**UNITED NATIONS DEVELOPMENT PROGRAMME**

# NIGERIA

# RUSAFIYA (Rural Water Supply and Sanitation)

PROJECT NIR/87/011/D/01/42

Report of Evaluation Mission

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## ACRONYMS

| | |
|---|---|
| BASIRDA | Bauchi State Integrated Rural Development Authority |
| CHICS | Community Health Involving Children in Schools |
| DFRRI | Directorate of Food, Roads, and Rural Infrastructure |
| FCTA | Federal Capital Territory Abuja |
| FGN | Federal Government |
| FMOH | Federal Ministry of Health |
| FMOWR | Federal Ministry of Water Resources |
| LGA | Local Government Authority |
| NCWR | National Council on Water Resources |
| NTCWR | National Technical Committee on Water Resources |
| PPER | Project Progress Evaluation Report |
| PROWESS | Promotion of the Role of Women in Water and Environmental Sanitation Services |
| PUB | Public Utilities Board |
| RRA | Rapid Reconnaissance Assessment |
| RUSAFIYA | Rural Water and Sanitation Project |
| RUWATSAN | Rural Water Supply and Sanitation |
| UNDP | United Nations Development Programme |
| WASCOM | Water and Sanitation Committee |

## 1.0 INTRODUCTION

Since September of 1985, the UNDP has provided assistance for support of development in the rural water supply and sanitation sector in Nigeria through the Federal Ministry of Health. Under an early project, standard designs and manuals were produced and training in construction of latrines was provided through the Directorate of Food, Roads, and Rural Infrastructure (DFRRI). Under this project, the Federal Ministry of Health undertook, with the assistance of consultants, a rapid assessment of sectoral development needs in four states and the Federal Capital Territory Abuja (FCTA). This assessment revealed a lack of data bases for planning in the sector, insufficient personnel trained to undertake planning and implementation, poor definition of responsibilities within the sector, little attention to community mobilization and sanitation associated with sectoral development, and difficulty in securing equipment and spare parts from outside the country.

In response, assistance was provided for the design of a project to address these needs on a pilot basis. This project, the Rural Water Supply and Sanitation Project, later designated the RUSAFIYA Project, calls for an evaluation, the terms and timing of which would be decided by the Government, UNDP, and the executing agency.

The timing of the evaluation was established at a tripartite meeting held at the end of March, 1990 (See Appendix V).

## 2.0 THE EVALUATION PROCESS

### 2.1 Purpose

Evaluations of UNDP funded projects are carried out primarily as management tools providing a basis for improving project design and implementation. More specifically, the evaluation of the RUSAFIYA Project was intended to:

- determine the extent and effect of problems faced during project implementation;
- determine whether expected delays in the implementation of project activities were due to overly optimistic establishment of time schedules or to problems with the project design;
- evaluate the project approach and results achieved so far under the project; and
- give recommendations on the future design and activities of the project.

It was intended to examine objectively and independently the project concept and design, implementation, and accomplishments. The full terms of reference are contained in Appendix I

### 2.2 Evaluation Team

The evaluation team consisted of four members appointed by the parties to the project and cost-sharing agreements, but coming from outside these agencies and organizations. The mission included two public health engineers with extensive experience in planning, management, and implementation of comprehensive rural water supply and sanitation programmes in other African countries, an engineer experienced in the water sector and in programme management in the Nigerian context, and a household scientist experienced in training and involvement of women in development in the sector in other African countries (Appendix II).

## 2.3 Methodology

The team leader, selected by the UNDP, met in New York with the Nigeria Desk Officer in the West Africa Bureau before departing on the mission. He and the other team members appointed by the World Bank and the Netherlands Government arrived in Lagos between 27 and 30 October, 1990 and attended briefings from the funding, executing, and implementing agencies as well as concerned ministries. They then proceeded to Jos where they met the fourth member of the mission on 1 November. They spent their first day in Jos in team planning, receiving, and beginning their review of, documents produced under the project, and in initial visits with Plateau State officials. The following day they departed for visits with officials at State, and LGA levels in all four participating States and the FCTA, site visits in participating villages, and meetings with community leaders, water and sanitation committee (WASCOM) members, and extension workers, and observation of training activities in progress, carried out over a six day period. While in the field they also met with national project advisory staff. On 3 November they met further with international and national staff in the project offices.

The schedule for the mission was modified to provide additional days for preparation of draft Findings and Recommendations for submission for review prior to a tripartite meeting before their departure from the country between 17 and 21 November, and for resumption of the mission in Lagos from 3 to 7 December to permit completion of the report (See Appendices III and IV). The report was finalized following debriefing by the Team Leader in New York on 14 and 15 December, 1990.

## 2.4 Comments on the Review Process

The following points are noted with regard to the evaluation process itself:

- Whereas it is understood that the review process should be independent and objective, the tone of parts of the terms of reference was highly subjective;

- Initial briefings on the project from UNDP in Lagos were cut short and failed to provide a coherent understanding of its background. This made understanding and assessment of the project more

difficult. The task of the evaluators could have been greatly facilitated had well prepared briefings been provided;

- The compressed timeframe for conduct of the mission limited severely the opportunity to provide the attention that this highly complex project deserves;

- Compounding the disadvantage of the compressed timeframe were the receipt of extensive and lengthy documents only after arrival at the project offices on the third day in country, the absence of routine project reports and summary documents, and the staggered arrival and meeting of mission members;

- The project team appeared so much submerged in details of the project that it appeared difficult for them to present a cohesive overview of the project, its history, its central focus, implementation strategies and processes, or its accomplishments. Their focus on details of implementation complicated the task of the evaluators and suggested a source of difficulty experienced on the part of project management in viewing the project in its overall context and in communicating its accomplishments outside the project. This is discussed further below;

- The late submission of a detailed chronology of events and project organogram depicting all participating positions, lines of authority, and hierarchical relationships also constrained the Mission's initial efforts to understand the project and its implementation.

Having said this, it is further noted that:

- Logistical support provided by the project staff greatly facilitated the work of the Mission as it attempted to hold to an extremely tight schedule. Whereas every effort was made by project management to support the team by providing required transport and facilities, however, the timeframe did not allow for the considerable time required to set them up and to deal with the mechanics of report preparation;

- Unanticipated logistical constraints in Lagos prevented further work on the evaluation report for the first three days after the return of the Mission to Lagos from Jos. Furthermore, these were the only days the full Mission was together following their return; and

- Whereas many materials which could have been compiled to illustrate the accomplishments of the project and its progress had not been prepared prior to the arrival of the mission, every effort was made to respond to requests from the evaluation team.

Insufficient time allowed in the terms of reference for the Mission, combined with prior commitments which forced the departure of three of the evaluation team members, and other constraints causing delays in the preparation of the evaluation report, necessitated reconvening of the Mission in Lagos from 3 to 7 December after all members had left the country.

# 3.0 PROJECT CONCEPT AND DESIGN

## 3.1 Context of the Project

### 3.1.1 Relation to National Development Objectives

The President, in his address at the opening of the National Seminar on Integrated Rural Development Policy organized by DFRRI on 17 September, 1990, stressed the basic concept of community involvement and action to reinforce a sense of ownership, local maintenance, and sustainability of development in rural areas. The RUSAFIYA Project was conceived as a step towards achieving this objective.

### 3.1.2 Relation to Existing National Sectoral Development Guidelines

Realization of the need for national policies and strategies to guide development in the water supply and sanitation sector began to emerge in Nigeria in 1984 when, pursuant to a World Bank funded Nationwide Water Supply and Sanitation Rehabilitation Project, a Sector Memorandum on Water Supply and Sanitation in Nigeria was drafted. This document, amended by the Federal Department of Water Resources (FDWR) and the National Technical Committee on Water Resources (NTCWR) and finalized in 1986, called attention to the absence of guidelines covering sector development. In doing so, it anticipated the failure of handpumps depending on Government agencies for maintenance and repair, and suggested community financing and responsibility for maintenance and repairs. It also recognized the importance of linking sanitation and health education with water supply. Finally, it dealt with institutions involved in, or impacting on, the sector, as well as health and other related issues.

Many of these issues were later embodied more specifically in the 1986 Programme Objectives contained in the Policy Guidelines for the Nation-Wide Rural Water and Sanitation Programme developed by DFRRI. These stressed appropriate technologies, village level operation and maintenance, community mobilization, self-reliance, and improved health knowledge and practices.

The RUSAFIYA Project was conceived and designed to build on, and reinforce, these early policy initiatives and to develop an implementation model to be tested.

As an initial step towards formulation of a national rural water supply and sanitation sector policy, strategy, and action plan, a draft document has been prepared by a group of consultants for presentation. This document incorporates the RUSAFIYA concept, and experiences gained during implementation of the project can thus benefit national sector policy making.

### 3.1.3 Relation to UNDP/World Bank Strategy

The RUSAFIYA Project fits into the Country Programme Strategy of UNDP/World Bank, aimed at initiating a comprehensive national sector development process to achieve sustained development in the sector. In the context of this strategy, the RUSAFIYA Project constitutes a demonstration project designed to test and refine implementation strategies for the delivery of water supply and sanitation services to low-income rural people which can be replicated on a national scale.

It aims at strengthening institutions in both the private and public sectors and provides training towards this end. The model, tested and refined, should provide a basis for sound sector policies as a framework for national sector plans and investment programmes.

### 3.1.4 Organizational and Institutional Framework

The RUSAFIYA Project exists in a complex sectoral institutional environment which includes a number of ministries and agencies at each level of Government, from Federal to State to LGA. In addition, ministries and agencies differ from State to State, in both name and responsibilities. The RUSAFIYA Project itself was established under the Federal Ministry of Health (FMOH). But its outputs are expected to impact on programmes implemented by all ministries and agencies active in the sector, both individually, and jointly.

At Federal level, these include the FMOH, Federal Ministry of Water Resources (FMWR), and the Directorate of Food, Roads, and Rural Infrastructure (DFRRI). These have their counterparts at State level, and also include Public Utilities Boards (PUBs). In Bauchi State there is also the Bauchi State Integrated Rural

Development Authority (BASIRDA), which serves as the counterpart agency for the project. At LGA level, are a variety of health, community development, and water supply units. LGAs are organized into more than six departments, with underlying divisions and sections. The proposed WASUs have been designated in at least some LGAs, or by some LGA officials, as divisions.

The Project Document calls for integration into this institutional framework at Federal and State levels through liaison (advisory) committees and counterpart staff. The World Bank was designated the executing agency, and the FMOH the implementing agency. However, the Federal role is not clear.

### 3.1.5 Need

Health. The project addresses the methodology for meeting needs of a rural population which currently stands at about 55 million living in communities of less than 5,000 people, three fourths of whom do not have access to safe water or sanitation. Resources existing within these communities are scarce.

Health status among this population is poor, in large measure as a result of diseases related to water and sanitation of the environment. Infant mortality stands at about 130 per 1,000 live births, and whereas malaria is an important causal factor, diarrhoeal and other intestinal diseases are second in importance as a cause of infant deaths and the major cause for hospital admissions. Diarrhoea related deaths among children have been estimated at between 150,000 and 200,000 per year. Furthermore, prevalence rates of guinea worm infestation can be as high as 70 to 80% in some areas.

The potential for improvement of health status by establishing access to safe water supplies, particularly if linked to sanitation and improved hygiene, is great.

Over and above the need for improved water supply, sanitation, and hygiene, however, is the capacity to deliver and support services and to achieve behavioral objectives.

Sustainability. Poor operation and maintenance of existing water supplies have clearly demonstrated the need for sustainable development. Current strategies for sector development have left unresolved this very important issue. It is one of the fundamental objectives of the RUSAFIYA Project to address this issue.

Assessment of Needs. A rapid assessment of needs and resources available to implement projects to meet these needs was carried out in five States prior to design of the project. Needs identified related to:

- existing data bases for planning,
- insufficient trained technical personnel,
- demarcation of responsibilities in the sector,
- emphasis on water supply with little attention to sanitation and community mobilization,
- resources available for purchase of equipment and spares from outside the country.

The project was conceptualized to address these needs.

### 3.1.6 The Design Process

In November of 1985 the Federal Ministry of Health requested assistance from the UNDP in the rural water and sanitation sector in the FCTA and the four States currently receiving support under the project. It was agreed that a project would be prepared under the ongoing UNDP Project NIR/85/070. A new project was designed by the advisor under that project, with assistance of consultants from the Netherlands funded by the Dutch Government. Following the rapid assessment of needs (see section 3.1.5), and based upon its findings, the project design was carried out by the project advisor and a Dutch consultant team consisting of a hydrogeologist and water engineer who spent three weeks each in each of the states, and an institutional specialist and mechanical engineer, who visited each of the states for a period of one week each, working with state personnel in the participating states and the UNDP.

## 3.2 Project Concept

### 3.2.1 Project Document

The Project Document, signed in September, 1988, and revised in May, 1990 following the Tripartite Review Meeting, forms the legal basis for implementation of the RUSAFIYA Project, together with signed Memoranda of Understanding between the UNDP and the participating States and the FCTA.

The Project Document sets out the purpose and objectives of the project and puts it into the context of the overall development of the sector. It describes a rationale and strategy upon which the project is expected to build. It also identifies inputs and agency responsibilities, outputs, and activities required to achieve them. It provides an implementation schedule and budgets, and defines reporting requirements. These are discussed in greater detail below and in succeeding chapters of this report.

However, several points should be noted in particular. First, whereas the project aimed at developing a sector development implementation model intended to impact heavily on the way in which future development would be carried out, commitment of the donor agency is specifically terminated upon completion of the project. Secondly, integration of the project within the sectoral institutional framework is vague. Finally, organization and management of the project were not defined in detail. Nor is its implementation. These issues are left to project management, which is guided by proposals for institutional development and implementation guidelines prepared by HIFAB International AS in June, 1988.

These, and other factors described in this report have strongly influenced the way in which the project has evolved, or have allowed it to develop in large measure outside of, and apart from, established institutions.

### 3.2.2 Purpose and Objectives

To understand the purpose and objectives of the RUSAFIYA Project, it is necessary to look in several places in the Project Document. Thus, Primary function is described as direct project support and institution building at State and local government levels. Secondary function is described as institution building at Federal level. The Objectives stress a community based institutional model for planning and implementing rural water supplies and sanitation, with assistance at State level to improve planning, management, and logistical support. They also stress the involvement of women. The Strategy Section emphasizes sustainability of institutions, linkage of water supplies, sanitation, and hygiene education, and the demonstration aspect of the project. They stress support primarily for village based institutions with only vague reference to institutional structures at LGA level, linkages to State level, and training at State, LGA, and local levels.

More specifically, RUSAFIYA's long term development objective is the expansion and improvement of the delivery of water supply and sanitation services to rural communities. But its primary output consists of a proven methodology, or a model, which can be employed in implementing future sectoral development.

To facilitate the development, testing, and demonstration of the model, the project provides resources in support of meeting limited secondary objectives. These include:

- Assistance to the FCTA and participating states to improve planning, management, and logistical support for rural water supply and sanitation;

- Material and related support for construction of a limited number of water points and VIP latrines in participating communities; and

- Provision of limited training at community, LGA, and State levels in support of the primary objective.

Other immediate objectives identified in the project document relate to the strategy for meeting the primary objective and to its purpose. These include:

- Enhancement of the role of women in planning and management of village level sectoral development initiatives;

- Promotion and establishment of an improved policy on ownership and cost recovery for community water supplies and sanitation; and

- Improvement of personal and environmental hygiene in participating communities.

The proposals for institutional development and implementation guidelines prepared by HIFAB-International AS in June, 1988 which constitute an important reference and guide to project management, emphasize the adoption and/or development of "such systems, routines, and procedures as may make it possible for the LGA to shoulder a major responsibility in community oriented water supply and sanitation."

At State level:

- Approximately 50 technical staff will receive training;
- State coordinators will gain experience which can provide a base for future support to LGAs and replication of community based water supply and sanitation projects; and
- Reduction in the demand for assistance to communities for maintenance of water supply facilities.

At Federal level:

- Policy makers receive the RUSAFIYA model as a base for establishing policy in the sector;
- Trained and experienced staff who will be able to provide a base for future support to States and replication of community based water supply and sanitation projects;
- Reduction in demands on the recurrent budget by mobilizing community resources; and
- Experience in community mobilization which can be replicated to develop community level self-sufficiency and mobilization of community resources for development in other sectors.

Private sector:

- Small local contractors who will be trained and better able to serve local needs;
- Borehole drillers will receive advice on how to strengthen their sector;
- Together with the Bauchi Handpump Project, the RUSAFIYA Project will benefit shop owners who can retail handpump spares; and
- Together with the Bauchi Handpump Project, the RUSAFIYA Project will benefit manufacturers of handpumps.

### 3.2.3 Benefits and Beneficiaries

The RUSAFIYA Project differs from the usual development project in that its primary purpose relates not to the provision of services to clearly identified target beneficiaries, but rather to development of an institutional and implementation model to achieve more effective sector development in the future. In the process, it will, in fact, have immediate beneficiaries. These include:

At community level:

- Approximately 350 rural communities, or about 150,000 people who will receive:
  - . affordable safe water supplies
  - . improved environmental sanitation
  - . health education and assistance in improving community and family health
  - . assistance in organizing and developing the capacity to plan, manage, sustain, and maintain community development initiatives;
- Communities, families, and school children who will also benefit from health education through the CHICS Programme in schools; and
- Approximately 1,500 households which will have access to household latrines.

At LGA level:

- Participating LGAs will establish WASUs to support rural water supply and sanitation development initiatives;
- Participating LGAs will benefit from experience in planning, managing, and assisting community based development projects;
- Approximately 200 staff will receive training; and
- Relief from burden of assistance to communities for the maintenance of water supply facilities.

But its greatest potential benefits are anticipated in the future through the spread of the RUSAFIYA approach and its replication in more States and new LGAs and communities which it is hoped will be enabled to develop as self-sufficient units able to plan, manage, maintain, and sustain water supply, sanitation, and other environmental health initiatives.

### 3.2.4 Strategies

The RUSAFIYA Project is built upon the premise that communities can take effective action and mobilize their own resources to meet their own priority needs and to improve the quality of their own lives on a sustainable basis. Furthermore, it assumes that this can be done at moderate cost employing appropriate technologies, and that communities can play a large role and that they can, with help, do so more effectively and efficiently, and with greater benefits, than it can be accomplished for them by State or Federal agencies or external organizations.

The strategy employed is first of all to provide a knowledge base and organizational assistance to communities, together with technical assistance to carry out construction and training. It helps to build confidence, skills, a sense of ownership, and self-sufficiency at community level. In doing so, it gives special emphasis, where appropriate, on the role and direct involvement of women in all aspects of planning and implementation. The strategy employed is secondly to help build up the institutional capacity at LGA, State, and Federal levels to sustain and replicate support to communities. More specifically, the strategies include:

- Participatory approach to develop a replicable model through intimate involvement of communities in all aspects of the water supply and sanitation services development as well as training at State, LGA, and community levels;

- Participatory approach to develop a sustainable organizational, structural, and institutional arrangement for integrated rural development in the water supply and sanitation sector;

- Special emphasis on the role and direct involvement of women;

- Promotion of, and emphasis on, community ownership of relevant infrastructure, such as water points and VIP latrines;

- Use of low-cost technology that is affordable, reliable, and sustainable (VLOM facilities);

- Mobilization of local resources and cost sharing;

- Self-reliance;

- Adoption of 'trial and error' approach to the various activities through tests, demonstrations, guidelines, and development of an institutional base for sustainability and replicability;

- Decentralized solution to rural development problems where the development components are geared to long term, inward looking, self renewing cycles based on organization of rural human resources, and management of existing surrounding available materials;

- Initial use of existing institutions such as LGAs (through RUWATSAN units) as a base, restructuring them by creating permanent water and sanitation units, and supporting their initial efforts through inputs in cash and kind to enable them to replicate the facilities in other LGAs; and

- Development of human resource through training.

### 3.2.5 Project Inputs

Inputs into the RUSAFIYA Project as defined in the Project Document and its Revision, are diverse, and include contributions from UNDP, the World Bank, the Netherlands Government, the Nigerian Government, the participating States, LGAs, and communities (See Project Document and its Revision, Section J).

From UNDP/World Bank, these include:

- Long term technical assistance
- Short term technical assistance, often employing resources available from trust funds or other

These outputs are listed in Appendix VI. Related to each output were up to four activities required to achieve them identified in paragraph 2.23 of the Project Document and its 1990 revision. These are listed in Appendix VII.

Progress towards producing these outputs and carrying out activities required to do so is described in Chapter 4.

### 3.2.7 Relation of RUSAFIYA Project to Other Sector Projects

The RUSAFIYA Project was designed to impact on development throughout the rural water supply and sanitation sector in Nigeria by providing an implementation model to enhance sustainability and benefits. To do so, it must provide a basis for the formulation of sector development policies and strategies which in turn must be applied and adhered to throughout the sector. It therefore is related to all future sectoral development and supporting projects in a fundamental way.

Implementation of the project is itself tied very closely to, and dependent upon, two other projects. These are:

- Promotion of the Role of Women in Water and Environmental Sanitation Services (PROWWESS) RAF/87/043 - this project has contributed heavily to the community development components of the RUSAFIYA Project and to efforts to enhancement of the role of women in sectoral development;

- Bauchi Handpump Testing Project under RAF/87/049 - the RUSAFIYA Project is even more dependent upon outputs of this project which are aimed at establishment of local manufacture of handpumps and production and marketing of spare parts.

The project draws on resources from other projects and trust funds administered by the UNDP and the World Bank. These include:

- World Bank Regional Water Supply and Sanitation Group (RWSG) in Abidjan with funding under RAF/87/038 - this has been a source of assistance throughout the project, and includes assistance in the development of an accounting and information management system;

bilateral sources
- In-country training/counterpart training
- Participant training/study tours
- Health education and related material production
- Supplies and equipment
- Well drilling and construction

The Netherlands Government has, through the Netherlands Consultant Trust Fund administered by the World Bank, contributed towards the planning of the RUSAFIYA Project. It has also entered into a formal agreement providing further funding to support:

- Technical assistance
- Development of training materials
- Project evaluation

This strengthens support for women's participation and institutional development. It has also relieved the financial burden on Federal and State Governments.

From the Federal Government come:

- Counterpart staff
- Office accommodations and utilities
- Financial contributions towards implementation costs

States provide financial contributions, and together with LGAs, they also provide:

- Counterpart staff
- Office accommodations and utilities

At village level, contributions are called for in the form of participation in the planning, establishment of operation and maintenance funds, and provision of labor. Villages also are called upon to establish a local mechanism for maintenance and repair of handpumps.

### 3.2.6 Planned Outputs and Related Activities

Fourteen outputs were planned which were linked to the five specific immediate objectives of the RUSAFIYA Project. These were identified in paragraph 2.22 of the Project Document, and were modified in terms of numerical targets in its 1990 revision.

- Netherlands Consultant Trust Fund administered by the World Bank - this fund has contributed to the support of initial design as well as to the implementation of the project; and

- Norwegian Consultants Trust Fund/Swedish Consultants Trust Fund administered by the World Bank - these funds provided support for the preparation of proposals for institutional development and implementation guidelines by HIFAB International AS.

The RUSAFIYA Project, providing a model for effective and sustainable water supply and sanitation development at community level, can contribute to more effective implementation of other existing projects in the sector. These include:

- Agricultural Development Projects (ADPs)/World Bank

- National Rural Drinking Water and Sanitation Programme/UNICEF

- Nigerian Guinea Worm Eradication Programme

### 3.2.8 Project in Relation to Existing Infrastructure

The RUSAFIYA Project relates to Government at Federal and State levels via Project Advisory Committees which provide liaising linkages and counterparts who similarly provide liaison and assist the project. The project interacts directly with WASUs established at LGA level and at village levels.

While on the one hand, future assistance from UNDP was not envisaged, the revised Memorandum of Understanding incorporated in the Project Revision states that:

> "The institutional and management arrangements for the project have been designed to facilitate eventual replication of the project model throughout the country, and to serve as a possible basis for the major rural infrastructure project in the World Bank's lending program for Nigeria."

### 3.2.9 Timeframe

The project was originally designed as a three year project to begin in January, 1988, with a completion date in December, 1990. Signing of the Project Document was delayed until September, 1988. However, the UNDP signed an advance authorization in June, 1988, allowing start-up in July of that year.

The timeframe was extended to September, 1991 in Revision "D" of the Project Document, and it has been proposed by project management that it be further extended to September, 1992.

## 4.0 PROJECT IMPLEMENTATION

### 4.1 Outputs and Activities

Outputs planned under the RUSAFIYA Project, and activities required to produce them, were identified in the Project Document and its revision of May, 1990 (Appendices VI and VII). Progress in carrying out these activities and moving towards accomplishment of these outputs is reviewed in this section. Milestones in the implementation of the project are identified in Appendix VIII.

#### 4.1.1 Establishment of Water and Sanitation Units (WASUs)

Activity 1.1 - Identification of LGAs/Negotiations with LGA officials. The identification of participating LGAs has been carried out in all states. Negotiations with LGA officials on establishment and staffing of the WASUs are proceeding well. This has led to the establishment of a WASU as an institutionalized unit in Nasarawa (in the form of a department), of a fully recognized unit in Gwagwalada which is soon to become a division with a budgetary allocation proposed in its 1990/91 budget plan, and of a functioning unit in Ningi, although not formally established. Negotiations on establishment of WASUs in Oju and Gwoza are in progress. In Oju an under-staffed unit is functioning, and in Gwoza, staff have been identified and are ready to initiate activities under the project.

Activity 1.2 - Staff selection and training. With the exeption of WASU staff in Oju, all international, national, and local staff of the project had been selected and were on duty at the time of the evaluation mission in November, 1990. Training has been provided through workshops and supervisory activities. Both are provided on an ongoing basis. The amount of training undertaken at any participating LGA depends on the period of time the project has been active in it. Thus, most training has taken place in Nasarawa, it being the first LGA to take part in project activities and in developing and trying out new steps in the project model. In Gwoza, training has yet to be initiated.

Activity 1.3 - Planning and execution of project activities. In Nasarawa, Ningi, and Gwagwalada, planning and execution of project activities are carried out by WASU staff with supervision from project advisory staff in their roles as project coordinators. Monthly "clinics" are employed to

facilitate this process. In Oju, where staffing is incomplete, where there has not as yet been a unit head appointed, and where the extension agents are still in training, all activities currently are planned and executed by the project coordinator. In Gwoza, rapid reconnaissance surveys are presently being conducted, and planning and execution of projects have not begun.

Progressive shifting of responsibility for planning and executing projects is not taking place to any significant extent. But it is planned that State advisor/coordinators will distribute their time equally among the participating States as called for in the Project Document. This will have the beneficial effect of enhancing the roles of WASU heads.

Activity 1.4 - Review of operational experience. In addition to monthly "clinics", project staff participate in monthly meetings in which experience is reviewed and feedback of results is supposed to take place. However, no regular reports of these meetings were available to the evaluation team. While implementation of activities does evolve with experience, this appears not to be documented in a systematic way.

### 4.1.2 Organisation and Training in Communities

Activity 2.1 - Community organisation. The encouragement of communities to organize themselves for management proceeds in a step-wise fashion. From the start of project activities in an area, which begins with a rapid reconnaissance appraisal (See appendix IX), The population is involved and consulted during this time, which leads to acceptance of the project concept in around 90% of communities approached. This is an activity of the WASU extension agents which results in the institutionalisation of water and sanitation committees (WASCOMs). WASCOMs have been established in Nasarawa, Ningi, and Gwagwalada as follows:

| | |
|---|---|
| Nasarawa | 31 |
| Ningi | 35 |
| Gwagwalada | 18 |

Activity 2.2 - Community training. A series of training modules has been prepared, each describing a new aspect of the establishment of a self-reliant community level management system backed up by a WASU at LGA level (See appendix X). Community and WASCOM members, as well as several artists and artisans, have been, or are being, trained, in order to attain community level training goals and to involve local artists into the preparation

of training materials (See appendix XI). Most formal training is provided at workshops or village meetings.

Activity 2.3 - Community support. Continuous support and backstopping is provided to WASCOMs by the extention agents under the WASU. It is not certain how long this support will be needed by communities. Furthermore, there are as yet no clear commitments to continue. Nor is it clear how it would be continued by the WASUs, which have no formal status, after completion of the RUSAFIYA project.

Activity 2.4 - Review of approach. The monthly "clinics" form the basis of a review process and provide feedback of results. It provides a forum for solution of implementational problems, and sharing of successes which can reinforce or improve the model. This is very much guided by the coordinators assigned to the various States, and, depending on the subject, on other advisory project staff. Nasarawa serves more specifically as a pilot region where new activities are first put into practice and evaluated. These may then be applied in other LGAs. The approach may be somewhat altered or further developed for application in other States.

The review system is still in an early stage of development. No implementation guidelines or manuals have been developed as yet. Nor have there been established mechanisms to assess impacts.

### 4.1.3 Distribution System for Spare Parts

Activity 3.1 - Procurement of handpump spares. Spare parts for handpumps installed in project communities are currently procured by the project. It is anticipated that a marketing system for spares will be developed in participating States within two years after the first pumps have been installed in each. Initially, communities in which handpumps were installed bought kits with spare parts which should last for the first two years. Purchase of these kits, which at the present time are available for sale through the project, is to be shifted to the private sector. The project will begin by selling to local merchants. Later, production, distribution, and marketing will be through the private sector. No procurement of spare parts for other than the Afridev pump is planned.

Activity 3.2 - Establishment of distribution network. The establishment of a distibution network for local purchase of spare parts has not yet started (up to now only 6 pumps have been installed). It is intended that local merchants will be approached to retail spare parts (See Activity 3.1). A parallel project closely coordinated with the RUSAFIYA Project is helping to set up local production centres for the Afridev pump in Nigeria. At present, WASCOM members are supposed to come to temporary project distribution centres in participating states to collect their pump and purchase spare parts. In most cases, spare parts are kept at the house of the WASCOM chairman.

Activity 3.3 - Operation of distribution network. Since planning for distribution of spare parts is in its early stages, no operational distribution or marketing system has been put in place as yet.

### 4.1.4 Preparation of Guidelines for Selection and Organisation of Communities and for Distribution of Spare Parts

Activity 4.1 - Preparation of guidelines. Either of two approaches could have been taken to the drafting of guidelines under this output. In the first, draft manuals could have been prepared to guide implementation in the initial stages of the project. These could have been revised on a continuous basis incorporating lessons learned from experience.

The alternative which was chosen, however, left drafting of manuals until experience had made possible the refinement of the model. Since the model for establishment of WASUs and for organization and training of communities has not been refined, and since an operational distribution network for spare parts has not been established, operational guidelines have not been produced. As a starting point for their development, preparation of a series of reports and position papers has been initiated, however (See appendix XII).

### 4.1.5 Procurement of Equipment

Activity 5.1 - Reconfirmation of equipment needs. Equipment needs specified in the Memoranda of Understanding, and identified during consultations by DHV in participating States, have been revised based on reassessments and modifications in the Project Document. Identified needs were similar in each state,

### 4.1.7 Setting of Implementation Targets for Participating LGAs

Activity 7.1 - Collection of data, planning, and construction. Extension agents are trained in use of a participatory approach as well as in data collection and interpretation methods, and hydrogeologists are provided training to advance their skills. In the initial stages of preparation for village projects, the rapid reconnaissance appraisal and in-depth socio-economic survey provide most of the information for planning, in which villagers are continuously involved. This results in working schemes that differ to suit individual communities. The socio-economic survey and preparation in each community last for at least half a year.

Activity 7.2 - Mobilisation of communities. Mobilisation of communities takes place through a series of village meetings at which awareness is raised and demands for information on waterpoint management and waterborne diseases are met (See appendices X and XIV for materials employed).

Awareness is heightened during initial surveys, interviewing, and community meetings utilising materials which have been developed for use by extension agents under WASUs, and through activities of WASCOMs. Training of WASCOM and community members by village health educators, who are themselves members of the community, results in a still greater awareness and more effective mobilisation.

Activity 7.3 - Selection of communities and construction. It is felt that project targets can be met, but over a much longer period than was initially planned (See appendices XV and XVI). Only in Nasarawa LGA can targets be achieved as scheduled. Construction of VIP latrines has been slow until now (37 have been completed, including 19 multi-compartment and 18 indididual latrines). It is expected that the rate of latrine construction will increase only gradually, but that this will occur on a continuous basis. For instance, in Nasarawa, people have begun to express interest in building VIP latrines in their court yards after a period of a year and a half of hygiene education and demonstration of sanitation methods.

In Ningi, one demomstration single-pit VIP-latrine has been built, and approximately eight domestic latrines have been constructed under supervision of the RUSAFIYA project. Other latrines have been upgraded.

the major differences concerning the geophysical equipement. As far as possible, purchases have been made locally. A major exeption was made for the initial procurement of 70 handpumps manufactured in India. More recent orders have been placed with three national production centres. Delivery has been held up because prices are not competitive with those of Indian pumps. This is a result of high duties on raw materials imported into Nigeria. UNDP considers India a developing country, so preference is expressed for importation of the less expensive pumps over purchase of those manufactured locally. This, however, would not be supportive of the goal of encouraging local Nigerian production.

Activity 5.2 - Preparation of specifications. Specifications have been prepared for equipment and orders placed. Much of the equipment ordered has been received (See appendix XIII).

Activity 5.3 - Procurement. Procurement is dependent, or partly dependent, on UNDP procurement procedures on the one hand, and on the actual financial contributions of each of the participating States, on the other. Both factors impact on the purchasing of equipment. This causes minor delays, but up to now has not influenced greatly the implementation rate of the project.

### 4.1.6 Design and Implementation of Community Based Projects

Activity 6.1 - Design and apply model. Workplan sheets II contained in the Project Document and its Revision indicate globally the sequencing of activities which were thought necessary to plan and implement an integrated rural water supply and sanitation project. But they do not cover all activities undertaken, or to be undertaken, to implement such a bottom-up project. There seems to be a consensus on the sequence of the steps, but the project has not produced clear documentation describing, or serving as a guideline for carrying out, these activities.

Activity 6.2 - Review and revision of the model. Review of experience and revision of approach is a continuous process, but feedback to other participating LGAs does not appear to take place systematically. Each new participating LGA has, however, benefitted from experience in earlier LGAs, and the process of implementation proceeds much more smoothly at the LGAs that joined later.

### 4.1.8 Preparation of Implementation Guidelines for Community Projects

Activity 8.1 - Preparation of guidelines. Guidelines for implementation of projects in communities have not been produced (See discussion in paragraph 4.1.4).

### 4.1.9 Training

Activities 9.1-9.5 - Implement training. A variety of training sessions have been implemented under the RUSAFIYA Project (See Appendix XVIII). These began in Nasarawa LGA and it is there that training has been carried out most intensively and extensively through workshops. Ningi and Gwagwalada LGA personnel have benefitted from the experience gained in Nasarawa applied during a sequence of training activities.

The participatory approach has been successfully applied in community meetings, and during training of WASCOM members. Artisans trained in two workshops on latrine construction have started construction of latrines. A variety of training activities have been organized under the project, other short term training has been attended outside the project, and a study tour has been provided outside the country. In-country training has included field training in geophysical survey methods and training for teachers in the CHICS programme. External training has included visits to projects with strong health education and community ownership components in Ghana and Burkina Faso.

The numbers of persons who participated in training activities in Plateau and Bauchi States and in Abuja included 26 at State level, 108 at LGA level, and 385 at community level. Rough estimates suggest that the actual number of individuals involved was around 16 at State level, 70 at LGA level, and 220 at community level. Seminars for LGA, State, and Federal officials have not been undertaken up to now.

### 4.1.10 Preparation of Training Manuals

Activity 10.1 - Review of existing training materials. Existing manuals on training methods, training manuals, and training materials have been reviewed for use or adaptation by project staff, for the most part in collaboration with

The construction target of 540 low-cost water supplies should be met, and that of 1,600 demonstration VIP latrines could possibly be met using the approach developed, and by contracting locally for well-digging and hand drilling of boreholes where appropriate. But it is anticipated that this too will take place at a lower, and in the long run, more realistic, rate than anticipated in the project document.

The targets established for hand drilled wells in the revised project document will be changed because it appeared not to be an appropriate method. Out of 105 water points, it is anticipated that 95 will be either machine drilled boreholes or hand dug wells. This change will require an additional US$ 450,000.

Activity 7.4 - Promotion of hygiene education. The provision of hygiene education at schools and in communities is gradually taking shape, and has been slow in starting. It is becoming an integral part of the total scheme of village mobilisation and organisation. It is noted that the hygiene education advisor arrived only in May, 1990, 20 months after the start of the project. Time is required for new ideas and practices to prove their worth. Understanding, confidence, and behaviour change do not appear overnight. A significant change in hygiene behaviour can not be expected during the short life of the RUSAFIYA Project.

Hygiene education at schools is provided for the most part under the CHICS programme (See appendix XVII). The approach is more or less the same as that provided for communities, but with trained teachers in primary schools providing the hygiene education. At present, the CHICS programme is active in Nasarawa, where 4 school latrines have also been completed. Other areas currently involved, or still to be identified, include:

- Gwagwalada where five latrines have been completed at schools. In total, 20 schools will be involved;

- Ningi, where four schools are now involved.

In some areas, local institutions such as the parent-teachers associations and school boards have begun to participate in the sector development effort.

consultants. Some materials have been obtained through UNDP and UNESCO and adapted to the project concept. A position paper "Planning and Implementation of Training" is in preparation.

Guidelines for conducting training and complete training materials are not yet available (See appendix XII, No.4).

Activity 10.2 - Production of "how to do it" construction booklets. One booklet on VIP latrine construction is available (See appendix XII); others are planned, for instance on production of the Mozambique slab, but are yet to be produced. Production of materials for use at community level are needed and will require skill and extensive testing in the field.

Activity 10.3 - Production of training materials for LGA and State staff. Most training for LGA personnel has, up to this point, been undertaken in conjunction with that provided at community level. Thus, most materials used at LGA and State levels are the same as those used at community level. As stated above, some training materials have been adapted from existing sources, others have been produced by the project itself.

Not all subjects covered during training are included in the materials prepared under the project. Furthermore, production of specific topical materials generally takes place only at the time their subject matter is scheduled in the workschemes of extention agents. No detailed plan for production of needed materials appear to have been prepared.

Activity 10.4 - Production of audio-visual materials. Production of audio-visual materials is generally undertaken in conjunction with the development of training materials. The initial conceptual design has been carried out on several occasions in workshops held in Jos or in one of the participating LGAs. Final production has been completed for the most part by the training adviser in consultation with other technical advisors. A list of audio-visual materials produced or used is given in Appendix XIV.

In workshops, one or two local artists have been included and trained to work out the drawings in cooperation with the other participants. Materials are reviewed by staff and pre-tested in a single village. While using the materials in communities, extention agents are asked to provide feedback in the form of reactions or remarks which can be used as a basis for improving them.

Activity 10.5 - Evaluation, review, and revision of training materials. Neither the systematic review of training materials produced, nor assessment of impacts or effectiveness of training, has yet been planned or started. Thus, revision of training materials based on a sound understanding of their effectiveness and how they are perceived has not been possible.

### 4.1.11 Community Ownership

Activity 11.1 - Advocacy and social marketing of community ownership. Advocacy, and social marketing to establish community ownership of water supply facilities, appear to be an integral part of the project strategy and approach. During discussions between the evaluation team and state or LGA authorities, support was expressed for community ownership of water points. In discussions with villagers, there was no doubt about the community becoming the owner.

Activity 11.2 - Interim recommendations on ownership. It was decided at the Tripartite Review Meeting in March, 1990, that communities should not pay for handpumps, although they were prepared to do so. Some had even collected up to Naira 5,000 for the purpose. This is a clear indication of commitment on their part.

Although a position paper (No. 2) on "Community Financing and Ownership" has been produced, it deals mostly with financing. While it is true that "initial investment, creating a feeling of ownership" (see paragraph No. 3) is an important factor, there is more to ownership than financial involvement. This is scarcely reflected in the position paper (Paragraph Nos. 23, 24 and 25), which stresses the importance of village organisation to pay for the installation of pumps. Other important issues such as training of community members as pump mechanics for maintenance and repair of handpumps, as well as community contributions to well construction through provision of labour, local construction materials, and food and housing for hired labourers may be of equal importance to financial contributions.

A draft of a "Community/LGA Water Supply, Sanitation and Improved Health Agreement" is to be submitted for approval by the several authorities concerned (See Appendix XIX). Once accepted, this document will be signed by the LGA and the community at the beginning of water and sanitation activities in each in an attempt to improve understanding of responsibilities, contributions, and benefits, and as a token of serious

involvement from both sides, creating a basis of trust and ownership at an early stage. However, it does not incorporate a statement on community ownership.

Activity 11.3 - Review and final recommendations on ownership. The above Position Paper gives recommendations with regard to community financial ownership of water points. Experience gained up to the present time is not sufficient to permit extensive review or formulation of final recommendations.

### 4.1.12 Cost Recovery for Operation and Maintenance

Activity 12.1 - Review of credit and cost recovery practices. Review of prevailing formal and informal credit and cost recovery practices by Uche Mbanefo on request of the project resulted in the report "Pump financing study", September 30, 1989.

Activity 12.2 - Interim recommendations on cost recovery. Recommendations on "cost-recovery" are extensively discussed at all levels. The concept is new in the Nigerian context where communal supplies have in the past been provided free by Government. However, for the sake of establishing ownership, it is accepted that an initial amount of money should be collected and saved towards costs of repairs, but discussions have not been conclusive so far.

As the pump financing study mentions, people are accustomed to credits and saving money. They have been collecting money in amounts varying between Naira 500 and 5,000 per community. The use of a bank account is completely new to many communities. Some have, however, established such accounts. Others have found appropriate alternatives.

Activity 12.3 - Review and final recommendations on cost recovery. Position Paper No. 2 on community financing and ownership reflects current recommendations and experience. It is considered too early to finalize recommendations.

### 4.1.13 Improved Knowledge and Practices

Activity 13.1 - Promotion of hygiene education. To date, hygiene education has been provided on a pilot basis under the project so that lessons learned can be applied to the improvement of approach and content.

### 4.1.14 Audio-Visual Materials

Activity 14.1 - Development of audio-visual materials. Audio-visual materials for personal and environmental hygiene have been developed or procured, but need to be further adapted or revised.

## 4.2 Constraints

Many parties have roles in the implementation of this project, each with its particular procedures and interests. As a result, negotiations with State and LGA officials have proved time-consuming, and delays have been encountered before signing of Memoranda of Understanding. Establishment of the WASUs, staff recruitment and selection, establishment of full time positions within a promotion structure, reconfirmation of equipment needs, procurement of equipment by the UNDP, and endorsement of new policies and procedures defined in position papers, all require time.

Organisation of communities also faces constraints. These relate first of all to access, which is important for two reasons. First, limited access during rainy season, or difficult access of remote villages, may limit the rate of community mobilisation. Secondly, rural communities often express mistrust of authorities attributable to previous experiences with (government) projects. And community organisation may suffer from the (previous) interventions of other agencies with a different approach (delivering free of charge, promising other things or in another way) in the same region.

Organization of communities employing a participatory approach also requires reorganisation and retraining of extension agents.

In some cases, the financial situation of beneficiary communities is not favourable.

Discussion and resolution of policy with regard to cost-recovery have taken considerable time and are still not conclusive.

No systematic reporting or monitoring system was established until late in the project, making it difficult to define lessons learned and to incorporate them into implementational guidelines defining the sequence of activities

and resources needed, or identifying major points requiring attention when applying them in other communities, LGAs, or States.

The low rate of output in the beginning of participatory bottom-up water supply and sanitation projects has caused impatience and misunderstanding within the funding agency, and has resulted in pressure being placed on the project to "produce" water points and latrines.

### 4.3 Project Management

The description of organisation, management structure, and division of responsibilities among agencies is vague in the Memoranda of Understanding. In the job description for project staff, there is no statement as to whom each officer is meant to report.

The project coordinator appears to consult and report on project policy issues with FMOH, procurement and financial issues with UNDP and project concepts and strategies with World Bank. Thus, in order for the project to progress, the project coordinator has taken most of the management decisions himself. In fact, the role of the project coordinator can best be described as a project manager responsible for finance, accounting, project implementation, reporting, and project progress.

Decision-making related to the project is centered around the project and State advisor/coordinator, all of whom are project staff.

The project link into government infrastructure are on the day to day basis looked after by counterpart staff. The counterpart staff do not have decision-making responsibilities but are mainly liaise with the project to facilitate government participation in accordance with the Memoranda of Understanding.

#### 4.3.1 Supporting Staff

In addition to the key posts mentioned above, the project has advisory staff dealing with special issues including health education, hydrogeology, community development, and women in development. LGSs provide staff necessary for implementation of

the project. These are mainly community development and health extention agents.

As a result of the tripartite review in March, 1990, a Federal counterpart has joined the project. He joined the project headquarters in October, 1990. Before then, as a national coordinator in the FMOH, he had allocated 10% of his time to the project. His terms of reference state that he should report directly to the FMOH and that he would be responsible to see that the Federal government fulfills its committments in line with the Memoranda of Understanding.

State counterparts are, with one exception, hydrogeologists. They provide technical assistance to LGAs and the project, as well as liaising with State agencies. LGA's provide Unit heads for the WASUs, as well as community development, health, and other extension staff, and some well-sinkers.

### 4.3.2 Project Advisory Committees

Project advisory committees have been established at state and federal levels. These committees were initially designated as management committees but later redesignated advisory committees in the revised Memoranda of Understanding.

### 4.3.3 Project Work Plans

At headquarters, some very general work schedules have been prepared, as seen in the Memorandum of Understanding. However, at the project HQ level the team has not found any detailed workplan indicating how the advisors, and other project resources are being utilized.

At the LGA level, work plans are in the process of being established as a working tool for the WASU.

Management tools such as working guidelines and/or project routines to facilitate delegation of responsibilities have not been found, nor have intermediate targets for development of guidelines, training materials, or use of project equipment.

## 4.4 Project Staffing

Staffing of the RUSAFIYA Project includes positions funded under the project as well as positions filled by personnel assigned from existing government institutions as seen below:

| LEVEL | PROJECT STAFF | NATIONAL STAFF |
|---|---|---|
| Federal | None | Counterpart(1), FMOH<br>Liaison officer, FMWR<br>(part time) |
| Project | Project coordinator(1)<br>State coordinators/<br>Advisors(5)*<br>Tech. advisors (3)<br>Office staff (3)<br>Drivers(5) | |
| State | None | State counterparts(5) |
| LGA | State Coordinators/<br>Advisors(5)*<br>Account Clerks(4) | WASU Heads(5)<br>Community<br>Development<br>Officers<br>Extension Agents,<br>Health<br>Other<br>Technical assistants<br>Drivers<br>(Total 10-12 /LGA) |

* The state coordinators have dual functions. They therefore have been listed two places in this table. They all have expertise in a specialty, and include hydrogeologists, health, and community development specialists. About 80% of their time is allocated to providing technical advice related to their specialties in all the LGAs. However, they are also given specific responsibility for overall project management

The main government staff input into the project is provided at LGA level. This applies in particular to community development and health extension workers and to a lesser extent

to technical officers from the Rural Water Supply Section within the LGAs. The technical officers have preciously been involved in supervision of sinking of open wells in the different communities

The recruitment of project staff has been delayed compared to earlier targets dates. Typically, the recruitment of staff has been delayed in relation to targets from 6 to 12 months (See appendix XX). The main reason for delayed staffing has been the lengthy procedures for approval of candidates by government and UNDP.

## 4.5 Monitoring and Evaluation

Steps towards development of an information system were initiated in May, 1990 to monitor progress for both software and hardware components of the project. By September/October, 1990, the system was operational. It is understood that information in the format developed is now updated on a monthly basis (See appendix XXI).

In addition, financial monitoring of project expenditures are updated continuously through a computerized system in the project headquarters in Jos. This system covers both funds provided by UNDP and those contributed by State Governments. Both these sources of funds are transferred to the project account, and these are thus monitored by the project.

Since the start of the project, two Project Progress and Evaluation Reports (PPERs) have been submitted to UNDP and Federal agencies. The latter of the two reports was the basis for the tripartite review of the project which took place in March, 1990.

It is important to note that no system for assessment of impacts, including establishment of baseline information for later assessment, was called for in the Project Document. Nor has the project itself taken steps to do so, or to communicate the need to do so. This is discussed in other sections of this report (See section 5.10), but its importance should be stressed here since the project is in essence a test and a demonstration of a methodology to be replicated in other States, LGAs, and even other sectors. It represents an investment in the future with benefits which are expected to be sustained and increased later

- Delays in receipt of Government cash and cost sharing contributions,

- Slow start up due to complex institutional framework for the project,

- Delay in recruitment of project personnel,

- Lack of enthusiasm for community involvement in sanitation component of the project.

It was noted that a new work plan was being prepared for presentation.

Out of the review came the following conclusions and decisions together with identification of actions required of project management, UNDP, and Government:

1) All States must fully participate in future Review Meetings.

2) Project Management should:

   - Submit to UNDP an updated Project Performance and Evaluation Report (PPER). Deadline April 6th 1990;

   - Provide an estimate of the financial implications of extending the project duration by one year. Deadline April 6th 1990;

   - Note the approval of the participation of national experts by Government;

   - Provide quarterly progress reports in view of the complicated nature of the project;

   - Review cost sharing mechanism under the project and prepare a modality for its application. Deadline June 1990;

   - Update and consolidate project workplan. Deadline April 6th 1990;

   - Discontinue upfront contributions requested from communities for provision of water points and adopt strategy of contributions for operation, maintenance, and replacement; and

in participating communities, and through replication, in additional communities. Evaluation is inherent in the testing and demonstration process.

### 4.6 Tripartite Review

A tripartite review of the RUSAFIYA Project was held at the end of March, 1990, 18 months after the signing of the Project Document. Participants included officials of the Ministries of Finance and Health, the UNDP, the World Bank, project staff, their counterparts at Federal, State, and LGA levels, and State officials of DFRRI and BASIRDA. This review was based on progress reported in the Project Performance Evaluation Report (PPER) prepared in August, 1989, plus supplementary materials prepared to provide current data on progress.

Discussions focused on a number of issues which resulted in specific recommendations. These included:

- Reporting
- Progress related to outputs
- Operational issues and constraints
- Revision of the timeframe (workplan) and its financial implications
- Need for evaluation of the project

It was indicated that:

- The project design remained valid and in keeping with Government priorities;

- The status of 11 out of 14 project outputs was satisfactory;

- The project objectives could not be met within the project time frame except in Nasarawa LGA of Plateau State, an extra year being required to complete the entire project;

- The main problems of implementation were:

  . Delays in signing the Memoranda of Understanding between the States, Federal Ministry of Health, and UNDP,

. Ensure concurrent provision of water and sanitation facilities with health education.

3) UNDP should advise Project Management by 2nd April 1990 whether acquisition of radios has been approved for easier communication between the various sites and Jos Headquarters.

4) The Federal Ministry of Health, Federal Ministry of Finance, and UNDP should ensure that the participating States keep to the terms of their Memoranda of Understanding by sending in their contributions fully and in a timely fashion.

5) Honourable Minister of Health should write to Borno State Government requesting their signature on the Memorandum of Understanding, giving a deadline of 30 June 1990 for this and requesting their first installment within two weeks of signature.

6) The Federal Ministry of Finance and Economic Development should expedite approval of Project Revision 'D' incorporating the 3rd Party contribution of the Dutch Government.

7) State Governments should participate fully in the preparation of training manuals for the project.

8) A joint FGN-IBRD-UNDP in depth evaluation mission should be undertaken as of second half of September 1990.

The Tripartite Review extended also to the memoranda of understanding and the cash and cost-sharing contributions from the States. The issue of the overall status of the project attracted serious discussions and explanations by the project management who maintained that the project was still behind schedule for reasons already considered.

- Delays in signing of Memoranda of Understanding;
- Complexity of project;
- Need for redefinition of some aspects of project approach, especially the water supply component and

procedures for selection of, and interactions with, communities; and

- The Tripartite Review meeting brought out some fears and concerns with respect to the roles of counterpart staff in the project.

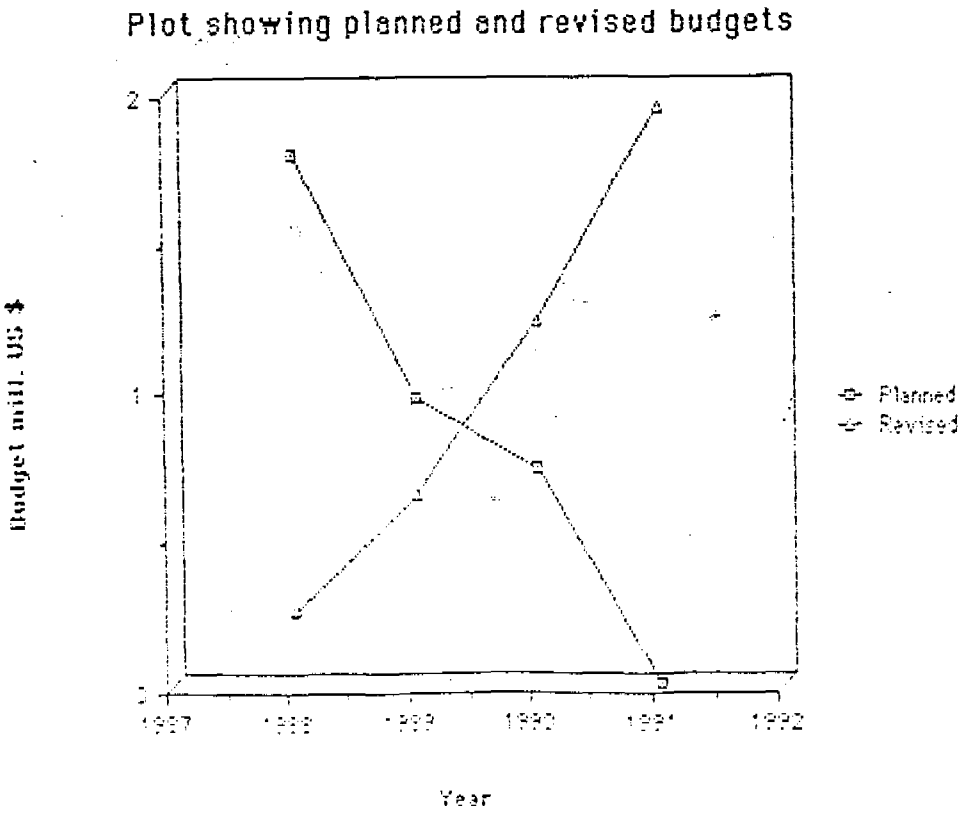
## 4.7 Budgets, Expenditures, and Financing

The budget for the project in the first Project Document signed in September, 1988 was US $ 3.47 million. This budget figure was revised upward to US $ 4.01 in Revision "D" of that document signed in April, 1990 (See Appendix XXII).

Of particular note was a dramatic change in the scheduling of expenditures indicated in the following table:

| | Budget (millions of U.S Dollars) | | | |
|---|---|---|---|---|
| | 1988 | 1989 | 1990 | 1991 |
| Planned Budget | 1.77 | .95 | .72 | .00 |
| Revised Budget | .24 | .63 | 1.21 | 1.93 |

In this table, revised budget figures for 1988 through 1990 represent actual expenditures for these years.



Changes in budget categories reflect major changes in implementation strategies which are evident from the following:

| Budget Category | Original Budget* | Revised Budget* | Proposed Budget to 1992 |
|---|---|---|---|
| Personnel | 1,287 | 1,241 | 1,373 |
| Sub-contracts | 0 | 1,427 | 1,877 |
| Training | 173 | 142 | 125 |
| Equipment | 1,946 | 1,156 | 1,150 |
| Other | 39 | 44 | 70 |
| GRAND TOTAL | 3,445 | 4,010 | 4,595 |

*Expressed in thousands of US dollars

Justification for the above changes in the pattern of expenditures included:

- Decision to use of contractors for construction of wells and boreholes and thus reduction in the equipment budget

- Late signing of Memoranda of Understanding by States

A further revision of the budget has been prepared for extension of the project into 1992 (See appendix XXIII). This revised budget calls for an additional US $ 0.6 million. This would bring the revised total to US $ 4.6 million. The increase is mainly attributable to difficulties experienced with sinking of hand-drilled boreholes necessitating machine drilling. The project coordinator has therefore proposed that 75 of 95 planned hand-drilled boreholes be replaced by machine drilled boreholes.

Contributions from the FMOH and State Governments are required under the Project Document and signed Memoranda of Understanding. The project is dependent on the timely payment of these counterpart contributions to maintain imprest accounts.

Payment of these contributions has fallen behind schedule:

| | PAYMENTS MADE* | | PAYMENTS OUTSTANDING* | |
|---|---|---|---|---|
| | 1989 | 1990 | 1990 | 1991 |
| FCT | 55 | - | 39 | - |
| BORNO | - | 60 | - | - |
| BAUCHI | - | 43 | 39 | 8 |
| PLATEAU | - | 9 | - | - |
| BENUE | - | - | 56 | 39 |
| Totals | 55 | 112 | 134 | 47 |

*Expressed in thousands of US dollars

Benue state is farthest behind in making payments. To date, delayed payments have not had serious adverse effects on the project, but problems are likely to arise as soon as intensive commercial construction of water points starts unless payments are made.

## 4.8 Backstopping and Support

Demands have been placed upon the project and have strained the environment in which it has operated as a consequence of misunderstandings which appear to have developed, largely as a result of distance between the project and the agencies that have to appreciate fully its complexity and the demanding nature of its inputs and their implementation. During the tripartite review, the executing agency and the FMOH were criticized for providing insufficient supervision. In addition, difficulties have arisen in the past in replenishing imprest accounts. These difficulties apprear to have been largely solved through the joint efforts of UNDP and the World Bank.

The project receives backstopping support from the Water and Sanitation Group in the Abidjan Office of the World Bank. This link provides documentation, experience, and advice from related projects including PROWWESS and the Bauchi Handpump Testing Project. The World Bank has also assisted directly in the development of an accounting and information management system for the project. In addition, both UNDP and the World Bank have provided documentation and support for specialist consultants services, which clearly have assisted the project in its development and implementation. They have also helped

mobilize and provide access to additional funding for these supporting services:

Technical backstopping provided by UNDP and the World Bank through consultancies funded from outside the project included the following:

- Implementation Planning Surveys. DHV Consultants, World Bank/Dutch Trust Fund, Jan., 1988. These surveys provided important data on the participating States related to water supply and sanitation, as well as implementational data upon which to base design of the project.
- Proposals for Institutional Development and Implementation Guidelines. HIFAB International AS, World Bank/ Trust Funds, June, 1988. This report identified implementation strategies and provided valuable guidance for management and implementation of the RUSAFIYA Project.

- Report on PROWWESS Praticipatory Methods and Training Workshop. Sawyer, Ojidoh, and Goertz, UNDP/World Bank, September, 1989. Several methods of implementing a participatory approach have proposed which are compatible with the socio-cultural context of the RUSAFIYA Project. These have been employed during a workshop in order to select a methodology for use under the project.

- Mission Report. Munguti & Sawyer, UNDP/World Bank, December, 1989. This report provides an overview of extension activities and the development and use of training materials, especially in Nasarawa, but in Ningi as well, with recommendations for follow-up.

- Borehole drilling in Africa. Adenle & Beale, UNDP/World Bank, August, 1989. A comprehensive report assessing the status of drilling capacity in Nigeria. The report includes suggestions on how the drilling sector can be strengthened and how drilling can be effectively and efficiently carried out in the rural water supply sector.

## 5.0 PROJECT ISSUES

### 5.1 Purpose and Objectives

The purpose of the RUSAFIYA Project has been understood differently by different people. This is not surprising when the primary and secondary functions, immediate objectives, and strategy statement contained in the Project Document are compared. Thus, Primary function is described as direct project support and institution building at State and local government levels. Secondary function is described as institution building at Federal level. The Objectives stress a community based institutional model for planning and implementing rural water supplies and sanitation, with assistance at State level to improve planning, management, and logistical support. The Strategy section emphasizes sustainability of institutions, linkage of water supplies, sanitation, and hygiene education, and the demonstration aspect of the project. The strategies support primarily village based institutions, with only vague reference to institutional structures at LGA level, linkages to State level, on training at State, LGA, and local levels.

In certain quarters, expectations relate to physical facilities. Others look for institutional development at State and Federal levels. To many participating officials, the project's aims are as confusing as their own functions and roles in it. The project itself has stressed development of the model and support for its application primarily at village and LGA levels. To many villagers in the LGAs, expectations of the project relate to the provision of water points which will be their own and not the property of Government, which in itself is evidence that the idea is welcome.

Thus, the purpose and objectives of the RUSAFIYA Project must be clearly understood in terms of its immediate objectives and how they fit in the context of long term sectoral development objectives. It is important to see the project as an initial step in the overall development of the sector in Nigeria which was intended to provide a platform from which to launch future projects, consistent with RUSAFIYA's long term development objective which is the expansion and improvement of the delivery of water supply and sanitation services to rural communities. But its primary output consists of a proven methodology, or a model, which can be employed in implementing future sectoral development. The secondary objectives of the project relate to the testing and demonstration of the model.

It is clear, therefore, that the purpose of the project is not to set up infrastructure or to provide hardware and physical resources as ends in themselves. Rather, it is institutional, to prepare a framework and mechanism that would trigger future establishment of services that would contribute to the improvement of the quality of life of people in rural areas. Provision of water points and improved sanitation facilities, and their control by communities themselves is the central theme of the project.

Achievement of the project's long term development objective is predicated on the assumption that an approach is required which can build and demonstrate to communities (and policy makers) their own capacity to mobilize and manage their own resources, their capacity to control and maintain their own water supplies, to create a sanitary environment, and to improve the health of their communities on a sustainable basis. This approach has great merit, and is well founded on experience in Nigeria and elsewhere. It is also consistent with national development policies.

The full impact and benefits of the RUSAFIYA Project, however, will be attained only when the model is fully integrated in a national policy and applied widely in the development of the sector. The project aims not at achieving large scale immediate access to water supply and sanitation facilities. Rather, it represents an investment in the future, in a more participatory and self-reliant involvement of communities and sustainability of facilities. Its ultimate success, and its benefits, must, in the end, be measured in terms of its eventual impact on the success of sectoral development (See sections 5.3 and 5.10).

## 5.2. Infrastructure Development

One of the main objectives of the project is to develop a model for developing sustainable rural water supply and sanitation facilities. The model should establish sustainable infrastructure that can provide the necessary framework for keeping the developed physical facilities in operation so as to serve the communities for many years. In order to achieve this, the project has helped establish, develop, and strengthen infrastructure as discussed below.

Community level infrastructure. The project has been highly successful in establishing water and sanitation committees (WASCOMs) in communities. The establishment of such committees has been carried out on a voluntary basis by the communities themselves. It provides an important forum for discussing and resolving issues relating to safe drinking water, and maintenance of their water supply and sanitation facilities. WASCOMs provide management structure to secure the community's interests during the planning, implementation, operation and maintenance stages.

The work the project has done in helping to establish these very important committees is impressive,and an important step towards securing long term sustainability. It is, nevertheless, recommended that the project monitor the activities of these committees so as to identify problems which may occur time after the installation of water points. Perhaps the project should consider retraining of WASCOM members after some time so as to maintain the momentum of community action.

LGA-level infrastructure. Four out of 5 participating LGAs have established water and sanitation units (WASUs). This indicates the commitment of the LGA to the project. Staff have been transferred from the Health, Community Development, Rural Water Supply, and other Sections, and placed in the new units. Also, where WASUs have been established, a unit head from the LGA has been identified (exept for one). This is again promising. The units have from 10-15 staff members, all of whom are attached to the RUSAFIYA project.

Although WASUs have been established in the project LGAs, these units are not yet consolidated into permanent structures. One of the indications of this is the continued existance of Water Supply Sections and their well-sinking activities which continue in parallel with the WASUs. It is clear that LGAs cannot have two separate units with similar objectives and functions. It appears therefore that the LGAs at present view WASUs as "project" units. Even if this is the case, however this can be considered an important step, and perhaps a logical step prior to merging of the two sections or units into one unit as a permanent structure or to merging their functions and approach. Having said this, it is clear that more work and effort are required to consolidate the accomplishments achieved so far.

Institutional development at State level. Under the RUSAFIYA Project, States were expected to carry out two key functions, namely to provide first of all technical support to LGA level projects, and secondly, to provide the institutional support which could facilitate replication of the project approach from one LGA to the next. Currently, institution building is centered around one person, namely the state counterpart. If that person leaves, all the expertise developed could move with him. However, given the scale of the project, and the absence of financial resources to facilitate replication from one LGA to the next in any State, there is at this time little incentive or reason to establish a unit at State level which could stimulate and facilitate replication. It would be unrealistic to expect that State agencies would commit themselves to building an organization that has no assurance of funding to carry out its work.

Present staffing at State level is probably adequate, however, given the scale of the current project with one LGA per State.

## 5.3 Project Management

As stated earlier, the project coordinator has been heavily involved in all details of the project. As a result, he has not devoted sufficient time to informing people about the RUSAFIYA Project, or drawn them sufficiently into it.

It must be said that the evaluation team recognizes the tremendous work and effort the project coordinator and his team have put into the project. Without this determined effort, the project would not have accomplished what it has.

Project Organization. Project management now appears to be very much a "project organization" with very limited relation to Federal and State agencies. Project Advisory Committees provide the main mechanism through which project staff present their strategies and findings, and report progress to sector staff from other agencies and projects. The low level of Government involvement in the management of the project has the effect of isolating it.

Given the nature of the project and its timeframe, close integration into the Government structure could have slowed progress. But while the relatively independent organizational relationship adopted by the RUSAFIYA Project may have moved it

more rapidly towards its goal of producing a model for achieving more effective involvement of communities in sector development, this appears to have taken place at the cost of full achievement of institutional objectives.

Decision making. Decisions on most operational issues are taken by the Project coordinator and project advisors. In some cases, he has to consult UNDP or the World Bank, but he plays a strong management role. Development of operational project strategies appears likewise to be carried out by the project coordinator in consultation with his advisory team and the Abidjan Office of the World Bank.

At LGA level State Coordinators play the central role in determining strategies for implementing project related activities. State Cooordinators are responsible for project related activities, expenditures, use of equipment, and transport. They are the decision-makers. This has the effect of isolating the State counterpart staff, especially, and in some cases, the full potential institutional benefit of the project is as a result not achieved.

The project also has placed accountants in the WASUs. These persons train LGA staff. However, their primary role is to maintain financial accounts for the project. This approach is necessary since the project is accountable for all funds utilized under it.

Management tools. In a complex project of this type, with decentralized implementation, with its dependence on field staff, and many new isssues and strategies to test, management tools are extremely important. These include:

- Detailed workplans for use of personnel and management of project resources;
- Project guidelines, descriptive routines, and procedures to facilitate efficient delegation of responsibilities;
- Establishment of short and intermediate targets for self evaluation;
- Routine monitoring systems for project progress; and
- Establishment of information management systems.

Project management does not appear to have utilized these management tools effectively.

Workplans used at project level are very general. They can be more properly described as time schedules for activities primarily at LGA level. Work plans for HQ staff on issues such as project documentation, development of guidelines, and training, and training materials were limited. With so many project advisors, detailed workplans for the project and for each staff member should be prepared identifying specific short and medium term targets and responsibilities.

Guidelines. Two types of guidelines are required:

- Technical guidelines
- Operational guidelines (routines and procedures for project management)

In order to facilitate delegation of responsibilities, clear guidelines are needed. These would have been usefull from the beginning of the project. More importantly, they were necessary at an early stage so that they could be properly tested and revised. Some work has been done to prepare some technical guidelines. These include in some instances policy issues and strategies for implementation of the RUSAFIYA model. The approach taken by the project has been to draft Position Papers which have been circulated to Federal agencies for approval. A result of this time consuming procedure could be that none of the Position Papers, or perhaps only a few, will be approved before the end of project. Guidelines could have been developed as working tools for effective implementation of project related activities. These could have been developed jointly by project and implementation agency staff, tested, and approved where appropriate for use in a wider context outside the project.

Working guidelines which could be revised as experience is gained under the project could be put compiled to form a manual for the project and for use following its completion. In this way, the input of project advisors and counterparts would benefit future projects and enhance the process of replication. They should be structured so as to provide the best possible documentation for the model and to be practical tools for use of field implementing staff. This could be done with assistance of a consultant experienced in writing of guidelines.

Self evaluation. Continuous monitoring and self-evaluation are important to effective project management. Neither appear to

take place in a regular manner or on a regular basis, with the exeption of preparation of annual Project Performance Evaluation Reports.

Monitoring. In May, 1990, the project established a monitoring system covering activities in the LGAs for both hard and soft components. This system is important, not just for record keeping, but for motivation of staff and project personnel in general.

Monitoring of activities does not seem to include progress made and work done relating to development of guidelines, training materials, or policy development. This should be done and related to detailed work plans mentioned above.

## 5.4 Indicators of Success

Indicators of success are very important for project evaluation. "Success criteria" identified in the Project Document are of limited value because they focus on completion of activities rather than on impact. The RUSAFIYA Project aims at developing a model that will facilitate development of sustainable rural water supplies aimed at improving the health of the rural people. The indicators identified do not provide measures of sustainablity, nor can they be employed to assess impacts.

It is important to add that the project itself is not meant to be sustained since it has a defined lifetime and its primary product is the model itself. Indicators of success for the project should answer questions related to, and include measures of, success in the delivery of the RUSAFIYA model, its development, testing, and implementation:

- Has the project been successful in developing the RUSAFIYA model?

- Has the project been successful in strengthening the existing infrastructure so that the model can be used later or replicated?

The main product of the project, which is a model for future application at LGA and community level, must be assessed

to answer different questions using criteria listed below related to:

- Sustainability:
  - . Are rural water supply facilities operating after 1, 2, 3, or 4 years?
  - . Have communities organized or carried out any repairs of the pump themselves?
  - . Are spare parts available or accessible when they are needed?
  - . Is the community maintenance fund maintained
  - . Have collected funds been used as planned?
- Public health:
  - . Are there quantifiable reductions in cases of guinea worm or diarrhoeal diseases after 1, 2, 3, or 4 years?
- Health and hygiene education:
  - . Are there changes in knowledge, attitudes, and behavioural practices related to the messages communicated, such as:
    - . use and storage of drinking water
    - . sources of water used for drinking purposes?
- LGA infrastructure:
  - . does the WASU exist intact?
  - . does the WASU have resources to continue work in other LGAs?

Based on the above, it is very important that the project now defines these indicators of success which would be required after the end of the project to carry out an ex-post evaluation.

It is also very important that baseline data be collected now that can be used for future evaluations.

## 5.5 Progress in Meeting Objectives

### 5.5.1 Factors which Have Delayed Implementation

Several factors have combined to delay implementation. These include:

- Recruitment of staff. Three professional project staff were recruited in 1988, three in 1989, and three in 1990. It was originally planned that five of these staff members would arrive in 1988, while the remaining four would join the project in 1989. Some, such as the health educator, who joined in 1990, were key positions which should have been filled early in the project. The delay in staffing the project has, of course, affected implementation;

- Signing of Memoranda of Understanding. The States were late in signing these agreements. The last to sign was Borno State, which finalized the agreement in July, 1990, more than half way through the scheduled life of the project.

The above delays have affected project implementation schedules. However, the time schedule that has resulted from these delays has strengthened the project overall. It has given new project areas the opportunity to learn from earlier mistakes and experiences. This has been demonstrated particularly in the start up in new project areas, where work goes faster, and resource personnel know better how to proceed. Another advantage has been that LGA staff could be given on-the-job training in experienced LGAs.

It appears that the project is now under heavy "pressure" to produce results in the form of numbers of water supplies or constructed latrines. As a result, it is hoped that project implementation will "make up for lost time." This carries with it real risks. In the HIFAB Report it was said that "...the basic purpose of this Project is not one of an impact-orientated implementation but of **developing a working model** which, if replicated and sustained over time and space, will create an impact." Thus, the output of physical facilities is of secondary

importance. The project now appears to be increasing efforts to produce "numbers" by bringing in contractors so as to increase the rate of construction. This may work well, but experience from many projects elsewhere has demonstrated that community mobilization and extension work "running ahead" of a drilling team or contractor can quickly go wrong if not very carefully planned because drilling crews are very expensive and must work according to their own schedule. If they are delayed, standing costs can be high. The consequence is often that the community development work has to be rushed, or only partly completed, before the drilling rigs move in. If communities are not ready as a result of not having participated in the decision-making process, or not having agreed to the commitments they have to make, future sustainability could be compromised.

### 5.5.2 Project Backstopping and Support

At the Tripartite Review Meeting, the executing agency and the Ministry of Health were criticized for providing insufficient supervision of the project. The issue does not appear to be one of supervision, however, as much as, in the case of the executing and funding agencies, a matter of understanding the project and supporting its needs as required and in a timely fashion. In the case of the Ministry, it is a matter of involvement and support. Greater back-up and support could have benefitted the project by reducing burdens on project staff in some cases. Where this has not occurred, it appears to have been in large measure the result of poor communication and lack of understanding.

Questions have been raised with regard to progress in meeting of physical targets. These have hurt the environment in which the project operates. As a result, energies which should be, and should have been, devoted to meeting project objectives have been diverted. The intended benefits to the effectiveness of sector development and accomplishment of the intended ends could be threatened. The UNDP, in particular, must be able to support effectively the concept of this project and act to assure that its purpose is not compromised. Furthermore, if UNDP is to be able to make major decisions with respect to the project, to make them in a timely manner, and follow up as needed, it must be well informed and clear as to its purpose and requirements.

Difficulties have arisen in the past in replenishing imprest accounts. These difficulties appear to have been largely solved through the joint efforts of the UNDP and the World Bank. More demanding of the time of project staff, is the follow-up of

cost-sharing contributions and clearing and delivery of equipment. These appear to be responsibilities of the UNDP, but the burden has fallen largely on the project.

Having said this, however, it must be emphasized that both UNDP and the World Bank have been very effective in mobilising resources from international and regional funds for the benefit of the project (See section 4.8).

The implementation planning surveys by DHV consultants provided the data bases and background essential for development of the project document. The technical report by Adenle and Beale on "Borehole Drilling in Africa, A case study of Nigeria," could be of great importance for large scale implementation of rural water supply drilling activities. It has also directly supported the RUSAFIYA Project in short-listing able private contractors and providing contract documents and drilling specifications.

The HIFAB report established the operational framework for project implementation which has, to a large extent, been followed. Likewise, assistance from PROWWESS has greatly facilitated community development work.

### 5.5.3 Rapid Reconnaissance Surveys (RRSs)

Techniques and approaches at the LGA level for planning of activities in the LGAs appear very good. The Rapid Reconnaissance Survey method developed under the project seems to provide a good overview of settlement patterns in LGAs. It also provides an objective way of assessing needs, priorities, and existing water points which require rehabilitation. In a planning environment which suffers from inadequate planning data, the RRS can be an effective and appropriate tool to enhance project design and implementation.

## 5.6 Timeframe

The planned life of the project was three years. This was an extremely short time to allow for completion of this project, particularly since it was designed to recommend strategies and to develop methods for mobilising communities, to produce training materials, and to determine appropriate technologies, before testing them on a limited scale for implementation. Once implemented, a project of this nature would have to monitor and

evaluate its outputs and impacts over time and assess its success with respect to sustainability.

The RUSAFIYA Project takes community involvement much further than most other projects. It does not aim only at community participation in construction and operation and maintenance, it goes further. The RUSAFIYA Project aims at establishing a community infrastructure to achieve sustainable management of water supply and sanitation facilities. Communities thus have to be introduced to:

- The benefits of safe water and sanitation facilities;
- The advantages of community ownership and self-reliance;
- The idea that they can play significant roles in planning for, and meeting, their own needs; and
- The advantages of local infrastructure to sustain water supplies.

Since communities have difficulty participating much during planting and harvesting seasons, and since extension staff and construction crews may have difficulty reaching many of the communities during the rainy season, the timeframe of this project is very short indeed. Also, sanitation programmes normally require additional preparation time. Typically,

First year: - health education
- construction of demonstration units

Second year - slow construction in communities (10-50 units)

Third year - construction should pick up (some 100's of units)

A five-year timeframe would have been more realistic for this project. Extension of the RUSAFIYA Project to March 1993 would appear realistic to allow time to meet its objectives fully in view of constraints, the recent start of project activities in some participating communities, and the need to assess impacts.

## 5.7 Communication and Information Management

Clear communication to all people involved in the RUSAFIYA Project is important. This is particularly so since the project has so many components that need to be well understood if the project is to have its desired impact. Outward communitation about the RUSAFIYA APPROACH and the RUSAFIYA MODEL is inadequate for a project with this potential significance. Good information management tools are missing. The project needs simple diagrams, posters, flyers, and brief overview information materials that can describe its objectives, the model, strategies employed, and its activities in a simple and understandable manner. Above all, regular formal reporting of progress to the donor agencies and Government is needed. There are many different groups of people that require information in an easily accessible format. These include:

- Decision makers
- Technical project and counterpart staff
- Project Advisory Committees
- LGA councellors and chairmen
- District heads and committees
- Policy makers
- Implementing agencies and staff of related projects
- Financing agencies
- Others

The format in which information is presented may vary depending on purpose and target groups for which it is intended. For example, the following should be considered:

- Flyers and posters aimed at outlining the objectives and aims of the RUSAFIYA Project.

- Brief project pamphlet. There are no brief descriptive materials available to explain what the RUSAFIYA Project is about. This makes it difficult for senior officials and staff to appreciate fully the role of the project.

- Newsletter. All related sector and involved project related staff should be informed or reminded regularly about what is going on in the project, what is being achieved, innovations, and what its objectives are. The same reporting format could include comments and views from involved staff and beneficiaries describing how they perceive the project. The project requires



p.56 missing.

Involvement of women should not be limited to target groups, i.e., women in commmunities and LGA agents, but includes project staff and persons who liaise with the project as well. It is noteworthy that the higher the level, the lower the number of women involved. For instance, none of the WASU heads or project counterparts are women. Thus,

- Although efforts have been made, they are convincing only at the lowest two levels (community WASCOM and extension agents).

- It is still necessary to stress the need for **active** participation of women.

- Because of traditional perceptions, but mostly for religious reasons, in some regions (especially in Bauchi, and maybe to a lesser extent in Borno), participation of community women is very difficult. Alternative strategies for achieving participatory objectives need to be explored and developed with all persons involved.

- There is a need to make more systematic efforts to link, and even integrate, participation of women in project activities and into other Government programmes in this sector, for instance through the Better Life Programme, or existing women's associations, in order to strengthen the position of women.

- There is a need to formulate clear guidelines for involvement of women. For instance, women should be the central focus of the management and use of the facilities and their maintenance. Women should be given the opportunity to develop their own competence in the water and sanitation sector. While increasing the coverage of the service of the sector, however, women should not be overburdened or lose status.

- There is a need to formulate strategies and identify indicators to measure effects.

- There is continuous need to stress the importance of women's participation in training and their contact with involved authorities.

## 5.9 Training

A wide range of training methods is used under the project. A selection of target groups has been made that seems to agree with the different kinds of activities and the different levels of participants the project seeks to train. And a variety of materials are being used. The approach taken requires systematic follow-up and for a period that might even be longer than the planned life of the project. Thus, extension agents perform a complicated task applying a new approach and handling a diversity of subjects at community level. They consider working with the extension training materials highly motivating. Training workshops conducted under the project, however, might provide more of an incentive if certificates were handed out. The monthly clinics provide the necessary basis for evaluation of the content and effectiveness of the training and for its strengthening. Training materials used are appropriate, simple, and effective. They have the advantage of being familiar to the villagers, easy to take into communities and to work with, and are inexpensive. Combined with the participatory approach, they succeed in raising interest, involvement, and awareness. One of the most impressive results of the training is the community exercise resulting in creation of a map showing settlement patterns drawn by inhabitants of communities.

Training for hydrogeologists and for artisans, as well as for WASCOM members, is reported to be satisfactory. It is too early to assess the long term effectiveness or impacts of training, but preparation must begin for their assessment. Indicators of success should be identified, assessment planned, and baseline data collected.

Attention must be given to assessing the attendence of female members at community meetings, but more specifically the training of the WASCOM members.

Community health workers form a delicate link in the chain of hygiene education, and therefore due attention needs to be devoted to their training and follow up.

It has been observed that hygiene education starts rather late in the mobilization of communities. It is advisable to start this activity as soon as possible in order to raise an early awareness of proper hygiene and effective use of water supply and sanitation facilities among beneficiaries, as well as of sanitation of the environment, and in order to enhance incentives and benefits.

The use of mass media campaigns through radio to support the activities in hygiene education in communities and at schools might be concidered as part of later application of the model.

One weakness in the implementation of the project is the confusion about, or lack of information on, what the RUSAFIYA Project is about among LGA officials and decision makers at State and Federal levels. This could be aleviated by providing an orientation workshop on project objectives and activities as originally programmed.

Only short term training plans appear to exist. Workplans constitute an important management tool which should be more effectively used (see discussion in section 5.3).

The project will need a senior training advisor after the departure of the present advisor in order to supervise the quality of the training programme and the performance of extension agents, and in order to help design the assessment of the long term impacts.

## 5.10 Cost Sharing Strategies

The issue of cost sharing has been brought into this project in two ways:

- To enhance water point and VIP latrine sustainability; and

- To help spread financial resources more widely to reach the 40-50 million rural people who do not have access to safe water supply and sanitation facilities today.

Sustainability. It appears that participating communities do collect funds to cover costs of future operation and maintenance of their water supplies. In many cases, contributions collected have exceeded Naira 1,000. This is impressive, and a clear indicator of potential for community willingness to operate and maintain their water supply systems in the future.

Impact of cost sharing on water sector. If the Government is aiming at assisting 40 to 50 million rural people to develop safe water and sanitation facilities to serve their communities, the investment requirements will be high. In terms of

development, more than 100,000 water points would probably be needed. Thus, if, through cost sharing, individual communities could contribute between Naira 5,000 and 10,000 in cash or in kind, a significant contribution could be made to expanding the benefits of limited resources available through Government or external funding sources to more of the rural population.

It is noted that at the Tripartite Review Meeting, it was decided that communities should not be asked to purchase their water pumps. The issue at stake is whether by purchasing the pump, ownership can be established. Experiences from projects in other countries have indicated that signing of an agreement, holding a "hand-over" ceremony, or telling people that the water supply is theirs may not be enough to convince villagers that the facility truly belongs to the community and that they can keep it operating themselves. Direct purchase of the pumps by villagers may have special significance in terms of ownership and in terms of establishing who is responsible for operation and maintenance. Grinding mills run and are maintained in many villages. Perhaps the issue of ownership is one of the keys to keeping facilities running and continuously serving communities.

## 5.11 Choice of Technology

Water facilities. If the objective of the rural water supply programme in Nigeria is to provide all rural people with safe drinking water, and about 40-50 million people are to be reached with this facility in the future, the magnitude of the capital investment dictates that the most cost effective solutions need to be employed. At the same time, many dug wells and inoperable handpumps exist which might be renovated at lower cost than the construction of new facilities. Thus, serious consideration should be given to testing the following least cost technological choices:

- Upgrading of existing perennial dug wells,
- Deepening and upgrading of perennial low-yielding wells,
- Renovation of existing inoperable handpumps,
- Development of surface water sources using ground filtration by sinking wells on embankments of ponds, dams, and streams.

It must be noted that hydrogeological conditions may be expected to rule out hand dug wells in many instances. Where they are viable, however, they should be the first choice.

Technologies must be sustainable by communities. As a rule, the technology providing the lowest public cost per capita should be chosen. However, if communities opt for a higher level of service, this should not be ruled out. The additional expense, however, should be borne by the community. Thus, where appropriate, consideration should be given to providing communities with a choice, either at the time a new water point is planned, or at a later time. Small motorized boreholes offer one option which could be considered on higher yielding boreholes or wells if this technology is demonstrated to be sustainable under community management. These installations should be implemented in line with the RUSAFIYA model. For larger communities, motorized supplies may be cheaper on a per capita basis than a larger number of boreholes, each fitted with a handpump. A project proposal (NORAD) for testing of a motorized systems was given to the evaluation team. It aims at introducing small piped schemes for larger communities and this project may answer the fundamental question raised above concerning community management of such schemes.

Sanitation facilities. The introduction of the Mozambique slab to the RUSAFIYA sanitation component can be of importance in finding an affordable and appropriate technology which local communities can themselves replicate. The typical VIP latrine seen in institutional settings is very expensive, and to the knowledge of the team, no private household has yet constructed one on a voluntary basis, probably because of the high cost. The Mozambique slab can be made with its ringbeam for the equivalent cost of one bag of cement. This should be affordable to most households.

The team is concerned that the technology used requires good quality control during construction if failures are to be avoided. The project can ill afford slab failures which could mark the technology as dangerous. This is an issue that the project must consider, especially if local contractors are encouraged to play a role in the manufacture of these slabs.

Additional attention should be paid also to providing a smooth finish for latrine slabs since this would ease the job of keeping the latrine clean, and reduce possible odour problems.

### 5.12 Impacts

The primary purpose of the RUSAFIYA Project is to develop, test, refine, and demonstrate a replicable model for achieving

sustainability of water supplies linked with sanitation and improved hygiene practices in rural areas. The first of these, to develop, test, and refine a model, is aimed at a specific output which of itself cannot lead to impacts. Impact is the primary purpose of a demonstration. However, it is as a demonstration project that RUSAFIYA must produce its major impacts, and it is by these impacts that it must finally be judged. Since these impacts must follow demonstration of the validity of the model in terms of its implementation at community level, they cannot be assessed directly at this point in time. These impacts include:

- Sustainability and expansion of sectoral development initiatives in participating communities, e.g. continued operation of handpumps, increasing latrine coverage, implementation of new projects using local funds;

- Acceptance and sustainability of knowledge and practices relating to hygiene;

- Improved health status in participating communities perhaps indicated by the prevalence of guinea worm infestation where this is a risk;

- Continued and expanded application of planning, organizational, and management capacity in participating communities in the sector and carrying over to other sectors;

- Committment on the part of participating LGAs expressed in terms of establishment of viable and sustainable WASUs;

- Acceptance of the RUSAFIYA concept and approach and commitment to it at state and national levels as a matter of policy and on an operational basis, i.e. acceptance and replication in other States and LGAs;

- Extension of the concept and approach to other externally funded water supply and sanitation projects;

- Spread of the concept, approach, and the model to other sectors; and

- Strengthening the private sector.

This highlights the need to plan for, and at an appropriate time in the future, to implement, an assessment of these impacts. If this is to be done, the basis for this assessment must be established at an early stage. This is especially the case with regard to the first four items in this listing which apply to sustainability and impact at community level.

Having said this, however, it is possible to identify some immmediate impacts of the project.

It is clear that the project has already had some impacts, particularly at local level where its efforts have been concentrated. Thus, at village level:

- There is a high level of enthusiasm for, and confidence in, an approach that has expanded concepts of health, organization, planning, and management, developed the capacity to repair handpumps themselves, and enables them to assure the dependability of their improved water supplies without having to depend on uncertain resources outside the community; and

- There is evidence that organizational, planning, and management capablities have been significantly enhanced, and that participation of women, has been introduced. Monetary contributions are being made, systems for managing accounts have been introduced, and records are being kept. WASCOMs have the potential for supporting growth of this capacity at local level.

At LGA level, there is an appreciation for the approach, the use of local resources, and the need for sustainable community level self-reliance.

At State and Federal levels the impact of the project is minimal at this point in time. However, lessons learned from the experience gained during implementation of the project so far are being incorporated into a draft sector strategy being prepared by a consultant group. It is possible that impact in terms of the second immediate objective of the project, to improve planning, management, and logistical support for rural water supply and sanitation at state level in the four participating states and the FCTA, was unrealistic in view of the long term commitment to the approach required and the limited funding provided for replication.

## 5.13 Counterpart Roles

The roles of counterpart staff are weak and limit the opportunity to realize the full institutional benefits of the project:

- National Counterpart Coordinator. The role of the highest serving Government Representative, the National Counterpart Coordinator, is clear and unambiguous - a liaison officer outside the project team without a role in management, responsibilities for project execution, authority in the hierarchy of positions, and finally, without a role in the development of an institutional base for replication of the RUSAFIYA concept. In fact, he has no longer a fixed role in the Government structure either;

- State Counterpart staff. As with the National Counterpart Coordinator, State Counterparts, in the main, provide implementation capacity and technical expertise to the project. They have few if any responsibilities in the execution of the project, however, and do not have daily responsibilities and commitments within their parent agencies linked to the Project. While the evaluation team can suggest no solution, and Project management has done all in its power to ameliorate the situation, it should be noted that the discrepancy between salaries of national staff employed by the Project and those assigned to it by Government has become a source of irritation and appears to have diverted energies from Project activities.

The difficulty, especially with respect to the limited role given to State counterparts, was recognized in the June, 1988 implementational guidelines and proposals of HIFAB International AS for institutional development. In this connexion, it was suggested that the role of these counterparts should be considered in the context of long term project objectives of replicability and sustainability. This meant that State counterparts must play major roles in transferring experience and know-how. The need for active and accelerating involvement was emphasized.

On the other hand, while the relationships of Federal counterparts from the FMOH and FMOWR were seen as difficult, they have not been strengthened. Although these counterparts have

been moved physically to the project headquarters, there has been no further effort to strengthen ties between the project and the Federal government through strengthening of their roles. At State level, these ties are almost as weak.

It is noted then, that the World Bank's role as executing agency for the project, a very tenuous linkage of the project with Federal agencies, an unclear role of government, and the very short time frame for completion of the project, have led to the creation of a largely autonomous project, developing strategies, identifying and taking initiatives, and making decisions on a largely independant basis, and without a real home in the institutional structure of the country.

The team is of the opinion that the roles defined for these counterpart staff undermine the aim of institution building. Amendments should be made as soon as possible to strengthen these roles and shift responsibilities to counterpart staff, with Coordinator/Advisors taking on more of an advisory role, over the remainder of the project.

## 5.14 Strengthening of the Private Sector

The project is making contributions in certain areas of the private sector in order to strengthen support for the rural water supply and sanitation sector and to service rural communities, in particular.

Thus, small private contractors have been trained in better well digging techniques. Latrine builders have been trained in the construction of demonstration latrines so that they can later offer their services to households, businnesses, or institutions that want to improve their sanitation facilities. Two workshops have been held for latrine builders. Both the multicompartment type of VIP latrine and the household VIP have been demonstrated. Training in the construction of household latrines focuses mainly on manufacture of ringbeams and Mozambique type slabs.

Efforts have been made also to assist and strengthen the drilling sector by assessing the borehole drilling industry, its strengths, and its weaknesses. The report of this assessment also includes a number of suggestions on how to strengthen and rationalize the sector. This document could be of value in improving the quality, efficiency, and

viability of local drilling companies. This could be of particular importance if the Government decides to increase its efforts in the rural water supply sector.

The RUSAFIYA Project is closely linked to the Bauchi Handpump Testing Project which in addition to testing handpumps, will assist local manufacturers in making VLOM (Afridev) handpumps. This can be a valuable contribution to ssecure availability of spare parts. The RUSAFIYA Project is concerned that a spare parts distribution system is established through accessible local shops. It is too early to establish a distribution system, or expect that one can function, at this time, when only a small number of pumps have been installed. However, in a year's time this situation should have changed as more pumps are installed in more communities. It may take even more time before the demand for spare parts becomes significant.

The above activities and efforts are not described in the outputs of the project document, but they need to be highlighted since they may later prove important for the sector as a whole.

## 5.15 Sector Issues

The RUSAFIYA project aims at developing and demonstrating a model for implementation of sustainable rural water supply and sanitation facilities. The model, which will be the main product of the project, will encompass approaches to establishment of the needed infrastructure at community and LGA levels.

The need and demand for a viable model are great. The current percentage of inoperable rural water supplies is over 60% in some states. There is a clear need to find ways to assure the operation and maintenance of such small supplies. No solutions have been demonstrated as yet. Therefore, the possibility that the RUSAFIYA model (or approach to community management of rural water supplies) can prove viable as an approach to achieving sustainable rural water supplies and sanitation facilities is exiting and important.

The rural water supply and sanitation sector is currently being forced to rethink its policies and strategies

and to address these operation and maintenance problems. At Federal level, a sector policy and strategy paper has been discussed which clearly emphasizes the need for change because existing services are falling into disrepair, scarce resources are not being effectively used, and because nearly half the rural population is without safe water or sanitation facilities. The issues discussed include decentralization of responsibilities to LGAs, introduction of appropriate technologies and village level maintainable (VLOM) pumps, cost sharing, better coordination of sector activities, and linkage of water supplies, sanitation, and hygiene education for better health. Discussions are likewise taking place at State and LGA levels in search of solutions to the "rural water supply problem."

With this background, the RUSAFIYA Project appears to be timely, and if the model works as planned, the impact on the rural water supply and sanitation sector can be very significant for Nigeria.

Links are established so that experiences from the RUSAFIYA project can reach senior policy makers. Water-related issues are forwarded to the NTCWR subcommittee on rural water supply and sanitation through the FMOWR, while sanitation issues can be discussed directly with FMOH.

## 6.0 FINDINGS AND CONCLUSIONS

What follows is a compilation of observations arising from the work of the evaluation team during its visit to Nigeria in October and November, 1990. The overall assessment of the Mission is that the RUSAFIYA Project is developing and testing some very important approaches and methods for mobilizing communities and establishing self sufficiency and sustainability of water supplies and sanitation facilities in communities. The project has been a highly successful one in terms of its objectives at LGA and community levels and it has to its credit many accomplishments, particularly with respect to its impacts at village, and to a large extent, at LGA levels. The validity of its approach is appreciated at LGA and village levels, and progress for the most part is considered satisfactory. No model has been developed or tested above the LGA level. An apparent delay in project implementation has in reality benefitted and strengthened the project and led to a more realistic sequencing and rate of implementation. The findings of the Mission must be read in the context of these overwhelming conclusions and considered in terms of what they can contribute to enhancing implementation during the remainder of the project, follow-up to the project, and improving the conceptualization and design of future projects.

### 6.1 Project Concept and Design

- Water supply especially, but not as yet sanitation, are considered priority needs for most villages;

- The objective of the RUSAFIYA Project is first of all to develop and demonstrate a replicable community-based model for achieving sustainable safe water supplies through community ownership and self reliance in rural villages linked with improved sanitation and hygiene practices;

- The objective is second to improve planning, management, and logistical support at state and LGA levels for development of water supplies and sanitation;

- Thirdly, the project document includes training and physical targets in support of these two objectives;

- These objectives are entirely consistent with, and supportive of, national development needs, objectives, and policies;

- Experience in Nigeria, as well as elsewhere, demonstrates clearly the need to intensify community involvement and support in a manner which will assure that perceived needs are met and in a manner which will enable communities to maintain their own facilities and to benefit fully from them. This project addresses this need directly and comprehensively;

- The activities under the RUSAFIYA Project constitute an important step towards optimizing benefits of sector development in rural areas by linking water supply, sanitation, and hygiene education, mobilizing resources within communities, and building self-sufficiency and confidence at village level. Its objective is to develop a replicable model for achieving this goal;

- The full purpose and objectives of the project are not, however, clearly stated in one place in the project document. Rather, they are divided between the Objectives section and the section on strategy. This, together with the failure of the strategies to address fully the requirements of the objectives, has led to confusion;

- The focus of the project is institutional;

- At the local level people accept and support the approach employed under the project;

- At LGA and state levels the degrees of understanding of purpose and concept vary, but they support the approach aimed at community involvement, ownership, and self-reliance, and with the objective of sustainability. They are unclear about the immediate objectives;

- The project purpose, concept, and approach appear to be less widely and less well understood and appreciated at federal level;

- The project is extremely complex in terms of the institutional environment in which it functions, the inputs it provides, and its implementation. This adds to the confusion.

## 6.2 Project Design

- The project exists outside of the structure of government, relating to it through a project advisory (originally project management) committee and through counterparts. However, the latter do not occupy established positions and their functions, largely outside either the project or the government structure, are not conducive to lasting institutional strengthening;

- The institutional relationships between the project and government are loosely defined in the project document. This has led to flexibility and rapid progress in developing and applying a replicable model at village and LGA levels. It has also allowed the project to develop outside government structures and as a result, institutional strengthening has been sacrificed at state and federal levels where resources and capacity to facilitate institutional development are also scarce;

- Lack of long term commitment to the initiative begun under the project, which is specifically spelled out in the project document, also discourages commitment to establishing sustainable institutions at state or LGA levels;

- Defined roles of national counterparts, especially the federal counterpart coordinator, and their relationships to project staff and their home agencies, are weak and do not contribute to their growth and strengthening of their planning and management capabilities or technical background. While some, particularly technical officers, have benefitted greatly from their interaction with project advisors, their roles as they are currently defined tend to discourage self confidence and preparation for a larger role in maintaining and replicating the approach being developed and demonstrated in the participating LGAs;

- The timeframe set out in the project document was very short and failed to account for either the realities of

achieving institutional changes, particularly in a complex institutional environment, or the intensive community development requirements envisaged;

- There is widespread concern at all levels that many small rural water supplies provided in villages in past without involvement of the community and which depend for maintenance on resources outside the community no longer are functioning. The RUSAFIYA Project addresses this concern;

- The project as conceived and designed supports the process of intense community involvement and the development of the capacity within the community to maintain their own water supplies, improve the quality of their environment, and achieve enhanced health benefits;

- The project is conceived as a demonstration project aimed at achieving community action to maintain water supply facilities and linkage of water supply, sanitation, and improved hygiene behavior. There has been no mechanism incorporated into the design to provide either the data base or the mechanism to assess, during or after the project, whether its objectives have been achieved or can be sustained;

- There is a feeling is some States that there was no involvement of the States in the design of the project. This appears to have been the result of extensive turnover of staff causing a break in institutional memory;

- Reporting requirements contained in the Project Document included the submission of progress reports after the first nine months and at yearly intervals thereafter. The first of these, the Project Performance Evaluation Report, was submitted in August, 1989. This was revised and resubmitted in April, 1990, twenty-one months after the inception of the project and eighteen months after the signing of the project document. In view of the complexity of the project and the issues involved in its implementation, it is felt that the lack of more frequent reporting of activities, progress, and constraints resulted in a breakdown in communications and the growth of confusion with regard

to its purpose, and failure to understand either its requirements or its accomplishments.

## 6.3 Project Implementation and Management

- Decision making is centralized with the project coordinator. This management approach places an excessive burden on him. More importantly, it sets the project apart from the institutional environment it is intended to benefit;

- Organization of the project and counterpart relationships are such that they also impede achievement of institutional goals;

- Project management is excessively involved in details. As a result, a clear and coherent view of the project, and where it is going is not effectively communicated outside the project;

- Analysis and review of project activities, accomplishments, and progress towards achievement of purpose with a view to understanding the project as a whole, had not been undertaken prior to arrival of the evaluation team. Formal activities which could contribute to a better internal understanding of the project and its implications were not visible to the evaluation team;

- Communication from the project to UNDP and the FMOH on the one hand, and to a lesser extent to state and LGA officials on the other, have not been effective. This is perhaps because a clear overview of project objectives, strategies, activities, achievements, and progress is missing;

- Although some work planning takes place at LGA level, there appears to be no systematic work planning, setting of operational targets, monitoring of progress, or self-evaluation for the project as a whole;

- The operational focus of the project has been on the LGA and village levels;

- Delays experienced have resulted in an unintended sequencing of project implementation. This has

resulted in an implementation schedule which is more realistic than initially planned and allows for lessons learned in one LGA to benefit the next;

- Before embarking on activities to meet physical targets, the project developed a community level approach encompassing organizational structuring and community mobilization. A logical strategy has been followed and reasonable progress has been made in achieving institutional objectives at LGA and village levels;

- Although the project has been under pressure to speed up the installation of hardware and show greater visible progress, it has not done so. It is the view of the evaluation team that this was an important decision. It is important that this not be done. To do so would threaten community mobilization efforts, distort the model developed, endanger the success of the project in the participating communities, and compromise the objectives of the project itself;

- Neither the UNDP nor the project have made appropriate efforts to assure a common understanding of purpose and implementation strategies and their requirements as observed in the minutes of the Tripartite Review;

- The project has recently developed an accounting and monitoring system that appears to be potentially valuable. It is employed effectively as an accounting tool, but has yet to be employed with full effect as a communication tool, and has not been carried over to the states as a management and planning tool;

- Allocation and utilization of financial resources appear appropriate; and

- There has been effective use of consultants by the project with project staff providing continuity.

## 6.4 Accomplishments

- That implementation proceeds more smoothly at LGAs that joined later in the project suggests that the model and its implementation, as well as the process of institution building is developing well;

- There is support at state, LGA, and local levels for expansion of the project approach;

- An effective start has been made in the implementation of the RUSAFIYA approach, the impact of which can be seen at LGA and village levels. If back-up is provided through an effective system for marketing of spare parts and continued support to villages, this should be sustainable at this level. It does not appear, however, that it is established in a way which will, or can, be perpetuated and replicated at LGA level if support is not provided;

- Water and Sanitation Units (WASUs) have been set up in four of five target LGAs, but their permanence is by no means established;

- Heads have been appointed to four of five Water and Sanitation Units, but do not all occupy established, or even full time posts;

- Water and Sanitation Committees (WASCOMs) are being established at community level and communities are clearly demonstrating their motivation and enthusiasm for taking over the operation and maintenance of their schemes. Cash contributions are being made to maintenance funds which are being managed according to specific needs of each community;

- The school latrine programme appears to be progressing well in coordination with the CHICS programme and seems promising, but there also appear not to be guidelines for implementing this programme;

- Some communities which have never maintained bank accounts now do as a result of their participation in the RUSAFIYA Project;

- Others participate in spite of previous bad experiences with other projects;

- Women are being involved in water and sanitation development in villages through WASCOMs. The extent of their roles in these committees is not clear. In certain areas a strong role is unlikely at this time;

- Training of state hydrogeologists in some instances is proceeding well. In others, it is falling behind needs;

- The training through assignment of staff from recently joined LGAs or states to ongoing LGAs or states appears successful and is an accomplishment of the project;

- The project has been highly productive of documents of a detailed nature on technical subjects aimed at technical staff and policy makers. These serve the purpose of documenting technical decisions;

- The project has initiated production of a series of position papers to explain background for and document positions on policy issues;

- The UNDP and World Bank have been successful in mobilizing resources from outside the project to meet emerging operational needs and to expand its scope as required; and

- The technology introduced under the sanitation component is affordable and looks promising. It can significantly affect success of the sanitation component.

## 6.5 Remaining Project Concerns and Needs

- There is uncertainty and lack of confidence in where the project leaves national institutions and their staff members involved with it upon its conclusion;

- Dug well implementation in Nasarawa was proceeding slowly as a result of poor siting and difficulties in applying the proposed technology at some sites;

- The project has not produced operational guidelines or manuals which can be used to plan or implement activities in new communities or LGAs, or which can be used as reference sources for LGA staff or at village level. These are badly needed as a guide if the initiatives begun with support of the project are to be sustained and replicated;

- It is doubtful that the model is replicable in its present form because the project has not left the supporting institutions and framework at state and federal levels. State level institutions are not being prepared to maintain the momentum of the RUSAFIYA approach;

- Serious efforts have been made to involve women in project activities, but the results are not yet satisfactory. Clear goals and alternative strategies should be formulated, discussed, and implemented;

- There is a need to move forward in the establishment of a distribution system for the selling of spare parts for handpumps;

- There is a need to assess improvements in the technique for hand dug wells in areas where rock layers impede progress;

- If the Mozambique slab is to be manufactured by private producers, it is felt that attention must be given to quality control;

- There is a need to develop a strategy and institutional base for replicating the model to other states and to other LGAs in the five states where it has been tested;

- There is a need to strengthen understanding of the project concept and activities at all levels;

- There is a need to shift to a less centralized decision making structure and to draw more project and counterpart staff into the planning and decision making process; and

- If it is expected that the approach is to be replicated, there is a need to establish viable infrastructure at state and federal levels.

## 7.0 RECOMMENDATIONS

- It is strongly recommended that communications between the project and UNDP be strengthened through more frequent reporting of progress, needs, constraints, and proposed activities, and by visits to the project and field sites by UNDP,

- It is recommended that the existing project completion date be extended to the end of March, 1993, with appropriate budget additions to maintain its current level of activity to a rational conclusion of the project on condition that it is responsive to needs identified above, and that overall objectives and targets remain substantially as presently defined.

- The current RUSAFIYA Project has provided for the development and testing of a model at community and LGA levels. It is anticipated that by the completion of the project, if extended, its objectives will have been substantially met. Without additional resources, however, replication of the approach to other LGAs or other States cannot take place. It is strongly recommended, therefore, that action be taken at an early stage to plan and to lay the foundation for an implementation and expansion phase of the RUSAFIYA concept and to allow the approach to become more firmly established.

- It is strongly recommended that counterpart roles be redefined to meet goals of institutionalization, that management and operational responsibilities be shifted to national counterparts, and that project staff take on more of an advisory role.

- It is strongly recommended that assistance be provided to help bring the diverse elements of the project into perspective, compile the experiences of the project into a cohesive picture, and provide a basis for extension of the current project and development of a project to support the beginning of an implementation and expansion phase.

- It is recommended that consideration be given to conducting a workshop for state and LGA officials to provide them with an opportunity to fully understand the approach (model) as it has emerged, to give them an

opportunity to discuss and formulate their views and thoughts on the approach and how it can be applied, expanded, and furthered, and to draw them into planning for establishing the model in, and for its replication to, other LGAs.

- It is recommended that assistance be provided to the project for the design of an evaluation system and establishment of an information base for assessment of impacts at community level, and plans for an ex-post comprehensive evaluation of impacts, be undertaken at an early stage.

- It is recommended that assistance be provided to the project to develop an efficient communication and information system for the project.

- It is strongly recommended that agreements with participating communities stress community ownership of their water supplies.

- It is strongly recommended that the principle of subsidized community purchase of handpumps be reexamined with a view to introducing the concept, increasing ownership in a very real sense.

- It is recommended that the project look further into the upgrading of existing perennial dug wells.

- It is recommended that the project apply the RUSAFIYA approach to mobilize communities and assist them to rehabilitate and take over ownership of existing broken down water supplies implemented by government (communitization of existing facilities).

- It is recommended that an option to take a handpump or motorized system be provided on suitable existing boreholes identified for rehabilitation to test community decision making.

- It is recommended that WASUs be consolidated within, and merged with, water supply sections in the LGA structure.

- It is recommended that the project investigate controlled blasting as a tool for facilitating penetration of hard rock layers during construction of hand dug wells.

- Although responsibility for supporting development of a distribution system for spare parts for handpumps belongs to another project, this project must ensure that this system is established in participating LGAs.

- Lessons learned with regard to organization and implementation of sector development in rural areas should be institutionalized in a common national policy and strategy statement to guide the sector development process and the channeling of external resources.

- It is recommended that the project to test the viability of serving larger communities with limited scale, cost effective motorized/piped schemes as suggested in principle in the "Small Piped Project Proposal" to be funded by NORAD should be implemented. However, the project document should be modified to include rehabilitation of existing facilities to be "sold to local communities" and operated and maintained by them. This project should establish whether larger communities can manage, repair, and maintain small piped (motorized) water supplies. The project proposal also should be revised to link the existing RUSAFIYA Project and post monitoring of that project to the extended activities proposed in the project proposal using existing project infrastructure.

## 8.0 LESSONS LEARNED

It is premature, at this stage of project implementation, before the model has been fully developed, tested, and demonstrated, to draw final conclusions regarding lessons learned, either as they relate to the design or implementation of this or other projects in Nigeria, or as they relate to water supply and sanitation projects in general. However, some important lessons can be drawn from experience so far:

- The Project has so far demonstrated that villagers are committed to the RUSAFIYA approach. They have actively participated in the implementation of facilities development, but they also have proved their commitment by collecting and setting aside cash for future operation and maintenance. At the start of the Project, some villages were themselves prepared to purchase pumps, even if this meant paying Naira 5,000;

- The Project has shown that villages believe in community management of their water supplies. This is an important finding as shown by the preparedness of villages to make cash contributions to their village committees.

- From the Project it has been learnt that hand-drilling can only be employed where favorable soil conditions prevail. Careful hydrogeological investigations are essential if hand-drilling is to succeed.

- Siting of water points is difficult in the project areas. Use of well trained hydrogeologists at all times is essential for successful implementation of ground water supplies.

From a global perspective, the lessons learned from the RUSAFIYA Project at the present point in time relate primarily to project conceptualization and design, especially in the context of overall sector development. Within the context of concept and approach to project design and implementation, therefore, it can be concluded that:

- To achieve their full potential, projects should have an institutional home within the government structure, integrate well into it, support its activities, and help build its capacity to implement.

- To build competence, confidence, and motivation, national counterpart roles should be clear and strong, solidly integrated into government structures, with provision for advisor support and shared involvement, and with the counterpart playing an increasingly independent role in an established government structure committed to the aims of the project.

- Projects with heavy community mobilization components, and especially projects to develop, test, and demonstrate development approaches, require medium term timeframes and donor commitment.

- Projects designed as demonstration projects should include specific elements to establish evaluation data bases and methodologies, including ex-post evaluations.

- Regular and well defined reporting requirements are needed to assure effective communication between projects and funding agencies and to provide a monitoring base.

- Project documents should be specific and clear on division of responsibilities and project management structure.

# APPENDIX I

FEDERAL GOVERNMENT OF NIGERIA
WORLD BANK
UNITED NATIONS DEVELOPMENT PROGRAMME

DRAFT TERMS OF REFERENCE OF
IN-DEPTH EVALUATION MISSION

NIR/87/011 - RUSAFIYA (RURAL WATER SUPPLY AND SANITATION)

BACKGROUND

Out of total population of more than 100 million, about half live in small communities of less than 5000 in Nigeria. It is estimated that less than 20 % of this rural population of about 50 million have access to a reliable, safe water supply. An even smaller percentage has access to safe sanitation. Traditionally, women have been responsible for domestic water supply. However, almost all the supplies of water, usually hand-dug wells and streams, involve considerable time and effort to collect. They often dry up during the drought period and are sometimes polluted and suffer from variety of problems, including objectionable taste and odour. Where water services have been provided for the rural community, inappropriate technologies have often been introduced with little or no community involvement. The high cost of maintenance of these systems, exacerbated by the lack of a fueling of ownership and for the water points by the communities served, the absence of cost recovery and a worsening economic situation, have all made it difficult to sustain operations.

Prior to 1967, responsibility for rural water supply and sanitation rested with Local Government Areas (LGAs). When the State Water Boards were created in 1967, this responsibility was transferred to them, however, they have been mainly pre-occupied with urban needs. To redress this imbalance and in line with government policy on decentralization, it is now intended to shift the responsibility back to the Local Government Area level.

It is against this background that since September 1985, UNDP has provided assistance to the Federal Ministry of Health (FMH) in the rural water and sanitation sector, first under the project NIR/85/070 and since July 1988 under the present project.

In February 1986, the Federal Government established a Directorate of Food, Roads and Rural Infrastructure (DFRRI) to promote and coordinate development of the rural areas. One of the key programmes of the DFRRI is for nationwide Rural Water Supply and Sanitation (RUWATSAN). The guidelines for this programme were formulated with assistance from UNDP and UNICEF. The Federal Capital Territory (FCT) and the four states of Bauchi, Borno, Benue and Plateau were thus visited by local and expatriate consultants for implementing RUWATSAN programme.

The mission s found the following constraints affecting the success of the RUWATSAN programme: a) lack of sufficient data for planning; b) insufficient number of well trained technical personnel to undertake planning and implementation; c) inadequate demarcation of responsibilities for project activities, which concentration on the provision of water supplies and little attention paid to community-mobilization and sanitation; and d) problems in securing foreign exchange to procure materials, equipment and spare parts. preparatory work has also included a pre-implementation planning survey carried out in each participating State by consultants from the Netherlands. The survey was funded by the Netherlands Consultant Trust Fund administered by the World Bank.

DESCRIPTION OF THE PROJECT

The project is designed to address two International Drinking Water Supply and Sanitation Decade issues: institutional arrangement for, and the processes of, effective planning, management and implementation of sustainable rural water supply and sanitation services. The project will seek to

a) assist the FCT, Bauchi, Benue, Borno and Plateau States to improve their planning, management and logistical support for rural water supply and sanitation and, in the process, achieve project target of 755 water points and 2,290 demonstration VIP latrines in five local government areas;

b) develop an LGA and community-based institutional model for the planning and implementation of rural water supply and sanitation with particular emphasis on the role of women;

c) promote and establish an improved policy on ownership and cost recovery for community water supplies and sanitation;

d) provide training for a total of 875 people, including 625 at community-level, 200 at LGA-level and 50 at state-level; and

e) improve personal and environmental hygiene in the project communities.

The project was approved by the Action Committee of UNDP in April 1988 with IPF Budgets of US$ 3,000,000 and Government cost-sharing of $496,260 and GCCC of Naira 8,839,800. The project took off in July 1988 with the fielding of the CTA. It is expected to last for three years. The project Headquarters is located in Jos while its operational centres are located in each participating state.

In the course of implementation of project activities, UNDP and the Netherlands Government held discussions over the modalities for a third-party cost-sharing contribution. The consultations concluded in November 1988 when an agreement was signed by UNDP and the Dutch Government for a US$ 775,000 grant towards the implementation of the project. The revised project document incorporating the Dutch contribution was signed in May 1990. The grant is to provide expert assistance for institutional development and training, development of training materials and for funding an in-depth project evaluation exercise. Whilst the UNDP contribution to the project remained unchanged (US$ 3,000,000), budget line 99 (total) increased by US$ 565,150 brought about through third party cost sharing (Dutch) of US$ 698,000 and reduction in Government cost-sharing of US$ 132,850 to US$ 314,230. Further GCCC is reduced by Naira 2,411,170 (from Naira 8,839,800 to Naira 6,428,650) and in kind contribution by Naira 318,565 (from Naira 1,020,960 to Naira 702,395).

The need for an evaluation of the project was foreseen at the time of project approval and the timing of the mission was decided at the Tripartite Review Meeting (TPR) of the project which took place on 30 March 1990 at the project Headquarters. At the TPR, it was realized that the project objectives may not be achieved by the end of the prescribed three year project life due to various obstacles faced in project implementation such as delay in Government cost sharing payments, slow start of establishment of physical facilities, etc. It is expected that the result of the evaluation will be used to determine whether this is due to overly optimistic establishment of time schedules or to problems with the project design.

PURPOSE

The purpose of the in-depth evaluation mission is:

- to determine the extent and effect of problems faced during the project implementation;

- to determine whether the expected delay in the project activities is due to overly optimistic establishment of time schedules, delay in signing memorandum of understanding by some state governments, period of project document approval process, or to problems with the project design;

- to evaluate the project approach and results achieved so far through activities under the project; and

- to give recommendations on the future design and activities of the project.

AREAS TO BE COVERED

The in-depth evaluation mission will, more specifically, examine the following issues:

1. Project Concept and Design

- Whether project concept and design are congruent with the realization of a solution to the problems of the target group, (e.g. cost recovery, community contributions).
- Whether project inputs envisaged are coherent and realistic given the time and resources available.

2. Implementation

- The quality and timeliness of project inputs, especially financial contributions by all parties concerned and physical facilities expected from the Government and number of project personnel expected to be fielded (e.g. government cost sharing input, timely establishment of physical facilities).

- The appropriateness of the manner in which activities are carried out with emphasis on the involvement of the target group.

- The quality and timeliness of monitoring and backstopping by all parties concerned.

3. Results

- Whether the project is producing or has produced its outputs effectively.

- Whether the project is likely to achieve its objectives within the time available.

- The overall impact of the project on the target group (e.g. capacity building achieved in LGA and local communities).

LESSONS LEARNT

The mission will record significant lessons that can be drawn from experience of this project and its result, in particular any positive factors that worked well and can be applied to other projects and any negative factors that affected the project which should be avoided in the future.

COMPOSITION OF THE MISSION

The mission will be composed of three (or four) members; one appointed by the Federal Government of Nigeria, and one each by the World Bank and UNDP respectively. Further, the Netherlands Government is invited to nominate a member of the evaluation mission in view of its substantial third part cost sharing contribution to the project. The member appointed by UNDP will be the team leader of the mission.

TIME TABLE AND ITINERARY OF THE MISSION

The members of the mission will receive the necessary briefing from their respective Agency Headquarters, the Federal Ministry of Finance and Economic Development, the Federal Ministry of Health, UNDP and World Bank representatives respectively.

- Upon arrival in Lagos, the mission members will be briefed by the Resident Representatives of UNDP and the World Bank as well as the relevant Government authorities. Apart from the Federal Ministry of Finance and Economic Development, this will include the government implementing agency for the project Federal Ministry of health as well as other bodies involved in the rural water supply activities such as DFRRI, Federal Ministry of Water Resources, etc.

- The mission will assemble in Lagos on Monday, 29 October 1990 and will stay in the country for at least 21 days. During their stay, the members of the mission will visit above mentioned government authorities, the project Headquarters in Jos, as well as all project sites, states and local governments of FCT, Bauchi, Benue, Borno and Plateau States.

- A tripartite review meeting will be held to review the draft evaluation mission report and its conclusion/recommendations at least three days prior to the mission's departure. Duration of the mission would be extended if TPR decide necessary to do so. The mission will finalize the report in Nigeria and will leave a signed, agreed report in Lagos before departure.

- The members appointed by World Bank and UNDP will debrief in their respective headquarters after departure from Lagos.

CONSULTATION IN THE FIELD

The Mission will maintain close liaison with the UNDP Resident Representative in Nigeria, the concerned agencies of the Government, any members of the international team of experts, the counterpart staff assigned to the project, as well as the World Bank field staff in the country.

Although the Mission should feel free to discuss with the authorities concerned anything relevant to its assignment, it is not authorized to make any commitments on behalf of the UNDP or World Bank.

## APPENDIX II

### Composition of the Mission

Ms. Carja A.A. Butijn (The Netherlands Government)
Household Scientist
Wageningen Agricultural University
Ritzema Bosweg 32A
6703 AZ Wageningen
The Netherlands

Dr. Alfred W. Hoadley (Team Leader, UNDP)
Senior Associate
Associates in Rural Development
110 Main Street
P.O. Box 1397
Burlington
Vermont 05402
U.S.A.

Engr. Jerome Umolu (Government of Nigeria)
Special Consultant
P.O. Box 6417
Anglo-Jos
Jos
Plateau State
Nigeria

Dr. Svein Stoveland (World Bank)
Public Health Engineer
Stoveland Consult
Lumberveien 9A
4624 Kristiansand
Norway

## APPENDIX III

## ITINERARY

| | | |
|---|---|---|
| Monday 30 Oct. | 08:00-08:30 | Dr. Hoadley met with Mr. Jun Matsumoto, UNDP Programme Advisor |
| " | 08:30-09:00 | Drs. Hoadley and Stoveland met with Mr. Edmund Bengtsson, UNDP Programme Advisor |
| " | 09:00-09:30 | Drs. Hoadley and Stoveland met for briefing with Mr. Patrick Sweeney, UNDP Assistant Resident Representative, Mr. E. Bengtsson, and Mr. J. Matsumoto |
| " | 09:30-12:00 | Drs. Hoadley and Stoveland met with Mr. Mathew Idowu, National Project Coordinator |
| " | 12:00-13:30 | Drs. Hoadley and Stoveland met with Dr. Robert Roche, World Bank and Mr. Peter Lochery, Chief Technical Advisor |
| " | 13:45-14:30 | Drs. Hoadley and Stoveland met with Mr. A.F. Obende, Assistant Director, Economic Affaires Division, Federal Ministry of Finance and Economic Development, accompanied by Mr. E. Bengtsson, Dr. R. Roche, Mr. Mathew Idowu, and Mr. Peter Lochery |
| " | 15:00-19:00 | Drs. Hoadley and Stoveland met with Dr. R. Roche, Mr. Peter Lochery, and Mr. Olu Olutimeyini, Consultant |
| Tuesday 30 Oct. | 07:30-08:00 | Drs. Hoadley and Stoveland met with the Honorable Minister of Health, Dr. Ransom-Kouti, and staff, accompanied by Dr. G. Williams, Director, Disease Control and International Health, Federal Ministry of Health, Mr. E. Bengtsson, Dr. R. Roche, Mr. M. Idowu, and Mr. Peter Lachery |
| " | 08:00-09:30 | Drs. Hoadley and Stoveland met with Dr. G. Williams and staff accompanied by Mr. E. Bengtsson, Dr. R. Roche, Mr. M. Idowu, and Mr. Peter Lochery |

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| " | 10:00-13:00 | Drs. Hoadley and Stoveland and Ms. Carja Butijn met for further briefing and discussion with Mr. E. Bengtsson |
| " | 13:00-15:00 | Hotel check-out and travel to Lagos airport |
| " | 15:00-19:00 | Travel to Jos |
| Wednesday 31 Oct. | 08:00-12:00 | Drs. Hoadley and Stoveland, Mr. Umolu and, Ms. Butijn met with Mr. P. Lochery in project offices. Team Planning and document review |
| " | 12:00-13:30 | Evaluation team met with Engr. Jimmy Kintim Cheto, Director, DFRRI, Plateau State, and Mr. Haruna Non, National Counterpart, Plateau State, accompanied by Mr. Peter Lochery |
| " | 13:30-17:00 | Team planning and review continued |
| " | 19:00-20:30 | Team planning continued |
| Thursday 1 Nov. | 08:00-11:30 | Travel to Nasarawa |
| " | 11:30-13:00 | Evaluation team met with Mr. Muaza Mohammed, Head, Water and Sanitation Unit and staff, accompanied by Mr. M. Idowu and Mr. Hassan Kida, Hygiene Education Advisor |
| " | 13:00-14:00 | Evaluation team met with Mr. Sunday J. Audong, Secretary of LGA, accompanied by Mr. M. Mohammed, Mr. M. Idowu, and Mr. H. Kida |
| " | 14:00-15:00 | Lunch with WASU and project staff |
| " | 15:00-17:30 | Evaluation team met with communities and held site visits in Kemu, Dogo Fili, Kawo Fulani, and Nahuche accompanied by Mr. M. Mohammed and staff, Mr. M. Idowu, and Mr. H. Kida |
| " | 17:30-19:00 | Travel to Abuja |
| " | 20:00- | Evaluation team review |

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| | 21:00 | |
| Friday 2 Nov. | 08:30-09:15 | Evaluation team met with Mr. I.O. Essien, hydrologist and State Counterpart accompanied by Mr. M. Idowu |
| " | 09:15-10:00 | Evaluation team met with Mr. K. Okoli, Director, DFFRI, accompanied by Mr. M. Odowu and Mr. I.O. Essien |
| " | 10:15-11:30 | Evaluation team met with Engr E.O. Okeke, Assistant Director, Federal Ministry of Water Resources accompanied by Mr. M. Idowu |
| " | 11:30-12:00 | Travel to Gwagwalada |
| " | 12:00-14:00 | Evaluation team met with Mr. Saidu Musa, Head, Water and Sanitation Unit and staff, Dr. (Mrs.) Comfort Olayiwole, WID Advisor and State Coordinator, accompanied by Mr. M. Idowu |
| " | 14:00-15:00 | Evaluation team met with Mr. M.H. Ahmed, Seretary to Area Council and Area Council members, accompanied by Mr. S. Musa, Mr. M. Idowu, and Dr. C.B. Olayiwole |
| " | 15:00-16:00 | Site visits accompanied by Mr. M.H. Ahmed, Area Council members, Mr. S. Musa, Mr. M. Idowu, Dr. C.B. Olayiwole, and Mr. H. Kida |
| " | 16:00-17:30 | Evaluation team met with Mr. S. Musa, Dr. C.B. Olayiwole, Mrs. Paz Lutz, Training Advisor accompanied by Mr. M. Idowu |
| " | 17:30-18:00 | Return to Abuja |
| " | 19:00-20:30 | Evaluation team review and planning |
| Saturday 3 Nov. | 08:00-11:15 | Return to Jos |
| " | 11:30-18:00 | Evaluation team met with Mr. Peter Lochery, Mr. David Ede, Water Supply Advisor, Mrs. Paz Lutz, and Dr. C.B. Olayiwole |

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| Sunday 4 Nov. | 08:00-14:00 | Evaluation team reviewed documents and drafted report outline |
| " | 14:00-16:00 | Evaluation team review |
| " | 16:00-19:00 | Travel to Bauchi |
| Monday 5 Nov. | 08:00-09:30 | Evaluation team met with Engr. Bulus M.Musa, Assistant Director, Rural Water Supply, BASIRDA accompanied by Mr. A. Jumba, Senior Hydrologist and Bauchi State Counterpart and Mr. Mohammed Yacubu, Hygiene Education Advisor and Bauchi State Coordinator |
| " | 09:30-10:30 | Evaluation team met with Mr. A. Jumba accompanied by Mr. M. Yacubu |
| " | 10:30-12:15 | Travel to Ningi |
| " | 12:25-13:45 | Evaluation team met with Mr. Ibrahim Aliyu, Head, Water and Sanitation Unit accompanied by Mr. M. Yacubu, Mr. M. Idowu, and Mr. O. Habilla |
| " | 13:45-14:15 | Travel to community |
| " | 14:15-16:30 | Evaluation team met with community leaders, WASCOM members, and Extension Agents accompanied by Mr. I. Aliyu, Mr. M. Idowu, Mr. M. Yacubu, and Mr. O. Habilla |
| " | 16:45-17:15 | Evaluation team met with Secretary of LGA, accompanied by Mr. I. Aliyu, Mr. M. Idowu, Mr. M. Yacubu, and Mr. O. Habilla |
| " | 17:15-18:30 | Travel to Bauchi |
| Tuesday 6 Nov. | 08:00-10:00 | Evaluation team review and planning |
| " | 10:00-19:00 | Dr. Stoveland travel to Maiduguri accompanied by Mr. M. Idowu and Mr. O. Habilla |
| " | 10:00-12:15 | Dr. Hoadley, Engr. Umolu, and Ms. Butijn travel to Jos |

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| " | 12:15-14:00 | Dr. Hoadley and Ms. Butijn compile materials and findings |
| " | 14:00-18:00 | Engr. Umolu and Ms. Butijn travel to Makurdi |
| " | 20:00-21:00 | Engr. Umolu and Ms. Butijn met with Mr. Bitrum Pam, Community Development Advisor and Benue State Coordinator |
| " | 21:00-22:00 | Ms. Butijn met Mr. Jeremia Daojo and Mr. Obe, Benue State Counterpart accompanied by Mr. Pam |
| " | 14:00-17:00 | Dr. Hoadley compile draft materials |
| Wednesday 7 Nov. | 08:30-10:00 | Dr. Hoadley met with Mr. Peter Lochery |
| " | 10:00-11:00 | Dr. Hoadley met with Mr. Haruna Non, Hydrogeologist and Plateau State Counterpart |
| " | 11:00-14:00 | Dr. Hoadley continued discussions with Mr. Peter Lochery |
| " | 14:00-17:00 | Dr. Hoadley compiled draft materials |
| " | 08:30-10:00 | Dr. Stoveland met with Mr. S.A. Kida, Director and the Assistant Director, DFFRI and Mr. E.N. Gadzama, Borno State Counterpart accompanied by Mr. M. Idowu and Mr. O. Habilla |
| " | 10:00-11:30 | Travel to Gwoza |
| " | 11:30-14:00 | Dr. Stoveland met with Mr. Ahmed Ashemi, Chairman, and Mr. A.A. Gagi Dogo, Secretary of the LGA, Mr. Adam Baba, WASU Head, and other LGA staff accompanied by Mr. Gadzama, Mr. M. Idowu, and Mr. O. Habilla |
| " | 14:00-16:00 | Briefing on progress of the rapid reconnaissance survey |
| " | 16:00-17:30 | Travel to Maiduguri |

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| " | 08:15-<br>10:15 | Engr. Umolu and Ms. Butijn met with Mr. Neban Bur Haigh, High Commissioner, Benue State Ministry of Health, the secretary, and accountant, accompanied by Mr. Pam |
| " | 10:15-<br>12:30 | Engr. Umolu and Ms. Butijn travelled to Oju region |
| " | 12:30-<br>15:00 | Engr. Umolu and Ms. Butijn attended field participatory training workshop for extension agents in two villages in Oju |
| " | 15:00-<br>16:00 | Engr. Umolu and Ms. Butijn travelled to Oju town |
| " | 16:00-<br>16:45 | Engr. Umolu and Ms. Butijn met with Mr. Yohanie I. Ityowna, Secretary, Oju LGA, accompanied by Ms. C.B. Olayiwole, Mr. B. Pam, Mr. Obe, and Mr. Daoja |
| " | 16:45-<br>19:30 | Engr. Umolu and Ms. Butijn returned to Makurdi |
| Thursday<br>8 Nov. | 08:00-<br>17:00 | Dr. Hoadley report oganisation and preparation |
| " | 08:15-<br>17:00 | Dr. Stoveland travelled to Jos accompanied by Mr. M. Idowu |
| " | 08:00-<br>10:00 | Engr. Umolu and Ms. Butijn reviewed project documents |
| " | 10:00-<br>11:00 | Engr. Umolu and Ms. Butijn met with Mr. S. Dayon, Assistant General Manager of Planning and Design, Lower Benue River Basin Development Authority |
| " | 12:00-<br>16:30 | Engr. Umolu and Ms. Butijn returned to Jos |
| Friday<br>9 October | 08:00-<br>18:00 | Evaluation team establish working facilities and report organization and preparation |
| " | 12:30-<br>14:30 | Ms. Butijn met with Mrs. Paz Lutz and Ms. C.B. Olayiwole |
| Saturday<br>10 Nov. | 08:00-<br>21:30 | Evaluation team organization and report |

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| Sunday 11 Nov. | 08:00-21:30 | Evaluation team report preparation |
| Monday 12 Nov. | 08:00-21:30 | Evaluation team report preparation |
| Tuesday 13 Nov. | 08:00- | Evaluation team report preparation |
| Wednesday 14 Nov. | 08:00-9:00 | Preparation for departure from Jos |
| " | 09:00-10:00 | Wrap-up at RUSAFIYA office |
| " | 10:15-11:00 | Travel to airport, Jos |
| " | 11:15-13:45 | Travel by air to Lagos |
| " | 14:15-15:00 | Travel from airport for UNDP |
| " | 15:00-16:45 | Evaluation team met with Mr. E. Bengtsson at UNDP |
| " | 16:45-20:00 | Evaluation team searched for hotel rooms |
| Thursday 15 Nov. | 06:30-07:45 | Depart hotel for Federal Secretariat |
| " | 08:00-09:30 | Evaluation team met with Dr. G. Williams and staff accompanied by Mr. M. Idowu, Mr. P. Lachery, Dr. C. Olayiwole joined by Mr. Allain Luccersol and Mr. Desmond McNeil |
| " | 09:30-10:00 | Dr. Hoadley travel to UNDP |
| " | " | Mr. J. Umolu travel to office for report preparation |
| " | " | Dr. Stoveland and Ms. Butijn travel to Sheraton hotel |
| " | 10:00-10:30 | Dr. Hoadley met with Mr. E. Bengtsson concerning logistical arrangements |

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| " | 10:30-13:00 | Dr. Hoadley travelled to Airport Hotel to Sheraton Hotel |
| " | 13:45-14:30 | Travel to UNDP |
| " | 14:30-15:00 | Dr. Hoadley met with Mr. E. Bengtsson concerning travel and other matters |
| " | 15:00-17:45 | Evaluation team met with Mr. Dan Temu, Deputy Resident Representative and Mr. E. Bengtsson |
| " | 17:45-19:15 | Return to Sheraton Hotel |
| " | 19:30-21:00 | Evaluation team planning |
| " | 21:00-24:15 | Evaluation team met with Mr. A. Luccersol |
| Friday 16 Nov. | 08:00-09:00 | Travel to Federal Secretariat |
| " | 09:00-09:30 | Evaluation team met with the Director, Federal Ministry of Water Resources |
| " | 09:30-10:00 | Evaluation team planning |
| " | 10:00-12:30 | Evaluation team met with Tripartite Review members including Mr. T. Obende, Mr. M. Idowu, Mr. D. Temu, Mr. E. Bengtsson, Mr. A. Luccersol, Mr. P. Lochery, and Dr. C. Olayiwole |
| " | 12:30-14:00 | Return to Sheraton Hotel |
| " | 14:00-15:30 | Team review and planning |
| " | 15:30 | Mr. Umolu departed Lagos |
| " | 15:30-16:30 | Dr. Hoadley and Ms. Butijn travelled to International Airport |
| " | 16:30-18:00 | Dr. Hoadley and Ms. Butijn met with Mr. A. Luccersol |

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| " | 18:00-19:00 | Dr. Hoadley and Ms. Butijn returned to Sheraton Hotel |
| Saturday 17 Nov. | 08:00-17:00 | Report preparation |
| " | 18:00 | Dr. Stoveland departed Lagos |
| Sunday 18 Nov. | 08:00-17:00 | Report Editing and Preparation |
| Monday 19 Nov. | 08:00-09:10 | Dr. Hoadley and Ms. Butijn travelled to UNDP |
| " | 09:10-10:50 | Dr. Hoadley and Ms. Butijn met with Mr. E. Bengtsson |
| " | 10:50-11:00 | Dr. Hoadley and Ms. Butijn travelled to Dutch Embassy |
| " | 11:00-12:30 | Ms. Butijn met with Dutch Embassy Staff |
| " | 14:10-15:00 | Dr. Hoadley and Ms. Butijn met with Mr. E. Bengtsson |
| " | 15:00-16:00 | Dr. Hoadley and Ms. Butijn met with Mr. Assefa Fre-Hiwet, Resident Representative, UNDP, Nigeria, accompanied by Mr. P. Sweeney and Mr. E. Bengtsson |
| " | 16:00-16:40 | Dr. Hoadley and Ms. Butijn met with Mr. E. Bengtsson |
| " | 16:40-18:30 | Dr. Hoadley and Ms. Butijn returned to Hotel |
| Tuesday 20 Nov. | 08:00-18:00 | Dr. Hoadley editing of draft report |
| " | 08:30 | Ms. Butijn departed Lagos |
| Wednesday 21 Nov. | 09:00-10:00 | Dr. Hoadley travelled to UNDP |
| " | 10:00-12:00 | Dr. Hoadley printed documents and completed logistical arrangements |

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| " | 12:00-13:30 | Dr. Hoadley returned to Sheraton Hotel |
| " | 13:30-17:00 | Report editing |
| " | 18:00 | Dr. Hoadley departed Lagos |
| Sunday 2 Dec. | 04:00 | Dr. Stoveland arrived in Lagos |
| " | 17:00 | Mr. Umolu arrived in Lagos |
| " | 19:30 | Dr. Hoadley arrived in Lagos |
| " | 21:30 | Ms. Butijn arrived in Lagos |
| Monday 3 Dec. | 08:30-09:00 | Dr. Hoadley and Mr. Umolu travelled to UNDP |
| " | 09:00-10:00 | Dr. Hoadley and Mr. Umolu met with Mr. E. Bengtsson |
| " | 10:00-10:30 | Dr. Hoadley and Mr. Umolu returned to Hotel |
| " | 08:00-10:30 | Dr. Stoveland and Ms. Butijn, team planning and report preparation |
| " | 10:30-10:50 | Ms. Butijn travelled to Netherlands Embassy |
| " | 10:50-11:45 | Ms. Butijn met with staff of Netherlands Embassy |
| " | 11:45-12:00 | Ms. Butijn returned to hotel |
| " | 10:30-18:00 | Dr. Hoadley, Dr. Stoveland, and Mr. Umolu report preparation |
| " | 12:00-18:00 | Ms. Butijn, report preparation |
| Tuesday 4 Dec. | 08:00-18:00 | Review and report preparation |
| Wednesday 5 Dec. | 08:00-20:00 | Report preparation |

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| " | 09:00-09:30 | Dr. Hoadley travelled to UNDP |
| " | 09:30-10:00 | Dr. Hoadley met with Mr. E. Bengtsson |
| " | 10:00-10:30 | Dr. Hoadley returned to hotel |
| Thursday 6 Dec. | 08:00-20:00 | Report review, editing, and preparation |
| " | 12:00 | Mr. Umolu departed Lagos |
| Friday 7 Dec. | 08:00-14:00 | Drs. Hoadley and Stoveland and Ms. Butijn, report preparation |
| " | 14:00-18:00 | Dr. Hoadley and Ms. Butijn, report preparation |
| " | 14:00-14:45 | Dr. Stoveland, travel to UNDP |
| " | 14:45-18:00 | Dr. Stoveland, reproduction of report |
| " | 18:00 | Dr. Hoadley and Ms. Butijn departed Lagos |
| Sunday 9 Dec. | 18:00 | Dr. Stoveland departed Lagos |

APPENDIX IV

United Nations
Development Programme

World Development

**MEMORANDUM**

To: Resident Representative
United Nations Development Programme
Lagos

From: Dr. A.W. Hoadley
Team Leader
Evaluation Mission for RUSAFIYA Project

Date: 17 November, 1990

Subject: Extension of Mission

This will confirm discussions on 16 November, 1990 between the members of the Evaluation Mission and Mr. Dan Temu, Deputy Resident Representative, and Mr. Edmund Bengtsson, Project Advisor, regarding scheduling of the above mission. At that meeting it was noted that:

- Insufficient time was allowed in the terms of reference for conducting an evaluation of this project which has a large number of components and a complex structure

- The tight scheduling in the field did not allow for the unexpected quantity of documents to be reviewed (nearly 50)

- Time required by the project to compile needed information did not allow review and incorporation into the report during the allotted time

- Unanticipated logistical constraints in Lagos prevented further work on the report for the first three days after the return of the Mission

In addition, UNDP has requested that the Mission review and comment as a group the piped water scheme proposal.

In view of the above, and the importance of the evaluation to this very significant project which has great potential impact, it is requested that the Mission be extended to provide time for completion of its mandate. The members of the Mission, based on the timeframe spelled out in the terms of reference, made commitments which require their departure from Nigeria as originally scheduled between 16 and 19 November. At the start of the Mission I postponed my own departure until 21 November on the assumption that completion of the report would have been possible for the evaluation team to complete its work prior to their departure. Completion of the report requires that all members of the team be able to work together on the report.

UNITED NATIONS

At the meeting between the evaluation team and the Deputy Resident Representative on 16 November, it was proposed that the team members depart as planned and reconvene during the first week of December in Holland to complete the report. The team understands the concern expressed by the UNDP at the tripartite meeting on 16 November that the report be completed in Nigeria. Therefore, it is proposed that the team depart as planned and reconvene in Lagos on 3 December for a period of 5 days. It is noted, based on verbal communications, that, given the constraints encountered, this proposal is considered reasonable by the Government of Nigeria, the World Bank, and the Dutch Government. It is noted further that the completed evaluation report will be available in good time for the next tripartite meeting in early 1991.

It is believed that this extension is in the interest of the project and of the Global Programme, and we therefore request your approval.

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# APPENDIX V

NIR/87/011 - Rural Water Supply and Sanitation

Minutes of the Tripartite Review Meeting
held at Project Headquarters, Jos on
30 March 1990, at 10.00a.m.

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|---|---|---|
| Mr. A.F. Obende | - | Assistant Director, Economic Affairs Division, Federal Ministry of Finance and Economic Development, (Chairperson) |
| Dr. G. Williams | - | Director, Disease Control and International Health Department Federal Ministry of Health. |
| Mr. M. Idowu | - | National Project Co-ordinator |
| Major S.M. Tamba | - | Director, DFFRI. Plateau State. |
| Mr. O. Habila | - | Senior Hydrologist, DFFRI, Plateau State, Plateau State Project Co-ordinator. |
| Engr. B. Musa | - | Assistant Director for Rural Water Supply, Bauchi State Integrated Rural Development Authority, BASIRDA. |
| Mr. A. Jumba | - | Senior Hydrologist, BASIRDA Bauchi State Project Co-ordinator. |
| Mr. D. Suemo | - | Rural Water Supply Co-ordinator DFRRI, Federal Capital Territory |
| Mr. I. Essien | - | Federal Capital Territory Project Co-ordinator. |
| Mr. R. Roche | - | Programme Officer, World Bank Rural Water and Sanitation Group Abidjan. |
| Mr. C. P. Malik | - | Deputy Resident Representative UNDP, Lagos. |
| Mr. E. Bengtsson | - | Assistant Resident Representative a.i. UNDP, Lagos. |
| Mr. J. Matsumoto | - | Programme Adviser, UNDP, Lagos. |
| Mr. P. Lochery | - | Project Co-ordinator/CTA. |
| Mrs. P. Lutz | - | Training Adviser. |
| Mr. D. Ede | - | Water Supply Adviser. |
| Mr. H. Kida | - | Sanitation Adviser, Project Co-ordinator for Plateau State. |
| Mr. B. Pam | - | Community Development Adviser. |

The Chairman welcomed everyone to the meeting which hereafter, adopted the agenda as circulated in advance:

AGENDA

1. Opening remarks.

2. Project concept and design

3. Project Progress:

   - Establishment of project team.
   - Signing of Memoranda of understanding with participating states.
   - Government cost-sharing and cash contributions.
   - State of field activities:
   - Plateau State
   - Bauchi State
   - F.C.T., Abuja
   - Benue State
   - Borno State

4. Operational Issues.

5. Work Plan

6. Need for Evaluation.

7. Decisions and Recommendations.

8. Any other business.

2. Project Concept and Design

The Representative of the Federal Ministry of Health (FMOH) in his outline of the project concept and design described the disease profile of the country as being essentially, that of a typical developing country, where the bulk of sickness cases relate to poor sanitation and water supply. These are areas where the government is keen on addressing the problems of the disadvantaged rural populations by shifting resources to the rural areas, where presently less than 20% of the population have access to safe water and even less to adequate sanitation facilities. Based on this, as well as on the Government's awareness of available low-cost technologies for supply of the services, the project was put together focussing on Local Government Areas and communities to promote the self-reliance of the communitites in providing the services. As such, the project is one of the government measures to transform rural life, halt rural-urban migration, increase incomes etc.

The Chairperson, drawing on the government's general experience with UNDP-assisted projects pointed out that too often, projects are behind schedule; a fact which, he felt, could often be attributed to insufficient supervision by the Executing Agency as well as the supervising Ministry.

In the present case and on the basis of available ocumentation, he was doubtful as to how much would eventually nave been achieved at the end of the prescribed three year project life. He expressed concern as to how to ensure the best utilization of UNDP funding not least in view of the high cost of international expertise which is about $120,000 per annum.

The UNDP Representative outlined the role of the three parties (Government, Executing Agency and UNDP) in project implementation stressing that all projects receiving assistance are the government's projects which fall within the framework of the national priorities and are co-ordinated by the National Co-ordinating Authority, the Federal Ministry of Finance and Economic Development (FMFED). UNDP inputs to the Government's projects are provided through Executing Agencies. He traced in brief the background of this project to which, he said, the Government, the Executing Agency and UNDP attach great importance. The project addresses areas that are of high priority for the Government as well as UNDP such as rural development, water and sanitation supply, women in development, grassroots participation etc. He then added that the meeting was going to review the performance of the project since it took off 21 months ago, and the delivery of inputs by UNDP, Government and the Executing Agency.

On the issue of the Project Performance Evaluation Report (PPER), he mentioned that it was received in UNDP in August 1989, whereas according to the regulations it should have been received after 9 months of project operations (i.e. in March/April 89). Further, on the issue of the project revision 'D' incorporating third party cost-sharing contribution of US$775,000 into the project, he expressed concern as to the delay in its signature since the revision was proposed as early as December 1988.

The CTA in his reaction to the two latter points raised by the UNDP pointed out that whilst it is correct that an advance authorization was issued early July 1988, full project operations could not begin till after September 1988 when the project document was signed. The PPER, therefore was prepared in a timely manner in June 1989. To this UNDP answered that really, the project had commenced in January 1988 when an earlier project under which the CTA was serving was extended primarily with the purpose of bridging the time gap up to approval of the present project. Concerning revision 'D' he confirmed that it had been discussed with UNDP in December 1988 whereafter it had been submitted in April 1989, however, in a wrong format. Resubmission was thereafter done in July 1989 whereafter it took UNDP/Lagos up to January 1990 to review the revision and forward it to New York. Since then, the revision has been awaiting formal government approval.

Project Progress

The project progress was considered on the basis of the PPER of June 1989 and its up-date (copy attached). During the discussion, it was suggested and agreed that an updated PPER should be prepared within a week. The status is as follows:

Output 1 ( Water supply and sanitation units established at LGA-level to provide technical and logistical support to rural communities for water supply and sanitation services). Two water and sanitation units (WASU) have been fully established (Nasarawa and Ningi), whereas the WASU Head only has been appointed in Gwagwalada (LGA selected for activities in F.C.T.). This was considered unsatisfactory, but should be seen against the fact that it is a requirement that the memorandum of understanding has been signed prior to commencement of activities in a particular state.

Output 2 (Project communities organized for planning, installation, operation and maintenance of their water supply and sanitation facilities with their optimal involvement in decision making). In Nassarawa, activities have been ongoing since September 1988. In Ningi all communities have not yet been identified following the rapid recognaissance survey which is the first activity in the project LGA's. Organization and training of a community is expected to last 6 months. This status was considered satisfactory for the two active LGA's and unsatisfactory for three. Overall, the states was not considered satisfactory.

Output 3 (Storage and distribution systems for handpump spare parts). Orders have been placed for handpumps in Nigeria as well as outside and the first installations are expected within the next 2 months whereas by December 1990 pumps should have been installed in three possibly four LGA's. At the same time a storage and distribution system will have been initiated. This was considered satisfactory in four LGA's out of five and overall satisfactory.

A lengthy discussion arose from the mentioning in the PPER that the 'project will act as a wholesaler'. The following emerged:

(a) The initial function of wholesaler is expected to be taken over by local merchants as and when they emerge.

(b) Meanwhile, there is a need to sort out procedures for handling proceeds by the project. The project management should make suggestion to this effect.

(c) The issue of cost-recovery is accepted by the Federal Ministry of Health. It is government policy.

(d) The project document spirit is that the project should be learning by doing and the project is

learning for what and how much communities are prepared to pay. It was agreed that the project documentation should contain something on the issue of cost-recovery.

Output 4 (Guidelines on LGA/community-based institutional model) Experience is being gathered from the LGA's and states where the project is active and the model is developing. It is expected that guidelines can be produced by late 1990/early 1991 since it is not a requirement that experience from all states is being incorporated. The status is considered satisfactory.

The Status Project Advisory Committee (SPAC) had proven a useful tool for project implementation. In view of this and the provision of the project document for a Project Advisory Committee, it was felt that the overall project committee should meet soon. It could eventually be expanded through inclusion of other agencies thereby avoiding overlapping.

Output 5 (Vital equipment for success of state water supply and sanitation programmes identified and procured). The initial order for equipment was prepared in June 1988 but not placed till November of that year when the agreement between IBRD and UNDP/OPS was signed for the purchase of equipment. This coupled with time consuming processing on the part of OPS in procuring various specialized equipment for the first time and major delays when clearing equipment from Lagos port have slowed down delivery of equipment. The present status is that the majority of equipment has been received for Plateau and Bauchi States, some for F.C.T. wheareas orders have been placed for equipment for Benue State. This is considered satisfactory for Plateau, Bauchi and F.C.T. and not for Benue and Borno States.

In the process, a comprehensive study has been carried out (with regional and inter-regional funding) of the Nigerian drilling industry during which 90 companies were reviewed, 45 interviewed and about 10 shortlisted. The report will be circulated shortly.

Requested by UNDP, the CTA then briefed the meeting on the status and where-abouts of all equipment listed on pages 39-44 of the PPER. THe status will be reflected in the updated PPER under preparation by the project management. In the process he raised the issue of the purpose of the tripartite review which, in his view, should be primarily to identify and resolve problems being encountered by the project and towards which he felt that not all interventions made had contributed. He further stated that some problems might have been resolved at an earlier stage if UNDP had undertaken monitoring visits to the project (for which he had appealed). Only twice had the project been visited by UNDP during a brief visit by the Resident Representative in late 1989 and during a monitoring visit by the programme officer in the week preceeding the tripartite review. He mentioned the complications of the project, inter alia as concerns accounts and institutional framework all contributing to a very busy schedule for project staff. Concerning the Chairman's remark on

high in Nigerian terms, the same could not be said if compared with what obtains internationally. He for one did not receive anything like US$120,000/year as had been otherwise mentioned in the discussion. He finally said that he worked on the project because he felt he has something to contribute and not because he would have trouble finding a job elsewhere.

The representative of the World Bank Rural Water and Sanitation group intervened to reiterate the concern and desire expressed by the CTA for a constructive debate which all parties confirmed was constructive and that they would like the review to proceed in the same fashion. The CTA raised the issue of procuring radios to link the various project centres more easily than is presently the case. The acquisition of radios has been kept pending by UNDP who is in the process of ironing out communication needs pertaining to all projects. It was agreed that the UNDP representatives should ascertain the precise status of the issue immediately upon return to LAgos and advise the project accordingly.

Output 6 (Six community-based, integrated rural water supply and sanitation projects designed and under implementation, one in each demonstration LGA). The number of project LGA's has been reduced to six and the project has been designed for all, and is being implemented in three. This is satisfactory for three and not for two LGA's.

Output 7 (Targets set under project for water supply, sanitation and hygiene education in demonstration LGA's achieved). Targets set for Nassarawa will be achieved on time, whereas the others will require 3-12 months extra. If delivery required within the originally stipulated 36 months project life, the status is, therefore unsatisfactory.

Asked about the status of the sanitation component, the CTA briefed the meeting that it had started well with promotion but that actual implementation had been slow. The project is now pursuing a two pronged approach involving:

a) identification of individuals who are interested in establishing improved latrines at their homes. In these cases, the Water and Sanitation Unit (WASU) provides technical assistance and possibly, the slap whereas the individual provides the rest. Progress in this respect has been slow and it is the impression of project staff that the latrines are rarely built for health purposes but rather for status and

b) cooperation with primary schools after discussions with Plateau State Ministry of Education. Construction is being done partly by Parents-Teachers Association (digging and superstructure) and partly by WASU (slaps and brick-lining of hole). Overall, the sanitation component needs strengthening.

and hygiene education). Most components required for the formulation of guidelines were reported to be in place in Nassarawa where communities as well as the LGA have been very responsive to initiatives taken. In Nigeria, the communities are being approached. The Representative of the FMOH cautioned that activities in sanitation education would have to go hand-in-hand with the establishment of facilities since otherwise it would not be possible for the villages to practise what is being taught.

Output 9 (50 state-level, 200 LGA-level and 625 community personnel trained). So far 25 state, 65 LGA and 300 community personnel have been reached by training activities carried out by the project. This is considered satisfactory.

Output 10 (Training materials and manuals compiled for hand dug wells, VIP latrines and other aspects of community-based installation, operation and maintenance of water supply and sanitation services). Manuals for multicompartment V.I.P., single pit and household pit latrines have been produced and published by FMOH, whilst manuals for hand dug wells and the Afridev pump are underway. It is expected that towards the end of 1990 the complete set of manuals will be produced. They will then be reviewed and revised during the remainder of the project. THe status is satisfactory though the CTA solicited greater counterpart involvement in the work on manuals, a suggestion which was well received by both Plateau and Bauchi States.

Output 11 (Recommendations made on community ownership of water supply facilities located within communities). The CTA highlighted this output as a fundamental one for the project, since it has direct hearing on how communities can become more involved in covering costs of water supply facilities. THe Representative of FMOH queried whether the project is establishing any institutional infrastructure in the communities to manage funds etc. The CTA explained the role of community water and sanitation communities (WASCOM's) that are being established in all communities and are also the main target of training by the LGA extension workers. Within the WASCOMs, training is concentrated on the functions of the chairperson, the secretary, the treasurer and the mechanic.

Output 12 (Cost-recovery mechanisms started in each demonstration LGA for operation and maintenance of rural supply and for sanitation). This output is well underway and will be achieved by September 1991 subject to Borno State signing the Memorandum of Understanding. The output, in conjunction with output 11, gave rise to an intensive discussion on cost-recovery/community contribution towards the establishment of water points. The positions advanced were:

(a) The World Bank favoured an approach whereby, under the project, the communities pay for part of the initial capital costs (the pump) involved in establishing a water point, plus for subsequent maintenance repair and replacement. The rationale for this was that payments attest to the community's commitment to the pump. If the reaction of the

communities were tested in a pilot project it would further provide policy/decision makers with proven option that would otherwise not be available. The World Bank representative and the CTA suggested that, eventually, it could be left to the states to decide whether or not they would require 'up-front' payments from the community.

(b) The Representatives of FMOH and FMFED both felt that the project should provide the full initial capital outlay for the establishment of water points, including the pump, whereafter the communities would be responsible for maintenance and repair of the pump as well as for its eventual replacement. This was based primarily on the fact that other government agencies establishing water points provide the pump but also on the provisions of the project document.

(c) The UNDP felt that since the project document provides for handpumps under the UNDP contribution, they should be provided free of charge to the communities.

The meeting eventually decided against up-front payment by communities and for their contributions towards maintenance, repair and replacement of pumps.

Output 13 (Improved knowledge and practice of personal and environmental hygiene in project communities). Training activities involving children in schools are ongoing in Nassarawa and initial responses in Gwagwalada has been overwhelming. The status is satisfactory.

Output 14 (Audio-visual materials for personal and environmental hygiene education). Some audio-visual materials are being procured and others are being produced by the project. The status is considered satisfactory.

Following the review of individual outputs, the status of the Memorandum of Understanding and the cash and cost-sharing contributions from the states was reviewed and it was decided that the Honourable Minister, Federal Ministry of Health should be approached to write to the Borno Government with a view to ensuring Borno's early signature on Memorandum of Understanding. It was decided that unless Borno signs by 30 June a revision will be processed dropping Borno from the project. Further, the first installment should be paid by Borno within two weks of full signature of the Memorandum of Understanding. Concerning the contributions from the states, it was decided that FMOH, FMFED, and UNDP should all write to them soliciting timely payments of contributions.

Finally, the issue of the overall status of the project was raised. The CTA felt that the statement made in the PPER (p.24. point 7c) was still valid, except that the delays sustained were different (3-12 months for the states other than Plateau

to the definition of the roles of counterpart staff in the project, the CTA clarified the project focus to the communities/LGA's and states. Since this process, whereby the community articulates needs/demands, the LGA supports the community and the state supports the LGA is the opposite of traditional top-focussed modalities of operations practised by governments, answers to questions of the exact roles of staff at the various levels of governments are not readily available, but will rather have to be evolved in the course of project implementation.

4. Operational Issues

Covered under 3 above.

5. Work Plan

In the discussion of the work plan, it was decided that the sheets which need updating will be up-dated (sheets I, III, IV, V, VI, VII). Further, project management should prepare precise estimation for later decision on the financial inplications of extending the project life by a year as required per the revised work plan.

6. Need for Evaluation

UNDP briefed the meeting on the modalities for and regulations governing joint in-depth evaluations of projects, and on the basis of that, it was decided to have an in-depth evaluation of the project starting second half of September. It was felt that, further, the project requires more frequent reporting than standard procedures call for, and the meeting therefore, requested the project management to prepare quarterly papers and reports.

7. Decisions and Recommendations

1. All states covered by the project document should participate in future revision meetings irrespective of whether they have signed the Memorandum of Understanding.

2. The project management should submit to UNDP an updated project performance and evaluation report (PPER) within a week.

3. UNDP should advise project management, by 2 April, as to whether they can proceed with the acquisition of radios to ease communication between project sites.

4. Project management should provide, within a week, an estimate of the financial implications of extending the project duration by 1 year.

5. Project management should provide quarterly reports of project progress, in view of the complicatedd nature of the project.

Finance and Economic Development and UNDP should all follow up with the participating states to ensure that their contributions to the project are forthcoming in a timely manner according to the signed Memorandum of Understanding.

7. 30 June 1990 was established as deadline for Borno State to sign the Memorandum of Understanding. If the Memorandum is not signed by then a project revision will be processed dropping Borno from the project.

8. The Honourable Minister, Federal Ministry of Health should write to the Borno State Government with a v[illegible] ensuring Borno's early signature on the Memorand[illegible] Understanding.

9. First installment by Borno should be paid with[illegible] weeks of full signature of the Memorandum of Underst[illegible] covering the state.

10. Cost recovery mechanism under the project sho[illegible] reviewed and project management should prepare within [illegible] months, a modality for its application.

11. Up-front contributions requested from communities towards the establishment of water points should be discontinued and replaced with contributions towards replacement of pumps and their maintenance and operation.

12. Federal Ministry of Finance and Economic Development should expedite approval of project revision 'D' incorporating Dutch 3rd party contribution into the project.

13. Activities for provision of water and sanitation facilities should be concurrent with activities for hygiene education.

14. All candidatures for national experts hitherto presented for Government's consideration were approved.

15. The project workplan should be updated and consolidated by project management within one week.

16. State Governments should be more actively involved in preparation of various training manuals to be produced under the project.

17. A joint FGN-IBRD-UNDP in-depth evaluation mission should be undertaken as of second half September 1990.

8. <u>Any other business</u>

a) The CTA wished to appeal for an early approval of candidatures presented for Government's selection for the still vacant parts of national professionals under the project. The Government representatives approved them (to be confirmed in

b) The CTA advised that very soon the C.V. of a geophysics consultant would be received and he appealed for an early clearance of his candidature.

c) The World Bank Representative outlined the size of average settlements in the country saying that in the north 50% of the rural population live in communities of less than 1,200 whereas in the south 25% live in these communities. He wanted th enquire from the meeting whether it would be possible to introduce underthe project a further element to provide mechanized water supply systems for a limited number (4-8) of larger communities with population of 1,200-5,000. The purpose of this would by to determine what functions relating to such a scheme could be carried by the community. Funding to the tune of US$500,000 would be made available through third party cost-sharing.(Norway) A short paper (attached) was distributed outlining the proposal. The meeting whilst in general welcoming the idea, advised that the issue should be presented formally in writing as soon as funding is sorted out.

The meeting then came to an end with a vote of thanks from the Chairman to all participants for their constructive contributions.

# APPENDIX VI

## OUTPUTS RELATED TO OBJECTIVES OF THE PROJECT

Outputs

2.22 The expected outputs of the project are as follows (see ANNEX I for success criteria and verifiers):

**Objective (a) — LGA-based institutional model**

Outputs
(1) Water supply and sanitation units established at LGA-level to provide technical and logistical support to rural communities for water supply and sanitation services.
(2) Project communities organized for planning, installation, operation and maintenance of their water supply and sanitation facilities with their optimal involvement in decision-making.
(3) Storage and distribution systems for handpump spare parts.
(4) Guidelines on an LGA/community-based institutional model.

**Objective (b) — Improved planning, management and logistical support**

Outputs
(5) Vital equipment for success of State water supply and sanitation programmes identified and procured.
(6) Five community-based, integrated rural water supply and sanitation projects designed and under implementation, one in each demonstration LGA.
(7) Targets set under project for water supply, sanitation and hygiene education in demonstration LGAs achieved.
(8) Guidelines established for participatory planning and implementation of integrated projects in water supply, sanitation and hygiene education.

**Objective (c) — Training**

Outputs
(9) 50 state-level, 200 LGA-level and 625 community personnel trained.
(10) Training materials and manuals compiled for hand dug wells, VIP latrines and other aspects of community-based installation, operation and maintenance of water supply and sanitation services.

**Objective (d) — Ownership and cost recovery**

Outputs
(11) Recommendations made on community ownership of water supply facilities located within communities.
(12) Cost-recovery mechanisms started in each demonstration LGA for operation and maintenance of water supply and for sanitation.

**Objective (e) — Personal and environmental hygiene**

Outputs
(13) Improved knowledge and practice of personal and environmental hygiene in project communities.
(14) Audio-visual materials for personal and environmental hygiene education.

# APPENDIX VII

## ACTIVITIES RELATED TO OUTPUTS OF THE PROJECT

I. Activities

(2.23) To produce the required outputs, the following activities will be undertaken:

Output 1 Water supply and sanitation units established at LGA level to provide technical and logistical support to rural communities for water and sanitation services.

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| Activities | 1.1 | Identification of appropriate LGAs and negotiations with LGA officials on establishment and staffing of the rural water and sanitation units. |
| | 1.2 | Staff selection and training. |
| | 1.3 | Planning and execution of project activities with staff with progressive shift of responsibility to selected staff. |
| | 1.4 | Review of operational experience and feedback of results into project implementation. |

Output 2 Project communities organized and trained for planning, installation, operation and maintenance of their water supply and sanitation facilities with their optimal involvement in decision-making.

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| Activities | 2.1 | Encouragement of communities to organize themselves for managing their water supply and sanitation services. |
| | 2.2 | Provision of training and guidance to communities on technical aspects of managing their water and sanitation services and where to go for help. |
| | 2.3 | Provision of continued support and backstopping to community water and sanitation management teams till they become self-reliant. |
| | 2.4 | Review approach in the light of experience and feedback results into project implementation. |

Output 3 Storage and distribution systems for handpump spare parts.

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| Activities | 3.1 | Procurement of spare parts for handpumps used in project communities. |
| | 3.2 | Establishment of a distribution network based on discussions with community-level organizations for water and sanitation. |
| | 3.3 | Operate network and revise operation in the light of experience. |

Output 4 Guidelines on an LGA/community-based institutional model.

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| Activity | 4.1 | In the light of results of activities 1.4, 2.4 and 3.3 prepare guidelines on LGA/community-based institutional model for rural water supply and sanitation. |

Output 5 Vital equipment for success of State water supply and sanitation programmes identified and procured.

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| Activities | 5.1 | Reconfirm with States their equipment needs. |
| | 5.2 | Prepare detailed specification of required equipment. |
| | 5.3 | Procure equipment. |

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| Output 6 | | Five community-based, integrated rural water supply and sanitation projects designed and under implementation, one in each demonstration LGA. |
| Activities | 6.1 | Design and apply in each project LGA a sequence of steps to be followed in a bottom-up approach to the planning and implementation of integrated rural water supply and sanitation projects. |
| | 6.2 | Review experience, revise procedures as required and feed back results to project LGAs. |
| Output 7 | | Targets set under project for water supply, sanitation and hygiene education in demonstration LGAs achieved. |
| Activities | 7.1 | Collect water resources and socio-economic data and use them for detailed planning and the construction of water and sanitation facilities in selected communities with the optimal involvement of the community at all stages of the activity using participatory approaches. |
| | 7.2 | Undertake mobilization of communities for their participation in project activities. |
| | 7.3 | Working within the established institutional structure, and following the community based integrated approach, select project communities |

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| Output 8 | | Guidelines for participatory planning and implementation of integrated projects in water supply, sanitation and hygiene education. |
| Activity | 8.1 | Pulling together the results of activity 6.2 from all demonstration LGAs to prepare guidelines for the planning and implementation of integrated projects in water supply, sanitation and hygiene education. |

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| Output 9 | | 150 state-level, 200 LGA-level and 625 community personnel trained. |
| Activities | 9.1 | Provide training in participatory approaches for project trainers. |
| | 9.2 | Conduct workshops and short courses for state-level professional personnel on aspects of project planning and implementation including use of personal computers. |
| | 9.3 | Arrange training courses for local government staff in community development, health education, latrine construction, pump maintenance and construction of wells and hand drilled boreholes. |
| | 9.4 | Train community leaders and artisans on skill development for their roles including book-keeping, well sinking, VIP latrine construction and pump operation and maintenance. |
| | 9.5 | Provide seminars for Federal-level policy makers. |

Output 10 Training materials and manuals compiled for hand dug wells, VIP latrines and other aspects of community-based participatory installation, operation and maintenance of water supply and sanitation services.

Activities
- 10.1 Review existing training materials and facilities for use and/or adaptation.
- 10.2 Produce 'how to do it' booklets on well construction, VIP latrine construction and handpump maintenance for specific pumps for use at community level.
- 10.3 Produce higher level training materials for LGA and state-level personnel.
- 10.4 Procure and adapt audio-visual training materials for use at community, LGA and state levels.
- 10.5 Review efficacy of all training materials on basis of training course evaluations and revise training materials for wider dissemination.

Output 11 Recommendations on community ownership of water supply facilities in demonstration LGAs.

Activities
- 11.1 Advocacy and social marketing of community ownership of water supply facilities at community, LGA and State levels with full involvement of the community in question.
- 11.2 Formulation and limited implementation of interim recommendations on ownership of water supply and sanitation facilities.
- 11.3 Review of experience and preparation of final recommendations on ownership of water and sanitation facilities.

Output 12 Cost-recovery mechanisms started in each demonstration LGA for operation and maintenance of rural water supply and sanitation systems.

Activities
- 12.1 Review of prevailing formal and informal credit and cost recovery practices.
- 12.2 Formulation and implementation of interim recommendations on cost-recovery mechanisms.
- 12.3 Review of experience and preparation of final recommendations on cost recovery.

Output 13 Improved knowledge and practice of personal and environmental hygiene in project communities.

Activity
- 13.1 Promotion of hygiene education at schools and community level in all project communities.

Output 14 Audio-visual materials for personal and environmental hygiene education.

Activity
- 14.1 Development or procurement and appropriate adaptation of audio-visual materials for personal and environmental hygiene.

# APPENDIX VIII

Chronology of Project Preparation and Implementation

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| Nov 22, 1985 | Informal discussion between UNDP and Federal Ministry of Health (FMH) regarding possible UNDP assistance in the sector. |
| Feb 24, 1986 | Meeting between UNICEF and FMH: agreed that FMH thru Federal Ministry of Finance and Economic Development (FMFED) would request UNDP assistance with rural water supply and sanitation in Borno, Benue, Rivers, Ogun and Ondo. |
| Feb 28, 1986 | FMH and UNDP request Sanitation Adviser, NIR/85/070, to prepare document for UNDP-assisted Rural Water Supply and Sanitation (RWSS) Project |
| Jul 1986 | Outline proposal for RWSS project prepared. |
| Sep 1986 | FMFED/UNDP make provision for RWSS project in 1987-91 planning cycle, US$ 2.5 million allocated |
| Oct 20, 1986 | M.O. Idowu appointed as counterpart to Sanitation Adviser (NIR/87/011) |
| Oct 23, 1986 | FMH propose that RWSS Project should provide assistance in Abuja, Benue, Plateau, Bauchi and Borno. Assistance to be carefully defined with initial assessment of equipment and resources available in each State and discussions with agencies responsible for executing DFRRI RUWATSAN Programme. |
| Dec 31, 1986 | NIR/85/070 Rev B (Water Supply and Sanitation Adviser to FMH) approved, outputs include "a strategic plan for a rural water supply and sanitation program for Government and UNDP funding. |
| Feb 1987 | Initial visit by Lochery and Idowu to Jos, Abuja, Makurdi, Bauchi and Maiduguri to make contact with relevant agencies and discuss possible assistance. |
| Apr 1987 | Assessment of Needs and Resources of Plateau, Benue and FCT for implementing rural water and sanitation programmes. One week consultancy mission to each, Prof Ogunrombe - Plateau, Prof Iwugo - FCT, Prof Oluwande - Benue. |

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| | Funded by NIR/85/070. |
| May 1987 | One man month consultant assistance from DHV in preparation of draft project document. After review and some redrafting by World Bank document submitted in June to FMH and UNDP for review. |
| Jul 1987 | TOR for pre-implementation survey cleared with FMH, FDWR and DFRRI. |
| Aug 1987 | Proposal for Netherlands cost sharing prepared and submitted to Netherlands Embassy Lagos thru UNDP. Messrs Lochery and Idowu visit Bauchi, Maiduguri, Jos, Abuja and Makurdi to clear pre-implementation survey TOR with States |
| Sep - Nov 1987 | Pre-implementation surveys by DHV in Plateau, FCT, Benue, Bauchi and Borno. Draft memorandum of understanding prepared with each State. 7 man months consultancy. Funded from Dutch Consultant Trust Fund. Cost US$ 133,559. |
| Nov 1987 | Borno dropped from Project, State Government unable to make any financial commitment. Project document revised in accordance with survey findings. Reviewed by UNDP (Nigeria) Project Action Committee on Nov. 11, revised and resubmitted on Nov. 17. |
| Dec 1987 | Document approved by FMH, FMH agreed to provide Naira 50,000 per annum per State. FMH formally asked FMFED to seek UNDP assistance by letter dated Dec. 23. Document passed to DFRRI, FDWR and UNICEF for comments. Document despatched to UNDP, NY Dec 23. Recruitment of staff commenced. |
| Dec 22, 1987 | Letter from Governor of Borno to Minister of Health asking for Borno to be included in project. |
| Dec 1-3 and Dec 17-18, 1987 | Missions to Makurdi to discuss draft memorandum |
| Dec 4 and Dec 21-23, 1987 | Missions to Abuja to discuss draft memorandum |
| Dec 16, 1987 | Mission to Plateau to discuss draft memorandum |
| Jan 6-7, 1988 | Mission to Bauchi to discuss draft memorandum |
| Jan 12, 1988 | Mission to Bauchi to discuss draft memorandum, meeting with Water Surveys (Nigeria) Ltd to |

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| | discuss experience with small pick-up mounted drilling rigs in Bauchi and adjacent States |
| Jan 13, 1988 | Meeting with Director PDIRD, Nasarawa selected as demonstration LGA, Governor has approved state contribution of Naira 750,000 whereas Naira 975,000 required |
| Jan 14-15, 1988 | Mission to Makurdi to discuss draft memorandum |
| Jan 18, 1988 | Mission to Bauchi, agreement reached with BASIRDA on memorandum of understanding |
| Jan 22, 1988 | New Director DFRRI FCT briefed<br>Minister of Health writes to Borno Governor and requests UNDP to restore Borno to project |
| Jan 25, 1988 | Meeting at FDWR to discuss document. Department satisfied with document. |
| Jan 27, 1988 | Mission to Makurdi to discuss draft memorandum |
| Jan 29, 1988 | Meeting with DFRRI HQ. Consider document "very good". Meeting at Netherlands Embassy regarding cost sharing contribution, no reply yet received from the Hague |
| Jan 28, 1988 | FMFED approve document except for standard clauses |
| Feb 1988 | World Bank requested to revise document to include Borno |
| Feb 3, 1988 | Summoned to Jos by Director PDIRD to see Governor regarding contribution but on arrival Governor unavailable |
| Mar 1988 | Document revised to incorporate Borno, UNDP budget increased from US$ 2.5 to 3.0 million |
| Apr 22, 1988 | Revised document to Idowu |
| Apr 28, 1988 | UNDP HQ PAC approve original document excluding Borno |
| May 1988 | Rural Water Supply and Sanitation, Proposals for Institutional Development and Implementation Guidelines, Bjorn Lunoe and Gordon Tamm, Hifab Consultants, funded from Norwegian and Swedish Consultant Trust Funds held by World Bank, approx for 5 man weeks US$ 25,000 |
| May 1988 | Bauchi State Government select Ningi LGA for project |

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| Jul 1, 1988 | Advanced authorization for NIR/87/011/A given by UNDP, Project Coordinator full time |
| Jul 7-8, 1988 | Mission to Maiduguri to discuss memorandum of understanding and visit to Gwoza LGA |
| Jul 28, 1988 | Memorandum of Understanding for Plateau signed |
| Jul 27-28, 1988 | Mission to Maiduguri with hydrogeologist from World Bank HQ to discuss water supply component with Water Board. Reviewed existing borehole logs with Water Board and selected four LGAs suitable for handpump equipped boreholes and wells. |
| Aug 2, 1988 | FMH approves document revision incorporating Borno |
| Sep - Dec 1988 | Socio-economic Survey of Nasarawa<br>May Yacoob, Lead Consultant<br>Bitrus Nyam Pam, Community Development<br>H.O. Adesina, Medical Geographer<br>Joshua Adeniyi, Public Health<br>Olu Moloye, Anthropologist |
| Sep 14, 1988 | Othniel Habila appointed Plateau counterpart |
| Sep 18, 1988 | NIR/87/011/B approved, start of three year project period |
| Oct 2, 1988 | Jos project office opened |
| Oct 28, 1990 | Interagency Subcontract between World Bank and UNDP OPS for procurement of equipment |
| Nov 30, 1988 | Cost sharing agreement (DG 1,550,000) signed between Netherlands Government and UNDP |
| Dec 1988 | Project document revised to incorporate Netherlands cost sharing and deeper machine drilled boreholes. Document passed to Idowu for review. Training Adviser starts work. |
| Dec 5-8, 1988 | Socio-economic workshop in Nasarawa (project launch), Plateau staff proposes name RUSAFIYA |
| Jan-Apr 1989 | No power in Jos office due to major cable fault at Federal Secretariat |
| Jan 1, 1989 | CDA full time |
| Jan 24, 1989 | Bauchi Executive Council approves Memorandum of Understanding on basis of memo from BASIRDA |

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| Feb 1989 | Water Supply Adviser starts work as consultant (6 months in 1989) |
| Feb 26, 1989 | Project requests UNDP Lagos in writing for authority to use UN frequency before purchasing radios to link project sites with Jos |
| Mar 17, 1989 | First FMH contribution Naira 40,000 |
| Mar 28, 1989 | NIR/87/011/D submitted to UNDP Lagos, includes Netherlands cost sharing and machine drilled boreholes in all participating States. FMH informal comments on need for one full time counterpart from FMH incorporated, FDWR counterpart redesignated as liaison officer. |
| May 1 - Jun 10, 1989 | Borehole Drilling in Africa: Case Study in Nigeria, consultants O.A. Adenle and G. Beale together with C. Maduabuchi, FDWR funded from INT/87/013, approx cost US$ 50,000 |
| May 27, 1989 | Four Landcruisers delivered to supplement one Peugeot 505 Stationwagon and Landcruiser from NIR/85/070 (registration of vehicles in Lagos took 3-4 months) |
| Apr - Sep, 1989 | First four month attachment of FMH Environmental Health Officer to project for training |
| Apr 3-7, 1989 | 2 counterpart staff attend 15th WEDC Conference in Kano |
| Jun 2, 1989 | Second FMH contribution Naira 50,000 |
| Jun 11-15, 1989 | World Bank financial controller responsible for NIR/87/011 meets with project staff in Jos to discuss financial arrangements and reporting |
| Jun 19, 1989 | Nasarawa community selection complete |
| Jun 30, 1989 | PC, WID Adviser meet PROWWESS staff in Abidjan to discuss collaboration including WID Adviser's workplan, PC's travel funded by RAF/87/049 |
| Jul 1989 | Alhassan Jumba appointed Bauchi Counterpart |
| Jul - Aug, 1989 | WID Adviser, 40 days consultancy |
| Jul 7, 1989 | Project Rev D in revised format and including one year fellowship for Federal Counterpart designate submitted to UNDP |
| Jul 17, 1989 | Bauchi Memorandum of Understanding signed, |

| | |
|---|---|
| | initial copies signed February by State Government mislaid in Lagos |
| July 19-20, 1989 | Workshop in Jos for LG personnel from Nasarawa and Ningi, participants recommended that communities should be requested to pay full cost of handpumps |
| Jul 24, 1989 | First Bauchi SPAC meeting, held in Bauchi |
| Jul 30 - Aug 18, 1989 | Pump financing study, Uche Mbanefo, financial analyst, RWSG-WA |
| Aug 1989 | Edmund Bengtsson takes over from Rene Guiraud as UNDP programme officer responsible for NIR/87/011 |
| Aug 1989 | First PPER prepared |
| Aug 1-5, 1989 | David Kinley, writer for UNDP Source Magazine visits Jos, Misau, Nasarawa and Oju |
| Aug 7-17, 1989 | Hygiene Education Workshop in Ilorin, facilitated by WASH, funded by USAID at request of RUSAFIYA thru FMH. Participants included FMH, state and local government personnel working with UNICEF assisted projects or RUSAFIYA |
| Aug 28, 1989 | Second Bauchi SPAC, held in Bauchi |
| Aug 29, 1990 | Mandatory Project Revision C approved |
| Sep 13-29 | PROWWESS Participatory Methods Training Workshop facilitated by Ron Sawyer, PROWWESS Consultant, Ngozi Ojidoh, PROWWESS Consultant, and Ulrike Goertze, UNV PROWWESS and project staff, consultants funded by PROWWESS (RAF/87/043) |
| Oct 1989 - Jan 1990 | Second FMH environmental health officer attached to RUSAFIYA for training |
| Oct 2, 1989 | SA full time |
| Oct 5, 1989 | Hand drilling commenced in Nasarawa |
| Oct 24, 1989 | Third FMH contribution Naira 50,000 |
| Oct 27, 1989 | UNDP Lagos PAC meeting review Project Revision D |
| Oct 30, 1989 | GCCC imprest account opened |
| Nov 3, 1989 | FCT signs memorandum and selects Gwagwalada LGA Ibanga Essien appointed as FCT Counterpart |

| | |
|---|---|
| Nov 3 - Dec 20, 1989 | Participatory Training Materials and Development of Extension Service, Ron Sawyer, PROWWESS Consultant and K.K. Munguti, KWAHO, 10 man weeks, funded from RAF/87/043 and RAF/87/049 respectively |
| Nov 18, 1989 | Brief (2 hour) visit by UNDP Res Rep to Jos Project Office. RR briefed on project and agreed to follow up request for use of UN radio frequency |
| Nov 23, 1989 | Third Bauchi SPAC, held in Bauchi |
| Dec 4-22, 1989 | Consultant assistance to RRS in Ningi, Othniel Habila, consultant funded by RAF/87/049 |
| Dec 23, 1989 | Ningi RRS completed |
| Dec 15, 1989 | First FCT contribution Naira 567,205 |
| Dec 29, 1989 | Fourth FMH contribution Naira 150,000 |
| Jan 1990 | First VIP latrine complete in Nasarawa |
| Jan 4, 1990 | Project Rev D forwarded by UNDP Lagos to HQ |
| Jan 8 - Jan 20, 1990 | National Counterpart visits all project sites |
| Jan 1990 | Project Revision D approved by UNDP HQ |
| Feb - Jul 1990 | FMH Environmental Health Officer acts as State Coordinator in Bauchi |
| Feb 90 | Water Supply Adviser fulltime |
| Feb 2, 1990 | Nasarawa LG contribution Naira 10,000<br>Ningi WASU formed |
| Feb 6, 1990 | First Bauchi State contribution Naira 100,000 |
| Feb 8, 1990 | First Plateau State contribution Naira 100,000 |
| Feb 12, 1990 | First Plateau SPAC, held in Jos |
| Feb 22, 1990 | Fourth Bauchi SPAC, held in Bauchi |
| Mar 13, 1990 | Benue signs memorandum and selects Oju LGA |
| Mar 26-29, 1990 | Monitoring visit by Edmund Bengtsson, UNDP |
| Mar 30, 1990 | Tripartite Review Meeting, Jos<br>Jun Matsumoto takes over day to day Programme |

| | |
|---|---|
| | Officer duties at UNDP for RUSAFIYA |
| Apr 2, 1990 | Government signs Project Rev D |
| Apr 11, 1990 | PPER 2 submitted to UNDP |
| Apr 23, 1990 | World Bank signs Project Rev D |
| Apr 30 - May 26, 1990 | Training in latrine construction and introduction of mozambique slab, Seth Adu Asah, consultant |
| May 1, 1990 | WID Adviser full time |
| May 8, 1990 | Second Plateau SPAC, held in Nasarawa |
| May 15, 1990 | Hydrogeologist full time |
| May 16, 1990 | UNDP Res Rep makes 1 hour visit to Nasarawa project site |
| May 17, 1990 | Fifth Bauchi SPAC, held in Bauchi<br>Gwagwalada RRS completed |
| May 22, 1990 | HEA full time |
| May 24, 1990 | Second Plateau State contribution Naira 100,000 |
| May 30, 1990 | UNDP signs Project Revision D, effective |
| Jun 1990 | First VIP latrine completed in Ningi |
| Jun 4-16, 1990 | Support for design, field testing and modification of participatory techniques and materials, Ron Sawyer, consultant |
| Jun 13 - Jul 12, 1990 | Geophysical training consultancy, Ed Wightman, consultant geophysicist |
| Jun 21, 1990 | 15 Nasarawa Boreholes, Subcontract 1 prepared |
| Jun 29, 1990 | 80 Ningi Boreholes, Subcontract 2 prepared<br>45 Ningi Boreholes, Subcontract 3 prepared |
| Jul 1990 | Gwagwalada WASU formed |
| Jul 4, 1990 | Borno signs memorandum and selects Gwoza LGA<br>Mechanical Engineer full time<br>Mandatory Project Revision E approved |
| Jul 14, 1990 | Briefing/discussion between UNDP Res Rep, World Bank Operations Officer, RWSG-WA Manager and staff, and Project Coordinator |

| | |
|---|---|
| Jul 20, 1990 | 70 latest specification Afridev handpumps delivered Ningi from Inalsa, India (order placed Sep 1, 1989) |
| Jul 31, 1990 | Haruna Non appointed Plateau Counterpart<br>Third Plateau SPAC, held in Jos |
| Aug - Sep 1990 | Third FMH environmental health officer attached to RUSAFIYA for training |
| Aug 1990 | National Counterpart moved to Jos, full time on project |
| Aug 13, 1990 | Borno memorandum signed |
| Aug 16, 1990 | Sixth Bauchi SPAC, held in Bauchi |
| Aug 28, 1990 | Fourth Plateau SPAC, held in Plateau |
| Aug 31, 1990 | Draft position papers on local government institutional framework and community financing circulated to relevant federal and state agencies<br>First VIP latrine completed in Gwagwalada |
| Sep 1990 | Emmanuel Gadzama appointed Borno Counterpart |
| Sep 2, 1990 | First Nasarawa 5 well contract out to tender |
| Sep 7, 1990 | First Borno State contribution Naira 653,000<br>Second Bauchi State contribution Naira 462,353 |
| Sep 12, 1990 | 15 Nasarawa Boreholes, Subcontract 1 out to tender |
| Sep 27, 1990 | Seventh Bauchi SPAC, held in Bauchi |
| Sep 25, 1990 | Revisions to Plateau memorandum agreed |
| Sep 28, 1990 | Rapid reconnaissance survey commenced in Oju |
| Oct 1990 | National Counterpart Designate departs for UK on one year project fellowship, MSc, University of Dundee<br>First hand dug well started in Ningi |
| Oct 2, 1990 | First handpump installed Nasarawa |
| Oct 12, 1990 | J.I. Daagu appointed Benue Counterpart (Water) |
| Oct 13-27, 1990 | Completion of sanitation training, Seth Adu Asah, consultant |

| | |
|---|---|
| Oct 18, 1990 | FPAC Meeting, Jos |
| Oct 19, 1990 | Eighth Bauchi SPAC, held in Ningi |
| Oct 23, 1990 | Evaluation of tenders, 15 Nasarawa Boreholes, Subcontract 1<br>Evaluation of tenders first Nasarawa 5 well contract<br>Fifth Plateau SPAC, held in Nasarawa |
| Oct 24, 1990 | NORAD funding for piped water supply project, Nasarawa secured (US$ 500,000), Aide Memoire submitted to UNDP |
| Oct 25, 1990 | P.A.I. Obe appointed Benue Counterpart (Hygiene and Sanitation) |
| Oct 26, 1990 | Prequalification completed for 80 Ningi Boreholes, Subcontract 2 |
| Oct 29 - Nov 21, 1990 | Mid-term evaluation |
| Oct 30, 1990 | FMH contribution Naira 100,000 |
| Nov 1990 | Fourth and fifth FMH environmental health officers attached to project for training |
| Nov 13, 1990 | RRS completed in Gwoza |
| Nov 14, 1990 | First Borno SPAC, held in Maiduguri |
| Nov 17-30, 1990 | Study tour for counterpart staff to RWSS projects in Burkina Faso and N. Ghana |

chron/11/13/90

# APPENDIX IX

RUSAFIYA PROJECT TECHNICAL PAPER SERIES NO. 1

## Guidelines to Rapid Reconnaissance

### Introduction

In the draft working paper concerned with the water supply component (June 1989) the specific aims of Rapid Reconnaissance of communities in the LGA were given as:

1. Assess reliability of data gathered in the desk study.
2. Assess existing water sources and development potential with emphasis on hand-dug and hand-drilled well potential.
3 Introduce LGA community development personnel to the aims and limitations of the project.
4. Gain a general impression of perception of water needs and self financing motivation.

During recent discussions it has become clear that the type of survey envisaged was, perhaps, not clearly appreciated either from the above description or from the work already undertaken in Nasarawa. This brief guideline has been written in an attempt at clarification.

### Primary Objective

The primary purpose of the rapid reconnaissance is to provide overall background data to enable community selection to take place on the basis of physical criteria. Thus the fulfilment of the first two aims described above involves the field checking and expansion of existing information mainly through observation with very limited correspondent questioning. The third aim is directed towards the enhancement of team and operator capability and may be considered the "training" component of the activity. The fourth aim was added as a result of experience in Nasarawa where it became clear that information on "felt need" and ability to pay should be gathered at an early stage before a firm and "committing" relationship with a specific community had been established. This information should be noted if either readily or casually available rather than being actively pursued. Substantive information on these matters will be obtained during subsequent contacts. Thus a simple definition of the objectives may be taken as:

> " To gain an overall impression of the physical environment and socio-cultural make-up of a community with emphasis on water resources".

Team : Hydrogeologist/water resources surveyor plus one or two extension workers.

Method

The method may be described as "quick and relatively clean" in that it is intended to be cost-effective, rapid but non-exhaustive and therefore liable to some bias. In order to minimize one area of possible bias it is recommended that all community contacts be kept as informal as possible. As information is to be gathered by observation with limited questioning it is certainly qualitative and approximate but that situation will not be improved by formalising community contacts. It is this point that has perhaps caused some misunderstanding. In all contacts it is clear that full attention must be paid to normal courtesy and to sympathetic approach, dress and manner but it must also be remembered that there are over 300 communities to assess in Ningi and thus the target should be to cover at least 30 per week or 6 per day. Undertaking the survey with the appropriate extension agent for the district should assist community contact while avoiding prolonged formalised meetings. The key to the method is to realise that the reconnaissance starts as soon as the vehicle sets off. Thus full notes must be made at all times including mileage at start and to each noteable feature (e.g river) plus all communities. All rapid reconnaisance groups should aim to have a full route map with distances produced at the end of each days work. EACH PARTY MEMBER MUST MAKE NOTES if the exercise is to be effective. Similary the point of including different specialists in the team is that the engineering/geology/works staff learn about the ethnic mix and settlement pattern whilst instructing the community development and health staff concerning the geomorphology, geology and technical aspects of the project and area.

Information

The exact content of each community description is left to the teams but the following type of information must be collected.

Type of water source/sources
Population estimate
Community type e.g scattered, nucleated
Guinea worm infection - present/absent, many cases/few
Geology
Hand-dug wells present/perennial/non-perennial

RUSAFIYA RAPID RECONNAISSANCE FORM

| A | B | C | D |
|---|---|---|---|
| | | | |

Community _____ District _____

Population _____

Main Water Source - Dry Season.

Distance to Source.

Main Water Source - Wet Season.

Distance to Source.

Geology.

Possible New Installation /s.

Comments.(including indications of need)

Map / Location.

Coding Guide

A. g = guinea worm
   o = no guinea worm.

B. p = pond
   s = stream
   w = well
   b = borehole
   o = other

C. c = clear
   d = dirty

D. 1 = <1 km.
   2 = <2 km.
   3 = <3 km.
   4 = <4 km.
   5 = <5km.
   6 = >5km.

# APPENDIX X

## Task-oriented Training Materials for Extension Agents

| | |
|---|---|
| 1. Contact with community leaders to introduce the project | Module 1 Project Activities |
| 2. Additional visits to obtain permission to conduct survey/make communities more knowledgeable | Module 2 Working with Communities |
| 3. Conduct community survey | Module 3 Understanding the Community and Module 4 Methods of data collection |
| 4. Determine concerns of communities from responses of population | Module 5 Information Systems |
| 5. Visit households and discuss informal health issues and roles | Module 6 Water-Sanitation-Health relationships |
| 6. Assist community to organize WASCOM | Module 7 Organizing Community Groups |
| 7. Meet with WASCOM on findings on their needs and perceptions | Module W-1 Getting to know WASCOM |
| 8. Update information, including hydrogeologic findings, maps, etc. | Module 8 Information Systems |
| 9. Meet with WASCOM on training tasks | Module W-2 How to be an Effective Facilitator |
| 10. Meet with WASCOM on village Hygiene Education training | Module 9 Tasks in Hygiene Education |
| 11. Promote latrine construction and training of artisans | Module 10 Methods for Hygiene Education and Skills |
| 12. Visit households on topics for health and sanitation | Module 11 Planning for Health Sessions<br>Module 12 Developing Hygiene Messages |
| 13. Dialogue with WASCOM on conditionalities of project | Module W-3 Situation Analysis with WASCOM |
| 14. Establish time table for community motivation, participation and education | Module 2 Developing a Work Plan<br>Module 1 Project Activities |
| 15. Meet with WASCOM, oversee construction and training of handpump caretakers/mechanics | Module W-4 Hand pump Maintenance |
| 16. Keep records and provide feedback | Module 5 Information |

| | |
|---|---|
| 17. Organize with community and school hygiene and sanitation action programme | Module : Work Plan on Hygiene Education CHICS. HyEduc Workshops |
| 18. Monitor activities in domestic and environmental hygiene | Module : Developing Hygiene messages |
| 19. Assist in promotion of latrine construction | CHICS. HyEduc workshops |
| 20. Provide training on women's roles in water and sanitation services | HyEduc Workshops |
| 21. Work with WASCOM on a management plan of handpump facility | Module : Management of Hand Pump |
| 22. Training of women for participatory roles in community organization | Module : Organizing Community Groups |
| 23. Evaluate community participation in management of RWSS facilities | ModuleW-5 Management of Hand Pump |
| 24. Meet with local organizations on participatory roles in RWSS | Module : Organizing Community Groups and All other relevant modules |

# APPENDIX XI

A CHRONOLOGY OF TRAINING ACTIVITIES IN RUSAFIYA PROJECT

| | Date | Title | Venue |
|---|---|---|---|
| 1. | Dec 5-8, 1988 | Workshop on Socio Economic Survey | Nasarawa |
| 2. | Feb 2-3, 1989 | Review Workshop of Training Modules | Jos |
| 3. | Feb 21-24 | Orientation Training for EA | Nasarawa |
| 4. | Mar 13-15 | Review of data-gathering instruments and field test findings | Jos |
| 5. | Apr 11-13 | Evaluation and Situation Analysis WS | Nasarawa |
| 6. | Apr-May | On-the-Job training/Supervision | Nasarawa |
| 7. | June 22 | Meeting with RWSG-WA consultants on project components | Jos |
| 8. | Jul 4-7 | Community Hygiene Education for EA's | Nasarawa |
| 9. | Jul 19-20 | Workshop on Planning, Operation and Management | Jos |
| 10. | Aug 2-3 | Curriculum Dev Workshop on CHICS | Jos |
| 11. | Aug 7-18 | Workshop on Community Participation in Hygiene Educ (WASH assisted) | Ilorin |
| 12. | Sept 20-28 | Workshop on Participatory Methods (PROWWESS assisted) | Ningi |
| 13. | Nov 14-17 | Review of Materials for CHICS | Nasarawa |
| 14. | Nov 12-Dec 1 | Planning of Rural Water Supply and Sanitation (CIFIGRE) | Nairobi |
| 15. | Jan 16-18, 1990 | Training Workshop on CHICS | Nasarawa |
| 16. | Jan 30-Feb 1 | Orientation-Participatory Workshop | Ningi |
| 17. | Feb 8-20 | Training on Latrine Construction | Ningi |
| 18. | Feb 16-23 | Orientation-Participatory Workshop | Gwagwalada |
| 19. | Feb 26-Mar 16 | OJT for Extension Agents of Ningi and Gwagwalada | Nasarawa |
| 20. | Mar 15-16 | Materials Development Workshop | Ningi |
| 21. | Mar 28-29 | EA's Training on Working with WASCOM | Nasarawa |

| | | |
|---|---|---|
| 22. Apr 5-7 | International Conference on Water Engineering and Development in Africa | Kano |
| 23. May 16-18 | Workshop on Working with WASCOM | Ningi |
| 24. Jun 18-Jul 10 | Training for Geophysical Survey | Project Sites |
| 25. July 27 | Staff workshop on Office Practice and Communications | Jos |
| 26. Aug 13-14 | Workshop on Information Systems | Nasarawa |
| 27. Aug 22-23 | Workshop on Information Systems | Ningi |
| 28. Aug 27-28 | EA's Training on Hydrogeology | Nasarawa |
| 29. Sept 4-6 | Orientation Training on CHICs | Ningi |
| 30. Oct 3-4 | EA's Training on Hydrogeology | Ningi |
| 31. Oct 3-5 | Orientation Training for WASCOM and VillHy Educ | Gwagwalada |
| 32. Oct 8-9 | Hand Pump Maintenance Training | Nasarawa |
| 33. Oct 9-11 | Orientation Training for CHICs | Gwagwalada |
| 34. Oct 16-26 | Artisans' training on Latrine Construction | Gwagwalada |
| 35. Oct 24-26 | Community Hygiene Educ. Workshop | Gwagwalada |
| 36. Oct 30-Nov 3 | Orientation-Participatory Workshop | Oju |
| 37. Nov 17-Dec 1 | Study Tour to B. Faso and Ghana | Bolgatenga Yatenga |
| 38. Dec 4-14 | Orientation-Participatory Workshop | Gwoza |

# APPENDIX XII

RUGAFIYA PROJECT. NOV. 1990.

INFORMATION PRESENTATION

Framework.

The framework for the presentation of information, findings and methodology is provided by the Position Paper series. Position Papers are intended to give the agreed policy and strategic outline for the implementation of project concerns. They are short (ideally less than 6 pages) and as reflectors of current thinking may be subject to periodic update or revision. They are initially circulated in draft form to relevant Federal and State agencies involved in the project then, following any necessary revision, they are discussed at LG level.

The completion of each Position Paper depends on the existence of background information which varies in both scope and depth. In certain instances many of the reports used in the writing of the Position Papers will be working papers in their own right. In the following compilation that genesis is indicated. Thus, for example, within the framework created by the Position Paper on Planning and Implementation of Training there will be a whole series of guidelines and instructional manuals which have been and will be used during workshops and on the job training. The interdependence of the various project components is demonstrated within the listing that follows. All the reports listed were prepared by consultants, World Bank regional staff or project personnel. Primary editorial responsibility has rested with the project.

Position Papers.

No.1. Institutional Framework for Development of Rural Water Supply and Sanitation at Local Government Level. 6 pages - Sept. 1990

Pre -Implementation Planning Strategy for the Proposed UNDP Project. DHV Consultancy Report 1988

Rural Water Supply and Sanitation . Proposals for Institutional Development and Implementation Guidelines. hifab Consultancy Report 1988

Water Supply Component Planning Methodology and Implem ntation - Working Paper . David Ede June 1989.

Water and Sanitation Unit - Functions, Roles & Staff T.O.R.'s - Internal Discussion Paper . 7 pages July 1990

Institutional Framework for Rural Water Supply and Sanitation

No.2. Community Financing and Ownership. 9 pages Sept. 1990

Pump Financing Study. Uche Mbanefo RWSG/WA Abidjan. Sept. 1989

Issues Discussed in Implementation Strategy Workshop July 1989. Back to Office Report . Bob Roche RWSG/WA Abidjan.

LGA / Community Agreement for Water Supply and Sanitation (in prep.)

No.3. Promoting Community Participation . (in prep.)

Report on a Socioeconomic Survey in Plateau State. Research Triangle Institute, North Carolina. Nov. 1988 (finalised 1989).

Report on Community Development Component of the Socio-Economic Survey in Nassarawa LGA of Plateau State. Bitrus Nyam-Pam Nov. 1988.

Mapping of Project Settlements Component of the Socio-economic Survey in Nassarawa LGA of Plateau State. H.O. Adesina Nov. 1988.

Mission Report. K.K. Munguti and Sawyer Nov. 1989.

No.4. Planning and Implementation of Training. (draft complete)

Memo on "On the Job Training". Paz C. Lutz April 1989.

Report on the Short Term Consultancy for Training. Paz C. Lutz April 1989.

Report on PROWWESS Participatory Methods Training Workshop. Sawyer, Ojidoh and Goertz Sept. 1989.

Training Guidelines and Instructional Materials in the following categories have been or are to be produced.

a) Task orientation and participatory techniques.
b) Community organisation (WASCOM)
c) Community Hygiene Education
d) Community Health Involving Children in Schools (CHICS)
e) Hydrogeological Background for EA's
f) Hand Pump Maintenance

All above materials complete and in use, some guidelines prepared.

g) Hand Dug Well Construction
h) Hand Drilled Borehole Construction

No.5. Siting of Waterpoints

Geophysical Survey for Groundwater Supplies. Manual first draft revision complete. Final Dec. 1990 / Jan. 1991.

No.6. Hand Dug Wells.

Appropriate Systems for the Delivery of Sustainable Groundwater Supplies.Ede, Habila and Lochery. April 1990 Vom Seminar on Rural Development.

Contract Documents for Construction of Hand Dug Wells (between LG and Contractor)

Set 1. Nasarawa. June 1990
Set 2. Ningi. July 1990

Tender Evaluation Report Hand Dug Well Contract Nasarawa. Oct.1990

No.7. Hand Drilled Boreholes.

Water Supply Component - Some Mistakes , Lessons and Modifications. Internal Discussion Paper. Sept. 1990

No.8. Machine Drilled Boreholes.

Borehole Drilling in Africa. O.A. Adenle and G. Beale. Draft Aug. 1989, Final June 1990.

Contract Documents for the Drilling of Boreholes (between Agency or Govt. and Contractor)

Set 1. Nasarawa (client IBRD). June 1990
Set 2. Ningi (client IBRD). July 1990
Set 3. Gwagwalada (client IBRD)

Prequalification Evaluation Report Ningi Contract. Nov. 1990

Tender Evaluation Report Borehole Drilling Contract Nasarawa. Oct. 1990.

No. 9. Hygiene Education.

Report on Hygiene Education Component of Socio-Economic Survey in Nassarawa LGA of Plateau State. J.D. Adeniyi and O. Moloye Nov.1988

No. 10. Community Selection.

Guidelines to Rapid Reconnaissance.RUSAFIYA Project Tech. Paper Series No.1 David Ede Sept. 1990

Experience. RUSAFIYA Project Team .Paper presented PADP Workshop on Community Participation in Rural Infrastructure Jos. Oct. 1990.

No. 11. Sanitation Strategy - Design and Promotion of Latrines.

Technical Guidelines for the Construction of Ventilated Improved (VIP) Latrines 3rd revised Edition. First edition drafted by P.W.S. Lochery published by DFRRI. 1988.

No. 12. Waterpoint and Handpump Maintenance, Spare Parts and Replacement.

Bauchi Hand Pump Testing Project Report. 1989.

No. 13. Programme Implementation Monitoring.

A Field Guide for Monitoring Programme Implementation. Internal Discussion Paper. July 1990.

No. 14. Management of Technical Assistance.

Project Document. Water Supply and Sanitation Project NIR 87/011

International Drinking Water Supply and Sanitation Decade Decade Activities in Nigeria. Paper prepared for UN chiefs of Mission Meeting on IDWSSD Activities . Peter W.S.Lochery April 1988.

The 'Project' Concept, Institutional Capacity and Progress. Internal Discussion Paper.David P. Ede. Sep. 1989

Sector Strategy and Action Plan (World Bank in prep.)

# APPENDIX XIII

## EQUIPMENT ORDERED AND DELIVERED UNDER RUSAFIYA PROJECT

| | | | Remarks |
|---|---|---|---|
| geophysical surveying equipment (US$ 25,000); | | | Difficult hydrogeological conditions require testing of different types of equipment before purchase |
| equipment for basic determination of water quality (US$ 5,000); | ✓ | ✓ | |
| well digging equipment including moulds and dewatering equipment (US$ 14,000); | ✓ | | Dewatering pump ordered |
| hand drilling set including test pump for boreholes (US$ 11,625); | | | Will test equipment from other States in Oju before ordering. |
| 2 No. 4WD pick-ups (US$ 26,000); | 2 | 1 | |
| 1 No. 4WD station-wagon (US$ 16,000); | ✓ | ✓ | |
| 3 No. individual camping sets (US$ 1,875); | | | To be discussed with Government |
| office equipment (US$ 7,475); | ✓ | ✓ | |
| SSB radio (US$ 3,000); | | | Awaiting authorization from UNDP |
| second-hand sea container as store (US$ 5,000). | ✓ | ✓ | |
| rno State (total US$ 184,250) | | | |
| 100 No. handpumps, rods and rising mains (US$ 75,000); | | | Local manufacture |
| spareparts for light vehicles, and geophysical equipment (US$ 13,400); | | | |
| hand drilling survey set (US$ 5,000); | | | Cancelled, not proved effective elsewhere |
| geophysical surveying equipment (US$ 12,500); | ✓ | | EM34-3 to supplement existing State GN. equipment |
| equipment for basic determination of water quality (US$ 5,000); | ✓ | | |
| well digging equipment including moulds and dewatering equipment (US$ 14,000); | | | Information on existing GN equipment being obtained |
| 1 No. 4WD station-wagon (US$ 16,000); | ✓ | | |
| 2 No. 4WD pick-ups (US$ 26,000); | 2 | 1 | |
| No. individual camping sets (US$ 1,875); | | | To be discussed with Government |
| office equipment (US$ 7,475); | ✓ | | |
| SSB radio (US$ 3,000); | | | Awaiting authorization from UNDP |
| second-hand sea container as store (US$ 5,000). | | | Local purchase |
| teau State (total US$ 192,375) | | | |
| asings and screens for 45 No. shallow hand drilled boreholes (US$ 9,000); | ✓ | ✓ | |
| 00 No. handpumps, rods and rising mains (US$ 75,000); | 50 | | Pump type agreed with State GN. 50 being obtained, remainder local manufacture later |
| spareparts for light vehicles and geophysical quipment (US$ 13,400); | ✓ | ✓ | GN. equipment repaired. |
| and drilling survey set (US$ 5,000); | ✓ | ✓ | |
| equipment for basic determination of water quality (US$ 5,000); | ✓ | ✓ | |
| ell digging equipment including moulds | | | |

| | ORDERED | DELIVERED | REMARKS |
|---|---|---|---|
| - 3 No. individual camping sets (US$ 1,875); | ✓ | ✓ | |
| - office equipment (US$ 7,475); | ✓ | ✓ | |
| - SSB radio (US$ 3,000); | | | Awaiting UNAP authorization |
| - second-hand sea container as store (US$ 5,000). | ✓ | ✓ | |
| CT (total US$ 214,375) | | | |
| - casings and screens for 30 No. shallow hand drilled boreholes (US$ 6,000); | ✓ | ✓ | |
| - 100 No. handpumps, rods and rising mains (US$ 75,000); | | | Pump type agreed with State Govt. Local Manufacture |
| - spareparts for light vehicles and geophysical equipment (US$ 13,400); | ✓ | ✓ | |
| - hand drilling survey set (US$ 5,000); | | | Not proved successful elsewhere |
| - geophysical surveying equipment (US$ 25,000); | ✓ | ✓ | |
| - equipment for basic determination of water quality (US$ 5,000); | ✓ | ✓ | |
| - well digging equipment including moulds and dewatering equipment (US$ 14,000); | ✓ | ✓ | Dewatering pump + compressor procured |
| - hand drilling set including test pump for boreholes (US$ 11,625); | | | will buy one from other States by redeployment |
| - 2 No. 4WD pick-ups (US$ 26,000); | ✓ | ✓ | |
| - 1 No. 4WD station-wagon (US$ 16,000); | ✓ | ✓ | |
| - 3 No. individual camping sets (US$ 1,875); | | | To be disposed with Govt. |
| - office equipment (US$ 7,475); | ✓ | ✓ | |
| - SSB radio (US$ 3,000); | | | Awaiting UNAP authorization |
| - second-hand sea container as store (US$ 5,000). | ✓ | ✓ | |
| Federal Directorate of Food, Roads and Rural Infrastructures | | | |
| - personal computer and printer (US$ 3,000). | ✓ | ✓ | Awaiting replacement monitor |
| Project Office in Jos (total US$ 126,500) | | | |
| - spare parts for light vehicles (US$ 12,800); | ✓ | ✓ | |
| 4 No. 4WD stationwagons (US$ 64,000); | ✓ | ✓ | |
| geophysical surveying equipment (US$ 20,000); | ✓ | ✓ | |
| audio-visual equipment (US$ 6,000); | ✓ | ✓ | |
| 3 No. SSB radios (US$ 7,500); | | | Awaiting UNAP authorization |
| photocopier (US$ 6,200); | | | |
| 2 No. PCs with printers and plotter (US$ 9,000); | ✓ | ✓ | |
| 2 No. typewriters (US$ 1,000). | ✓ | ✓ | |

-weeks of consultancy funded by the UNDP / World Bank

# APPENDIX XIV

## List of Audio-visuals Produced and/or Used in the Training Programme

1. Photo-parade - 15 black and white photos from UNESCO and other on such topics as water uses (adult literacy, URI, water-related diseases, and home hygiene

2. Unserialized posters - three sets of artist's drawings composed of 3-9 different socio-economic and cultural activities that may be arranged into a story made up of 4 or 6 pictures.

3. Story with a gap - two pairs of artist's interpretation of a 'before' and 'after' situation, are presented to generate discussions on what actions to take to change a situation.

4. Pocket cards (to be used with a pocket chart) - frequency of hygiene practices, vectors of water-related diseases, village resources for health services, women's or men's attitudes towards women's participatory roles in the community, water sources and causes of contamination, and roles of WASCOM.

5. Posters - Women Together ( Taruwan Mata)
Let's Build Latrines (Gina Shagga)

6. Flip Cards - Disease Transmission Routes( set of 2 to 4 pictures) on the following:
a) water-borne diseases
b) water-washed diseases
c) water-site related diseases
d) insect or vector-related diseases
e) guinea worm transmission cycle
f) oral-faecal routes

7. Sound-Slides from the World Bank training materials for low cost water supply and sanitation:

a) Project Planning and Community Health
b) The Importance of User Participation
c) Health Aspects of Water Supply and Sanitation
d) Hygiene Education
e) Construction of Wells and Boreholes
f) On-site Sanitation (VIP Latrines)

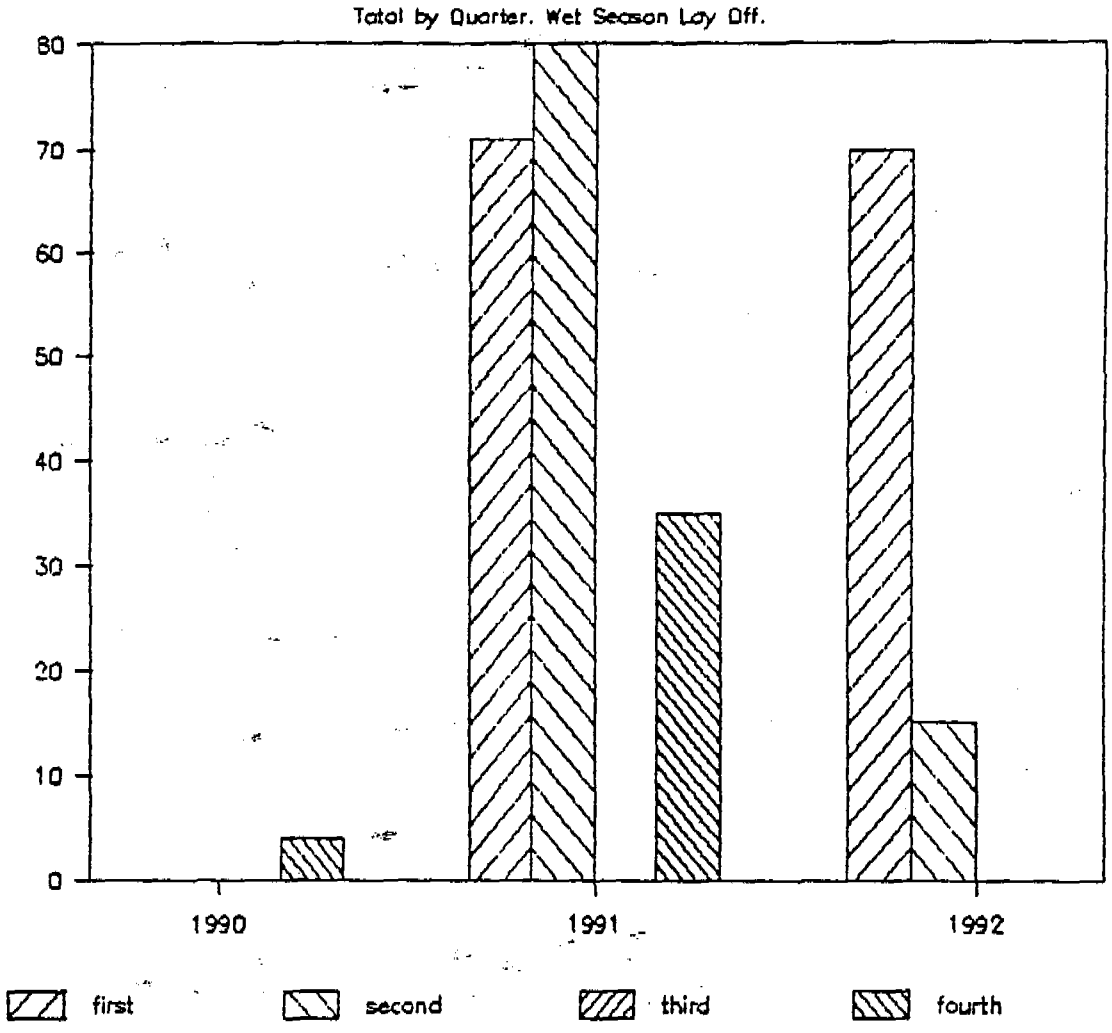
8. HUSAFIYA Game - as an ice-breaker, it simulates some of the activities before the hand-pump is constructed.

9. Flexi-flans and flannel chart. Sets of figures to depict the village scene, and used to generate discussion and critique the placement of water and sanitation facilities, and to provide creative outlets for villagers' ideas.

# APPENDIX XV

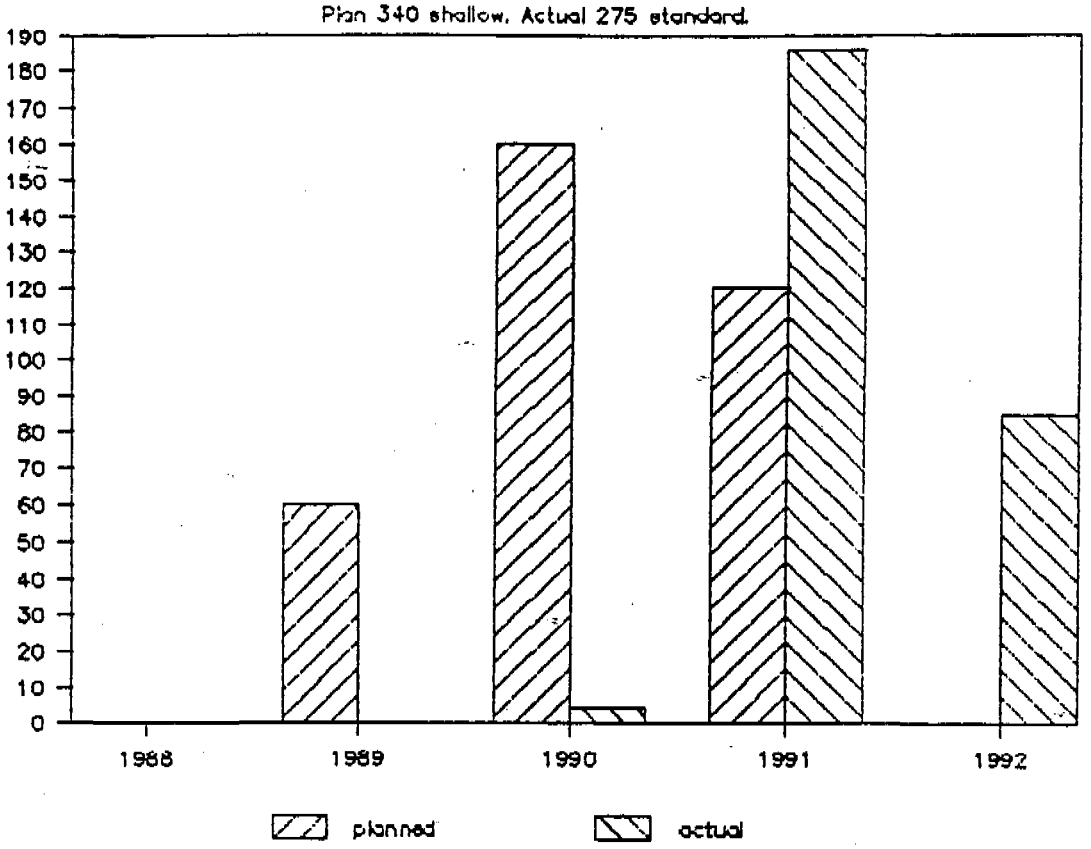
## WATER SOURCE DEVELOPMENT UNDER RUSAFIYA PROJECT

## MACHINE DRILLED BH's CURRENT PLAN.



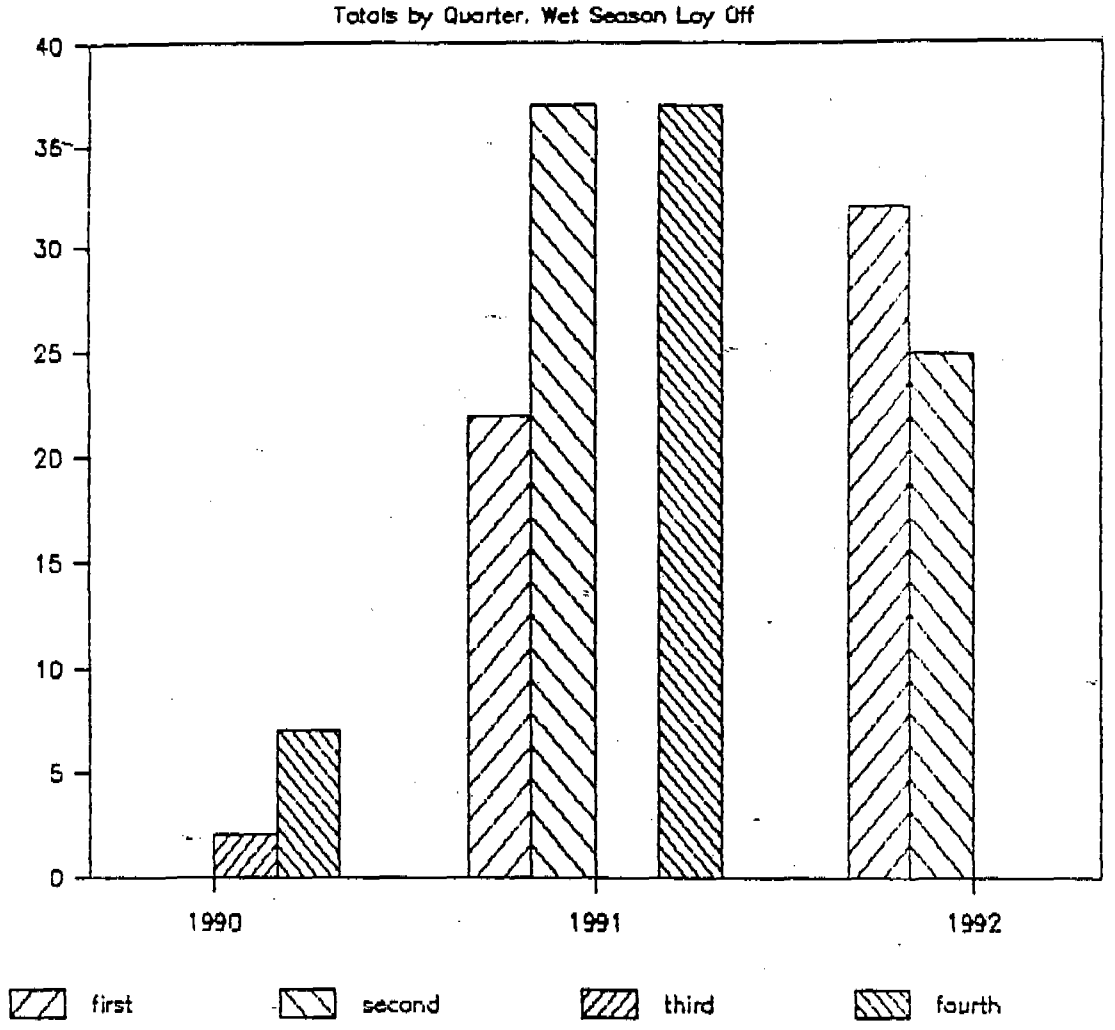
# MACHINE DRILLED BOREHOLE CONSTRUCTION

Plan 340 shallow, Actual 275 standard.



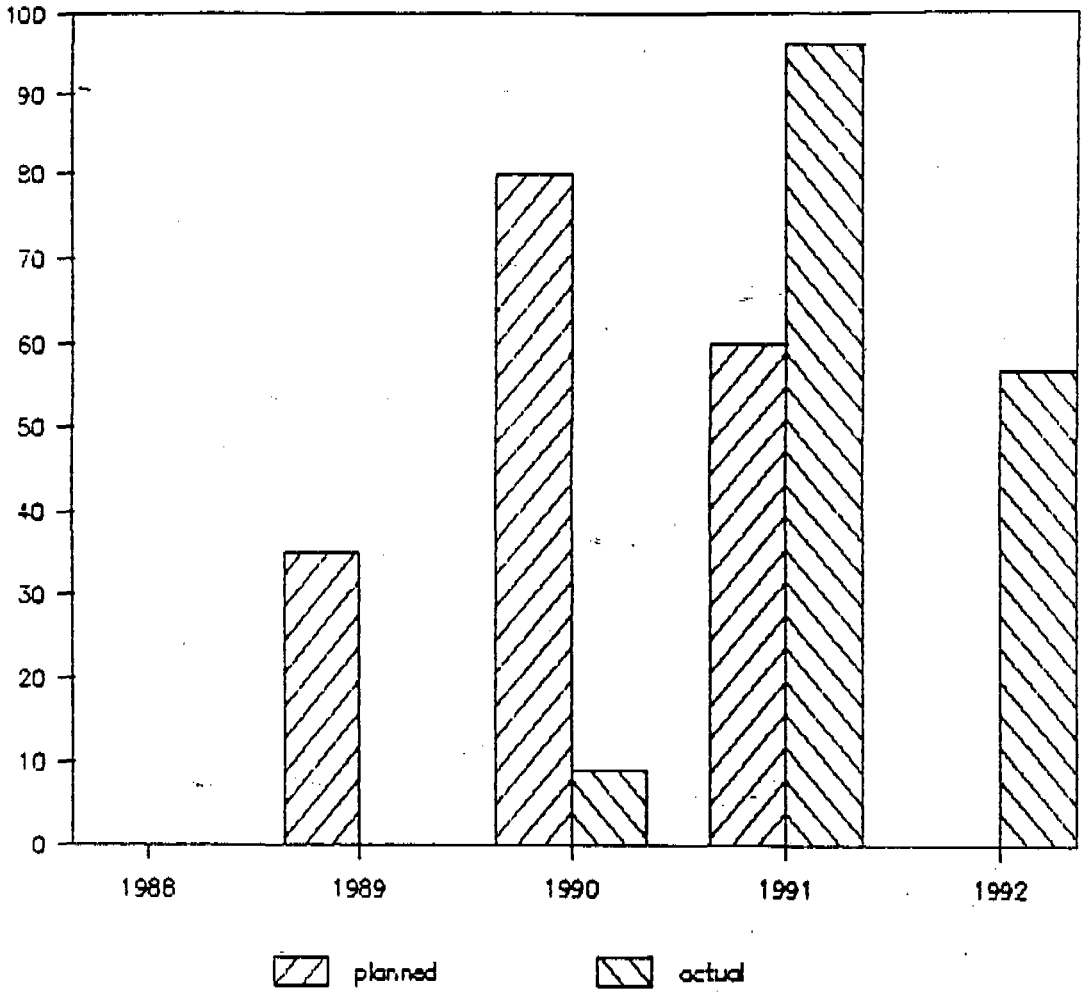
# HAND DUG WELLS CURRENT PLAN.

Totals by Quarter. Wet Season Lay Off

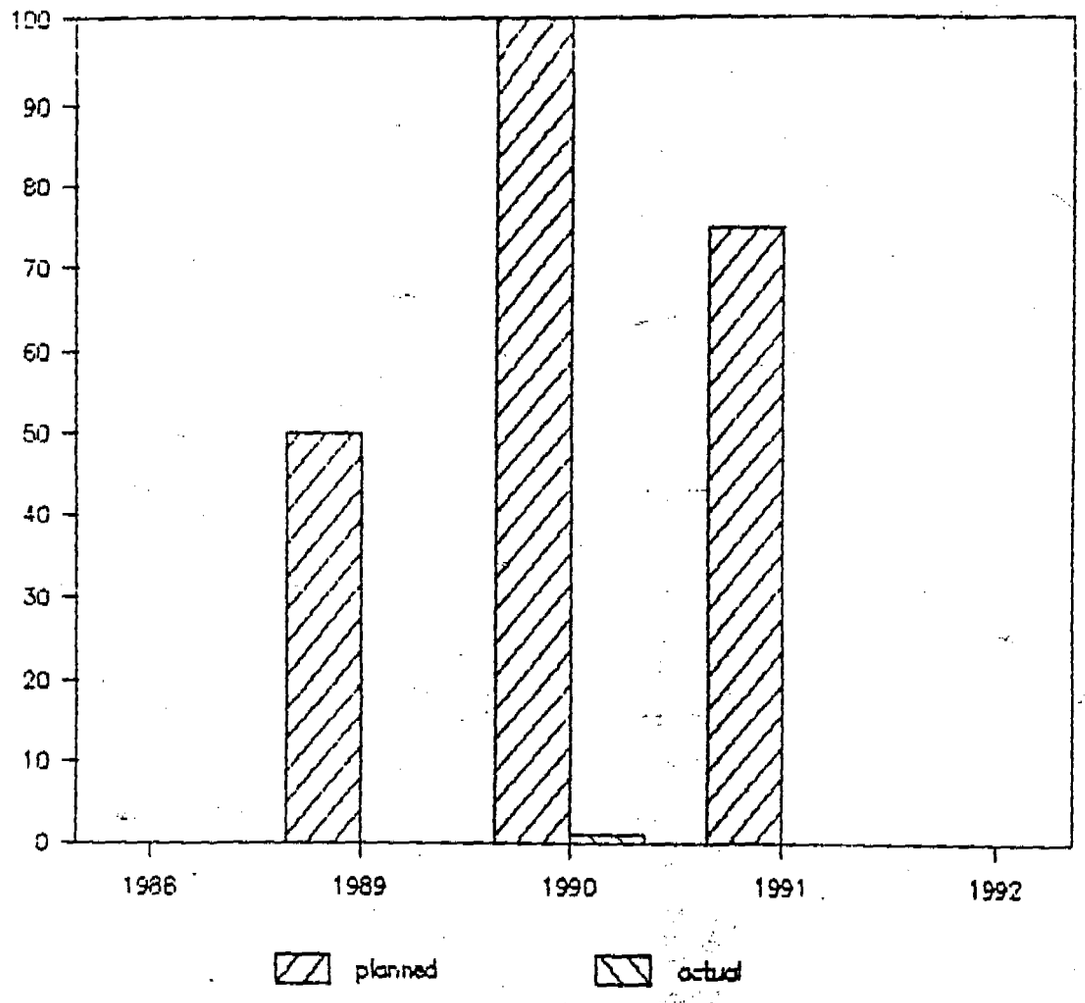


# HAND DUG WELL CONSTRUCTION

Planned 175. Actual 160



# HAND DRILLED BOREHOLE CONSTRUCTION

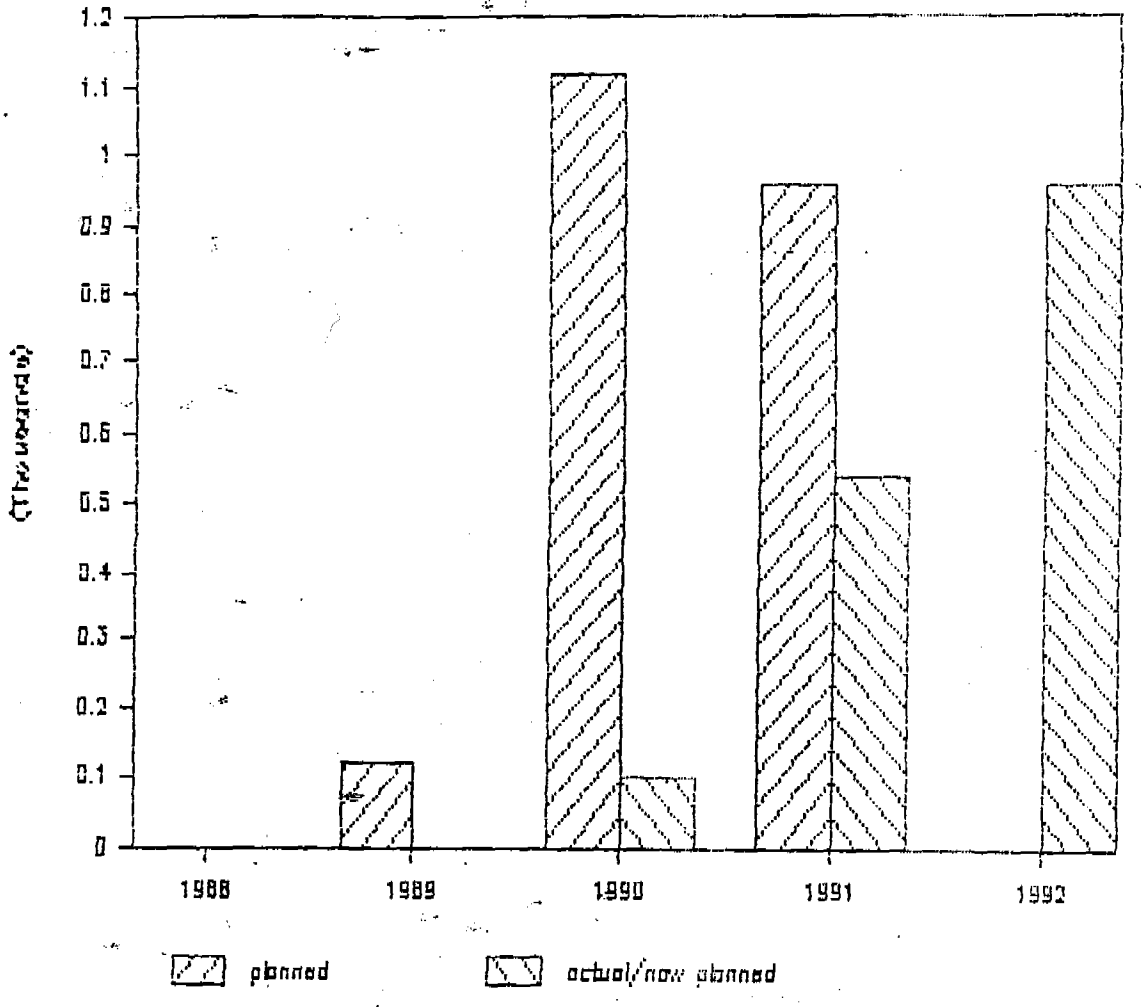



Originally 225 Hand Drilled Boreholes were planned. This was reduced to 105 under Revision D. After 4 attempted boreholes (of which 1 was successful) drilling has been stopped pending further work on the method.In view of time and schedule constraints it is considered that the method may be applicable to only 10 sites project wide.The remaining sites (95) will have to be developed by machine drilled boreholes (MDB) and hand dug wells (HDW). At present 75 MDB's and 20 HDW's are envisaged for which it is estimated an additional sum of US$ 450000 will be required.

# APPENDIX XVI

## LATRINE CONSTRUCTION UNDER RUSAFIYA PROJECT

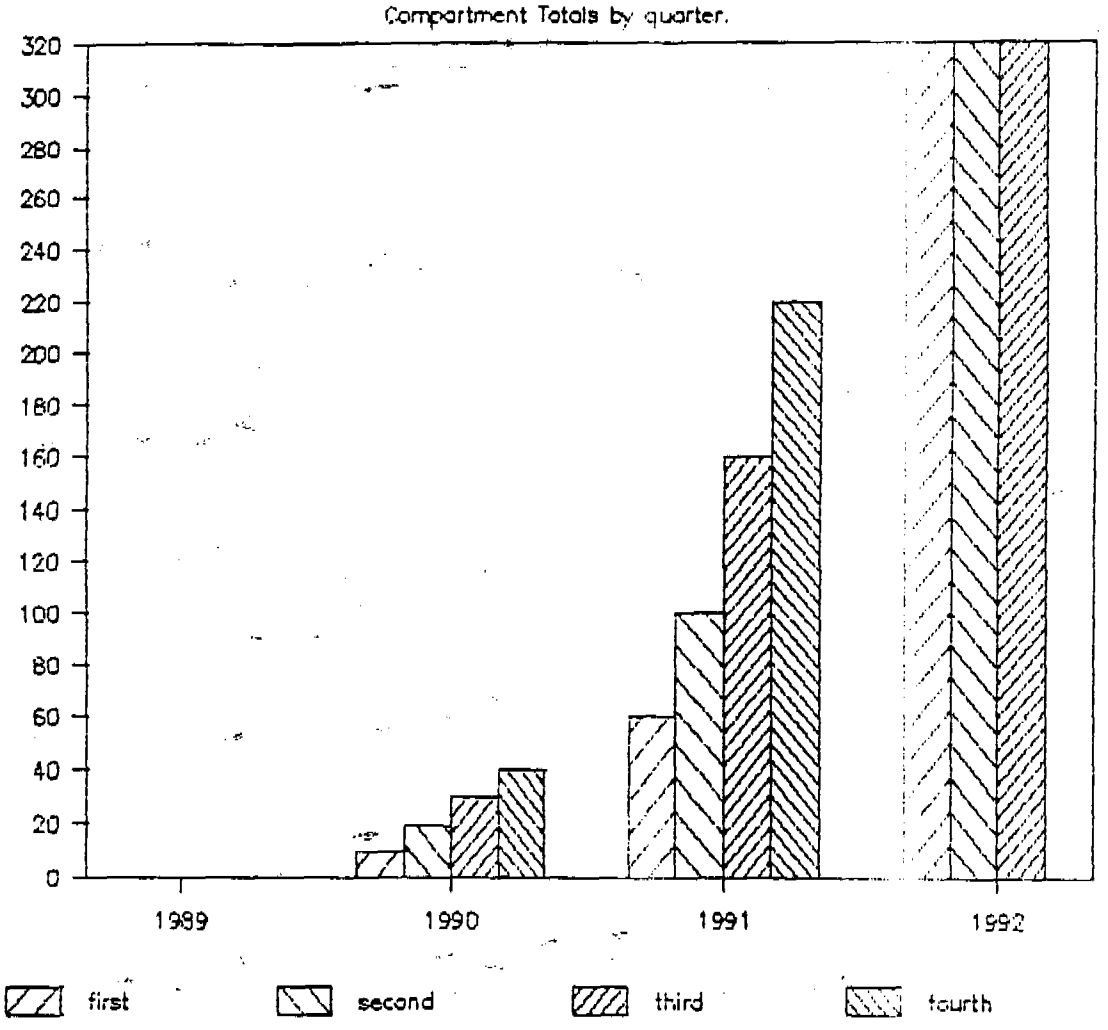
### LATRINE COMPARTMENT CONSTRUCTION




Latrines Completed to end October 1990 (no. of compartments)

| | Dom.S.Pit | Dom.Alt.Pit | Multi.Alt.Pit | Multi.Trench |
|---|---|---|---|---|
| Nasarawa | 14 | 1 | 14 | 6 |
| Ningi | 5 | 5 | 7 | |
| Gwagwalada | | | 5 | |
| Totals. | 19 | 6 | 26 | 6. |

# VIP CONSTRUCTION – CURRENT PLAN



# APPENDIX XVII

RUSAFIYA
HYGIENE EDUCATION IN WATER AND SANITATION
FOR PRIMARY SCHOOLS.

Pilot Programme

Health awareness has to be learnt. Teaching health awareness promotes changes in health behaviour and attitudes that affect incidence of disease. A main purpose of hygiene education is to reduce disease associated with inadequate or polluted/contaminated water sources and poor home and community sanitation. However, a clean drinking water supply, increased amounts of domestic water and better methods of human excreta disposal (latrines or sewerage) do not themselves result in a more hygienic environment or reduction in disease. The consumers of these new facilities must use them, use them properly and then often adopt new behaviours that will maximize the health benefits.

The main objectives of a hygiene education programme in schools are:

1. To develop awareness in health and promote cooperative efforts among the school, home and community.
2. To promote health consciousness and understandings of ther ationship between sanitation and disease.
3. To develop habits of personal and home hygiene, including the proper use of toilet facilities and the maintenance of water supply and resources.
4. To acquire understandings of diseases related to water and human excreta.
5. To promote self-reliance and autonomy in the solution of health problems, health care and community sanitation.

The themes for hygiene education in primary schools are:

1. Personal cleanliness and domestic hygiene
2. Health problems in water sources
3. Protecting water sources/hygiene practices
4. Diseases related to water and sanitation
   Measures to interrupt disease transmission

Teaching methods emphasize less of lecturing and talking but more of experiential learning, such as:

| | | | |
|---|---|---|---|
| Questioning | Discussion | Demonstrations | Story-telling |
| Dramatization | Role-playing | Outdoor-learning | Printed material/posters |
| Songs and slogans | Photographs | Resource persons | Places and things |

Individual and collective behaviour to be adopted:

1. Personal hygiene, emphasizing handwashing with soap.
2. Domestic hygiene, emphasizing food handling and garbage disposal.
3. Sanitary disposal of excreta, especially of children's faeces.
4. Hygienic collection, storage and use of water.
5. Construction of latrines and its proper use.
6. Correct use and maintenance of water supply.
7. Sanitation practices for vector control.

# APPENDIX XVIII

Progress Report on the Training Component of NIR/87/011
RUSAFIYA, JOS

1. Human resource development through training at state, LGA and community levels is an integral part of the RUSAFIYA structure, planning and management process. One of the immediate objectives of the Project calls for the training of "a total of 875 people, including 625 at community level, 200 at LGA level and 50 at state level."

2. In the RUSAFIYA project, there was a need to upgrade practical skills of community development officers and health workers and educators, technical skills among works and geophysics personnel, the community education techniques of primary school teachers and to reorganize and partially deploy staff to improve management and planning. At the state level, technical staff assisting implementation at LGA level needed to understand the processes of problem solving and team management style of integrated user-participation projects. The WASCOMS in the beneficiary communities need assistance and training in the performance of their roles and responsibilities and most especially, the users of the water and sanitation facilities - in their proper use and maintenance for effective, efficient and sustained services.

3. Thus, training activities are aimed at (1) developing a community based institutional system for rural water and sanitation with particular emphasis on the role of women (2) developing practical skills required for particular functions and tasks in the implementation of the project and (3) promoting personal and environmental hygiene in the communities.

4. The key elements of the training programme are as follows:

4.1 Training is related to the specific tasks performed in defined operational context and work plans. Its approach is "learning by doing" or "training to do".

4.2 Training courses and activities are scheduled according to the needs for particular skills at specific stages of the overall implementation strategy.

4.3 Training of the individuals and the development of the training materials is a continuous process merging with practical supervision on the job.

4.4 On-the-job training takes place between project personnel and project locales in an apprentice-type situation to acquire first-hand experiences of the field realities.

the trainee to participate in his own learning and develop his/her own latent capacities.

5. The training materials developed in the project comprise 15 modules and its attendant visuals, in topics of community participation and organization, hygiene education and participatory processes.

6. The number of individuals trained in Plateau, Bauchi and FCT Abuja, as of the present, include 26 at state level, 108 at LGA level, and 265 at community level. In the latter group include members of the WASCOM, village hygiene educators, artisans and adult groups, i.e. elders and women.

7. To promote personal and environmental hygiene in schools and communities, the project developed a pilot programme called "Community Health Involving Children in Schools (CHICS). It has been introduced to three LGA's in a 3-day orientation workshop. Outcomes of CHICS in the designated pilot schools are:

7.1 A scheme of work for hygiene education based on the teaching units on water and sanitation for Primary I-IV.

7.2 Involvement of the Primary Schools Management Board (PSMB) of the state and the Local Education Authority in cooperation with the PTA's and Village Education Committees in the construction of demonstration VIP latrines in primary schools. Thus far, three multi-pit latrines in primary schools and 12 individual pit latrines have been constraucted in Nasarawa, four multi-compartment latrines have been completed in Ningi in public places and two, are under construction in primary schools, while in Gwagwalada, an anticipated 20 school latrines will be constructed in the technical assistance of RUSAFIYA, thanks to an allocation of funds by FCT Abuja PSMB.

7.3 An increased level of awareness and cooperation among school officials and community leaders in improving school and community hygiene and sanitation.

8. Issues to consider in connection with the training programme:

8.1 Certification in the training courses and its duration in time or hours should be recognized, so that the experiences gained in the project by the trainees will lead to seniority and possibly higher salaries.

8.2 Training materials produced in the project are used over and over through five project LGA's, in about 230 communities and handled by at most, 4,500 individuals. The wear and tear on these manually duplicated "software" require that they be printed on more durable materials which should last more than the life span of the project. Furthermore, these materials should be available to other LGA's throughout the country to serve as "models" for their own training needs.

# APPENDIX XIX

COMMUNITY / LGA WATER SUPPLY, SANITATION AND IMPROVED HEALTH AGREEMENT

THE FOLLOWING AGREEMENT IS MADE, ON THE .....DAY OF .....,IN THE YEAR....., BETWEEN ..... HEREAFTER REFERRED TO AS THE COMMUNITY, AND THE .....LGA WATER AND SANITATION chapter HEREAFTER REFERRED TO AS THE WASc.

Whereas the WASc is willing to support and facilitate the development of water supply sanitation and health education.

This agreement sets forth the conditions under which the development will take place.

The terms of this agreement are as follows:

Community Responsibilities

1. The community undertakes to assist the LG extension agents in the collection of data and to present its view of its own needs to those extension agents.

2. The community agrees to provide accomodation for extension agents working in the community.

3. The community agrees to support and to participate fully in the health education and general training provided by the WASc.

4. The community agrees that in due time it will elect a Water and Sanitation Committee (WASCOM) to represent its interests and that a fair proportion of the members of WASCOM should be women.

5. The community undertakes to assist those engaged in construction wherever possible. In particular community members will assist construction crews in the provision of water for constuction purposes.

6. The community agrees to set up a system to collect monies for such purposes as may be agreed betwwen the community and the WASc.

7. The community undertakes to provide at least six people to be trained in handpump and waterpoint maintenance at least four of whom should be women.

8. The community agrees to assume all responsiblity for the maintenance of the waterpoint upon its completion.

9. The community agrees to ensure the security of any construction materials or equipment identified to the community by the WASc, its representatives or contractors employed by it or the community provided the safe storage of those materials or equipment has already been agreed with the community.

10.

WASc Responsibilities

1. The WASc agrees to provide at least one extension agent to facilitate the development of water supply, sanitation and health education in the community.

2. The WASc agrees to present all findings from data collection to the community.

3. The WASc undertakes to assist the community in the formation of a water and sanitation committee(WASCOM).

4. The WASc undertakes to apply for assistance from State Level technical specialists to assess the water supply potential in the area around the community and to carry out detailed geophysical surveys if necessary.

5. The EA responsble for the community undertakes to liaise with the survey team on the community's behalf but to make no decision affecting the community without consultation with the community.

6. The WASc undertakes to assist the community in the organisation required to implement the recommendations resulting from surveys.

7. The WASc underatakes to help in the supervision of such contractors as may be needed to implement construction work in the communities either by providing direct supervision (HDW) or by organisation of State level assistance (machine drilled boreholes).

8. The WASc agrees to train at least six community members in hand pump and waterpoint maintenance.

9. The WASc agrees to support the WASCOM established by the community and to be guided by the committee as the representaives of the communities collective opinion.

10. The WASc undertakes to continue with training of the community in water sanitation and health matters and agrees that the assigned EA shall monitor the progress of the community.

The WASc is not responsible for any injuries suffered by the inhabitants of the community in the course of construction.

The WASc will hold the community responsible for the loss or theft of any materials or equipment entrusted to the care of any member of the community.

We fully understand the terms set forth in this agreement and agree to abide by them.

SIGNED.

WASCOM. Chairman. Date.

WASc. Head. Date.

# APPENDIX XX

Staff appointments

| Name | Position | Target | Recommended by WB | Approved by FGN | Started work | Remarks |
|---|---|---|---|---|---|---|
| Lochery | PC | 09/88 | 06/88 | 12/88 | 07/88 | |
| Lutz | TA | 09/88 | 07/88 | 12/88 | 12/88 | |
| Ede | WSA | 09/88 | 09/88 | 02/89 | 02/89 | 6 mths 89 fulltime from 2/90 |
| Olayiwole | WIDA | 01/89 | 02/89 | 05/89 | 07/89 | 2 mths 89 fulltime from 5/90 |
| Pam | CDA | 09/88 | 09/88 | 11/88 | 09/88 | 1 mth 88 fulltime from 1/89 |
| Kida | SA | 09/88 | 06/89 | 08/89 | 10/89 | |
| Habila | Hydro | 01/89 | 03/90 | 03/90 | 05/90 | Contingent approval Rev D |
| Yakubu | HEA | 09/88 | 01/90 | 03/90 | 05/90 | Initial advert for candidates not successful |
| Omodu | Mech Eng | 09/88 | 01/90 | 03/90 | 07/90 | Interviews conducted twice |

# SAMPLE FORMAT FOR MONITORING SOFTWARE AND HARDWARE COMPONENTS OF PROJECT

ISAFIYA COMMUNITY ASSESSMENT — LGA GWAGWALADA AREA COUNCIL FCT — DATE OCTOBER 31ST 1990

| | Cluster | Population | EA responsible for community | No. EA visits | Percent pop. at meetings | Perception/ commitment to RUSAFIYA | WASCOM formed | No. WASCOM women | No. of WASCOM members trained | No. VHE's trained | Contributions collected by community | HDW | Water | HDB points sited | HDB | HDW | Water | HDB points constructed | HDB | VIPL compart. constructed: Dom s pit | Dom alt pit | Multi alt pit | Multi trench | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ıfa | CC-2 | 1200 | | 4 | 60 | Clear & positive | yes | 3 | Not yet | Nil | Nil | | | | | | | | | | | | | |
| ısso | CA-2 | 300 | | 3 | 40 | " | yes | 3 | " | Nil | Nil | | | | | | | | | | | | | |
| ngoji | CB-3 | 1000 | | 8 | 70 | " | yes | 3 | " | Nil | Nil | | | | | | | | | | | 5C | | In Pro, ross |
| ikokoro | CA-6 | 800 | | 4 | 60 | " | yes | 3 | " | Nil | Nil | | | | | | | | | | | | | (pit li |
| kwa | CA-14 | 1000 | | 4 | 40 | " | yes | 3 | " | Nil3 | Nil | | | | | | | | | | | | | |
| janarki | CB-2 | 1000 | | 4 | 50 | " | yes | 3 | " | Nil | Nil | | | | | | | | | | | | | |
| gbe | CC-1 | 500 | | 3 | 80 | " | yes | 3 | " | Nil | Nil | | | | | | | | | | | | | |
| rakuti | CC-6 | 400 | | 3 | 50 | " | yes | 3 | " | Nil | Nil | | | | | | | | | | | | | |
| jadobuta | CB-6 | 500 | | 3 | 30 | Nagative | - | - | - | - | - | | | | | | | | | | | | | |
| mugo | CB-1 | 800 | | 4 | 50 | " | - | - | - | - | - | | | | | | | | | | | | | |
| aita oho | CC-8 | 350 | | 5 | 60 | Clear & positive | yes | 3 | Not yet | Nil | Nil | | | | | | | | | | | | | |
| Maje | CB-11 | 700 | | 3 | 50 | " | yes | 2 | " | Nil | Nil | | | | | | | | | | | | | |
| disabo | CA-3 | 300 | | 3 | 30 | " | yes | 3 | " | Nil | Nil | | | | | | | | | | | | | |
| di II | CA-2 | 300 | | 3 | 60 | " | yes | 3 | " | Nil | Nil | | | | | | | | | | | | | |
| idapada | CA-7 | 500 | | 3 | 80 | " | yes | 2 | " | Nil | Nil | | | | | | | | | | | | | |
| gadna | CA-1 | 500 | | 3 | 60 | " | yes | 2 | " | Nil | Nil | | | | | | | | | | | | | |
| ilaiyi ari | CB-12 | 300 | | 7 | 90 | " | yes | 3 | " | Nil | Nil | | | | | | | | | | | " | | In pro ross |
| aita oho II | CC-7 | 400 | | 2 | 10 | " | Not yet | - | " | Nil | Nil | | | | | | | | | | | | | (Si to olearoc |
| tunku oho | CB-14 | 500 | | 6 | 60 | " | yes | 2 | " | Nil | Nil | | | | | | | | | | | | | |
| ilaiyi | CB-13 | 700 | | 5 | 50 | " | yes | 4 | " | Nil | Nil | | | | | | | | | | | | | |
| labiri | CA-5 | 1000 | | 2 | 50 | " | yes | 3 | " | Nil | Nil | | | | | | | | | | | | | |

RUSAFIYA PROJECT (NIR/87/011)

Staff appointments

| Name | Position | Target | Started work | Remarks |
|---|---|---|---|---|
| Chime | Admin Ass | 09/88 | 07/89 | Jos |
| Amazu | Secretary | 09/88 | 02/89 | Jos |
| Usman | A/C Clerk | 07/89 | 06/90 | Ningi |
| Oboigbe | A/C Clerk | 11/89 | 04/90 | Gwagwalada |
| Dawood | A/C Clerk | 09/88 | 05/90 | Nasarawa |
| Akpere | A/C Clerk | 09/90 | 12/90 | Oju |
| Idowu | Secretary | 09/88 | 09/88 | Jos |
| Okezie | Driver | 09/88 | 07/88 | Jos |
| Okwuike | Driver | 09/88 | 01/89 | Jos |
| Dung | Driver | 05/89 | 07/89 | Jos |
| Adeyi | Driver | 12/89 | 07/90 | Jos |
| Hinmikaiye | Driver | 05/89 | 09/90 | Jos |

# APPENDIX XXII

## UNITED NATIONS DEVELOPMENT PROGRAMME

## PROJECT BUDGET REVISION

COUNTRY: Nigeria

PROJECT TITLE: RUSAFIYA (Rural Water Supply and Sanitation)

PROJECT NO.: NIR/87/011/E/01/42

The above project is amended as indicated and for the following purposes:

(See revised budgets attached, covering UNDP contribution, Government of Nigeria and third party cost sharing and Government of Nigeria cash counterpart contribution)

To reflect 1989 actual expenditures and rephased estimates for 1990 and 1991.

| | |
|---|---|
| Previous UNDP Contribution: | US$ 4,012,230 |
| Revised UNDP Contribution: | US$ 4,012,230 |
| UNDP Contribution - Increase (Decrease): | Nil |

Taiq Husain

Agreed on behalf of the Executing Agency

July 4, 1990

Date

Approved on Behalf of UNDP
Assefa Fre-Hiwet - Resident Representative

9 July 1990

Date

Country: Nigeria
Project Number: NIR/87/011/E/01/42
Title: RUSAFIYA (Rural Water Supply and Sanitation)

| | | Total | | 1988 | | 1989 | | 1990 | | 1991 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | mm | US$ | mm | US$ | mm | US$ | mm | US$ | mm | US$ |
| 10 | PERSONNEL | | | | | | | | | | |
| 11 | Experts | | | | | | | | | | |
| 01 | Coordinator | 39 | 295,398 | 6 | 56,214 | 12 | 89,184 | 12 | 80,000 | 9 | 70,000 |
| 02 | Water Supply Adviser | 21 | 150,000 | 0 | 0 | 0 | 0 | 12 | 80,000 | 9 | 70,000 |
| 04 | Consultants | 25 | 284,101 | 2 | 38,252 | 13 | 95,849 | 6 | 90,000 | 4 | 60,000 |
| 05 | Training Adviser | 22 | 161,123 | 0 | 0 | 5 | 38,607 | 12 | 80,000 | 5 | 42,516 |
| 06 | Coordination Support | | 41,864 | | 0 | | 0 | | 21,000 | | 20,864 |
| 99 | Sub-total | 107 | 932,486 | 8 | 94,466 | 30 | 223,640 | 42 | 351,000 | 27 | 263,380 |
| 13 | Admin. Support (Local) | | 119,184 | | 2,991 | | 16,193 | | 50,000 | | 50,000 |
| 15 | Experts' Travel | | 29,101 | | 1,773 | | 14,328 | | 7,000 | | 6,000 |
| 16 | Mission Costs | | 3,136 | | 0 | | 3,136 | | 0 | | 0 |
| 17 | National Professional | | | | | | | | | | |
| 01 | Mech.Elec. Engineer | 15 | 18,000 | 0 | 0 | 0 | 0 | 6 | 6,000 | 9 | 12,000 |
| 02 | Comm.Dev. Adviser | 36 | 42,528 | 3 | 3,128 | 12 | 11,400 | 12 | 14,000 | 9 | 14,000 |
| 03 | Sanitation Adviser | 24 | 26,800 | 0 | 0 | 3 | 2,800 | 12 | 12,000 | 9 | 12,000 |
| 04 | Hygiene Educ. Adviser | 17 | 20,000 | 0 | 0 | 0 | 0 | 8 | 8,000 | 9 | 12,000 |
| 05 | Hydrogeologist | 17 | 20,000 | 0 | 0 | 0 | 0 | 8 | 8,000 | 9 | 12,000 |
| 06 | WID Adviser | 17 | 25,000 | 0 | 0 | 0 | 0 | 8 | 10,000 | 9 | 15,000 |
| 07 | Consultants | 4 | 4,978 | 0 | 0 | 4 | 4,978 | 0 | 0 | 0 | 0 |
| 99 | Sub-total | 126 | 157,306 | 3 | 3,128 | 19 | 19,178 | 54 | 58,000 | 54 | 77,000 |
| 19 | Over/Under Accrual | | 1,781 | | 0 | | 1,781 | | 0 | | 0 |
| 19 | COMPONENT TOTAL | 233 | 1,241,994 | 11 | 102,358 | 49 | 278,256 | 96 | 466,000 | 81 | 395,380 |
| 20 | SUB-CONTRACTS | | | | | | | | | | |
| 21 | Sub- contracts | | 1,427,254 | | 0 | | 0 | | 161,200 | | 1,266,054 |
| 29 | COMPONENT TOTAL | | 1,427,254 | | 0 | | 0 | | 161,200 | | 1,266,054 |
| 30 | TRAINING | | | | | | | | | | |
| 31 | Fellowships-Individual | | 30,000 | | 0 | | 0 | | 20,000 | | 10,000 |
| 32 | Group Training/Study Tours | | 110,998 | | 0 | | 16,440 | | 38,000 | | 56,558 |
| 33 | In-service Training | | 828 | | 201 | | 627 | | 0 | | 0 |
| 38 | Over/Under Accrual | | 375 | | 0 | | 375 | | 0 | | 0 |
| 39 | COMPONENT TOTAL | | 142,201 | | 201 | | 17,442 | | 58,000 | | 66,558 |
| 40 | EQUIPMENT | | | | | | | | | | |
| 41 | Expendable | | 6,947 | | 150 | | 3,797 | | 1,500 | | 1,500 |
| 42 | Non-expendable | | 1,149,125 | | 133,055 | | 311,699 | | 511,871 | | 192,500 |
| 48 | Over/Under Accrual | | 3 | | 0 | | 3 | | 0 | | 0 |
| 49 | COMPONENT TOTAL | | 1,156,075 | | 133,205 | | 315,499 | | 513,371 | | 194,000 |
| 50 | MISCELLANEOUS | | | | | | | | | | |
| 51 | Oper. and Maint. Equip. | | 19,093 | | 1,534 | | 6,559 | | 6,000 | | 5,000 |
| 52 | Reporting Costs | | 4,207 | | 0 | | 1,707 | | 1,500 | | 1,000 |
| 53 | Sundry | | 20,931 | | 965 | | 8,795 | | 6,200 | | 4,871 |
| 58 | Over/Under Accrual | | 575 | | 0 | | 575 | | 0 | | 0 |
| 59 | COMPONENT TOTAL | | 44,706 | | 2,499 | | 17,636 | | 13,700 | | 10,871 |
| 99 | GRAND TOTAL | | 4,012,230 | | 238,263 | | 628,833 | | 1,212,271 | | 1,932,863 |
| 100 | UNDP CONTRIBUTION | | 1,000,000 | | 238,263 | | 628,833 | | | | |

Country: Nigeria
Project Number: NIR/87/011/E/01/42
Title: KUSAFIYA (Rural Water Supply and Sanitation)

| | | Total US$ | 1988 US$ | 1989 US$ | 1990 US$ | 1991 US$ |
|---|---|---|---|---|---|---|
| 100 Cost Sharing | | | | | | |
| 101.1 | Government of Netherlands | 698,000 | 0 | 0 | | |
| 101.2 | Government of Nigeria | 314,230 | 0 | 0 | | |
| 156 Overhead | | | | | | |
| 156.1 | Overhead charges on line 101.1 | 77,000 | 0 | 0 | | |
| 156.2 | Overhead charges on line 101.2 | 34,560 | 0 | 0 | | |
| 199 Total Cost Sharing | | 1,123,790 | 0 | 0 | | |

1) The Government of Netherlands has agreed to make a Cost Sharing Contribution of US$ 775,000 (including 11% overheads) into UNDP Contribution Account, referenced UNDP NIR/87/011/E, as per the following schedule of payments :

| | |
|---|---|
| January 1989 | US$ 23,550 |
| January 1, 1990 | US$ 414,312 |
| January 1, 1991 | US$ 337,138 |
| | US$ 775,000 |

2) The Government of Nigeria has agreed to make a Cost Sharing Contribution of US$ 348,790 (including 11% overheads) into UNDP Contribution Account, referenced UNDP NIR/87/011/E, as per the following schedule of payments :

| | |
|---|---|
| January 1989 | US$136,435 |
| January 1, 1990 | US$ 165,155 |
| January 1, 1991 | US$ 47,200 |
| | US$ 348,790 |

unbud2/06/15/90

Project Budget Covering Government Counterpart Contribution in Cash
(in Naira)

Country: Nigeria
Project Number: NIR/87/011/E/01/42
Title: RUSAFIYA (Rural Water Supply and Sanitation)

| | | Total Naira | 1988 Naira | 1989 Naira | 1990 Naira | 1991 Naira |
|---|---|---|---|---|---|---|
| 10 | Project Personnel | | | | | |
| 11 | Expert Housing | 300,000 | 0 | 0 | 150,000 | 150,000 |
| 16 | Travel | 594,000 | 0 | 0 | 222,000 | 372,000 |
| 19 | COMPONENT TOTAL | 894,000 | 0 | 0 | 372,000 | 522,000 |
| 20 | Sub-Contracts | | | | | |
| 21.01 | Sub-Contracts | 2,176,630 | 0 | 0 | 384,000 | 1,792,630 |
| 29 | COMPONENT TOTAL | 2,176,630 | 0 | 0 | 384,000 | 1,792,630 |
| 30 | Training | | | | | |
| 32 | In-service Training | 1,012,500 | 0 | 0 | 400,000 | 612,500 |
| 39 | COMPONENT TOTAL | 1,012,500 | 0 | 0 | 400,000 | 612,500 |
| 40 | Equipment | | | | | |
| 41 | Expendable | 1,062,250 | 0 | 0 | 190,000 | 872,250 |
| 42 | Non-expendable | 264,000 | 0 | 0 | 216,000 | 48,000 |
| 49 | COMPONENT TOTAL | 1,326,250 | 0 | 0 | 406,000 | 920,250 |
| 50 | Miscellaneous | | | | | |
| 51 | Operations and Maint. | 1,008,250 | 0 | 0 | 342,000 | 666,250 |
| 53 | Sundry | 11,000 | 0 | 0 | 6,000 | 5,000 |
| 59 | COMPONENT TOTAL | 1,019,250 | 0 | 0 | 348,000 | 671,250 |
| 99 | Grand Total | 6,428,630 | 0 | 0 | 1,910,000 | 4,518,630 |

The Government of Nigeria has agreed to make a cash contribution of Naira 6,428,630 to be deposited into UNDP Account, referenced UNDP NIR/87/011/E as per following schedule of payments :

| | Naira |
|---|---|
| Jan 1, 1989 | 766,050 |
| Jan 1, 1990 | 3,209,700 |
| Jan 1, 1991 | 2,452,880 |
| Total Cash contribution | 6,428,630 |

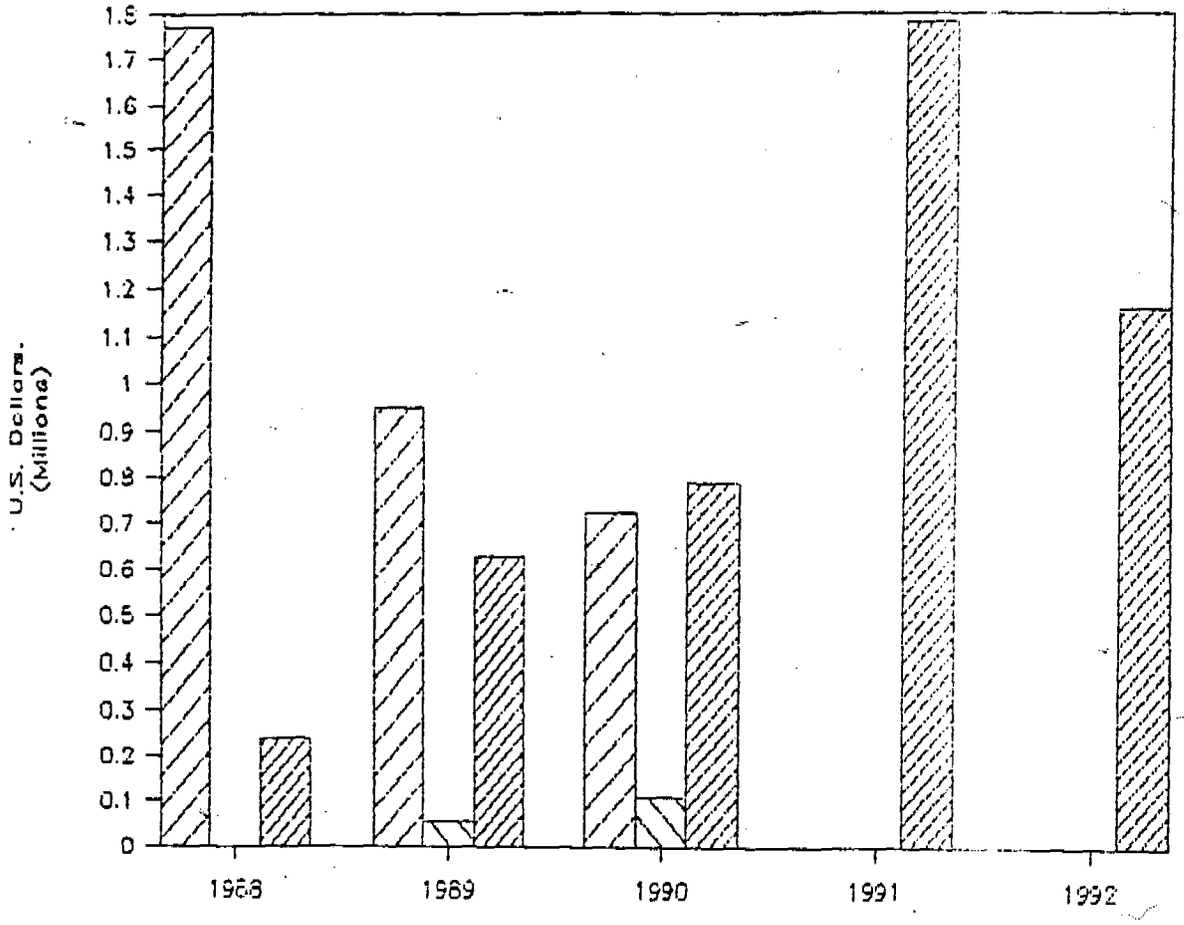
# APPENDIX XXIII

## PROPOSED REVISION OF BUDGET TO 1992

IPF Budget - Actual and Estimated Future Expenditure (US$)

| | Total | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|
| Personnel | 1,372,614 | 102,358 | 278,256 | 432,000 | 375,000 | 185,000 |
| Sub-contracts (machine drilled boreholes) | 1,877,400 | | | | 1,050,400 | 827,000 |
| Training | 124,643 | 201 | 17,442 | 40,000 | 48,000 | 19,000 |
| Equipment | 1,150,704 | 133,205 | 315,499 | 302,000 | 300,000 | 100,000 |
| Misc. | 70,135 | 2,499 | 17,636 | 18,000 | 18,000 | 14,000 |
| Totals | 4,595,496 | 238,263 | 628,833 | 792,000 | 1,791,400 | 1,145,000 |

# IPF EXPENDITURE




Govt. of Nigeria Cost Sharing (G.C.S.) in U.S. Dollars.

| | Payments | | Outstanding. | |
|---|---|---|---|---|
| | 1989 | 1990 | 1990 | 1991 |
| FCT | 55,500 | - | 39,410 | - |
| Borno | - | 60,000 | - | - |
| Bauchi | - | 42,461 | 39,604 | 7,790 |
| Plateau | - | 9,095 | - | - |
| Benue | - | - | 55,500 | 39,410. |
| Totals | 55,500 | 111,576 | 134,514 | 47,200 |

| | | |
|---|---|---|
| Total G. C. S. Required | = U.S.$ | 348,790. |
| Total paid to date | = U.S.$ | 167,076. |
| Outstanding 1990 | = U.S.$ | 134,514. |
| Payment Due 1991 | = U.S.$ | 47,200. |
| Current IPF | = U.S.$ | 4,012,230. |
| Estimated IPF required | = U.S.$ | 4,600,000. |

Increased costs primarily due to additional machine drilled boreholes required and extended project period.

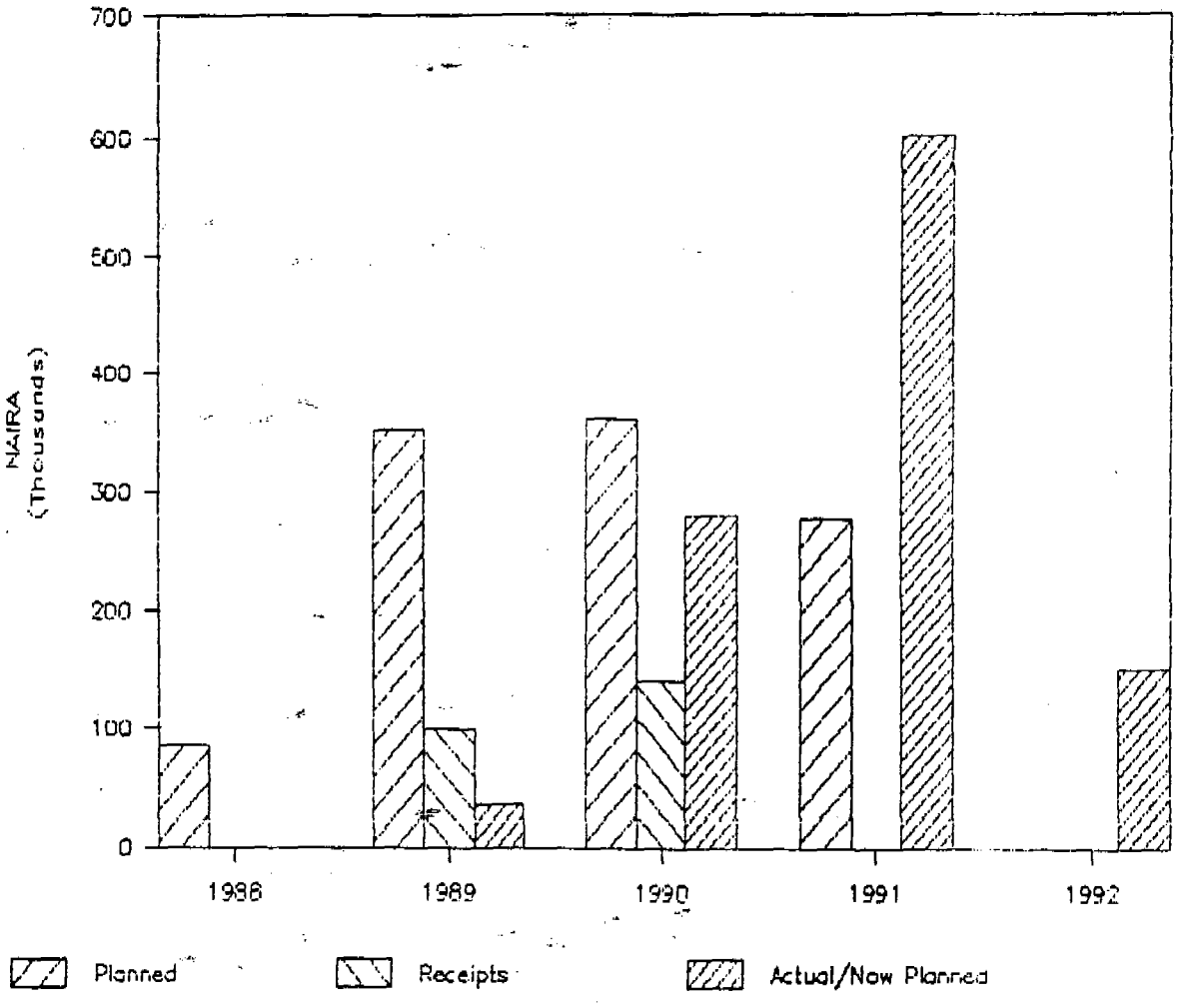
RUSAFIYA Project

Government Cost Sharing and Cash Counterpart Contributions

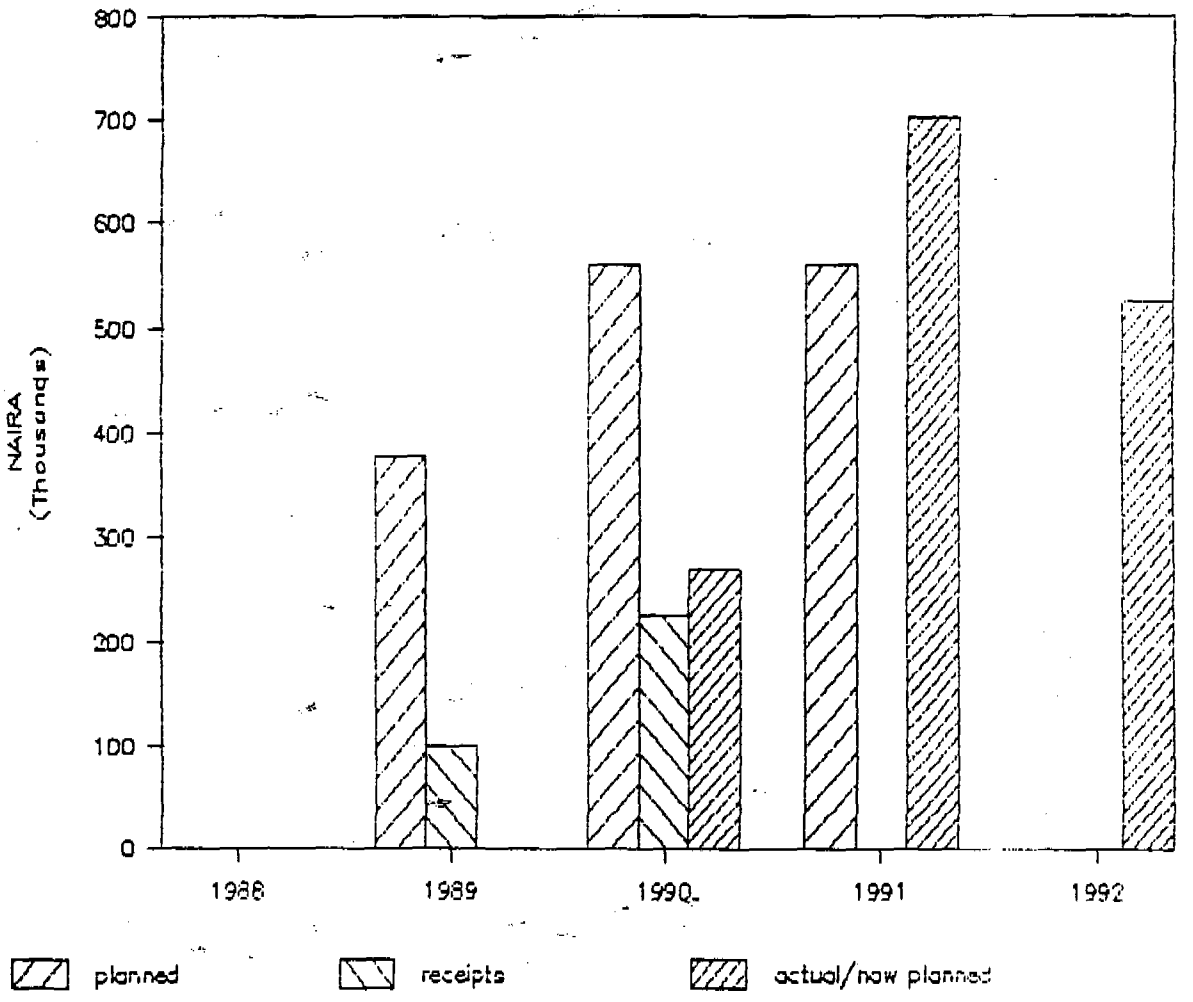
All amounts in Naira

| | FMH | Plateau | Bauchi | FCT | Borno | Benue |
|---|---|---|---|---|---|---|
| Total paid to date (not including community contribution) | 390,000 | 210,000 | 562,353 | 567,205 | 65.,560 | |
| Cash counterpart contribution | 390,000 | 130,423 | 225,353 | 158,170 | 17",000 | |
| Cost sharing contribution (converted to USD by UNDP) | | 69,577 | 337,000 | 409,035 | 47..560 | |
| LGA contribution | | 10,000 | | | | |
| Outstanding | 360,000 | 797,867 | 926,343 | 971,766 | | 1,470,606 |
| Community contribution | | 29,750 | 37,235 | | | |

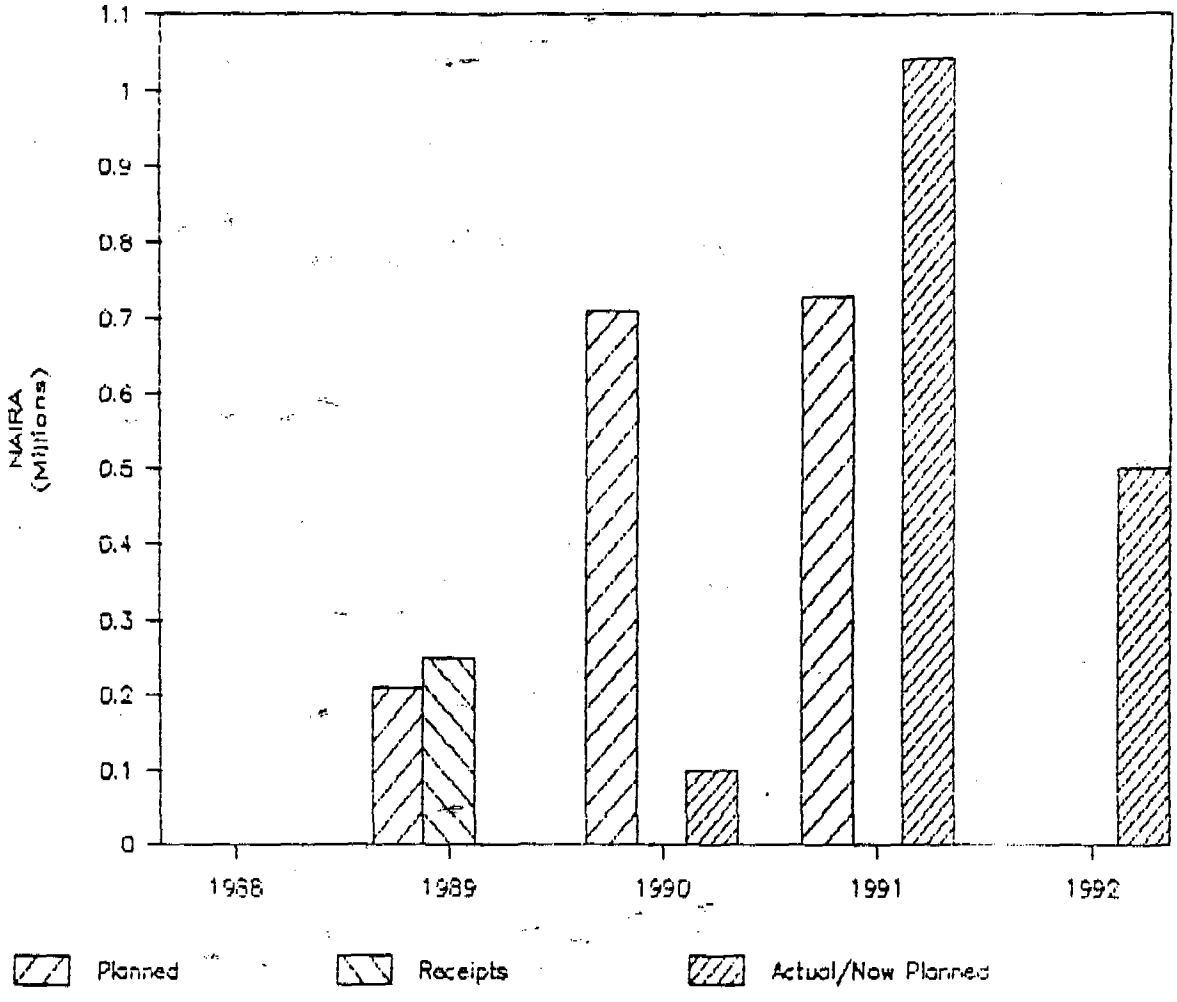
# PLATEAU GCCC EXPENDITURE



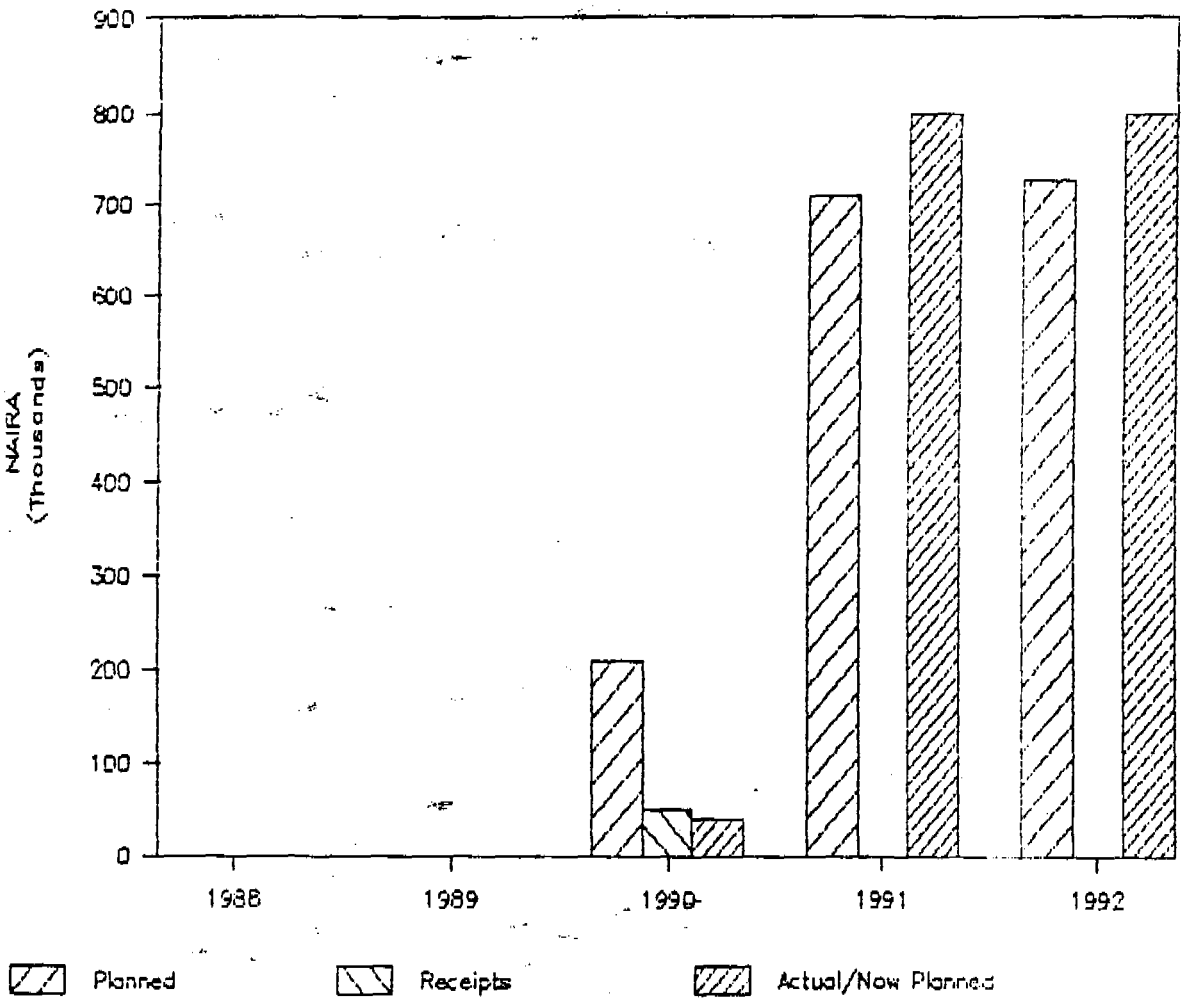
# BAUCHI GCCC EXPENDITURE



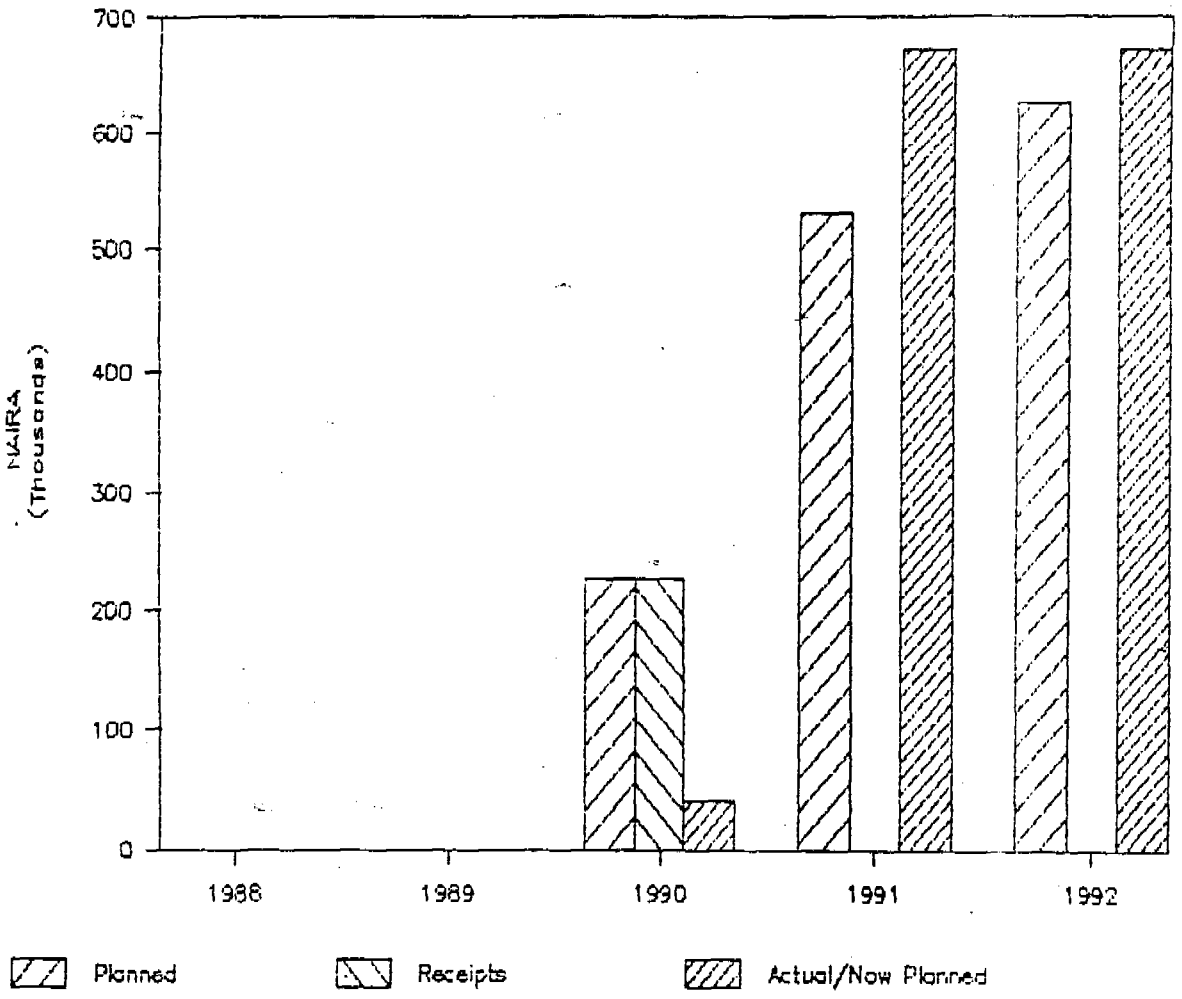
# FCT GCCC EXPENDITURE



# BENUE GCCC EXPENDITURE



# BORNO GCCC EXPENDITURE



# APPENDIX XXIV

## WOMEN IN DEVELOPMENT
## RUSAFIYA PROJECT

Women in the project states like those in parts of the country do a great deal of work every day, which often goes unrecognized. Women's health is affected by long days of work which includes fetching water from very long distances. Power and decision-making is often kept away from them even in matters affecting their well-being. Thus during initial visits to most communities, women's participation in RUSAFIYA was very low and or non existance.

However, it is with joy that I report that women's involvement in the project has been on a steady increase.

Through the use of PROWWESS approaches, it has been possible to enlighten both men and women on the importance of women involvement in the project. Extension Agents have also been trained and or been given training to encourage women's participation in community activities. Community leaders, men and even women themselves have been and are being enlightened on why women need to acquire knowledge, new skills, and to take responsibility for decisions that affects their own health, that of their families and communities. As a result, women are now members of every Water and Sanitation Committee (WASCOM). In all communities, women are selected as Hand Pump Caretakers, VIP latrine caretakers and in some cases Hand Pump Managers, as well as village Hygiene Educators. WID activities will include other related skills such as production of gardens within and around pump sites and nutrition education for increased health and income.

For ~~good~~ great success of Programme, and ~~greater~~ involvement of other technical agencies, WIDA has made contacts and linkage with Co-ordinators of Better Life Programme in our project areas for their cooperation.

CBOlaiwole 11/1/90

DR (MRS) C.B. OLAYIWOLE
WIDA RUSAFIYA Project
NIR/87/011