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PUBLIC STANDPOST WATER SUPPLIES  
multi-country demonstration project

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PROGRESS REPORT

at

30th June, 1986

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International Reference Centre  
for Community Water Supply and Sanitation

P.O. Box 93190,  
2509 AD The Hague  
The Netherlands

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part outlines the various methods and tools used to collect and analyze data. This includes both traditional manual methods and modern digital technologies, highlighting the benefits of each approach.

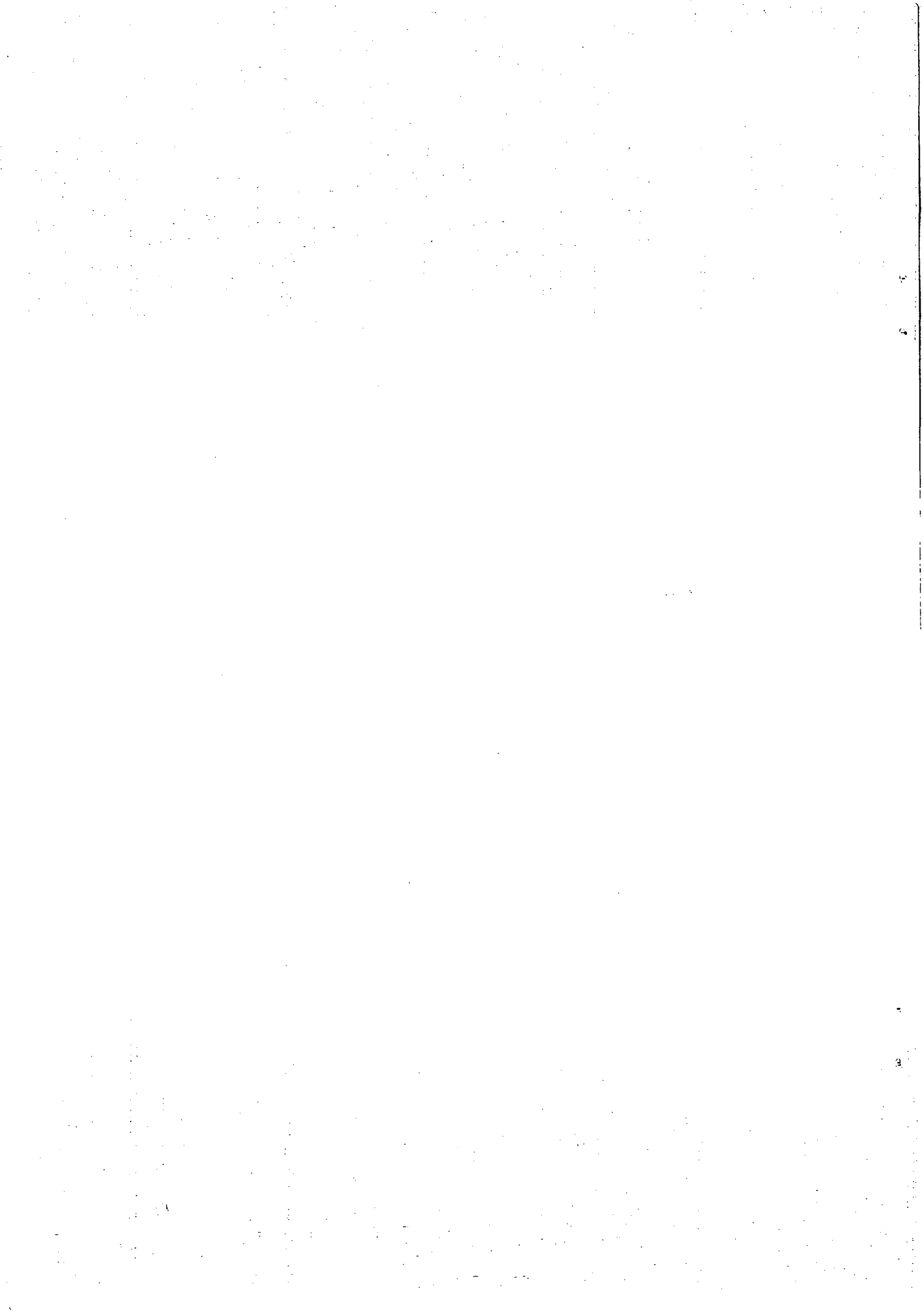
3. The third part focuses on the challenges and risks associated with data management, such as data loss, security breaches, and compliance issues. It provides strategies to mitigate these risks and ensure the integrity of the data.

4. The final part discusses the future of data management, including emerging trends like artificial intelligence and cloud computing, and how they will impact the way organizations handle their data.

CONTENTS	Page
1. SUMMARY REVIEW	2
2. PROGRESS ON THE COUNTRY PROJECTS	
2.1 Indonesia	4
2.2 Malawi	6
2.3 Sri Lanka	9
2.4 Zambia	12
3. PROGRESS ON INTER-COUNTRY AND SUPPORT ACTIVITIES	15
4. PLANNED ACTIVITIES FOR THE REMAINDER OF THE PROJECT	18
4.1 Introduction	18
4.2 Indonesia	18
4.3 Malawi	18
4.4 Sri Lanka	19
4.5 Zambia	20
4.6 Inter-Country and Support Activities	21
5. FINANCIAL REVIEW	22
 APPENDICES	
APPENDIX A Project Background	24
APPENDIX B Organisational Framework	26
APPENDIX C List of Project Staff and Project Co-ordinating Institutions	28
APPENDIX D List of Written Output and Project Documents	30

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## 1. SUMMARY REVIEW

The multi-country PSWS project, funded by DGIS through IRC, aims to provide a framework in which the participating countries, with IRC support, are encouraged to develop improved approaches to public standpost supplies. This is an important level of service within developing-country water supply which nonetheless continues to meet problems worldwide. In addressing these problems, the project promotes the development of approaches that involve the community at every stage and which take account of the social, financial and operational issues as well as the essential technology. Formally underway in Indonesia, Malawi, Sri Lanka and Zambia since early 1983, actual start dates have been staggered, due to in-country circumstances.

The project was subject to an evaluation during 1985. An innovative evaluation approach was used whereby the project was cross-evaluated by national project staff from the other participating countries, guided by an independent developing-country team leader. This approach proved to have important information transfer and learning spin-offs. The evaluation concluded that the project had scored well against its goals, although progress had generally been slower than planned. Further consolidation of the demonstration schemes and action to encourage the use of project findings in larger scale programmes and policy were needed. Such activities are planned for the remainder of 1986.

The mandate for the PSWS project expired on 31st December '85 and it did not prove possible for confirmation of its extension and of supplementary funding to be given until June 1986. Because of this, some momentum has inevitably been lost during the first half of 1986. Transfer of further funds to the participating countries was postponed and no major new IRC activities in support of the project could be initiated in the first half of 1986. Nonetheless project activities are again now accelerating to make maximum use of the final 6-months of the project. On a country-by-country basis, progress since the Evaluation report can be summarised as follows:

In Indonesia, work has continued in support of the demonstration schemes at Gumulung Tonggoh, Jagasiri, Playangan, Karya Mulia, Cikijing and Kasenden. Gumulung Tonggoh, the first completed, has been monitored and community inputs to the management of the schemes supported. Further reports and a brochure on the project in Bahasa Indonesia have been produced by national participants and training courses and briefing meetings continued at several levels as part of the information-transfer process. A major final national workshop is planned to present and share Indonesian experiences of community-based approaches, with special emphasis on standpost supplies.

The project in Malawi got underway after earlier delay due to recruitment difficulties. A full-time Malawian Project Officer has been appointed by the Department of Water and staff have also been assigned from the Ministries of Health and Community Services. Because of time limitations the project in Malawi has concentrated on study and improvement of a number of existing piped schemes in small district centres. There are a large number of these and further

schemes are planned by Government. Potential for wider-scale pick-up of the improved approaches is thus high in Malawi.

In Sri Lanka the demonstration schemes at Haldumullah and Seelatena became operational. The latter scheme involves rehabilitation, with community participation, of a scheme which failed under an earlier programme. Community preparation work and hygiene education at the third scheme, Wijebahukanda, has continued, with construction planned during 1986. An important development in the Sri Lankan project is the successful development of a parallel sanitation programme, with latrine components being manufactured at local level and widely accepted by the communities. Technical inputs from WHO have been important here. A number of papers have been produced by national staff in Sri Lanka including a Sanitation Manual and draft Community Participation Guidelines intended for national use. These guidelines were reviewed at a national workshop on the project at which the views of a number of Sri Lankan agencies were again sought on the approach and findings. Participants from the PSWS project in Indonesia, Malawi and Zambia also attended and the workshop included practical field visits to the demonstration schemes.

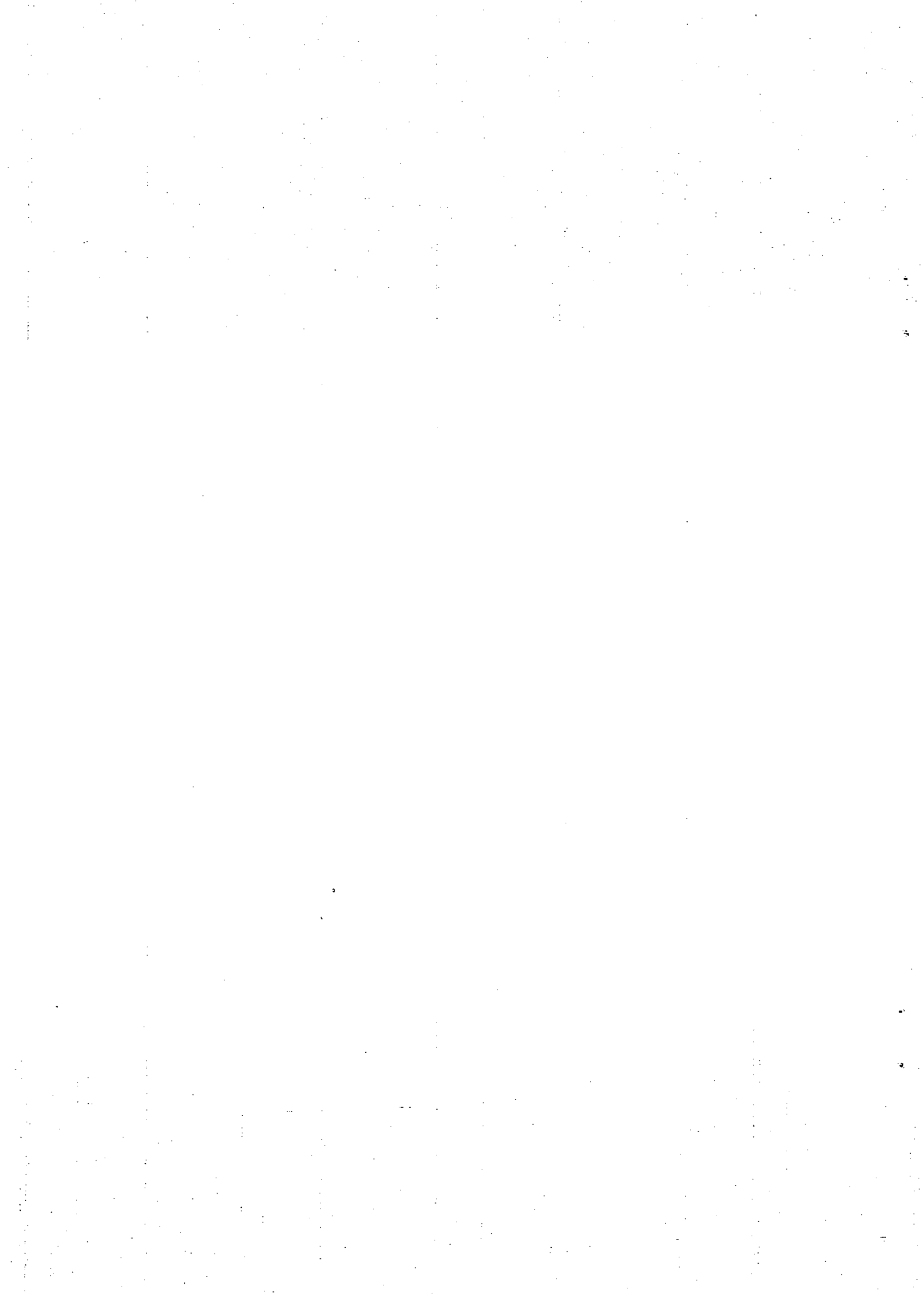
The project in Zambia has continued to develop steadily, with local demonstration schemes operational at Chibombo as well as Mwachisompola. As in Sri Lanka, the piped water supply schemes are being accompanied by sanitation and hygiene education programmes and a number of latrines, usually using local materials and traditional building methods, have been constructed by participating communities. A Zambian project water engineer from the Department of Water Affairs has joined the Ministry of Health-based Project Manager. Because of the endorsement of the project by senior officers in key ministries and their participation in the Project Management Committee, the prospects for wider use of the findings are promising.

IRC's support to the project during the period has included co-ordination and support visits to the participating countries by the IRC Project Manager and consultants, organisation of and support to the Evaluation, and continuing information exchange. The development of guidelines for community-based financial management for piped supplies has progressed well and publication of these as an IRC Occasional Paper is planned for late 1986. This will join earlier project-initiated publications, including a literature review for public standpost water supplies and guidelines on hygiene education. Practical guidelines to promote the potential for community-based maintenance are also planned, and groundwork on the development of a new IRC Technical Paper on piped supplies has also continued. Contacts have been maintained with the Royal Netherlands Embassy staff, WHO and other agencies and projects.

During the period under review proposals for follow-up to the PSWS project have been discussed and developed with a number of potential participating countries. All four countries which participated in the PSWS project are keen to build on the project further and there is strong interest too from Zimbabwe. During early 1986 the proposal for a follow-up programme, "Piped Supplies for Small Communities" was formulated based on country-initiatives and funding support sought from DGIS. The new programme would have a Southern-Africa focus (Malawi, Zambia, Zimbabwe). It would widen the development and

promotion of community-based approaches to cover various types of piped water supply (group, yard and house connections as well as public taps), encourage a flexible approach to service levels and give new emphasis to local organisation and financing for sustained operation of completed schemes.

Discussion on the potential for appropriate follow-up activities in Indonesia and Sri Lanka has also been developed further with country-participants and others and these will be continued in coming months.





## 2. PROGRESS ON THE COUNTRY PROJECTS

### 2.1 INDONESIA

#### General

At this reporting point some general conclusions may be drawn regarding PSWS project progress in Indonesia:

- \* Under the direction of Indonesian project staff, a workable, community-based approach to rural piped water supplies has been developed and effectively demonstrated in several locations in West Java;
- \* A most important point in the Indonesian context is that this approach has been developed within existing frameworks of hierarchical local-government and community leadership structures. Full consultation at all levels is thus a key feature of the approach;
- \* The project has been developed by the main government research and development institute for public works and close links have been maintained with and inputs made by the implementing agencies of Cipta Karya, Ministry of Health and Ministry of Interior;
- \* Largely because of the foregoing two points, the approach is accepted as meritworthy and appropriate by policy makers and implementers, particularly in Cipta Karya. There are a number of indications that the approach is endorsed, that findings are being built into training materials and policy, and that it will be more widely applied;
- \* Good documentation has been prepared on the project approach and findings. Although largely in Bahasa Indonesia, some is also in English;
- \* Initial sharing of ideas and resulting consensus before and during formulation of the approach was excellent through two national workshops ('83 and '84) and a number of meetings and discussions; A major national workshop is planned for December '86/January '87 in order to wider share and seek comment on the community-based approach developed and its relevance for other programmes.

#### Project Team

Mr. A. Parwoto of IHS has for some time been in-charge of the direction and day to day management of the PSWS project in Indonesia as PSWS Project Officer. The formal Project Manager is the IHS Director, Ir. Ritonga.

A number of more junior sanitary engineers and assistant researchers, both men and women, work under Mr. Parwoto's direction. There has been a positive commitment to sensitise junior staff in both IHS and DJCK to the development of the more community-oriented approaches through involvement in the project.

### Project Management Committee (PMC)

The PMC continues to meet at intervals, usually under the chairmanship of DJCK's Director General or Director of Water Supply. The Committee has proved an important mechanism for the endorsement and promotion of wider application of the project results.

### Local Demonstration Schemes

All six schemes (Kasenden, Karya Mulia, Playangan, Gumulung Tonggoh, Cikijing, Jagasiri) have been commissioned. Except for Playangan, all are reported to be operating successfully, with evidence of community-initiated maintenance and revenue collection.

Further details of the activities at the local demonstration schemes and of how the community-based approach has been developed and adapted are given in current and planned country-level reports (ref. Appendix D).

Although the experiences generated have generally been very positive there are two areas of difficulty which have nonetheless also yielded learning experiences. One is the lack of success in integrating sanitation developments alongside the new water supplies, the other the difficulties of adapting technology in order to bring piped water supply to the lower-income users at Playangan.

A highly useful self evaluation of the schemes was recently organised by national project staff. Cadets (community motivators), typical users and local government representatives from each demonstration scheme were brought together to discuss and review the approach developed and come up with some conclusions. One of these was that the 3-stage training process (training of trainers, training of cadets, training of community users) had proved particularly successful.

### Dissemination

Mr. Darmawan's presentation on the PSWS Project at the Asian Water Technology conference in Kuala Lumpur last year is widely referred to and is taken (by WHO and others for example) as evidence of DJCK's commitment to the approach developed.

The Assistant Governor of West Java observed part of the above mentioned self-evaluation exercise and stated that he approved of the approach developed and wished to see it used on a wider basis.

A presentation was made recently by the PSWS Project Officer on the project approach to officers of the Directorate of Housing, DJCK. The approach has interest for them for use in integrated housing/ environment/ infrastructure projects. Several other presentations to Universities and other bodies are planned.

An important mechanism for dissemination of the project findings and community-based philosophy is through promotion and re-posting of staff who have worked on the project. These are good examples of this in Indonesia.

## 2.2 MALAWI

### General

After a number of delays the PSWS Project in Malawi got underway during this reporting period. Project activities are focussing on the consolidation and broadening of approaches developed under the earlier UNCDF/UNDP/WHO Urban Communal Water Point Project and dissemination of the improved concepts, (particularly the tap-committee approach to local management).

### Project focus

By focussing on a limited number of schemes under the existing Urban Communal Water Point (UCWP) Programme and through studies and monitoring activities, the PSWS project in Malawi is enabling more to be learnt about the systems developed and the communities and institutional structures within which they operate. PSWS is therefore strengthening the earlier programme both by helping ensure continuity and by promoting the introduction, on a pilot basis, of components lacking in the earlier programme, such as sanitation and hygiene education.

### Project Management

The creation of a newly-established non-technical post of PSWS Project Officer/Water Co-Ordination Officer within the Water Department was a significant initiative and one that is likely to have long-term impact. This is a permanent position at a senior level and can be seen as an important development which the project has directly stimulated. It should increase liaison on health and social issues in water and sanitation projects and further promote inter-ministerial liaison.

Mr. F. Kwaule took up this position in early 1985. He has a non-technical background with a degree in social sciences and a diploma in development communication. His work experience includes the area of journalism. These skills should prove very useful to the project in Malawi.

A familiarization programme and initial workplan was undertaken by the Project Officer including:

- . orientation within DoW
- . familiarization with the UCWP Project
- . background reading/preparation
- . selection of sites
- . pilot observation and monitoring programme
- . initial study into the concept of local Centre Water Councils
- . medium-term planning.

There are increased restrictions on the extent of internal travel by government officers, which may affect the mobility of the Project Officer in coming months. In addition housing for the Project Officer remains a major constraint.

Project staff

Counterpart staff have been nominated to work with the Project Officer, both from the Ministry of Health (Mr. D.T. Nyasulu, Principal Health Co-ordinator) and from the Ministry of Community Services (Mr. I.Z. Nkunica, Senior Community Development Officer).

It has been agreed that Mr. Lupiya, the Water Department Engineer for communal water point schemes, will support all technical aspects of the PSWS Project. He is a graduate Professional-Officer level civil engineer.

Three temporary Field Assistants have been recruited by the Water Department and a fourth is planned. These are to be based at each of the current demonstration schemes to support the Project Officer in field-related activities. Mr. Sam Mlemba and Mr. Cromwell Manjawila are based respectively at Salima and Mponela/Dowa whilst a lady Field Assistant, Ms. Rebecca Banda is based at Kasungu.

A three-week training/induction course was organised for the Field Assistants by the Project Officer and individual work-plans prepared in conjunction with them. An additional short training course for the Field Assistants has been offered by the Ministry of Community Services.

A new Driver has been permanently allocated to the project vehicle and administrative support continues to be provided by the Water Department.

Project Working Group/Project Participating Institutions

Contacts were maintained and meetings held with senior officials of the Ministry of Health and Ministry of Community Services. These ministries participated in an inaugural Project Working Group meeting, initiated by the Water Department in late 1985. The meeting confirmed willingness and interest in supporting the project, in making inputs to planning and implementation via the project working group and in making extension workers available at the demonstration schemes.

Demonstration Schemes

Four schemes under the UCWP programme have been selected for detailed monitoring and support under the Malawian PSWS project. These are:

- \* 2 'mature' schemes (over 2 years' operational experience) (Salima and Dowa/Mponella)
- \* 2 'newly commissioned' schemes (Likuni and Kasungu)

All sites selected are within one day's travel of the PO/WCO's base in Lilongwe.

Project activities, particularly the installation of Field Assistants, have had a positive influence on community responses to the management of the schemes, and credit balances have increased. Central Water Councils and tap committees are being re-activated in each location.

### Project Output

Based on surveys, monitoring and action-research at the demonstration schemes, excellent studies and reports are now flowing from PSWS Malawi.

A detailed Preliminary Field Report, detailing the results of field studies at the four completed schemes under study has been prepared. This presents positive and negative aspects of the communal water point approach and makes valuable recommendations as to how it could be further strengthened.

Quarterly and summary monthly progress reports are prepared by the Project Officer.

### Planning for a new project on Piped Supplies for Small Communities

Further detailed planning work was carried out by project staff on the proposed Piped Supplies for Small Communities (PSSC) project in Malawi, 1987-89. This was in response to DGIS's request for more information on country-level workplans (including tentative selection of new local demonstration schemes) in support of the multi-country PSSC proposal submitted to them by IRC in early '86.

A workplan, budget and master programme have been prepared and a telex confirming strong interest in participating in the new project sent to IRC by the Water Department.

### Project Transport

A project vehicle (Toyota pickup) has been purchased and is allocated to the Project Officer under the control of the Chief Water Supply Officer. Supplementary transport is available to the Project Officer via the Water Department for transporting larger groups of personnel or materials. Field Assistants have been issued with bicycles.

### Liaison

Liaison has been further strengthened with WHO and UNDP and with the UNDP/UNCDF/WHO UCWP Project.

The Royal Netherlands Embassy in Lusaka is kept informed of project developments in Malawi.

The Malawian Project Officer and PSWS Field Assistants assisted external consultants for two weeks in their social-economic study for the District Water Supply Master Plan funded by the African Development Bank.

The Malawian Project Officer attended the Sri Lankan National PSWS Workshop in Colombo in December '85 and presented a paper there on the Malawian project experience.

## 2.3 SRI LANKA

### PSWS Demonstration Scheme Progress

Both Haldummulla and Seelatenna local demonstration schemes are now operational. There are about 18 taps in each community and a good coverage of water-seal latrines. Both communities are well motivated and committed to self-reliance. Detailed mechanisms to build on this in terms of practical O & M and revenue generation procedures are now under development by project staff.

At Wijebahukanda the process of community motivation is well developed, hygiene education programmes are underway and construction is beginning.

It has proved impossible to progress the scheme at Padaviya due to security reasons and the future of this scheme is uncertain.

### Development of Methodology

The development of a community-based approach in the first two demonstration schemes, has been successful. This has given project staff confidence both to share the lessons and experience of the project with others at a major national workshop and, increasingly, to use the approach as the basis for the development of manuals and guidelines.

### National Project Workshop

A major workshop was held in the context of the PSWS project from 2-6 December 1985 in Colombo. Entitled "National Workshop to Share Experiences of Public Standpost Water Supply and Sanitation Projects Planned and Implemented with Community Participation", it brought together over 50 participants from Sri Lanka's water and sanitation sector including governmental, non-governmental and international agencies.

There was a good spread between field level and more centrally placed staff. One representative of the PSWS project from each of Indonesia, Malawi and Zambia (Messrs Buce, Kwaule and Kabumu) was also able to attend under IRC sponsorship.

A senior officer of the Ministry of Housing, Local Government and Construction, and representatives from UNDP, WHO, UNICEF and IRC each made statements at the opening ceremony.

The workshop's first day was designed to concentrate on presentation of experiences with days 2 and 3 taken up with Field visits to the PSWS demonstration schemes at Haldummulla and Seelatenna. The final two days were spent in group work (problem analysis, review of the draft national guidelines for community participation in water supply and sanitation) and reporting.

Achievements and outputs of the workshop included:

- \* Energetic debate and airing of many of the key issues amongst Sri Lankans themselves;
- \* Recognition by Sri Lankans outside the project that considerable progress has been made within PSWS Sri Lanka towards development of a community based approach for wider use;
- \* Internally generated acknowledgement that more remains to be done within the project on operation and maintenance, financial management and aspects of standpost design;
- \* Re-motivating project staff by making them aware that the project subject-area is of real interest to their colleagues;
- \* Orientation of the Sri Lankan PSWS project activities for 1986;
- \* Special recognition that the innovative approach to sanitation (using village fabrication of slabs and siphons) had worked and should be copied;
- \* Detailed feed back and suggestions for major improvement of the draft Sri Lankan CEP manual, based on the project approach;
- \* Opening up of new contacts between Ministries.

National staff intend to have a summary workshop report available shortly.

#### Recent Project Output

The draft Community Participation manual prepared by national staff was extensively reviewed during the workshop and a number of proposals made for its restructuring and improvement. A small working group is now developing it further in Sri Lanka, for finalisation late 1986.

An updated paper was prepared by national project staff for the workshop, ("Community Participation: How it worked in Haldummulla and Seelatenna").

#### Project Administration

The Project Management Committee has continued to meet regularly to guide and support project development.

Mr. W.A.N. Weerasinghe (Project Officer) replaced Mr. S.J.P. Weejeagoonewardene as Project Manager during the latter's study leave in Germany. Mr. Weejeagoonewardene has since again taken up the responsibilities of Project Manager on his return to Sri Lanka and Mr. Weerasinghe's departure to study in the USA.

Mr. H.I. Karunadasa continues as Project Officer with special responsibility for community participation aspects and is assisted by Mr. Abekoon, a retired health educator, at the Haldumullah and Seelatenna schemes. Mr. Abekoon replaces Mr. Kaleel, who has joined the Rural Sanitation Unit full time.

#### PSWS Video

A professionally produced video-film has been commissioned by project staff to record and share the experience of the Haldumulla PSWS demonstration scheme. A copy has been obtained for IRC use internationally in sharing project experiences.

Rural Sanitation Unit

The unit has been set up within the NWSDB to provide sociological and hygiene-education support to water and sanitation projects. The influence of PSWS project activities on its formation is acknowledged by the NWSDB and others. Mr. H.I. Karunadasa (PSWS Project Officer) will share his present duties with those as Chief of the new unit.

Liaison

A representative of the Ministry of Plan Implementation (Mr. J.S. Ameresekere) attended the PSWS workshop and liaison was actively promoted between NWSDB, MPI and PSWS/Sri Lanka during the workshop and subsequent discussions.

Liaison was maintained with Messrs. Bruinsma and Zeldenrust of the Royal Netherlands Embassy in Colombo.

Close co-operation with WHO was continued through Mr. U. Percy Lao, WHO Sanitary Engineer, who advises the project management committee and has made major inputs in promoting the in-parallel sanitation activities.



## 2.4 ZAMBIA

### Project Team

A very strong national project team is now working on the project. Mr. Moses Chimuka, a District Health Inspector with the Ministry of Health continues as Project Manager and contributes particular skills in community consultation and hygiene education.

Mr. David Kabumu, a qualified engineer, joined as Project Engineer in December '85. This has proved an important strengthening of the project team from the Department of Water Affairs at a management level. He makes both much-needed technical inputs to the project and assists the process of transferring the project experiences and methods into larger-scale DWA programmes. Mr. Joshua Malama acted as Technical Support Officer to the project for a period pending Mr. Kabumu's appointment.

Mr. Kenny Kamalata, a very well experienced Principal Social Development Officer continues to generally support the development of the project in Zambia, and acts as principal liaison person with the Department of Social Development.

The Project Team's existing project vehicle (Toyota Pickup) continues in service but servicability suffers from a general shortage of spare parts in Zambia.

### Project Management Committee

The Project Management Committee continues to be a very strong component of the Zambian project. It successfully reinforces the project, particularly as there is a growing commitment to see the PMC as platform for inputs as well as a steering group. The PMC continues to be chaired by the Director, Department of Water Affairs, with senior representatives of participating institutions (Ministry of Health, Department of Social Development, University of Zambia), the National Decade Adviser and project staff also participating.

### Progress at the Local Demonstration Schemes

#### General

Until recently all schemes have been affected by a shortage of professional engineering skills within the Zambian team. This has now been overcome with Mr. Kabumu's appointment. At all schemes there is a clearly mobilization of and support from communities and evidence of successful informal hygiene education. In most cases the existing Health Committee has been used as the basis of the Water Committee, with appropriate strengthening.

Importantly, a charging policy has been developed and agreed with the communities based on a flat rate of 2 Zambian kwacha per house per month.

Construction materials have been donated from a number of sources including the communities themselves, neighbourhood missions, farms and commercial companies, as well as some contribution from the Department of Water Affairs.

#### Mwachisompola

At Bolingo compound the first 'model' standpost continues in use. It was implemented largely through community inputs to location, materials, construction and agreement on revenue and is maintained by a local "plumber" from the community. Further standposts are planned in the fast-growing hospital satellite village.

Two demonstration "VIP" latrines have been constructed nearby, funded by a local manufacturer. These offer a contrast to the more appropriate VIP and standard latrines which the project has promoted in the compound itself. These have mudwalls and thatched rooves but are equally effective. The latrines and the cleanliness of the settlement show that hygiene education activities have been very effective here.

At the Rural Health Centre there has been slow progress in the rehabilitation of a broken borehole, diesel pump and three old standposts from an earlier scheme. This is mainly due to the non-availability until recently of engineering skills within the project to prepare designs, specify improvements and cost out alternatives for discussion with the communities and local council.

#### Chimbombo

At Kaongo Village/Primary School three standposts are operational although there are technical problems in the earlier system which are currently being investigated. At Chiyuni two of the three standposts planned are operational.

#### Chongwe

Some materials have been purchased, a community-fund established, and donations received. Following extensive community consultation self-help construction is now underway.

#### Planning for a new Project on Piped Supplies for Small Communities

An internal detailed review of progress within the PSWS project in Zambia has been undertaken by the project team and points raised in the Interim Evaluation report further developed. Facilitating factors, constraints and objectives that had been met or only partially met were identified. This review formed a good basis for planning the potential new activities.

The three-man project team have developed a workplan, budget and outline programme for a new 3-year PSSC project in Zambia 1987-89. This planning work was adopted by a special meeting of the Project Management Committee. A letter of "strong interest" has been sent by the Zambian Government to IRC, signed by the Chairman of the National Action Committee.

This more detailed planning for follow-up activities was stimulated by DGIS's request for information on country-level plans for the new project, in response to the submission of a new multi-country proposal by IRC in early '86.

#### Dissemination

The Zambian Project Engineer attended the Sri Lankan National PSWS Workshop in December '85 and presented a paper there on the Zambian project experiences.

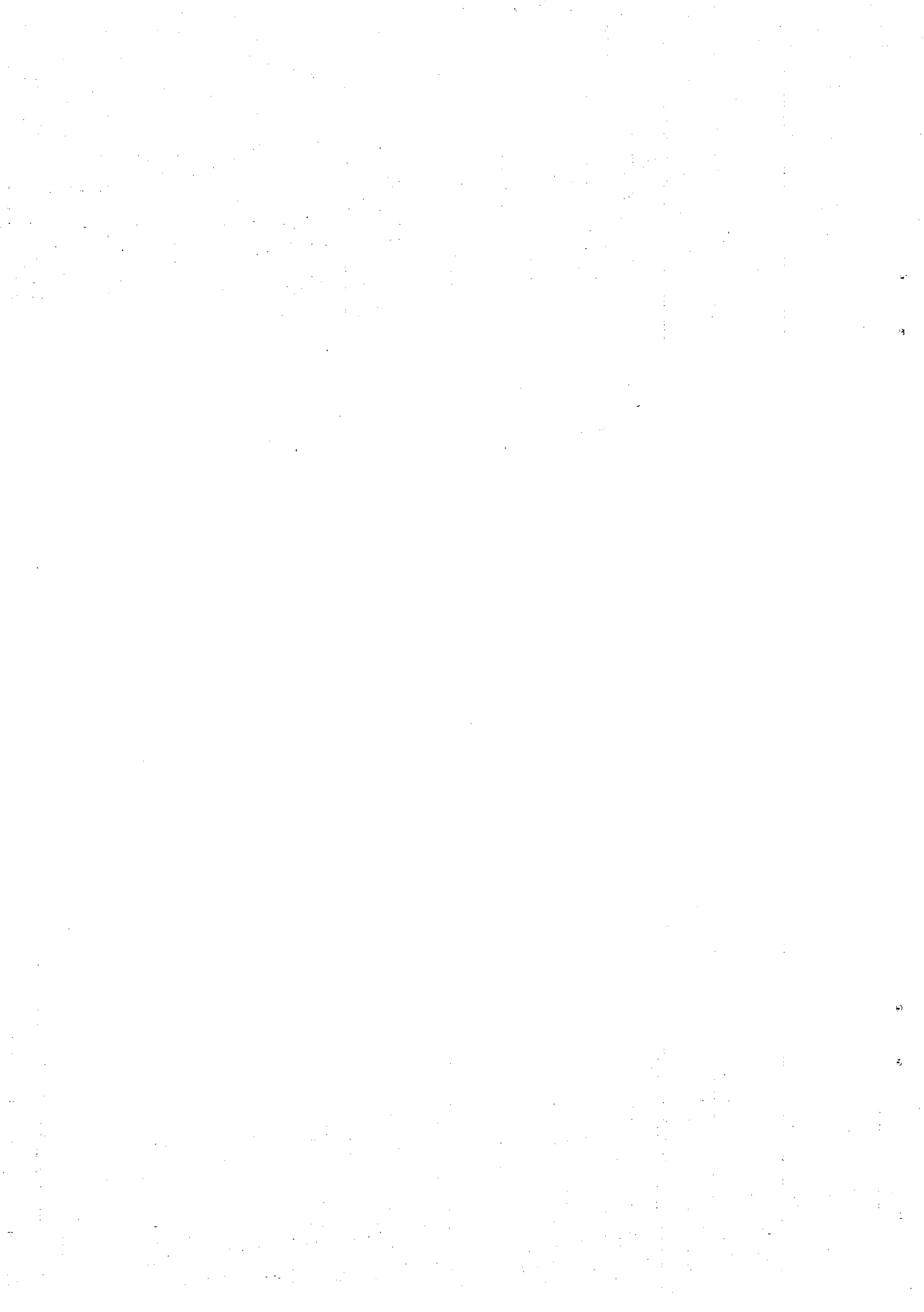
A study visit was made by the Zambian Project Manager to standpost schemes of the Lusaka Urban District Council, to exchange information and experiences on the problems of public taps and the approaches used.

The Project Management Committee now makes occasional field visits to view the progress of the demonstration schemes and to further discuss the implications of the methods used for larger scale programmes.

Other visitors to the project have included the DGIS Desk officer for Zambia, the WHO Programme Co-ordinator and the Advisory Board of Zambia's Mwachisompola Health Demonstration Zone.

Mr. Kamalata (PSWS Project Officer) has taken part in a TV-Zambia programme on the PHC approach, drawing on his PSWS experiences.

Both the Project Manager and Project Engineer have been asked to participate in the Zambian Primary Health Care committee. WHO staff in Zambia remain very supportive of the project and despite the difficulties (recognised as being typical of project development in Zambia), consider it to have very useful potential impact. The UNDP Decade Adviser (also secretary of the National Action Committee), considers the project's efforts to develop a community-based approach unique in Zambia and meriting further development.



### 3. PROGRESS ON INTER-COUNTRY AND SUPPORT ACTIVITIES

#### Interim Evaluation

A major evaluation of the project was carried out during July and August 1985. The evaluation process was designed to promote self-evaluation by the national participants themselves, to maximise the learning potential and stimulate follow-up to the Evaluation findings. For these reasons in each country the project was evaluated by mixed teams of both resident and visiting national project staff. Support was provided by Dr. S.W. Yun, a senior developing country national as team leader and, in two countries, by participants nominated by DGIS. Inter-country and support activities were also evaluated.

The evaluation looked in depth at a number of key aspects of the project and made recommendations both for strengthening present activities and sharing and applying the findings. It also strongly recommended that PSWS should be followed by a new project, building on the present activities, but with broader scope and objectives. Overall the report concluded that the community-based project approach, integration of non-technical aspects and project implementation by national staff had been successful and should be more widely used in future.

A full report of the interim evaluation is available.

#### Support Consultancies and Studies

Sociologists Ms. C. van Wijk and M.A. Boesveld have carried out support missions to Malawi and Zambia to assist national project staff in clarifying the methodologies, strengths and weaknesses of the approaches used in the demonstration schemes, and to guide further reporting in appropriate ways.

At the request of Indonesian project staff, Ms. Y. van Dok provided support to the PSWS/Indonesian project, including studies, from within the community, of the approaches developed at the demonstration schemes.

Ms. C. van Wijk and Mr. H. Tjen-A-Kwoei were commissioned to carry out the work on community-based financial management, with support inputs from Mr. P. Adiga of AIT Thailand and Ms. A. Kerrar-Hoek.

Mr. N. Scotney carried out a short overview study of the wide experiences of piped water supplies in Kenya. This will be used to further stimulate attention on the issues in the participating countries.

#### IRC Support Documents

Two publications on the key subject of revenue generation are nearing completion in support of the project. The first of these discusses the various methods that are available for community-based revenue generation, including the organisational and administrative framework

within which each must be set. Illustrative examples are given from various regions of the world. Currently in review within IRC and by project staff, it is planned that this work will move forward for publication in early '87 as an IRC Occasional Paper.

Further support will be given by a second document in the same field but concentrating on a review of the available literature on revenue generation for community water supply and sanitation.

The basis for the development of practical guidelines for promotion of community-based operation and maintenance has been designed and this work is planned for the second half of 1986.

Guideline documents were prepared by Ms. M. Boot for the national project staff in support of the evaluation of the project. These focussed on the guided use of the self evaluation approach and on identification of the issues to be considered in evaluating a demonstration project of this type.

Compilation work for a completely revised version of IRC's Technical Papers TP13 and TP14 (Public Standpost Water Supplies) continues with planned publication in 1987. It is intended that this publication will make maximum use of country project findings and experiences.

#### Exchange Visits

As part of the project self-evaluation process, selected Sri Lankan and Indonesian project staff made reciprocal visits and similarly, the Malawian Project Officer visited Zambia.

A key project participant from each of Indonesia, Malawi and Zambia took part in the Sri Lankan National workshop on standpost water supplies and sanitation in December 1985, and each presented papers on their respective country activities.

These opportunities for exchange visits and joint work have proved extremely useful in stimulating analysis and comparison of the approaches under development.

Co-ordination and Support Visits

The following travel in support of the project has been carried out by the IRC Project Manager:

9th April	- 21st April	'85	Malawi
22nd April	- 24th April	'85	Zimbabwe
25th April	- 1st May	'85	Zambia
<hr/>			
5th June	- 8th June	'85	Korea
8th June	- 10th June	'85	Thailand
10th June	- 16th June	'85	Indonesia
17th June	- 26th June	'85	Sri Lanka
<hr/>			
6th July	- 12th July	'85	Malawi
12th July	- 17th July	'85	Zambia
<hr/>			
27th November	- 11th December	'85	Sri Lanka
<hr/>			
20th February	- 28th February	'86	Zambia
28th February	- 6th March	'86	Zimbabwe
6th March	- 12th March	'86	Malawi
12th March	- 14th March	'86	Kenya

Reporting and Co-ordination

The previous Interim Progress Report, drafts of the Interim Evaluation Report and draft proposals for the planned new PSSC project, were discussed during a series of meetings at DGIS, and with DGIS's agreement, distributed to the Netherlands Embassies in the participating countries.

The opportunity was also taken during support visits to the participating countries to brief and take advice from representatives of the Royal Netherlands Embassies. WHO Programme Co-ordinators and representatives of other international agencies were also kept informed at country, regional and headquarters levels and contacts with various organisations and projects in the participating countries and other interested countries have been further developed.

Development of Proposals for Follow-Up Activities

Following the Interim Evaluation of the PSWS Project and taking full account of its recommendations, discussions with potential participating countries on their interest in and the necessary focus of a new project were intensified. As reported in Section 2 this led to the supported development in-country of draft workplans, programmes and budgets for a new three year project on piped supplies for small communities in Malawi and Zambia. Preliminary planning work was also carried out in Zimbabwe (which has a strong wish to join the new project), including identification of a potential co-ordinating institution and a preliminary planning meeting of representatives from a number of ministries. Interest was confirmed via an "agreed statement" in which potential inputs of the various Ministries are set out. A project of this type in Zimbabwe has the strong support of WHO, and World Bank representatives in Zimbabwe and of the Royal Netherlands Embassy there.

On the basis of this country-planning, IRC prepared a proposal for a multi-country programme on Piped Supplies for Small Communities and submitted it to DGIS for funding consideration in early 1986. The planned programme would be carried out in Malawi, Zambia and Zimbabwe over the period 1987-89. This was re-submitted in June 1986 with more detail of country-level activities and interest.

Potential for follow-up to the current project in Indonesia and Sri Lanka has also been actively developed and may lead to the development of further proposals for IRC-supported country activities.



#### 4. PLANNED ACTIVITIES FOR THE REMAINDER OF THE PROJECT

##### 4.1 INTRODUCTION

Workplan and budgets for 1986 activities, at both country and inter-country levels were generally developed in late 1985. However due to the delay in confirmation of the extension of the project mandate beyond 31st December 1985, and corresponding funding suppletion, a number of activities for 1986 are only just being initiated at the time of reporting. This will inevitably affect the degree to which these activities can be developed in the time available.

##### 4.2 INDONESIA

A detailed programme and budget for activities for the remaining months until the end of the PSWS project have been prepared by national project staff. These include:

- (a) Inputs to monitoring a piped scheme in peri-urban Jakarta (in liaison DJCK and PDAM/Jakarta);
- (b) Technical improvements to Playangan system in conjunction with organisational support to community;
- (c) Reinforcement of hygiene education activities at all locations;
- (d) Further training of local operators from the communities;
- (e) Modification of existing manuals (improving and simplifying text and adding illustrations in support);
- (f) Commissioning of a video or slide-set describing the approach developed;
- (g) Translation of key material into English;
- (h) Preparation and execution of a national seminar on community based approaches to CWSS, (with special emphasis on piped supply), including preparation of key material.
- (i) PMC meetings to further discuss sharing/applying information and need for follow up activities 1987 onwards;
- (j) Planning for potential follow-up activities for 1987 and beyond;

##### 4.3 MALAWI

Activities planned by national project staff include:

- (a) PSSC planning:  
Further planning for the proposed new project on Piped Supplies for Small Communities in Malawi, including preparation of a detailed country proposal and draft agreement;
- (b) Training Seminar:  
Integrated seminar for Project Field Assistants and extension workers both from the Water Department and from collaborating ministries, (Health and Community Services);

- (c) **Reactivation of the Central Water Councils:**  
The Project plans to revive these bodies through meetings and brief seminars with all the members. One of the most important tools in this respect will be written guidelines which will outline roles for the council as a whole and those for individual members;
- (d) **Reorganizing the Tap Committees:**  
The project plans to work hand-in-hand with the Central Water Councils to promote the re-election of new committee members where the committees are incomplete and to install them in a democratic way through representative community elections;
- (e) **Briefings and workshops for different groups:**  
The PSWS project has formulated plans to further inform both the Tap Committees and users through a series of briefings and informal workshops jointly organised by the Ministry of Community Services, Ministry of Health and Ministry of Works and Supplies;
- (f) **Hygiene Education:**  
Pilot activities will be targetted at integrating community hygiene discussions in existing groups such as adult education groups, women's groups and primary schools through the Ministry of Health;
- (g) **Financial management:**  
The potential use of credit balances on communal water bills as the basis for a maintenance-related revolving fund is to be investigated.

#### 4.4 SRI LANKA

Activities for the final 6 months of the project will concentrate on consolidating the project and promoting the sharing and application of information from it. Special emphasis is being given to development of operation, maintenance and financial management procedures at the demonstration schemes. Main points of the workplan include:

- (a) Consolidating/improving present schemes;
- (b) Monitoring and learning from all schemes;
- (c) Sharing information and ideas (visits, guidelines, final report)
- (d) Promoting wider use (through the Rural Sanitation Unit, NGO Advisory Council, Project Management Committee etc.)

Activities planned by national project staff include:

- \* A second part of the video film, illustrating operation and maintenance and revenue generation procedures;
- \* A study on appropriate standpost design options;
- \* Finalisation and production of the draft guidelines on community participation;
- \* Implementation of the post-implementation part of the socio-economic studies at the local demonstration schemes;
- \* Preparation of a manual on operation and maintenance;
- \* Illustrated step-by-step outline of the project approach;
- \* An illustrated brochure on community-based approaches to piped water supply;
- \* Final reporting.

During coming months National staff also plan to further develop their ideas for potential follow-up activities in Sri Lanka for 1987 onwards.

#### 4.5 ZAMBIA

The plan of activities for PSWS/Zambia for the remainder of the project, as developed by the national project staff, includes:

- (a) Completing the activities already under way at the demonstration schemes;
- (b) Establishing a monitoring system for follow-up on community participation and hygiene education;
- (c) Organisation of specific Training Course/Workshop for extension workers from the three local demonstration schemes and others;
- (d) Setting up and monitoring training activities (for example in simple book-keeping for village treasurers and in simple plumbing techniques for caretakers);
- (e) Introducing appropriate community financing systems;
- (f) Streamlining project management and administration.
- (g) Development of a straightforward report on the community-based approaches to standpost water supplies which have been developed. This would be aimed at broader use in Zambia and would sum-up project experiences and recommendations;
- (h) Translation of key project material into selected Zambian indigenous languages.
- (i) Further planning for the proposed new project on Piped Supplies for Small Communities in Zambia, including preparation of a detailed workplan;

#### 4.6 INTER-COUNTRY AND SUPPORT ACTIVITIES

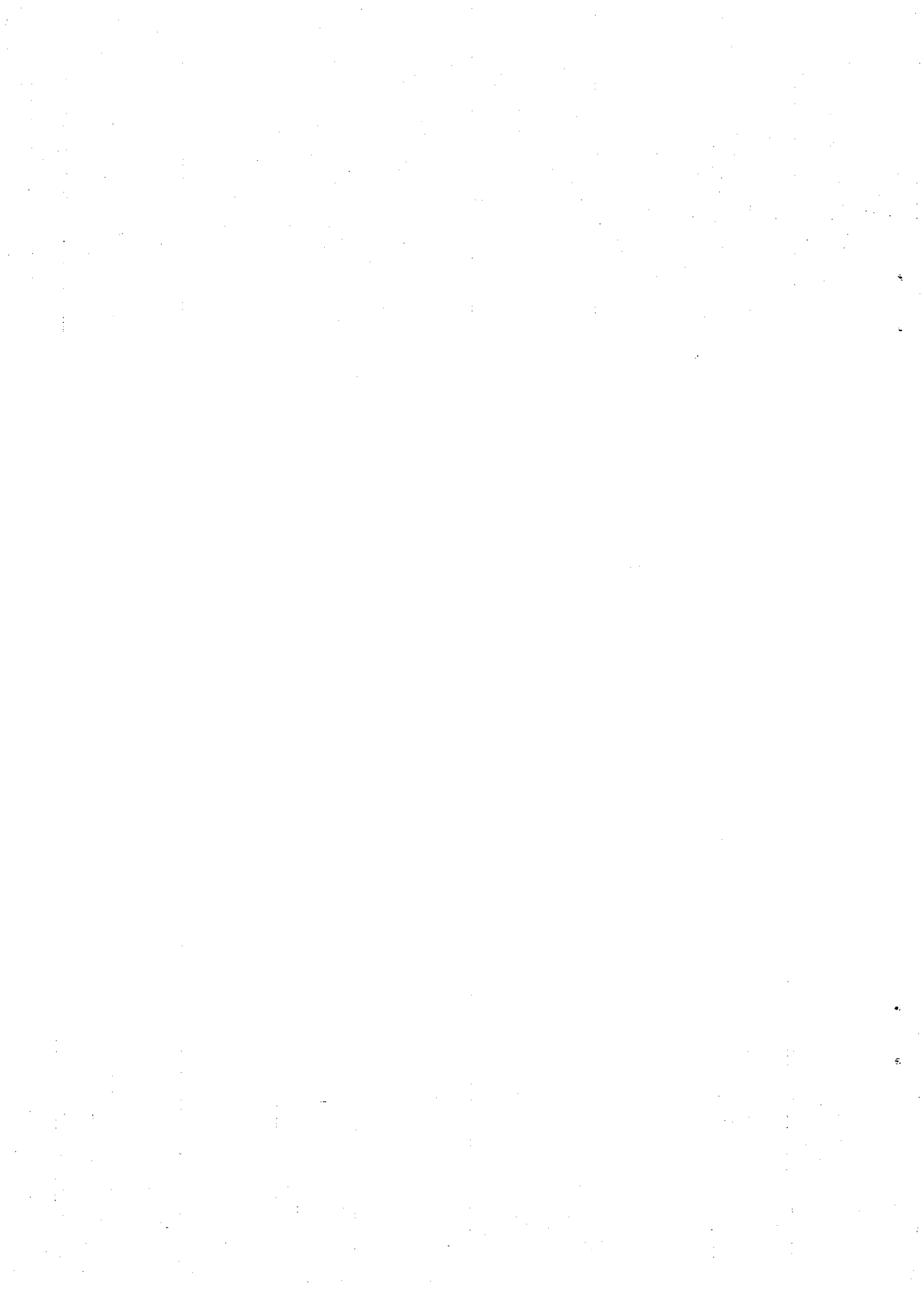
Planned activities under IRC co-ordination include:

- (a) Finalisation of the guidelines on community-based financial management "What Price Water" and publication as an IRC Occasional Paper;
- (b) Finalisation of the literature review on community-based financial management and initial use as a project working document;
- (c) Preparation of straightforward, extensively illustrated guidelines to promote community-based operation and maintenance of piped supplies, for use by project staff and village-level extension workers;
- (d) Continued building of the knowledge bases on Piped Supplies for Small Communities and further development of a draft Technical Paper on this subject (for publication in 1987) in replacement of IRC's TP13 and TP14 on Public Standpost Water Supplies's);
- (e) Initiation of the first phase of a planned programme of research into manual taps for use in piped water supplies;
- (f) Development of options for using selected national project staff as visiting advisers/supporters to the other project countries;
- (g) Further project supports visits by selected consultants to project countries both to assist project consolidation and to stimulate continuing emphasis on community issues and reporting;

- (h) Further visits by the Project Manager to the project countries in support of project activities, to ensure each country continues to be briefed on progress in other countries, to stimulate dissemination and wider use and to assist in planning follow-up activities;
- (i) Identification and recruitment of a developing country national as a temporary Project Support Officer to assist in IRC's support to the participating countries;
- (j) Sponsorship of selected national project staff to visit neighbouring countries, both for sharing information and to develop opportunities for combined work;
- (k) Further detailed planning, in conjunction with the potential participating countries, of the planned new project on Piped Supplies for Small Communities (1987-89);
- (l) Initiation of a preliminary study in Zimbabwe on the past history, present experiences and future potential of piped supplies for small communities;
- (m) Continued discussions with DGIS on the planned 3-year multi-country project on Piped Supplies for Small Communities.

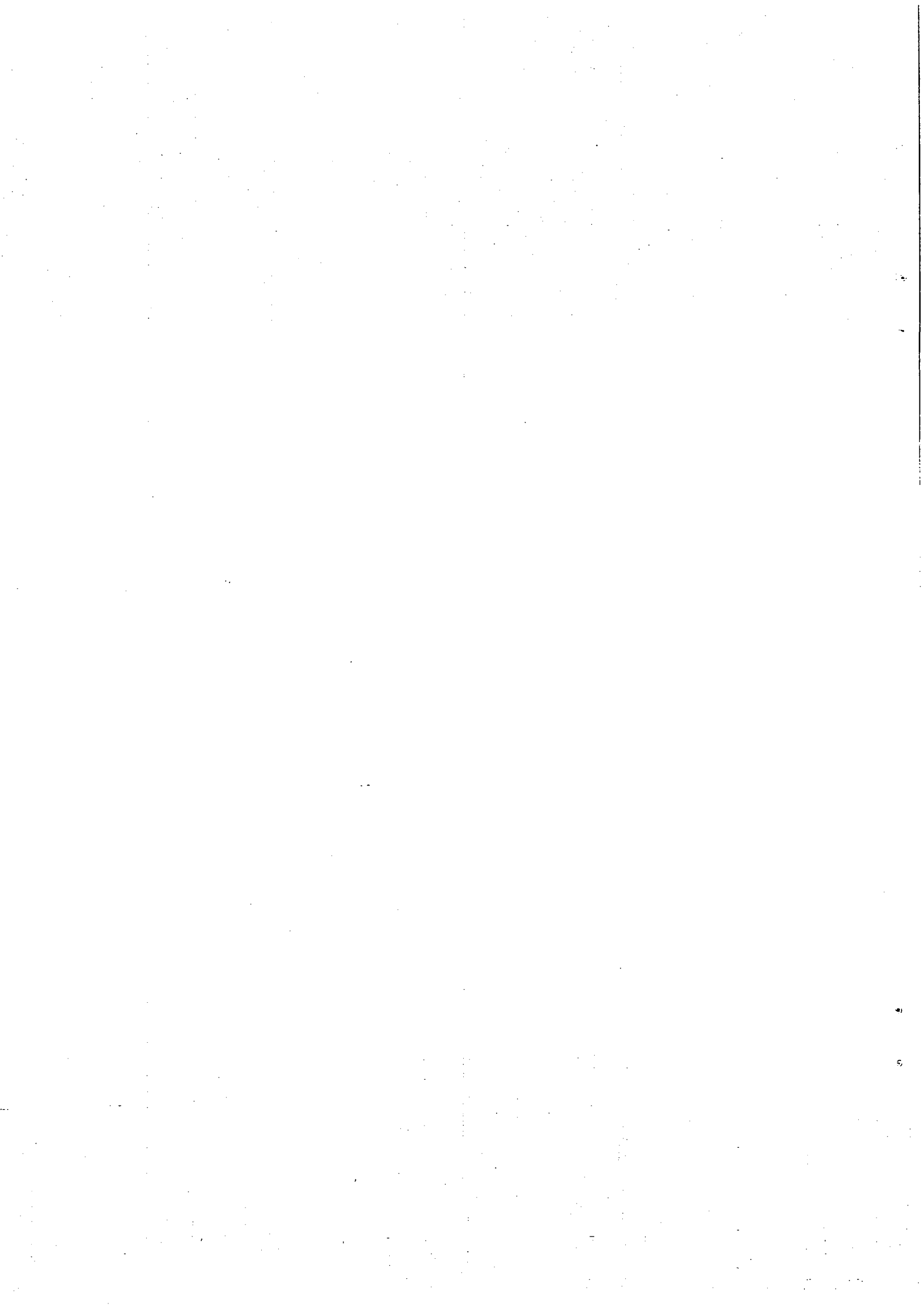
## 5. FINANCIAL REVIEW

- (1) Under the terms of the letter of Agreement from DGIS to IRC, reference CDC-190816 and dated 13th July 1982, DGIS agreed to contribute up to Dfl. 2,056,000,- to the project. This amount was supplemented by a further sum of Dfl. 330,000 by DGIS's letter of 23rd June 1986, (ref. DST/PLb-153769 (I11)), giving on overall project total of Dfl. 2,386,000.
- (2) Agreements have been signed by IRC with Project Co-ordinating Institutions in Indonesia, Malawi, Sri Lanka and Zambia, and subsequently time-extended in-line with the extension of the main DGIS/IRC Agreement. The maximum financial commitment for the four country-contracts up to 31st December 1986 amounts to US \$ 336,000.-. At 30th June, 1986 a total of US \$ 139,650.- has been transferred to the project countries, either against declarations of expenditure or requests for working advances.
- (3) The anticipated expenditure on the project is as outlined in the revised Budget Summary overpage. For the calendar year 1986 the expected expenditure amounts to approximately Dfl 869,000.-. It is therefore anticipated that the allocated funds will be fully taken-up by the end of the project.



PUBLIC STANDPOST WATER SUPPLIES PROJECTESTIMATED BUDGET SUMMARY AT 30/JUNE/1986

ITEM	ACTUAL EXPENDITURE DFL			BUDGETED EXPEN- DITURE DFL	TOTALS DFL
	1982/83	1984	1985	1986	
A. Country Projects	106,800	145,100	98,800	200,000	550,700
B. Inter-country Collaboration	900	86,400	56,100	114,000	257,400
C. Special Studies and publications	32,800	57,000	34,800	127,000	251,600
D. Project Support	237,400	235,900	143,700	239,000	856,000
E. Travel and Subsistence	51,400	45,600	78,400	121,000	296,400
F. Contingencies	8,900	4,700	92,300	68,000	173,900
Totals	438,200	574,700	504,100	869,000	2,386,000





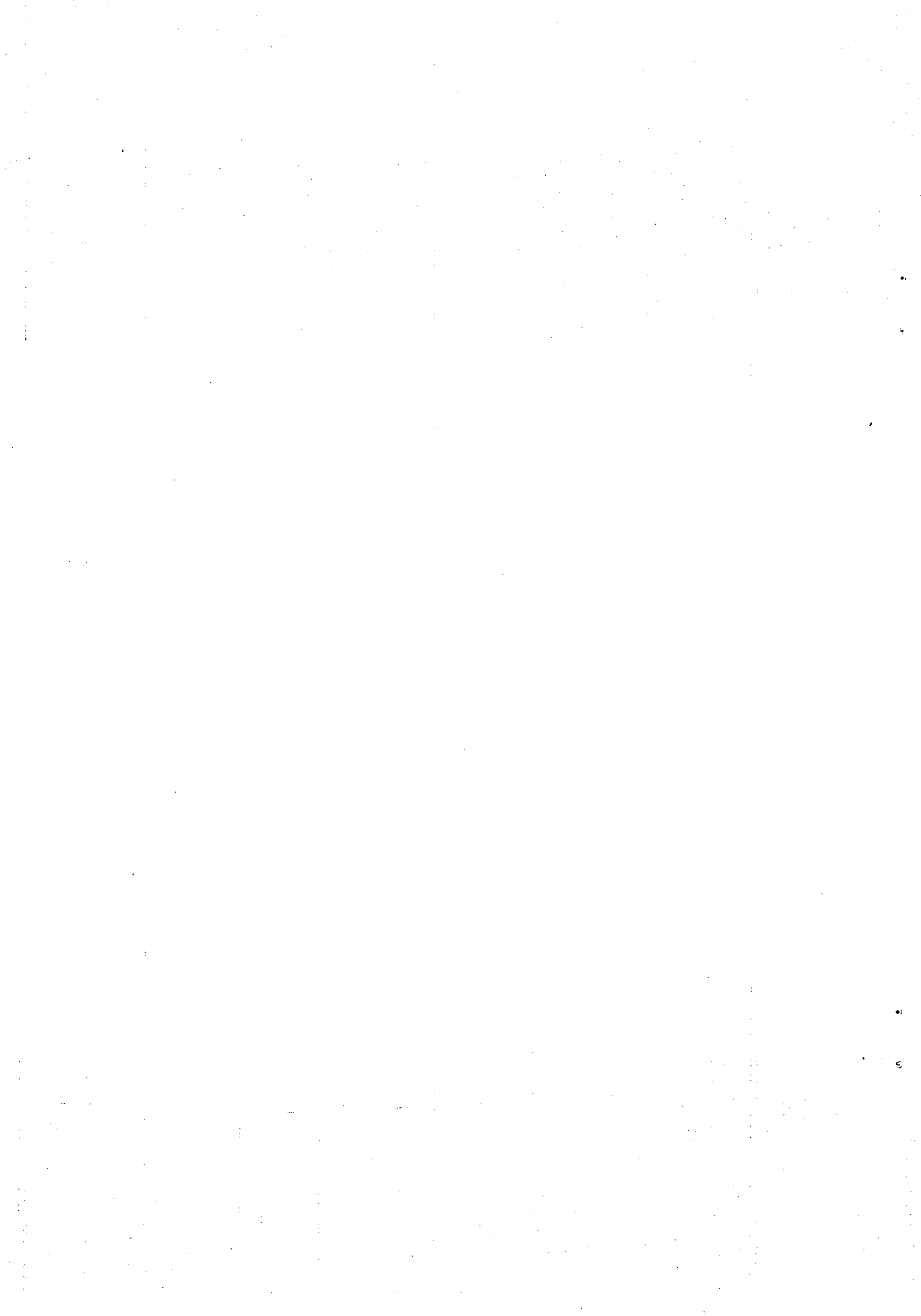
APPENDICES

APPENDIX A           PROJECT BACKGROUND

APPENDIX B           ORGANISATIONAL FRAMEWORK

APPENDIX C           LIST OF PROJECT STAFF AND PROJECT CO-ORDINATING  
INSTITUTIONS

APPENDIX D           LIST OF WRITTEN OUTPUT AND PROJECT DOCUMENTS



## APPENDIX A

## PROJECT BACKGROUND

- \* Public Standpost Water Supplies, technically straightforward piped systems serving the community through public taps, can provide an appropriate level of service for many communities. Examples include satellite townships, rural growth centres and peri-urban developments, where the advantages of a piped supply are apparent but the settlement density or economic levels cannot justify individual house connections.
- \* However, many supplies of this sort fail or have only limited success, largely due to difficulties related to public ownership, financial management, operation and maintenance and inadequate involvement and education of the community.
- \* The Public Standpost Water Supplies Project (PSWS) therefore focuses on this type of water supply and aims at encouraging the development of more successful and appropriate methods for planning, implementing and managing them. The project is orientated towards community water supply systems which both include a considerable number of public standposts/communal water points and are designed to serve the poorer sections of the population in rural and urban fringe areas of developing countries.
- \* The project is being developed as an integrated demonstration project in that:
  - various technical, organisational, economic and socio-cultural aspects are dealt with as integrated parts of the project
  - a number of local demonstration schemes are being developed in each participating country.
- \* The project has four linked activity areas:
  - demonstration projects in four countries
  - preparation of manuals and guidelines on aspects of public standpost water supply systems
  - ongoing evaluation and 'lesson learning'
  - transfer and application of generated knowledge both in-country and internationally.
- \* The project is being executed on a multi-country basis in Indonesia, Malawi, Sri Lanka and Zambia. Each country project forms a small but integral part of the national water supply and sanitation programme. This is intended to promote future application of project results in larger scale investment projects. The impact of the demonstration projects will therefore benefit from a 'leverage' effect. The project is also developed in line with the 'programmatic approach' in that it is designed to complement other ongoing and planned activities in related sectors and that it is intended to lead to longer term structural improvements.

- \* Selection of countries wishing to participate in the project has been based on interest, need, potential contribution, geographic location, availability of participating institutions and staff and previously established working relationships.
- \* Keynotes of the project approach are:
  - Implementation of the majority of project activities in the participating countries through and by nationals.
  - Recognition that the software components (socio-cultural, economic, organisational) are of at least equal importance to more technical aspects.
  - Promotion of an integrated approach in terms of bringing together
    - component subjects
    - inputs from various institutions and organisations
    - inputs from community, regional and national levels
    - activities between participating countries and other interested countries.
  - Encouragement of community awareness and participation at every stage.
  - Emphasis on community-based management as far as possible, including financial management, operation and maintenance. The development of Local Water Committees is therefore a particularly important element.
  - Emphasis on the information transfer of the generated knowledge and experience both within the project countries and internationally.
- \* In promoting a fully integrated approach, a number of Component Subjects are taken into account within the project. These include:
  - Community Hygiene Education
  - Community Participation
  - Operation and Maintenance
  - Financial Management
  - Administration and Legislation
  - Organisational and Institutional Aspects
  - Planning, Design and Construction
  - Materials, Parts and Equipment  
(Selection, Standardisation, Testing, Local Manufacture)
  - Sanitation
  - Training and Manpower Development

Each participating country is encouraged to identify and give priority to those Component Subjects which are most relevant to national and local needs.
- \* Collaboration among national agencies at country, regional and local levels is strongly promoted. The establishment of national Project Management Committees in which several interested agencies participate, the secondment of national project staff from other agencies, co-operation amongst extension workers at field level are amongst mechanisms used.
- \* The international exchange of information and the sharing of knowledge and experience between the participating countries (as well as with other countries and international agencies) is promoted, in line with the UN-supported concept of Technical Co-operation amongst Developing Countries (TCDC).

## APPENDIX B

## ORGANISATIONAL FRAMEWORK

\* DGIS/IRC Agreement

The agreement between the Ministry of Foreign Affairs/DGIS and IRC for the execution of the Public Standpost Water Supplies Project (PSWS) was formalised in July 1982 (letter Cdc-190816, dated 13th July 1982.) The Agreement covered the execution of the project in four countries (Indonesia, Malawi, Sri Lanka and Zambia), over a two year period with a total budget of Dfl 2,056,000. By the letter of 7th March 1984, ref. CDC-46396, the duration of the project was extended until 31st December 1985 and by subsequent letter of 23rd June, 1986 (ref DST/PLb153769(I11) further extended until 31st December 1986 with a budget supplement of Dfl 330,000.

\* Country Arrangements

Following indication of a strong wish to participate and detailed agreement with IRC on workplan, schedule of activities and administrative details, individual country-project proposals were put forward to IRC by the four countries. These formed the basis of country project agreements between IRC and the co-ordinating institutions for the execution of country projects once funding had been committed by DGIS.

These formal agreements were made with a Project Co-ordinating Institution (PCI) in each country. This institution is responsible for country project implementation, progress and budgetary control.

Each country project is monitored by a multi-agency Project Management Committee (PMC) which also acts as a clearing-house for practical inputs to the project, and as a means of developing linkages with full-scale projects. The PMCs comprise representatives of ministry departments, academic institutions, and international bodies.

Each of these agencies, known as a Project Participating Institution (PPIs), is responsible for ensuring co-operation, inputs and staff secondment from their institutions at local, as well as national levels. They also offer support to training, specific studies, and other project activities.

Day-today country-project management is the responsibility of a country Project Manager who is in each case a senior national from one of the participating institutions. The Project Manager is often supported by a Project Support Officer and/or Field Assistants, sometimes seconded from another agency.

\* IRC's Responsibilities

IRC has a central supporting and co-ordinating role in the project which includes: advisory visits by the IRC Project Manager and consultants; general information and technology support; co-ordination between the various country projects, including exchange of results and findings; organizing regional and

international working meetings and seminars; arranging for bilateral working visits; engaging consultants on specific subjects; preparation of selected multi-country manuals, guidelines and other publications; and the administration of the project as a whole.

A full-time Project Manager is engaged on the project supported by an administrative Project Assistant.

Specialist support is given to the project both through use of the IRC-based professional team and selected consultants.

\* Liaison

Full liaison with other national institutions, organisations and projects in each of the participating countries is promoted through the multi agency Project Management Committee and the emphasis on information sharing.

The staff of the Royal Netherlands Embassy in each country give continuing advice and are kept informed of project developments.

Working relationships have been developed with international agencies at country and regional level, such as WHO, UNICEF, UNDP, World Bank, and other organizations, including NGO's, which are active in community water supply and sanitation in developing countries.

Reporting on country activities and the overall project is via IRC to DGIS. The results and findings of the project are compiled at intervals by the participants for wider use.

The project has been subject to externally monitored evaluations based on supported self-evaluation principles.

## APPENDIX C

## Public Standpost Water Supplies (PSWS) Project

## LIST OF PROJECT STAFF AND PROJECT CO-ORDINATING INSTITUTIONS (PCI'S)

June 1986

1. INDONESIA

Ir. S.M. Ritongo	- Project Manager
Mr. A. Parwoto	- Project Officer

Institute of Human Settlements,  
Agency for Research and Development of Public Works,  
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Tromol Pos 15,  
Bandung,  
Indonesia

telephone: Bandung 81082/81083  
telex : 28327 DBR BD IA  
cable : REHOCE BDR

2. MALAWI

Mr. F. Kwaule	- Project Officer (MoWS)
Mr. D.T. Nyasulu	- Project Liaison Officer (MoH)
Mr. I.Z. Nkunika	- Project Liaison Officer (MoCS)
Ms. R. Banda	- Field Assistant
Mr. S. Mlelemba	- Field Assistant
Mr. C. Manjawila	- Field Assistant

Water Department,  
Ministry of Works and Supplies,  
Tikwere House,  
Private Bag 390,  
Lilongwe 3,  
Malawi

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telex : WORKS MT  
cable : LAVAWATER LLW

3. SRI LANKA

Mr. W.A.N. Weerasinghe	- Project Manager (NWSDB)
Mr. S.J.P. Wijegoonewardene	- Project Officer (NWSDB)
Mr. H.I. Karunadasa	- Project Officer (MoH)

National Water Supply and Drainage Board,  
 Galle Road,  
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 Sri Lanka  
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 telex : 21482 NWSDB CE  
 cable : WATERBOARD RATMALANA

4. ZAMBIA

Mr. M.K. Chimuka	- Project Manager (MoH)
Mr. D.M. Kabumu	- Project Engineer (DWA)
Mr. Kamalata	- Project Support Officer (DSD)

Department of Water Affairs,  
 Ministry of Agriculture and Water Development,  
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 Ridgeway,  
 Lusaka,  
 Zambia

telephone: Lusaka 215281  
 telex : 43950 ZA  
 cable : ZAMWATER LUSAKA

5. IRC

Mr. Michael Seager	- Project Manager
Ms. Janine Bauer	- Project Assistant

International Reference Centre for Community Water Supply and  
 Sanitation (WHO Collaborating Centre)  
 Prinses Margrietplantsoen 20  
 P.O. Box 93190  
 2509 AD The Hague  
 The Netherlands

telephone: 070-814911  
 telex : 33296 IRC NL  
 cable : WORLDWATER THE HAGUE



## APPENDIX D

## LIST OF WRITTEN OUTPUT AND PROJECT DOCUMENTS

1. PROJECT OUTPUT1.1 Participating Countries(a) Indonesia

- (1) 'Summary Report and Recommendations from a Workshop on Public Standpost Water Supplies, held in Jakarta from 22-24th March 1983', DPMB, Bandung
- (2) 'Proceedings, Seminar on Potable Water Supply through Public Taps', Jakarta 22-24 March, 1983; RCRHS/DPMB Bandung, 1983
- (3) 'General Guideline for Demonstration Project of PSWS-IRC Indonesia' PSWS Team, CRHS/DPMB Bandung, March 1984
- (4) 'Steps in Community Education/Participation and General Outline of Training Programme for Trainers and Cadres of Water Supply', PSWS Teams, CRHS/DPMB Bandung, March 1984
- (5) 'Questionnaire for Observation Reports at Demonstration Villages', (Bahasa Indonesia), PSWS Team, Bandung, 1983
- (6) 'Final Report, Regional Seminar on Public Standpost Water Supplies as Infrastructure in Housing for Low-income Communities Cirebon', CRHS/DPMB Bandung, 1984
- (7) Papers prepared for the March 1984 Seminar on Public Standpost Water Supplies as Infrastructure for Low-income Communities in Cirebon, Indonesia, including:
  - . 'Community Motivation for Health Water Supply, and the need for Integrated Planning'
  - . 'Branched Network Design for low Cost Water Supply for Low-income Communities'
  - . 'The Role of House Connections and Public Standposts in Rural Water Supply Schemes'
- (8) 'Buku Penuntun Kader Pembangunan Desa Bidang Air Bersih/Kran Unum (KPD.KU.)', (PSWS Project Guidance Manual for Kader/Community Motivators), CRHS/DPMB Bandung, 1984
- (9) 'Buku Penuntun Pelatih Kader Pembangunan Desa Bidang Air Bersih Kran Unum', (PSWS Project Guidance Manual for Trainers of Community Motivators/Kaders), Proyek PSWS-IRC Jawa Barat, CRHS/DPMB Bandung, 1984
- (10) 'Brief Report of the Joint Project PSWS of IRC and the Centre for R & D on Human Settlements', CRHS/DPMB Bandung, June 1984

- (11) 'Water Provision for the People by the People: A case study of Gumulung Tonggoh', PSWS/Indonesian team, Bandung, November 1984
- (12) 'Laporan Observasi dan Pengumpulan Data Penyediaan Air Bersih Untuk Umum Di Desa Gumulung Tonggoh & Desa Jugasai', (Technical Report on Gumulung Tonggoh and Jagasim', PSWS Team, RCRHS/DPMB Bandung, 1984
- (13) 'Ditto Playangan and Kesenden PSWS Team, RCRHS/DPMB Bandung, 1984
- (14) 'Pedoman Langkah Peran Serta Masyarakat dan Kurikulum Latihan', (Community Participation Schedule and Training Curricula), RCRHS/DPMB Bandung, 1984
- (15) 'Pedoman Perencanaan Pelaksanaan dan Pengelolaan Kran Umum', (Standards and Specifications) RCRHS/DPMB Bandung, 1984
- (16) 'Health Education Component of Public Standpost Water Supplies Project Indonesia', PSWS Team, Bandung, November '84
- (17) 'Proyek Kerjasama Departemen Pekerjaan Umum dengan International Reference Centre for Community Water Supplies and Sanitation dibidang Kran Umum', (Brochure on DPU/IRC PSWS demonstration project), PSWS Team, Bandung, 1984 (English translation available)
- (18) 'Time Schedule for PSWS Project in Indonesia', PSWS Team, Bandung, August 1983
- (19) 'IHS IRC Co-operation Project on PSWS: Summary of Accomplished Activities' 1983-85, PSWS Team, Bandung, 1985
- (20) 'Laporan Perkembangan Proyek Public Standpost Water Supply Bekerjasama Dengan IRC', (Summary Outline Report), PSWS Team, Bandung, 13 June '85
- (21) 'Technical Aspects of the PSWS Project in Indonesia' (Paper to the Sri Lankan Workshop on Standpost Water Supplies), Buce Syabudi, Institute of Human Settlements, Bandung, Indonesia, December 1985
- (22) 'The Public Standpost Water Supplies Project in Indonesia', Darmawan Saleh, Paper presented at the Asian Water Technology Conference, Kuala Lumpur, November 1985
- (23) 'The IRC Public Standpost Water Supplies Co-operation Project in Indonesia: An Overview', Djauhari Sumintardja, Institute of Human Settlements, Bandung 1985

(b) Malawi

- (1) 'Collaboration between the Urban Communal Water Point and the Public Standpost Water Supplies Project' Department of Lands, Valuation and Water, Lilongwe, March 1984.

- (2) 'PSWS/Malawi: Preliminary Workplan and Programme' Water Department; April 1985.
- (3) 'Information Paper I, PSWS Project Malawi', Lilongwe, October 1985
- (4) 'PSWS/PSSC Projects: Master Programme 1985-87', Lilongwe, July 1985
- (5) 'Workplan, Piped Supplies for Small Communities (PSSC) Project' Malawi, July 1985 - December 1988, Revision 2 Water Department, Lilongwe, March 1986.
- (6) 'Budget, PSSC Project Malawi, January 1986 to December 1988', Revision 2, Water Department, Lilongwe, March 1986.
- (7) 'Quarterly Project Progress Report, PSWS Project Malawi', Water Department, Lilongwe, January 1986.
- (8) 'Monthly Report, January '86, Public Standpost Water Supplies Project', Water Department, Lilongwe, February 1986.
- (9) 'Preliminary Field Report, Public Standpost Water Supplies Project Malawi', Water Department, Lilongwe, February 1986.
- (10) 'PSWS Project Malawi: Proposed Activities for further development of Present Approach', F. Kwaule, PSWS/Malawi, Lilongwe, June 1986.
- (11) 'Workplan: Seminar for Field Assistants', Lilongwe, April 1986
- (12) 'Proposed Workplan for Field Assistant in Mponela/Dowa', Water Department, Lilongwe, July 1985
- (13) 'PSWS Project: Social-Cultural and Sanitation Survey Questionnaire', Water Department, Lilongwe, December 1985
- (14) 'PSWS Project: Pilot Observation and Monitoring Findings', Water Department, Lilongwe, June 1985

(c) Sri Lanka

- (1) 'Summary of Experiences Learned in a Community Participation Project on Public Standpost Water Supply and Sanitation: An Interim Report', National Water Supply and Drainage Board, Sri Lanka, January 1984.
- (2) 'Major Problems, Solutions Applied and Experiences learned in the Public Standpost Water Supplies Project Sri Lanka', Paper for a Regional Seminar in Cirebon, Indonesia, NWSDB, Sri Lanka, March 1984.
- (3) 'Interim Report of Progress of Demonstration Project on Public Standpost Water Supply Systems and Sanitation', Editor: H.I. Karunadasa, National Water Supply and Drainage Board, Sri Lanka, August 1984.

- (4) 'Sri Lanka: Minutes of the Project Management Committee for the PSWS Project', Various, 1983-1986.
- (5) 'Community Participation: How it worked in Haldumullah and Seelatenna', H.I. Karunadasa, National Water Supply and Drainage Board, Colombo, December 1985.
- (6) 'Report on Sanitation Programme at Haldumulla, a village Community in Sri Lanka', NWSDB, Colombo, April 1985
- (7) 'Map sharing PSWS Demonstration Sites', NWSDB, Colombo, 1983
- (8) 'Workplans, PSWS Schemes at Padaviya, Wijebahukanda and Seelatena, NWSDB, Colombo, 1984
- (9) 'Notes on the Evaluation of the IRC sponsored Water Supply and Sanitation Project', NWSDB, Colombo, June 1985
- (10) 'Outline Description/Preliminary Sketches for Proposed Health Education Materials', NWSDB, Colombo, 1985
- (11) 'Public Taps in Sri Lanka', Paper prepared for ISWA Regional Conference, Gabon, N.D. Peiris, Chairman, NWSDB, Colombo, 1985
- (12) 'PSWS Project Sri Lanka: Programme of Activities 1983-'85, NWSDB, Colombo, 1983
- (13) 'PSWS Project Sri Lanka: Tentative Schedule of Activities', NWSDB, Colombo, 1983
- (14) 'Questionnaire: Socio-Economic Survey on Water and Sanitation', NWSDB, Colombo, 1983
- (15) 'A People's Achievement: Pure Water for Haldumullah.' VHS-format Video Film of a PSWS Demonstration Scheme, National Water Supply and Drainage Board, Colombo, October 1985.
- (16) '1986 Workplan', PSWS team, Colombo, December 1985
- (17) 'PSWS Budget 1986, PSWS team, Colombo, December 1985
- (18) 'Progress Report up to end of June 1986, PSWS team, Colombo, 1986

(d) Zambia

- (1) 'Master Programme and Schedule of Inputs - PSWS Project', Department of Water Affairs, Zambia, February 1984.
- (2) 'Zambia: Minutes of the Project Management Committee of the PSWS Project', Various, 1983-86.
- (3) 'Minutes of a Local Water Committee Meeting held in Chiyuni Village, Lusaka, June 1986.

- (4) 'Public Standpost Water Supply in Zambia', D.M. Kabumu (Paper to the Sri Lankan Workshop on Standpost Water Supplies), Department of Water Affairs, Lusaka, November 1985.
- (5) 'PSSC Project/Zambia: Proposed Master Programme', Department of Water Affairs, Lusaka, Zambia, February, 1986.
- (6) 'PSSC Project/Zambia: Provisional Workplan 1987-1989', Department of Water Affairs, Lusaka, Zambia, March, 1986.
- (7) 'PSSC Project/Zambia: Preliminary Budget 1987-89', Department of Water Affairs, Lusaka, Zambia, March, 1986.
- (8) 'Report on the Site Visit to Mwachisompola by Project Engineer, 28/January/86', Internal Report, D.M. Kabumu, PSWS/Zambia, Lusaka, January 1986.
- (9) 'A Report on Study Visit to Chainda Compound for Comparison with PSWS Project Activities', Internal Report, M.K. Chimuka, PSWS Zambia, Lusaka, October 1985.
- (10) 'PSWS/PSSC Project in Zambia: General Information and Methodology, A First Review', M.K. Chimuka, D.M. Kamalat, K.L. Kamalata, PSWS Zambia, Lusaka, May 1986
- (11) 'Report on Visits to Chibombo Project Area: Chiyuni and Mwamuyamba', M.K. Chimuka, Lusaka, 1984
- (12) 'PSWS/Zambia: Feasibility Study for Demonstration Schemes', J. Malama, Department of Water Affairs, Lusaka, June 1985
- (13) 'Outline Plans for the Remainder of the Project', PSWS Team, Lusaka, June 1985
- (14) 'PSWS Zambia: Progress Reports', Various 1983-86, PSWS Team, Lusaka
- (15) 'PSWS Zambia: Location Map for the Demonstration Schemes, Lusaka, 1984

## 1.2 IRC Support Output

- (1) 'Public Standpost Water Supplies'  
IRC Technical Paper 13, November 1979
- (2) 'Public Standpost Water Supplies, a Design Manual', IRC  
Technical Paper 14, December 1979
- (3) 'Community Education and Participation' IRC Technical Paper  
17, June 1981
- (4) 'Public Standpost Water Supplies Project - A Summary' IRC,  
April 1983
- (5) 'Public Standpost Water Supplies Project - A Short  
Introduction', IRC, November 1983

- (6) 'Report on a PSWS Support Consultancy to Sri Lanka, Bert L.M. van Woersem, July 1983
- (7) 'Summary Progress Report for the Participating Countries', IRC, December 1983
- (8) 'Tools for Continuity: Draft Guidelines on Community-based Financial Management of Community Water Supply and Sanitation Systems', IRC, March 1984
- (9) 'Making the Links: Guidelines on Hygiene Education in Community Water Supply and Sanitation', IRC Occasional Paper, June 1984
- (10) 'The Environment of Simple Water Supplies: A Selected and Annotated Bibliography in support of Public Standpost Water Supplies', IRC Occasional Paper, June 1984
- (11) 'Report on PSWS Consultancy to Malawi and Zambia', N. Scotney, October 1984
- (12) 'Report on PSWS Consultancy to Zambia', S. Cavanna, November 1984
- (13) 'Public Standpost Water supplies/The IRC PSWS Project' Brochure, IRC, November 1984
- (14) 'Discussion Notes on the Evaluation of the PSWS Project', IRC, The Hague, January 1985
- (15) 'Second Summary Progress Report for the Participating Countries', IRC, The Hague, January 1985
- (16) 'Some Guidelines for the Interim Evaluation of the PSWS Project', IRC The Hague, May, 1985
- (17) 'PSWS Project:  
List of Project Staff and Project Co-ordinating Institutions', IRC, The Hague, June 1985
- (18) 'Piped Supplies for Small Communities:  
Draft discussion paper for a new multi-country project", IRC, The Hague, July 1985
- (19) 'Public Standpost Water Supplies Project:  
Report of the Interim Evaluation', PSWS Project Evaluation Team, September 1985
- (20) 'Opening Session Address by IRC to Sri Lankan National Workshop to share experiences of Public Standpost Water Supplies and Sanitation Projects', IRC, The Hague, December 1985
- (21) 'Piped Supplies for Small Communities', in "Developing World Water", January 1986
- (22) 'PSWS Project:  
List of Project Output', IRC, The Hague, June 1986

- (23) 'Piped Supplies for Small Communities: Proposal for a multi-country information development and demonstration programme in Malawi, Zimbabwe and Zambia, 1987-89', IRC, The Hague, June 1986
- (24) Summary Report on PSWS Consultancy to Malawi, M. Boesveld/C. van Wijk, IRC, June 1986
- (25) 'Summary Report on PSWS Consultancy to Zambia, M. Boesveld, IRC, June 1986
- (26) 'Community Involvement in Financing Improvement Water Supplies', Draft for publication in "World Water", IRC, May 1986

### 1.3 Output from the PSWS International Meeting (Thailand, November 1984)

- (1) 'Meeting Report, International Meeting on Standpost Water Supplies and Sanitation', Vols. I and II Khon Kaen University, December 1984
- (2) Working Group Reports:
  - A. 'Community-based Management of Standpost Systems, particularly operation and maintenance and financial management'
  - B. 'Combining participatory hygiene education, piped water supply and sanitation'
  - C. 'Planning service levels; appropriate design, materials and parts; construction and evaluation for community standpost systems'
- (3) 'PSWS Meeting Field Trip Guide', Khon Kaen University
- (4) 'The IRC Public Standpost Water Supply Co-operation Project in Indonesia - An Overview', Djauhari Sumintardja, Institute of Human Settlements, Bandung, November 1984
- (5) 'General Guideline for Demonstration Project for IRC, Indonesia', PSWS Team, Direktorat Air Bersih, Direktorat Jenderal Cipta karya, Jakarta, November 1984
- (6) 'Water Provision for the People by the People: A case of Gumulung Tonggoh - Indonesia', PSWS Indonesia Team, Bandung, November 1984
- (7) 'Health Inputs to Community Water Supply Projects in Malawi', P.S. Chindamba, Ministry of Health, Lilongwe, November 1984
- (8) 'Women and Water', L.P. Kholoma, Ministry of Community Services Malawi, Lilongwe, November 1984
- (9) 'Country Report on Public Standpost Water Supply and Sanitation Project, Sri Lanka', National Water Supply and Drainage Board Sri Lanka, Colombo, November 1984

- (10) Paper on PSWS Project in Zambia, K.L. Kamalata, Lusaka, November 1984
- (11) 'Use of Public Standposts in Thailand', Faculty of Engineering, Khon Kaen University, November 1984
- (12) 'Cost Recovery Mechanisms for Public Standposts in Thailand', Faculty of Engineering, Khon Kaen University, November 1984
- (13) 'Cost Implications of Standposts and House Connections for Rural Piped Water Supply', P.B. Adiga, Environmental Engineering Division, Asian Institute of Technology, Bangkok, November 1984

## 2. PRINCIPLE REPORTS TO DGIS

- (1) Progress Report on the PSWS Project (April '83)
- (2) Progress Report on the PSWS Project (October '83)
- (3) Progress Report on the PSWS Project (June '84)
- (4) Progress Report on the PSWS Project (January '85)
- (5) Interim Evaluation Report PSWS Project (September '85)
- (6) Progress Report on the PSWS Project (June '86)

## 3. TRAVEL REPORTS

- (1) Summary Report on Travel to Malawi and Zambia  
(E.L.P. Hessing, 1982 04 20)
- (2) Summary Report on Travel to Indonesia and Sri Lanka  
(E.L.P. Hessing, 1982 03 20)
- (3) Summary Report on Travel to Sri Lanka, Malawi and Zambia  
(M. Seager, 1983 04 11)
- (4) Summary Report on Travel to Indonesia  
(E.L.P. Hessing, 1983 04 20)
- (5) Summary Report on Travel to Indonesia and Sri Lanka  
(M. Seager, 1983 06 15)
- (6) Summary Report on Travel to Malawi and Zambia  
(M. Seager, 1983 10 26)
- (7) Summary Report on Travel to Sri Lanka and Indonesia  
(M. Seager, 1984 01 06)
- (8) Summary Report on Travel to Tanzania, Zambia, Malawi, Kenya and U.K.  
(M. Seager, 1984 03 28)
- (9) Summary Report on Travel to Indonesia  
(M.T. Boot, 1984 04)



- (10) Summary Report on Travel to Switzerland, Malawi, Zimbabwe and Zambia  
(M. Seager, 1984 06)
- (11) Summary Report on Travel to India, Thailand, Indonesia and Sri Lanka  
(M. Seager, 1984 10)
- (12) Summary Report on Travel to Thailand and Indonesia  
(M. Seager, 1984 12)
- (13) Summary Report on Travel to Malawi, Zimbabwe and Zambia  
(M. Seager, 1985 05 06)
- (14) Summary Report on Travel to Sri Lanka  
(M. Seager, 1985 12 12)
- (15) Summary Report on Travel to Zambia, Zimbabwe, Malawi and Kenya  
(M. Seager, 1986 03 15)

#### 4. PROJECT AGREEMENTS

- (1) Proposal for PSWS multi-country project (1980 07 09)
- (2) Proposal for participation by Indonesia in PSWS project  
(1981 12 15)
- (3) Proposal for participation by Malawi in PSWS project  
(1982 01 22)
- (4) Proposal for participation by Sri Lanka in PSWS project  
(1982 03 30)
- (5) Proposal for participation by Zambia in PDSWS project  
(1981 11 12)
- (6) Agreement letter from DGIS, ref. CDC-190816, dated 13th July 1982
- (7) Agreement amendment letter from DGIS, ref. CDC-46396, dated 7th March 1984
- (8) Agreement amendment letter from DGIS, ref. DST/PLb-153769 (I11) dated 23rd June 1986
- (9) Letter of Agreement for participation by Indonesia in PSWS project, (1982 03 25) and subsequent exchanges
- (10) Letter of Agreement for participation by Malawi in PSWS project, (1983 01 24) and subsequent exchanges
- (11) Letter of Agreement for participation by Sri Lanka in PSWS project, (1982 08 10) and subsequent exchanges
- (12) Letter of Agreement for participation by Zambia in PSWS project, (1983 02 21) and subsequent exchanges