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PRELIMINARY VERSION

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REPUBLIC OF ZAMBIA

Department of Water Affairs
Department of Social Development
Ministry of Health

PIPED SUPPLIES FOR SMALL COMMUNITIES PROJECT ZAMBIA

INTERIM REPORT

Period: January 1988 - December 1989

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1. INTRODUCTION

- 1.1 The Piped Supplies for Small Communities (PSSC) Project is a follow-up on the Public Standpost Water Supplies (PSWS) Project which Zambia implemented from 1983 to 1987 with the support of the International Water and Sanitation Centre (IRC) and funding by the Netherlands Government's Directorate General for International Co-operation (DGIS).
- 1.2 The PSSC Project Agreement was signed in January 1988 and Project activities started early in the year. PSSC was designed to build up and consolidate the experiences and achievements of PSWS and apply them on a wider scale in Zambia.

2. OBJECTIVES AND APPROACHES

2.1 Objectives

- 2.1.1 The broad objectives of the PSSC Project are to Develop information, to Demonstrate and to Share information concerning the planning and management of piped water supplies for small communities. The objectives of PSSC may be summarised as:
- a) To develop and demonstrate more efficient and appropriate ways of planning, implementing and managing piped water supply systems, with an appropriate sanitation programme as a parallel component, in rural and low income urban fringe areas;
 - b) To promote information sharing and application of general knowledge and understanding at both national and sector policy levels and in other Projects;
 - c) To conduct a series of studies and to prepare guidelines on organisational, socio-economic, financial management and technical aspects of piped water supply and sanitation systems for small communities;
 - d) To set up and develop a number of demonstration schemes as a basis for information development, application, and sharing;
 - e) To contribute to the international exchange of information on aspects of piped water supplies and appropriate sanitation systems in line with the concept of Technical Co-operation among Developing Countries (TCDC).

2.1.2 Like the PSWS Project, the PSSC Project emphasizes community participation, proper use of the facilities provided, development of a sense of ownership by the user community, community-based maintenance, agreed responsibilities between the Government development agency and the Community, and also agreement on contributions by the community towards expenses of operation and maintenance. Whereas the PSWS project was essentially restricted to standposts only, the PSSC project aimed to build in flexible choice and progressive development of service levels as follows:

- house connections
- back yard connections
- neighbourhood connections
- public standposts

2.2 Basic Approach

The scope of the PSSC Project is wider than that of the PSWS, however the Project approach is essentially the same. It consists of three main steps. In the first place the problems and successes encountered with piped water supplies were to be investigated, special attention being given to community participation, financial management, training and organisation for 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 close consultation with the local people a community-based, integrated approach would be demonstrated and monitored. Finally, the experiences gained in the Project would be shared with other experts and agencies involved with water supply, sanitation, and hygiene education. Transfer of knowledge and experience and promotion of a wider application of Project findings would be undertaken not only in Zambia but also throughout the sub-region.

3. INSTITUTIONAL FRAMEWORK

- 3.1 A combined agreement with IRC was entered into by the Departments of Water Affairs and Social Development, and the Ministry of Health.
- 3.2 The implementation of the Project is being guided and monitored by a multi-disciplinary and multi-institutional Project Management Committee (PMC). The PMC has consisted of government ministries dealing with water, economic development, health, social development and local government, as well as NGOs, the University of Zambia, the National Action Committee and the Party (United National Independence Party). The multi-sectoral PMC provides the Project with the necessary technical and political level support for its activities.

3.3 Direct implementation of the project has been carried out by a Project Team consisting of staff from the Ministries of Water, Health and Social Development. Implementation is co-ordinated by the Department of Water Affairs, while other Project Participating Institutions are:

- i) Ministry of Health (Environmental Health Division)
- ii) Department of Social Development

3.4 The project team consists of:

- Project Manager from the Ministry of Health
- One extra team member from the Ministry of Health
- 2 members each from Departments of Water Affairs and Social Development

The team is also assisted by a Project Adviser, and since October 1989, by a locally-based Consultant.

3.5 Project personnel, Co-ordinating and Participating Institutions are listed in Annexe 1.

4. PROGRAMME OF WORK

4.1 The main programme of work consists of three main activities and sub-activities as follows:

- i) Continuing strengthening and monitoring of the previous PSWS Project:
 - completing local demonstration schemes
 - further improving operational procedures at the local demonstration schemes
 - ongoing monitoring and evaluation with the Communities

- ii) Investigating wider types and mixes of piped water supplies and sanitation:
 - replanning and reorganisation
 - review of experiences to date
 - special studies (women's role, cash-raising, technical aspects, sanitation improvements)
 - refinement of improved approaches
 - preparation and implementation of local demonstration schemes
 - monitoring, feedback, adaptation
 - interim and final evaluation
 - identifying and planning follow-up activities
 - preparing revised guidelines based on both PSSC and PSWS experiences

- iii) Sharing information and promoting applications:
- comparing community-based and existing approaches
 - testing and integrating guidelines
 - promoting the improvement of sector policies and programme procedures
 - developing training procedures and integrating into national training procedures
 - in-service training
 - information transfer in Zambia and internationally
 - National Workshops

4.2 The total duration of the Project was set at 36 months. The budget allocated was equal to US\$ 202,000.

5. PROJECT ACHIEVEMENTS

5.1 General

5.1.1 In spite of the difficulties which will be further detailed in section 6, the Project has had some significant achievements. These are presented briefly in sections below.

5.2 National Workshop on Piped Supplies for Small Communities

5.2.1 The first National Workshop on Piped Water Supplies for Small Communities in Zambia was held in Siavonga, Southern Province from 23-27 January 1989. The workshop was attended by Officials from the Water, Health, Social Development and other related Ministries, project officers from other donor-assisted rural water supply projects, as well as sector officials from Malawi and Zimbabwe. The WHO Representative, and the Secretary for Development at the Royal Netherlands Embassy, took part in the first day's plenary session. The opening speech by the Minister of Water, Lands and Natural Resources set the tone for a fruitful exchange of experiences on implementation of piped water supplies in Zambia, and a discussion of strategies for enhancing the effectiveness of community water supply programmes.

5.3 Short Course on communication manuals

5.3.1 A short course on communication manuals and guideline production in Zambia was held in July 1989, in Lusaka. The short course has improved the skills of water and sanitation sector staff in the development and production of guidelines, manuals, and other communication materials. Such manuals are to be used by Project staff and others to promote community-based management.

5.3.2 Since the course the Project Team is preparing manuals and guidelines on technical aspects, community organisation, sanitation improvements, and women's role in piped water supplies. These guidelines will be reviewed and finalised at a short follow-up course scheduled for mid 1990.

5.4 Project Management Committee (PMC) Meetings

5.4.1 PMC Meetings were held on the average every three months. The meetings were opportunities to inform the PMC on the progress being made, to seek ratification by PMC for proposed actions by the Project Team, to plan future programme of activities such as the National Workshop, and secure practical inputs from the collaborating institutions.

5.5 Project Staff Meetings

5.5.1 Project staff meetings were held at least monthly. The purpose of the meetings was to improve working relationships of the Project staff, to review progress, and to carry out detailed planning of activities in accordance with the master programme.

5.6 Reporting

5.6.1 Quarterly reports, Interim Report, minutes of PMC and Project staff meetings were produced and circulated to all PMC/Project staff and to IRC.

5.7 PSWS Review and PSSC Planning Workshops

5.7.1 A structured series of Project review and planning meetings were held as a basis for onward Project development. These included:

i) A PSWS Review Workshop held from 2 to 3 May 1988, in Lusaka. The Workshop was attended by all Project staff and by an IRC Consultant. Also participating were two female extension workers - a Health Assistant and a Social Development Assistant; these had been invited to report on field experience of the Project in their areas. The Workshop reviewed achievements and shortcomings of the PSWS Project as a basis for continued strengthening and monitoring of PSWS under the PSSC Project. During the Workshop the Project Manager conducted field visits to PSWS sites in Chibombo area and Chongwe.

ii) From 9-14 May 1988 the Project Team participated in a Planning Workshop in Lusaka. The Workshop was devoted to refinement of the initial planning and identification of priority activities under the PSSC Project. It was agreed that more detailed planning would follow later.

5.8 Implementation re-planning

5.8.1 An interim Planning Workshop was held from 30 August to 1 September 1989, in Lusaka. It was attended by Project staff from Water Affairs Department, Department of Social Development, the Ministry of Health, the University of Zambia, and the local Project Consultant Dr. I.L. Nyumbu. The objective of the Workshop was to review the progress achieved since January 1988 and to plan for implementation of activities within the framework of the original Project duration (1988-1990) and Workplan. The Project Team continued to carry out detailed planning during a Workshop held from 5 to 6 December 1989.

5.9 International Visits

5.9.1 In April, 1988 Mr. D. Ng'ambi - Project Engineer and Mrs. G. Muzyamba Project Supporting Officer attended a one week PSWS/Malawi evaluation workshop held in Malawi in line with the concept of TCDC.

5.9.2 In the same year Mr. M.K. Chimuka - Project Manager and Mr. K.L. Kamalata, Project Adviser, attended a PSSC National Workshop in Blantyre, Malawi that was held in October 1988.

5.10 Preliminary Selection of Local Demonstration Schemes

5.10.1 At the second PMC meeting held in 1988 the PMC members tentatively identified sites to be developed as Local Demonstration Schemes under PSSC in Zambia. These were:

Central Province

- a) Kapyanga Area - Mumbwa District
- b) Itala Compound - Mkushi District
- c) Nakole Compound - Kabwe Township

Lusaka Province

Rufunsa Police Camp - Lusaka Rural District

Western Province

Namushakende - Mongu District

Southern Province

Sianjalika Mission - Mazabuka District

Northern Province

Chilonga Mission - Mpika District

Members also resolved that the PSSC sites selected should be in 3 different categories viz:

- Extension schemes to peri-urban areas e.g. Nakole and Namushakende
- Rehabilitation schemes to places where there used to be water reticulation systems e.g. Kapyanga, Rufunsa and Sianjalika, and
- New schemes at Chilonga and Mkushi

5.10.2 Feasibility Studies by Provincial Water Engineers

Provincial Water Engineers in all 5 Provinces that were selected for demonstration schemes were requested to carry out detailed feasibility studies of suggested sites and submit the findings to the Chairman of the PMC. This was done and the findings from the studies carried out were presented at the National Workshop held in Siavonga from 23 - 27 January 1989.

However, since the reports came only from the Provincial Water Engineers the PMC requested the other Provincial Heads from Ministry of Health and Department of Social Development to carry out feasibility studies on socio-economic, health and hygiene aspects.

However, a careful review and replanning of Project activities, carried out at the replanning workshops, has revealed the need to limit the number of Local Demonstration Schemes. Subject to a final decision by the PMC, the choice of schemes will include the following schemes, all within 300 km. of Lusaka City:

- i) Soloborn - Kafue District (Lusaka Province) Peri-Urban Rehabilitation
- ii) Kasengeli - Kafue District (Lusaka Province) Rehabilitation and Extension
- iii) Kapyanga - Mumbwa District (Central Province) Rehabilitation and Extension
- iv) Lusitu - Siavonga District (Southern Province) Rehabilitation and Extension.

The Project Team has so far carried out social and technical feasibility studies of these and other (in Northern, Central and Western Provinces) schemes. Reports are being prepared for the PMC's decision.

6. CONSTRAINTS TO PROGRESS

- 6.1 The main constraints to progress came from both internal and external factors some of which were not within the control of the Project. These affected the execution of the Project.
- 6.2 Among the internal constraints, a major one was related to country-level management of the Project. Although the Project had a full time Zambian Project Manager it lacked effective leadership. This was a result of a combination of factors such as remote location of the Project Manager's office and place of residence. It was also apparent that the Manager (although full time) had other commitments and professional responsibilities to the Ministry of Health besides PSSC. This situation at

times led to problems of administration, calling forward of funds, co-ordination and supervision of PSSC Project activities.

6.3 Delayed delivery of Project vehicle

6.4 A number of external factors related to the Project environment also seriously affected the progress. They include:

i) Interim reorganisation of the Ministries in Zambia led to the transfer of the Project Co-ordinating Institution (Department of Water Affairs) to a new Ministry. This seriously affected the disbursement of funds and administrative procedures.

ii) Shortage of professional manpower in all three project participating institutions affected planned support for the project.

iii) Competing demands on the project team members due to additional unforeseen programmes in respective participating institutions.

7. RESOLUTION OF CONSTRAINTS

7.1 The Project Management Committee has already taken steps to improve the leadership of the Project. Since February 1990, a new Acting Project Manager has been appointed from one of the Senior Members of the Project Team who reside in Lusaka. Selection of a new Manager is underway.

7.2 The Project Team has been reconstituted and strengthened by the addition of two Project Officers from both the Departments of Water Affairs and Social Development. There are now two women on the Project Team who will anchor the community participation activities.

7.3 The Project Team as a whole has carried out detailed review and replanning of the Project and has produced a comprehensive plan. The Team has a clearer understanding of the objectives, the approach, and specific details of the implementation of responsibilities, and greater appreciation of the inter-relationship between the components that make up the project.

7.4 A new and more reliable project vehicle (Toyota Landcruiser) is now available for Project activities. The older vehicle is being rehabilitated.

- 7.5 The project has received sufficient advance of funds from IRC and is able to plan and implement project activities. Disbursement procedures within the coordinating institution (Department of Water Affairs) have been streamlined.

8. **FUTURE WORKPLAN AND BUDGET**

- 8.1 Following the series of planning workshops, the Project Team has prepared a new workplan for completing all activities identified in the original plan. The revised Workplan extends beyond the Project period by 18 months. This extension reflects what the Project Team considers to be a reasonable time to complete the activities. It is clearly understood that such an extension is subject to an agreement between the Government of Zambia and the supporting and funding agencies (IRC and DGIS).
- 8.2 A priority activity is the implementation of Local Demonstration Schemes. Considerable preparatory work has been carried out, and the Project Team is poised ready to begin the implementation once the PMC has ratified the detailed preparation.
- 8.3 A budget revision has been carried out as a result of the detailed replanning Workshop. The budget is presented in Annexe 2, and shows the total expenditures in 1988 and 1989 as well as projected expenditures for 1990, 1991 and 1992. The grand total required of US\$ 256,000 is in excess of the original budget by US\$ 54,000. The extra budgetary requirement will be the subject of a request to IRC.

Annexe 1

PSSC/ZAMBIA

PROJECT PERSONNEL, CO-ORDINATING AND PARTICIPATING INSTITUTIONS

Personnel: (time inputs vary)

Mr.M.K.Chimuka	Project Manager (until February 1990) (Ministry of Health)
Mr.D.Ng'ambi	Acting Project Manager (from February 1990) (Department of Water Affairs)
Mr.O.Chanda	Assistant Project Engineer (Department of Water Affairs)
Mr.D.Mwanza	Assistant Project Engineer (Department of Water Affairs)
Mrs.G.Muzyamba	Project Officer (part 1988 only) (Department of Social Development)
Mrs.I Kabombo	Project Supporting Officer (Department of Social Development)
Mrs.A.I.Simasiku	Project Supporting Officer (Department of Social Development)
Mr.R.Banda	Assistant Project Supporting Officer (Department of Social Development)
Mr.K.L.Kamalata	Project Adviser (Department of Social Development)
Dr.I.L.Nyumbu	Project Consultant

Co-ordinating institution:

Department of Water Affairs	telephone:215281
Ministry of Water, Lands and Natural Resources	telex:43950 ZA
Mulungushi House	cable:ZAMWATER LUSAKA
PO Box 50288	
Ridgeway	
LUSAKA	
Zambia	

Principal Participating Institutions:

Ministry of Health	telephone:Lusaka 211528/213435
Woodgate House	
Cairo Road	
PO Box 30205	telex:via WHO 40920 ZAWHO
LUSAKA	
Zambia	
Department of Social Development	telephone:Lusaka 213860/212461/212040
Ministry of Labour and Social Services	
Letchwe House	
PO Box 31958	
LUSAKA	
Zambia	

Annexe 2

PSSC PROJECT ZAMBIA

REVISED BUDGET

JUNE 1990

	EXPENDITURES		BUDGETS			TOTALS \$
	1988 \$	1989 \$	1990 \$	1991 \$	1992 \$	
1. TRANSPORT (VEHICLE, SPARES, FUEL)	38,884	2,502	3,580	4,180	2,640	51,786
2. LOCAL DEMON- STRATION SCHEMES		154	33,750	31,500	-	65,404
3. PROJECT EQUIPMENT	320	78	1,000	800	-	2,198
4. NATIONAL WORKSHOPS		18,440	-	10,000	-	28,440
5. LOCAL WORKSHOPS		682	1,400	1,400	400	3,882
6. TRAINING COURSES			1,800	1,800	900	4,500
7. GUIDELINES/ SUPPORTING MATERIALS			6,000	6,000	3,150	15,150
8. SPECIAL STUDIES		9,650	2,500	2,500	650	15,300
9. EVALUATIONS	136	159	-	-	4,500	4,795
10. TRAVEL SUBSISTENCE FOR PROJECT TEAM	429	131	11,000	11,000	4,400	26,960
11. ESTABLISHMENT OF REFERENCE FACILITIES			1,000	1,000	-	2,000
12. PMC HONORARIUM	469	345	800	800	500	2,914
13. PROJECT TEAM SUPPLEMENT		1,407	3,000	3,000	1,500	8,907
14. INTER-COUNTRY ACTIVITIES	4,789		4,000	4,000	2,000	14,789
SUB TOTALS	45,027	33,548	69,830	77,980	20,690	247,025
Contingencies	-	-	3,700	4,100	1,175	8,975
GRAND TOTAL				GRAND TOTAL:	US\$	256,000