AN INDEPENDENT EVALUATION

REPORT

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Quantiya Project (1987 - 1993)

A UNDP/WB Water and Sanitation Programme







An Independent Evaluation Report

RUSAFIYA PROJECT

(NIR/87/011)

UNICEF NIGERIA 1999

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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

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

RRA Rapid Reconnaissance Assessment

RUSAFIYA Rural Water and Sanitation Project

RUWATSAN Rural Water Supply and Sanitation

UNDP United Nations Development Programme

BSADP Bauchi State Agricultural Development Programme

BNARDA Benue State Agricultural and Rural Development Authority

BOSAP Borno State Agricultural Development Programme

SUMMARY OF EVALUATION REPORT

Country:

NIGERIA

Project Title:

Rural Water Supply and Sanitation

(RUSAFIYA) Project

Total Government Contribution:

N7,756,754.00

Total UNDP Contribution:

\$3,130,727.00

Total Netherlands Government Contribution:

\$797,244.00

Executing Agency:

International Bank for Reconstruction

and Development (World Bank)

Title of Report and Number of Volumes:

An Independent Evaluation of the Defunct RUSAFIYA Project.

Report Prepared By:

UNICEF

BRIEFSTATEMENT:

1.0 INTRODUCTION

The RUSAFIYA Project (an acronym in Hausa for water, sanitation and health) was conceived during 1987. It was originally designed as a three year project to begin in January, 1988 with a completion date in December, 1990. But, due to the late signing of the project document, it actually took off during mid 1988. The programme covers five local Government areas viz:- Nasarawa L.G.A. in Nasarawa State, Ningi, L.G.A. in Bauchi State, Gwoza L.G.A. in Borno State, Oju/Obi L.G.As in Benue State and Gwagwalada/Kwali L.G.As. In the Federal Capital Territory, Abuja.

Funding was provided by the UNDP, Netherlands Government and the Federal Government of Nigeria. Unfortunately, the implementation of the programme did not go well.

Hence, after reviewing the progress it was agreed in the tripartite review meeting held in January, 1992 to extend the project to June, 1992 in all the states except in Benue to end in March, 1993. Regrettably however, in spite of the extension, the project could not achieve the project targets as is evident from the table below:-

<u>RUSAFIYA PROJECT (NIR/87/011)</u> END OF PROJECT SUMMARY SHEET, MARCH 1993.

| LGA | Targets as per Revised Project Document | | | A Revised Project End of Project | | | Hand Pumps Installed | |
|------|---|------|------|----------------------------------|------|------|-------------------------|--|
| | BHs | HDWs | VIPs | BHs | HDWs | VIPs | H/Pumps | |
| NAS. | 31 | 25 | 235 | 32 | 20 | 120 | 42 | |
| NIN. | 80 | 22 | 250 | 80 | 14 | 123 | 41 | |
| GWA. | 40 | 15 | 195 | 44 | 10 | 110 | 54 | |
| GWO. | 53 | 12 | 144 | 59 | 8 | 46 | 42 | |
| OJU | - | - | - | 5 | 5 | 38 | 4 | |

NB:- Lack of GCCC prevented further construction of HDWs and VIPs.



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2.0 STRATEGY

The RUSAFIYA project aims at using the participatory approach to develop a replicable model and a sustainable organisational/institutional arrangement for planning and implementing integrated projects for water supply, sanitation and hygiene education. The process to be used will involve starting with the best available approach and institutional arrangement and using the method of learning by doing to test and continually modify the methods in the light of experience to end up with an approach which is socio-culturally appropriate, technically feasible and financially affordable.

3.0 DEVELOPMENT OBJECTIVE

To expand and improve the delivery of water supply and sanitation services to rural communities in Nigeria.

Immediate objectives:

- Developing 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.
 This objective was partially achieved.
- ii) Assisting the Federal Capital Territory, Bauchi, Benue, Borno and Plateau/Nasarawa States to improve their planning, management and logistical support for rural water supply and sanitation and, in the process, achieve project targets of 540 water points and 1600 demonstration VIP latrines in five local government areas (LGAs). This objective was partially achieved. (Refer project output achieved by end of March, 1993)
- Providing training for a total of 875 people, including 625 at community level, 200 at LGA-level and 50 at state-level.
 This objective was fully achieved.
- iv) Promoting and establishing an improved policy on ownership and cost recovery for community water supplies and sanitation.
 This objective was fully achieved.
- v) Improving personal and environmental hygiene in the project communities. This objective was partially achieved.

4.0 FINDINGSAND RECOMMENDATIONS

The RUSAFIYA project has served as a model to provide excellent learning opportunities at state level, Local Government level and community level. It has also been able to develop a replicable model through the involvement of communities in all aspects of water supply and sanitation services development programme. On the basis of many major lessons learned from the defunct RUSAFIYA project, following recommendations are made:-

- i) The designed of the defunct RUSAFIYA project was too ambitious and unrealistic. The project was too large and widely spread to be adequately managed and the capacities of the Local Government Councils to carry out their functions was grossly over estimated. Hence, the targets set out in the original project document even after revision in January, 1992 for both the institutional progress and physical facility completion were not met. In future, project design and targets must be discussed and fully agreed upon by all the parties concerned.
- ii) The programme of drilling bore-holes and construction of hand dug wells was partially successful. It is strongly recommended that it should be replicated in other L.G.As. as it has tremendously reduced the guinea worm and other water borne disease and resulted in the improvement of health and living standards of the people. However, the people must be provided more training about the benefits of potable water supply facilities and the need to maintain those facilities from contributions by the benefitting communities.
- The concept of V.I.P. latrines is very new to the rural dwellers. Hence, there is a strong need to educate the communities on the benefits of V.I.P. latrines. Since, it has been observed that the V.I.P. latrines constructed during the life time of RUSAFIYA project are either very poorly maintained or totally abandoned in certain places, it is strongly recommended that only those communities who are really serious to maintain these facilities should be selected to benefit from the programme. An undertaking should be obtained from the communities to contribute towards the cost of construction and for the full payment of maintenance cost.

- iv) Like the V.I.P. latrines, CHICS programme is also very new but very encouraging. Although, it has ceased to exist in many schools due to one reason or the other, it can still be revived and vigorously pursued as it would serve as a grassroot awareness programme for healthy living in the communities where only limited medical facilities are available.
- v) The involvement of a single person from State Government level as a state coordinator is grossly inadequate. In the event of his death, absence or dismissal from service, there is no trained person available to take over the responsibilities of the project.
 - Hence, it is strongly recommended that more than one person at least three persons should be trained at state level to take over the responsibilities of the project during execution and after completion for sustainability.
- vi) Provision must invariably be made for the payment of allowance and other incentives to the seconded staff so as to motivate them to be more responsible and interested in the job. Lazy and un-interested staff should be immediately replaced by the willing workers.
- vii) Since, women are the primary and main users of the water, their involvement at all levels of the programme viz:- planning, implementation, operation and maintenance etc should be made mandatory. In Ningi, Nasarawa and Gwoza L.G.As, some women had been trained for the maintenance and repairs of hand pumps but in Gwagwalada and Oju/Obi L.G.As in Benue state, no female trained artisans were available.
- viii) It has been observed that some of the major causes for the failure of the RUSAFIYA project to achieve full targets were:
 - a) Delays in the signing of the Memorandum of Understanding (M.O.Us).
 - b) Late payment of GCCC by the State Governments.

Hence, it is strongly recommended that in future firm commitments may be obtained from the State Governments in respect of timely signing of the Memorandum of Understanding and regular release of GCCC so as to complete the project in time. In order to avoid embarrassment during execution of the programme, it is advisable that deductions at source may be made by the Federal Ministry of Finance for which the State Governments would issue necessary authority to the Federal Ministry of Finance to do so.

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BAUCHISTATE-NINGILOCAL GOVERNMENT AREA.



Figure 1: A successful Borehole drilled in Gazagi Village, Ningi LGA. Community is very happy with the facility.



Figure 2: A well maintained Bore hole in Gardo Village, Ningi LGA. Showing good drainage





Figure 3: A trained female village handpump mechanic repairing the hand pump in Gazagi village, Ningi LGA

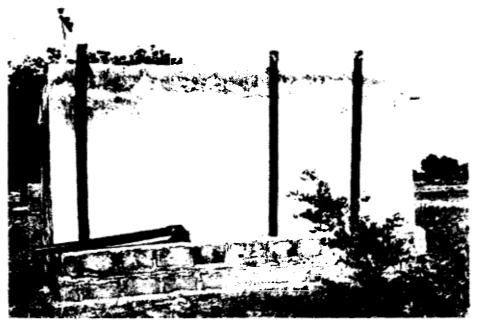


Figure 4: A V.I.P. Latrine built in Gazagi village in Ningi $LG \wedge$





Figure 5: Discussions with the WASU Head, about the sustainability of the Water and Sanitation facilities, Ningi LGA

BORNO STATE - GWOZA LOCAL GOVERNMENT AREA



Figure 6: A highly successful Bore hole in Uraha Village, Gwoza LGA Showing good yield



Figure 7: A happy community in a remote area in Hudugum Village, Gwoza LGA where guinea worm disease has been totally eliminated due to the availability of potable water supply facility producing good discharge



Figure 8: A community in Jaje Village, Gwoza LGA which contributes generously towards the cost of repair and maintenance of the hand pump.

A demonstration of Community ownership of the programme

NASARAWA STATE - NASARAWA LOCAL GOVERNMENT AREA



Figure 9: A successful borehole in Kemu Village, Nasarawa LGA where both the WASCOM and school teachers are very prompt in the repair and maintenance of their hand pump, Headmaster of the School is second from left.



Figure 10: Example of an Un-willing Gumki Village Community, Nasarawa LGA who did not contribute towards the cost of repair of thep ump. Hence, there is no water. A sad situation.





Figure 11: A poorly maintained well in Sabo Gari Village, Nasarawa LGA. The structure is supported by a piece of wood. No contribution towards maintenance. Waiting for the LGA to repair the pump.



Figure 12: A well organised Community in Kemu village, Nasarawa LGA keeping the hand pump locked during off hours to protect it from being damaged by the children

FCT ABUJA - GWAGWALADA LOCAL GOVERNMENT AREA



Figure 13: A bore hole in Ija Dabuta Village, Gwagwalada LGA in the FCT with low yield, People wait long hours to fill their containers. Maintenance culture is very poor.



Figure 14: A V.I.P. Latrine built in Gonugo Village, Gwagwalada LGA of FCT. The structure is fairly well maintained.



BENUE STATE - OBILOCAL GOVERNMENT AREA



Figure 15: An abandoned well in Uwobi village, Obi LGA of Benue State.

People are waiting for the LGA to repair the handpump. The community is reluctant to contribute towards the maintenance and repair costs.



Figure 16: In Oju LGA of Benue State, péople are happy with the bore hole which is giving good discharge.

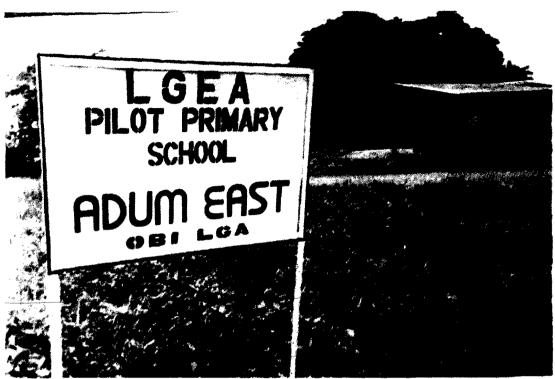


Figure 17: LGEA pilot Primary School, Adum East, Obi LGA where a V.I.P. Latrine was provided.



Figure 18: The abandoned V.I.P. Latrine in Adum East pilot primary school in Obi LGA, in Benue State. The people lack maintenance spirit.



Figure 19: The consultant listening curiously as people complain in Udeji Village, Obi LGA about lack of water supply facilities



Figure 20: Another abandoned V.I.P. Latrine in Abode Village, Obi LGA in Benue State.

1.0 PURPOSE OF EVALUATION

The RUSAFIYA project terminated exactly four years ago, on the 31st March, 1993. The UNICEF has decided to conduct An Independent Evaluation of the defunct RUSAFIYA project in order to know:-

- a) To what extent did this project achieve the set objectives.
- b) How were the states/L.G.As and the communities involved in the project.
- c) What benefits the participating communities got and/or are getting from this project.
- d) What lessons, positive or negative can be learnt from the experience of this project.

Answers to these and facts from observations of communities situation can facilitate in the improvement of our development efforts for sustainable rural water supply and environmental sanitation programme in the country.

The consultant is expected to undertake the evaluation so as to generate data on the defunct RUSAFIYA project that will give information as what worked or did not work. What lessons can be learnt and can be adopted to improve WES programme especially community management efforts.

1.1 EVALUATION TEAM

The Independent Evaluation Team comprised of one Expatriate Consultant Engineer having extensive experience in planning, management and implementation of comprehensive Rural Water Supply and Sanitation Programmes which was gained from four countries viz:- Nigeria (24 years), Sierra Leone (6 months), Canada (1 year) and Pakistan (5 years). During the last 10 years, the expatriate consultant was involved on the supervision of a World Bank funded water related project in Nigeria.

1.2 METHODOLOGY

After the award of the Consultancy Services contract, the consultant met with:-

- a) The Snr. Project Officer and Chief Water and Environmental Sanitation Section.
- b) Chief Water Supply Section.
- c) Project Officer Sanitation, Water and Environmental Sanitation Section for briefing.

Later on, courtesy call was paid on the UNICEF Resident Representative, Lagos.

Work Plan and Research Instrument to carry out the Independent Evaluation of the Defunct RUSAFIYA project was prepared and finalized.

Then the consultant proceeded to Jos to commence field work in the 5 states viz. Bauchi, Borno, Plateau/Nasarawa, F.C.T. Abuja and Benue State. Interactions were made with the representatives at state level and L.G.A. levels. Site visits in participating villages and meetings with community leaders, water and sanitation committee (WASCOM) members, extension workers and observations of infrastructures put in place during the life time of RUSAFIYA project were carried out.

At the end of field visits to Bauchi, Borno, Plateau/Nasarawa states and the F.C.T. Abuja, a Mid Term Review (M.T.R) meeting was held at Lagos with the Snr. Project officer and Chief Water and Environmental Sanitation Section and the Chief Water Supply Section to discuss the progress achieved in the aforesaid states and find solutions to the problems encountered. At the end of the meeting, the consultant proceeded to Abuja to complete his field studies in the remaining part of the F.C.T and Benue state. Final report was prepared and submitted on the 31st July, 1998.

1.3 COMMENTS ON THE REVIEW PROCESS

The time frame allowed for the completion of the Evaluation process was too short. It did not take cognisance of the far furling distances between the L.G.As, and communities in the 5/6 states and creation of two additional L.G.As viz Obi L.G.A. in Benue State and Kwali L.G.A in the F.C.T Abuja.



The un-precedented fuel scarcity in the country had very seriously affected the smooth conduct of the exercise. Exhorbitantly high transportation cost had to be paid to reach the remotest places in the Northern part of Nigeria where RUSAFIYA project is cited.

The estimated budget for the payment of consultancy fee, transportation and research assistance was also grossly inadequate as it was not at par with the current situation in the country.

Un-anticipated and most unfortunate logistical constraints viz:- the sudden deaths of the former Head of State of Nigeria and Chief M.K.O. Abiola further slowed down the evaluation process.

Death of the state coordinator in Nasawara state and non appointment of his successor made it very difficult to collect relevant information at state level.

Dissolution of WASUs at some L.G.As. and non availability of WASU Heads also made the evaluation job very difficult.

Non availability of project documents and other relevant reports at Lagos and Jos offices was another serious set back. However, some assistance was received from an N.G.O., ICOWASS at Jos and the current UNDP boss at Jos who provided some documents/ data since both of them had at one time served the defunct RUSAFTYA project. Thus the consultant had to make extra hard efforts to get in touch with the relevant reports and documents and also to locate the concerned persons since most of them had left their former places of work and new places were not known.

1. BACKGROUND

In Nigeria out of an estimated total population of more than 88 million (1991) provisional census return) about halflive in small rural communities of less than 5,000. It is estimated that less than 20 percent of this rural population of more than 40 million have access to a reliable and safe water supply. An even smaller percentage have access to safe sanitation. The collection of water from almost all the traditional supplies of water involves considerable time and effort; in addition many sources are not perennial and are often polluted. Where water services have been provided for rural communities, inappropriate technologies have often been introduced with little or no community involvement. The high cost of maintenance of these systems, coupled with lack of a feeling of ownership for the water points by the communities served, the absence of cost sharing and a worsening economic situation, has made it difficult to sustain many of these facilities.

In November, 1985 the Federal Ministry of Health (FMOH) requested general assistance from UNDP in the rural water and sanitation sector. At a subsequent meeting, FMOH specified that assistance should be provided to the Federal Capital Territory (FCT) and the States of Bauchi, Benue, Borno and Plateau. It was agreed that a project would be prepared by the Sanitation Adviser to FMOH who was assigned to UNDP NIR/85/070. The new project was designed to address two key issues that were judged to have constrained the efficient development of the sector:

- institutional responsibility for rural water supply, and
- the processes of effective planning, management and implementation of sustainable rural water supply and sanitation services, including the need to strengthen the involvement of beneficiaries in the sector.

The FCT and the four States of Bauchi, Benue, Borno and Plateau/Nasarawa were visited for a rapid assessment of their needs and resources for implementing RUWATSAN projects. This rapid assessment was followed up with missions by local consultants to FCT, Benue and Plateau/Nasarawa and by a project formulation mission by expatriate consultants. These missions found the following constraints affecting the success of the WATSAN programme:

- lack of sufficient data for planning;
- insufficient numbers of well trained technical personnel to undertake planning and implementation;
- inadequate demarcation of responsibilities for project activities with concentration on the provision of water supplies and little attention paid to community mobilisation and sanitation;
- problems in securing foreign exchange to procure materials, equipment and spare parts.

The project was designed to address these constraints.

Preparatory work also included a pre-implementation planning survey carried out in each participating state and funded by the Netherlands Consultant Trust Fund administered by the World Bank.

One of the outputs of the surveys were draft formats of the Memorandum of Understanding which was eventually agreed between each State Government and UNDP. These documents confirm the obligations of both parties. In particular, each memorandum confirmed on one side the schedule of payments and contributions in kind to be made by the state to the project, and on the other the equipment and services to be provided by UNDP.

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2. STRATEGY

It was planned that the Project would use a participatory approach to develop a replicable model and a sustainable organisational/institutional arrangement for planning and implementing integrated projects for water supply, sanitation and hygiene education. The process it was intended to follow was to start with the best available approach and institutional arrangement and on the basis of "learning by doing" test and continually modify the methods in the light of experience. The objective being to end up with an approach which is socio-culturally appropriate, technically feasible and financially affordable. The key elements of the initial strategy were as follows:

- LGA-based institutional structures (LGA RUSAFIYA Units) with linkages to community and state levels for implementation of rural water resupply and sanitation;
- 2) Community-based participatory approach for planning, installation, operation and maintenance;
- 3) Development of community capacity for self-help latrine construction;
- 4) Integrated approach to the planning and delivery of water, sanitation and hygiene education;
- 5) Cost recovery and community/household ownership of water supply and sanitation facilities;
- 6) Intensified involvement of women;
- 7) Affordability, reliability, and sustainability of technologies; and
- 8) Human resources development through training at State, LGA and community levels.

3. INVOLVEMENTOFWOMEN

Special emphasis was placed on the involvement of women. A "woman in integrated development" (WID) adviser was appointed to the project team. The adviser was chosen in consultation with PROWWESS-Africa and the Division of women in Development at the World Bank. Preference was given to the appointment of a woman to the key post of Training Adviser. Together, these staff have accounted for a total of 54 staff months. In addition, the collaboration which has been established with PROWWESS-Africa was continued throughout the life of the project.

4. COST OF RECOVERY/COST SHARING

Initially, the project thought to promote partial cost recovery as the cornerstone of community and individual ownership. At an early workshop involving LGA, State and project personnel the purchase of the hand pump at a subsidised price was identified as an ideal method for the promotion of this strategy. During the first Tripartite review, however, both UNDP and FMOH objected to the purchase of the hand pumps and the cost recovery concept was replaced by one of "cost sharing"

The minimum goal in cost sharing has henceforth been community contributions to the cost of operation and maintenance. In this, as in the other elements of the project, a participatory methodology has been used in an attempt to identify sustainable and replicable approaches.

5. PROJECTDOCUMENT

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 Memorandum 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.

6. PROJECTOBJECTIVES

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.
- 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 objectives 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.
- Improvement of personal and environmental hygiene in participating communities.



7. 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 implementational 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 organising and developing the capacity to plan, manage, sustain, and maintain community development initiatives.
- Communities, families, and school children also benefit from health education through the CHICS programme in schools.
- 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 staffwill receive training.
- Relief from burden of assistance to communities for the maintenance of water supply facilities.

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.
- Reduction in the demand for assistance to communities for assistance in maintaining 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 can 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 mobilising community resources.
- Experience in community mobilisation which can be replicated to develop community level self-sufficiency and mobilisation
 of community level self-sufficiency and mobilisation 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.
- Together with the Bauchi Handpump Project, the RUSAFIYA Project will benefit manufacturers of handpumps.

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.

8. STRATEGIES

The strategy employed is first of all to provide a knowledge base and organisational assistance to communities, together with technical assistance to carry out construction and training. It helps to build confidence, skills, and 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:



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- 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 organisational, 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 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).
- Mobilisation 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.
- Decentralised solution to rural development problems where the development components are geared to long term, inward looking, self renewing cycles based on organisation 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.
- Development of human resources through training.

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 authorisation in June, 1988, allowing start-up in July of that year.

The time frame was extended to September, 1991 in Revision "D" of the Project Document. Later on, a critical review of the progress achieved was done and it was discovered that the project had failed to achieve full targets. Hence, it was agreed in the Tripartite Review meeting held in January, 1992 to extend the project to June, 1992 in all states except in Benue to end in March, 1993.

10. ACHIEVEMENTOF PROJECTOBJECTIVES

a) Development Objective:

The development objective of the RUSAFIYA Project is to expand and improve the delivery of water supply and sanitation services to rural communities in Nigeria:

This objective has been partially achieved since the RUSAFIYA Project has failed to achieve the planned or revised targets. (Refer table showing progress achieved at the end of 31st March, 1993 when Project came to an end).

b) Immediate Objectives

To 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:

This objective was partially achieved. The objective was based on the government policy of decentralisation which assumed that the LGAs would be responsive enough in the roles assigned to them in the sector. At the LGA level water and sanitation units/divisions (WASUs/WASDs) were established in all five project LGAs which provided support to communities in their area in the planning and implementation of project activities. Much of this support has been

directed through Water and Sanitation Committees (WASCOMs) which were formed in the communities. These committees formed the main basis for training and organisation. Furthermore, through them the communities were encouraged both to take the initiative in the solution of their water and sanitation problems and to emphasise the participation of women in both committee work and handpump maintenance.



ii) To assist the Federal Capital Territory, Bauchi, Benue, Borno and Plateau States to improve their planning, management and logistical for rural water supply and sanitation and, in the process, achieve project targets of 540 water points and 1600 demonstration VIP latrines in five local government areas (LGAs).

The single individual who worked as a coordinator was in some states based within and implementing agency that had several other interests and where changes in leadership often occurred. Thus their effectiveness was much dependent on individual ability, personality and motivation. Once emphasis was placed on the construction of physical facilities the inability of the states to fulfil their planned management and supervisory role became apparent and in practice they effectively abrogated their supervisory role to executing agency personnel. Those state staff who remained in close support and contact with field activities did, however gain valuable experience and would be better placed to take independent management responsibility in the future. The lessons learned from these experiences will, in the future, help in more clearly defining the institutional and manpower requirements at this level.

During the execution of the programme, it was noted that the independent initiatives of Borno State Coordinator in the use of a small rig from BOSADP which produced ten (10) shallow bore-holes was commendable. This has not only increased the number of water points in the State, but had also shown that personal commitment, initiative and drive can bring about the ability of state personnel to handle similar projects on their own with little external support.

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

This objective was fully achieved. In fact, more people were trained at all levels than indicated in this objective. A total of ,502 people were trained including 3,226 at community level, 215 at LGA-level and 61 at state level.

iv) To promote and establish an improved policy on ownership and cost recovery for community water supplies and sanitation:

Cost recovery was not clearly defined and quantified in the project document. In the course of the project, the concept of cost recovery was revised to cost-sharing. In the light of this change, the objective has been fully achieved. It is perhaps unfortunate that an initial proposal for communities to buy their handpumps was rejected. The executing agency believes that this would not only have enhanced ownership but would have clearly promoted investment cost sharing. In the future, however, the communities will have to bear the full cost of maintenance and replacement of their facilities.

The establishment of the principle of cost sharing which has the enthusiastic support of most communities is a cornerstone in the achievement of the development objective.

v) To improve personal and environmental hygiene in the project communities.

The communities which had interacted with the project have a heightened awareness of health issues and some improvement in general environmental cleanliness has been noted.

PROPOSED TARGETS AS PER ORIGINAL PROJECT DOCUMENT

| | PH | PHYSICAL FACILITIES | | | **TRAINING | | |
|--------------------|------|---------------------|------|-------|------------|--------|--|
| STATE/LGA | VIPL | HDW | *BHS | Comms | LGAs | States | |
| Bauchi (Ningi) | 400 | 60 | 60 | 125 | 40 | 10 | |
| Benue (Oju) | 300 | 25 | 75 | 125 | 40 | 10 | |
| Borno (Gwoza) | 300 | 30 | 70 | 125 | 40 | 10 | |
| FCT (Gwagwalada) | 300 | 25 | 75 | 125 | 40 | 10 | |
| Plateau (Nasarawa) | 300 | 25 | 75 | 125 | 40 | 10 | |
| Total to date | 1600 | 165 | 375 | 625 | 200 | 50 | |

- * For Benue, Plateau and FCT these figures include respectively 30, 30 and 45 hand drilled boreholes.
- ** No state by state breakdown was given in the original plan.



PROPOSED TARGETS AS PER 1992 REVISED PROJECT DOCUMENT

| PHYSICAL FACILITIES | | | | | | |
|---------------------|------|-----|------|-------|------|--------|
| **TRAINING | | | | | | |
| STATE/LGA | VIPL | HDW | *BHS | Comms | LGAs | States |
| Bauchi (Ningi) | 250 | 22 | 80 | 125 | 40 | 10 |
| Benue (Oju) | - | - | 125 | 40 | 10 | 10 |
| Borno (Gwoza) | 144 | 12 | 53 | 125 | 40 | 10 |
| FCT (Gwagwalada) | 195 | 15 | 40 | 125 | 40 | 10 |
| Plateau (Nasarawa) | 235 | 25 | 31 | 125 | 40 | 10 |
| Total to date | 824 | 74 | 208 | 625 | 200 | 50 |

^{**} No breakdown by states was given in the revision.

PROJECT OUTPUT ACHIEVED BY MARCH 1993

| STATE/LGC | PHYSICAL FACILITIES | | | | | TRAINING | | | | |
|------------------|---------------------|-----|-----|-------|-----|----------|------|------|-----|--------|
| _ | VIPL | HDW | BHs | H/PUI | MPS | COMM | ſS | LGAs | | States |
| | | | | *I | N/I | F | М | F | М | |
| Bauchi (Ningi) | 123 | 14 | 80 | 45 | 49 | 197 | 101 | 5 | 35 | 17 |
| Benue (Oju) | 38 | 5 | 5 | 4 | 1 | 226 | 6 | 4 | 41 | 8 |
| Borno (Gwoza) | 46 | 8 | 59 | 42 | 25 | 481 | 630 | 7 | 26 | 8 |
| FCT (Gwagwalada) | 110 | 10 | 44 | 54 | - | 187 | 661 | 5 | 43 | 10 |
| Plateau | 120 | 20 | 32 | 41 | 11 | 150 | 482 | 4 | 43 | 18 |
| (Nasarawa) | | | | | | | 276 | | | |
| Total | 437 | 57 | 220 | 86 | 86 | 1241 | 3065 | 25 | 188 | 61 |

PROJECT FUNDING UP TO THE END OF MARCH, 1993

| Agency | Expected | Contributions | Realized Contributions | |
|--------------------|-----------|---------------|------------------------|-----------|
| | US\$ | NGN | US\$ | NGN |
| UNDPUSS | 3,130,727 | | 3,130,727 | |
| Netherlands | 797,244 | | 797,244 | |
| FMOHHS | | 1,000,000 | | 890,000 |
| Bauchi Government | | 2,102,573 | | 2,007,224 |
| Benue Government | | 2,371,570 | | 647,730 |
| Borno Government | | 1,709,700 | | 1,434,560 |
| FCT Government | | 2,236,885 | | 1,838,950 |
| Plateau Government | | 1,007,867 | | 938,290 |
| Total | 3,927,971 | 10,428,595 | 3,927,971 | 7,756,754 |



11. INVOLVEMENT OF STATES/LGAS AND COMMUNITIES

The RUSAFIYA project was built on the premise that communities could take effective action and mobilise their own resources to meet their own priority needs and improve the quality of their own lives on a sustainable basis. The strategy is first of all to provide a knowledge base and organisational assistance to communities, together with technical assistance to carry out construction and training. It helps to build confidence, skills and a sense of ownership and self-sufficiency at community level. It gives special emphasis on the role and direct involvement of women in all aspect of planning and implementation. The strategy employed helps to build up the institutional capacity at LGA, State and Federal levels to sustain and replicate support to communities. More specifically the strategy includes:-

- 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, L.G.A. and community levels.
- Participatory approach to development as well as training at state, L.G.A. and community levels.
- Participatory approach to develop a sustainable organisational, 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 and emphasis on community ownership of relevant infrastructures, such as water points and V.I.P. latrines.
- Self-reliance.
- Development of human resources through training.

In line with the aforesaid strategy, representatives from Federal Government, State Governments and L.G.As were involved at all stages of the RUSAFIYA project. However, it has been noted that some of the staff arrived late and thus could not participate fully in the development programme. Serious efforts were made to involve women at all stages of the programme including decision making process, in the organisation of villages, and in preparation for future responsibilities in the water and sanitation sector. Even, some women were trained for the repairs and maintenance of the hand pumps so that they could be able to carry out the necessary repairs as and when the need arises. In two L.G.As viz: Ningi and Gwoza, the current WASU Heads are women, whose performance is commendable.

12. BENEFITS DERIVED FROM THE RUSAFIYA PROJECT

Major benefits derived from the RUSAFIYA project include:-

- a) Increased awareness of water, sanitation and health relationships and of guinea worm control and eradication.
- b) Improved behaviours in water use and environmental hygiene.
- c) Management of and active participation in construction, operation and maintenance of sustainable water and sanitation facilities.
- d) Local and State Government staff were trained to make improved institutional arrangement for addressing water and sanitation needs.
- e) Community representative groups including women were organised at community level, motivated and trained to manage their water and sanitation services.
- f) Seminars, workshops and on-the-job training programmes were held for State, LGA and Community personnel.
- g) Capacity built up was achieved at community ,LGA and State levels to undertake sustainable projects in water and sanitation.
- h) Idea of community ownership of the water and sanitation facilities was introduced
- i) Communities were enlightened for operation and maintenance of their water and sanitation facilities.
- Guidelines were produced for LGA and community based institutional systems for rural water and sanitation.
- k) Participatory and skills training materials were produced and disseminated.
- Schools children benefited from health education through the CHICS programme.
- m) Small local contractors were trained to be able to serve local needs.
- n) Bore-hole drillers were trained to strengthen their sector.
- o) RUSAFIYA approach will help in the replication of programme in other L.G.As and communities.
- p) Participatory approach to develop a replicable model through intimate involvement of communities in all aspects of the water supply and sanitation services development was introduced.



LESSONS LEARNT

The RUSAFIYA project has served as a model to provide excellent learning opportunities at State level, Local Government level and Community level. It has also been able to develop a replicable model through the involvement of communities in all aspects of water supply and sanitation services development programme. Many major lessons have been learnt from the defunct RUSAFIYA project which would serve as a useful guide for the future planning and implementation of similar projects. These are:

- The design of the defunct RUSAFIYA project was too ambitious and unrealistic. The project was too large and widely spread to be adequately managed and the capacities of the Local Government Councils to carry out their functions was grossly over estimated. Hence, the targets set out in the original project document even after revision in January, 1992 for both the institutional progress and physical facility completion were not met. The over-all achieved outputs have remained less than 50%. In future, project design and targets must be discussed and fully agreed upon by all the parties concerned.
- 2) Financial commitments of the Government should be clearly understood and documented. An up-front contribution must be made by the participating states followed by regular and timely payment of their subventions. Since, some State Governments cannot adhere strictly to the payment schedules for their contributions, it would be better if arrangements are made for deduction at source by the Federal Ministry of Finance so as to ensure timely completion of the programme.
- 3) The involvement of a single person from State Government level as a State coordinator is grossly inadequate. In the event of his death, absence or dismissal from service, there is no trained person available to take over the responsibilities of the project. Also, it becomes very difficult rather impossible to collect relevant information about the project at State level. Hence it is strongly recommended that more than one person at least three persons should be trained at state level to take over the responsibilities of the project during execution and after completion for sustainability purposes.
- 4) Selection of the benefitting communities should be on demand basis with firm commitments from those communities to carry out necessary maintenance and repairs of the infrastructures from their own contributions and assume full ownership of the facilities provided to them. In certain cases, it has been discovered that the facilities have been abandoned as the communities are expecting the Government to come and carry out necessary repairs for them since it was a Government project.
- 5) Since, women are the primary and main users of the water, their involvement at all levels of the programme viziplanning, implementation, operation and maintenance should be made mandatory. In Ningi, Nasarawa and Gwoza L.G.As, some women had been trained for the maintenance and repairs of hand pumps but in Gwagwalada and Oju/Obi L.G.As, no female trained artisans were available.
- In order to achieve good yield from the wells, geophysical surveys must be conducted at various sites before a final decision is made for the location of a well. Local contractors should also be trained to conduct geophysical surveys. All the data collected by geophysical surveys and drilling must be stored in a data base for use by any other Government agency. The selection of sites for the drilling of bore holes in Oju and Obi L.G.As was not correctly done as the yield from these bore holes is too low.
- 7) Drilling of bore holes through contractors is faster but it must be properly supervised so as to ensure that the drilling has been done upto the required depths and expected yield is achieved. Private sector involvement should be encouraged where ever possible for better performance.
- 8) Traders should be encouraged to keep a stock of the hand pump spare parts readily available for the interested communities.
- 9) Provision must invariably be made for the payment of allowances and other incentives to the seconded staff so as to motivate them to be more responsible and interested in the job. Lazy and un-interested staff should be immediately replaced by the willing worker



- Regular reporting of progress, needs, constraints and proposed activities between the project and the UNDP should be strengthened so as to keep the funding agency fully abreast with the programme and also to enable them to find timely solutions to the problems. Field visits to assess the progress achieved must be made regularly and systematically.
- 11) The roles of funding agency, implementing agency and executing agency must be clearly defined so that all involved are fully aware of their responsibilities.
- 12) The training programme was successful but after completion of the project, most of the trained personal have migrated to other places. Hence, in future for sustainability purposes, more emphasis should be placed on the training of female workers particularly in the areas of hand pump repairs and health education. Women should also be involved in decision making which would ensure greater degree of their commitment towards the success of the programme.
- 13) The take off of the V.I.P. latrines programme is very new. It can succeed only if the health benefits are fully understood by the communities. No new construction of the V.I.P. latrines or water points has been done by the communities since March, 1993 when RUSAFIYA programme came to an end.
- 14) The concepts of cost sharing, community ownership and management should be fully discussed and its benefits explained to the communities. Their acceptance to these concepts should be documented.
- 15) Communities should be educated, convinced and encouraged to buy their own hand pumps.
- 16) The low out put of the programme can be attributed partly to the delay in the signing of the memorandum of understanding (M.O.U.) By the State Governments and delays in the payment of G.C.C.C. and the problems of using untrained contractors. Most of the local contractors performed lower than expected. Their capacities in the areas of good practice for construction and contract management needs to bestrengthened.

FINDINGS AND RECOMMENDATIONS

On the basis of discussions held with the representatives from 5 participating states, Chairmen, Vice Chairmen, Secretaries and Heads of Works Departments from 7 Local Government Areas, WASCOM members from 20 selected communities, interviews conducted with the teachers and students from schools where CHICS programme was established followed by field visits performed for verification of the infrastructures put in place by the defunct RUSAFIYA project, following recommendations are made:-

1.0 CONSTRUCTION OF WATER POINTS:

The programme of drilling bore holes and digging of hand dug wells in Gwoza L.G.A of Borno State, Ningi L.G.A. of Bauchi state, Nasarawa L.G.A. of Nasarawa State, Gwagwalada and Kwali L.G.As in the F.C.T. has been partially successful since full targets have not ben achieved in these areas. However, maintenance culture in Borno, Bauchi and Nasarawa States is fairly good. The programme is being sustained very well with funding from the Local Governments and contributions by the benefitting communities. But the Gwagwalada and Kwali Local Government Areas in the F.C.T. are not very serious about the sustainability of the programme. As a result WASU and WASCOM in these L.G.As have totally disappeared. The bore holes where the hand pumps are faulty have not been repaired for a very long period of time and are left abandoned. The communities are nor forth coming to contribute and buy the spare parts to repair the hand pumps. Probably, they are expecting the Government to come and carry out necessary repairs for them.

Therefore, it is strongly recommended that for future development programmes, an undertaking should be obtained from the L.G.As for the timely repairs and maintenance of the facilities. The concept of facilities belonging to the government should be totally forgotten instead, idea of community ownership of the facilities should be inculcated, fully understood and strongly practiced.

In Oju and Obi L.G.As of Benue state only 5 bore holes were drilled out of the planned target of 125 bore holes. Out of the five bore holes drilled only one bore hole was fitted with hand pump. Remaining four bore holes remained without hand pumps until 1998 when the Petroleum Trust Fund (P.T.F.) Came to their aid and installed hand pumps on these bore holes. In future, efforts should b made to complete the infrastructures fully and properly handed over to the



benefitting communities.

People should be educated on how to use and maintain those facilities.

The project design had some flaws right from the very beginning by planning the installation of 125 bore holes with hand pumps in Benue State without properly ascertaining the aquifer characteristics in the Oju and Obi L.G.As of the State. Due to incorrect planning only five bore holes could be drilled against the planned target of 125 bore holes and their yield was also very low. Later on, proposal was made to replace the bore holes drilling programme with Oju pipe line water supply scheme. This proposal was accepted but unfortunately, nothing was done to implement it despite the fact that the completion date was extended for 2 years i.e. upto the end of March, 1993. Some where fault lies with either the non-payment or very late payment of G.C.C.C. by the Benue State Government which resulted.

into non release of funds by the funding agencies as well. So, the benefitting communities are still seriously suffering and the incidence of guinea worm and other water born disease are very rampant. These communities may be taken care of in some future development programmes.

It is therefore, strongly recommended that the programme of drilling bore holes and construction of hand dug wells should be replicated in other L.G.As as it has tremendously reduced the guinea worm and other water born diseases and resulted in the improvement of health and living standard of the people.

However, the people must be given more training about the benefits of potable water supply facilities and the need to maintain those facilities from contributions by the benefitting communities.

2.0 CONSTRUCTION OF V.I.P. LATRINES:

The concept of V.I.P. latrines is very new to the communities. The over all progress achieved during the project life time for the construction of V.I.P. latrines remained very low i.e less than 50%. Neither the communities nor the schools where the V.I.P. latrines were constructed are serious to maintain those facilities.

At some places these have been mis-used while at other places these are totally abandoned. Hence, before the V.I.P. latrines are constructed in a community, people should be educated about their benefits and how to use them so as to motivate the rural dwellers to change their traditional habits and adopt the improved hygienic standards and assume full responsibilities for their maintenance.

Replication of V.I.P. latrines to other communities though it is very essential must be undertaken with caution. Only those communities who are interested in the programme and are really serious to maintain the facilities should be selected. They should also be made to contribute towards the cost of construction of the V.I.P. latrines.

3.0 INTRODUCTION OF COMMUNITY HEALTH INVOLVING CHILDREN IN SCHOOLS (CHICS) PROGRAMME:

Like the V.I.P. latrines, (CHICS) programme is also very new but very encouraging as well. Although, it has ceased to exist in many schools due to one reason or the other, it can be revived and vigorously pursued as it would serve as a grassroot awareness programme for healthy living in the communities where only limited medical facilities are available.

4.0 FUTURE DESIGN OF THE PROJECTS:

Future design for projects in water and sanitation sub-sector should take into consideration the lessons learned to ensure greater participation of State and Local Governments and that the State and Local Governments participation in the projects be demanded driven.

5.0 FUNDING:

It has been observed that some of the major causes for the failure of the RUSAFIYA project to achieve full targets were:-

- a) Delays in the signing of the memorandum of understanding (M.O.U.) And
- b) Late payment of G.C.C.C by the State Governments.

It is therefore, very strongly recommended that in future firm commitments may be obtained from the State Governments in respect of timely signing of the Memorandum of Understanding and regular release of G.C.C.C. so as to complete the project in time.



In order to avoid embarrassment during implementation of the programme, it is advisable that deduction of source may be made by the Federal Ministry of Finance for which the State Government would issue necessary authority to the Federal Ministry of Finance to do so.

ACTUAL GOVERNMENT FUNDING AFTER 36 MONTHS FOLLOW-UP FROM EXECUTING, IMPLEMENTING AND FUNDING AGENCY

| Agency | Amount to be contributed (Naira) | Paid to date (Naira) | Balance due (Naira) |
|---------|----------------------------------|-------------------------|------------------------|
| FMOH | 1,000,000.00 | 890,000.00 | 110,000.00 |
| Bauchi | 2,102,573.00 | 2,007,224.00 | 95,349.00 |
| Benue | 2,371,570.00 | 647,730.00 | 1,723,840.00 |
| Borno | 1,709,700.00 | 1,434,560.00 | 275,140.00 |
| Plateau | 1,007,867.00 | 938,290.00 | 69,577.00 |
| FCT | 2,236,885.00 | 1,838,950.00 | 397,935.00 |
| TOTAL | 10,428,595.00 | 7,756,754.00 | 2,370,841.00 |

(B) TRAINING Number in each category trained

| LGA | Artisans | VHEs | WASCOM Members | Pump Mech. | State Pers. | LGA Pers. | Total |
|-------|----------|------|-------------------|---------------|----------------|--------------|-------|
| NAS. | 15 | 43 | 531 | 10 | 18 | 47 | 664 |
| NINGI | 18 | 163 | 1050 | 12 | 17 | 40 | 1179 |
| GWA. | 8 | 102 | 567 | 10 | 10 | 48 | 701 |
| GWO. | 10 | 76 | 1066 | 17 | 8 | 33 | 1144 |
| OJU | 14 | 103 | 45 | 8 | 8 | 45 | 138 |
| Total | 65 | 487 | 3259 | 57 | 61 | 213 | 3826 |

NB: The total includes seven trained FMOH &S personnel.

A) LIST OF STAFF EMPLOYED THROUGH OUT THE PERIOD OF THE PROJECT

| S/NO | NAME OF STAFF | DEPARTMENT |
|------|------------------------|------------------------------------|
| 1. | Mr. Peter Lochery | Project Coordinator |
| 2. | Mr. David Ede | Water Supply Adviser |
| 3. | Mr. Hassan Kida | Sanitation Adviser |
| 4. | Mrs. Paz Lutz | Training Adviser |
| 5. | Mrs. Comfort Olayiwole | WID/Project Coordinator |
| 6. | Mr. Bitrus Pam | Community Development Adviser |
| 7. | Mr Habila Othniel | Hydro-geologist |
| 8. | Mr. Yakubu Mohammed | Hygiene Education/Training Adviser |
| 9. | Mr. Adolphus Omodu | Mechanical Engineer |
| 10. | Mr. Billy Oboigbe | Accounts Clerk |
| 11. | Mr. Ali Dawood | Accounts Clerk |
| 12. | Mr. Ben Akpera | Accounts Clerk/Admin. Assistant |

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| 13. | Mr. Olujimi Adeyi | Accounts Clerk/Admin. Assistant |
|-----|------------------------|---------------------------------|
| 14. | Mr. Raphael Himikaiye | Driver |
| 15. | Miss Ruth Bankole | Junior Telephonist |
| 16. | Mr. Okizie Bartholomew | Driver |
| 17. | Mr. Emeka Okwuike | Driver |
| 18. | Mr. Dung Chung | Driver |
| 19. | Mr. Garba Usman | Accounts Clerk |
| 20. | Mr. Chika Chime | Administrative Assistant |
| 21. | Mr. Raphael O. Amazu | Secretary |
| 22. | Ms. Abimbola Idowu | Accounts Clerk |
| 23. | Mr. Sunday Micah | Accounts Clerk |
| | | |

(B) LIST OF RUSAFIYA STAFF IN EACH L.G.A.

| I. | Ningi L.G.A. | | |
|------|-------------------|---------------|-------------------|
| S/NO | NAME OF STAFF | DEPARTMENT | DESIGNATION |
| 1. | Alhassan Jumba | | State Coordinator |
| 2. | Ibrahim Aliyu | | Head of Unit |
| 3. | Kallamu Garba | | Technical Officer |
| 4. | Salamatu Mohammed | Med. & Health | Extension Agent |
| 5. | Sule Mamuda | Med. & Health | Extension Agent |
| 6. | Adamu Hussaini | Med. & Health | Extension Agent |
| 7. | Rufas Bako | Med. & Health | Extension Agent |
| 8. | Adamu Usman | Med. & Health | Extension Agent |
| 9. | Mikah Sani | Comm. Dev. | Extension Agent |
| 10. | Inuwa Really | Comm. Dev. | Extension Agent |
| 11. | Mohammed Bello | Comm. Dev. | Extension Agent |
| 12. | Briskilla Musa | Comm. Dev. | Extension Agent |
| 13. | Binta Sabo | Comm. Dev. | Extension Agent |
| 14. | Ibrahim Aggery | | Clerk |
| 15. | Mohammed Sale | | Driver |
| 16. | Audu Gero | | Driver |
| 17. | Talle Mohammed | | Driver |

II. OJU L.G.A.

| S/NO | NAME OF STAFF | DEPARTMENT | DESIGNATION |
|------|-----------------|----------------|-------------------|
| 1. | S. I. Mande | Min. of Health | State Coordinator |
| 2. | Jeremiah Da'agu | DFRRI | Hydro-geologist |
| 3. | Job O. Ominiyi | Health Dept. | Head of Unit |
| 4. | Godwin Odike | Works Dept. | Technical Officer |
| 5. | Andrew Onah | Health Dept. | Extension Agent |
| 6. | Andrew Ajigah | Health Dept. | Extension Agent |
| 7. | Jairus Idah | Health Dept. | Extension Agent |
| 8. | Cletus Akira | Health Dept. | Extension Agent |



| 9. | Victoria Okwe | Health Dept. | Extension Agent |
|-----|----------------|--------------|-----------------|
| 10. | Omari Ehile | Health Dept. | Extension Agent |
| 11. | Peter Ogbogo | Health Dept. | Extension Agent |
| 12. | Comfort Eriba | Health Dept. | Extension Agent |
| 13. | Abigail Ochong | Health Dept. | Extension Agent |
| 14. | Mathias Isegbe | Health Dept. | Extension Agent |
| 15. | Bonny Obiebe | Health Dept. | Typist |
| 16. | Paul Onah | | Driver |
| 17. | Linus Edoh | | Driver |
| 18. | Paul Egbe | | Driver |
| | | | |

III. GWOZA L.G.A.

| S/NO | NAME OF STAFF | DEPARTMENT | DESIGNATION |
|------|------------------|-------------------|--------------------|
| 1. | Emmanuel Gadzama | DFRRI | State Coordinator |
| 2. | Adam Baba | Works Dept. | Head of Division |
| 3. | Mohammed Bakari | Works Dept. | Technical Officer |
| 4. | Amina Mohammed | Med. & Health | Health Facilitator |
| 5. | Ali Goni | Education Dept. | Extension Agent |
| 6. | Isa Nuhu | Education Dept. | Extension Agent |
| 7. | Fadimatu Kala | Education Dept. | Extension Agent |
| 8. | Fatsuma Yahaya | Education Dept. | Extension Agent |
| 9. | Fadimatu Yakubu | Med. & Health | Extension Agent |
| 10. | Kaltume Dauda | Med. & Health | Extension Agent |
| 11. | Abdulhamid Moh'd | Med. & Health | Extension Agent |
| 12. | Audu Timta | Admin. Dept. | Extension Agent |
| 13. | Aishatu Adamu | Admin. Dept. | Extension Agent |
| 14. | Safiya Wuliya | Admin. Dept. | Extension Agent |
| 15. | Idrisa Jawa | Works Dept. | Extension Agent |
| 16. | Shettima Musa | Comm. Dept. | Extension Agent |
| 17. | Yunusa Babale | Works Dept. | Driver |
| 18. | Usman Buba | Admin. Dept. | Driver |
| 19. | Ishaya Kachala | M.O. W. Resources | Driver |

VIEWS OF:-BAUCHI STATE GOVERNMENT

- NINGI L.G.A, AND
- FOUR COMMUNITIES



QUESTIONNAIRE FOR THE EVALUATION OF RUSAFIYA PROJECT

PART I STATELEVELOFFICIALS

1. Name of State:

Bauchi

2. Name of Respondent:

Alhassan Jumba (State Coordinator, now Deputy Director Rural Water

Supply, Basard, Bauchi State)

| S/N | Question | Response |
|-----|---|--|
| 1. | What was the main goal of RUSAFIYA towards ownership of facility. | To introduce participatory approachin the state? |
| 2. | Was the project goal and objectives achieved? | Fairly achieved. |
| 3. | If YES, how? | A lot of benefitting communities are still maintaining the facilities. |
| 4. | If NO, why? | Project targets up till now have not been fully accomplished. |
| 5. | Did RUSAFIYA introduce any concept that is different from other projects? | Yes. |
| 6. | Please list if you know any. | Participatory approach CHICS programme Posters, flexi etc. |
| 7. | Are there quantifiable reduction in cases | Yes, there is tremendous reduction in |
| | of Guinea worm and/or diarrhoea diseases | cases of water borne diseases. |
| | in the areas where the project took place? | |
| 8. | Does the LGA Water and Sanitation Unit | Yes |
| | (WASU) still exist? | |
| 9. | Do they have the resources to continue | To fully cover LGAs, there is need to have 1 |
| | work in the LGAs? | additional 4wheel drive vehicle and 4 motorcycles. |
| 10. | Has the state established similar WASU | No. |
| | structures in othe LGAs? | |
| 11. | Is the state aware of the number of water | Yes, 45 WPs were installed. |
| | points that were installed during the project phase | |
| | of RUSAFIYA? | |
| 12. | How many household latrines and school | 123 |
| | latrines were built during the project? | |
| 13. | How many people were trained at the State Level | 6 |
| | for implementation and management of the project? | |
| 14. | One of the main objectives of the project was to | Yes, through contact with LGA |
| | establish community ownership of Water and | WASU |
| | Sanitation facilities, did this happen? How is the | |
| | state monitoring its progress/operation? | |
| 15. | Are these people rendering any useful assistance to other | Yes |
| | similar State programmes? | |
| 16. | Were there any constraints which affected the timely | Yes |
| | implementation and completion of the project? | |
| 17. | What are the general lessons your state | Lessons learnt include: |
| | learnt from the RUSAFIYA project? | Improvement of living standards of rural dwellers. |
| | | Increased productivity. |
| | | State, LG, Community training given Extension services rendered. |
| 18. | What do you think could have been | Better funding and logistics, more government involvement for |
| | done to improve the project? | sustainability. There is need to procure drill rigs and geophysical |
| | | survey equipments for the state government to easily replicate |
| | | the programme. |
| 19. | Would you reccomend a similar project | Yes |
| | in other Local Governments? | |
| 20. | What advice would you give towards | Better management and drawing a good Memorandum of |
| | implementing similar projects? | Understanding |



PART I LOCAL GOVERNMENT LEVEL (LGA)

1. Name of local government area: Ningi, Bauchi State

2. Name of Respondent:

| S/N | Question | Response |
|-----|---|--|
| 1. | What was the main goal and objectives | To mobilise communities towards |
| ļ | of the RUSAFIYA project in your LGA? | self-reliance and sanitation. |
| 2. | Were these achieved? | Yes |
| 3. | IfYES,how? | Communities have put the ideas into practice. |
| 4 | IfNO, why? | Nil |
| 5, | Does the LGA Water and Sanitation | Yes |
| | Unit(WASU) still exist? | |
| 6. | Does the unit have resources to continue | Yes, but inadequate |
| | the work? | |
| 7. | How many communities were involved in | 78 |
| | the RUSAFIYA project? | |
| 8. | How many water points were installed | 45 |
| · | during the RUSAFIYA project? | |
| 9. | How many household latrines and school | 108 |
| | latrines were constructed during the | |
| | RUSAFIYA project? | |
| 10. | Are the water facilities functioning? | Yes |
| 11. | Were communities trained to carry out | Yes |
| ! | repairs of hand pumps? | |
| 12. | Is the community maintenance funds | Yes |
| | properly maintained? | · |
| 13. | Were women involved in all areas of | Some are well involved but some refused. |
| | planning and implementation of the | , |
| | "RUSAFIYA project at the local level? | |
| 14. | How many people were trained at the Local | 15 at Local government level 936 at Community level. |
| | government(LG) level and at Community level? | |
| 15. | How many community water and sanitation | 78 (Each WASCOM comprises of 12 members) |
| | committees (WASCOM) were established during | |
| | the project? | |
| 16 | Do these committees exists and are they rendering | Yes |
| | any useful services in the operation and maintenance | |
| | of the facilities? | |
| 17. | Was the Community Health Involving Children | No |
| | in School (CHICS) successful in your LGA? | |
| 18. | How many schools were involved in the CHICS project? | 6 |
| 19. | Is CHICS still existing in some schools? | Yes |
| 20. | Has CHICS been introduced in other schools? | No |
| 21. | How is the project being sustained? | Local government assistance |
| 22. | Were the training materials and manuals produced and | Yes, but not sufficient |
| | circulated for hand dug wells, VIP latrines and other | |
| } | aspects of installation, operation and maintenance of | |
| L | water supply and sanitation services to LGA? | |



| S/N | Question | Response |
|-----|---|---|
| 23. | Are these materials and manuals still available and | Yes |
| | are they serving any useful purpose now? | |
| 24. | Were Audio-Visual materials including | Yes, but not sufficient |
| | pocket cards, posters, song messages, | |
| | flip cards and flexi flan figures etc. | |
| | provided for personal and environmental | |
| | hygiene education? | |
| 25. | Are these materials still readily available | No |
| | and do they serve any useful purpose? | , |
| 26. | What constraints if any affected the | Lack of delivery of materials in time |
| | timely completion of the project? | e.g. hand pumps, logistic problems (vehicles etc.), |
| | | management issues and staff motivation(Government) |
| 27. | What are the lessons learnt so far from | Community mobilisation achieved Extension services |
| | the RUSAFIYA project? | improved General improvement of benefitting |
| | | communities. Eradication of water borne diseases. |
| 28. | What do you think could be done to improve | More support from UNDP and Government. |
| | the implementation of the programme? | |
| 29. | What advice would you give in improving | More involvement of people from all levels in the |
| | the implementation of the projects? | planning and implementation. |
| 30 | Do you reccomend the replication of the | Yes |
| | RUSAFIYA project in other LGAs? | |

PART III COMMUNITY LEVEL OFFICIALS

1. Name of Community: Gazagi, Ningi LGA, Bauchi State

2. Name of Respondent: Isyaku Jarmai (Secretary of WASCOM)

| S/N | Question | Response |
|------|---|--|
| 1. | When was RUSAFIYA established in your community? | 1990 |
| 2 | What was the goal of the RUSAFIYA project in your community? | To have a sense of ownership |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | Some five metres away, some 200m, some 1 kilometre. |
| 5. " | Are other water sources available? | Yes, but only used by animals |
| 6. | What is the terrain like to water points? | Tilting towards the west |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 20 litres per minute |
| 8. | What is the approximate population served by the borehole? | 500 people |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Neat They fetch in buckets and store in pots. Free from microorganisms |



| S/N | Question | Response |
|-----|---|------------------------------------|
| 10. | Reliability: Maintenance system | |
| | Trained artisans - How many were trained? | 4 |
| | Willingness to pay for water and how much? | Weekly contribution from each user |
| | What is the frequency of breakdowns? | Once in five years |
| | How long does it take before repairs are effected? | One hour |
| 11. | Is CHICS still existing in all/some schools? | No |
| 12. | If YES to question 11, how many? | Nil |
| 13. | Has CHICS been introduced in other schools since then? | We don't have schools |
| 14. | How is the project being sustained? | Contributions at monthly meetings |
| 15. | Were training materials and manuals produced and circulated | Yes |
| | for hand dug wells, VIP latrines and other aspects of installation, | |
| | operation and maintenance of water supply and sanitation | |
| | services to LGA? | |
| 16. | Are these materials and manuals still available and are they | Yes |
| | serving any useful purpose? | |
| 17. | Were Audio-Visual materials including pocket cards, posters, | Yes |
| | song messages, flip cards and flexi flan figures etc. | |
| | provided for personal and environmental hygiene education? | |
| 18. | Are these materials still readily available and do they serve | No |
| | any useful purpose? | |
| 19. | What constraints if any affected the timely completion of the | None |
| | project? | |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | To be self reliant |
| 21. | What do you think could be done to improve the | Supply of Audio-Visual materials |
| | implementation of the programme? | |
| 22. | Do you reccomend the replication of the RUSAFIYA | Yes |
| | project in other LGA's? | |

PART III COMMUNITY LEVEL OFFICIALS

1. Name of Community: Gardo, Ningi LGA, Bauchi State

2. Name of Respondent: Ya'u (Secretary) School Teacher

| S/N | Question | Response |
|-----|---|--|
| 1. | When was RUSAFIYA established in your community? | 1990 |
| 2. | What was the goal of the RUSAFIYA project in your community? | To have a sense of ownership |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | Some are 100m and others 150m away from water points. |
| 5. | Are other water sources available? | Yes |
| 6. | What is the terrain like to water points? | Tilting towards the south- west |
| 7. | Quantity of water available: What time does it take to fill a container of 25 litres? | 20 litres per minute |
| 8. | What is the approximate population served by the borehole? | 700 people |
| 9. | Water quality: | |
| | Borehole surroundings? | Fair |
| | Modes of transportation and storage? | They fetch in buckets and store in pots and close with covers. |
| | Bacteriological analysis of water sample (If possible) | Free from microorganisms |



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| S/N | Question | Response |
|-----|--|--|
| 10. | Reliability: Maintenance system | |
| | Trained artisans - How many were trained? | 4 |
| | Willingness to pay for water and how much? | Wiling to pay as per estimate |
| | What is the frequency of breakdowns? | Once in five years |
| | How long does it take before repairs are effected? | Two days |
| 11. | Is CHICS still existing in all/some schools? | No |
| 12. | If YES to question 11, how many? | Nil |
| 13. | Has CHICS been introduced in other schools since then? | We don't have schools |
| 14. | How is the project being sustained? | We hold meetings |
| 15. | Were training materials and manuals produced and | Yes |
| | circulated for hand dug wells, VIP latrines and other | |
| | aspects of installation, operation and maintenance | |
| | of water supply and sanitation services to LGA? | |
| 16. | Are these materials and manuals still available and are they | Yes |
| | serving any useful purpose? | |
| 17. | Were Audio-Visual materials including pocket cards, posters, | No |
| | song messages, flip cards and flexi flan figures etc. provided for | |
| | personal and environmental hygiene education? | |
| 18. | Are these materials still readily available and do they serve | No |
| | any useful purpose? | |
| 19. | What constraints if any affected the timely completion of | None |
| | the project? | |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | To be self reliant |
| 21. | What do you think could be done to improve the | Increase of manpower and facilities/spare parts facilities |
| | implementation of the programme? | |
| 22. | Do you reccomend the replication of the RUSAFIYA project | Yes |
| | in other LGAs? | |

1. Name of Community: Rumbu, Ningi LGA, Bauchi State

2. Name of Respondent: Saleh Ladan (Chairman of WASCOM)

| S/N | Question | Response |
|-----|--|------------------------------|
| 1. | When was RUSAFIYA established in your community? | 1991 |
| 2. | What was the goal of the RUSAFIYA project in your community? | To have a sense of ownership |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | Inside the community |
| 5. | Are other water sources available? | None |
| 6. | What is the terrain like to water points? | Flat |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 20 litres per minute |
| 8. | What is the approximate population served by the borehole? | 2500 people |



| S/N | Question | Response |
|-----|--|--|
| 9. | Water quality: | |
| | Borehole surroundings? | Needs improvement |
| | Modes of transportation and storage? | They fetch in buckets. |
| | Bacteriological analysis of water sample (If possible) | Free from microorganisms |
| 10. | Reliability: Maintenance system | |
| | Trained artisans - How many were trained? | 4 |
| | Willingness to pay for water and how much? | Through community farm crops. |
| | What is the frequency of breakdowns? | Once in five years |
| | How long does it take before repairs are effected? | One hour |
| 11. | Is CHICS still existing in all/some schools? | No |
| 12. | If YES to question 11, how many? | Nil |
| 13. | Has CHICS been introduced in other schools since then? | CHICS not introduced |
| 14. | How is the project being sustained? | Meetings held fortnightly |
| 15. | Were training materials and manuals produced and | Yes |
| | circulated for hand dug wells, VIP latrines and other | |
| | aspects of installation, operation and maintenance of water | |
| | supply and sanitation services to LGA? | |
| 16. | Are these materials and manuals still available and are | Yes |
| | they serving any useful purpose? | |
| 17. | Were Audio-Visual materials including pocket cards, | No |
| | posters, song messages, flip cards and flexi flan figures etc. | |
| | provided for personal and environmental hygiene | |
| | education? | |
| 18. | Are these materials still readily available and do they | No |
| | serve any useful purpose? | |
| 19. | What constraints if any affected the timely completion | None |
| | of the project? | |
| 20. | What are the lessons learnt so far from the | To be self reliant |
| | RUSAFIYA project? | |
| 21. | What do you think could be done to improve the | Theres is need for additional pump/ |
| | implementation of the programme? | increase of manpower and facilities (spare |
| | | parts), and there should be monitoring and |
| | | evaluation from UNDP, at least annually |
| 22. | Do you reccomend the replication of the | Yes |
| | RUSAFIYA project in other LGAs? | |

1. Name of Community: Ginduba, Ningi LGA, Bauchi State

2. Name of Respondent: Shuaibu Dandiya (Chairman WASCOM)

| S/N | Question | Response |
|-----|---|-------------------------------|
| 1. | When was RUSAFIYA established in your community? | 1991 |
| 2. | What was the goal of the RUSAFIYA project in your community? | To have a sense of ownership |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | Inside the community |
| 5. | Are other water sources available? | Yes, but only used by animals |



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| S/N | Question | Response |
|-----|--|---|
| 6. | What is the terrain like to water points? | Flat |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 30 litres per minute |
| 8. | What is the approximate population served by the borehole? | 2000 people |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Clean They fetch in buckets and store in plots and use cover to cover it. Free from microorganisms |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | 4 Yes Once in five years One hour |
| 11. | Is CHICS still existing in all/some schools? | No |
| 12. | If YES to question 11, how many? | Nil |
| 13. | Has CHICS been introduced in other schools since then? | We don't have schools, but are working towards one |
| 14. | How is the project being sustained? | Monthly meetings |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects or installation, operation and maintenance of water supply and sanitation services to LGA? | No |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | No |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc.provided for personal and environmental hygiene education? | No |
| 18. | Are these materials still readily available and do they serve any useful purpose? | No . |
| 19. | What constraints if any affected the timely completion of the project? | None |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | To be self reliant |
| 21. | What do you think could be done to improve the implementation of the programme? | Increase of manpower and facilities (spare parts) and addition of more pumps, monitoring and evaluation from UNDP, at least annually. |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | Yes |



VIEWS OF:-BORNO STATE GOVERNMENT

- GWOZA L.G.A, AND
- FOURCOMMUNITIES

QUESTIONNAIRE FOR THE EVALUATION OF RUSAFIYA PROJECT

PART I STATE LEVEL OFFICIALS

1. Name of State: Borno

2. Name of Respondent: Mr. E. M. Gadzama

| S/N | Question | Response |
|-----|---|---|
| 1. | What was the main goal of RUSAFIYA in the state? | It was a pilot project - for sustainability by the rural community |
| 2. | Was the project goal and objectives achieved? | Partially |
| 3. | IfYES,how? | |
| 4. | IfNO, why? | Not all the communities have been trained to sustain and maintain the infrastructures and the time was also a factor that hindered 100% success as 59 out of 75 water points and 59 VIP latrines out of 300 were constructed. |
| 5. | Did RUSAFIYA introduce any concept that is different from other projects? | Yes |
| 6. | Please list if you know any. | Down to earth technology Sustainability Training of actual users of infrastructures. ownership of Infrastructures. |
| 7. | Are there quantifiable reduction in cases of Guinea worm and/or diarrhoea diseases in the areas where the project took place? | Yes, in some communities guinea worm has been eradicated. |
| 8. | Does the LGA Water and Sanitation Unit (WASU) still exist? | Yes |
| 9. | Do they have the resources to continue work in the LGAs? | Yes, from the Local Government. |
| 10. | Has the state established similar WASU structures in other LGAs? | No. |
| 11. | Is the state aware of the number of water points that were installed during the project phase of RUSAFIYA? | Yes |
| 12. | How many household latrines and school latrines were built during the project? | 59 |
| 13. | How many people were trained at the State Level for implementation and management of the project? | 8 |
| 14. | One of the main objectives of the project was to establish community ownership of Water and Sanitation facilities, did this happen? How is the state monitoring its progress/operation? repairs | Yes, from time to time, the state goes round to monitor the effectiveness of the communities trained and the functionality of the infrastructures. Also, they come to purchase spares from their WASU account for |
| 15. | Are these people rendering any useful assistance to othersimilar State programmes? | No |
| 16. | Were there any constraints which affected the timely implementation and completion of the project? | Yes, the signing of the Memorandum of Understanding was very late and also the release of GCCC was late. |
| 17. | What are the general lessons your state learnt from the RUSAFIYA project? | Government can provide potable water to the rural populace if it so wishes. |



| S/N | Question | Response |
|-----|---|--|
| 18. | What do you think could have been done to improve the project? | Timely payment of the GCCC and also timely signing of the Memorandum of Understanding. |
| 19. | Would you reccomend a similar project in other Local Governments? | Seriously, it's worth replicating. |
| 20. | What advice would you give towards implementing similar? projects | All the parties involved have to be serious and committed to their obligations and has to be timely. |

PART II LOCAL GOVERNMENT LEVEL (LGA)

1. Name of local government area: Gwoza, Borno State

2. Name of Respondent: Mrs. Amina Muhammed

| S/N | Question | Response |
|-----|---|--|
| 1. | What was the main goal and objectives of the RUSAFIYA project in your LGA? | To eradicate guinea worm |
| 2. | Were these achieved? | Yes |
| 3. | IfYES, how? | By provision of safe potable water aupply |
| 4. | IfNO, why? | Nil |
| 5. | Does the LGA Water and Sanitation Unit(WASU) still exist? | Yes |
| 6. | Does the unit have resources to continue the work? | Not enough |
| 7. | How many communities were involved in the RUSAFIYA project? | 66 |
| 8. | How many water points were installed during the RUSAFIYA project? | 2 |
| 9. | How many household latrines and school latrines were constructed during the RUSAFIYA project? | 35 |
| 10. | Are the water facilities functioning? | Yes |
| 11. | Were communities trained to carry out repairs of hand pumps? | Yes |
| 12. | Is the community maintenance funds properly maintained? | Yes |
| 13. | Were women involved in all areas of planning and implementation of the RUSAFIYA project at the local level? | Yes |
| 14. | How many people were trained at the Local government(LG) level and at Community level? | 10 at Local government level 20 at Community level. |
| 15. | How many community water and sanitation committees (WASCOM) were established during the project? | All communities |
| 16. | Do these committees exists and are they rendering any useful services in the operation and maintenance of the facilities? | Yes |
| 17. | Was the Community Health Involving Children in School (CHICS) successful in your LGA? | No |
| 18. | How many schools were involved in the CHICS project? | 3 |
| 19. | Is CHICS still existing in some schools? | No |



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| S/N | Question | Response |
|-----|--|--|
| 20. | Has CHICS been introduced in other schools? | No |
| 21. | How is the project being sustained? | Unit receives contributions from LGA and communities. |
| 22. | Were the training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenanceof water supply and sanitation services to LGA? | No |
| 23. | Are these materials and manuals still available and are they serving any useful purpose now? | No |
| 24. | Were Audio-Visual materials including pocket cards, posters song messages, flip cards and flexi flan figures etc.provided for personal and environmental hygiene education? | Yes |
| 25. | Are these materials still readily available and do they serve any useful purpose? | No |
| 26. | What constraints if any affected the timely completion of the project? | Lack of funds |
| 27. | What are the lessons learnt so far from the RUSAFIYA project? | Operation/maintenance of facilities Community development Hygiene education Eradication of water borne diseases. |
| 28. | What do you think could be done to improve the implementation of the programme? | Completion of uncompleted projects, and community involvement |
| 29. | What advice would you give in improving the implementation of the projects? | Women involvement should be 80% in the programme |
| 30 | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | Yes |

1. Name of Community: Uvaha

2. Name of Respondent: Umaru Buba

| S/N | Question | Response |
|-----|--|-----------------------------------|
| 1. | When was RUSAFIYA established in your community? | 9-10-1990 |
| 2. | What was the goal of the RUSAFIYA project in your community? | To eradicate water borne diseases |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | Within community reach |
| 5. | Are other water sources available? | No |
| 6. | What is the terrain like to water points? | |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 2 - 5 minutes |
| 8. | What is the approximate population served by the borehole? | 500 |



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| S/N | Question | Response |
|-----|--|---|
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Hygienic Transported in a hygienic manner |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | 4 Willingly pay N30 per month Once a year One to two days |
| 11. | Is CHICS still existing in all/some schools? | No |
| 12. | If YES to question 11, how many? | Nil |
| 13. | Has CHICS been introduced in other schools since then? | No |
| 14. | How is the project being sustained? | WASCOM and local government contribution |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | When the project was on; materials were available. |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | Not available now |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | When the project was on, the materials were available. |
| 18. | Are these materials still readily available and do they serve any useful purpose? | Not available now |
| 19. | What constraints if any affected the timely completion of the project? | Lack of funds |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | We learnt much aboutpersonal hygieneand environmental sanitation. |
| 21. | What do you think could be done to improve the implementation of the programme? | We should increase the involvement of the community, especially women in the programme. |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | Yes, reccomended. |

1. Name of Community: Hudugum

2. Name of Respondent: Ahmadu Muni

| S/N | Question | Response |
|-----|---|--|
| 1. | When was RUSAFIYA established in your community? | 9-10-199- |
| 2. | What was the goal of the RUSAFIYA project in your community? | To eradicate water borne diseases, especially guinea worm. |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | Within the community |



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| S/N | Question | Response |
|-----|--|---|
| 5. | Are other water sources available? | Yes, (not sufficient) hand dug wells. |
| 6. | What is the terrain like to water points? | |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 2 to 3 minutes |
| 8. | What is the approximate population served by the borehole? | 350 - 400 people |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | The surrounding is clean Transported and stored hygienically |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | Community and Local government 3 Wilingly contribute N20.00 per month Twice a year One week |
| 11. | Is CHICS still existing in all/some schools? | No |
| 12. | If YES to question 11, how many? | |
| 13. | Has CHICS been introduced in other schools since then? | No |
| 14. | How is the project being sustained? | WASCOM/Local government |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | When the project was on, it was available |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | Not available |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | When the project was on, they were available. |
| 18. | Are these materials still readily available and do they serve any useful purpose? | Not available |
| 19. | What constraints if any affected the timely completion of the project? | Lack of funds |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | We learnt much about personal hygiene and environmental sanitation. |
| 21. | What do you think could be done to improve the implementation of the programme? | Increase the involvement of the community, especially women. |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | Yes. Reccomended |

1. Name of Community: Kurana Bassa

2. Name of Respondent: Mohammed Sihauri

| S/N | Question | Response |
|-----|--|-----------|
| 1. | When was RUSAFIYA established in your community? | 9-10-1990 |



| S/N | Question | Response | |
|-----|--|--|--|
| 2. | What was the goal of the RUSAFIYA project in your community? | To eradicate water borne diseases, especially guinea worm. | |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes | |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | Within the community | |
| 5. | Are other water sources available? | No | |
| 6. | What is the terrain like to water points? | | |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 2 to 3 minutes | |
| 8. | What is the approximate population served by the borehole? | 500 - 600 people | |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | The surrounding is clean Storage facilities are covered and clean Free from microorganisms | |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | Community and Local government 4 They are willing to pay N50.00 Twice a year One week | |
| 11. | Is CHICS still existing in all/some schools? | No | |
| 12. | If YES to question 11, how many? | | |
| 13. | Has CHICS been introduced in other schools since then? | No | |
| 14. | How is the project being sustained? | WASCOM/Local government | |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | When the project was on; the materials/manuals were available in the LGA | |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | Not available now | |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | They were available when the project was on for hygiene education and environmenta sanitation. | |
| 18. | Are these materials still readily available and do they serve any useful purpose? | Not readily available now | |
| 19. | What constraints if any affected the timely completion of the project? | Lack of funds | |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | Knowledge about hygiene Community development work and operation. | |
| 21. | What do you think could be done to improve the implementation of the programme? | At least 80% women participation should be given. | |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | Yes, reccomended | |



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1. Name of Community: Jaje

2. Name of Respondent: Mrs. Hauwa Ali

| S/N | Question Response | | |
|-----|--|--|--|
| 1. | When was RUSAFIYA established in your community? | Since 1990 | |
| 2. | What was the goal of the RUSAFIYA project in your community? | To eradicate water borne diseases, especially guinea worm. | |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes | |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | Within community reach | |
| 5. | Are other water sources available? | Yes, hand dug wells | |
| 6. | What is the terrain like to water points? | | |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 1 to 2 minutes | |
| 8. | What is the approximate population served by the borehole? | 1000 people | |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | The surrounding is clean Transported and stored in a covered water pot | |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | 4 Willing to pay N50.00 each month Once a year One week | |
| 11. | Is CHICS still existing in all/some schools? | No | |
| 12. | If YES to question 11, how many? | | |
| 13. | Has CHICS been introduced in other schools since then? | No | |
| 14. | How is the project being sustained? | WASCOM/Local governments | |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | It was available when the project was on. | |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | Not available now | |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | It was available when the project was on. | |
| 18. | Are these materials still readily available and do they serve any useful purpose? | Not available now | |
| 19. | What constraints if any affected the timely completion of the project? | Lack of funds | |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | Operation/maintenance of facilities Personal hygiene and community development work. | |
| 21. | What do you think could be done to improve the implementation of the | Promote women participation in hygiene sessions. | |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs?. | Yes | |

VIEWS OF:NASARAWA STATE GOVERNMENT
- NASARAWA L.G.A, AND
- FOUR COMMUNITIES



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QUESTIONNAIRE FOR THE EVALUATION OF RUSAFIYA PROJECT Part I State level officials

1. Name of State:

Nasarawa

2. Name of Respondent:

Andrew A. Egah

| S/N | Question | Response | |
|-----|---|--|--|
| 1. | What was the main goal of RUSAFIYA in the state? | Eradication of guinea worm and diarhoea and provision of good drinking water. | |
| 2. | Was the project goal and objectives achieved? | Yes | |
| 3. | If YES, how? | By the total eradication of guinea worm and diarrhoea in the catchment areas. | |
| 4. | If NO, why? | | |
| 5. | Did RUSAFIYA introduce any concept that is different from other projects? | Yes. | |
| 6. | Please list if you know any. | Community participation towards maintenance of the boreholes, VIP latrines. Introduction of envirnmental hygiene education | |
| 7. | Are there quantifiable reduction in cases of Guinea worm and/or diarrhoea diseases in the areas where the project took place? | Yes, about 80% success achieved. | |
| 8. | Does the LGA Water and Sanitation Unit (WASU) still exist? | Yes | |
| 9. | Do they have the resources to continue work in the LGAs? | Yes, human resources and community contributions and maintenance culture adopted by the LGA. | |
| 10. | Has the state established similar WASU structures in othe LGAs? | No. | |
| 11. | Is the state aware of the number of water points that were installed during the project phase of RUSAFIYA? | Yes. | |
| 12. | How many household latrines and school latrines were built during the project? | 115 | |
| 13. | How many people were trained at the State Level for implementation and management of the project? | Two officers were trained during former Plateau State Government i.e. before the creation of Nasarawa State. | |
| 14. | One of the main objectives of the project was to establish community ownership of Water and Sanitation facilities, did this happen? How is the state monitoring its progress/operation? | Yes, prior to the state creation, the officers from the state monitored progress of its operations through supervision through Haruna Nun who was the state coordinator, but as of now, the supervision of the project and its maintenance is being carried out by the LGA cordinator (WASU) unit. However, it would be worthwhile if the state establishes its monitoring unit to coordinate the activities at the state level) | |
| 15. | Are these people rendering any useful assistance to other similar State programmes? | Yes | |
| 16. | Were there any constraints which affected the timely implementation and completion of the project? | No | |
| 17. | What are the general lessons your state learnt from the RUSAFIYA project? | Lessons learnt include: Quick eradication of guinea worm and diarrhoea disease after introduction of the programme in the LGA. | |

| S/N | Question | Response |
|-----|---|---|
| 18. | What do you think could have been done to improve the project? | Our major problem is the lack of spare parts at the WAS unit. |
| 19. | Would you reccomend a similar project in other Local Governments? | Yes |
| 20. | What advice would you give towards implementing similar projects? | I am of the view that similar projects be implemented in other LGAs where there is acute scarcity of potable drinking water e.g. Nasarawa Eggon LGA, Awe LGA, Wamba LGA |

PART II LOCAL GOVERNMENT LEVEL (LGA)

Name of local government area: Nasarawa
 Name of Respondent: Isa O. Kogo

| S/N | Question | Response |
|-----------|---|--|
| 1. | What was the main goal and objectives of the RUSAFIYA project in your LGA? | Guinea worm eradication and diarrhoea control |
| 2. | Were these achieved? | |
| 3. | If YES, how? | No more cases of guinea worm and diarrhoea and improved health and sanitation behaviour of rural populace. |
| 4. | IfNO, why? | |
| 5. | Does the LGA Water and Sanitation Unit(WASU) still exist? | Yes, the WASU is still existing piloted by LGC coordinator. |
| 6. | Does the unit have resources to continue the work? | Yes, human resouces and self-help by community contribution. |
| 7. | How many communities were involved in the RUSAFIYA project? | Thirty four communities benefited in the RUSAFIYA project. |
| 8. | How many water points were installed during the RUSAFIYA project? | 46 |
| 9. | How many household latrines and school latrines were constructed during the RUSAFIYA project? | 115 |
| 10. | Are the water facilities functioning? | About 80% are good, the major obstacle is spare parts and spoilt motor cycles. |
| 11. | Were communities trained to carry out repairs of hand pumps? | Yes, four pump mechanics were trained. |
| 12. | Is the community maintenance funds properly maintained? | Yes, the SASCOM usually managed the funds properly to further the maintenance of the facilities. |
| 13. | Were women involved in all areas of planning and implementation of the RUSAFIYA project at the local level? | Yes, women are WASCOM members and are the custodians of the borehole facilities. |
| 14. | How many people were trained at the Local government(LG) level and at Community level? | All the WASU staff were trained and operation and maintenance mechanics (WASCOM) were trained. |
| 15. | How many community water and sanitation committees (WASCOM) were established during the project? | 247 |
| 16. | Do these committees exists and are they rendering any useful services in the operation and maintenance of the facilities? | Yes |

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| S/N | Question | Response | |
|------|---|--|--|
| 17. | Was the Community Health Involving Children in School (CHICS)successful in your LGA? | No | |
| 18. | How many schools were involved in the CHICS project? | Very few (5) schools. | |
| 19. | Is CHICS still existing in some schools? | Yes, some schools. | |
| 20. | Has CHICS been introducedin other schools? | No | |
| 21. | How is the project being sustained? | Community contribution towards communal effort | |
| 22. | Were the training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | Yes, but the training materials are no more available for further circulation. | |
| 23. | Are these materials and manuals still available and are they serving any useful purpose now? | The materials are not available, but the materials are very useful since they are very educating. | |
| 24. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | Yes | |
| 25. | Are these materials still readily available and do they serve any useful purpose? | No, the materials are no more available at our disposal. | |
| 26. | What constraints if any affected the timelycompletion of the project? | None, all the beneficiary communities participated actively in the projects. | |
| 27. | What are the lessons learnt so far from the RUSAFIYA project? | Good drinking water and total eradication of guinea worm/diarrhoea illness. | |
| 2,8. | What do you think could be done to improve the implementation of the programme? | Educate the LGC on needs to fund WASU promptly e.g. mobility to enable the staff visit communities. | |
| 29. | What advice would you give in improving the implementation of the projects? | Government assistance to the WASU and provision of spare parts. | |
| 30 | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | Nasarawa LGA needs more RUSAFIYA projects. Not all villages withcases of guinea worm benefited and acute shortage of water scarcity recommend the assistance of the replication. Other LGAs like Nasarawa Eggon, Awe and Wamba would be a place of demonstration. | |

1. Name of Community: Kemu/N.S. LG

2. Name of Respondent: Bulus Danbaki

| S/N | Question | Response |
|-----|---|--|
| 1. | When was RUSAFIYA established in your community? | 1989 |
| 2. | What was the goal of the RUSAFIYA project in your community? | Guinea worm eradication, diarrhoea control, reduced scarcity of water. |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes |
| | | |

| S/N | Question Response | | |
|-----|--|---|--|
| 4. | Convenience of water points: What is the estimated distance between water points and household? | 15m | |
| 5. | Are other water sources available? | Yes, rain water | |
| 6. | What is the terrain like to water points? | Well accepted | |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 5 minutes | |
| 8. | What is the approximate population served by the borehole? | 400 people | |
| 9. | Water quality: Borehole surroundings? Modes of _transportation and storage? Bacteriological analysis of water sample (If possible) | Very clean Stored in pots. No | |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | 4 Promptly, N50.00 Once in every year Just two weeks. | |
| 11. | Is CHICS still existing in all/some schools? | No | |
| 12. | If YES to question 11, how many? | | |
| 13. | Has CHICS been introduced in other schools since then? | I don't know | |
| 14. | How is the project being sustained? | Through community contributions. | |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | No | |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | No | |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | Songs messages, pocket cards, visual materials on environmental hygiene was introduced but not available. | |
| 18. | Are these materials still readily available and do they serve any useful purpose? | They serve purpose, but not available | |
| 19. | What constraints if any affected the timely completion of the project? | Financial and spare parts only. | |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | Good water and total eradication of guinea worm and diarrhoea. | |
| 21. | What do you think could be done to improve the implementation of the programme? | More water points and provision of spare parts and government aid. | |
| 22. | Do you reccomend the replication of the RUSAFIYA | Yes, more RUSAFIYA project needed in Kemu. | |

1. Name of Community: Shamege/N.S. LG

2. Name of Respondent: Abubakar Suleiman

| S/N | Question | | Response |
|-----|--|------|----------|
| 1. | When was RUSAFIYA established in your community? | 1989 | |



| S/N | Question | Response |
|-----|---|--|
| 2. | What was the goal of the RUSAFIYA project in your community? | Shortage of good water and eradication of guinea worm epidemic. |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Very successful, because no more guinea worm cases. |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | 1/2 km |
| 5. | Are other water sources available? | No |
| 6. | What is the terrain like to water points? | Generally acceepted by the whole community on the site of project. |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 5 minutes |
| 8. | What is the approximate population served by the borehole? | 2000 people |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Neat Very potable, nice |
| 10. | Reliability: Maintenance system Trained artisans- How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | Good 2 Promptly, N250.00 each. Yearly Immediately |
| 11. | Is CHICS still existing in all/some schools? | No |
| 12. | If YES to question 11, how many? | |
| 13. | Has CHICS been introduced in other schools since then? | No |
| 14. | How is the project being sustained? | Community contributions |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenanceof water supply and sanitation services to LGA? | No |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | Not provided |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | Yes |
| 18. | Are these materials still readily available and do they serve any useful purpose? | Not available, but very useful purpose even now. |
| 19. | What constraints if any affected the timely completion of the project? | Financially we are not capable. |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | Good water and sanitation. |
| 21. | What do you think could be done to improve the implementation of the programme? | Provision of spare parts and government assistance. |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | Yes, and we need more in Shamege |



1. Name of Community: Sabo Gari/N.S. LG

2. Name of Respondent: Musa Birni

| S/N | Question | Response |
|-----|--|---|
| 1. | When was RUSAFIYA established in your community? | 1991 |
| 2. | What was the goal of the RUSAFIYA project in your community? | Scarcity of water, guinea worm eradication and diarrhoea. |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes, very successful |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | 1/3 km |
| 5. | Are other water sources available? | Rain water and LGC hand dug well |
| 6. | What is the terrain like to water points? | Very suitable |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 5 minutes |
| 8. | What is the approximate population served by the borehole? | 200 people |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Very clean Pots and base very clean No |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | Good 4 N100.00 each Two times Not long to effect repairs (1 month) |
| 11. | Is CHICS still existing in all/some schools? | No |
| 12. | If YES to question 11, how many? | No, we have no school in Sabo Gari |
| 13. | Has CHICS been introduced in other schools since then? | I don't know. |
| 14. | How is the project being sustained? | Contributions of monies to sustain the RUSAFIYA project through the WASCOM(Sabo Gari Community) |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | Yes, but only those trained on mechanic has the knowledge of materials. |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | Materials are not available, but we need them for repair purpose. |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc provided for personal and environmental hygiene education? | No, we only participate in National Environmental Sanitation once in every month. |
| 18. | Are these materials still readily available and do they serve any useful purpose? | No, materials could be useful if only made available in the community. |
| 19. | What constraints if any affected the timely completion of the project? incapability sometimes. | Scarcity of spare parts and financial |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | Complete eradication of diarrhoea and guinea worm illnes. |

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| S/N | Question | Response |
|-----|---|--|
| 21. | What do you think could be done to improve the implementation of the programme? | More boreholes is needed and spare parts is needed in the LGC WASU office. |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | Government assistance towards financial constraints. |

- Name of Community: Gunki/N.S. LG Name of Respondent: Awal Abdullahi 1.
- 2.

| S/N | Question | Response |
|-----|--|---|
| 1. | When was RUSAFIYA established in your community? | 1990 |
| 2. | What was the goal of the RUSAFIYA project in your community? | Eradication of guinea worm and scarcity of water. |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Very successful and cooperating |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | 1/3 km |
| 5. | Are other water sources available? | Hand dug well by the LGC |
| 6. | What is the terrain like to water points? | Nice |
| 7. | Quantity of water available: What time does it take to fill a container of 25 litres - 50 litres? | 10 minutes |
| 8. | What is the approximate population served by the borehole? | 300 people |
| 9. | Water quality: Borehole sorroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Clean Pots and base on head. No |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | Very prompt No Promptly, N50.00 Two years Less than two months |
| 11. | Is CHICS still existing in all/some schools? | Yes |
| 12. | If YES to question 11, how many? | One school |
| 13. | Has CHICS been introduced in other schools since then? | I don't know |
| 14. | How is the project being sustained? | Through communal efforts |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | No |
| 16. | Are these materials and manuals still available and are they serving don't know any useful purpose? | I don't know |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, Sanitation every flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | No, only the National Environmental month end. |
| 18. | Are these materials still readily available and do they serve any useful purpose? | No |
| 19. | What constraints if any affected the timely completion of the project? | Financial constraints and spare parts. |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | Good drinkable water available and less illness e.g. diarrhoea. |
| 21. | What do you think could be done to improve the implementation of the programme? | Provision of more spare parts and government assistance towards its purchase. |
| 22. | Do you recommend the replication of the RUSAFTYA project in other LGAs? | Yes, we still need more in Gunki. |



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VIEWS OF:-F. C. T., ABUJA GWAGWALADA/KWALI L.G.As, AND FOUR COMMUNITIES



QUESTIONNAIRE FOR THE EVALUATION OF RUSAFIYA PROJECT

PART I STATE LEVEL OFFICIALS

1. Name of State: Federal Capital Territory, Abuja

2. Name of Respondent: Mr. Ibanga O. Essien, F.C.T. Coordinator.

| S/N | Question | Response |
|-----|---|---|
| 1. | What was the main goal of RUSAFIYAin the state? | Provision of 100 hand pump water points and improvement of sanitation facilities. |
| 2. | Was the project goal and objectives achieved? | No |
| 3. | IfYES,how? | |
| 4. | IfNO, why? | Because of problems associated with faulty planning and execution of the project. |
| 5. | Did RUSAFIYA introduce any concept that is different from other projects? | Yes. |
| 6. | Please list if you know any. | Participatory approach Community management and maintenance of facilities |
| 7. | Are there quantifiable reduction in cases of Guinea worm and/or diarrhoea diseases in the areas where the project took place? | Yes |
| 8. | Does the LGA Water and Sanitation Unit (WASU) still exist? | Partially existing |
| 9. | Do they have the resources to continue work in the LGAs? | Apparently negligible resources. |
| 10. | Has the state established similar WASU structures in othe LGAs? | No. |
| 11. | Is the state aware of the number of water points that were installed during the project phase of RUSAFIYA? | Yes,54 WPs were installed. |
| 12. | How many household latrines and school latrines were built during the project? | 74 |
| 13. | How many people were trained at the State Level for implementation and management of the project? | 5 |
| 14. | One of the main objectives of the project was to establish community ownership of Water and Sanitation facilities, did this happen? How is the state monitoring its progress/operation? | Community ownership of water and sanitation f facilities was established successfully in some communities. Monitoring by the state is done by occasional visits to communities. |
| 15. | Are these people rendering any useful assistance to other similar State programmes? | Yes |
| 16. | Were there any constraints which affected the timely implementation and completion of the project? | Yes, but the time frame adopted was over-ambitious. Inadequate training and incentives for state |
| 17. | What are the general lessons your state learnt from the RUSAFIYA project? | Need for direct inputs from the state at the planning stage of projects. |
| 18. | What do you think could have been done to improve the project? | State could have done more on decision making at implementation/ execution stage. |
| 19. | Would you reccomend a similar project in other Local Governments? | Yes |
| 20. | What advice would you give towards implementing similar projects? | State level personnel on such projects should be exposed to the highest level training available to any participant on such project. |

PART II LOCAL GOVERNMENT LEVEL (LGA)

1. Name of local government area: Gwagwalada/F.C.T.

2. Name of Respondent: Gambo A. Yewuti

| | - | ` |
|-----|---|---|
| S/N | Question | Response |
| 1. | What was the main goal and objectives of the RUSAFIYA project in your LGA? | The main goals and ojectives of the RUSAFIYA project in my Area Council is the provision of rural water supply and sanitation facilities and hygiene education in 51 selected communities through community participation. These water points and 300 various types of demonstration latrine. |
| 2. | Were these achieved? | |
| 3. | IfYES,how? | |
| 4. | IfNO, why? | |
| 5. | Does the LGA Water and Sanitation Unit(WASU) still exist? | No |
| 6. | Does the unit have resources to continue the work? | No · |
| 7. | How many communities were involved in the RUSAFTYA project? | 51 |
| 8 | How many water points were installed during the RUSAFIYA project? | 54 |
| 9. | How many household latrines and school latrines were constructed RUSAFIYA project? | during the 118 |
| 10. | Are the water facilities functioning? | Many are functioning properly. |
| 11. | Were communities trained to carry out repairs of hand pumps? | Yes |
| 12. | Is the community maintenance funds properly maintained? | Yes |
| 13. | Were women involved in all areas of planning and implementation of the RUSAFIYA project at the local level? | Yes, in some communities. |
| 14. | How many people were trained at the Local government(LG) level and at Community level? | 15 at A/C level and all WASCOM members in 51 communities. |
| 15. | How many community water and sanitation committees (WASCOM) were established during the project? | 51 |
| 16. | Do these committees exists and are they rendering any useful services in the operation and maintenance of the facilities? | Yes |
| 17. | Was the Community Health Involving Children in School (CHICS) successful in your LGA? | Very successful |
| 18. | How many schools were involved in the CHICS project? | 8 |
| 19. | Is CHICS still existing in some schools? | All existing |
| 20. | Has CHICS been introduced in other schools? | No |
| 21. | How is the project being sustained? | Project is not sustained at the area council level. |
| 22. | Were the training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | Yes |
| 23. | Are these materials and manuals still available and are they serving any useful purpose now? | No, not available. |



| s/N | Question | Response |
|-----|---|---|
| 24. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | Yes |
| 25. | Are these materials still readily available and do they serve any useful purpose? | No, not available |
| 26. | What constraints if any affected the timely completion of the project? | Lack of fund and late payment of counterpart contribution by the state government and the Federal Ministry of Health. |
| 27. | What are the lessons learnt so far from the RUSAFIYA project? | |
| 28. | What do you think could be done to improve the implementation of the programme? | |
| 29. | What advice would you give in improving the implementation of the project? | I would advice that more fund should be provided and adequate logistic support especially to the extension workers. |
| 30 | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | I reccomend the replication of the RUSAFIYA project to other LGAs, if the local government will take it serious. |

1. Name of Community: Gonugo/Gwagwalada LG

2. Name of Respondent: Emmanuel

| S/N | Question | Response |
|-----|--|---|
| 1. | When was RUSAFIYA established in your community? | 1990 |
| 2 | What was the goal of the RUSAFIYA project in your community? | Provision of good water and toilet. |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | 1 kilometre. |
| 5. | Are other water sources available? | Yes, river. |
| 6. | What is the terrain like to water points? | Sloping |
| 7. | Quantity of water available: What time does it take to fill a container of 25 litres - 50 litres? | 4-5 minutes |
| 8. | What is the approximate population served by the borehole? | 1,500 people |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Clean Safe |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | 1 Free of charge but willing Once in a year. As soon as possible. |
| 11. | Is CHICS still existing in all/some schools? | Some schools |
| 12. | If YES to question 11, how many? | 8 |
| 13. | Has CHICS been introduced in other schools since then? | No |
| 14. | How is the project being sustained? | Community contribution of fund. |



| S/N | Question | Response |
|-----|---|----------------------------|
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | Yes |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | No |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | Yes |
| 18. | Are these materials still readily available and do they serve any useful purpose? | No |
| 19. | What constraints if any affected the timely completion of the project? | I don't know. |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | Community participation. |
| 21. | What do you think could be done to improve the implementation of the programme? | The A/C should help us. |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | More help from government. |

1. Name of Community: Yangoji/Gwagwalada L.G.

2. Name of Respondent: Barnabas

| S/N | Question | Response |
|-----|--|--|
| 1. | When was RUSAFIYA established in your community? | 1990 |
| 2. | What was the goal of the RUSAFIYA project in your community? | Provision of water and latrine |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | 1km |
| 5. | Are other water sources available? | Yes |
| 6. | What is the terrain like to water points? | Flat |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 3-6 minutes |
| 8. | What is the approximate population served by the borehole? | 2000 people |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Clean Safe |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | Good 1 Always willing but it's free. Once in years As soon as reported |
| 11. | Is CHICS still existing in all/some schools? | Some shoools |
| 12. | If YES to question 11, how many? | 8 |
| 13. | Has CHICS been introduced in other schools since then? | No |
| 14. | How is the project being sustained? | By community contribution |



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| S/N | Question | Response |
|-----|--|---|
| 15. | Were training materials and manuals produced and circulated for hand dugwells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | Yes |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | No |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | Yes, except Audio-Visual, others were provided during training session. |
| 18. | Are these materials still readily available and do they serve any useful purpose? | No |
| 19. | What constraints if any affected the timely completion of the project? | Funds |
| 20. | What are the lessons learnt so far from the RUSAFTYA project? | Community participation and ownership. |
| 21. | What do you think could be done to improve the implementation of the programme? | Provision of more funds and assistance from area council. |
| 22. | Do you recommend the replication of the RUSAFTYA project in other LGAs? | Yes |

1. Name of Community: Kutunku Tsoho/Gwagwalada L.G.

2. Name of Respondent: Philibus

| S/N | Question | Response |
|-----|--|--|
| 1. | When was RUSAFIYA established in your community? | 1991 |
| 2. | What was the goal of the RUSAFIYA project in your community? | Provision of water and sanitation facilities. |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | 1 km |
| 5. | Are other water sources available? | Yes, stream |
| 6. | What is the terrain like to water points? | Flat |
| 7. | Quantity of water available: What time does it take to fill a container of 25 litres - 50 litres? | 4 minutes |
| 8. | What is the approximate population served by the borehole? | 3000 people |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Clean Safe |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | l Free service Twice a year As soon as possible |
| 11. | Is CHICS still existing in all/some schools? | Some |
| 12. | If YES to question 11, how many? | 8 |
| 13. | Has CHICS been introduced in other schools since then? | No |
| 14. | How is the project being sustained? | Community fund contribution |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | Yes |



| S/N | Question | Response |
|-----|---|----------------------------|
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | No |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | Yes |
| 18. | Are these materials still readily available and do they serve any useful purpose? | Not available |
| 19. | What constraints if any affected the timely completion of the project? | I don't know |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | Community participation |
| 21. | What do you think could be done to improve the implementation of the programme? | Government should help us. |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | Yes |

1. Name of Community: Ijah Dabuta/Gwagwalada L.G.

2. Name of Respondent: Jonah

| S/N | Question | Response | |
|-----|--|------------------------------------|--|
| 1. | When was RUSAFIYA established in your community? | 1990 | |
| 2. | What was the goal of the RUSAFIYA project in your community? | Provision of water and toilets | |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes | |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | Less than 1 km | |
| 5. | Are other water sources available? | Yes, there is a river | |
| 6. | What is the terrain like to water points? | Sloping | |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 7 minutes | |
| 8. | What is the approximate population served by the borehole? | 900 people | |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Clean Safe | |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | 1 100% | |
| 11. | Is CHICS still existing in all/some schools? | Some | |
| 12. | If YES to question 11, how many? | 8 | |
| 13. | Has CHICS been introduced in other schools since then? | No | |
| 14. | How is the project being sustained? | Contribution of fund by community. | |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | Yes | |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | No | |



| S/N | Question | Response |
|-----|---|--|
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, lip cards and flexi flan figures etc. provided for personal fand environmental hygiene education? | Yes, except Audio-Visual provided during training session. |
| 18. | Are these materials still readily available and do they serve any useful purpose? | No |
| 19. | What constraints if any affected the timely completion of the project? | Fund |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | Community participation and ownership of facilities. |
| 21. | What do you think could be done to improve the implementation of the programme? | Contribution of fund and A/C should help. |
| 22. | Do you reccomend the replication of the RUSAFTYA project in other LGAs? | Yes |

VIEWS OF:BENUE STATE GOVERNMENT
OJU/OBI L.G.As, AND
FOUR COMMUNITIES



QUESTIONNAIRE FOR THE EVALUATION OF RUSAFIYA PROJECT

PART I STATE LEVEL OFFICIALS

1. Name of State: Benue

2. Name of Respondent: Job Ominiyi (Formerly Head of Unit)

| S/N | Question | Response | |
|-----|--|--|--|
| 1. | What was the main goal of RUSAFIYA in the state? | To reduce guinea worm and other related disease through provision of improved water and sanitation facilities. | |
| 2 | Was the project goal and objectives achieved? | No | |
| 3. | IfYES,how? | | |
| 4. | IfNO, why? | Not much was done before the project had been fully accomplished. | |
| 5. | Did RUSAFIYA introduce any concept that is different from other projects? | Yes. | |
| 6. | Please list if you know any. | Community participation. | |
| 7. | Are there quantifiable reduction in cases of Guinea worm and/or diarrhoea diseases in the areas where the project took place? | No | |
| 8 | Does the LGA Water and Sanitation Unit (WASU) still exist? | Yes | |
| 9. | Do they have the resources to continue work in the LGAs? | Yes | |
| 10. | Has the state established similar WASU structures in othe LGAs? | Yes. | |
| 11. | Is the state aware of the number of water points that were installed during the project phase of RUSAFIYA? | Yes | |
| 12. | How many household latrines and school latrines were built during the project? | 7 and 4 respectively | |
| 13. | How many people were trained at the State Level for implementation and management of the project? | 3 | |
| 14. | One of the main objectives of the project was to establish community Water and Sanitation facilities, did this happen? How is the state monitoring its progress/operation? | Yes. No actual monitoring is being done. | |
| 15. | Are these people rendering any useful assistance to other similar State programmes? | Yes | |
| 16. | Were there any constraints which affected the timely implementation a completion of the project? | Yes | |
| 17. | What are the general lessons your state learnt from the RUSAFIYA project? | | |
| 18. | What do you think could have been done to improve the project? | | |
| 19. | Would you reccomend a similar project in other Local Governments? | | |
| 20. | What advice would you give towards implementing similar projects? | | |



PART II LOCALGOVERNMENTLEVEL(LGA)

1. Name of local government area: Oju

2. Name of Respondent: Job Ominiyi

| S/N | Question | Response | |
|-----|--|---|--|
| 1. | What was the main goal and objectives of the RUSAFIYA project in your LGA? | The main goals was to reduce guinea worm and other water related dseases in the LGA through the provision of improved water and sanitation facilities. The objectives were; | |
| | | To develop local govt. and community based institutions to plan and implement rural water supply and sanitation facilities with the active involvement of women. To promote community ownership of facilities provided during the project. To provide improved water supply and sanitation facilities. To promote and bring about improved personal and environmental hygiene | |
| 2. | Were these achieved? | Yes, to a level. | |
| 3. | IfYES, how? | WASU + WASCOM established and functional. | |
| 4. | IfNO, why? | Facilities could not be provided for lack of funds. | |
| 5. | Does the LGA Water and Sanitation Unit (WASU) still exist? | No & Yes | |
| 6. | Does the unit have resources to continue the work? Yes, recently with funding from DF water aid. | | |
| 7 | How many communities were involved in the RUSAFIYA project? | 56 | |
| 8. | How many water points were installed during the RUSAFIYA project? | 11 started, but only 4 completed. | |
| 9. | How many household latrines and school latrines were constructed during the RUSAFIYA project? | 7 and 4 respectively. | |
| 10. | Are the water facilities functioning? | Yes | |
| 11. | Were communities trained to carry out repairs of hand pumps? | Yes | |
| 12. | Is the community maintenance funds properly maintained? | Yes | |
| 13. | Were women involved in all areas of planning and implementation of the RUSAFIYA project at the local level? | Yes | |
| 14. | How many people were trained at the Local government(LG) level Community level? | 59 at Local government level 23 at Community level. | |
| 15. | How many community water and sanitation committees (WASCOM) were established during the project? | 56 | |
| 16. | Do these committees exists and are they rendering any useful services in the operation and maintenance of the facilities? | Some are, but very few. | |
| 17. | Was the Community Health Involving Children in School (CHICS) Don't know for lack of monitoring. successful in your LGA? | | |
| 18. | How many schools were involved in the CHICS project? | 8 (The teachers were trained) | |
| 19. | Is CHICS still existing in some schools? | Don't know | |
| 20. | Has CHICS been introduced in other No schools? | | |
| 21. | How is the project being sustained? | Not sustained due to unceremonious termination of the RUSAFIYA phase, until water aid came in. | |

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| S/N | Question | Response . |
|-----|---|--|
| 22. | Were the training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | Yes, some were supplied. |
| 23. | Are these materials and manuals still available and are they serving any useful purpose now? | Yes, they are available and serving a useful purpose |
| 24. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | |
| 25. | Are these materials still readily available and do they serve any useful purpose? | Yes |
| 26. | What constraints if any affected the timely completion of the project? | Lack of funds as project funds were withdrawn for lack of government counterpart funding. |
| 27. | What are the lessons learnt so far from the RUSAFIYA project? | Lessons learnt from RUSAFIYA: The people of the LGA are willing to contribute to the planning and implementation of development projects. |
| | | The capacity of local government officials is generally undermined by state and federal officials as evidenced by powers for certain decisions being usurped and such decisions just made and handed down. |
| 28. | What do you think could be done to improve the implementation of the programme? | Federal and state officials should be informed to be I less haughty with LGA officials. The LGA officials should be given a chance to prove themselves. Community members trained on the job in well construction so that the skill is left behind in the community for possible replication as the population |
| 29. | What advice would you give in improving the implementation of the projects? | Emphasis should continue to be placed on the participation of women in rural water supply and sanitation work right from the planning to the implementation stage. |
| 30 | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | Yes |

1. Name of Community: Uwobe/ObiLGA

2. Name of Respondent: Rhoda Okpire

| S/N | Question | Response |
|-----|---|--|
| 1. | When was RUSAFIYA established in your community? | 1992 |
| 2. | What was the goal of the RUSAFIYA project in your community? | In providing water to reduce water scarcity. |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | About 1km. |
| 5. | Are other water sources available? | Pond |
| 6. | What is the terrain like to water points? | Flat |



| S/N | Question | Response | |
|-------|--|--|--|
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? 5 minutes | | |
| 8. | What is the approximate population served by the borehole? | 2000 people | |
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Weedy In basins and stored in pots. | |
| 10. | 10. Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? Reliability: Maintenance system Trained artisans - 2 Yes (A basin costs N2) Three months interval Less than a week. | | |
| 11. | Is CHICS still existing in all/some schools? | No | |
| 12. | If YES to question 11, how many? | | |
| 13. | Has CHICS been introduced in other schools since then? | No means of sustenance, some people only come to inspect it from time to time. | |
| 14. | How is the project being sustained? | Yes | |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | No | |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | No | |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc.provided for personal and environmental hygiene education? | No | |
| 18. | Are these materials still readily available and do they serve any useful purpose? | | |
| 19. | | | |
| _ 20. | What are the lessons learnt so far from the RUSAFIYA project? | There is reduction of guinea worm | |
| 21. | What do you think could be done to improve the implementation of the programme? Let the programme come into being one pont of water is not sufficient. | | |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | Yes | |

Part III community level officials

1. Name of Community: Udeji / Obi LGA

2. Name of Respondent: Emma Ode

| S/N | Question | Response | |
|-----|--|--|--|
| 1. | When was RUSAFIYA established in your community? | 1991 | |
| 2. | What was the goal of the RUSAFIYA project in your community? | Providing water to eradicate guinea worm. | |
| 3. | Was the project successful in involving community members in deciding water facility sites? | Yes | |
| 4. | Convenience of water points: What is the estimated distance between water points and household? | 1 km for those who live far away from the poin | |
| 5. | Are other water sources available? | Locally hand dug wells | |
| 6. | What is the terrain like to water points? | Flat | |
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 5 minutes | |
| 8. | What is the approximate population served by the borehole? | 450 people | |



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| S/N | Question | Response | |
|-----|--|---|--|
| 9. | Water quality: Borehole surroundings? Modes of transportation and storage? Bacteriological analysis of water sample (If possible) | Clean With basins and jerrycans. | |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? | 2 We do not pay. Two years intervals. Since the pump spoilt, the people not paid for repairs. | |
| 11. | Is CHICS still existing in all/some schools? | No | |
| 12. | If YES to question 11, how many? | | |
| 13. | Has CHICS been introduced in other schools since then? | No | |
| 14. | How is the project being sustained? | The project has not been sustained in any way. | |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services | Yes | |
| 16. | Are these materials and manuals still available and are they serving any useful purpose | Some of the materials are spoiled so it does not serve any useful purpose again. | |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | , Yes | |
| 18. | Are these materials still readily available and do they serve any useful purpose? | They are no longer available. | |
| 19. | What constraints if any affected the timely completion of the project? | The constrain is that the water point is not sufficient. | |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | We were taught how to filter water and to keep our surroundings clean. | |
| 21. | What do you think could be done to improve the implementation of the programme? | The Federal Government of Nigeria should assist the UNDP should assist the UNDP to provide us water. | |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | RUSAFIYA project should work in other communities only when they are ready to spend more years and to pump more money so that the work should progress. | |

Part IiI community level officials

1. Name of Community: Abode/Obi LGA

2. Name of Respondent: Margaret Ogiri

| Question | Response |
|---|--|
| When was RUSAFIYA established in your community? | 1992 |
| What was the goal of the RUSAFIYA project in your community? To provide water to eradicate g to reduce water sacreity. | |
| Was the project successful in involving community members in deciding water facility sites? | Yes |
| Convenience of water points: What is the estimated distance between water points and household? | 1 km for those living far from the point. |
| Are other water sources available? | Ponds |
| What is the terrain like to water points? | Flat |
| | When was RUSAFIYA established in your community? What was the goal of the RUSAFIYA project in your community? Was the project successful in involving community members in deciding water facility sites? Convenience of water points: What is the estimated distance between water points and household? Are other water sources available? |



| S/N | Question | Response | |
|-----|---|--|--|
| 7. | Quantity of water available: What time does it take to fill a container of 25litres - 50 litres? | 5 minutes | |
| 8. | What is the approximate population served by the borehole? | 600 people | |
| 9. | 9. Water quality: Borehole surroundings? Weedy Modes of transportation and storage? Bacteriological analysis of water sample (If possible) Weedy Basins and stored in pots. | | |
| 10. | Reliability: Maintenance system Trained artisans - How many were trained? Willingness to pay for water and how much? What is the frequency of breakdowns? How long does it take before repairs are effected? Zes, one naira per basin. After a year or two. Less than a month. | | |
| 11. | Is CHICS still existing in all/some schools? | | |
| 12. | If YES to question 11, how many? | | |
| 13. | Has CHICS been introduced in other schools since then? | No | |
| 14. | How is the project being sustained? | The project is not sustained. | |
| 15. | Were training materials and manuals produced and circulated for hand dug wells, VIP latrines and other aspects of installation, operation and maintenance of water supply and sanitation services to LGA? | Yes | |
| 16. | Are these materials and manuals still available and are they serving any useful purpose? | No | |
| 17. | Were Audio-Visual materials including pocket cards, posters, song messages, flip cards and flexi flan figures etc. provided for personal and environmental hygiene education? | Yes | |
| 18. | Are these materials still readily available and do they serve any useful purpose? | | |
| 19. | What constraints if any affected the timelycompletion of the project? | The supply of water from the well is not and the project did not dig another. | |
| 20. | What are the lessons learnt so far from the RUSAFIYA project? | | |
| 21. | | | |
| 22. | Do you reccomend the replication of the RUSAFIYA project in other LGAs? | If the UNDP will not take full responsibility of funding I advice that let the project not be taken to any other community that will cause mistrust on the extent agents | |

TERMS OF REFERENCE FOR EVALUATION OF RUSAFIYA PROJECT

BACKGROUND AND RATIONALE

In the past, there have been many efforts by Governments and external donors to improve rural water supplies in developing countries. Such donors have usually come into the country, deliver the so-called aid and with the exit of the donor agency, usually comes an end to the water supply scheme. It has now been realised that for such aide to be sustained, community involvement at every stage is very crucial.

Rusafiya, an acronym in the Hausa language for water, sanitation and health was conceived in 1987 and implementation started in mid 1998 when the project document was signed. It was funded by the UNDP and the Netherlands Government, the largest in-country demonstration project in rural water supply and sanitation ever executed by the UNDP - World Bank Programme. The Federal Ministry of Health in Nigeria was the supervising ministry and both WHO and UNICEF were on the board of Federal Project Advisory Committee.

PROJECT OBJECTIVES

Development Objective

To expand and improve the delivery of water supply and sanitation services to rural communities in Nigeria.

Immediate Objectives were:

- To create a Local Government Area(LGA)-Based Institutional Model by:
 - establishing a Water Supply and Sanitation Unit at LGA level for technical and logistical support;
 - organizing project communities organised for installation, operation and maintenance of water supply and sanitation services;
 - creating storage and distribution systems for hand pump spare parts.
- 2. To improve Planning, Management and Logistical Support by:
 - procurement of vital equipment;
 - conducting community based, integrated water supply and sanitation, and village hygiene education promotion;
 - targeting communities with emphasis on women's role.
- 3. To train State-Level, LGA-Level and Community Personnel by:
 - developing training materials for community participation, construction of hand-dug wells and VIP latrines, maintenance of water supply and sanitation services, geophysical survey and tasks of extension agents.
 - training at least 625 personnel at State, LGA and community level trained in the implementation processes of the project;
 - Training of village water and sanitation committee (WASCOM)
 in management of water supply, artisans in construction of
 sanitation facilities and hygiene education promotion.
- 4. To promote ownership of Water supply facilities and Village Level Operation and Maintenance(VLOM) by:
 - organizing cost recovery mechanisms for operation and maintenance of facilities; Installing 540 hand pumps in communities;
 - training local artisans in various aspects of construction, repair and maintenance of hand pumps.
- 5. To promote Personal and Environmental Hygiene by:
 - conducting hygiene education promotion on improved knowledge and practices in sanitation;
 - providing audio-visual materials for personal and environmental hygiene education; implementing programme in Community Health Involving Children in Schools (CHICS);
 - Assisting in constructing 1,500 compartment of VIP latrines.



Purpose of the Evaluation:

The RUSAFIYA Project terminated exactly Four years ago - on 31st, March 1993. To what extent did this project achieved the set objectives? How were the State/LGAs and the communities involved in the project? What benefits did the participating communities got and or are getting from the project? What lessons, positive or negative that can be learn from the experience of this project? Answers to these and facts from observations of communities' situation can facilitate in the improvement of our development efforts for sustainable rural water supply and environmental sanitation programme in the country. The Consultant is expected to undertake the evaluation so as to generate data on the defunct RUSAFIYA Project that will give information as what worked or did not work. What lessons can be learnt and can be adopted to improve WES Programme especially community management efforts.

The consultant will carry out the following tasks:

- i. Desk study for information on the project institutional arrangement, planning implementation, involvement of the communities and especially women in the operation and maintenance of the systems
- ii. Visit the 5/6 participating States, 5 LGAs and at least 3 or 4 Communities in each LGA:

Bauchi State,

Ningi LGA;

Borno State,

Gwoza LGA;

Benue,

Oju LGA;

Plateau/Nasarawa States,

Nasarawa LGA

Federal Capital Territory,

Gwagwalada Area Council

- Talk to state and LGA officials on the set-up of the defunct project, get any records/document they have on the project.
- Visit sample communities, talk to community leaders/members on the project and their involvement in the planning, implementation and operation of the facilities. Talk to WASCOM members on maintenance system put in place during the project phase and what is in practice now.
- visit water and sanitation facilities established during the project implementation phase for direct observation of the functionality of the facilities.
- iv. Sample opinion and attitude of users of the facilities as to their perceived involvement in the operation and maintenance of the facilities and the usefulness or otherwise of the facilities.
- v. Visit schools which had CHICS programme, interview teachers and sample children on their perception and importance of this programme. Observe the functionality of latrines built in the schools during the project.
- vi. Analyse the information/data obtained and give details of findings and recommendations on usefulness or otherwise of the findings to improving other on-going/future rural water supply and sanitation programmes.
- vii. Final report of the results of the study and recommendations in 3 hard copies and a diskette.



ENGR. NASIM'S ITINERARY FOR EVALUATION OF RUSAFIYA

MAY 20TH TO JULY 31ST, 1998:

| DAY | DATE | PLANOFWORK |
|-----------------------|--|---|
| Wednesday to Sunday | 20 th May to 31 st May | Award of contract to the consultant by UNICEF H/Q Lagos to carry out an Independent Evaluation of the Defunct RUSAFIYA Project |
| | | Signing of the contract agreement between UNICEF and the consultant |
| | | Collection of relevant documents by the consultant and to conduct desk studies of the available documents. |
| Monday to Friday | 1 st June to 5 th June | Travel to Lagos Briefing by Mr Mansoor Ali, Chief WES Section Dr (Mrs) Comfort Olayiwole Sanitation Officer and Mr. Olushola Ismail, Water Supply Officer Courtesy call on the Resident Representative, UNICEF Lagos Courtesy call on the UNDP Resident Representation, Lagos Finalization of Work Plan for the Evaluation of RUSAFIYA project. Travel to Jos Finalization of Research instrument. |
| Saturday to Sunday | 6 th June to 7 th June | Review of documents |
| Tuesday - | 9 th June | Journey to Bauchi Team Planning and documents review Visit UNICEF Office Bauchi Meet Mr Mohammed Kamfut, WES PO Zone D and Mr Zakari Danbarn, Bauchi State WATSAN P M to information about the defunct RUSAFIYA Projects, Finalise travel plans for Ningi and Environs Interact with Bauchi State Government coordinator and the defunct BASIRDA (now BSADP) and Bauchi WATSAN Officials Desk studies |
| Wednesday to Saturday | 10 th June to 13 th June | Field visits to Ningi and environs. Meet Local Government Officials, WASCOM members, Women group, Extension Agents and Community Representatives. Inspect infrastructures build during the project life time |
| Sunday | 14 th June | Documents Review and preparation of draft report outline. |
| Monday | 15 th June | Travel to Maiduguri /Evaluation team review and planning . Desk Studies |
| Tuesday | 16 th June | Meet Borno State Government Co-ordinator Collect relevant documents and information Interact with BOSADP Officials Documents Review |
| Wednesday to Saturday | 17 th June to 20 th June | Field visits to Gwoza and environ Meet Local Government Officials WASU Head, WASCOM members, Women group, Extension Agents and Community Representatives. Inspect frastructures build during the project life time. |
| Sunday | 21 st June | Travel to Jos |

| DAY | DATE | PLANOFWORK |
|-----------------------|--|--|
| DAI | DINE | TERROR WORK |
| Monday to Sunday | 22 nd June to 28 th June | Review the Bauchi and Borno States documents, carry on desk studies Prepare draft report. |
| Monday to Tuesday | 29 th June to 30 th June | Journey to Lafia, Nasarawa State Evaluation team review and planning Meet State Government Co-ordinator Collect relevant documents and information. Interact with Officials and Carry on desk studies. |
| Tuesday | 30th June | Travel to Nassrawa LGA. |
| Wednesday to Sunday | 1 st July to 3 nd July | Evaluation team review and planning Meet Officials and collect relevant documents and information Pay field visits to Nassrawa and e environ. Inspect the infrastructure built during the project life time. Meet WASCOM Members, Women group, Extension Agents and Community representatives. |
| Saturday to Wednesday | 4 th July to 8 th July | Travel to Abuja Meet F.C.T officials, Collect relevant documents and information Meet Gwagwalada Local Government Officials, collect relevant documents and information Pay field visits to Gwagwalada, Kwali and environ, inspect the infrastructure build during the project life time Meet WASCOM Members, Women group, Extension Agents and Community Representatives. |
| Friday | 10th July | Travel from Abuja to Jos |
| Monday | 13 th July | Travel from Jos to Makurdi Meet Benue State Officials, Collect relevant documents and information Interact with BERWASSA/DFIA Officials and obtain their views their facilitation for field visit to Oju/Obi |
| Tuesday to Thursday | 14 th July to 16 th July | Makurdi to Oju/Obi and environ Meet LGA Officials, Extension Agents WASCOM Members Women Groups |
| Friday | 17th July | Travel to Makurdi, Jos |
| Saturday to Thursday | 18th July to 23rd July | Preparation, printing and binding of draft final report |
| Friday to Thursday | 24th July to 30th July | Journey to Lagos Preparation and discussions on the draft final report. Presentation results, Completion |
| | | and submission of final report. |

OJU WATER SUPPLY SCHEME

1. INTRODUCTION

Oju LGA in Benue State was selected by the State Government for the implementation of the Rusafiya Project. In line with the procedure adopted for project execution, a rapid reconnaissance survey (RRS) was carried out in the LGA and communities to benefit from the project were selected. Survey results and previous reports indicates that Oju has severe health problems stemming from inadequate water supplies, in guinea worm diseases, as yellow fever, guinea worm, typhoid fever and childhood infections. The presence as endemic is guinea worm, has attracted the State Government and international agencies attention in an attempt to find a solution.

Most of the communities in the LGA are scattered with inadequate safe water supplies. During the wet season communities rely on water collected from ponds while in the dry season people travel long distances to fetch water. Few boreholes fitted with hand pump and hand dug wells exists. Results of geophysical surveys carried out by the Rusafiya/State hydrogeology team indicate that ground water development using hand pumps cannot be implemented as a general solution owing to the non-availability of aquifers at depths appropriate for hand pump operation.

2. PREVIOUS WORK CARRIED OUT DURING THE IMPLEMENTATION OF RUSAFIYA PROJECT

A) Rapid Reconnaissance Survey

A Rapid reconnaissance survey was carried out during the last part of 1990. The objectives of the survey were to:

- 1. Update existing date on the size of communities in the LGA.
- Determine existing sources of water supply, assess the possibilities of reactivation of water points
 constructed prior to the Rusafiya project and the potential for hand dug-wells and machine-drilled
 boreholes.
- 3. Obtain first hand information on the communities' felt needs and possible community participation in water and sanitation projects that may be undertaken by agencies operating in Oju LGA.
- 4. Determine and record the communities with guinea worm.

A total of 465 communities were surveyed. Out of this number, 57 communities were selected to benefit from the limited number of water points and sanitation facilities to be provided.

This survey enabled the Project Execution team to make the following conclusions.

- 1. The main sources of water supply in the whole LGA are ponds, hand-dug wells, rainwater and a limited number of boreholes fitted with hand pumps.
- There was no feeling of ownership amongst the communities for the few water points established by DFRRI and the Local Government.
- 3. The spirit of collective responsibility for the provision of portable water supplies was lacking among the communities.
- 4. The primary felt need of the communities is potable water supply.
- 5. As noted above, the LGA is underlain by mainly marine sediments and some igneous intrusive and extrusive. The formations are often capped by laterite of varying thickness.

B) Determination of Groundwater Potentials

Building on the result of the rapid reconnaissance survey, the Project hydrogeological team carried out hydrogeological and geophysical surveys using mainly resistivity depth soundings in more than 20 communities. Electromagnetic profiling using a Geonics EM-34 for more detailed work was undertaken in selected communities.

The results of these surveys indicate that groundwater development will be difficult if not impossible in several; of the project communities. Four hand dug well have been sunk and fitted with hand pumps just to give minimal supply and to test the ground water conditions. These dug wells are in operation in the wet season, while in the dry season the communities organise themselves to share what is available after long hours of recharge. This presents a gloomy picture in view of the fact that alternative sources will be both expensive and time consuming to develop.



C) Water Supply Development

In view of the difficulty of establishing individual water points based on handpump equipped boreholes or dug wells, it was decided that the most cost effective option for establishing a sustainable water supply to the communities in this area would be a small piped water scheme. This could possibly be a groundwater source available to serve a number of communities depending on budgetary provision. Initially two clusters of communities have been identified for this scheme. Hydrogeological and geophysical surveys for the development of well fields for each of the two clusters has been carried out by the project drogeological team.

3. BOREHOLE DRILLING AND PREPARATORY WORK FOR THE SMALL PIPE SCHEME PROJECT

Borehole contract for sinking of 6 boreholes with 3 in each was awarded to m/s Lavalin Nig. Ltd. The first holes tried in Adum East proved unsuccessful as the yield obtained cannot provide adequate water to sustain even a hand pump. Four boreholes have been sunk in the area and they proved successful with yields above 18 litres per second each. These boreholes will be used for the pipe scheme project, which will cover about 14 communities.

A feasibility and preliminary design report has been carried and evidence are very much available for the implementation of the pipe scheme project. Community mobilisation, health education, enlightenment of the proposed scheme is already in progress.

4. THE PROPOSED PIPE WATER SUPPLY SCHEME

The proposed project scheme will involve the abstraction of groundwater from a well field to a service reservoir, subsequent piping to communities and limited distribution within individual communities through standpipes.

This scheme will draw on current Rusafiya experience, and will also specifically investigate the most appropriate methods of operation, maintenance and possible revenue collection for small piped system. Particular attention will be paid to determining the extent to which small community supplies can be undertaken autonomously. It is anticipated that the communities will contribute 10 to 15 percent of the capital cost (mainly the cost of piping within the community) and all of the operation and maintenance and replacement costs.

ANALYSIS OF PIPED SYSTEM ALTERNATIVES

OJULOCAL GOVERNMENT, BENUE STATE

BACKGROUND

- 1. The Rusafiya Rural Water Supply and Sanitation Project (NIR/87/001) was designed to make use of boreholes and hand dug wells to provide water to communities in Oju Local Government. This proved unfeasible due to the low yield of groundwater aquifers that underlay most of the area. To resolve this problem a shift was made to pipe water supply systems, and supplement financing from NORAD was acquired to pay the added cost.
- 2. The proposed project is based on three principles essential to sustainability: community ownership, planning and management. Experience has shown that if communities take direct responsibility for managing the operation and maintenance of and revenue collection for their water supply facilities, they will maintain them provided they plan and own them. While the following management arrangements are likely to be modified during the planning process, they will serve as a guide for project design. It is envisioned that
 - Water User Groups, formed around standpipes, will be responsible for managing individual water points and collecting user fees based on the amount of metered water delivered at the standpipe;
 - ii. Representatives of each Water User Group in a community will form a community Water and Sanitation Committee (WASCOM),
 - iii. Representatives of each WASCOM will be represented on a Water User Association that will manage the system;
 - iv. The Water User Association will contract individuals or a firm to operate the system and to collect revenues from individual Water User Groups.
- 3. In keeping with community ownership and to better ensure that the system will be maintained beneficiaries will be expected to pay part of the construction cost and all of the recurrent costs (i.e operation, maintenance and replacement of all mechanical equipment when it is worn out) for their facilities. Communities would pay for the piped network and standpipes within their community in this way they are paying for something tangible, hold their money until the main system is complete, and set a precedent for later expansion of the distribution system within the community at their own initiative. The community's contribution to construction would be about 40 Naira per person (cash and kind) if a standpipe is provided for every 250 people, but would vary depending on the length of piping and number of outlets. Recurrent costs will be up to 10 Naira per person per month. This is high, but communities really have no option, unless long term national/state RWSS programmes provide a mechanism to help pay for major equipment replacements. Such a programme could drop the cost of 5 to 6 Naira per person per month.

4. Surveys

When the decision was made to proceed with the piped scheme, further geophysical surveys and exploratory drilling were undertaken in both the Adum East and The areas. No aquifer was able to sustain a piped system was able to be located in Adum East area, but a good aquifer was found about one kilometer east of The that potentially could serve both areas. Demographic surveys were also undertaken to locate and estimate the population of individual communities that could be served by piped schemes, and transits were run to determine pipeline elevation profiles. Maps of The and Adum East areas are provided in Figures 1 and 2. The population of The area is about 10,000 and that of the Adum East area is about 22,000.

5. Design for the Adum East Area

A principle consideration in the design of a system for the Adum East area is topography of the area - specifically the fact that the well field is located near The where the ground elevation is 60 meters, while the elevation at Adum East is 135 meters. This means that water must be pumped up hill about 165 meters (20m pumping lift, 75m elevation differential, and 10m storage elevation), requiring well pumps to first lift water to a pumping station near the well field, followed by booster pumps to lift the water up to a storage tank in Adum East. The requisite pumps, generators and pressure pipe are particularly expensive (Table 1). Four gravity mains would then provide service to the communities shown in Figure 1.

6. Design for The Area

The topography in The area lends itself to a simpler - less expensive system. First, well pumps can pump water directly to storage tanks in The and near Okwutungbe; second, the pumping elevation is only 60 meters (20m pumping lift, 30 elevation differential, and 10m storage elevation); and third, the population is divided between the two areas requiring only half the total flow to go through the pressure mains heading east and pressure mains can be used (Table 2). The four gravity mains serving The and its surrounding communities and a fifthgravity main serving Okwutungbe and communities to its north are shown in Figure 2.



7. Cost Summary

The estimated costs of the systems for The and Adum East areas are shown below. In terms of the cost per person served, the US\$610,000 needed to serve the 22,000 people in The area corresponds to US\$28 per person, while the US\$860,000 needed to serve the 15,000 people living in the Adum East area corresponds to US\$57 per person. This means that twice as many people can be served for a given investment in The area as in the Adum East area.

Cost Summary (US Dollars)

| Item | Uto Area | Adum East Area |
|----------------------------|-------------|----------------|
| Construction | 440,000 | 640,000 |
| Design (6%) | 25,000 | 40,000 |
| Construction supervision | (8%) 25,000 | 40,000 |
| TA, training and reporting | 75,000 | 75,000 |
| Contingencies (10%) | 45,000 | 65,000 |
| Total | 610,000 | 860,00 |

8. Recommendations

It is recommended that priority be given to The area for the following reasons:

(i) Guinea Worm disease is mor prevalent there (ii) more people can be served for a given investment there, and (iii) the water source is located there. It is also recommended that GCCC funds be used to construct about 40 hand dug wells in the Adum East area. While water will probably need to be rationed during the dry season and some wells may even go dry at that time of year, service would be better than it is now. If government and UNDP choose to finance a piped system in the Adum East area, it is recommended that a staged approach be taken so that management arrangements can be demonstrated and the safe yield of the well field can be confirmed before preceding with the largerinvestment.

9. Financing

The following financing is available for planning and construction in Oju LGA after March 31,1992. The total US\$720,000 is adequate to cover the piped system in The area (US\$610,00) and the hand dug wells in the Adum East Area (US\$110,000). The balance would be held in reserve to cover possible minor extensions service and unexpected costs.

PIPED SYSTEM

| NIR/87/011 funds for Oju | US\$150,000 US\$425,000 US\$35,000 |
|-------------------------------|--|
| NORAD funds | |
| Community contribution | |
| Total | US\$610,000 |
| Hand Dug Wells | |
| State GCCC funds ² | US\$90,000 |
| NORAD funds ³ | US\$20,000 |
| Sub-total | US\$110,000 |
| Total | US\$720,000 |

- 1) About 8.5% of construction cost (3/4 cash and 1/4 in kind) The cost will vary depending on desired number of standpipes.
- 2) Naira 1.77 million at 20 Naira/USD.
- 3) Local manufacture of prototype direct action handpumps (about 20), half of which would be installed in the project area and the other half elsewhere in the country as part of the FMAWRRD's handpump monitoring programme.



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10. In addition to the funds listed below, Oju LGA is being requested to finance operation of the LGA RWSS Unit at a level of Naira 5,000 per month starting November, 1992 and continue through March 31, 1994 (Naira 85,000 total), with funds for the first six months to be deposited in the project account in Jos prior to further activities in the LGA. The existing WASU imprest account will be maintained for this purpose and quarterly reports submitted to the LGA.

Schedule

| Communities to complete planning of their distribution systems. | |
|---|-----------|
| Construction drawings, specifications and tender documents completed. | |
| Short list of qualified contractors finalized | |
| Contractor selected based on lowest bid and contract awarded. | |
| Construction started | |
| Construction completed | Dec. 1993 |

