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and Rural Development

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WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION<sup>1</sup>

**ANNUAL PROGRESS REPORT**

Approved by SC on 3.2.94

1993

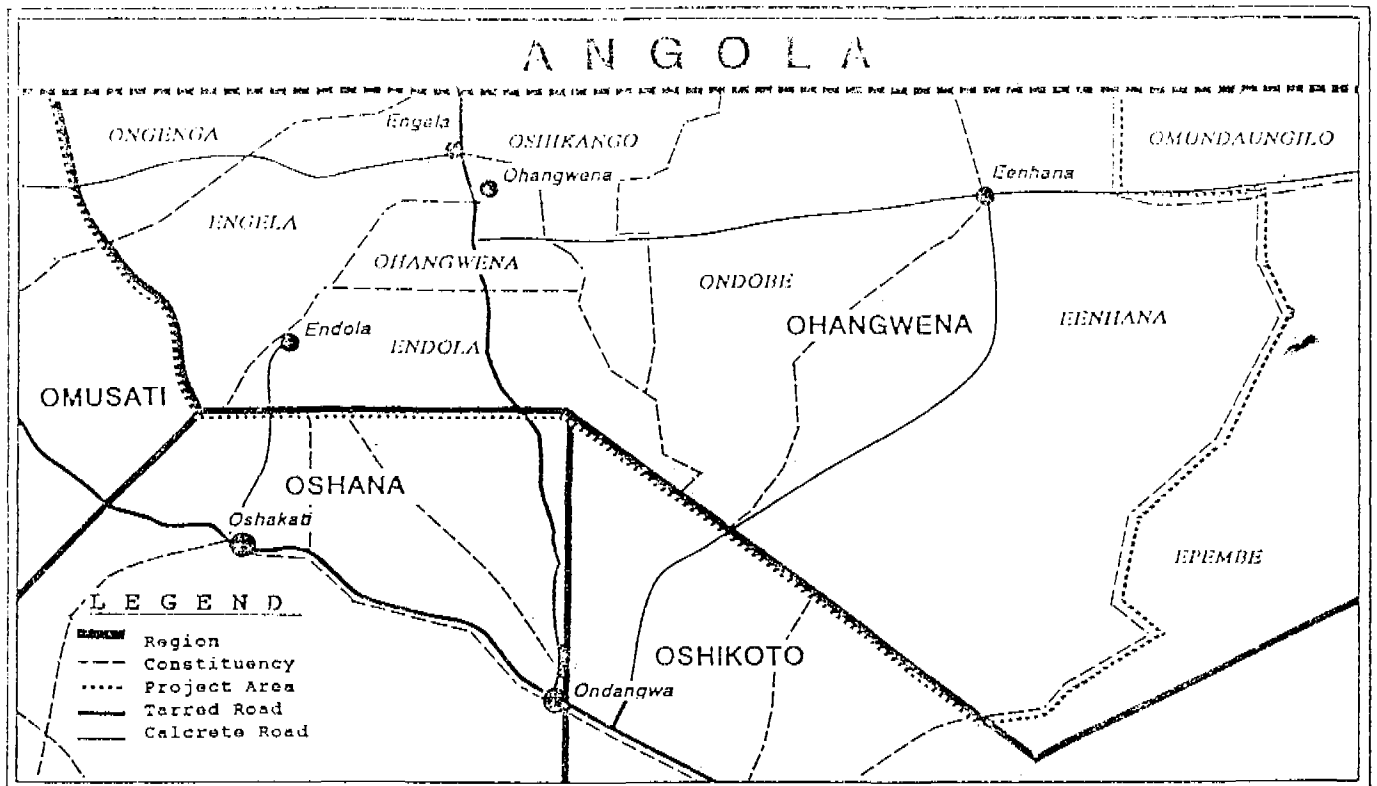
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Project No: 28103701-6

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The Project Area  
of the Water Supply and Sanitation Project  
in the Ohangwena Region



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## ABBREVIATIONS

CANAMCO	Canada Namibia Co-Operation
CCN	Council of Churches in Namibia
CD	Community Development
CDO	Community Development Officer
CHW	Community Health Worker
DAPP	Development Aid from People to People
DCD	Directorate of Community Development
DRD	Directorate of Rural Development
DRWS	Directorate of Rural Water Supply
DWA	Department of Water Affairs
EAIHP	English Area Integrated Health Project
GST	General Sales Tax
IABP	Integrated Area Based Programme
IEC	Information, Education and Communication
IRC	International Water and Sanitation Centre
MAWRD	Ministry of Agriculture, Water and Rural Development
MEC	Ministry of Education and Culture
MHSS	Ministry of Health and Social Services
MRLGH	Ministry of Regional, Local Government and Housing
MAU	Namibia Agriculture Union
NET	Namibia Development Trust
NGO	Non Governmental Organization
NISER	Namibia Institute for Social and Economical Research
NRC	Namibia Red Cross
PHC	Primary Health Care
PRODEC	Programme for Development Cooperation
RDC	Rural Development Centre
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Fund for Women
VIP	Ventilated Improved Pit latrine
VLOM	Village Level Operation and Maintenance
WASP	Water and Sanitation Policy
WPC	Water Point Committee
WSSPOR	Water Supply and Sanitation Project in Ohangwena Region

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## FOREWORD

The Work Plan for 1993 did not exist. Therefore the implementation was carried out based on the decisions by the Steering Committee Meetings held quarterly. It is also evident that during the first quarter of 1994 there will be a complete change of the expatriate personnel active from the beginning of the project. For these reasons the report content does not follow strictly Kinuda's guidelines for reporting. The report is also highlighting some of the activities more than normally needed in order to facilitate the smooth process of transferring the duties to the project's new expatriate personnel.

## EXECUTIVE SUMMARY

The organizational rearrangements in the Ministry of Agriculture, Water and Rural Development made all the objectives of the first Sub-Project: "Institutional and Human Resources Development" irrelevant and impossible to implement by the project. The planning of organizing a new directorate for rural water supply started in 1992 by the Department of Water Affairs. The new structure of rural water supply under the Department of Water Affairs was finally approved by the Public Service Commission and endorsed by the Cabinet in July 1993. This development facilitated the revision of the project document and change of the implementing authority from Directorate of Rural Development to the Directorate of Rural Water Supply. Due to the existing set-up of the project with the Directorate of Rural Development the possibilities and resources of the advisors to participate in the development of the new organizational structure of the rural water supply with Department of Water Affairs were limited. Therefore the role of the project was merely to follow-up the ongoing development without active contribution.

In the first Supervisory Board meeting in November, 1992 it was decided to extend the duration of the project with one year with the original budget unchanged. Especially lack of Namibian counterpart staff and the planned extensive public service restructuring programme had affected the project implementation adversely and led to situation where the personnel employed by Finnconsult assumed duties which did not belong to them. In early 1993 it became clear that the assumptions on which the original Project Document was based were not realistic. Consequently it was agreed that the Revised Project Document that takes into account different changes in the project environment will be prepared. Accordingly the Board approved the Revised Project Document as proposed and also decided to extend the Project period with one year to the end of 1996 without exceeding the original project budget.

During 1993 the community involvement approach developed in 1992 was adapted and refined. This was done by incorporating the practical field experiences of the extension personnel and relevant information collected through formal and informal meetings with local and international development workers. The relevance and success of the approach is evident from the increased involvement by the communities in the project area in their own water and sanitation affairs and the fact that the approach is in line with the policy and strategies of DWA's newly established DRWS. The selected philosophy and working approach augur well for the intended full incorporation of the project into the DRWS. During the report year the emphasis was on the establishment and the training of WPC members. During 1994 the members will be trained to train the community in issues of water and sanitation.

Alternative solutions for sustainable water supply in the project area have been worked out. Also the socio-cultural and financial feasibility of the alternatives has been in a drafting stage by the end of the year. The Environmental issues were postponed by the Steering Committee to 1994. The cost sharing was worked out for the Revised Project Document. Proposals for the design criteria as well as implementation costs were prepared for the drafting of the revised project document.

The construction of the water points as well as sanitation facilities continued based on the order of received applications. The participation of the communities was given a high priority. Due to the serious drought, activities at some sites were postponed and priority was given to the areas affected most by the drought. Sanitation construction was mainly focused on institutions like schools and clinics. Several methods of latrine construction were tested and the designs were revised based on the experience gained from contractors and the communities.

The total budget of the Finnish contribution for 1993 was FIM 7 300 000. Total disbursements paid by Finnida during 1993 were FIM 7 161 392. The funds allocated for the project by Finnida during 1992-1993 were FIM 15 330 000. Total disbursements during the same period were FIM 15 063 000. About N\$ 64 000 (FIM 108 800; 1 N\$ = 1,7 FIM) was paid by the Namibian Government during 1993. End of the year an extra sum of about N\$ 236 000 (FIM 401 200) was in process for the payment by the Namibian Government during the fiscal year 1992-1993.

## 1. ACHIEVEMENTS DURING THE REPORT PERIOD

### 1.1 INSTITUTION BUILDING AND HUMAN RESOURCES DEVELOPMENT

#### Objectives of the Original Document

In the original Project Document the three immediate objectives were defined as follows:

1. "To establish and organize the Marula Region Water Supply Unit under the Directorate of Rural Development for sustaining development of rural water supply and sanitation services."
2. "To develop the Marula Region Water Supply Unit and prepare it for independent operation without external support."
3. "To establish and arrive communication enabling an efficient information on project activities in the project area as well as at all levels of administration of the involved parties."

The organizational rearrangements in the Ministry of Agriculture, Water and Rural Development made all these objectives of the first Sub-Project "Institutional and Human Resources Development" irrelevant and impossible to implement by the project. Early 1993 the responsibility for rural water supply was transferred from the Directorate of Rural Development (Department of Agriculture) to the Directorate of Rural Water Supply (Department of Water Affairs). Due to the existing set-up of the project with the Directorate of Rural Development the possibilities and resources of the advisors to participate in the development of the new rural water supply organizational structure with Department of Water Affairs were limited. Therefore the role of the project was merely to follow-up the ongoing development without active contribution.

The achievement indicators "National Policy", "Organizational structure of rural water supply" and "management procedures for rural water supply" as defined in the original project document have all been worked out by the Department of Water Affairs without the project's direct involvement. The WASP document and Rural Water Supply Organization were approved by Cabinet in the middle of 1993.

Due to this development the agreement with project's Senior Human Resources Development Adviser, Christina Swart, was terminated at the end of April 1993. According to the decisions taken by the Steering Committee the project concentrated only on the training of the project staff, contractors and communities during the year 1993.

#### Training activities conducted during 1993

The training events organized or participated during the year are presented in Annex 8.

#### Ad-Hoc Water Supply and Sanitation Technical Support Committee

The project facilitated the meetings of the Ad-Hoc Water Supply and Sanitation Technical Support Committee four times during the year 1993. The Committee is composed of permanent members from the Department of Water Affairs, Directorate of Rural Development, Ministry of Health and Social Services, Water Supply and Sanitation Project in Ohangwena Region, Rural Development Centre, Diocesan Water Project, IBIS/WUS-Denmark, DAPP, IABP-Tsandi, UNICEF, Development Brigade Corporation. In each meeting invited participants from other Government units and NGOs have been present.

Two meetings of the Committee concentrated on the issues of handpump standardization. The standardized procedures for the assessment of water supply and sanitation coverage in the Northern Regions was discussed in a one day workshop organized by the Committee. The last meeting of the year concentrated issues such as the development of latrine designs and coordination in sanitation construction.

## 1.2 COMMUNITY INVOLVEMENT

### Objectives of the Original Document

In the original Project Document the three immediate objectives were defined as follows:

1. To mobilize the communities covered by the project in order to create an awareness of the necessity of community participation in the entire project cycle.
2. To promote increased involvement in the planning, implementation and evaluation of the water supply and sanitation services with a strong emphasis on maintenance and the introduction of a cost-sharing system.
3. To identify and support potential income generating activities with a strong community participation and involvement in connection with the water supply and sanitation development.

During 1993 the community involvement approach developed in 1992 was adapted and refined. This was done by incorporating the practical field experiences of the extension personnel and relevant information collected through formal and informal meetings with local and international development workers. The relevance and success of the approach is evident from the increased involvement by the communities in the project area in their own water and sanitation affairs and the fact that the approach is in line with the policy and strategies of DWA's newly established Directorate of Rural Water Supply. The compatible philosophy and working approach augur well for the intended full incorporation of the project into the DRWS and future cooperation between the community and the Government. During the report year the emphasis was on the establishment and the training of WPC members. During 1994 the members will be trained to train the community in issues of water and sanitation.

Details of the year's activities are as follows:

### Awareness Creation

Effective participation is only possible when all concerned know what the aims of the project are, when there is a clear understanding and appreciation of the particular conditions and circumstances of the people in the project area and when members of the community are provided with the necessary management and technical skills to take on their tasks. The project has approached this in two ways, namely by working directly with the members of the various communities in Ohangwena and by working together with other development agencies within and outside the project area on policy as well as specific programme issues.

On the direct Community-Project level 40 community meetings with a total attendance of about 2 440 (1 200 women, 1020 men and 220 children) were held. 20 water point committees were established and the members received specialized training (e.g. financial management, meeting procedures, planning). Feasibility studies were conducted in two communities during January and February 1993. The studies provided project personnel with a better understanding of the behaviour and knowledge of water issues within the communities. During 1993 a total of 91 water point construction applications and 89 latrine construction applications were received.



### Income Generation

The establishment of a strong small business sector to provide goods and services primarily to the project and secondarily to the community continued to be difficult. Various factors need to be considered to find reasons for this. Ohangwena is a densely populated rural subsistence farming area with a high illiteracy rate and a very narrow managerial and technical base. The main business activities relate to trading and entertainment and there is an underdeveloped manufacturing sector due to the unavailability of natural resources and to the large existing market of relatively cheap imported materials and goods. Households in the area rely on cash from individuals who have jobs in the formal sector (private and governmental), or from other sources such as state pensions. Even with a high rate of unemployment, self-employment is viewed as a secondary, and in many cases a temporary income generating option. The aforementioned are illustrated by the past year's experience when people trained and contracted as **entrepreneurs** (for example to make and sell bricks and fencing or to provide transport) insisted on viewing themselves as project employees. Aspects of entrepreneurship such as self-motivation, self-improvement, perseverance, risk taking and identification of new opportunities and as well as basic business management functions like quality control, costing, pricing and marketing had to be absorbed into the project and became a costly and time consuming exercise.

### Coordination

Certainly one of the most interesting and exciting development during the report year was the project's increased role together with other agencies and actors in creating and maintaining mechanisms for cooperation and coordination on local, regional and national level with regard to policy issues and field activities. Of particular note is the following.

#### "Working Group for the Water Point Committees"

The Project continued to be closely involved in the work of the "Working Group". Under the chairpersonship of DRD, the membership was open to local and international NGOs and governmental institutions. The group's work was to promote participatory rural water supply through the development of a series of handbooks. The handbooks produced are the following:

- \* Handbook for Water Point Committees,
- \* Training Together to Start Water Point Committees,
- \* The Rural Extension Officer's Work Manual: Getting Closer to the Community,
- \* Training Manual for Rural Extension Workers.

The members of the Working Group were DWA, UNICEF, NDT, the NRC, NAU, Canamco, WSSPOR, the Anglican Church and MEC. The Project Coordinator and the Senior CD Adviser represented the project and attended nine meetings held in Windhoek during 1993.

Under this programme of cooperation three workshops for community workers and caretakers were held. The Junior CD Adviser, H. Kapweya, attended the two workshops on WPCs conducted in Rehoboth in January/February and Okashana in August and participated in the evaluation of the supporting handbooks. In February she was also elected as convenor of the Northern Water Point Committee Network Team. She arranged three meetings during the year to share information and to plan for the follow-up workshop in August 1993. The Construction Supervisor, J. Hashoongo, Project Secretary, O. Shiimbi and a Water Point Caretaker from the village of Onamutenya attended the Caretaker's Workshop held at Okashana during September 1993 and helped to develop draft caretaker handbooks for windmills, diesel engines and hand pumps.

In June 1993 the members of the Working Group started discussing the future of the Group and in particular future NGO/DWA cooperation. In line with Cabinet's decision to transfer the responsibility of the rural water supply from DRD to DWA the chairpersonship of the Working Group was handed over to DWA in September 1993. In November 1993 the Working Group was disbanded to enable the establishment of a NGO/Donor/DRWS coordination forum. Participants at the one day workshop on NGO/Government Coordination held on 26 November 1993 welcomed such cooperation but decided to meet again in February 1994 for further discussions. This meeting will be held in Windhoek and chaired by the Project Coordinator.

#### **Ohangwena Regional Council**

Starting in June 1993 close cooperation has been established between the project and the office of the Regional Council. As a result of various meetings the following situation has developed:

- \* The Regional Governor has been appointed as a full member in the Project Steering Committee;
- \* The project's community development personnel has been participating in community meetings held by the Councillors;
- \* current and future activities such as the
  - o selection and allocation of contractors
  - o planning of water supply
  - o function of intersectoral development committees
  - o design of the revised project document and work plan 1994
 have been carried out jointly.

#### **"Ohangwena Community Development Coordination Group"**

The Project facilitated and promoted the establishment of the "Ohangwena Community Development Coordination Group" which met for the first time in October 1993 under the chairpersonship of the Junior CD Adviser. The first meeting was attended by the representatives of the following: DWA/MAWRD, UNICEF, PHC/MHSS (Engela and Eenhana PHC-Districts), DCD/MRLGH, CCN, Diocesan Water Project and WSSPOR. It was decided to extend future invitations to the Agriculture Extension Officers/MAWRD, MEC, Cooperation for Development and Development Brigade Corporation. The aim of this group is to coordinate the activities of all the community development bodies in the Ohangwena Region in order to

- \* avoid duplication of activities;
- \* support of each other's activities
- \* facilitate the sharing of experiences; and
- \* assist the Regional government where needed.

The second meeting was held in December 1993.

#### **Namibian Voluntarism**

The Senior CD Adviser participated in the arrangement of the first Consultative Workshop to design guidelines for Namibian volunteers. The two day workshop was held in November 1993 and participants searched for a common understanding of voluntarism in the Namibian setting and a way of rewarding volunteers. A follow-up workshop with more volunteer participation is planned for 1994.

### Canamco

During November 1993 members of the "Working Group on Water Point Committees" were invited to take part in the evaluation of a community water training programme in the Kavango funded by UNICEF and executed by Canamco. In particular the impact on the various communities, the water point committees and the trainers had to be assessed. In general this study would be a contribution to the development of national criteria for evaluating participatory water training. This was a good opportunity to compare our own work with that of another agency working in a different area and to share our experience and skills with our colleagues. The Senior CD Adviser together with representatives from DWA, UNICEF, DRD, and Canamco participated in drawing up the terms of reference and designing the evaluation form. The Junior CD Adviser was a member of the evaluation team which visited the Kavango during 13 - 20.11.1993. The final report is to be published in 1994.

### UNICEF

The year has seen increased cooperation between the project and UNICEF. Not only were these two bodies working together as members of various national bodies on issues related to community water supply and sanitation but also on specific activities such as providing community and business management training to contractors during July and September 1993 and the attendance of the Junior CD Adviser and Community Development Officer at the IEC workshop in November 1993.

### EAIHP/MHSS

Apart from the joint activities regarding the Health and Hygiene School Education Programme, officers of both projects are making a concerted effort to share their resources and experiences. Discussions to train and use the CHWs in the establishment and support of WPCs and members of the proposed intersectoral development committees, progressed well and will be translated into action during 1994.

### Diocesan Water Project, Odibo

The Project has consistently made an effort to involve the Diocesan Water Project based in Odibo in planning and executing community based water supply and sanitation activities within the Region. However after nearly two years no firm working relationship - formal or informal - has been established. This is an unfortunate state of affairs and is to the detriment of both the communities and the two projects.

### Hygiene Education

Together with EAIHP/MHSS and MEC the Project commenced with a series of "Health and Hygiene Education Demonstration Days" at schools in the Ohangwena Region where sanitation facilities have been erected by the project. To date four schools (Omuonde, Oshikango, Onekwaya-East and Oshimwaku) with a combined learner population of 2 883, 81 teachers and 98 members of the community participated in the programme. The demonstration material and activities have been designed to introduce new knowledge, reinforce "correct/good" habits and attitudes primarily amongst young learners at school and secondarily amongst their parents and siblings not attending school. The emphasis was on learning while having fun and issues addressed were as following:

- \* How to use and how to clean a toilet
- \* Personal hygiene (hand and body washing, care of hair, nails and teeth)
- \* Personal hygiene for girls
- \* Waste disposal and recycling
- \* Cleaning of classrooms
- \* Use of water

In November 1993 forms were designed which will be used during 1994 to evaluate the programme.

### Integration into DWA

Starting at the beginning of the year a close relationship developed between the Department of Water Affairs and the project's Community Involvement Section. The following is of particular interest:

- \* One DWA and three WSSPOR officers were trained by DWA in the skills of "audience research" to conduct a two week research project among the user communities of the Okahao-Onaanda rural pipe scheme.
- \* During the weekends of April 1993 the WSSPOR's Community Development Officer assisted the DWA's Community Officer in the training of the WPCs of the Okahao-Onaanda rural piped scheme.
- \* The Senior CD Adviser prepared and submitted comments on the following DWA material in March 1993 and November 1993 respectively:
  - o the Water Comic Books designed by DWA for use in the schools;
  - o the proposed training programme for DRWS's rural water extension officers.

### International Exposure

The Junior CD Adviser represented the Ministry of Agriculture, Water and Rural Development and the Project at a two weeks workshop on "Women in Water Supply" in Kenya from 15 to 27 February 1993. The workshop was funded by the Government of Netherlands and organised by IRC. Eleven representatives from eight African countries shared their experiences in participatory water supply and sanitation, and were introduced to the latest trends and information in this field. They were also given the opportunity to develop action plans for their own countries. This trip offered the Junior CD Adviser also a chance to visit the Finnida Water Supply Project in Kakamega, Kenya. These experiences have refined her analytical and planning skills and enabled her to operate on the implementation as well as the planning level.

## 1.3 WATER SUPPLY AND SANITATION DEVELOPMENT PLAN

### Objectives of the Original Document

In the original Project Document the three immediate objectives were defined as follows:

1. To identify the system of covering the project area with feasible and sustainable water supply and sanitation services according to the relevant national policies
2. To indicate the institutional and human resources development needs originating from planning, design, implementation as well as operation and maintenance of the improved water supply and sanitation systems
3. To prepare development plans for water supply and sanitation, including cost estimates and implementation programmes

Alternative solutions for sustainable water supply in the project area have been worked out. Also the socio-cultural and financial feasibility of the alternatives has been in drafting stage at the end of the year. The Environmental issues were postponed by the Steering Committee to 1994. The cost sharing was worked out for the Revised Project Document. Proposals for the design criteria as well as implementation costs were prepared for the drafting of the revised project document.

### Mapping

The mapping of the "Catchment Area of the Engela Hospital" prepared by the MT-Survey was completed at the end of the year. The programme for the completion of the mapping of the whole project area was approved in the revised project document. The progress of the mapping is presented in annex 2.

### Geographical Characteristics of the Project Area

The draft report was completed by Interconsult in the end of the year including the following main subjects: location, topography, climate, geology and physiography.

### Socio-Economic Development

In the beginning of 1993 the Socio-Economic and Health Desk-Top Study was carried out by NISER. The study was planned, financed and supervised jointly with the Engela Area Integrated Health Project. Based on this report the assessment of the socio-economic situation development had been drafted by the end of 1993 including the following subjects: socio-political structure, tenure, infrastructure and services, population, economic and development potential.

### Existing Water Supply Situation

Rural piped water supply coverage in the project area has been concluded jointly with the Department of Water Affairs and presented in tables and maps. Accordingly about 46 000 people (37 % of the total population of the project area) are served through the rural piped water supply service.

Point water supply coverage in the project area including existing omifimas and ndungus without protection is estimated to be about 40 % (50 000 people) compared to the total population of the project area. Practically it means that these people have access to the water source although the water quality of the source might be very poor.

Surface water supply, meaning open oshanas, has not been taken into account in water supply coverage calculations.

### Water Resources Assessment

The surface water potential based on the DWA's report: "Investigations into the Surface Water Resources of Owambo" had been drafted by the end of 1993 by Interconsult.

The field survey of shallow groundwater in the Western part of the project area was carried out by Ernest W B Miller & Associates during the first half of 1993. The results of other studies carried out earlier by Diocesan Water Project, Department of Water Affairs and Ground Water Consulting Services mainly covering the Eastern part of the project area were incorporated into the report. Assessment of the shallow ground water potential is based on this report and had been drafted by the end of 1993 by Interconsult.

In order to evaluate the reliability of the above mentioned assessment the quotations for the electrical resistivity, electromagnetic survey and ground penetrating radar investigations were received and the evaluation was approved by the Steering Committee. Due to the limit of the available budget the investigations could not be carried out during 1993.

In order to assess the deep ground water potential in the project area the following investigations have been carried out:

- \* The Deep Ground Water Desk-Top Study was carried out in 1992 by Interconsult
- \* Based on the above mentioned study the Reflective Seismic Survey was carried out by the University of Pretoria at the end of 1992. The total length of the seismic lines were 10 km.
- \* Based on the above survey the experimental drilling programme of ten deep boreholes was carried out during February - May 1993 by the drilling contractor, Nimtref. Four of the boreholes were drilled on the seismic lines. One was drilled for new Engela Hospital. The remaining five boreholes were drilled at the places suffering most from the ongoing very serious drought. Only one of the boreholes was very successful, six were half successful (saline water) and three boreholes were fully dry.
- \* The logging of the 9 boreholes recently drilled was carried out by DWA/Arnold Pittner in June and in August 1993.

Based on the reports of all above mentioned investigations the Deep Ground Water Potential had been drafted at the end of 1993 by Interconsult.

### Water Supply Options

The development and implementation of the rural piped water supply is carried out by the Department of Water Affairs. The project has supported DWA in the development of community participation and participatory training.

The shallow well construction options have been developed based on experience gained from construction and community participation activities. During October 1993 the project and UNICEF organized jointly a shallow well construction training course in Amutanga and at the end of the training a final selection of the water supply construction options for the revised project document and water supply development plan was done. Accordingly it is recommended that shallow wells are constructed either with interlocking or wired blocks and equipped with a bucket lifting system. Based on the Amutanga experience the well construction manual has been drafted including full break down of required materials, resources and costs.

Deep ground water supply construction options are limited to the Eastern part of the project area. Deep boreholes (> 100 m) are recommended only East of Eenhana. The objective is that the capacity of these boreholes should be more than 20 m<sup>3</sup>/d and therefore could be equipped with submersible pumps. In order to utilize middle deep ground water resources available at the depths of 40 - 80 m between the Engela and Eenhana the boreholes drilled up to 80 m could be equipped with handpumps if the yield of the borehole is more than 4 m<sup>3</sup>/d and the quality of the water is acceptable.

Other options such as dams, desalination, water harvesting, groundwater recharge, etc will be presented in the water supply and sanitation development plan.

### Sanitation Options

The survey of existing sanitation facilities in the project area was carried out by Ernest W B Miller & Associates and the project's Field Manager. According to the results only 7 % of the rural population has some kind of sanitation facilities and only 3 % of the rural population is using the VIP latrines.

In order to test different sanitation options the compost latrine study commenced at the beginning of 1993 and accordingly 11 test latrines were installed. Based on the second follow-up evaluation done late 1993, four of the owners favour compost latrines, five favour VIPs and two remained neutral. Several small technical improvements were proposed. The technical features of latrine operation are not yet available.

Different private and institutional sanitation options were discussed in the workshop in December 1993 organized by the Ad-Hoc Technical Water Supply and Sanitation Support Committee. The following recommendations were accepted:

- \* the best characteristics of each design shall be combined into one standard design
- \* accordingly the cost breakdown will be defined including possible overhead costs

The sanitation options for rural areas will be developed in 1994 based on the designs created in the above mentioned workshop.

The Root Zone Plant or Wetland System is recommended for Semi-Urban Sanitation Options. The wetland system treatment uses bacterial metabolism and physical sedimentation in the same manner as conventional waste water treatment systems. The fundamental difference between conventional and wetland systems is the following:

- \* in the conventional system waste water is treated rapidly requiring high level management and a technically advanced environment
- \* the wetland system treatment is a comparatively slow process and does not require special management and is suitable for an ecological environment

In order to assess the full feasibility of the above mentioned wetland system it is recommended that pilot tests are carried out in the Engela, Ohangwena and Eenhana settlement areas. For institutions and private households in the rural areas using running water the so-called small scale "Sub-Surface Agroplant" or three-phase septic tank equipped with an underground perforated outlet-pipe is recommended. A more detailed system description will be presented in the Development Plan.

#### Monitoring and Follow-Up

A workshop on "Standardized Procedures for the Assessment and Monitoring of Water Supply and Sanitation Coverage" was organized by the Ad-Hoc Water Supply and Sanitation Technical Support Committee in March 1993 in Ongwediva with high participation from all concerned parties. As a result of the workshop the Terms of Reference for the preparation of the above assessment was concluded. Due to the lack of funds and due to the ongoing Government reorganization the work has not commenced. Nevertheless the development of the database program for the input and output of field data was awarded to M-Tech by the Steering Committee in April 1993. At the end of 1993 several meetings were held with DWA to formulate the Management Information System for rural water supply. According to the recommendations of these meetings the project's database will be developed only for the project purposes at this stage.

#### Environmental Impact Assessment Study

The terms of reference for the Environmental Impact Assessment was drafted in March 1993, but due to its large and expensive content the study was postponed to 1994. New and more comprehensive terms of reference were drafted at the end of the year in order to facilitate the start of the study early in 1994.

#### Revised Project Document and Work Plan for 1994

In April 1993 the Planning and Design Adviser drafted a discussion paper consisting of subjects on population forecasts, existing water resources and an areal water development programme proposal to facilitate the visit of Finnida's Water Supply Adviser, Mr E. Kontula. As a result of his visit the guidelines for the drafting of the Revised Project Document were issued and agreed with DWA. Accordingly the first draft Revised Project Document was discussed in the Steering Committee Meeting in September 1993. The second draft was discussed in the Steering Committee Meeting in November 1993. The Document was corrected according to the comments by the Steering Committee and the Final Draft Document was submitted for the approval to the Supervisory Board at the end of November 1993. In the meeting of the Supervisory Board on 1.12.1993 the Revised Project Document and the Work Plan 1994 (drafted in several workshops parallel with the preparation of the Revised Project Document) were approved.

## 1.4 PHYSICAL IMPROVEMENTS

### Objectives of the Original Document

In the original Project Document the four immediate objectives were defined as follows:

1. To increase the coverage of population by improving water supply and sanitation services.
2. To provide the high priority groups and institutions with improved water supply and sanitation services.
3. To indicate the institutional and human resources development needs originating from implementation of water supply and sanitation systems.
4. To carry out experimental implementation of water supply and sanitation facilities.

The construction of the water points as well as sanitation facilities continued based on the order of received applications. The participation of the communities was given a high priority. Due to the serious drought activities at some sites were postponed and priority was given to the areas affected most by the drought. Sanitation construction was mainly focused at institutions like schools and clinics. Several methods of latrine construction were tested and the designs were revised based on the experience gained from contractors and the communities.

### Shallow Well Construction

The method of using concrete rings was abandoned due to its very low rate of community participation, high accident risk and high transportation costs. Anyhow, due to the production during the previous year about 150 rings were still in stock. Therefore shallow well construction with concrete rings continued during the year until almost all rings were used. Some rings were left for other purposes like lining of latrine pits, construction of small water storage tanks or for the use as grain stores.

In order to increase community participation the methods of lining the wells were tested by using three types of concrete blocks manufactured at site by the community. In Amutanga three Omifinas were lined by using

- a) normal concrete bricks,
- b) specially formed interlocking blocks with horizontal reinforcement
- c) vertically and horizontally wired specially formed concrete blocks.

All required forms were manufactured in the local private welding workshop. Based on the gained experience it was decided that in the wells already dug down to the water level the interlocking blocks should be used. In wells dug in the soft sand the wired blocks will be used and the digging of the well is done inside of the constructed block wall (Sinking method). Accordingly required unit price lists for the contractors were developed and the construction manual was in its final stage at the end of 1993.

At the end of the year 31 constructed shallow wells were in use.

### Drilling

The in-service training of the drillers ended in the middle of May 1993. Thereafter studies to find out locally available sand suitable for borehole filters were conducted by the drilling team. One promising site was identified near Ruacana, but due to its remote location and the limited market for filter sand the interest of the local business community was very low. Therefore tenders for supplying filter sand for the project use were requested. Based on the evaluation of the received tenders DWA ordered filter sand from South Africa. The same supplier also delivered the required casings and screens for ten shallow boreholes. The materials were received in October 1993. A water trailer and a diesel trailer needed in drilling were provided by the Rural Development Centre. The Valmet tractor ordered in 1992 was received in April 1993. The tractor is used for the transportation of all drilling equipment and materials to the drilling site. The drilling rig with all its accessories was mobilized to the drilling site early November 1993.



The first borehole drilled by the project's drilling rig (provided for the project's use by the Catholic Mission) was completed at the beginning of December 1993. The use of mud for preventing the collapse of the hole was tested but due to the lack of proper mixing equipment the hole was completed without mud.

The drilling crew consists of three drillers employed by the project and two drillers seconded from the previous DRD. Later these two drillers were transferred to the recently established DRWS. Due to the arrangements of the new Directorate it is unsure if the drillers from the Ministry can continue with the project.

The DRWS nominated two experienced drillers from Rundu to assist the project's drilling team in casing, backfilling and filling of required forms. This training was done at the drilling site in November-December 1993.

At the end of 1993, 7 boreholes drilled were in use.

### Handpumps

During the drought it became evident that most of the shallow wells will dry up. This is due to the nature of perched ground water. Therefore the installed handpumps became useless. Also none of the available handpumps fulfil the VLOM criteria. Therefore the communities could not remove the handpumps from empty wells. Actually, in many cases the community did not know that the well was empty. They thought that the handpump had been broken. Based on the discussions with the communities the project started to develop a bucket water lifting system, which is easy to construct at site (high community contribution) and easy to maintain by the community. The designs for slab, windlass-columns and the lid were done by the project's Design Adviser and prototype moulds were manufactured in a local private workshop. This type of the bucket lifting system has now been tested in several wells. Basically the system works satisfactorily, but some details need to be developed more. Anyhow the communities have clearly shown that they prefer the bucket water lifting system.

### Fence and Cattle Trough

Several internal project meetings have been held to solve the problems of

- a) how to encourage communities to construct a fence around the water point
- b) what is the best design for the cattle trough and how far it should be from the water point

Because of the deforestation problem the project can not encourage the use of wooden logs as a fence, although it is the tradition. Finally at the end 1993 the concrete pole system was developed and tested. The price of concrete poles casted on site (only cement and steel provided by the project) is very low, i.e. N\$ 5/pole. The fence wire needed for one well will cost less than N\$ 10. Testing of the concrete pole fence will continue in early 1994.

### Concrete Ring Water Tanks

There has been a demand from private people to construct small, cheap and simple water tanks for water or grain storage. The water tanks consisting of two concrete rings (total volume of 2,5 m<sup>3</sup>) installed on top of each other and equipped with a tap and cover have been tested. The concrete rings have been manufactured by the project's contractors. Results have not been very promising due to the high transportation costs, need of sophisticated installation equipment and difficulties to make water-tight joints between the rings. Possibilities to cast the rings on site by using the continuous casting method could be tested in future.

### Ferrocement Water Tanks

The construction of ferrocement water tanks for schools was initiated by UNICEF. The first training course for local contractors (builders) of the construction of 10 m<sup>3</sup> tanks was organized in the beginning of the year. Simultaneously the survey of schools was conducted in order to define the feasibility for water tank construction. The Water Supply Project in Ohangwena Region identified 6 contractor candidates from Ohangwena Region for training. The WSSPOR supervisor participated the training. After the contractor training the supervision and transportation in Ohangwena Region was organized by the WSSPOR. UNICEF provided materials and paid the contractors.

During May-July 1993 a second training session was organized by UNICEF for the construction of 46 m<sup>3</sup> ferrocement tanks and double pit latrines. Thereafter the schools were provided with either a 10 or a 46 m<sup>3</sup> water tank and one double pit latrine. At the end of 1993 a total of 31 ferrocement tanks were in use. (28/10m<sup>3</sup> and 3/46m<sup>3</sup>) The progress of the ferrocement tank construction is presented in Annex 4. Constructed latrines are presented in Annex 5.

### VIP Latrines for Schools and Clinics

According to the school sanitation survey carried out by the project most of the schools in the rural areas are without any sanitation facilities. The same applies for the clinics. Therefore the Steering Committee decided to give priority to sanitation construction for schools and clinics in order to demonstrate improved hygiene to the rural communities. School and clinic latrine designs were prepared, designs and construction method were approved verbally by the Department of Works, Oshakati, and 5 contractors were trained accordingly. At the end of 1993 seven public latrines with 8 units, 30 school latrines with 97 units, 27 private latrines and 10 clinic latrines with 22 units were constructed (total 154 units). The progress of latrine construction is presented in Annex 5.

All latrines have been constructed by the school and clinic communities with the assistance of a trained "contractor". All bricks and concrete casting have been done on site. The project has provided only cement, steel, corrugated iron sheets, required tools for construction and supervision. The community has provided, sand, water, labour and security.

In the beginning of the project the design criteria for school sanitation was one latrine unit for 50 students. For the school of 1000 students (normal school size) this means a latrine complex of 20 units. Usually communities cannot afford such a big complex either financially or time wise. Construction time is too long (3 to 4 months). Therefore the design criteria was modified and at this moment one double unit latrine for teachers and one four unit latrine for students per school is constructed.

The latrines are designed without doors and seats because the wind blows the doors away and seats prevent proper cleaning of the latrines. The teachers and matrons have requested doors to prevent animals and other outsiders to enter the toilet and to increase privacy. Seats are requested for comfort. The project's Steering Committee has decided that doors and seats can be provided but the community has to pay them fully.

### Private Latrines

The demand for the construction of private latrines has increased slowly. During the year mainly two types of latrines were offered for private use. Single corrugated iron sheet latrine with slab and ventilation system was sold with a price of N\$ 500, including the transportation and installation. A more luxurious model constructed with bricks, steel door, glass window, seat and ventilation system will cost N\$ 1 500. Constructed private latrines are presented in Annex 5. The project did not have enough capacity to demonstrate other low cost sanitation systems to the low-income rural population.

### Compost Latrines

The project installed 11 compost latrines in order to define technical and social feasibility of compost system. Five latrines were installed in public places (school, kindergarten, office, Cuca shop, brick factory). The remaining six latrines were installed in private homes. Two surveys were carried out during the year by the Design Technician of the project. The surveys conducted so far have proved that the compost latrines will not operate as public latrines. The maintenance is not taken care of. Four out of six private users favour compost latrines due to the benefit of produced manure and no smell. Some technical issues like the height of the seat, wall material and light structure against the wind were some disadvantages observed by the satisfied users. A major concern is to find suitable sodas for the biological process and the need of daily care. The users who have not understood the benefits of the toilet do not mind the using sodas and therefore experience smell problems.

## 1.5 LOGISTICS

### Objectives of the Original Document

In the original Project Document the three immediate objectives were defined as follows:

1. To ensure the quick start of the actual project implementation
2. To ensure all support activities needed for successful operation of the Marula Region Rural Water Supply Unit
3. To ensure the efficient information on establishment of the project as well as the communication of involved parties

Accordingly the Rural Water Supply Unit for Ohangwena was rapidly organized but unfortunately without the Ministry's full participation and support. Due to the lack of Ministry personnel the Consultant had to carry out duties not belonging to them. All administrative procedures, such as financial control, personnel management, reporting, etc have been organized very early in the project and were further developed during 1993.

### Office and Accommodation

At the beginning of the project (1992) the establishment of the project's office and accommodation at Ongwediva was seen the only viable solution due to the available infrastructure. Field implementation and the establishment of the Ohangwena Regional Council, based in Eenhana, created a situation where the supervision of field activities and close continuous contact with the beneficiaries and local leaders became very difficult due to the far distance between the office and the project area. Therefore the project's security, store, community personnel and offices were transferred to Ohangwena in September 1993. However the accommodation problem could not be solved and the personnel continues to drive daily from Ongwediva to Ohangwena and back resulting more than 160 km unnecessary daily driving with very high accident risk. The Department of Agriculture took over the responsibility for the office in Ongwediva. Four offices and one store room are still in the project's use as well as the three houses in the Ongwediva office compound.

### Project Vehicles

All project vehicles were insured in February 1993 with Glensure Insurance Brokers. In March 1993 one project vehicle was stolen from the Ongwediva office compound by armed thieves. The insurance company compensated N\$ 59 750. Two serious accidents occurred during the year. Repair of the vehicles was paid by the insurance company.

### Special Visitors

The Minister for Development Cooperation, Finland, Mr Toimi Kankaanniemi, familiarized himself with the project's field operations on 30.1.1993. The Minister's Special Adviser, Mr R. Ahteela, The Ambassador of Finland, Mrs K. Lintonen, The Director of Finnida, Mr G. Lindholm joined the delegation.

The delegation from the Finnish Parliament headed by Mr. P. Paasio and joined by the representatives of Finnida and Embassy of Finland paid a visit to the project on 25.2.1993.

Dr. Kaire Mbuende, the Deputy Minister for Ministry of Agriculture, Water and Rural Development officially opened the office building in Ongwediva on 11.3.1993. The opening ceremony was attended by special guests from the Region.

Mr. E. Kontula, Finnida's Water Supply Adviser, visited the project during 4.5 - 14.5.1993. As a result of his visit the guidelines for drafting a revised project document were issued.

Mrs H. Sipila, UNIFEM Finland, visited the project on 22.9.1993

### Project Personnel

The personnel who work permanently in the project are presented in Annex 5.

The employment conditions of the project's employees were improved in October 1993 by signing the Group Life Assurance, Permanent Health Insurance and Pension Fund Policy with Old Mutual/ Standard Bank. Accordingly the life and health assurances are paid by the project. Both the employer and employee contribute 5 % of the relevant basic salary to the pension-fund. All project employees opened bank accounts and accordingly salaries are paid into the bank.

Due to the developed infrastructure, manufacturing and business sector in Namibia and due to the established contacts and relations with manufacturers, suppliers and consultants during 1992-1993 the agreement regarding the " Support in Windhoek" with the Technology Systems and Management was terminated on 01.06.1993.

### General Sales Tax

The project was exempted from General Sales Tax (GST) on 6.10.1993 with a Sales Tax Registration Certificate received from the Ministry of Finance. Accordingly a claim of paid GSTs during 1992 were submitted to the Inland Revenue Office being a total of N\$ 129,389.50. The amount of N\$ 122,678.07 has been approved by the Inland Revenue Office for payment. The money was received early in 1994.

### Project Costs

The total budget of the Finnish contribution for 1993 was FIM 7 300 000. Total disbursements paid by Finnida during 1993 were FIM 7 161 392. Due to the fact that some of the goods for the project have been bought directly either by the Embassy of Finland or the Government Procurement Office in Finland the total balance of accounts was checked together with Finnida. Accordingly the funds allocated to the project during 1992-1993 were FIM 15 330 000. Total disbursements during the same period were FIM 15 063 000.

Due to the unclear situation of the implementing Namibian organization the Namibian contribution remained relatively low. Actual figures are missing but it is estimated that about N\$ 64 000 (FIM 108 800; 1 N\$ = 1,7 FIM) were paid by the Namibian Government during 1993. At the end of the year an extra sum of about N\$ 236 000 (FIM 401 200) was in process for the payment by the Namibian Government for the fiscal year 1992-1993. More detailed figures of the disbursements have been presented in Annex 7.

## 2. PROBLEMS ENCOUNTERED AND CORRECTIVE MEASURES TAKEN

### Accommodation and Office

The accommodation and office problems have been described already in item 1.5, Logistics.

### Field Supervision and Accountancy

Due to the unavailability of a Field Manager the Project Coordinator also had to carry out the tasks of field supervision during the first nine months of 1993. The time for such work was very limited (Project Coordinator was also carrying out all accounting work in the project for a period of 22.7 - 30.9.1993) and therefore the quality of construction was not satisfactory. In February 1993 Mrs C. Ndove was promoted as Ohangwena Office Coordinator, but her efforts were also not successful due to her inexperience and the lack of adequate support from the Project Coordinator. The situation improved in the beginning of October 1993 when Mr Arto Hurttu, Field Coordinator, took the responsibility of field supervision and coordination.

## 3. SIGNIFICANT CHANGES IN THE WORKING CONDITIONS

In the Supervisory Board Meeting in November 1992 Mr. Desmond Tshikesho, Chief Rural Development Officer (DRD), was appointed as Project Manager. During the second half of March 1993 Mr. Tshikesho was transferred to Windhoek. Thereafter the Project Coordinator had to take the full responsibility of the project implementation, which was not according to the valid project document. The planning of the Rural Water Supply reorganization was going on and the unclear situation regarding the future place of the project continued until mid-June 1993. In the meeting on 13.6.1993 at the Embassy of Finland the Department of Water Affairs clearly indicated their readiness to take over the implementation responsibility of the project. Accordingly the guidelines for the revision of the project document were accepted.

## 4. SIGNIFICANT CHANGES IN THE PROJECT ENVIRONMENT

The planning of organizing a new directorate for rural water supply started in 1992 by the Department of Water Affairs. The new structure of rural water supply under the Department of Water Affairs was finally approved by the Public Service Commission and endorsed by the Cabinet in July 1993. This development facilitated the revision of the project document and a change in the implementing authority from the DRD to the DRWS.

## 5. LESSONS LEARNED

### Business Development

If the aim is to establish a strong and diversified business sector in Ohangwena region it is clear that the provision of business management and technical skills training and the identification of possible income generating opportunities like 1993's brick making, fence making and business training in Ohaingungu, Omifima and Oidimba, and the discussions about micro-scale fish farming, are just not enough. The solution appears to be in the introduction of an entrepreneurship development programme planned and executed together with local and international agencies. The 1994 appointment of business advisor is a step in the right direction.

### Experience in the Establishment of WPCs

An area that needs special mention is that of the establishment of WPCs. The WPCs are the direct link between the communities and the project and it is in the interest of both parties that the WPCs are assisted in all possible ways to enable the members to take on their responsibilities as partners of the project. Our experience over the past two years indicate that there are a number of factors that contribute to the success of a WPC. Some are as follows:

- \* the structure and philosophy of a WPC should not be in conflict with the socio-cultural system in the project area
- \* effective and successful WPCs have members who were elected by the community and not appointed by the leadership, be it political, traditional or religious
- \* the most active WPC members are usually female
- \* headmen are nearly always elected as members of the WPC but not as chairpersons
- \* all members are people with a status or with a record of service and leadership in the community
- \* members are not elected for their literacy or numeracy skills
- \* a training programme including concentrating on water and sanitation issues, duties of committee members, meeting procedures, and planning and execution of activities should be designed together with the WPC
- \* WPCs have to be visited regularly by the CDOs not only to provide training and advice but also to motivate them and support their activities
- \* there is a direct relationship between the condition of the water point  
- related to the quality of the construction and the knowledge and skills to maintain it - and the success of the WPC
- \* the six months term of service suggested in the Handbook for Water Point Committees is too short for the members to be trained as WPC members as well as community trainers and activators.

Project title:                      Water Supply and Sanitation Project in Ohangwena Region, Phase I<sup>2</sup>

Project number:                    28103701-6

Sector:                              Water Supply and Sanitation

Duration:                            59 months (14.2.1992 - 31.12.1996)

Starting date:                      14.2.1992

Project financing:

- Government of  
          Namibia                              FIM 4 320 000.-
- Government of  
          Finland                                FIM 34 630 000.-

Competent Authorities:

- Namibia:                                The National Planning Commission Namibia (NPC)
- Finland:                                Ministry for Foreign Affairs/FINNIDA

Institutional framework for the project implementation:

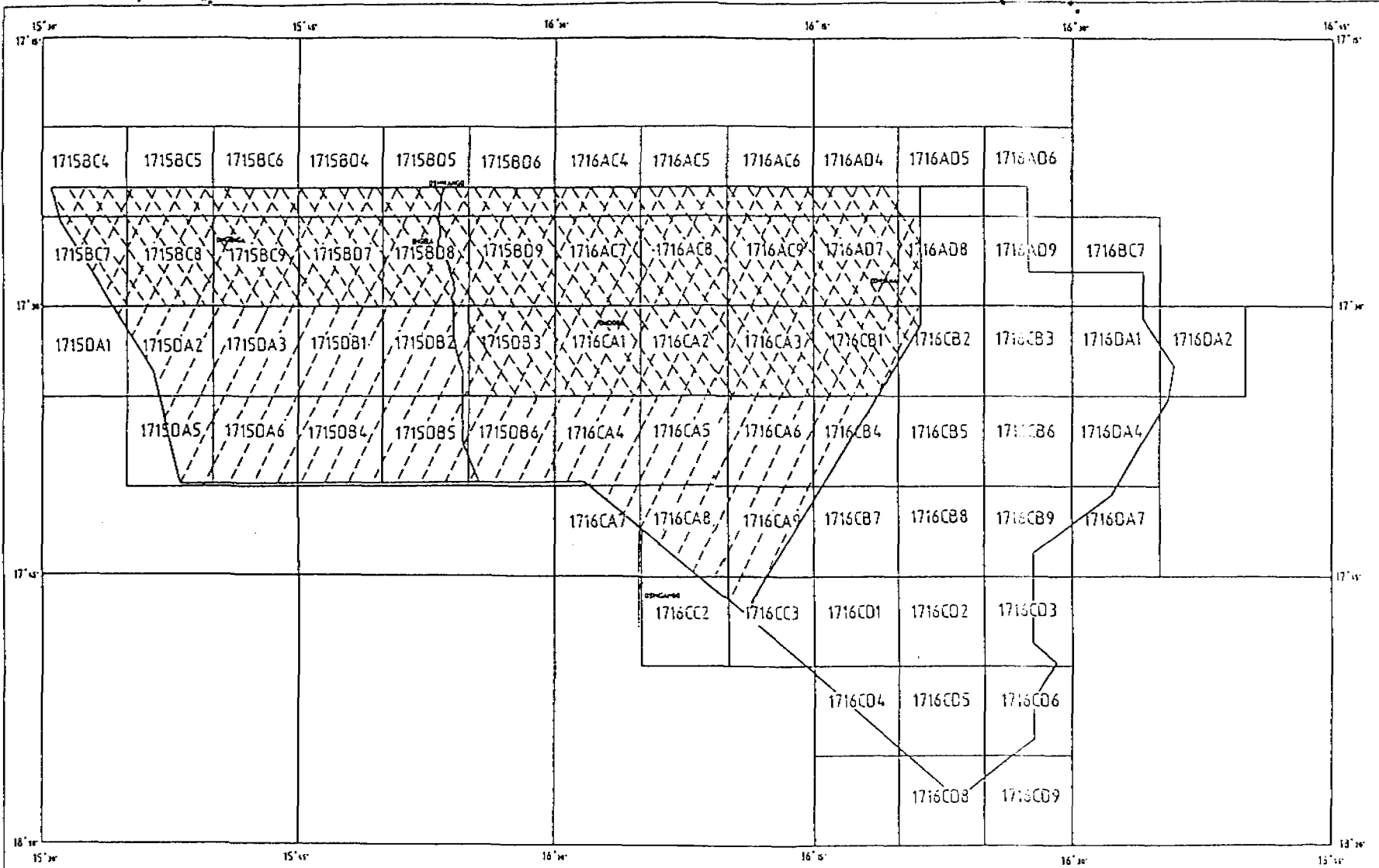
- Namibian implementing agency:  
  
    Ministry of Agriculture, Water and Rural  
    Development/Department of Water Affairs
- Consultant for development assistance services  
  
    Finnconsult Oy

Arrangements for coordination and supervision of the project implementation:

- Committee of competent authorities for overall project supervision at policy level:  
  
    Supervisory Board Meeting
- Committee for project management at implementation level:  
  
    Steering Committee




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<sup>2</sup> Revised Project Document, 1 December, 1993



TOPOGRAPHIC MAPPING 1:20 000 1992-1995

SHEET INDEX

- Schedule
-  1993
  -  1994
  -  1995

Aerial photography 1:30 000

Stereoplottling 1993-1995

M/S Survey LTD  
P O BOX 71, 04431 (Swakop) , Namibia

WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION , NAMIBIA

FINNCONSULT OY



WATER POINT CONSTRUCTION PROGRESS REPORT

DATE: 31.12.1993

SIGNED: 

No	Constitu- ency	Village	Technic. + social inspect.	WPC estab- lished	Well/Line Dug or deepened	Rings/ pipe in- stalled	Slab/ Stand constr	Pump/Tap instal led	Chlori nated	Cattle trough constr	Wash Basin Constr	Handed Over
1	Ohangwena	Okatope	17.4.92	19.4.92	Jul-92 Bricks	Old well no new rings	Aug-92	25.8.92 Bush pump	Aug-92			Yes
2	Engela	Ouhongo	Jun-92	11.9.92	Jul-92 Rings	Jul-92	Aug-92	Aug-92 Bush (RDC)	yes			Yes
3	Engela	Ohaingu	Jun-92	14.8.92	Jul-92 Rings	Jul-92	Aug-92	14.8.92 Plame wheel	yes	yes		18.8 92
4	Engela	Ohaingu	Jun-92	14.8.92	Jul-92 Rings	Jul-92	Aug-92	13.8.92 Bush (RDC)	yes	yes		18.8 92
5	Engela	Ohaingu	Jun-92	14.8.92	Jul-92 Rings	Jul-92	Aug-92	16.8.92 Bush (RDC)	yes	yes		18.8 92
6	Engela	Onamban go	Jun-92	15.9.92	Aug-92 Rings	Aug-92	Aug-92	Aug-92 L-type	yes			Yes
7	Engela	Oikalah enya	Jul-92	17.10.92	Aug-92 Rings	Aug-92	Aug-92	Sep-92 Bush (RDC)	yes	yes		Yes
8	Ohangwena	Ohangwe na	Jul-92	Local council	Aug-92 Water tap	Aug-92	Aug-92	7.8.92 Tap				Yes
9	Engela	Onghala	Jul-92		Jul-92 Rings	Jul-92	Jul-92	3.8.92 L-type	yes			Yes
10	Endola	Endola	Oct-92	22.7.93	Nov-92 Rings	Dec-92	Dec-92	30.12.92 Windlass	yes	No need		Yes
11	Endola	Omaheng e Chalush u	18.11.93	20.11.93	August-93							
12	Ohangwena	Etope	11.10 92	5.11.92	Aug-92 Rings	13.1.93	25.1. 93	25.1.93 L-type	yes	Yes		Yes
13	Ohangwena	Etope	20.4.93	23.4.93	22.4.93 borehole	22.4.93	22.4. 93	3.5.93 APRIDEV	yes			Yes

## WATER POINT CONSTRUCTION PROGRESS REPORT

DATE: 31.12.1993

SIGNED: 

No	Constitu- ency	Village	Technic. + social inspect.	WPC estab- lished	Well/Line Dug or deepened	Rings/ pipe in- stalled	Slab/ Stand constr	Pump/Tap instal led	Chlori nated	Cattle trough constr	Wash Basin Constr	Handed Over
14	Okankolo	Otyolo	Aug-92	DRD mainte- nance	Sep-92 Borehole	Sep-92	15.10. 92	15.10.92 Flame Wheel				Yes
15	Engela	Ouhongo	22.9.92 29.9.92	Yes	Sep-92 Rings	Oct-92	Oct-92	24.10.92 L-type				Yes
16	Ongenga	Omalyat a	22.9.92 29.9.92	14.5.93	Oct-92 Rings	Oct-92	Oct-92					No pump yet
17	Engela	Omatund a-Anamu kalo	20.9.93	4.11.93	92	Nov-93	Nov-93	Windlass 6.12.93	Yes	Nov-93		Yes
18	Engela	Okaheng e	24.9.92 20.9.93	21.10.92	Deepening 1993	8.10.93	4.11.93	11.11.93		3.11.9 3		Yes
19	Ohangwena	Oshitam bi	20.10.92 9.10.92	Yes	Apr-93 Rings	14.4.93	20.4.93	14.4.93 Lotus	Yes			Yes
20	Ondobe	Eembidi	19.10.92 2.10.92	Yes	Mar-93 Rings	Mar-93	Mar-93	Mar-93 Windlass	Yes			Yes
21	Ohangwena	Okelemb a	22.10.92 21.10.92	24.11.92	Nov-92 Rings	Nov-92	Nov-92	3.12.92 L-type	Yes			Yes
22	Engela	Omatund a	22.10.92 16.10.92	27.10.92	Oct-92 Rings	Oct-92	Oct-92	9.11.92 L-type	Yes			Yes
23	Endola	Omanyos he	28.10.92 13.10.92	4.11.92	Dec-92 Rings	Dec-92	Dec-92	30.12.92 L-type	Yes	1.2.93		Yes
24	Ongenga	Omufitu wanakas hole	23.11.92 27.10.92	2.11.92	Dec-92 Rings	Dec-92	Dec-92	27.12.92 Flame Wheel	Yes	4.2.93		4.2. 93
25	Eenhana	Oidimba	12.4.93 15.3.93	7.4.93	Mar-93 Borehole	31.3.93	17.4. 93	12.5.93 Lotus	Yes	13.5. 93		13.5. 93
26	Eenhana	Oiti- Itoka	4.6.93	7.6.93	Mar-93 Borehole	5.4.93	2.6.93	24.6.93 Lotus	Yes	13.7. 93		Yes

## WATER POINT CONSTRUCTION PROGRESS REPORT

DATE: 31.12.1993

SIGNED: 

No	Constitu- ency	Village	Technic. + social inspect.	WPC estab- lished	Well/Line Dug or deepened	Rings/ pipe in- stalled	Slab/ Stand constr	Pump/Tap instal led	Chlori nated	Cattle trough constr	Wash Basin Constr	Handed Over
27	Ondobe	Eenyika	8.6.93	8.6.93	Apr-93 Borehole	16.4.93	29.6. 93	7.7.93 L-type	Yes	14.7. 93		Yes
28	Eenhana	Omevata hekele	12.4.93	12.5.93	Apr-93 Borehole	22.4.93	14.5. 93	19.5.93 Lotus	21.5. 93	21.5. 93		21.5. 93
29	Eenhana	Onamute nya	25.3.93	25.3.93	May-93 Borehole	14.5.93	27.5 93	2.6.93 Nira	2.6. 93	June 93		Yes
30	Engela	Ohaingu	16.6.93		Apr-93 Borehole	30.4.93						
31	Oshikango	Olungho no	12.3.93	12.3.93	July-93 Water tap	6.7.93	16.6. 93	6.7.93 Blue tap		17.6. 93		6.7.93
32	Ohangwena	Omuonde school	28.5.93	School Committe e	Jul-93 Rehabil. old tap	28.5.93	28.5. 93	28.5.93 Blue tap				28.5. 93
33	Eenhana	Onamute nya	26.5.93	25.3.93	Jun-93 Rehab. of old well	2.6.93	10.6. 93	10.6.93 windlass	Yes			10.6. 93
34	Ongenga	Okambebe	6.4.93	20.4.93	Apr-93 Borehole	Apr-93						Salty Water
35	Ondobe	Eenyika	7.7.93 8.6.93	8.6.93	July-93 Shallow well	16.7.93	4.8.93	4.8.93 Nira	Yes	17.7. 93		4.8 93
36	Ohangwena	Okelemb a	20.7.93	23.8.93	Jul-93 Shallow well	6.9.93	7.9.93 Stand	Windlass 9.9.93	Yes	14.9.9 3		9.9.93
37	Ohangwena	Omalyat a-East	20.7.93	24.8.93	Shallow Well	14.9.93 Brick lining	15.9.9 3	15.9.93 Windlass	Yes			15.9.93
38	Ongenga	Oshimwa ku	3.8.93		Old Bore- hole Rehabilit ation		04.8.9 3	17.8.93 <del>Windlass</del> filled with sand	Yes			Cannot be used
39	Ohangwena	Onaame	20.7.93	10.9.93	Shallow Well Bricks	17.9.93 Brick Lining complete	20.9.9 3 Stand	Windlass 23.9.93	Yes			Yes

WATER POINT CONSTRUCTION PROGRESS REPORT

DATE: 31.12.1993

SIGNED: 

No	Constitu- ency	Village	Technic. + social inspect.	WPC estab- lished	Well/Line Dug or deepened	Rings/ pipe in- stalled	Slab/ Stand constr	Pump/Tap instal led	Chlori nated	Cattle trough constr	Wash Basin Constr	Handed Over
40	Engela	Oimband a-lunga	20.9.93 27.10.93	27.10.93	Nov-93	5.10.93	7.11.93	Windlass 11.11.93	Yes	3.11.93		Yes
41	Ohangwena	Oshitam bi	20.9.93	14.10.93	Apr1-92	28.10.93	7.10.93	Windlass 18.11.93	Yes	1.11.93		Yes
42	Endola	Omaheng e	25.11.93		'92							
43	Ongenga	Oshimwa ku	20.9.93	22.10.92	'92	7.10.93	16.11.93	Windlass 11.11.93	Yes			Yes
44	Endola	Oshand- umbala	20.9.93	26.10.93	'92	23.11.93	4.12.93	Windlass 2.12.93	Yes	20.11.93		Yes
45	Engela	Onghala	20.9.93	1.11.93	'92	27.11.93	2.12.93	6.12.933	Yes	23.11.93		Yes
46	Engela	Omata	20.9.93	9.11.93	'92	30.11.93	29.11.93	6.12.93	Yes	25.11.93		Yes

## FERRO - CEMENT TANK CONSTRUCTION 31.12.1993

Materials and contractors paid by UNICEF; Transport and supervision of works by WSSPOR

No	CONSTITUENCY	SCHOOL/CLINIC	VOLUME (ltr)	NUMBER	STATUS	REMARKS
1	Ondobe	Eembidl	10 000	1	Completed	Need repair
2	Changwena	Changwena	10 000	1	Completed	
3	Eenhana	Onghudi	10 000	1	Completed	Need repair
4	Changwena	Etale	10 000	1	Completed	
5	Oshikango	Odibo	10 000	1	Completed	Need repair
6	Enceia	Shekashena	10 000	1	Completed	
7	Endola	Omuve	10 000	1	Completed	
8	Engela	Onamukalo	10 000	1	Completed	
9	Endola	Ondeleka	10 000	1	Completed	
10	Ondobe	Etomba	10 000	1	Completed	
11	Ondobe	Omunekadi	10 000	1	Completed	
12	Ondobe	Oumbada	10 000	1	Completed	
13	Eenhana	Onakalunga	10 000	1	Completed	
14	Eenhana	Omutwewondjaba	10 000	1	Completed	
15	Eenhana	Oheitl	10 000	1	Completed	
16	Eenhana	Omhanda	10 000	1	Completed	Need repair
17	Eenhana	Ohakatiya	10 000	1	Completed	
18	Eenhana	Onangolo	10 000	1	Completed	
19	Eenhana	Oshikute	10 000	1	Completed	
20	Eenhana	Offiya	46 000	1	Completed	
21	Eenhana	Omundaungilo, Clinic	10 000	1	Completed	
22	Ondobe	Oshandi	10 000	1	Completed	
23	Eenhana	Oshikunde	10 000	1	Completed	
24	Eenhana	Okavele	10 000	1	Completed	
25	Eenhana	Ongwuyiyu	10 000	1	Completed	
26	Eenhana	Ohainengena	10 000	1	Completed	
27	Eenhana	Onangolo, Clinic	10 000	1	Completed	
28	Ondobe	Ohehonge	10 000	1	Completed	
29	Eenhana	Okahenge	46 000	1	Completed	
30	Eenhana	Oshipala	Repair	1	Completed	
31	Ondobe	Kornelius	46 000	1	Completed	Need repair

## LATRINE CONSTRUCTION PROGRESS REPORT

DATE: 31.12.1993

SIGNED: 

NO	Constituency	Village	Latrine type	More detailed information	Latrine dug or deepened	Foundation constructed	Completion Date	Training provided	Comments
1	Ohangwena	Ohangwena	Single Bricks	Demonstr. latrine at the office	July - 92	July - 92	Aug - 92		Public
2	Ohangwena	Onekwaya East	Blair Single	First latrine of Simon Moses	Sep - 92	Sep - 92	Oct - 92	29.9.93	School
3	Ohangwena	Okadila East	Blair Single	First latrine of Nehemia	Sep - 92	Sep - 92	Oct - 92		School
4	Endola	Oshekasheka	Blair Single	First latrine of Haingula	Sep - 92	Sep - 92	Oct - 92		School
5	Engela	Onyofi	Blair Single	First latrine of Fillemon Shiweda	Sep - 92	Sep - 92	Oct - 92		School
6	Ohangwena	Ohangwena	Blair Single	Demonstr. latrine at the office	Nov - 92	Nov - 92	Nov - 92		Public
7	Ohangwena	Ohangwena	Corrugate Iron Sheet	Demonstr. latrine at the office	Nov - 92	Nov - 92	Nov - 92		Public
8	Ongenga	Oshimwaku	Blair 8 seats	First multi-seats latrine	Oct - 92	Nov - 92	Nov - 92	3.11.1993	School
9	Ohangwena	Onuno	Corrugate Iron Single	Demonstration to the community	Oct - 92	Nov - 92	Nov - 92		Private
10	Ohangwena	Ondehaluka	Corrugate Iron Sheet	First toilet for teachers	Jan - 93	Jan - 93	Jan - 93		School
11	Ohangwena	Onuno	Corrugate Iron Sheet	Demonstration to the community	Jan - 93	Jan - 93	Jan - 93		Private
12	Engela	Omafo	Blair Single	Demonstration to the community	Dec - 92	Dec - 92	Dec - 92		Private

## LATRINE CONSTRUCTION PROGRESS REPORT

DATE: 31.12.1993

SIGNED: 

NO	Constituency	Village	Latrine type	More detailed information	Latrine dug or deepened	Foundation constructed	Completion Date	Training provided	Comments
13	Ohangwena	Omalyata	Blair Single	Demonstratio to the Community	Jan - 93	Jan - 93	Jan - 93		Private
14	Ohangwena	Epatululo	Corrugate Iron	Demonstration to the community	Jan - 93	Jan - 93	Jan - 93		Private
15	Engela	Engela	Corrugate Iron Single	Third toilet for patients	Mar - 93	Mar - 93	Mar - 93		Hospital
16	Ohangwena	Onekwaya West	Corrugate Iron Single	Demonstration	Feb - 93	Feb - 93	Feb - 93		Private
17	Oshikango	Oshikango	Corrugate Iron Single	Demonstration	Mar - 93	Mar - 93	Mar - 93		Private
18	Ohangwena	Oshandi	Corrugate Iron 2 - pcs	First church latrine	Mar - 93	Mar - 93	Mar - 93		Church
19	Oshana	Ongwediva	Compost	Demonstration for Project office	Mar - 93	Mar - 93	Mar - 93		Church
20	Oshana	Ongwediva Valombola	Compost	Marta's Cuca shop	Mar - 93	Mar - 93	Mar - 93		Private
21	Oshana	Ongwediva	VIP Bricks Single	Demonstration for project office	Feb - 93	Feb - 93	Feb - 93		Public
22	Engela	Engela	Corrugate Iron Single	First toilet for teachers	Mar - 93	Mar - 93	Mar - 93		School
23	Endola	Endola	Blair 14 - seats	Mr Shihepo	Apr - 93	May - 93	2.7.93		School
24	Ohangwena	Ohangwena	Corrugate Iron 2 - pcs	First toilet for patients	Mar - 93	Mar - 93	Mar - 93		Clinic

## LATRINE CONSTRUCTION PROGRESS REPORT

DATE: 31.12.1993

SIGNED: 

No	Contituency	Village	Latrine type	More detailed information	Latrine dug information	Foundation constructed	Completion date	Training Provided	Comments
25	Oshikango	Odibo	Blair 3 - seats	First latrine of Amon	Apr - 93	24.5.93	16.6.93		School
26	Oshana	Valombola	Compost	Tree nursery	Mar - 93	Mar - 93	Mar - 93		Private
27	Oshana	Ongwediva	Compost	Brick factory	Mar - 93	Mar - 93	Mar - 93		Private
28	Oshana	Ongwediva	Compost	Meme Asteria's Egumbo	Mar - 93	Mar - 93	Mar - 93		Private
29	Oshikoto	Oniipa	Compost	Kinder Garden	Mar - 93	Mar - 93	Mar - 93		Public
30	Ohangwena	Onekwaya East	Compost	Primary School	Mar - 93	Mar - 93	Mar - 93	29.9.93	School
31	Ohangwena	Onuno	Compost	Shiweda's Egumbo	Mar - 93	Mar - 93	Mar - 93		Private
32	Oshikango	Oshikango	Blair 10 - seats	Oshikango School	Apr - 93	11.5.93	2.6.93	28.9.93	School
33	Ohangwena	Ohangwena	Blair 8 - seats	Omuonde School	Apr - 93	11.5.93	11.6.93	14.7.93	School
34	Ohangwena	Ohangwena	VIP 2 - seats	Hamata's shop	20.4.93	11.5.93	24.5.93		Private
35	Ohangwena	Onekwaya East	Corrugate Iron Single	Nandjembo's home	May - 93	20.5.93	21.5.93		Private
36	Oshikango	Okanghudi	Corrugate Iron Single	Pohamba	May - 93	22.6.93	23.6.93		Private



LATRINE CONSTRUCTION PROGRESS REPORT DATE: 31.12.1993

SIGNED: 

NO	Constituency	Village	Latrine type	More detailed information	Latrine du or deepened	Foundation constructed	Completion date	Training date	Comments
37	Eenhana	Ohaihana	Corrugate Iron Single	Nangombe Sam	May - 93	21.5.93	21.5.93		Private
38	Ohangwena	Onamwilwa	VIP Bricks Single	Tui Nghivelwa	Mar - 93	17.6.93	21.6.93		Private
39	Oshikango	Oshikango	Compost	T Awene's house	May - 93	21.5.93	21.5.93		Private
40	Ohangwena	Omuloka	Compost	M.C.Shiluuah's house	May - 93	May - 93	6.6.93		Private
41	Oshikango	Oshikango squater	Corrugate Iron Single	Demonstration to the community	May - 93	7.6.93	9.6.93		Private
42	Ondobe	Odobe Clinic	Corrugate Iron 2 units	For men and women patients	May - 93	22.6.93	25.6.93		Clinic
43	Engela	Enongelo School	Corrugate iron Single	For handicapped	May - 93	7.7.93	9.7.93		School
44	Ohangwena	Okatope School	Blair bricks 6 units + 4 Amon	Training of toilet contractors	July and Aug - 93	Aug - 93	10.9.93		School
45	Eenhana	Ohakafiya School	Blair bricks 2 units	Jointly with UNICEF	Aug - 93	Aug - 93	1.8.93		School
46	Eenhana	Omhanda School	Blair bricks 2 units	Jointly with UNICEF	Aug - 93	13.8.93	Aug - 93		School
47	Eenhana	Oheti	Blair bricks 2 units	Jointly with UNICEF	Aug - 93	Aug - 93	1.8.93		School
48	Eenhana	Oshitunde School	Blair bricks 2 units	Jointly with UNICEF	Aug - 93	Aug - 93	11.8.93		School
49	Eenhana	Onangolo School	Blair bricks 2 units	Jointly with UNICEF	Aug - 93	Aug - 93	13.8.93		School
50	Ondobe	Ofifiya School	Blair bricks 2 units	Jointly with UNICEF	Aug - 93	Aug - 93	Aug - 93		School

LATRINE CONSTRUCTION PROGRESS REPORT DATE: 31.12.1993

SIGNED: 

No	Constituency	Village	Latrine type	More detailed information	Latrine dug or deepened	Foundation constructed	Completion date	Training provided	Comments
63	Ongenga	Ongenga	VIP Bricks 3 units	For Patients	Oct - 93	25.10.93	1.12.93		Clinic
64	Eenhana	Oshandi Clinic	VIP Bricks 2 units	Jointly with UNICEF	Sep - 93	Sep - 93	2.11.93		School
65	Eenhana	Oshikunde	VIP Bricks 2 units	Jointly with UNICEF	Oct - 93	Oct - 93	Nov - 93		School completed
66	Eenhana	Okavela	VIP Bricks 2 units	Jointly with UNICEF	Oct - 93	Oct - 93	Nov - 93		School completed
67	Eenhana	Ongwuiyu	VIP Bricks 2 units	Jointly with UNICEF	Oct - 93	Oct - 93	Nov - 93		School completed
68	Eenhana	Ohainengena	VIP Bricks 2 units	Jointly with UNICEF	Oct - 93	Oct - 93	Nov - 93		School completed
69	Eenhana	Onehonge	VIP Bricks 2 units	Jointly with UNICEF	Oct - 93	Oct - 93	Nov - 93		School completed
70	Eenhana	Oshipala	VIP Bricks 2 units	Jointly with UNICEF	Oct - 93	Oct - 93	Nov - 93		School completed
71	Ondobe	Onangolo Clinic	VIP Bricks 2 units	Jointly with UNICEF	Oct - 93	Oct - 93	2.11.93		Clinic completed
72	Endola	Onekwaya West	Iron Sheet Single	Mrs Kapofi	May - 93	26.10.93	20.10.93		Private
73	Ohangwena	Okauva Okatope	Iron Sheet Single	Mrs Hendrina	Mar - 93	26.10.93	20.10.93		Private
74	Endola	Ohalushu Comb. School	VIP Bricks 6 units	Principal	Jul - 93	7.12.93	31.12.93		School latrine
75	Oshikango	Edundja	VIP Bricks Single	Permanent Secretary L. Hangala	Nov - 93	Dec - 93	8.12.93		Private latrine

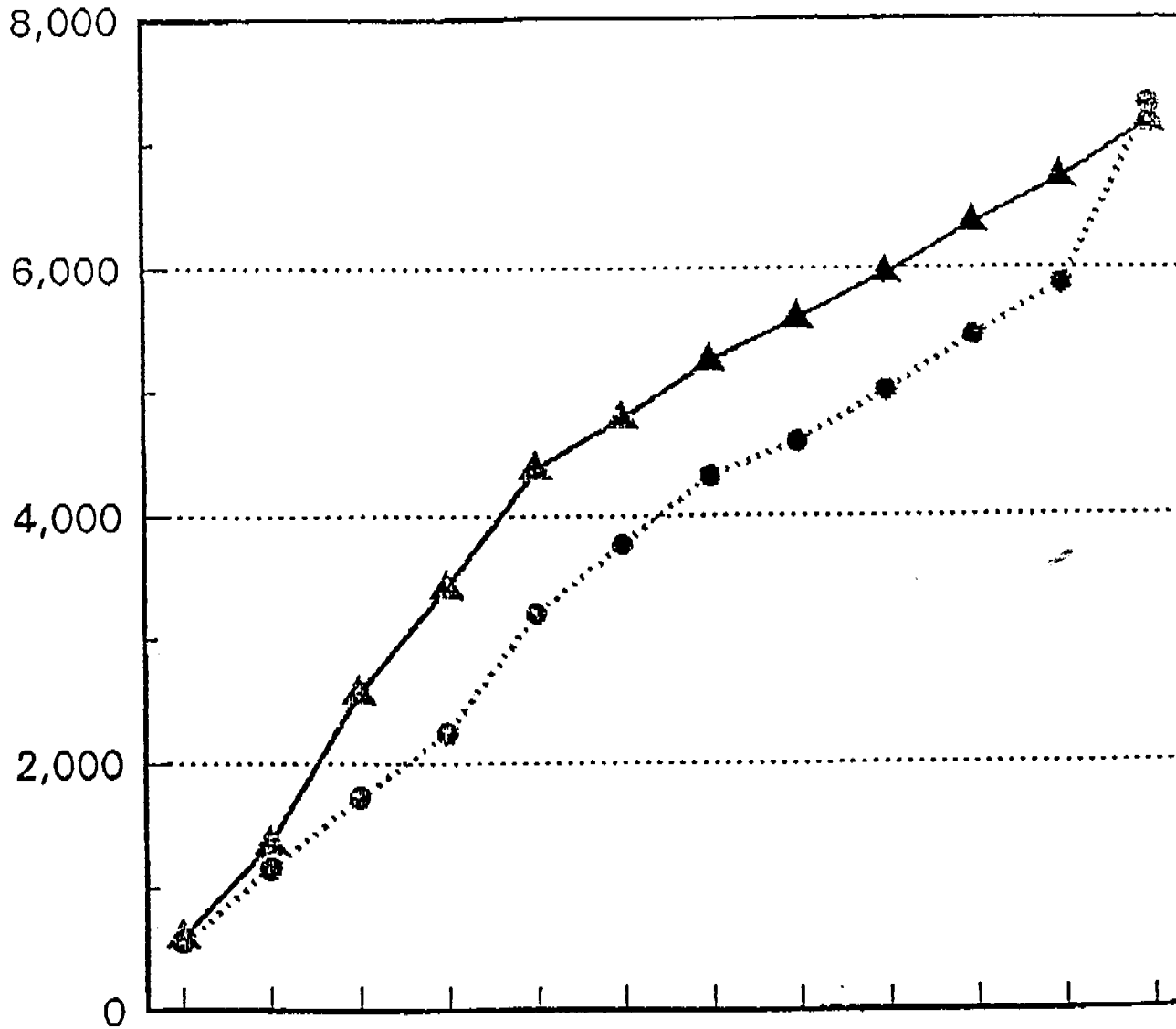
## PERSONNEL WORKED IN THE PROJECT PERMANENTLY (1992 - 1993)

No	NAME	POSITION	EMPLOYED BY	DATE OF START	CONTRACT ENDED	STATUS
1	Mr A. Suominen	Project Coordinator	Finconsult	01.03.1992		Continue
2	Mr H. Pelkonen	Planning Adviser	Finconsult	20.02.1992		Continue
3	Mr T. Tirronen	Hydrogeologist	Finconsult	01.03.1992	31.08.1993	End Contract
4	Mrs M. Pelkonen	Accountant	Finconsult	01.05.1992	31.07.1993	End Contract
5	Mrs U. Seppinen	Accountant	Finconsult	26.09.1993		Continue
6	Mr A. Hurta	Field Coordinator	Finconsult	01.10.1993		Continue
7	Mrs C. Swart	Senior HRD Adviser	Finconsult	01.04.1992	30.04.1993	Terminated
8	Mrs M. Truebody	Senior CD Adviser	Finconsult	01.03.1992		Continue
9	Mrs H. Kapweya	Junior CD Adviser	Finconsult	01.03.1992		Continue
10	Mrs H Martin	Junior CD Adviser	Finconsult	01.04.1992		Continue
11	Mr D. Tshikesho	Project Manager	MAWRD/DRD	01.12.1992	30.03.1993	Transferred
12	Mr S. Kamwanka	Design Technician	MAWRD/DRD	01.12.1992		Continue
13	Mr A. Kamati	Driller	WAWRD/DRD	18.01.1993		Continue
14	Mr E. David	Driller	MAWRD/DRD	18.01.1993		Continue
15	Mrs O. Shimbi	Secretary	WSSPOR	05.05.1992		Continue
16	Mrs M. Shillifa	Clerk	WSSPOR	01.12.1992		Continue
17	Ms E. Stefanus	Cleaner	WSSPOR	18.03.1992		Continue
18	Mr J. Mathias	Driver	WSSPOR	10.09.1992		Continue
19	Mr A. Ananias	Guard	WSSPOR	11.04.1992		Continue*
20	Mr P. Kautwima	Chief Guard	WSSPOR	09.05.1992		Continue
21	Mr L. Naudili	CDO	WSSPOR	14.08.1992		Continue
22	Mr S. Erastus	Guard	WSSPOR	01.11.1992		Continue
23	Mr W. Shapumba	Driller	WSSPOR	18.01.1993		Continue
24	Mr D. Shilongo	Driller	WSSPOR	18.01.1993		Continue
25	Mr P. Epafras	Driller Foreman	WSSPOR	18.01.1993		Continue
26	Mrs C. Ndove	Storekeeper	WSSPOR	14.08.1992		Continue
27	Mr T. Awene	Assistant Accountant	WSSPOR	01.09.1992		Continue
28	Mr J. Hashoongo	Construction Supervisor	WSSPOR	16.06.1992		Continue
29	Mr F. Shiweda	Construction Supervisor	WSSPOR	01.11.1992		Continue
30	Mr F. Paulus	Driver	WSSPOR	11.04.1992		Continue
31	Mr G. Hishitelwa	Driver	WSSPOR	24.03.1993		Continue
32	Mr F. Kamati	Handpump Supervisor	WSSPOR	31.10.1992		Continue
33	Mr M. Shikongo	Assistant Field Manager	WSSPOR	01.02.1993		Continue
34	Mr R. Sitwala	Assistant Accountant	WSSPOR	11.01.1993	14.07.1993	Resign
35	Mr A. Shatuka	Driver	WSSPOR	18.08.1992	09.03.1993	Resign
36	Mr P. Shikongo	Construction Supervisor	WSSPOR	01.06.1992	08.12.1992	Resign

# WSSPOR 1993

## Cumulative costs

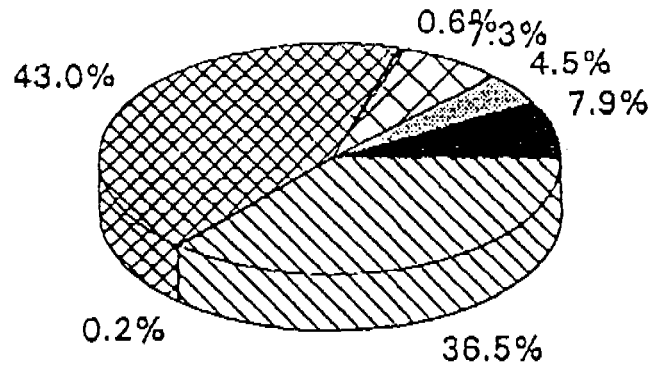
Fim 1000



Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Budgeted	663	1,158	1,728	2,237	3,211	3,764	4,218	4,584	5,008	5,445	5,964	7,300
Actual	663	1,358	2,567	3,420	4,369	4,778	5,240	5,588	5,948	6,358	6,718	7,118

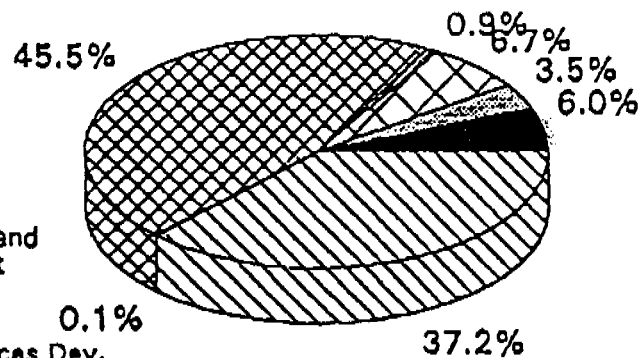
# Budget for 1993

## Breakdown by components



Revised budget  
Fim 7.3 million

- LOG = logistics
- WSS = Water Supply and Sanitation Development
- LST = Local Staff
- HUM = Human Resources Dev.
- CST = Consultant's staff
- COM = Community Involvement
- IMP = Physical improvements



Actual costs  
Fim 7.161 million



**NAMIBIA WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION  
BUDGET AND DISBURSEMENT FOLLOW-UP 1993**

COST CODE	SUB-PROJECT	BUDGET 1993	REVISED BUDGET	1/93 COSTS	II/93 COSTS	III/93 COSTS	IV/93 COSTS	TOTAL
1000	HUM	90000	45134	19691	14444	14909	13189	62233
	1200 Materials	30000	3041	2186	855	2588	1459	7088
	1300 Others	60000	42093	17505	13588	12321	11730	55145
2000	COM	60000	13573	3644	2929	0	922	7495
	2300 Others	60000	13573	3644	2929	0	922	7495
3000	WSS	240000	327443	115464	1949	133766	1726	252905
	3200 Materials	240000	327443	115464	1949	133766	1726	252905
4000	IMP	2763750	2646138	1020391	1272748	207273	148834	2649247
	4200 Materials	943750	1361799	795472	294327	175653	116077	1381530
	4300 Others	1820000	1284339	224919	978421	31620	32757	1267717
5000	LOG	600000	570240	339765	103371	-52739	33507	423904
	5100 Personnel	50000	9328	4328	0	0	0	4328
	5200 Materials	450000	475075	280545	91426	-67931	25428	329468
	5300 Others	100000	85837	54891	11945	15192	8079	90108
6000	CST	3092250	3116214	925283	700380	767459	891828	3284950
	6100 Personnel	3092250	3116214	925283	700380	767459	891828	3284950
7000	LST	600000	527258	129475	122813	102418	125952	480658
	7100 Personnel	600000	527258	129475	122813	102418	125952	480658
8000	CON	54000	54000	0	0	0	0	0
	8100 Personnel	0	0	0	0	0	0	0
	8200 Materials	0	0	0	0	0	0	0
	8300 Others	54000	54000	0	0	0	0	0
9000	TOTAL	7500000	7300000	2553712	2218635	1173086	1215959	7161392
	9100 Personnel	3742250	3652800	1059086	823194	869877	1017780	3769936
	9200 Materials	1663750	2167358	1193667	388558	244076	144690	1970991
	9300 Others	2094000	1425842	300959	1006884	59133	53489	1420464

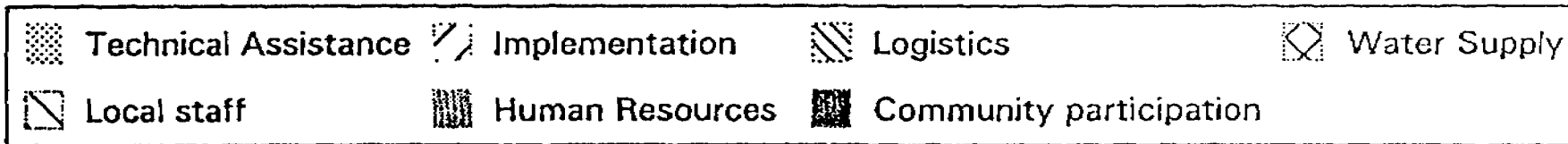
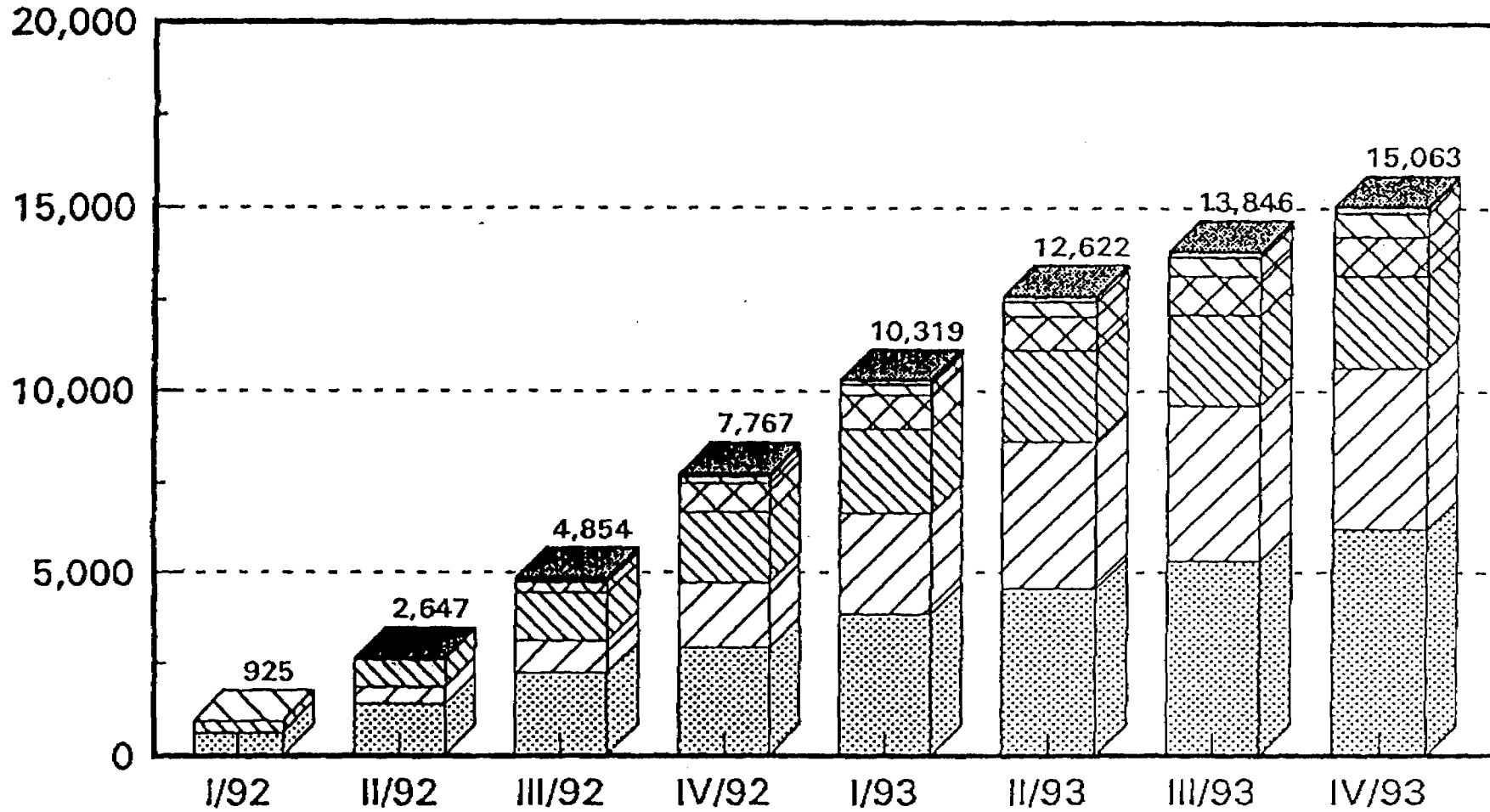
CUMULATIVE DISBURSEMENT 1992-93

Component	I/92	II/92	III/92	IV/92	I/93	II/93	III/93	IV/93
Human Resources Dev.	0	8	68	75	94	109	124	137
Community participation	0	8	14	41	45	48	48	49
Water Supply and Sanitation Implementation	2	17	271	814	929	931	1.064	1.066
Logistics	3	464	878	1.785	2.805	4.077	4.284	4.433
Consultancy	305	737	1.317	1.972	2.311	2.500	2.500	2.534
Local staff	614	1.385	2.238	2.923	3.848	4.548	5.315	6.207
Cumulative Total	1	28	68	157	287	409	511	637
	925	2.647	4.854	7.767	10.319	12.622	13.846	15.063

# WATER SUPPLY AND SANITATION PROJECT 1992-93

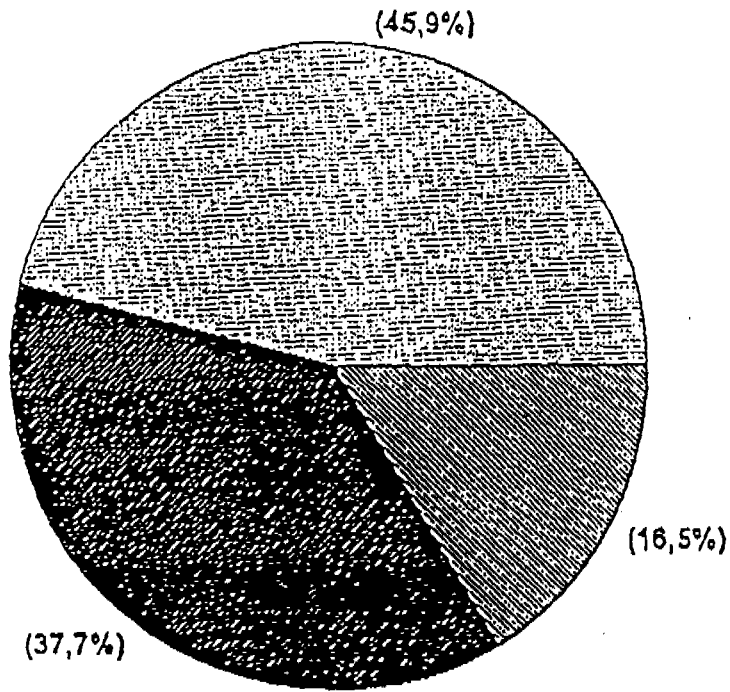
## CUMULATIVE DISBURSEMENT BY COMPONENTS

FIM Million





**WATER SUPPLY AND SANITATION 1992-93**



■ Technical assistance ■ Materials, investments ■ Others, monitoring

Total Fim 15.063 million

**Training Activities Conducted 1993**

**Mrs O. Shiimbi**, the Project Secretary, participated in a Seminar on Office Techniques and Secretarial Skills in Windhoek during 23 March - 3 April 1993. The training course was organized by PRODEC and the Private Sector Foundation.

**Mrs H. Kapweya**, Junior CD Adviser, participated in a training workshop on Water Point Committees in Rehoboth during 25.1 - 5.2.1993. The training workshop was organized by the Directorate of Rural Development. The main objective of the workshop was to develop a water point committee handbook.

**Mrs H. Martin**, Junior CD Adviser, participated in a training course on Small Business Management organized for NGOs in Windhoek during 21.1 - 23.1.1993.

**Mr P. Epafras, W. Shapumba, D. Shilongo, A. Kamati and E. David**, Drillers, participated in a training course on Hydraulic Rotary Drilling in Ongwediva during 18.1 - 29.2.1993. The training was conducted by two German volunteers experienced in using the project's drilling machine. Thereafter they continued practical in-service training in Mud-Rotary Drilling during the period 21.2 - 14.5.1993 with the drilling contractor, Nimtref.

**Mr F. Shiweda**, Construction Supervisor, participated in an on-the-job training course on Ferrocement Water Tank Construction in Oshakati during 18.1 - 22.1.1993. The training course was organized by UNICEF.

**Mrs H. Kapweya**, Junior CD Adviser, represented the Ministry of Agriculture, Water and Rural Development and the project in the Workshop on "Women in Water Supply" in Kenya during 15.2 - 27.2.1993. The workshop was organized by IRC and sponsored by the Netherlands Government. Thereafter Mrs Kapweya visited the Finnida Water Project in Kenya, Kakamega for one week.

**Mr F. Shiweda**, Construction Supervisor, participated in a training course for Gutter Installation in Oshakati during 1.2 - 3.2.1993. The training course was organized by UNICEF.

**Mr S. Kamwanka and Mr M. Shikongo**, Design Technician and Assistant Field Manager respectively, participated in a training course on "An Introduction to Ground Water" in Windhoek for three days. The course was organized by the Hydrogeological Association of Namibia.

**Mrs H. Martin**, Junior CD Adviser, participated in a three day training workshop on "Small Business Development" in Windhoek. The workshop was organized by the Namibian Development Trust.

**Mrs H. Kapweya, Mrs C. Ndove and Mr L. Naudili**, Junior CD Adviser, Storekeeper and CDO respectively, participated in a three day training course on "Conducting Audience Research" in Ongwediva. The training was organized by the Department of Water Affairs.

**Mr M. Shikongo**, Assistant Field Manager, participated in an 18 day training course on "Water Harvesting" in Windhoek. The course was organized by the Directorate of Rural Development.

**Mr F. Shiweda**, Construction Supervisor, participated in a training course on "46 m<sup>3</sup> Ferrocement Tank and VIP-Latrine Construction" in Emono during 24.5 - 2.7.1993. The course was organized by UNICEF.

**Mrs H. Kapweya**, Junior CD Adviser, attended the Water Point Committee Workshop in Okashana during 16.8. - 25.8.1993. The workshop was organized and financed by DRD. The main objective of the workshop was to develop the Water Point Committee Trainer's Manual.

**Mr J. Hashoongo, Mrs O. Shiimbi and Mr J. Hishekwa**, Construction Supervisor, Secretary and Water Point Caretaker respectively, participated in a workshop on "Caretaker Manuals" during 30.8 - 17.9.1993. The workshop was organized and financed by the Department of Water Affairs. The main objective of the workshop was to develop caretaker manuals for handpumps, wind pumps and diesel pumps.

**Mrs H. Martin and Mr L. Naudili**, Junior CD Adviser and CDO respectively, participated in a workshop on "Information, Education and Communication" in Oshakati during 7.10. - 8.10.1993. The workshop was organized by UNICEF. Main objective of the workshop was to develop an Information, Education and Communication (IEC) action plan.

ANNEX 8 (2/2)

**Mr Teophilus Awene**, Assistant Accountant, has been trained one day per week by the Project Accountant, Mrs Ulla Seppinen, since October 1993 (10 days in 1993). The main subjects so far are: daily diary of cash transactions, preparing vouchers, using LOTUS for running monthly cash and bank registers, design of simple tables, payment of salaries, employee tax calculations and payments, invoice payments and follow-up procedure, balancing of accounts and banking.

**14 Contractors** of the project participated in a three day training course on "Site Measuring" in Ongwediva. The training was conducted by Mr S. Kamwanka and Mr H. Pelkonen.

**6 Latrine Contractors** of the project participated in a on-the-job training course on "School Latrine Construction" in Okatope during 22.7 - 24.9.1993. The training was planned and organized by the WSSPOR and conducted by Mr. F. Shiweda.

**8 Well Contractors** of the project participated in an on-the-job training course on "Shallow Well Construction" in Amutanga during 27.9 - 22.10.1993. The course was planned and organized by WSSPOR and UNICEF jointly and conducted by Mr M. Shikongo and Mr J. Hashoongo from WSSPOR and Mr E. Nissen-Petersen from UNICEF. Six trainees from UNICEF and one trainee from RDC attended the course.

**Ms Helta Niilenge**, Community Mobilizer, from LABP-Tsandi project familiarized herself with the community work in the WSSPOR under the supervision of Mrs H. Kapweya during 4.10 - 15.10.1993.



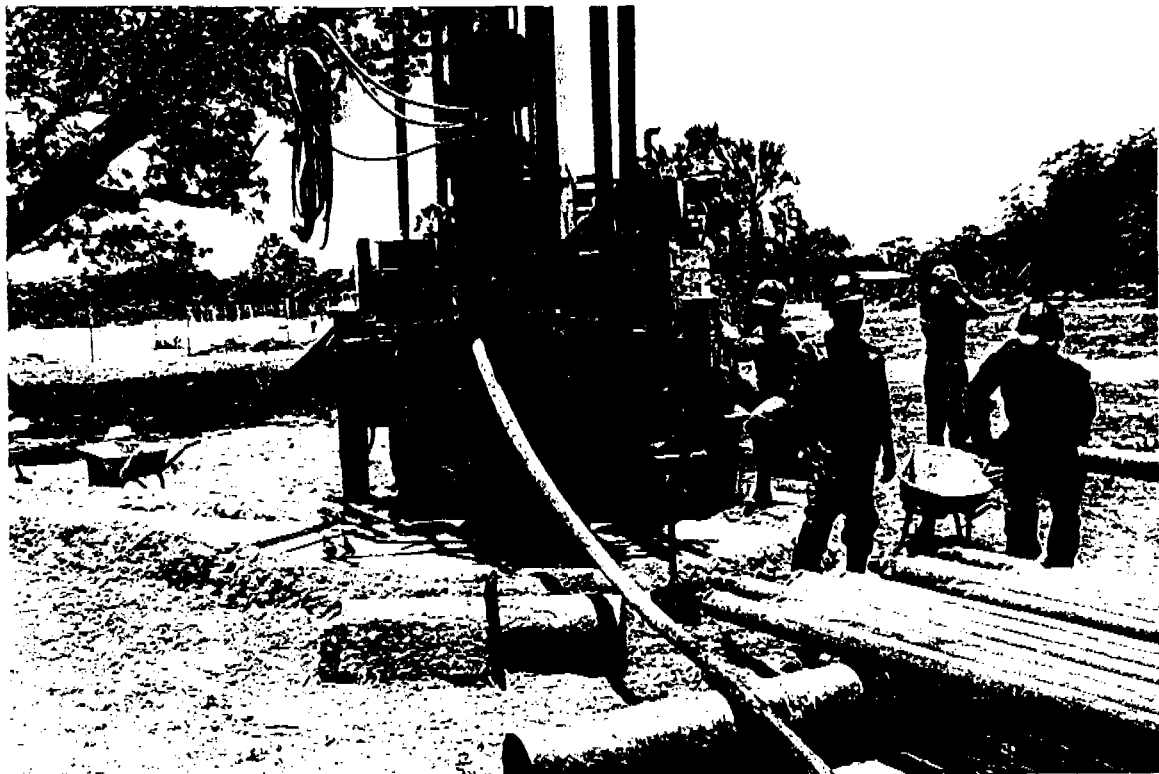
EENYIKA SHALLOW WELL WITH NIRA AF 85



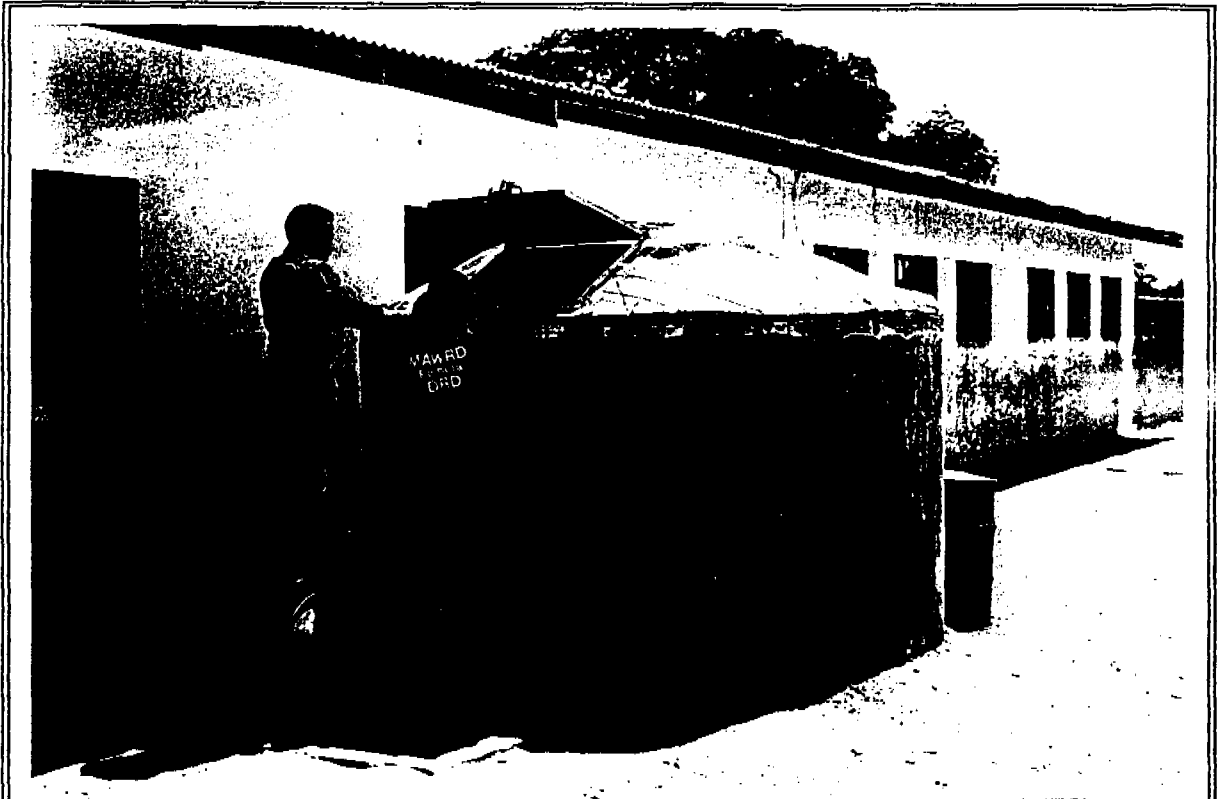
OIDIMBA BOREHOLE



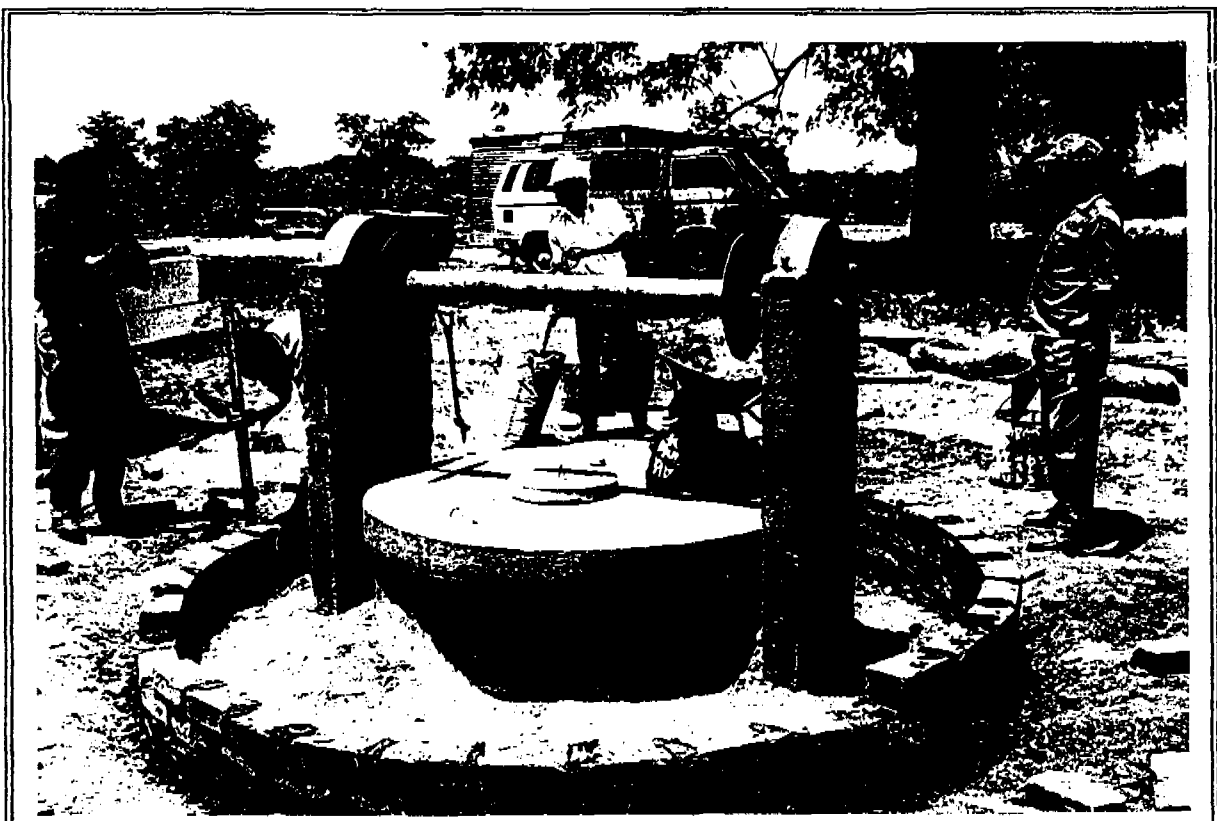
FENCE MAKING COMMUNITY PROJECT IN OHAINGU FEB '93



MUD - ROTARY DRILLING IN ENGELA ON FEB '93



FERRO - CEMENT WATER TANK CONSTRUCTION JOINTLY  
WITH UNICEF 1993



CONSTRUCTION OF EEMBINDI WELL (BUCKET SYSTEM)



FOUR UNIT SCHOOL LATRINE UNDER CONSTRUCTION IN OKATOPE



LOCAL LATRINE UNDER CONSTRUCTION