PUBLIC STANDPOST WATER SUPPLIES (PSWS)

PROJECT
1983 - 1987

FINAL REPORT

- Department of Water Affairs,
  Ministry of Agriculture and
  Water Development

- Ministry of Health

- Department of Social Development,
  Ministry of Labour and Social Services
REPUBLIC OF ZAMBIA

PUBLIC STANDPOST WATER SUPPLIES (PSWS)

PROJECT

1983 - 1987

FINAL REPORT

- Department of Water Affairs,
  Ministry of Agriculture and
  Water Development

- Ministry of Health

- Department of Social Development,
  Ministry of Labour and Social Services

PROJECT SUPPORTED BY THE INTERNATIONAL REFERENCE CENTRE FOR COMMUNITY WATER SUPPLY AND SANITATION (IRC)
PREFACE

As part of the International Drinking Water Supply and Sanitation Decade (IDWSSD) activities, Zambia signed an agreement with the International Reference Centre (IRC) for Community Water Supply and Sanitation, to participate in a multi-Country Public Standpost Water Supply (PSWS) project, from 1983 to 1986.

Investigating feasible and sustainable means of serving low income urban and rural growth point communities with piped water supply, the main project goals, came in line with national priorities. These communities have become a major focus in Zambia.

A number of public standposts were constructed as local demonstration schemes in three areas, with emphasis on community involvement and participation, from the initial stage of the project planning, implementation, operation and maintenance and to some extent, financial management. Sanitation and hygiene education as an integral part of the project was also carried out in the local demonstration schemes.

The inputs provided by the International Reference Centre, proved to be extremely useful. These included supporting the achievement of the project objectives and guidance given to the Zambian project staff, as well as the Project Management Committee (PMC) throughout the project implementation period.

Another important aspect of this project was the multi-country approach adopted. Due to this, the participating countries, namely Zambia, Malawi, Indonesia and Sri Lanka, were able to share and exchange experiences. This resulted in further development of the project in the participating countries.

It is therefore our hope that the developed approaches will prove useful not only in the task of improving capabilities in implementing public standpost water supply programmes, but also in increasing coverage of the rural centre and urban fringe low income groups, in line with IDWSSD targets.

L.L. Mbumwae
DEPUTY DIRECTOR,
DEPARTMENT OF WATER AFFAIRS.
Acting Chairman, Project Management Committee
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFACE by the Chairman of the Project Management Committee</td>
<td>(i)</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>2. AIMS AND OBJECTIVES</td>
<td>3</td>
</tr>
<tr>
<td>3. PROJECT APPROACH AND ORGANIZATION</td>
<td>5</td>
</tr>
<tr>
<td>3.1 Project Approach</td>
<td>5</td>
</tr>
<tr>
<td>3.2 Organizational Framework</td>
<td>6</td>
</tr>
<tr>
<td>3.3 Organization of Community Participation</td>
<td>6</td>
</tr>
<tr>
<td>3.4 Support at Demonstration Scheme Level</td>
<td>8</td>
</tr>
<tr>
<td>3.5 Other Supporting Provisions Available for the Project</td>
<td>8</td>
</tr>
<tr>
<td>3.6 Monitoring</td>
<td>9</td>
</tr>
<tr>
<td>3.7 Finances</td>
<td>9</td>
</tr>
<tr>
<td>4. ACTIVITIES AND RESULTS OF THE PROJECT AT THE DEMONSTRATION SCHEMES</td>
<td>11</td>
</tr>
<tr>
<td>4.1 Short Summary of Activities at the Demonstration Schemes</td>
<td>11</td>
</tr>
<tr>
<td>4.2 Summary of Results at the Demonstration Schemes</td>
<td>12</td>
</tr>
<tr>
<td>4.3 Community Participation</td>
<td>16</td>
</tr>
<tr>
<td>4.4 Operation and Maintenance</td>
<td>16</td>
</tr>
<tr>
<td>4.5 Health and Hygiene Education</td>
<td>16</td>
</tr>
<tr>
<td>4.6 Sanitation</td>
<td>16</td>
</tr>
<tr>
<td>5. WIDER DISSEMINATION OF KNOWLEDGE</td>
<td>19</td>
</tr>
<tr>
<td>5.1 Training</td>
<td>19</td>
</tr>
<tr>
<td>5.2 Written Materials and Mass media</td>
<td>19</td>
</tr>
<tr>
<td>5.3 National and International Workshops</td>
<td>20</td>
</tr>
<tr>
<td>5.4 Intercountry Interim Evaluation</td>
<td>20</td>
</tr>
<tr>
<td>6. FOLLOW-UP ACTIVITIES</td>
<td>23</td>
</tr>
<tr>
<td>6.1 Utilisation of Project Approach in other Projects</td>
<td>23</td>
</tr>
<tr>
<td>6.2 Follow-up Activities Directly Related to Project Activities</td>
<td>23</td>
</tr>
<tr>
<td>6.3 PSSC Project (Piped Supplies for Small Communities)</td>
<td>23</td>
</tr>
<tr>
<td>7. CONCLUSIONS</td>
<td>25</td>
</tr>
<tr>
<td>8. RECOMMENDATIONS</td>
<td>27</td>
</tr>
<tr>
<td>APPENDICES</td>
<td></td>
</tr>
<tr>
<td>I List of Project Staff</td>
<td>29</td>
</tr>
<tr>
<td>II List of Project Management Committee Members</td>
<td>31</td>
</tr>
<tr>
<td>III List of PSWS Project Output</td>
<td>33</td>
</tr>
</tbody>
</table>
1. **INTRODUCTION**

In 1981 the Zambian Government accepted and adopted the goals of the International Drinking Water Supply and Sanitation Decade. A National Action Committee was formed for the implementation of these goals and to enhance intersectoral cooperation which is an important feature of the Decade policy.

As part of the efforts to implement the goals of the Decade in Zambia, an agreement between the Zambia Government and the International Reference Centre for Community Water Supply and Sanitation (IRC) was signed in 1983 to undertake a demonstration project on Public Standpost Water Supplies (PSWS). Project activities began in 1984.

Through this project three ministries, the Ministry of Agriculture and Water Development, the Ministry of Health and the Ministry of Labour and Social Services and various other institutions have been brought together to co-ordinate work on water supply, sanitation, health and community development within the project. The Project Team, doing the actual work for the project, consisted of employees from these three ministries. Also, a Project Management Committee has been set up, in which various Zambian institutions concerned with water supply, sanitation and community development were represented. In this way, inputs from different sides contributed to the solution of problems.

The approach adopted in the PSWS project put a strong emphasis on community participation. Through the contribution of the community in the construction of water schemes and their involvement in operation and maintenance, there will be less dependence on Government funding. It has been recognized that water schemes can much better reach the expectations of the communities when they have been involved in planning and implementation.

The PSWS project was set up as a multi-country project, Zambia being one of the participants. The Project Team had the opportunity to exchange views and experiences through visits and workshops with counterparts in the other participating countries, (Malawi, Indonesia, Sri Lanka). Thus the project has contributed in a valuable way to Technical Cooperation amongst Developing Countries (TCDC).

IRC has had a coordinating and supporting role in the project. Coordination between the four country projects, particularly exchange of findings and general project information and international dissemination of knowledge gained in the project, has been supported through use of IRC-based professionals. IRC support of project activities in each country included periodic advisory visits by the IRC project manager and by a social scientist. Also general information on various aspects of public standpost water supplies was provided.
2. **AIMS AND OBJECTIVES**

The major aim of the PSWS project was to stimulate the development of improved approaches to public standpost water supplies through:

- development of appropriate strategies, methods and techniques for the planning, implementation and management of community standpost water supply systems;
- promotion of active participation of the communities in all stages of planning, implementation and management;
- sharing of experience and knowledge gained in the project on a national level and internationally.

The immediate objectives were:

1. to set up and develop a number of demonstration schemes on the application of public standposts in community water supply;

2. to conduct a series of studies and to prepare guidelines on particular organizational, economic, technological and socio-cultural aspects of public standpost water supply systems;

3. to contribute to the international exchange of information on various aspects of public standpost water supply systems;

4. to promote the application on a larger scale in Zambia of the strategies, methods and techniques developed in the project.

Because the importance of including health and hygiene education and sanitation in the project was recognized, the following further objectives were developed during the early days of the project:

- promotion of appropriate methods of excreta disposal through provision of simple methods of latrine construction, using locally available materials;

- development of health and hygiene education in connection with the other project activities, as an integrated approach.
3. PROJECT APPROACH AND ORGANIZATION

3.1 Project approach

In general the project approach consisted of three main steps. In the first place the problems and successes encountered with public standpost water supplies were to be investigated. Special attention was to be given to community participation, financial management, organization of operation and maintenance, and hygiene education.

Secondly, in selected small communities in rural and urban fringe areas demonstration schemes would be set up, where in discussion with the local people a community-based integrated approach would be demonstrated and monitored.

Finally, the experience gained in the project would be shared with other experts and agencies concerned with water supply, sanitation and hygiene education. Transfer of knowledge and experience and promotion of a wider application of project findings would take place not only within each country but also internationally.

To plan this approach and to meet the project objectives, a workplan and time schedule were made at the start of activities in 1984. These plans had to be adjusted several times. Some stagnation was caused by administrative problems. Probably also due to these problems very few preliminary and other special studies were executed: only one small study into health problems and water related diseases has been completed.

Also in the beginning difficulties arose because there was not sufficient technical support within the Project Team. This problem was solved by the nomination of a Water Engineer as Project Engineer in November 1985.

At the demonstration scheme level, delays in the implementation of some of the schemes have been caused by insufficient funds available in the communities and limited resources from the local authorities.

However, at the end of 1986 most of the schemes were completed (see also par. 4). Apart from the difficulties mentioned, it was at the outset probably not sufficiently recognised by all parties concerned that for a water supply project involving communities in planning and implementation, more time is needed than for a merely technical project. The extra time expenditure however has been paid back by the success of the project to date.

The objectives of transfer and application of knowledge generated through the project have been met in various ways. As planned, the co-operation between different sectors of the government (through the Project Management Committee and the Project Team) and with other national agencies has proved valuable in spreading the ideas of the project (see also par. 7.1). To reach a larger audience, some papers and other materials have been prepared. Members of the project team have attended national and international workshops (see for details par. 6.2). At demonstration scheme level training seminars and workshops have been held (see par. 7.2).
3.2 Organizational Framework

The Department of Water Affairs of the Ministry of Agriculture and Water Development has acted as the Project Coordinating Institution (PCI). The PCI has been the formal contracted party through the agreement on behalf of the Zambian Government with the International Reference Centre (IRC). The PCI was responsible for project implementation, progress and budget control and for reporting to IRC as well as to collaborate with other Project Participating Institutions.

To ensure support for the hygiene education, sanitation and community participation aspects within the PSWS project, the Department of Preventive Health (Ministry of Health) and the Department of Social Development (Ministry of Labour and Social Services) were chosen as Project Participating Institutions.

The Project Team, has been responsible for all project activities on the executive level. To ensure essential skills related to engineering, health and community participation, the team was chosen from the three above mentioned institutions (see the organization chart). All three team members performed their duties in the project on a part time basis. For supervision and adequate collaboration at national and local levels, it was considered essential to form a Project Management Committee (PMC). The PMC included representatives from the above institutions and other relevant agencies (see the list of PMC members in Appendix II). The PMC was chaired by the Director of Water Affairs.

3.3 Organization of Community Participation

The component of community participation was a prominent feature at all levels of the PSWS project. The inclusion of the Department of Social Development in the PSWS project was a major asset because the project got off the ground with a powerful element of community participation built-in. In the activities of the Department of Social Development, the main emphasis is laid on the promotion of self-help and self-reliance in order to create self-reliant rural communities capable of taking on more responsibilities in their own local development. At the start of the PSWS project a workshop was held involving participants from relevant organisations at which the importance of community participation, community education and community organisation were discussed.

The Department of Social Development, through a network of social development workers at district and village levels, spear-headed community participation within the project. The Ministry of Health, Department of Water Affairs, Department of Social Development, the party cadres (politicians) and District Council workers joined hands with community leaders to organise and educate communities about the PSWS project through formal and informal meetings held in project areas with existing community organisations, e.g. adult literacy classes and women's clubs of the Department of Social Development, the village development committees and with the water committees which had been set up at the demonstration sites.
PUBLIC STANDPOST WATER SUPPLIES PROJECT (PSWS) ZAMBIA
ORGANISATIONAL STRUCTURE

IRC

ZAMBIAN PSWS PROJECT

PCI DEPT. OF WATER AFFAIRS

PMC*

PPI MINISTRY OF HEALTH

PPI DEPT. OF SOCIAL DEVELOPMENT

PROJECT TEAM

PROJECT MANAGER
M.K. Chimuka
(District Health Inspector)

PROJECT ENGINEER
D.M. Kabumu
(Water Engineer)

PROJECT SUPPORTING OFFICER
K.L. Kamalata
(Principal Social Development Officer)

IRC INTERNATIONAL REFERENCE CENTRE
PCI PROJECT CO-ORDINATING INSTITUTION
PPI PROJECT PARTICIPATING INSTITUTION
PMC PROJECT MANAGEMENT COMMITTEE
* see List of Members in Annexe II
As pointed out already, community participation was aimed at involving communities in their own development projects and for them to appreciate and realise that the projects were actually theirs and not for the government or other organisations.

3.4 Support at Demonstration Scheme level

The District Councils of Chongwe and Chibombo, where the demonstration schemes are located were informed of the project objectives at an early stage of the planning to ensure their support.

The District Councils were somewhat reluctant to agree with the project ideas but later appreciated the project objectives. Because of some constraints such as financial and technical limitations of the councils, limited assistance came from them in the provision of materials and in further expanding project activities to villages around those chosen as demonstration sites for the project. Nevertheless the District Councils supported the project by providing plumbers and other relevant employees to work with the villagers as well as to advise the team on local conditions.

The Party, through the local leadership, was supportive in the project. The ward chairmen were consulted by the project team over the project and community participation. Further assistance came from other agencies such as:

(a) Mwachisompola Hospital which provided the water source, plumbers and bricklayers towards construction of the Mulimba water scheme.

(b) The community at all four sites provided both labour and materials such as sand, stones, cement, bricks and money.

(c) NGO'S including Missions such as Kaparu Mission, provided some pipes towards the construction of Mulimba scheme. The Parent/Teachers Association donated K 150 (approximately US$ 19.50) towards construction of VIP latrines at Chibombo Primary School.

(d) Private companies and commercial farmers like Frangila Farms and Van de Venta Farms together provided some pipes to Mulimba scheme. Willy Kit Company donated six pre-fabricated VIP latrines models towards the project.

3.5 Other Supporting Provisions Available for the Project

- Office accommodation, administration and secretarial support was provided by the Project Coordinating Institution, the Department of Water Affairs.

- Transport: The project owned a pick-up which proved inadequate in terms of project activities. Hence, alternative transport was provided by the PCI on request by the project team. Due to limited transport available at the Department of Water Affairs, it was not always possible to obtain the necessary transport on request.
- Advice: The project team received advice on request from various PMC members on issues of interest. For example, the Decade Adviser provided technical and organisational support; the Chief Health Inspector helped with the design of appropriate latrine models.

3.6 Monitoring

The Project Team members have built up the project themselves in the sense that they themselves directly approached the communities and the District Councils. They monitored all ongoing activities right from the start throughout the whole project process.

Evaluation of their activities took place through regular discussions among themselves, in reporting to the PMC, and attending PMC meetings. Regular reports written by the team were submitted to the PMC and IRC. On the basis of these reports, members from PMC and IRC gave advice, upon which adjustments were made when necessary.

The Project Team made field visits together and met regularly to discuss short term plans, progress and problems. They have been nominated to various bodies and committees, giving them the opportunity to explain the project approach and activities to others. Hence, the Project Team has established a network to promote the project approach in various government agencies and other institutions in Zambia, e.g. Mr. K.L. Kamalata the Project Supporting Officer is a member of the National Action Committee for the International Drinking Water Supply and Sanitation Decade. Mr. D.M. Kabumu the Project Engineer was a member of the governing body for "Water to the Village Project" sponsored by Rotary International, and all the team members are members of the National Primary Health Care Committee.

3.7 Finances

External funds for the project were provided by IRC, using grant money provided by the Directorate General of International Co-operation of the Netherlands Government.

Project budgets were prepared by the Project Team together with IRC. The Project Management Committee then agreed and approved the budgets. The project had an account with the Community Bank. All expenditures were to be checked by the Director of the Department of Water Affairs, who was signatory together with the Deputy Director. Two accountants at the Ministry of Agriculture and Water Development had to give their counter-signatures. Yearly account reports were prepared by the Ministry's Accounting Unit; they were reviewed by internal auditors. Funds were sent directly to the project account. Declarations and transfer of project funds from IRC to the project account have worked satisfactorily.
4. ACTIVITIES AND RESULTS OF THE PROJECT AT THE DEMONSTRATION SCHEMES

As a comprehensive description of the demonstration schemes has already been given in the Overview *), only short summaries of activities and results follow here:

4.1 Short Summary of Activities at the Demonstration Schemes

(a) Area selection for the PSWS local demonstration schemes was done by the Project Team on the basis of local discussions/observations and approved by the Project Management Committee on the basis of local discussions. In selecting the areas, the following criteria were used:

- Availability of adequate water sources in the vicinity i.e. where there was already an existing water reticulation system;

- Populated areas where there was a felt need for clean water near to the homes. (A Community Diagnosis Questionnaire was developed and used to assess the need);

- Willingness of the community to participate and to contribute to the scheme in cash, kind or labour;

- Nearness to Lusaka for easy access for close monitoring and support through the project staff.

The location of the selected areas has been indicated on the map on page 10.

(b) Community involvement - this was done through discussion and contact for initial planning and designing of the standposts. Communities were also involved in the actual work of construction, and took up some maintenance responsibilities via the caretakers.

(c) Information gathering through observation, discussion and surveys. House to house surveys were done using a questionnaire to find out health problems and water-related problems.

Needs of the community were assessed through discussions with local extension workers, influential people and local leaders. Potential for community involvement and participation was assessed through their previous participation in various self-help projects or schemes.

(d) Formation of local water committees. In villages where Village Health Committees existed, the water committees were absorbed into them to avoid duplication of work and to avoid creation of several committees.

(e) Engineering surveys and feasibility studies were done to check adequacy of supplies and to avoid set backs arising from other engineering constraints.

(f) Hygiene and health education was given on prevailing health problems and particularly on water-related diseases and sanitation as a component of the Project and was in most cases based on dialogue.

(g) Models of appropriate low-cost latrines were developed and demonstrated in the project areas.

(h) Training of caretakers. Caretakers were given on the job training on simple operation and maintenance.

(i) A seminar for extension workers as well as village headmen and their secretaries was conducted.

4.2 Summary of Results at the Demonstration Schemes

* Mwachisompola Hospital/Mulimba.

The compound consists of 21 households, with a total population of 50 inhabitants. One standpost with double tap was erected in Mulimba in July 1985. The source is the water supply of the hospital (a borehole). The scheme at Mulimba is still in excellent condition. However, there is not always sufficient water because the main scheme is old and inadequate. It is now under rehabilitation by the Ministry of Health.

Chibombo: an inadequate standpost built previous to the PSWS project.
PSWS Project demonstration area:
1: Chibombo
2: Mwachisompola/Mulimba
3: Mwachisompola Health Centre
4: Chongwe

REPUBLIC OF ZAMBIA

Scale 1:1,500,000
Chibombo: a PSWS standpost with a bucket stand.

Mulimba: women at a standpost built by the community with support from the PSWS project.
Kaongo: a standpost was built in the school compound with support from the PSWS project.

* Mwachisompola Health Centre.

This scheme once completed would serve a population of about 240 or more inhabitants. Around this centre, there are three villages that would benefit a lot from the scheme. Due to limited resources from the local authority, it has not been possible to complete Mwachisompola Rural Health Centre scheme. Nevertheless the community through their own efforts and financial contribution, have completed rehabilitating the pump house. Continuous efforts of the project team will hopefully lead to the procurement of the necessary pumping equipment in the near future in order to achieve the objectives.

* Chibombo:

(a) Chiyuni Village consists of 52 households with a total population of 420 inhabitants. Water source is a borehole. Two standposts were erected in 1988. They are still in good condition. Water supply is sufficient so far.

(b) Kaongo (Chibombo School): There is a cluster of villages around Chibombo Primary School, consisting of a total of 30 households with 300 inhabitants. Water source is a borehole. Originally there were 3 standposts with two taps each. Pressure has been insufficient; because of this one standpost has been closed. The
main scheme is too weak to provide sufficient water at all times for the other standposts. The District Council plans to buy a new electric motor for the pump to increase the capacity.

(c) Mwamuyamba: This serves 16 households with a population of about 100 inhabitants. Source of water supply is a borehole. One standpost with two taps was erected in 1986. It is still in good condition and water supply is sufficient.

* Chongwe (Sokosi): This village has 400 households with a total of about 1000 inhabitants. The source is a dam in a nearby river. In 1987 a standpost with one tap was erected. It is still in good condition. Usually there is sufficient water.

4.3 Community Participation

In all project areas, local water committees to spearhead project activities were set up composed of an equal number of women and men. For instance, in Mwachisompola (Malimba Compound), there were 7 women and 5 men, one of the women was elected as a Vice Chairperson. In all project areas women played a greater role in construction of standposts. They were involved in all aspects of the project from planning to implementation stage along with their menfolk. The responsibility of keeping the surroundings to the standpost clean was taken up by the women. In all project areas the communities contributed both in labour and materials towards their schemes.

The fact that water was now available at relatively short distances meant that time was saved which would be utilised for instance in attending to other activities e.g. social welfare clubs. Also gardens were set up which afford a chance to grow vegetables to promote good nutrition and provide some extra income.

4.4 Operation and Maintenance

Caretakers were given on the job training by local plumbers, to be able to carry out simple operation and maintenance. Major breakdowns were left to District Councils to repair. Each household contributed to meet the water charges by paying K2 per month (US $ 0.26) to the District Council. A member of the water committee acts as treasurer. Revolving funds have been set up by the water committees to pay for necessary spare parts.

4.5 Health and Hygiene Education

In the field of health and hygiene education, the Project Manager spearheaded local teams of health workers in health education with emphasis on supply of clean water and good sanitation. He identified health workers to understudy his activities so that they could become the ones responsible in their areas for close monitoring of the project.

4.6 Sanitation

Various demonstration models of latrines were put up in the villages. Several designs were made, so that villagers could choose the most appropriate model to meet their needs and their financial
means. Those models based on appropriate technology using locally available materials were most popular. The type made by a commercial Company in Zambia proved to be too expensive. It costs about K.500 (approximately US$ 64.0).

A latrine constructed with local materials.

A more expensive latrine with a roof of corrugated iron.
5. WIDER DISSEMINATION OF KNOWLEDGE

Sharing of project ideas and experiences with various groups of concerned agencies and professionals has been an important feature in the Zambian project approach. Some methods of spreading information through involving local authorities and leaders and through networking with government agencies and other institutions in Zambia have already been discussed (see par. 3.4). Here follows a short description of means used by the project staff to promote the wider dissemination of project information:

5.1 Training

In the project, different types of training were used to reach various levels of participants and other interested parties. At demonstration scheme level training courses for Caretakers took place through the project. Trainers were employees of the District Councils. Also a seminar was held for village headmen and their secretaries on primary health care activities. Topics covered were:

(a) Waterborne diseases, by the Project Manager;

(b) Community participation in projects, by the Project Supporting Officer;

(c) The role of women and children, by a Social Development Officer;

(d) The importance of using a pit latrine, by a Health Assistant.

In 1985, a workshop for workers from the District Councils specialized in extension, health and social development was held, together with the village headmen and their secretaries. Topics covered were:

- Setting up local water committees;
- Community participation;
- The role of women in water supply;
- Health and hygiene aspects of water supply;
- Collection of funds;
- Sanitation.

The above seminar was organised by the project staff and IRC provided a consultant. In addition, exchange visits by local water committees took place to share knowledge, experience and views.

5.2 Written Materials and Mass media

To promote spreading of knowledge and wider application of project findings, the project team has prepared several papers describing the methodology and results of the project. Periodic reports stating project progress and proceedings were circulated to PMC members and IRC. Pamphlets on design and construction of VIP latrines and on relationship between health, sanitation and water supply for local water committees and the communities have been drafted and are to be translated into local languages. A list of written output is given in Appendix III. Nevertheless it is fair to say that the project did not produce as many publications as had been planned.
Members of a PSWS water committee on an exchange visit.

Events from project activities were broadcast on Radio Zambia in July 1986 and in March 1987 the inauguration ceremonies for some of the demonstration schemes were shown on Television Zambia. During these inauguration ceremonies the guests of honour were the Ward Chairman for Chongwe and the District Governor for Rabwe (Chibombo) respectively.

5.3 National and International Workshops

The Zambian Project Team attended international workshops sponsored by IRC in connection with the PSWS project as follows:

- Thailand - November 1984
- Working visit to Sri Lanka - November 1984
- Workshop held in Sri Lanka in December 1985 attended by the Project Engineer
- Malawi workshop - November 1986
- International Drinking Water Supply and Sanitation Decade Conference, Lusaka - November 1986 attended by the Project Engineer.

All these workshops gave the project staff an opportunity to exchange views and experiences with their counterparts and other professionals.

5.4 Intercountry Interim Evaluation

This took place in Zambia in August 1985. The team members were:

- Dr. Yun - Team Leader from the Republic of Korea
- Mr. F. Kwaule - Project Officer from PSWS Malawi
- Mr. Van de Vliet - A Dutch Water Engineer working in Solwezi - Northwestern Province, Zambia
- The Zambian Project Team
The evaluation exercise was an important one in Zambia because it gave a chance to the project team to assess the level of development, progress and further direction for the project.

Members of the Project Team and a community development worker from Chongwe at a PSWS meeting.
6. **FOLLOW-UP ACTIVITIES**

6.1 **Utilisation of Project Approach in other Projects**

The Project Team has been requested to assist the Chibombo District Council in the planning and implementation of hand-over activities of village piped water supplies to the villagers in three areas in the District. This has been a first major step in the utilisation of PSWS project approach in other projects. The aims are to allow the villagers to rehabilitate, operate and maintain their water and sanitation systems. Also the people will be responsible for managing their own finances.

In order to achieve good results, the villagers in the planned District Council project area will be given an opportunity to visit the PSWS projects to see for themselves what they can achieve through their own involvement in water, sanitation, health and community activities. It is hoped that the approach and results from these projects will be distributed to other District Councils perhaps through the Ministry of Decentralization, for still wider application.

The successful use of an interministerial Project Manager Committee has also stimulated the further development of the WASHE Committees in Zambia. These are inter-sectorial committees monitoring water supplies, sanitation and hygiene education activities which are being set up at Provincial and District level throughout Zambia.

6.2 **Follow-up Activities Directly Related to Project Activities**

- There is a need for the Project Team to assist in the installation of extra standposts within PSWS project areas. This is due to the fact that the population has increased rapidly in the area where standposts initially were installed. However, this exercise will depend on the extent to which the Councils can improve their water works supply and distribution network.

- Sanitation aspects of the project, particularly the appropriate low-cost latrine models developed in the project, are to be spread to other areas outside PSWS project areas.

- Plans are developed to continue strengthening health education in both the PSWS project areas and the planned Chibombo District Council project areas.

6.3 **PSSC Project (Piped Supplies for Small Communities)**

During 1987 Zambia developed a proposal for participation in this 3-year inter-country follow-up project. Financial and backstopping support has been sought from IRC and the new project got underway in both Zambia and Malawi in early 1988.

The PSSC project is an important follow-up project to the PSWS project in order to achieve wider application of the approach and results learned from the demonstration schemes, further develop and improve the approach itself, and introduce a more flexible approach to selecting and developing levels of service within piped supplies.
7. CONCLUSIONS

The PSWS Project in Zambia can be considered successful in the following ways:

- A number of Ministries, Departments and other institutions were brought together in the Project Management Committee and the Project Team to work together and share experiences and expertise;

- The approach of the Project Team towards the promotion of community participation has been quite successful;

- Health and Hygiene education and Sanitation have been important components of the project;

- Dissemination of knowledge and experiences have been effected through various methods (e.g. networking, publications and broadcasts, and seminars and workshops). The approach and results are gradually being adopted for wider application;

Nevertheless there were some constraints which included:

- Lack of materials and limited resources from the district councils which impeded the improvement of parent schemes on which the standpost-based extensions depended. This has resulted in periodic water shortages and accordingly a less than optimal use of the standposts.

- At the same time, due to the low incomes of many people in the demonstration areas, the communities generally did not have enough money to contribute themselves toward major costs of improvement and maintenance of the parent schemes, although they were often able to support the extensions and standposts in their local environment.
8. **RECOMMENDATIONS**

- To use the new Piped Supplies for Small Communities (PSSC) project as a vehicle for promoting wider application and further development of the project approaches;

- To disseminate the project experiences and approach to a wider audience by publication of manuals, guidelines and audio-visuals and through workshops;

- To investigate wider types and mixes of piped water supplies and sanitation to serve various needs of different communities;

- To encourage more institutions and external support agencies to participate in the project in order to share experience and expertise;

- To continue monitoring and developing the existing schemes according to the needs of the population, providing they can be sustained from a financial and maintenance point of view.
APPENDIX I

LIST OF PROJECT STAFF

Mr. M.K. Chimuka  Project Manager PSWS
                  Ministry of Health

Mr. K.L. Kamalata  Project Officer PSWS
                  Department of Social Development

Mr. D.M. Kabumu  PSWS Project Engineer
                  Department of Water Affairs

Mr. J. Malawa  Project Technician
                  (part 1986)

Addresses

Ministry of Agriculture and Water Development
Department of Water Affairs
Nulungushi House
Independence Ave./Nationalist Road
P.O. Box 50288
Ridgeway
Lusaka
ZAMBIA

Tel.: 215281
Tlx.: 43950 ZA
Cb.: ZAMWATER LUSAKA

Ministry of Health
Woodgate House, Cairo Road
P.O. Box 30205
Lusaka
ZAMBIA

Tel.: 211528/213435
Tlx.: via WHO

Ministry of Labour & Social Services
Department of Social Development
Lechwe House, Freedom Way
P.O. Box 31958
Lusaka
ZAMBIA
# APPENDIX II

## LIST OF PROJECT MANAGEMENT COMMITTEE MEMBERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. C.R.W. Kayombo</td>
<td>Chairman (up to August 1987) Director of Water Affairs</td>
</tr>
<tr>
<td>Mr. L.L. Mbumwae</td>
<td>Chairman (from August 1987) Acting Director of Water Affairs</td>
</tr>
<tr>
<td>Mr. E.P. Katati</td>
<td>Commissioner</td>
</tr>
<tr>
<td></td>
<td>Department of Social Development</td>
</tr>
<tr>
<td>Dr. I.L. Nyumbu</td>
<td>IDWSSD Adviser</td>
</tr>
<tr>
<td></td>
<td>Department of Water Affairs</td>
</tr>
<tr>
<td>Dr. R. Baboo</td>
<td>Head Department of Community Health (School of Medicine, UNZA) (from April 1986)</td>
</tr>
<tr>
<td>Mr. M.K. Chimuka</td>
<td>Project Manager PSWS</td>
</tr>
<tr>
<td></td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>Dr. K. Jayaraman</td>
<td>Head (up to June 1988)</td>
</tr>
<tr>
<td></td>
<td>Department of Civil Engineering, UNZA</td>
</tr>
<tr>
<td>Mr. D.M. Kabumu</td>
<td>PSWS Project Engineer</td>
</tr>
<tr>
<td></td>
<td>Department of Water Affairs</td>
</tr>
<tr>
<td>Mr. K.L. Kamalata</td>
<td>Project Officer PSWS</td>
</tr>
<tr>
<td></td>
<td>Department of Social Development</td>
</tr>
<tr>
<td>Mr. P.K. Mambwe</td>
<td>Chief Health Inspector</td>
</tr>
<tr>
<td></td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>Mr. P.C. Mpande</td>
<td>Principal (up to September 1986)</td>
</tr>
<tr>
<td></td>
<td>Chainama College of Health Sciences</td>
</tr>
<tr>
<td>Mr. C. Mulanga</td>
<td>Technologist</td>
</tr>
<tr>
<td></td>
<td>TDAU, School of Civil Engineering UNZA</td>
</tr>
<tr>
<td>Mr. H.M. Mwanakatambo</td>
<td>Deputy Chief Health Inspector</td>
</tr>
<tr>
<td></td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>Mr. M.D. Patel</td>
<td>World Bank Project Co-ordinator</td>
</tr>
<tr>
<td></td>
<td>Department of Water Affairs</td>
</tr>
<tr>
<td>Mr. Tom Rops</td>
<td>Technologist (up to September 1986)</td>
</tr>
<tr>
<td></td>
<td>TDAU, School of Civil Engineering UNZA</td>
</tr>
<tr>
<td>Mr. P.B.M. Shibalatani</td>
<td>Assistant Project Director</td>
</tr>
<tr>
<td></td>
<td>(up to September 1986) Mwachisompola</td>
</tr>
<tr>
<td></td>
<td>Health Demonstration Zone</td>
</tr>
</tbody>
</table>
Mr. T. Tombo  
Tutor (from September 1986)  
Chainama College of Health Sciences

Dr. T. Watts  
Head Department of Community Health (School of Medicine, UNZA) (up to April 1986)

Dr. Weerakun  
Head (up to April 1988)  
TDAU (Technoloogy Development and Advisory Unit) School of Engineering UNZA

Mr. R.C. Zimbe  
Provincial Medical Officer  
PMO's Office, Lusaka Province (from December 1986)
APPENDIX III

LIST OF PSWS PROJECT OUTPUT

M.K. Chimuka
Paper on PSWS Project in Zambia for the 1st International PSWS Project
Meeting Bangkok, Thailand, November 1984

K.L. Kamalata
Paper on PSWS Project
for 1st International PSWS Project Meeting, Bangkok, Thailand, November 1984

M.K. Chimuka
Public Standpost Water Supplies Project, Progress Report, 1984

M.K. Chimuka
Public Standpost Water Supplies Project, Progress Report,
March - July 1985

J. Malama
PSWS/Zambia: Feasibility Study for Demonstration Schemes,
Lusaka, June 1985

D.M. Kabumu
Public Standpost Water Supply in Zambia,
A report prepared for presentation to the IRC workshop,
Sri Lanka, December 2-8, 1985

K.L. Kamalata
Community Participation
Lusaka, May 1986

M.K. Chimuka, D.M. Kabumu, K.L. Kamalata
PSWS/PSSC Projects in Zambia: General Information, Methodology and
Plans: A First Review, Lusaka, May 1986

M.K. Chimuka
Paper on Public Standpost Water Supplies Project (PSWS) in Zambia,
contributed to the Seminar on Information for Rural Water Supply and
Sanitation, Mangochi, Malawi, November 1986

K.L. Kamalata
Paper on Community Participation, contributed to the Seminar on
Information for Rural Water Supply and Sanitation, Mangochi, Malawi,
November, 1986

M.K. Chimuka
Report on the Water Supply and Sanitation Workshop, held in Mangochi -
Malawi from 7th to 11th November, and study of PSWS project sites from
11th to 21st November 1986

K.L. Kamalata
Report on the Water and Sanitation Workshop and Study Tour to Water
Projects in Malawi, from 11th to 21st November 1986

The Public Standpost Water Supplies (PSWS) project in Zambia. An