furthermore, they will be required to provide an approach, including a cost estimate, to the collection of new data, including its links to historical data. The proposed approach will be assessed as part of the evaluation of tenders.

Evaluation data should distinguish poor and disadvantaged groups, with special emphasis on women, children and youth (the latter defined as young adults who have not yet established themselves or formed their own families and are below the age of 25). Furthermore, the data collection should be done in a way that facilitates analysis of inter- and intra-community socio-economic factors, for example factors relating to:

- Human rights and democratic governance;
- Gender equality;
- HIV/AIDS;
- Social, economic and cultural equality, and
- Environmental sustainability.

3. Stakeholder Involvement

HESAWA is based on participatory approaches, which should be reflected in the evaluation. Those interested in tendering for the evaluation will be required to provide an approach to capturing the degree of stakeholder involvement, as expressed e.g. in terms of water user groups and school health clubs. The approach should have its focus on the users of the water and sanitation facilities but should also consider other stakeholders within civil society, the private sector and the district/regional/ national administration. The approach will be assessed as part of the evaluation of tenders.

4. Evaluation Questions

4.1 Relation to Sida's assessment criteria

The evaluation should relate to Sida's assessment criteria, as identified in Sida at Work¹. Particular attention should be given to:

- Sustainability, with emphasis on the extent to which Programme achievements are maintained in terms of i) physical facilities; ii) organisational and managerial capacity; and iii) impact on the health and welfare of the population in the Programme area. Human, environmental, institutional and financial aspects should be considered, as well as the ownership and influence exercised by the population (empowerment). Special attention should be paid to gender aspects.

Other assessment criteria that need to be considered include:

- Relevance, with emphasis on the Programme's role in poverty reduction, in particular its contributions in terms of the main objective of Swedish development cooperation, viz. 'creating conditions that will *enable the poor to improve their lives';*
- Effectiveness, with particular emphasis on the extent to which the Programme's objectives were achieved and the extent to which the implementation strategy represented a cost-effective way of reaching the objectives under the prevailing circumstances and given possible alternatives;
- Feasibility, with particular emphasis on the institutional environment and the capacity, resources and will for successful implementation, including efficient and transparent resource management, among the implementing parties;
- The quality of the development cooperation framework, with particular emphasis on the strengths and weaknesses in HESAWA's relations to, and coordination with, other development initiatives (Government and non-government ones) in the Programme area. Were appropriate consultative mechanisms in place to ensure adjustment of Programme activities in response to changing conditions?
- Risks and risk management, with particular emphasis on the adequacy and timeliness of Programme reactions to observed risks.

4.2 Specific evaluation outputs

As a basis for a comprehensive analysis of the long-term impact, sustainability and effectiveness of the HESAWA Programme, the evaluation should deliver the following outputs:

4.2.1. A representative review of the current status (including serviceability and utilisation) of water supplies, sanitation facilities (institutional as well as individual) and other facilities that were constructed as a result of the Programme. The review should include the facilities' status in terms of user control and/or legal ownership.

¹ Sida at Work, including the Manual on Contribution Management, is available at www.sida.se/sidaatwork.

4.2.2. A representative review of the current status of Water User Groups and other user-based organisations, e.g. School Health Clubs, that were established as a result of the Programme. The review should be gender specific and should reflect the extent to which the organisations remain effective: are bylaws in place and followed; are elections held as per thebylaws, do the organisations meet regularly and are they seen as legitimate representative bodies? What role do they have for (i) the operation and maintenance of water and sanitation facilities; (ii) the financial management of the installations; and (iii) decisions on investments in additional water and sanitation facilities and/or other development initiatives?

4.2.3. A representative review of the current numbers, status and roles of village health workers, traditional birth attendants and other village based technicians and animators.

4.2.4. A representative review of the current status of HESAWA committees at different levels (in addition to those referred to in 4.2.2. above), and their linkages to other development initiatives;

4.2.5. A representative review of the role and capacity of the private sector, in interaction with water user groups and/or individual users, in the operation and maintenance of existing facilities, as well as in replications/new investments. Revolving fund arrangements should be considered;

4.2.6. A representative review of the extent to which "HESAWA-based" principles remain visible relating to:

* school health and sanitation, including the current status of School Health Clubs as per 4.2.2;

- * the understanding and application of the HESAWA concept, including cost recovery, at district and village level:
- * the understanding and promotion of the HESAWA concept among CBOs/NGOs in the Programme area.

4.2.7. A review of the extent to which HESAWA-type activities continue at different levels after the phasing out of Swedish support.

4.3 Impact analysis

On the basis of historical data and data collected as per 2.4 and 4.2, determine whether there are changes (positive and negative) that could reasonably be attributed to HESAWA with regard to:

4.3.1. the wealth status, especially among disadvantaged groups, at the household, village and district levels;

4.3.2. the health status, especially among disadvantaged groups, at the household, village and districts levels, as well as at school and health facilities;

4.3.3. water and sanitation practices at the household, village and districts levels, as well as at school and health facilities;

4.3.4. democratic working procedures in civil and governmental organisations/ institutions at village and district levels;

4.3.5. the capability and capacity of village and district institutions to deliver services that are in demand by the population in the Programme area;

4.3.6. the capability and capacity of the private sector (formal as well as informal) to deliver services that are in demand by the population in the Programme area;

The impact analysis shall be gender specific and shall distinguish the situation of children and youth. Furthermore, it shall distinguish impacts relating to different socio-economic groups within the communities and the larger Programme area.

5. Recommendations, Lessons and Communication

5.1 Recommendations and lessons

Recommendations and lessons should be directed to the users of the evaluation, as identified in Section 1 above, and should reflect the experiences, views and demands of the poor and disadvantaged. Thus, recommendations and lessons should be presented from the following perspectives:

- 5.1.1 a household/village perspective;
- 5.1.2 a Tanzanian perspective;
- 5.1.3 a Lake Victoria Basin perspective
- 5.1.4 a Swedish development cooperation/Sida perspective.

The analysis should focus on strengths and weaknesses and should result in concrete recommendations for future interventions.

5.2 Communication Plan

A communication plan should be provided aiming at efficient dissemination of evaluation findings at the following levels:

- 5.2.1 the household/village level
- 5.2.2 the local and national Tanzania Government levels;
- 5.2.3 the Lake Victoria Basin level;
- 5.2.4 the Sida/development partners level.

The communication plan should include proposals as to how the findings should be used to enrich the policy debate and the planning of future interventions at the different levels, including interventions in the non-Tanzanian parts of the Lake Victoria Basin.

6. Methodology

The evaluators will be responsible for the evaluation methodology and research methods.

Those interested in tendering for the evaluation will be required to provide an approach to methodology and research, including cost implications. The approach will be assessed as part of the evaluation of tenders.

7. Work plan and schedule

Those interested in tendering for the evaluation will be required to provide an outline work plan and schedule. The outline will be assessed as part of the evaluation of tenders. Tentatively, it is assumed that

- Work will start within one month after the signing of the contract. During this mobilisation period, the consulta ld work, including the compilation of a draft Final Report, will be carried out within a four-month period after the mobilisation period;
- a participatory workshop to solicit comments from Tanzanian stakeholders will be held within one month after the submission of the draft Final Report; and
- a Final Report will be produced within two weeks after receiving final comments from Sida and relevant Tanzanian authorities.
The evaluation process, including the Final Report, should be completed by January 2006 at the latest.

8. Reporting

For a reporting schedule, see section 7 above. Reports for any other activities, such as seminars and workshops, shall be as agreed on the basis of the concept paper.

Evaluators are advised to use relevant parts of Sida's Evaluation Manual, 'Looking Back, Moving Forward'.² Among other things, evaluation reports should consider the report format in Annex B of the manual. A completed Sida Evaluation Data Work Sheet should be presented along with the report. As far as possible, reports shall follow the terminological conventions of the OECD/DAC Glossary on Evaluation and Results-based Management.

9. Evaluation Team

The core evaluation team members must have an academic degree or professional training in relevant area and good knowledge in written and spoken English and should consist of expertise in:

- socio-economic and gender aspects of rural development in East Africa, preferably Tanzania;
- affordable and sustainable community-led water and sanitation development in East Africa;
- health aspects of water and sanitation development in East Africa;
- sustainable and affordable institutional development in East Africa, in communities, the private sector and local/central government.

All core members of the evaluation team must be able to integrate aspects of gender equality, human rights, democratic working principles and the effects of HIV/AIDS in their work. Language skills in Swahili are further advantageous. Core members may not previously have worked within the HESAWA Programme.³ Additional expertise may be required for field work and research. Tenderers are encouraged to seek collaboration partners and expertise from Tanzanian/East African companies and/or research institutions. Furthermore, they are encouraged to seek assistance from field staff that has previously been involved in information and data gathering for HESAWA.

All-in-all it is estimated that an input of 5 person months of international staff and some 6 personmonths of local consultant and 6 month for additional staff for field research/data collection will be required.

10. Selection Criteria and Guidelines for Data Collection

Sampling of villages

It is suggested that sample villages be selected in the districts of Biharamolo and Bukoba in the Kagera region; Mwanza municipality and Kwimba in the Mwanza region; and Bund and Serengeti in the Mara region. Tenderers may, however, suggest and argue in favour of other districts.

In each district, six villages should be selected.

Villages from different HESAWA phases should be selected in each district in order to capture the situation in both 'old' and 'new' villages.

² An electronic version of the Manual will be found via Sida's web-site.

³ With core team members means member of consultant team and Tanzanian collaboration partners. For field staff, previous HESAWA experience is considered useful.

Sampling of institutions/organisations

The following types of institutions/organisations/functions should be captured:

- Village governments;
- District offices, in particular the District Executive Director (DED);
- Regional offices, in particular the Regional Administrative Secretary (RAS)
- The Ministry of Community Development, Women and Children.
- Representatives of civil society and the private sector.

Data collection

In order to reduce the need of additional data collection, already available material should be taken into consideration, in particular reports such as the Programme Statistics Verification and Water User Groups Analysis of 2003.

Evaluators are recommended to turn to the Embassy in Sweden in Dar es Salaam for access to Programme documentation.

Annex 2 Methodology of the Ex-post Evaluation of HESAWA

Criteria from Sida Evaluation Manual: *Transparent Account of Research Methods*. The report should include an account of sources of data and methods of data collection to help readers assess the likely accuracy of facts and figures.

An Overview to Methodology and Data Collection

There were a vast number of potential information elements, and multiple data sources for both primary and secondary data. The HESAWA Programme was active in a large geographical area in numerous places, and selecting the most representative cross-section of activities and people to be revisited was a challenging task. The figure 1 captures the overall information elements. The main constraint for primary data collection was time as expected in the beginning. The expected elections 30.10.2005 put a further time constraint and called for urgent mobilisation of the field research teams to complete the task before the pre-election rallies.

Reliability and validity of the evaluation judgements call for triangulation of data, and a certain amount of primary data was collected for this specific evaluation purpose. For bias-free evidence for evaluation and for development of recommendations for future, triangulation was done by using different methods to research the same issue to increase the reliability of the results. Contradictory results can bring up important problems as well as fundamental issues surrounding a topic.

Quantitative research seeks to place a reasonably firm, absolute levels or values on the things that it investigates in systematic, structured manner. This was done using simple 'counts' (e.g. of population size, water points, latrines, and other physical HESAWA structures) and by sample surveys conducted by enumerators. Qualitative research does not seek to establish absolute values for the things that it investigates, but builds up an accurate interpretation of what is being researched through triangulation of many different descriptive sources. Sample surveys were complemented with participatory and other qualitative approaches, such as outcome from focus group discussions and observation. The methodology used in the evaluation included the following:

- Observations: Field Research Team Supervisors and their counterparts, the interviewers, were requested to report their personal observations from the field research phase. The Core Team members did their own observations during the field visits.
- Focus group discussions: The Core Team members conducted focus group discussions with Water Users Groups, women's groups, district and regional officers. Some of these were conducted in a workshop form, allowing for group work and presentations as well.
- In depth discussions: The Core Team members interviewed the district, regional and central level key
 informants also in more private discussions, with the presence of a small group or Core Team
 members only.
- Futures workshop: participatory workshops utilising futures research tools were conducted to capture the changes from the past to present and suggest scenarios for the future.
- *Structured interviews:* Local extension workers from the district were recruited to do structured house-hold interviews. A check list was also completed with regards to the schools and Health Posts. (SPSS)
- Semi-structured interviews: Supervisors and interviewers interviewed the Village Governments and Water Users Groups. (SPSS)



Figure 1 Information elements

Literature Review

There are a large number of studies and other relevant documentation related to HESAWA. A careful review of these existing documents forms the basis for further evaluation. Using already established data sources and statistics was important for triangulation of the findings from primary data collection. The evaluation studies and other research conducted in the region provided further opportunity to triangulate the findings outside the HESAWA. These were searched within the key theme areas, including sustainability, governance, poverty, gender, water, sanitation and health. Especially Lake Victoria basin was of interest.

Sample Design and Selection

Sampling of villages: The ToR suggested that sample villages be selected in the districts of Biharamulo and Bukoba in the Kagera region; Mwanza municipality and Kwimba in the Mwanza region; and Bunda and Serengeti in the Mara region. In each district, six villages were selected. These resulted in 36 study areas which were covered by the field research teams (Table 1). In addition the Core Team members visited random villages during their travel from district to district. The ToR Annex 1 suggested that villages from different HESAWA phases should be selected in each district in order to capture the situation in both 'old' and 'new' villages. This was successfully done as can be seen from the Table 2 below which lists the villages covered and shows the year when the WUG interviewed was established in this village. Note that these years may not be exactly when the scheme was started or even finished, as some WUGs were established also after HESAWA. There may also be older schemes in the village, these having been covered in the Village Government surveys.

Sampling of institutions/organisations: The ToR suggested that the following types of institutions/organisations/functions should be captured: Village governments; District offices, in particular the District Executive Director (DED); Regional offices, in particular the Regional Administrative Secretary (RAS); The Ministry of Community Development, Women and Children; and Representatives of civil society and the private sector. Altogether 36 Village Governments were interviewed by the Field Research Teams, and the Core Team members made a number of more in-depth interviews with the other level officers listed above.

Random sampling and sample size: The primary requirement for a sample is that it is representative of the population in question. In other words, the sample population has the same characteristics as the study population at acceptable level of certainty with regards to the relevant characteristics. This requires that the sample is of a minimum size. Dale suggests that *"highly representative samples with low uncertainty will almost any realistic circumstances be: 50–70 units for population between 100–300; 70–90 units for populations between 300–1000; and 90–100 units for populations over 1000".* Dale further argues that the population sizes from a couple of thousand upwards the sample size does not change much *"unless one aims at unusually high level of certainty and precision (high confidence level and low sampling error)."* Thus, at district level the household sample size is representative at a fairly high confidence level, and the 36 samples from the Water Users Groups, Village Governments, schools and Health Posts represent allow making relevant statistical analysis within these groups accepting a higher level of uncertainty. Note that 36 represent exactly the number of the villages that were chosen for the study as given in the ToR. See Table 1 for the summary.

Number of cases	Per village	Per district	Per region	Total
	1 village/day	6 villages/district	2 dist./region	
Household surveys	20	120	240	722
Water Users Groups	1	6	12	35
Village Governments	1	6	12	36
Health Post check lists	1	6	12	36
School/youth club focus group d.	1	6	12	31
Total				860

Table 1. Number of surveys done by the Field Research Teams

Data Collection Instrument Development

The evaluation research utilised multiple tools to obtain and triangulate information from the field. All these were developed through Core Team interaction. Two Core Team members with two prospective Field Research members field tested the research tools in Kwimba district and did modification accordingly. The Core Team studied these once more and eventually after translation to Kiswahili language, the Field Research Team supervisors, interviewers and the supervisor of the data entry team participated in one day training-cum-planning workshop where these tools and the meaning of their questions were once more carefully discussed, proof read and finalised. This proved out to be the most valuable exercise, both in terms of "getting the questions right" and in terms of orienting the Field Research Teams into their task.

All human data, including the list of participants in various interactions, was gender-specific. Surveys and questionnaires further specified age and socio-economic background of the respondents. It was decided that the household surveys should seek for 50:50 gender balance in respondents, in other groups it was not feasible to expect this even though women's participation in Water Users Group interviews were encouraged. It was later decided that to balance the male-dominance at the village,

⁴ Dale, R. 2004. Evaluating Development Programmes and Projects. Second Edition. Sage Publications, New Delhi. 213 p. (p. 164)

district and regional government offices, special "women only" workshops and discussions were to be organised to capture the voice of the women as well. 5

Data processing and analysis was done separately for men and women, and where necessary, also for the different socio-economic classes and age-groups. The SPSS programme was used for analysis of the data from Village Governments, WUGs and household surveys to enable inter-community and intracommunity comparisons and cross-tabulation of various questions.

			MWANZA MUNICIP			SERENG	BUKOBA	
Village	SANGABUYE	2. Year established		,	,	,	,	,
	IGONGWE	2. Year established	1999	,	,	,	,	,
	MAGAKA	2. Year established	1988	,	,	,	,	,
	FUMAGILA	2. Year established	1989	,	,	,	,	,
	LUCHELELE	2. Year established	1989	,	,	,	,	,
	LWANHIMA	2. Year established	2004	,	,	,	,	,
	MWADUBI	2. Year established	,	1999	,	,	,	,
	KIKUBIJI	2. Year established	,	2001	,	,	,	,
	MWANKULWE	2. Year established	,	1994	,	,	,	,
	ISUNGA	2. Year established	,	2000	,	,	,	,
	MALIGISU	2. Year established	,	1993	,	,	,	,
	KINOJA	2. Year established	,	1994	,	,	,	,
	BUNDA STORE	2. Year established	,	,	1998	,	,	,
	SIKILO	2. Year established	,	,	1998	,	,	,
	KIBARA	2. Year established	,	,	1999	,	,	,
	HUNYARI	2. Year established	,	,	1995	,	,	,
	NYABEHU	2. Year established	,	,	2000	,	,	, ,
	ITUNUNU	2. Year established	,	,	,	1999	,	,
	MBALIBALI	2. Year established	,	,	,	1999	,	,
	NYAMBURI	2. Year established	,	,	,	1999	,	, ,
	NATA MBISO	2. Year established	,	,	,	1997	,	,
	KEBANCHABANCHE	2. Year established	,	,	,	1996	,	, ,
	RWAMCHANGA	2. Year established	I ,	,	ļ ,	1997	, , , , , , , , , , , , , , , , , , ,	ļ ,
	KYAIT OKE	2. Year established	,	,	,	,	1986	,
	RUHUNGA	2. Year established	I ,	,	ļ ,	, , , , , , , , , , , , , , , , , , ,	1985	, I
	MISHENYE	2. Year established	I ,	,	ļ ,	, , , , , , , , , , , , , , , , , , ,	1982	, I
	MUTUKULA	2. Year established	,	,	,	,	1989	,
	BUNAZI	2. Year established	ļ,	, ,	,	,	2001	, i
	IBOSA	2. Year established					1998	
	MKURWA	2. Year established	,	,	,	,	,	1998
	IHANDA	2. Year established	ĺ .	Í,	ĺ .	,		2003
	NYAKAHANJA	2. Year established	Í.	,	ĺ,	,	Í Í	1998
	RUKOLE	2. Year established	Í.	Í Í	,			2000
	KAGENYI	2. Year established	Í.	,	ĺ,	,	Í Í	2000
	KAISHO	2. Year established	Í.	,	ĺ,	,	Í Í	1988

Table 2. Villages randomly selected for the evaluation and the year when the interviewed WUG was established

Staffing and training fieldwork personnel

There were minor changes in the Field Research Team composition, see figure 2 below for the up dated structure of the field research organisation. As indicated earlier, these teams had to be identified, trained and mobilised in a very tight time frame, and consequently through a network of professionals most of these people were found from Mwanza. They represented professionals from local NGOs, research institutes and also from the government offices (!). All of them had been involved in the community development work and/or field research earlier.

⁵ There are a number of gender tool kits and background materials utilised by the Team members. The one quoted here is Van Wijk-Sijbesma, C. 1995. Gender in Community Water Supply, Sanitation and Water Resource Protection – A guide to methods and techniques. International Resource Centre, Delft. 44 p. www.irc.nl

It was decided that the questionnaires should be pre-coded as far as possible, and that the data entry should took place in one place only rather than in the districts to ensure the quality and consistency of data entry. An experienced data entry team was identified at the Bugando University Health Research Centre, and as indicated earlier, the supervisor of this team attended the one day training-sum-planning meeting thus familiarising himself on the logic of the questionnaires. The data entry team coded the remaining open questions. The data entry team supervisor was also closely working together with the Field Research Coordinator and the Research Scientist in all matters relating to data entry and its analysis. The SPSS database was developed and used for the analysis.



Figure 2 Field research teams – an organisational set up

Impact Analysis: From Past To Present

We can now bring all the findings together once more, and look at the future. The analysis focused on strengths and weaknesses, and resulted in concrete recommendations for future interventions. The stakeholder analysis matrix⁶ was used as a starting point for refining lessons learned and future recommendations. The future workshops with the regional and district level stakeholders as well as with the women-only groups provided an opportunity to involve various stakeholders for further elaboration of the findings from the field and to take a look into the sustainable futures. See the Figure 3 below for the internal frame of reference for the futures workshops, the main interest being in the top middle part of the figure: what are the future interventions, policies and programmes needed for Tanzanian rural water supply and sanitation moving towards the "Best Case" scenario? What are the various roles and responsibilities at different levels in this, including the Swedish development cooperation?

⁶ Table 3.2 in our Tender Document

Annex 3 References

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International Water and Sanitation Centre, Delft. www.irc.nl

The World Bank www.worldbank.org/html/oed

Annex 4 Persons Consulted

Central Level

Da	r es Salaam		
1	Mr. Christopher Sayi	Director	Rural Water Supply, Ministry of Water and Livestock Development
2	Mr. E.C. Mziray	Assistant Director	O&M, Rural Water Supply Division, Ministry of Water and Livestock Development
3	Mr. John A. Mukumwa	Assistant Director	Construction Monitoring, Ministry of Water and Livestock Development [was RWE in Mara 1988–94]
4	Ms. Judy D. Kizenga	Assistant Director	HESAWA, Ministry for Community Development, Women Affairs and Children
5	Mr. Simon K. Mbwillo		Local Government Reform Programme, Ministry of Regional Administration and Local Government
6	Mr. Jack Nyakirangani	HRD	Local Government Reform Programme, Ministry of Regional Administration and Local Government
7	Mr. Modestus Mtui	Former HESAWA Programme Coordinator	WSP International, Bagamoyo

Regional and District level

Mw	anza Region		
1	Mr. Rutaihwa	Regional Administrative Secretary	
2	Mr. Stephen Kasoga	Assistant Regional Administrative Secretary	
3	Mr. A.B. Bunduki	Community Development Officer	Ministry of Community Development, Women Affairs and Children
4	Mr. Michael Sadafaley	Regional Health Officer	Ministry of Health
5	Ms. Dora H. Nbundu	Regional Education Officer	
6	Eng. W.S.J. Nykanwa	Regional Water Engineer	Regional Secretariat, Ministry of Water and Livestock Development
7	Mr. Daniel Mkare	HESAWA Regional Advisor	
8	Mr. W.T. Kisangi	District HESAWA Coordinator	Mwanza City Council
9	Mr. Jospeh K. Bundala	District HESAWA Coordinator	Magu District
10	Mr. Godfrey Kalala	Agricultural District Water Engineer/ District HESAWA Coordinator	Kwimba District

Kagera Region Participating also in the futures workshop at Bukoba ELCT, 2.11.2005

1	Mr. Twende	Regional Administrative Secretary Acting	Assistant Regional Administrative Secretary
2	Mr. E. Anyosisye	Planning Officer/Technical Adviser to RAS	
3	Mr. Charles F. Mafwimbo	Planning Officer/Technical Adviser	Ministry of Community Development, Gender and Children
4	Mr. Gerase Iskengoma	Regional Health Officer Acting	Ministry of Health
5	Mr. John I.B. Ndaiahwa	Regional Water Engineer	Ministry of Water and Livestock Development
6	Mr. P. I. Kasuma	Technical Advisor/Regional Education Office	Ministry of Education
7	Mr. Charles Kiberenge	Planning Officer, (District HESAWA Coordinator 1988–1997)	Bukoba Rural District Council
8	Mr. Festo Mikindo	Community Development Officer	Bukoba Rural District Council
9	Mr. C. Ngangaji	Planning Officer	Bukoba Rural District Council
10	Mr. Theorest Kyaruzi	Ex-HESAWA Regional Director/Coordinator	(retired)
11	Mr. Z. Mbyama	District Executive Director	Bukoba Rural District Council
12	Mr. Henerico Batindluho	District Education Officer	Bukoba Rural District Council
13	Mr. Emmanuel M. Kato	Ag. District Water Engineer	Bukoba Rural District Council
14	Mr. Desderius B. Rugaimukamu	Ag. District Health Officer	Bukoba Rural District Council
15	Dr. Mike Mabimbi	District Medical Officer	Bukoba Rural District Council
16	Mr. Theophil Kweyamba	HESAWA Coordinator	Karagwe District, Community Development Office
Mai	ra Region		
1		Planning Officer	Serengeti District Council
2	Mr. J. Ngobagula	District Water Engineer	Serengeti District Water Office
3	Ms. Elizabeth Juma	Water Technician	Serengeti District Water Office
4		Acting DED	
5		Medical Officer	
6		Planning Officer	
Peo	ple at the KWUA meeting in K	emondo Bay, 1.11.2005:	
1	Mr. Emmanuel Kato	DWOO	Bukoba Rural District Council
2	Mr. Mganyisi	Former HESAWA Coordinator	Bukoba Rural District Council
3	Mr. Johannes Kasimbazi	Treasurer	Kemondo Water Users Association (KWUA)
4	Mr. Abbakari Y. Mtoro	Secretary	Kemondo Water Users Association (KWUA)
5	Mr. Moses Byebalilo	Scheme Attendant (Fundi)	Kemondo Water Users Association (KWUA)

6 Ms. Nazifa Adinani Assistant Treasurer Kemondo Water Users Association (KWUA)

7 Ms. Felicia Ustad Office Attendant Kemondo Water Users Association (KWUA)

Juhudi women's group, 1.11.2005, Kemondo Bay:

1	Ms. Nazifa Adinani
2	Ms. Godeliva Kweamba
3	Ms. Genitha Ishengoma
4	Ms. Tediment Rwegostora
5	Ms. Florentina Ginayton
6	Ms. Scolastica Ferdinandi
7	Ms. Judith Mugisha
8	Ms. Janeth Rubagumwa

16 Ms. Elieth Rawisoni

Women, poverty and livelihoods – futures workshop with the professional women in Bunda 9.11.2005 Participants (present also: Auli Keinänen, Julia Kunguru, Christine Noe, Sanna-Leena Rautanen)

1	Ms. Salome L. Rutory	Councillor	District Council Office
2	Ms. Elizabeth Ungula	Assistant Community Development Officer	District Council Office
3	Ms. Pudentiana I. Gunzar	District Academic Officer	Education Department
4	Ms. Rose Salaga	Senior Agriculture Officer	District Agriculture Office
5	Ms Chausiku Mshora	Community Development Officer	Gender and Children
6	Ms. Mary Masamza	Community Development Officer	Bunda District Council
7	Ms. Sophia S Magende	Technician	Engineering Department
8	Ms. Esthonath Kyange	Administrative Officer	District Council Office
9	Ms. Ester Sausi	Village Executive Officer	Nyamakokoto Village
10	Ms. Modesta M. Mbondo	Accounts Assistant	Accounts Section
11	Ms. Adelaida Masige	District Nursing Officer	Health Office
12	Ms. Daines Lyimio	Health Department	Health Department
13	Ms. Jane Sendi	Office Supervisor	Administration
14	Ms. Bhoke Munibi	Forestry Assistant	Forestry Department
15	Ms. Sarah J. Mahemba	Chairperson	Bunda Women Group
16	Ms. Ester Masalu	Chairperson	Green Rubana Women Group
17	Ms. Mary J. Okello	Typist	Water Department
18	Ms. Zainabu Masinde	Senior Office Attendant	District Council Office
19	Ms. Perris Zephania	District Home Economics Coordinator	Education Department
20	Ms. Theonestina Mutole	Group Member	COERT
+ W	omen groups in Nyambehu, Bailili	and Bukore Villages, including Ro	nda Green Women Group in Bunda.

Review Meetings with Swedish International Development Cooperation Agency (Sida)

Meeting in Stockholm October 19, 2005

Present from Sida: Ms. Charlotte Abelin-Hjertström Mr. Ingvar Andersson Ms. Marie Bergström Ms. Åsa Bjallas Ms. Mikaela Selin-Norqvist Mr. David Nilsson Ms. Louise Herrmann Mr. Rolf Winberg Mr. Per Brandström

Meeting in Stockholm December 12, 2005

Present from Sida: Ms. Charlotte Abelin Hjertström Mr. Ingvar Andersson Mr. Bengt Johansson Ms. Åsa Bjallas Ms. Marie Bergström Mr. Rolf Winberg Mr. Anders Karlsson Mr. Per Brandström

Embassy of Sweden, Dar es Salaam, Tanzania

Mr. Erik Wallin, Senior Programme Officer, District Development and Local Governance

Embassy of Finland, Dar es Salaam, Tanzania

Mr. Jorma Paukku, Ambassador

The World Bank

Mr. Parameswaran Iyer, Senior Sanitary Engineer, Washington D.C. USA Dr. Solomon Alemu, Senior Sanitary Engineer, Africa Region, Washington D.C. USA Mr. Francis Ato Brown, Senior Sanitary Engineer, Dar es Salaam, Tanzania Mr. Ede Ijjasz, Programme Manager, Water and Sanitation Programme, Washington D.C. USA

UN Millennium Project

Mr. Albert Wright, Co-Chair, Task Force on Water and Sanitation, Washington D.C. USA

Other interviewed persons

Mr. Jorgen Baltzer, Former Education Advisor to HESAWA, Nairobi, Kenya Ms. Anna Tufvesson, Sida (formerly Hifab International AB) Mr. Bo Bergman, HESAWA (1995–1998) Mr. Bertil Ejlertsson, Financial Controller in HESAWA (1996–2002) Mr. Göran Wallin, Technical Adviser in HESAWA (1996–1998) Mr. Hans Sjö, Technical Consultant, Hifab International AB (in various roles in HESAWA throughout the programme period)

Mr. Sigge Rege, Consultant

Mr. Roger Andersson, Consultant in Dar es Salaam (frequent contacts with HESAWA 1984–2002)

Mr. Per Brandström, Consultant (HESAWA Programme Advisor 1990-2002)

Ms. Margaretha Sundgren, Sida

HESAWA Workshop in Dar es Salaam 12.5.2006 – Embassy of Sweden Participants (present also: Christine Noe, Sanna-Leena Rautanen, Osmo Seppälä)

1	Ms. Louise Herrmann	Embassy of Sweden
2	Mr. Vitalis Mnyanga	Lake Victoria Environmental Management Project
3	Ms. Diana Nkongo	WaterAid
4	Dr. Hassan Mjengera	Ministry of Water
5	Mr. Ramadhan Ahungu	CWSSP – CARE
6	Mr. John Mukumwa	Ministry of Water
7	Mr. Stanley Matowo	Ministry of Water
8	Mr. Modestus Mtui	WSP International, Bagamoyo
9	Mr. Anders Karlsson	A.S.K. AB
10	Mr. K.N.T. Kmigizile	Ministry of Water
11	Mr. Nat Paynter	Water and Sanitation Program (WSP-TZ)
12	Ms. Kerstin Nordvaller	Embassy of Sweden
10		
13	Mr. Hans Sjö	Hifab International
13 14	Mr. Hans Sjö Ms. Magdalena Svensson	Hifab International Sida, Stockholm
13 14 15	Mr. Hans Sjö Ms. Magdalena Svensson Mr. Erik Wallin	Hifab International Sida, Stockholm Embassy of Sweden
13 14 15 16	Mr. Hans Sjö Ms. Magdalena Svensson Mr. Erik Wallin Mr. Dirk Schaefer	Hifab International Sida, Stockholm Embassy of Sweden GTZ
13 14 15 16 17	Mr. Hans Sjö Ms. Magdalena Svensson Mr. Erik Wallin Mr. Dirk Schaefer Mr. Hosest Anicetus	Hifab International Sida, Stockholm Embassy of Sweden GTZ Ministry of Health
13 14 15 16 17 18	Mr. Hans Sjö Ms. Magdalena Svensson Mr. Erik Wallin Mr. Dirk Schaefer Mr. Hosest Anicetus Ms. Sanna-Leena Rautanen	Hifab International Sida, Stockholm Embassy of Sweden GTZ Ministry of Health Plancenter Ltd (Evaluation Team)
13 14 15 16 17 18 19	Mr. Hans Sjö Ms. Magdalena Svensson Mr. Erik Wallin Mr. Dirk Schaefer Mr. Hosest Anicetus Ms. Sanna-Leena Rautanen Ms. Christine Noe	Hifab International Sida, Stockholm Embassy of Sweden GTZ Ministry of Health Plancenter Ltd (Evaluation Team) University of Dar es Salaam (Evaluation Team)
13 14 15 16 17 18 19 20	Mr. Hans Sjö Ms. Magdalena Svensson Mr. Erik Wallin Mr. Dirk Schaefer Mr. Hosest Anicetus Ms. Sanna-Leena Rautanen Ms. Christine Noe Dr. Osmo Seppälä	Hifab InternationalSida, StockholmEmbassy of SwedenGTZMinistry of HealthPlancenter Ltd (Evaluation Team)University of Dar es Salaam (Evaluation Team)Plancenter Ltd (Evaluation Team)

Annex 5 Field Research Teams

Each Field Research Team in each six districts had two directly employed and trained persons as shown in this annex. Their task was to conduct the Village Government and Water User Groups interviews, supervise the extension workers, and coordinate the action in their respective districts. In addition, in each district there were four extension workers recruited and trained locally by these trained supervisors to conduct the household surveys. The teams presented below also actively participated in planning the field research schedule and logistics, and contributed to the Swahili translations of the research tools. This enabled the team to further discuss the themes and rationale of the research task, and further elaborate what each question was meant to capture.

No	Name	Organisation	District	Task
Mwa	anza Region			
1	Ms.Mary Kabati	Rural Development Resource Centre	Mwanza	Supervisor
2	Dr. Mange Manyama	Bugando University	Mwanza	Interviewer
3	Mr. Boniface Kababi	Zonal Agriculture Research Fund	Kwimba	Supervisor
4	Mr. John Mdaki	Nyegeri Seminary	Kwimba	Interviewer
Mar	a Region			
5	Mr. Ramadhani Bundala	Tanzania Home Economics Association	Bunda Rural	Supervisor
6	Ms. Drusila Msunga	Mganza Secondary School	Bunda Rural	Interviewer
7	Mr. David Robi	Health Department – Mwanza City	Serengeti	Supervisor
8	Ms. Doreen Salu	National Literacy Centre	Serengeti	Interviewer
Kag	era Region			
9	Mr. Arcard Lutajwaha	St. Augustine University	Bukoba Rural	Supervisor
10	Ms. Gaudensia Bamugileki	Community Development Department – Mwanza City	Bukoba Rural	Interviewer
11	Dr. Salum Ally	Health Department – Biharamulo	Karagwe	Supervisor
12	Mr. Musagasa B. Tumaini	Regional Water	Karagwe	Interviewer

Annex 6 Case – Successful Water User Group and Women's Group in Bukoba Rural District

Field Visit to Kemondo Gravity Scheme

Tuesday 1.11.2005 from 9 am to 15 pm

Christine Noe, Osmo Seppälä, Sanna-Leena Rautanen

People met:

Mr. Emmanuel Kato, DWOO Bukoba Rural District Mr. Mganyisi, Former HESAWA Coordinator Mr. Johannes Kasimbazi, Treasurer, Kemondo Water Users' Association (KWUA) Mr. Abbakari Y. Mtoro, Secretary, KWUA Mr. Moses Byabalilo, Scheme Attendant (Fundi), KWUA Ms. Nazifa Adinani, Assistant Treasurer, KWUA Ms. Felicia Ustad, Office Attendant, KWUA

Technical Data

- Sources/intakes: 3 protected springs
- Tanks/reservoirs: 2 no. 90 m3 steel tanks (Braithwaite)
- 65 house connections
- 30 domestic points (DPs)
- 13 km of pipelines (including main pipeline from intakes)
- Total population of the area: about 12,000 (not quite sure)
- Population covered by the gravity scheme: about 11,000 (estimate by Moses)
- Serves the fish factory, port, 3 schools, 1 orphanage
- No shallow wells, no boreholes in the area (gravity scheme is the only source of water)

The Kemondo Bay has grown very fast during the past decade. Due to low coffee prices in early 1990s people from the surrounding areas came looking for the job, and with the fish factory and construction works, employment opportunities seem to be there. When in 1990 there were only a dysfunctional port and one primary school, now in 1005 they have port facility, fish factory for export, coffee curing factories, more schools and an orphanage, and of course, good water supply system. The population has grown from an estimated 2000–3000 to some 8000+. Note that many of the new economic activities in Kemondo Bay use and critically need good quality water fro their production, especially the fish factory processing fish for export.

Tariff and Revenue Data

- Current tariffs: TZS 2,000/month for households (house connections); TZS 2,500/month for households if using water also for economic purposes; TZS 5,000/month for petrol stations; TZS 2,000/month per household for those in the port area; TZS 120,000/month for the fish factory. Domestic points: TZS 12,000/year decided by the Committee, but not yet collected.
- Tariffs were last increased two years ago. There would be a need to raise these rates, see the next bullet point. Since there has been some problems in maintaining the service level that paying

customers expect to get (water shortages, technical problems), the KWUA has not felt it right to raise the tariffs.

- Current revenue collected varies between TZS 180,000–200,000/month. The collected revenue is
 not quite enough to cover all O&M costs. This is mainly due to some unexpected repairs and pipe
 bursts caused by the shifting of main pipeline due to road construction. KWUA expected the district
 (road department) to compensate but they did not.
- Domestic customers pay in KWUA office, institutional customers are invoiced and they pay through cheques/bank/cash.
- No meters, all tariffs are based on flat rates set in the KWUA meetings.

Source/intake Capacity and Protection

There have been problems with the spring intakes. Since they are a bit far, occasionally there has been some interference such as stealing of fences, bringing cattle near the springs, etc. Even during the visit the fencing was under repair since someone had stolen the fence posts. There was also a lady washing clothes at the source in the overflow, not directly in the intake. Some tree cutting has also happened near the intakes. The flow is fairly low during the dry season, but springs never dry completely. Also some animal droppings were observed above the intake, indicating that the catchment area immediately above the intake structures is frequented by cattle. It is not known whether fertilisers or other agro-chemical is used for the forest garden at the same area above the intake structures where such cash crops as banana, coffee and others are grown.

The first intake was constructed when there were about 3,000 users. The second intake was constructed in HESAWA Phase IV. The third intake was constructed after HESAWA. The third intake was also needed for the fish factory and the factor contributed to the implementation (grant). During HESAWA attention was given on the catchment conservation and source protection, but since most of the users live down in the village far from the sources, the issues of catchment protection are not very "important" to them.

Registration, Land and Water Rights

They have registered as the Kemondo Water Users' Association by the Ministry of Water and Livestock Development. The land rights for some sources belong to the Village Government and for some the land around the source is private. Water rights are in process, no abstraction permit is there. In the application phase the KWUA was asked how much water will be taken but no abstraction limits have been set.

Water Quality

The water from springs is of good quality. No treatment is made at any point. The fish factory uses the water for its processes, which is a proof of good quality since the fish factory has to test the water to ensure export quality product. DWOO still carries out regular water quality sampling and analysis twice a year. KWUA has last taken water samples to laboratory 3 years ago. During heavy rains the water quality gets worse. Water quality issues were included in HESAWA training, and it has been considered very important.

Management Structures and Performance

The Management Committee consists of 12 members (although at the moment only 10). 6 are men and 6 are women (50:50). There have been a few changes, e.g. the Chairman died 2 years ago. If new Committee members come in, they will receive training from the other members of the Committee. Also new customers receive some basic training, based on handouts and materials developed during HESAWA training. Participation in Annual General Meetings: last time about 50 people attended. People are more interested to attend when there is a problem. Low attendance, thus, is a positive indicator. Financial records are shown to customers (general public) in AGM. Budgets have not yet been show in AGM?

KWUA has its own bank account, with about TZS 700,000–800,000 currently. There are 4 signatories, 2 needed at a time. Financial statements are made annually.

Collabroration with Other WUAs/WUGs

There has been some collaboration with other WUGs, e.g. the Scheme Attendant has visited other schemes and has given them advice.

Operation and Maintenance, Spare Parts etc.

The Scheme Attendant keeps maintenance records (books in the office). Spare parts needed for repairs are usually been purchased from hardware shops in Bukoba town using money accumulated in KWUA's account (currently about 700,000–800,000 TZS).

Disconnection Policy

Disconnection will be done in case of continued non-payment (not yet after 1 month non-payment). Since January 2005 altogether 18 customers have been disconnected.

Relationship Between KWUA and Village Government

The relationship is "not very good, not very bad". The project is located in 3 villages: before establishing KWUA the three Village Governments controlled but lost their "power" when KWUA was established. [HESAWA encouraged to register] They even had 3 bank accounts earlier, one for each VG. This raises a question about whether the other Water Users Group still operate through Village Government Accounts? Is this a legacy from Village HESAWA Committees who were VG functionaries? And the power question: could this be happening elsewhere? That the VG would like to have a good control over WUG(s), or perhaps benefit from their revenue collection?

Future Plans

The KWUA has acknowledged that the community has grown very rapidly, and that there is a near future need to expand the services. There are also water shortages which demoralise the customers to pay their fees. KWUA has planned to construct a new reservoir tank to one section where water is now "running through" and thus, be able to store water during the night hours (and hours of lower use). More water sources will have to de identified as the present intake structures cannot meet the demand. According to the Treasurer, the KWUA has to sit down by themselves first and work out a feasible plan, be sure what it is they have to do, and then go for it.

KWUA seem to have developed a very strong sense of ownership of the facility, to the point where "the district people are needed only for small things". the KWUA had taken initiative themselves to improve the system and to negotiate with the Fish Factory for construction of further intake, and had set tariff structures by itself. The KWUA members, especially the Treasurer, were very confident to speak of all aspects of their activities and plans, technical and institutional/managerial alike.

JUHUDI Women Group

Meeting with the women's group during the field trip to Kemondo Bay

This women-only group was invited after the KWUA meeting when it was evident that the women present in the KWUA meeting were not actively participating in the discussion.

Names of group members who participated in the discussion:

- 1. Nazifa Adinani
- 2. Godeliva Kweamba
- 3. Genitha Ishengoma

- 4. Tediment Rwegostora
- 5. Florentina Ginayton
- 6. Scolastica Ferdinandi
- 7. Judith Mugisha
- 8. Janeth Rubagumwa
- 9. Elieth Rawisoni

This is a women group we met on 1st November 2005 in Kemondo Bay, Bukoba Rural district in Kagera region. They were nine and only one of them was a member of water committee and an assistant treasurer. According to them, they are registered group but I suspect they don't mean registration we might mean. These groups are common in rural areas and they usually aim to join efforts in solving problems that face women in their daily lives but they are rarely well organized to qualify for registration. They reported that there are many more women groups in their village but they insisted that they are the only well-organized group (I think they were trying to insist here that in case of any project this is the right group to fund).

The discussion focused on capturing issues of livelihood, women participation and involvement in planning, utilization and management of HESAWA related activities in the village. The guiding questions for the discussion were:

- 1. How have they been involved/participate in the project planning, implementation (e.g. location of water points) and maintenance
- 2. What are their main interests
- 3. How do they benefit socially, economically and democratically
 - How often do they attend meetings?
 - How many women are the members of water committee?
 - What is the situation now compared to the time before HESAWA intervention?

The response to these questions was:

- 1. Involved / participate in the project planning, implementation and maintenance
- There is equal number of women and men in the water committees. However, they still feel they have not been actively involved in decision-making. For example, in the choice of technology and location of water points women were not consulted. They were only involved after construction and at this point it was not consultation as such but trainings on how to use and manage the water points.
- Some of them feel that they are well involved because they were chosen as members of WUGs and they attend meetings often. Others agreed on this but they indicated that they do not know how project leaders are elected. Also the management of the water points is not very clear to them. When there is a facility breakdown and they are required to contribute money for repair it becomes difficult for them because they have not been involved from the beginning.
- In the committee, women are silent most of the time. I asked why and they said is a *cultural hangover*, men do not believe women can talk in front of them, which have also made them feel inferior when they are mixed with men. Some of them said being very active in the meetings also affects their relationships with their husbands husbands feel embarrassed if their wives talks = shouts in front of men! They all agreed at the end that number of women in the water committees does not indicate equal opportunity between men and women when it comes to making important decisions.

- As water users they also participate by contributing funds for O&M
- They participated in trainings on issues of health, water and sanitation and that have changed their understanding on these issues.
- 2. Benefits
- They benefited a lot from HESAWA trainings and water provision. They even have a Swahili saying that "JIWEKE SAWA NA HESAWA" simply meaning make yourself fit with HESAWA.
 Before HESAWA there were many water related diseases such as worms, skin diseases, eye and diarrhoea in their families. They have managed to reduce these diseases tremendously.
- Before HESAWA they were fetching water from the river. The water was unsafe and also the distance was long. Now they have tape water available close to their homes so they save time and money for treating members of the families.
- They have started new economic activities such as vegetable gardening, tree nurseries and petty businesses. Five of them reported to have started vegetable gardens, three others started tree nursery and three more have recently started a vanilla garden because they have water for irrigation as well as time saved from long distance and queue for water. These activities have raised their income levels to a certain extent but of course not enough.
- 3. Women interests / priority issues for recommendations
- a. More trainings
- b. More water points, equal and reliable distribution in order to improve economy and health of their families
- c. More opportunities for participation and decision-making. Women should be listened in a different venue from men because they have ideas that they cannot say when they are mixed with men.
- d. Women groups such as JUHUDI should be considered and supported by different interventions because women are less privileged economically and they have burden to take care of the families. This way they can also contribute more in O&M funds, which will ultimately make projects more sustainable. In these projects, women should be given active roles (e.g. if another water project comes today should be given to the women group because the existing system is basically dominated by men, which do not give women active role or any priority in decision making process).

Annex 7 Health Statistics from Mwanza Region



Figure 1. Diarrhoea cases 1985–2005 in Mwanza Region.







Figure 3. Eye infections 1985–2005 in Mwanza Region.



Figure 4. Skin infections 1985–2005 in Mwanza Region







Figure 6. Other health indicators 1985–2005 in Mwanza Region.



Figure 7. Other health indicators as reported in 2003 in the 36 health facilities visited in 36 villages (HESAWA Evaluation Field Survey, October 2005).

Annex 8 Scenarios for Future

Source: Futures workshop with regional stakeholders in Bukoba, 2.11.2005

Strengths (S)	Weaknesses (W)
 Availability of water supply Accessibility of water to household Increased awareness on water quality Improvement of water quality Construction of sanitary latrines Acquisition of knowledge & skills Peace and tranquillity Capacity built in the past Increased community participation Willingness of the people Supportive environment from the government (policies, fund support) Availability of land Interventions on ground now are motivating factor for beneficiaries Managerial and financial capacity is somehow effective at district and village levels Interventions are currently operational 	 More emphasis on water rather than sanitation Donor dependence Failure of Village Governments to contribute towards Village Water Fund Economic problems at household level Cultural problems (need, rehabilitation) Education level is low to majority (basic education) Lack of data bank of trained personnel especially at village level Spare-parts not easily available for effective running of the facilities Lack of dealers in inputs/spares Local leadership is some areas not effective Haphazard transfer of trained personnel leads to bad performance of the project
• O&M is being attended to favourably by beneficiaries (cost-sharing OK)	
Opportunities (O)	Threats/Limitations (T/L)
 Human resources Community acceptability Good geological climate Donor support Good climate (environment) Growing CSO sector Integration of EAC [could be an opportunity, but also a threat? Opportunity e.g. for the Lake Zone] Better economic base for villagers to boast cost-sharing More funds released by local authorities and central government will enable expansion and sustainability of facilities 	 Population increase vis-a-vis service coverage Culture of land monopoly Lack of ownership Poor economic status of the community Migrants from neighbouring countries HIV/AIDS Unfriendly behaviour to environment Unfriendly weather Political instability Non-availability of basic spares
• Involvement of private sector/service providers – diversify productivity	

	"Business-as-usual"	Worst Case – "Hesawa Fiasco"	Best Case – "Jiweke Sawa Na Hesawa"
Overall Scenario Description	Development in the areas of health, sanitation and water will continue at a low key, but improvements made during HESAWA and lessons learned will not be much utilised. Sustainability of HESAWA achievements is relatively low. Development is slow and not properly coordinated by the district and regional administration. Motivation of personnel in the administration is low.	The strong donor dependence during HESAWA period results in passive role of the communities and administration regarding their own development – waiting for the next donor to make things work. District and regional administration does not retain capacity to push for development due to their sidelined role during HESAWA and thus inadequate capacity building. Development is random and uncoordinated, leading gradually to decline of economy in the Lake Zone and increased corruption among district and regional administration.	HESAWA spirit has continued among district and regional authorities and as a result of the successful local government reform their capacity and motivation to support local development initiatives is high. Communities and villages have been able to effectively replicate development projects initiated by HESAWA. Motivation of LGA personnel is good as a result of the reform and training programmes, and their support to community initiatives is very good and stimulates new community projects.
Scenario Elements Described by Participants of the Kagera Regional Workshop	The areas of health, sanitation and water shall continue to be funded through pro-poor sectors support. Donors shall continue supporting HESAWA and/or similar projects. Continuous capacity building to village government and community at large. The capacity built shall be maintained. Mainstreaming cross-cutting issues. Use of rainwater harvesting technology. Harmonious environment from the village to the district level and vice versa. Transparency and accountability in financial manage- ment, user groups, Village and District Governments.	Interventions already in place are vandalised/collapse. O&M of vehicles and plants will degenerate. Water borne diseases will resurge. HRD will stagnate/apathy. The National MDGs will not be realised. Self reliance spirit already in the beneficiaries' mind will be adversely affected.	Sensitisation of the Council and Village leaders/ communities. Multi-sectoral collaboration. Fair and equal distribution of resources (health, water and sanitation). Equal distribution from the users' social point of view.

	"Business-as-usual"	Worst Case – "Hesawa Fiasco"	Best Case – "Jiweke Sawa Na Hesawa"
Envisaged Situation with Achievement of Millennium Development Goals in the Lake Zone	Millennium Development Goals of water and sanitation service coverage will not be met. Water service coverage will be: in 2015 urban 80%, rural 30%, and in 2025 urban 75%, rural 25%. Sanitation service coverage will be: in 2015 urban 90%, rural 75%, and in 2025 urban 80%, rural 65%. At individual and organisational level, old and inefficient working procedures and habits have continued. Bureaucracy has not been reduced. New WSPs have not been able to create customers' confidence and cost recovery remains low. Service quality to custom- ers has remained low. Development and registration of new WUAs has continued to be slow. The private sector has not effectively emerged to assume a key role in service provision or support services. The overall water and sanitation sector development has continued unsatisfactory: the WSS services situation has not been able to cope with the population growth.	With limited resources the government and municipali- ties will not be able to reach Millennium Development Goals. Water service coverage will be: in 2015 urban 85%, rural 45%, and in 2025 urban 85%, rural 50%. Sanitation service coverage will be: in 2015 urban 90%, rural 75%, and in 2025 urban 90%, rural 75%. The LGA reform largely fails and the restructured district and regional organisations. Due to power struggles and undetermined strategies the public sector has inadequate economic and financial resourc- es for water and sanitation improvements. On the other hand, private sector has not been given the role and capacity envisaged in the reform plans. Thus, the delayed implementation of the new sector administra- tion and operational structure has largely undermined the efforts. The overall water and sanitation sector development and services situation has remained unsatisfactory as compared to the set goals and performance targets.	In the beginning coverage will lag behind the Millennium Development Goals, but as soon as the LGA reforms and the private sector outsourcing capacity have developed service will improve rapidly. Water service coverage will be: in 2015 urban 85%, rural 50%, and in 2025 urban 95%, rural 70%. Sanitation service coverage will be: in 2015 urban 90%, rural 75%, and in 2025 urban 95%, rural 85%. At the operational level (WSPs, districts, etc.) restructuring has improved staff motivation and skills, but also there inadequate financial resources seriously affect the been improved but more slowly than expected and in the beginning fall far behind the targets. Especially new investments in infrastructure have been too low. Public sector remains responsible for service provision and regulation, but service production is largely done by the private sector. Communities are active and many new WUAs have been established and registered.

Annex 9 Communication Plan

The Communication Plan was an integral part of the evaluation aiming at efficient dissemination of the evaluation findings. This Communication Plan seeks to increase awareness, improve knowledge and advocate constructive water and sanitation management practices among the key stakeholders, and generally provide information for the key decision makers at relevant levels. Communication planning helps to ensure that everyone who needs to be informed about lessons learned and results gets the needed information. The messages and key issues for the Communication Plan are those presented in the chapter concerning recommendations and lessons learned. Furthermore, the district-wise findings can be useful for local development actors in raising further local discussion.

Issues of interest: Maintenance, sustainability and replication of water and sanitation facilities; continuation of hygienic practices and sanitation improvements; locally affordable and appropriate technologies; participatory local development and gender equality; cost-sharing, good governance and transparency; democratic working principles and human rights.

The intended users of the evaluation were recognised in the ToR as government and non-government actors who are involved in long-term poverty reduction efforts through participatory approaches, which are based on locally affordable and manageable technologies, gender equality, democratic working principles and the promotion of human rights, in Tanzania and the Lake Victoria Basin area. Furthermore, Sida is among the key users of this evaluation, looking for lessons learned as a contribution to its learning process on how to operationalise the poverty reduction objective of Swedish development cooperation a) at the level of overall policy and development of methods; and b) at the level of Swedish contributions to development programmes, in particular in East Africa.

The objective of the Communication Plan is two-fold. First it suggests information dissemination possibilities concerning the key findings and lessons learned in HESAWA and this ex-post evaluation; and secondly, through bringing the HESAWA experiences back in the table it aims at reinforcing the knowledge and awareness already created by HESAWA for further sustainability and use of best practices. To be effective, the Communication Plan should have a (1) short-term and (2) long-term communication strategy.

The Communication Plan recommends action also for the household/village level, local/national level, the Lake Victoria Basin level, and the Sida/development partners' level. It is important that findings and recommendations can be made accessible also for the district and village governments, local organisations including water users groups and women organisations, and other groups who work for the community development in various capacities. HESAWA as an essentially integrated programme have a lot to offer to all types of rural development programmes. The Communication Plan includes suggestions as to how the findings could be used to enrich the policy debate and the planning of future interventions at the different levels, including interventions in the non-Tanzanian parts of the Lake Victoria Basin.

This Communication Plan was developed through a participatory process by raising this issue at the end of the discussions and other interactions. The HESAWA workshop in Dar es Salaam in connection with the Sida Roap Map Workshop (May 2006) was utilised to further develop the Communication Plan. However, a more detailed and concrete implementation plan for dissemination and communication requires additional inputs and involvement of various Tanzanian stakeholders as indicated in the plan.

Information needs: What kinds of information about results and lessons learned are of interest? What are the audience-specific messages of importance? What are the sensitive or confidential issues to be handled discreetly within specific interest groups only? What kind of thematic information packages

there could be? What exactly is the use if this information? Due to complexity of HESAWA and a large number of issues involved, an option is to develop thematic information dissemination packages. For instance lessons learned in gender mainstreaming, or institutional development of the Water Users Groups/Water Users Associations are some examples of how to organize lessons learned into effective, informative and approachable working packages.

Communication methods/access to information: What information will be communicated to what groups in what ways? Common methods include reporting and documentation, email, meetings and presentations in various forums, media including local radio and newspapers, and various web sites and networks. Access to information by the various stakeholders and such basic matters as literacy have to be verified on location especially when considering household/village level knowledge sharing. Gender-sensitive information channels must be considered. HESAWA produced magazine and radio programmes. Radio programmes focused on WUG activity, sanitation and questions/answers from the listeners. These same channels could be used.

Timing and frequency: Frequency and timings are of importance especially when awareness-type of information is communicated, aiming at such goals as strengthening hygiene practices or motivating to contribute towards maintenance of water supply systems. Should these evaluation findings be used for that purpose, the messages and the target groups should be further elaborated.

Resources and costs: Many evaluation results are likely to be useful resources for the various stakeholders to be utilized by themselves, without external support.

Tables 1 and 2 below summarise some options and raises further questions. Estimates for related costs have not yet been made, since this requires additional consultations with Tanzanian stakeholders.

Stakeholders	Who are they?	Advantages	Goals	How to reach them?
Government officials, civil servants	Government officials, including village and district government levels, zonal and sectoral offices at the Lake Zone, and up to sub-ministerial level.	Represent the infrastructure of their ministries, link the rural areas to central government. Can benefit from HESAWA's lessons learned and relate those to present water, sanitation, health and rural development.	To disseminate targeted information to the largest number of civil servants possible, on a level they can best utilise the information in practice. To provide results district-wise to encourage further discussion why certain regions/districts stand out.	Information dissemination workshop at Zonal level. Supporting printed materials which can be utilised in the field (adequate number of copies). Materials to be provided through usual government channels.
Media	Print & broadcast journalists from public & private media. Independent journalists.	Have traditional media channel and tools available. HESAWA already successfully utilised local radio stations. Have attention of the majority of stakeholders.	To disseminate the chosen key messages to the wider community, and there by strengthen certain aspects of HESAWA's work.	Press releases. Invitations to the dissemination workshops (Zonal & Central), interviews with key informants & encouraging them to take the ideas forward (such as radio plays etc.)
Primary beneficiaries	Water Users Groups and the people using their facilities. WUGs are the key actors at the village level, the foundation for sustainability. Both women and men.	The WUG knows both cultural and natural environment, and can relate the information to their community-specific situation with the right language.	To support the WUGs in their tasks and encourage them to improve practices. To provide feed back taking into account the different roles and needs of women and men.	Through mass media and local government officials (see above), also through locally active (I)NGOs/CBOs.
Civil society	Academic & research institutes	Can be major transmitters of information by extensive networks of other academics, researchers. Can contribute significantly to local/ regional development and so will communicate it further. Have electronic access to colleagues globally/Can be engaged in public debate.	To use their own networks for dissemination of information (electronic, journals, student bodies).	Through professors and lecturers. The main Evaluation Report can serve the purpose, but selected key profes- sors should be invited for dissemination workshops.

Table 1. The Stakeholders' networks: Stakeholders, advantages and how to reach them?

Stakeholders	Who are they?	Advantages	Goals	How to reach them?
	Professional groups & institutes (especially health, water, sanitation)	Can be major transmitters of information. Can be engaged in public debate/often have their own dissemination networks (journals, print distribution, radio programs). May have extensive networks through professional associations (health!).	To use their own networks for dissemination of information (electronic, journals, student bodies, staff training).	Often have their own dissemination networks (journals, print distribution, mailings, radio programs) Have their own professional associations. The main Evaluation Report, possible translation into Kiswahili.
	Informal/semi-formal local groups, such as women's groups, youth clubs etc.	Key local development actors, change factors. Often have their own (effective) information channels and regular gatherings/meetings. Local language, can translate the key messages to the public.	To provide information in such a format that it is feasible to translate and use locally.	Through district Community Development Offices and (I) NGOs active in the Lake Zone.
Donors, providers of specialized programs	Inter-agency organizations, multilateral agencies, with programs in country	Good networks, both within the country and globally in their fields	To make best use of the HESAWA experience in continued dialogues, such as Joint Assistance Strategy, PRSPs, water sector reform	Representative participation in the dissemination workshop, print information. Web-site.
NGOs, aid organizations	International, national or local NGOs providing services, training, education	Are close to the grass roots stakeholders, frequent interaction in the villages. Can encourage the community Know the best channels to reach the socially excluded	To encourage the and CBOs, using their specific networks to reach more isolated stakeholders.	Representative participation in the dissemination workshop, print information. Web-site.
Donors, providers of specialized programs	Inter-agency organizations, multilateral agencies, with programs in country	Good networks, both within the country and globally in their fields	To make best use of the HESAWA experience in continued dialogues, such as Joint Assistance Strategy, PRSPs, water sector reform	Representative participation in the dissemination workshop, print information. Web-site.
NGOs, aid organizations	International, national or local NGOs providing services, training, education	Are close to the grass roots stakeholders, frequent interaction in the villages. Can encourage the community Know the best channels to reach the socially excluded	To encourage the participation of the NGos and CBOs, using their specific networks to reach more isolated stakeholders.	Representative participation in the dissemination workshop, print information. Web-site.

Hosehold levelHECherres. Brochures.Cherres. Flock managementsDenters. BrochuresDenters (hardin advisa)Repet (antivandalism)Bedets of successful cases.Redets of successful cases.Pageet (antivandalism)Denters (hardin advisa)Denters (hardin advisa)Mater Users ChronoMathreanton antificationRedets of successful cases.Redets of successful cases.Pageet radio bunchesRedot programmes to provide professionals.Water Users ChronoMathreanton antificationBecchures. training materials. RadioPageet radio bunchesRedot programmes to provide professionals.Worten CurosMathreanton antificationBecchures. training materials. RadioPageet radio bunchesRedot programmes to provide professionals.Worten CurosMathreanton antificationBecchures. training materials. RadioPageet radio bunchesRedot programmes to provide professionals.Worten CurosMathreanton antificationBecchures. training materials. RadioPageet radio bunchesRedot programmes to provide professionals.Worten CurosMathreanton antificationBecchures. training materials. RadioPageet radio bunchesRedot programmes to provide professionals.Worten CurosMathreanton antificationBecchures. training materials. RadioPageet radio bunchesPageet radio bunchesWorten CurosMathreanton antificationBecchures. training materials. Radio provide professionals.Pageet radio bunchesPageet radio professionals.Worten CurosMathreanton antificationBecchures. training materials. Radio professionals.Pageet radio bun	Audience	Key Message Themes (Informa- tion needs)	Methodology (information channel/media)	Timing/frequency	Outcome Indicators	Resources	Costs
Radio programmes on management. Radio programmes on technical biol. Radio programmes on programmes on programmes on programmes. Radio programmes on programmes on programmes on programmes. Radio programmes on programmes on programmes. Radio programmes on programmes on programmes. Radio programmes on programmes on programmes. Radio professionals. Water Users Group management. Maintenance and fund management. Bochures, training materials. Radio programmes. Leafiles of successful caterion results to 58 (MGs mitWLS, Nisci management. Rever valuation advise. More WUSs Nisci caterion results to 58 (MGs mitWLS, Nisci caterion results to 58 (MGs mitWLS, Nisci management. More WUSs Nisci caterion results to 58 (MGs mitWLS, Nisci caterion results to 58 (MGs mitWLS, Nisci management. More WUSs Nisci MuSs	Household level	HSE Respect (anti-vandalism)	Posters. Brochures. Leaflets of successful cases.	Once or twice.	Posters or brochures available and in use in villages.	Journalist/media profes- sional. Former HESAWA promotion adviser.	
Water Users Group management. Technical tips. Users State management. Technical tips.Borchures, training materials. Radio programmes. Lealing or succession cases of WUGs, WUAs. Visits to succession wUGs, WUAs. Visits to wUGs, WUAS, VISITMore WUGs, have stated goat to train stated to fricials?More WUGs, have stated goat to train stated to fricials?Annelia ReparationJournalis/rinde goat to develor.Halth more of train more of train more of train more of train satitation for people with HIV/AIDs.More WUGs have stated point attrains.More WUGs have stated goat to develor.Journalist/media portes.Local more of WUAMore wore of train more of train more of train satitation.More wore stated of train stated of train 			Radio programmes (Radio Mwanza)	Repeat radio launches 2–3 times.	Radio programmes on HESAWA evaluation and experiences.	Radio professionals. Former HESAWA promotion adviser.	
Women groupsEncourage gender mainteaming in institutions.Inform WUGs on HESAWA experiences and mobiles them to promote gender empowerment in WUGs etc.SchoolsMaintenance of RWH systems and thrinesDevelop dissemination material on thrinesDevelop dissemination material on thrinesSchoolsMaintenance of RWH systems and thrinesDevelop dissemination material on thrinesDevelop dissemination material on thrinesBeathMaintenance of RWH systems and continue.Develop district officials?) to selected schools exclude school to selected schools exclude school to selected schoolsDevelop district officials?) to selected schoolsHealthImportance of state water anitation for people with HV/ADS.Develop district biseminate evaluation results summary to those directly involved.Former HESAWA Promotion Adviser to participate in planning.Local (NGO, CBO)MolesSechures, training materials.Brochures, training materials.Former HESAWA Promotion Adviser to participate in planning.Local (NGO, CBO)MolesSechures, training materials.Brochures, training materials.Former HESAWA Promotion Adviser to promotion Adviser to 	Water Users Group	Maintenance and fund management. Technical tips. Sustainability and replicability.	Brochures, training materials. Radio programmes. Leaflets of successful cases of WUGs/ WUAs. Visits to successful WUGs/ WUAs. Disseminate evaluation results to 36 WUGs involved.	Repeat radio launches 2–3 times.	More WUGs have started registration process as WUAs.	Journalist/media profes- sional to develop. Former HESAWA promotion adviser.	
SchoolsMaintenance of RWH systems and latrinesDevelop diservitation intervise (by district officials?)Ideas for school health clubs to continue.Develop district officials?)Ideas for school health clubs to continue.Develop district officials?)HealthImportance of rotal sanitation.HealthImportance of state water and sanitation for people with HIV/AIDS.LocalWUGs and institutional support.Nullage/districtBrochmentation of best practices.Jocal (NIGV, CBO)Diseminate evaluation results summary to those directly involved.Local (NGV, CBO)Intervining materials.Local (NGV, CBO)Diseminate evaluationLocal (NGV, CBO)Diseminate valuationLocal (NGV, CBO)Diseminate valuationLocal (NGV, CBO)Diseminate valuationLocal (NGV, CBO)Brochnes, training materials.Local (NGV, CBO)Diseminate valuationLocal (NGV, CBO)Brochnes, training materials.Local (NGV, CBO) </td <td>Women groups</td> <td>Encourage gender mainstreaming in institutions.</td> <td>Inform WUGs on HESAWA experiences and mobilise them to promote gender empowerment in WUGs etc.</td> <td></td> <td></td> <td></td> <td></td>	Women groups	Encourage gender mainstreaming in institutions.	Inform WUGs on HESAWA experiences and mobilise them to promote gender empowerment in WUGs etc.				
Health professionalsImportance of total sanitation.ProfessionalsThe importance of safe water and sanitation for people with HIV/ADS.Local (village/district government)WuGs and institutional support. Documentation of best practices.Local (village/district government)Brochures, training materials. promotion diser practices.Local (NGO, CBO)NuGs and institutional support. Disseminate evaluation results summary to those directly involved.Local (NGO, CBO)Brochures, training materials.Local (NGO, CBO)Brochures, training materials.	Schools	Maintenance of RWH systems and latrines Ideas for school health clubs to continue.	Develop dissemination material on school health. Visits (by district officials? to selected schools to reactivate school health & sanitation initiatives.				
Local (village/district government)WUGs and institutional support. Documentation of best practices.Bronchien Adviser to promotion Adviser to participate in planning.Local (NGO, CBO)MUGs and institutional support.Eormer HESAWA Promotion Adviser to participate in planning.Local (NGO, CBO)Rochures, training materials.Former HESAWA Promotion Adviser to participate in planning.	Health professionals	Importance of total sanitation. The importance of safe water and sanitation for people with HIV/AIDS.					
Local (NGO, CBO) Brochures, training materials. Former HESAWA Promotion Adviser to participate in planning.	Local (village/district government)	WUGs and institutional support.	Brochures, training materials. Documentation of best practices. Disseminate evaluation results summary to those directly involved.			Former HESAWA Promotion Adviser to participate in planning.	
	Local (NGO, CBO)		Brochures, training materials.			Former HESAWA Promotion Adviser to participate in planning.	

Audience	Key Message Themes (Informa- tion needs)	Methodology (information channel/media)	Timing/frequency	Outcome Indicators	Resources	Costs
National	HESAWA experiences and best practices to be incorporated into national plans.	Annual National Water Week. WSP Newsletters. Another dissemination workshop.	Once a year.	HE SAWA experiences/ best practices elaborated	Former HE SAWA . Promotion Adviser to participate in planning.	
The Lake Victoria Basin		Research reports. Lake Victoria Water Week.	Once a year.			
The Sida/ development partners	Best practices from 'HESAWA-like' projects (not to emphasise HESAWA as such too much).	Dissemination workshop (maybe) Distributing evaluation report. NRWDP as entry point. WSP Newsletters.	Once-off.	Best practices document- ed and incorporated into NRWDP plans.		

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