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**THE REPUBLIC OF  
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**Finnish International  
Development Agency  
(FINNIDA)**

**WATER SUPPLY AND SANITATION  
PROJECT IN OHANGWENA REGION**

**WORK PLAN 1995**

Approved by the Supervisory Board on 30 November 1994.

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## ABBREVIATIONS

|         |   |
|---------|---|
| AA      | Assistant Accountant  |
| ABDO    | Assistant Business Development Officer                        |
| AFC     | Assistant Field Coordinator                                   |
| BDA     | Business Development Adviser                                  |
| CCDA    | Construction Capacity Development Adviser                     |
| CDO     | Community Development Officer                                 |
| CL      | Community Leader  |
| CM      | Community Members   |
| CBO     | Community Based Organization                                  |
| CRW     | Community Representative/Water                                |
| DE      | Design Technician   |
| DWA     | Department of Water Affairs                                   |
| EAIHP   | Engela Area Integrated Health Project                         |
| EIA     | Environmental Impact Assessment                               |
| FC      | Field Coordinator   |
| FIM     | Finnish Markka  |
| FINNIDA | Finnish International Development Agency                      |
| GRN     | The Government of the Republic of Namibia                     |
| ICBMP   | Integrated Community Based Management Plans                   |
| IDC     | Inter-sectoral Development Committee                          |
| IEC     | Information, Education and Communication                      |
| IMLT    | Institute for Management and Leadership Training              |
| JCDO    | Junior Community Development Officer                          |
| M & E   | Monitoring and Evaluation                                     |
| MLRR    | Ministry of Lands, Resettlement and Rehabilitation            |
| MOHSS   | Ministry of Health and Social Services                        |
| NGO     | Non-Governmental Organization                                 |
| NONCA   | Northern Namibia Contractors' Association                     |
| O & M   | Operation and Maintenance                                     |
| ORC     | Ohangwena Regional Council                                    |
| NAD     | Namibian Dollar   |
| PAME    | Participatory Assessment, Monitoring and Evaluation           |
| PC      | Project Coordinator   |
| PDC     | Planning and Design Consultant                                |
| RWEO    | Rural Water Extension Officer                                 |
| SB      | Supervisory Board   |
| SC      | Steering Committee  |
| SCDA    | Senior Community Development Adviser                          |
| SDP     | Sanitation Development Plan                                   |
| SIA     | Social Impact Assessment                                      |
| TC      | Technical Consultant  |
| TOR     | Terms of Reference  |
| UNICEF  | United Nations Children's Fund                                |
| VLOM    | Village Level Operation and Maintenance                       |
| WatSan  | Water Supply and Sanitation                                   |
| WASP    | The National Water Supply and Sanitation Sector Policy of GRN |
| WP      | Water Point   |
| WPC     | Water Point Committee   |
| WSSDP   | Water Supply and Sanitation Development Plan                  |
| WSSPOR  | Water Supply and Sanitation Project in Ohangwena Region       |

## 1. FOREWORD

This work plan has been developed in consultation with DWA, Regional Council and project staff during the period of September - October 1994. It was discussed in the Steering Committee meeting on 17 November and in the Supervisory Board meeting on 30 November 1994. The corrections made and comments given by the Committees have been incorporated in this annual operative plan and budget 1995.

The structure of the work plan differs from the structure used in the work plan for 1994. Instead of dividing the project artificially into sub-projects, we have approached the objectives defined in the Project Document from a process oriented viewpoint. The work plan has been presented step by step, from objectives through consultation, agreements and training to technical input.

The sub-projects, components and outputs defined in the Project Document appear in the work plan in a logical sequence, as required by the process oriented approach. The numbering used in the Project Document appears in brackets after each item. Therefore it is very important that the work plan and the Project Document are read together.

20 December 1994

Markku Leppavuori  
Project Coordinator

## 2. OBJECTIVES AND STRATEGY

### 2.1 Objectives as defined in the Project Document

The long term development objective of the project, as defined in the Project Document approved by the Supervisory Board on 1.12.1993 is to support the Namibian Government's efforts to secure a safe and adequate water supply as well as proper sanitation for the rural population of the project area. By achieving this objective the general health situation, standard of living and economic opportunities will be improved.

The immediate objectives are the following:

1. To encourage, organize and train communities to initiate, construct and manage their water supply and sanitation systems by giving technical assistance complemented with material and financial support and by supporting the drilling programme in the area.
2. To develop local contracting capacity for water supply and sanitation construction and to encourage local production and supply of construction materials complemented by local transportation capacity. Local contracting capacity here means individual trained artisans who have the capability, tools and knowledge to construct wells, tanks and latrines using locally available materials with the cost affordable for the communities. In order to facilitate the work of contractors required materials and transportation shall be locally available at affordable prices. Accordingly this development will be permanent and will expand on its own based on the development capacity of the communities.
3. To prepare development plans for water supply and sanitation for the project area and to establish a water supply and sanitation information system serving the needs of the Government and communities. Other objectives are to develop required manuals and guidelines as well as to monitor and evaluate the use of constructed facilities.

### 2.2 Changes in the project environment

- The structure of the DWA is under development; the responsibility for bulk water supply might be commercialized, while rural water supply will remain within the DWA.
- Increased integration between WSSPOR and DWA experienced: WSSPOR extension officer Lazarus Naudili was employed by DWA, but continues working for WSSPOR. DWA seconded a Design Technician, Mr Khosrow Rostami to work in the project. DWA employed an extension officer, Mr Toivo Shilumbu to work in the project.
- GRN supports local contractors: simplified tendering process used for small scale contracts, restricted to local contractors. This has increased the need of WSSPOR Construction Capacity Building to work in close collaboration with the already established small scale construction enterprises in the area.

### 2.3 Lessons learned during 1992 - 94

#### Community development

- The focus of community work in the project has been on developing appropriate extension methodologies. In order to achieve the project objective a shift towards community development approaches is needed.
- The National Water Supply and Sanitation Sector Policy of the Government of Namibia (WASP) calls for community participation. The project's approach is in line with this policy. However, community work will take more time than anticipated, e.g. the Omafo - Eenhana rural piped scheme may require community development work during 3 - 4 years. Discussion between DWA and WSSPOR shall continue to find consensus in community work and develop community work to meet the new challenges resulting from piped community managed schemes.
- The resources directed towards community mobilization for construction of water points and school latrines need to be on par with the resources directed towards construction itself. For example, if the project is able to carry out construction simultaneously in 15 communities, the resources are needed for the project to carry out community mobilization in as many communities. This means that a choice needs to be made between increased construction (and hiring and training more community development staff), and maintaining current staff levels (and not increasing project construction capacity).
- Water supply is the top priority of all communities in Ohangwena region. All other community activities depend to at least some degree on access to water. Therefore, it is not difficult to use water as a point of departure for community development activities in the area.
- There is a perception that sanitation is not a high priority. However, the sanitation survey carried out shows that this assumption is false and based on the experience that building of VIP latrines is not a priority. These two aspects do not equate. It is important for the project in the future to concentrate on developing a choice of improved sanitation options in addition to building VIP latrines at schools, clinics, and for those private individuals who can afford them.
- The community work shall support implementation of the WSSDP by bringing in the needs of the communities through consultation.

#### Construction Capacity Building

- The development of community based builders (contractor trainees) is a slow and time consuming exercise. Successful contractor needs practical, theoretical and managerial knowledge in addition to his or her own entrepreneurial flair.
- Commercial skills, including relations with the communities, should be taught.
- An excellent brick layer does not necessarily make a good contractor. Therefore, not all the contractor trainees will eventually become contractors.

- The contractor training programme should aim at training contractors to work with community members as their clients to be competitive in the informal and formal sector.
- Local contractors in Cuvelai Region have formed the Northern Namibia Contractors' Association (NONCA). NONCA members need basic business skills training as well as technical training. In addition, NONCA as an organization needs institutional capacity building in order for it to fulfil its obligations to its members. WSSPOR and NONCA may exchange experiences through discussions.
- There is a serious shortage of skilled artisans in the Cuvelai Region. There is therefore a need to locate a training facility / workshop from where the skills of the artisans would be developed in the various trades.

#### Physical implementation of project activities

- For the time being the trained artisans are still in need of support (material supply, transport, advise), additional training and continuous monitoring.
- Water point construction is preferred among the artisans, because community participation is better than in sanitation construction.
- Shallow wells: brick lining most feasible.
- Bucket / windlass water lifting system is more feasible than hand pumps and also preferred by communities - in shallow wells.
- In borehole construction the bottleneck has been flushing the boreholes. WSSPOR received the compressor in June 1994. The equipment has not been reliable.
- WSSPOR shall continue the construction of shallow wells and latrines by means of construction capacity building and community participation in the construction.

#### Planning and design

- There seems to be an improved understanding of different water supply options for different areas: piped schemes for densely populated areas and areas with no other options; point water supply for rural areas, where shallow or deep ground water is available. The project will not support shallow wells within the decided pipeline areas, such as Omafo - Eenhana rural piped scheme.
- Lack of any land use plan is an obstacle and threat for a sustainable WS development.
- The draft Water Supply and Sanitation Development Plan for the project area published in March 1994 is rather an outline than a plan. The plan shall be finished and complemented by the recommendations of the EIA, water use and needs assessment, shallow ground water survey and the SIA. The plan shall indicate, which technical solution for water supply and sanitation there will be in year 2005. The plan shall not be a blueprint, but a master plan giving general guidelines for the physical implementation. Revisions of the plan shall be prepared regularly.

## 2.4 Revised objectives, approach and strategy

In the past the project has relied on a clearly defined extension strategy as an approach to community mobilization. This has meant identifying appropriate information related to water supply and sanitation, developing means of communicating this information and setting up of information channels such as community meetings and training opportunities.

The project is currently in the process of learning more about what are the already existing practices and knowledge of the communities in the areas of sanitation and water supply. It is obvious that in order to develop the project towards its development objective, the project must move beyond "encouraging, organizing and training" community members to basing the work on existing resources of the communities. To do this we need to develop our knowledge of

- Who is responsible for which activities related to water supply and sanitation (e.g. construction, teaching, community organizing etc.).
- Who has access to and control over which resources (e.g. materials, information etc.).
- What impact do planned and existing project activities have on the lives of women and men in Ohangwena region.

It is therefore suggested that the first immediate objective of the project will be rewritten as:

*"To empower women and men to initiate, construct and manage their water supply and sanitation systems by facilitating these activities through technical assistance and material supply."*

The project is also striving to strengthen and enhance the capacity of the counterpart organization and Namibian staff of the project to undertake WSSPOR activities. Skill development is a priority in areas related to community organization, construction and business skill development.

It is therefore suggested that an additional immediate objective of the project will be adopted as:

*" To support skill development in organizing and communication, construction and design, and small business development through training for community based water supply and sanitation schemes."*

Additionally, the following points mark the WSSPOR approach and have their influence in practical operations during the year 1995:

- WSSDP shall be updated regularly. It should gain a status within ORC and DWA. Physical implementation to be based on WSSDP and the communities' needs.
- Even though construction of water points and sanitation facilities is not the key task of the project, construction work shall continue at its present scale. Otherwise there is a danger that the communities lose their motivation to work in committees that do not achieve practical improvements.

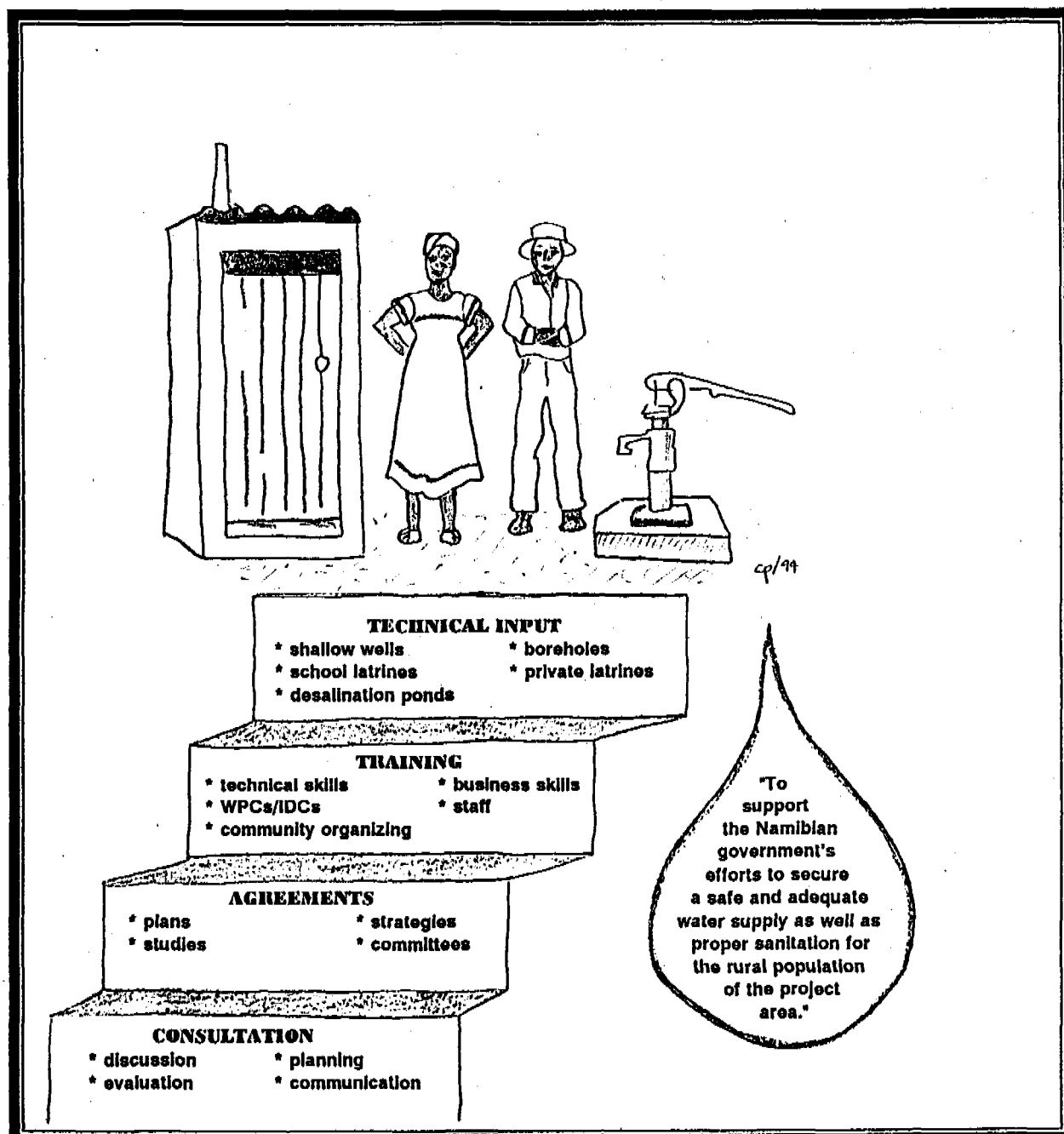


- The structure and organization of DWA is under development. WSSPOR will have an increasing role in supporting the institution building of the Ministry's Directorate for Rural Water Supply.
- The integration and cooperation between WSSPOR and DRWS Cuvelai Region will be strengthened.
- The absorption capacity of the target group shall not be exceeded. This may mean less activities in general, especially new activities and establishment of new WPCs. Instead, more attention will be paid to supporting the already established WPC's through ongoing training and awareness campaigns.
- Construction Capacity Building has found its way, the strategy has been developed. In 1995 the work will concentrate on training of individual artisans to develop construction capacity in the project area.
- DWA has paid increasingly attention to community development work. Extension workers are trained, a Senior Development Planner employed (former WSSPOR SCDA), regional responsibility organized. Consequently, a representative of DWA's extension work should be nominated as a member of the WSSPOR Steering Committee.

### 3. WORK PLAN

The activities defined in the Project Document appear in the work plan in a logical sequence, as required by the process oriented approach. The numbering used in the Project Document appears in brackets after each item. Some of the items do not appear in the Project Document. These components have been included in the work plan, because the project staff feels that they are necessary. These items are marked with "new" in brackets.

The WSSPOR process with its steps is described in figure below:



### 3.1 Water Supply and Sanitation Development Plan (5.3.1 - 5.3.2)

The development plans for water supply and sanitation for the project area also provide overall guidelines for the physical implementation of the project. The plans shall not be rigid, but rather general guidelines to be updated annually. The plans shall indicate, which technical solution for water supply and sanitation there will be in year 2005.

An outline for the plan was prepared during 1992-94 and published in March 1994. As part of the finalization of the plan an Environmental Impact Assessment was done and Sanitation Survey carried out during 1994. DWA implemented a Shallow Ground Water Survey in collaboration with WSSPOR to find out the reliability and location of the discontinued perched aquifer.

In 1995 the plan will be updated by incorporation the results of the EIA, Sanitation Survey, water needs assessment and Shallow Ground Water Survey. The results and recommendations of the SIA shall be incorporated in the next revision of the WSSDP.

Since the contract of the Planning and Design Adviser expired at the end of March 1994, the plans will be finalized by a short term consultant together with the Design Technician, seconded by DWA to the WSSPOR, and in consultation with the other advisers of the project.

#### Consultation

##### *Water Use and Needs Assessment*

A water use and needs assessment will be carried out to support the plan.

The overall strategy of the project is to develop rural communities' capacity and ability of the consumers to enable them in future to take full responsibility for the construction and management of their water supplies and sanitation systems. This means that the people themselves are expected to take the initiative and the responsibility for improving their water supply and sanitation situation. Therefore, the community work shall support implementation of the development plans.

Consultation between WSSPOR, communities and DWA will continue on the water supply alternatives, priorities and selection of solutions for different types of areas.

##### *Social Impact Assessment*

A Social Impact Assessment (SIA) with a gender perspective shall be carried out to establish the expected and possible impacts of the planned and existing activities of the project on the lives of the women and men living in the project area. This is a vital aspect of the WSSDP and needed urgently to complement the EIA that has already been carried out.

##### *Land Use Planning*

One of the key recommendations of the EIA is, that a comprehensive and integrated land-use plan to guide future water supply developments in Ohangwena Region shall be made. The project will work with the Ministry of Lands, Resettlement and Rehabilitation and other concerned authorities to get the land use planning work started.

### Agreements

#### *Water Use and Needs Assessment*

The methodology for the water use and needs assessment will be developed through consultation between PC, PDA, SCDA and a consultant to include both socio-economical and technical components.

Agreement with communities and DWA on the water supply alternatives and selection for different areas will be reached.

#### *Social Impact Assessment*

The methodology for the SIA will be developed through consultation between SCDA and a consultant to include components of human resource development, gender analysis and impact assessment. The Terms of Reference for the SIA will take the report of the French mission on Omafo-Eenhana rural piped water scheme in November 1994 into consideration.

### Training

The physical implementation of water supply and sanitation in the project area shall be based on the WSSDP and the needs of the consumers. Therefore the outcome and recommendations of WSSDP will be communicated to the community members and their opinions taken into consideration. Also the staff of DWA in Cuvelai Region and the WSSPOR staff shall be trained to make them familiar with the WSSDP. Another objective of training is to make updating of WSSDP a natural part of the annual work plan of the DWA.

#### *Social Impact Assessment*

The SIA will be carried out by a consultant able to train the CDO and JCDO in SIA, and the project staff on gender analysis. If possible, further training on SIA can be organized for the CDO and JCDO through the International Association of Impact Assessment. The skills covered will include:

- How to use SIA to develop project strategies.
- How to use gender analysis to monitor project impacts.

### Technical input

WSSDP is finished as "Revision 1995".

#### *Social Impact Assessment*

SIA is carried out and the results are incorporated into the WSSDP.

### **3.2 Monitoring and Evaluation (new)**

In order to continuously monitor the development impacts of the project, a participatory monitoring and evaluation system is needed. It is particularly important for the work of developing Water Point Committees (both existing and new) into operating management units.

Since the WPCs are there to initiate, construct and manage their water supply and sanitation systems, the physical implementation of the project activities need to be developed based on monitoring and evaluation, as well.

#### Consultation

For the continuous empowering of the WPCs it is important that the monitoring and evaluation is based on indicators that women and men of the Ohangwena communities use to assess the success of these committees and their practical achievements. The consultation is therefore aimed at developing these community based indicators for monitoring and evaluation.

Consultation with the artisans and construction supervisors is needed to develop meaningful indicators to assess the success of construction work. The indicators shall cover, in addition to the technical performance and construction management also the appropriateness of the technology used and the communication between the communities, artisans and supervisors.

#### Agreements

Agreement will be reached as to which indicators will be used for the continuous monitoring and evaluation of the project development activities.

#### Training

The community development and construction management staff will be trained in PAME (Participatory Assessment, Monitoring and Evaluation). They will gain skills in:

- How to identify community based indicators for development.
- How to collect and analyse information for continuous monitoring and evaluation.
- How to use this analysis to develop future work plans.

#### Technical input

PAME will be used as a system for continuous monitoring and evaluation in the project.

### **3.3 Inter-Sectoral Development Committees (5.1.1)**

#### Consultation

##### *Consultation with the Ohangwena Regional Council*

The project has together with EAIHP facilitated the establishment of the Inter-Sectoral Development Committees. The support in form of discussions and workshops will continue.

### *Consultation with extension agents*

As the project has been working with the Ohangwena Regional Council a parallel process has been developed by those directly involved in community extension work. This has been borne out from the frustration of dealing with parallel structures at the community level (i.e. WPCs, Health Committees, School Committees etc.)

As the IDC concept is developed further consultation will be maintained with the extension agents to ensure that their valuable experience of working with the communities enhances the concept development.

### *Consultation with communities*

Currently community resources, especially their leadership resources, are stretched to cover several committees. In future Village Development Committees will replace these, consolidating village development priorities within one committee. Consultation will be maintained with communities to ensure that the structure of these committees will be representative of interests in the communities and that the channel of information from the village to the regional level is as open as possible.

### *Development of Integrated Community Based Management Plans (ICBMP)*

The development of ICBMPs can only be undertaken when the project is working within a community in which the Village Development Committee has been established, and that community is situated in a constituency where a constituency level IDC exists, and when the regional IDC has been established.

The purpose is to develop an integrated development plan for the community of which water supply and sanitation will form one part. As the community identifies its development needs, other sectors will take responsibility for the needs that fall under their jurisdiction. This will assist the community to plan from the perspective of their general development needs, rather than from the perspective of sectoral priorities communicated to them by the extension agents.

### Agreements

The conceptualization of IDCs is finalized at all levels.

### Training

It is foreseen that workshops and training opportunities will be needed for the different parties before the concept is made operational. When the Village Development Committees are established, a special training opportunity will be the training of Community Representatives/Water who resume the responsibility of the caretakers of water points.

The Ohangwena Regional Council is responsible for the overall development in the Region. It will bear the responsibility for running the Inter-Sectoral Development Committee system. However, the Regional Office is short of competent staff. If the present staff is trained in basic development management skills, identification of development priorities, formulation of development programmes, preparation of projects, monitoring and evaluation of ongoing activities and other similar tasks, the office will be more capable in fulfilling its duties. A training programme is included in the work plan.

Technical input

*Establishment of Village Development Committees*

Once the conceptualization of the IDCs has been finalized, the project will work in cooperation with community members, DWA and other rural community oriented organizations, to replace existing WPCs with operational Village Development Committees.

*Action based on ICBMPs (Please see under consultation)*

It is expected that the project may be able to carry out this activity in 1-2 test areas, depending on how fast the development of IDCs is during 1995.

**3.4 Water Point Committees (5.1.1)**

**Note:** For the time being WSSPOR is working with the existing Water Point Committee structure. Once the IDC is operational, Water Point Committees will be replaced by Village Development Committees.

Consultation

*New WPCs*

The work of mobilizing new WPCs will be focused on the Omafo-Eenhana pipeline during 1995. It is expected that some 60 WPCs will need to be established along the pipeline. In addition, new WPCs will be established at the minimum level in order to keep the current building capacity employed (estimated 20 new WPCs for shallow wells and 10 for boreholes).

*Old WPCs*

The main focus of WPC work will be on working toward operationalizing existing WPCs. It is felt that through this work the project will be able to learn valuable information contributing towards how to establish WPCs that remain active from the beginning. Information related to training needs and expectations especially is needed.

Agreements

Agreements are reached as to the structure, tasks and establishment of WPCs. The project will work towards a broader mandate of WPCs to include the existing communal water points.

Strategy for strengthening existing WPCs is developed.

Training

*WPC training material development*

More visual training materials will be developed for use by the extension agents when training WPC members.

*WPC member training*

WPC member training will continue for new WPCs, and training needs for old WPCs will be established.

Technical input

Community based management of water points is established and their operations supported.

**3.5 Sanitation Extension Strategy (new)**

The need to develop a sanitation extension strategy is based on the fact that carrying out such extension in the schools and the communities far exceeds the human resource capacity of the project.

Consultation

The project will identify existing Community Based Organizations (CBOs) with membership in the project area and an interest in community development activities (e.g. Girl Guides, Boy Scouts, Church youth groups, trade unions etc).

Agreements

Agreements will be sought with CBOs as to their possible involvement in sanitation extension.

Training

*Preparation of sanitation extension material*

Sanitation extension will be prepared for extensive distribution through CBOs, community based businesses etc. The materials will focus on options for improved sanitation.

*Training of CBOs*

The project resources for training in this sector will be used for training CBO leaders who will train their membership, rather than training directly at the community level.

Technical input

Sanitation extension will be carried out by CBOs with assistance from WSSPOR.

**3.6 Cost-sharing policy (5.1.2)**

Consultation

*Consultation with DWA*

DWA is in the process of developing a cost-sharing policy for rural water supply. WSSPOR will support this development. It is important that consultation exists on this matter so that



mobilization for WPCs/IDCs can be as well informed as possible.

#### *Consultation with other NGOs*

As the cost-sharing issue is particularly sensitive, it is important to maintain Consultation with others with experience of cost-sharing with communities, even in sectors other than water supply.

#### *Consultation with communities*

Any cost-sharing policy must be developed in consultation with communities to ensure that it has community support for its operation.

#### Agreement

WSSPOR will support DWA in working for an agreement on the cost-sharing policy.

#### Training

WSSPOR will support training of those working in water supply sector with communities on the implementing of the cost-sharing policy.

#### Technical input

Cost-sharing policy is operational.

### **3.7 Technical Development (5.1.3, 5.1.4)**

#### Consultation

##### *Water Point Technology*

The Government of Namibia is currently working on standardisation of shallow well technology. This will facilitate maintenance and production of such technology within Namibia. WSSPOR is one of the few projects where various pump mechanisms have been tried, and where comparisons between these are possible. WSSPOR will also work through consultation with the users to determine factors affecting preference.

WSSPOR feels that there is need to develop the brick lined shallow wells. Standardization with other organizations working with shallow wells, simplifying the construction methods and increasing possibilities for on site construction need to be discussed with users and builders. Simplifying of other structures connected with shallow wells, such as cattle troughs, wash basins, fences and tanks needs to be discussed, as well.

##### *Sanitation Technology*

The goal in development of sanitation technology is to broaden the users choice as to the price range, skills needed to build a latrine and materials used in building. New options will be developed in close consultation with the users.

Based on the outcome of the 1994 Sanitation Survey, a Pit Latrine Survey will be designed. The aim is to find out in consultation with the community members and builders needs and

possibilities to develop the institutional and private latrine types to be better in terms of affordability and suitability for the users.

#### Agreements

WSSPOR will seek agreement with the communities on both standardisation and on prototypes of improved water point and sanitation options.

An agreement to make a Pit Latrine Survey will be made with communities and the SC.

#### Training

As new technology is developed, WSSPOR contractors will be introduced to these. Also community based skills will be strengthened through demonstrations and workshops.

A pit latrine survey will be made using participatory methods. WSSPOR staff will be trained to the methodology.

#### Technical input

There will be continuous development of technological options.

A "Product Catalogue" will be developed. It will include different latrine and well types, accessories and prices.

### **3.8 Training of Contractors (5.2.1)**

#### Consultation

The ongoing training programme has 15 contractor trainees. Current training experience has revealed that not all the trainees have the entrepreneurial flair to develop themselves as a contractor. Skills assessment will focus on individual skills and abilities of the trainees with the view of classifying them for different contract categories.

In order to broaden the skills of the contractor trainees, trade training skills are necessary. The trades needed in the construction trade include plumbing, electrical, metal and sheet metal works. These skills will be best developed in an existing, open training facility or workshop. Consultation and assessment of the existing facilities in the Region shall be carried out.

Bearing in mind that not all the contractor trainees will eventually develop to contractors, there is a need to assess the contractor resources with a view to train to already practising community based builders in the commercial and technical skills needed to develop to a contractor. A new group of trainees will be selected from among them.

The basis for all the training programme will be a market survey which should be carried out at the beginning of 1995 to establish the demand and supply of constructing resources in the Cuvelai Region.

The contractor training programme will be discussed with NONCA. NONCA members technical and commercial training needs will be assessed to facilitate their training through open training institutions.

DWA will be consulted on their experience in minor works tendering by small contractors.

#### Agreements

A conclusion of the experience of DWA in minor works tendering by small contractors will be made and adopted as a fact affecting the training plan.

On the basis of the needs identified and institutions assessed, a training plan shall be prepared for developing the skills of the community based contractors in the Cuvelai Region.

The new trainees will be selected and trained on the basis of the skills demanded in the Region.

#### Training

The training approach will aim at creating independence of the contractor trainees by gradually reducing the project's support. Construction works by the project will be tendered among the contractor trainees and they will submit their quotations. This should introduce the concept of competition among the contractor trainees. The year 1995 should mark the final year of training. During 1996 they should be fully independent. During 1995, contractor trainees should assume responsibility of transportation of materials to site.

The new group of trainees having a reasonable construction background should also be able to advance to independence during 1996. The involvement of women in construction process will be addressed.

The following are the main areas to be covered during the training:

#### Technical training:

- Brick making
- Brick laying
- Concrete making
- Introduction to dumpy level
- Setting out a building

**Community as working environment:**

- Communication skills
- Community expectations
- Community contributions
- Private clients in rural communities

**Business training:**

- Bill of Quantities and costing
- Basic arithmetics
- Cash management
- Tendering

On the job training outside the project, e.g. at the sites of NONCA members will be given as appropriate.

Technical input

Based on the findings of the assessment of training facilities, there will be need to develop an appropriate contractors curriculum and invest in the necessary basic tools and equipment.

### **3.9 Organizing Material Supply (5.2.2)**

Consultation

Private companies and contractors are encouraged to assume a greater role in water supply and sanitation development. They should have a key role in the maintenance of water supply facilities, the supply of building materials, hand pumps and spare parts.

A survey of the suppliers in Ohangwena Region was carried out in August 1994. A total of 78 shops in the 7 constituencies in Ohangwena Region were visited. A few selected stores strategically located in the communities will be further assessed as potential suppliers. A workshop for these suppliers is planned in early 1995. The training needs of the suppliers will be discussed a part of the overall construction development.

Agreements

On the basis of the evaluation of the suppliers, delivery forms and order (requisition) forms should be presented to the suppliers and an overall system of procurement discussed. On the basis of this system standard agreement procedures and guidelines should be developed. Communities and contractors should then liaise with the supplier as their focal points for material procurement.

### Training

In order to strengthen the capacity of the suppliers to function efficiently, the suppliers should be trained in the following areas:

- Shop layout
- Cash management
- Customer relations
- Stock management

### **3.10 Organizing Transportation (5.2.3)**

#### Consultation

The availability of appropriate and affordable transport is considered essential in increasing the demand for construction services.

The community or the contractors are supposed to arrange for the supply and delivery of the material to the sites.

A survey of the transporters in Ohangwena Region was carried out in August 1994. A total of 91 transporters were interviewed of whom 33 proved to be potential for further assessment. A few selected transporters will be met in a workshop in early 1995. At the workshop the business potential and training needs of the transporter will be discussed.

The contractors and artisans trained by the project will be consulted to find out their possibilities to organize transportation themselves, by using their own or otherwise readily available facilities.

#### Agreements

On the basis of the evaluation of the transporters, delivery forms and schedules, payment forms and agreement forms will be presented to the transporters for developing an overall transport system.

On the basis of this system, standard agreement procedures and guidelines should be developed. Communities and contractors should then utilize the available transport capacity for material procurement.

#### Training

The survey of transporters revealed a need for training in the following areas:

- Calculation of transport rates
- Cash management
- Overall transport management

### **3.11 Information and monitoring system for constructed water supply and sanitation in the project area (5.3.4)**

#### Consultation

The initially planned information and monitoring system for constructed water supply and sanitation in the project area has been redesigned to a management information system (MIS) plan related to WSSPOR's construction activities.

The system will yield information on the performance and management of the water points, latrines, communities, and contractors. In addition, reports on the costs of operation and maintenance as well as basic construction costs may be derived from the system.

The critical success factor for the system is the timeliness and the accuracy of the data gathered from the field. Great emphasis will be placed on the training of the various users: the communities, users of facilities, contractors and DWA.

The needs of the various users and realistic opportunities to collect input data will be assessed and reviewed while developing the system. The main features and capacity of the system will be introduced to the WSSPOR staff.

#### Agreements

The key responsibilities during the information processing will be outlined and shared among the WSSPOR staff. The phases of the information processing are: information gathering; analysis; storage; and distribution. At each phase, the role of the communities, project staff, the contractors and DWA will be outlined.

#### Training

The training will emphasize the information gathering systems and tools, the time line for information processing, the output expected from the system and the information storage and distribution system.

#### Technical input

There may be a need to upgrade the computer hardware to meet the reporting of the new information and monitoring system.

The present simple follow-up system for water points and latrines will be updated regularly, until the new information system under development is fully operational.

### **3.12 Staff training**

In 1995 staff training will be part and parcel of all project activities. Together with counterpart training it will facilitate Namibians to take over the duties of the FC and SCDA in 1995. Another aim is to leave the project employees to the Government with sufficient skills to work in their field of specialty within the Government.

### Consultation and agreements

The training needs assessment of the staff is a continuous process. Based on the evaluation, individual staff members will be sent to training courses in the Region or outside.

The training needs of the Assistant Business Development Officer (ABDO) and the Assistant Accountant have been assessed and reviewed based on their performance. On the basis of the needs identified, training programme has been designed for each of them progressively handing over more duties and responsibility to them.

### Training

#### *Community Development Officers*

The training of the CDO and JCDO will focus on the following:

- work planning
- community records
- training skills
- Participatory Assessment, Monitoring and Evaluation
- Social Impact Assessment including gender analysis

#### *Assistant Business Development Officer*

The ABDO will in the long run be responsible for monitoring and evaluation of all business related activities supported under the project. In this regard, the following basic skills are considered essential:

- Ability to plan, organize and manage business training
- Ability to analyse basic accounting and financial data
- Skills in monitoring and evaluation business activities
- Familiarity with the construction industry

The training programme for the ABDO will cover the following subjects:

- Basic bookkeeping
- Business management
- Basic technical training
- Monitoring and evaluation

#### *Assistant Accountant*

The Assistant Accountant has been given basic bookkeeping training both at IMLT and on the job training by the BDA.

The training has covered the following areas:

- Introduction to bookkeeping concepts
- Double entry system and the ledger
- Multi-column cash book and bank reconciliation
- Petty cash book
- Journal (purchases book, sales book etc.) and the trial balance.

The Assistant Accountant is now familiar with the basics of bookkeeping though emphasis is still on practical applications and experience.

The training programme designed will cover the following areas:

- Advanced bookkeeping
- Management of cash and bank
- Financial statements
- Accounting

Through this training the Assistant Accountant will be competent for a variety of bookkeeping and basic accounting tasks.

#### *Field Coordinator*

The Namibian Assistant Field Coordinator will take over the duties of the expatriate Field Coordinator. During 1995 he will be sent to a training course in sustainable rural water supply and sanitation, organized by the International Water and Sanitation Centre (IRC).

Additionally, he will participate in the Supervisor's training, as an instructor or as student, as applicable. He will also receive on the job training in organizing the construction procedure, utilization of construction personnel, chairing and organizing meetings, as well as in public relations.

#### *Construction Supervisors*

The supervisors will be given training in building work's theory and practise, organization of building work as well as in recording and reporting.

An excursion to another similar project in Namibia will be organized.

A study tour to the Western Kenya Water Supply Project has been planned.

#### *Drilling Crew*

The training of the drilling crew will continue mainly as on the job training. The two DWA drillers will receive the same training as long as they stay with WSSPOR. The possibility to get an experienced driller to the site for 2 - 3 months to give training will be examined.



### 3.13 Physical implementation of project activities (5.1.3 - 5.1.4)

#### Technical input

Shallow well construction will continue following the programme presented in Annex 2. Siting of wells will be reconsidered, taking the shallow ground water survey, done by DWA in 1994 into account.

Borehole construction will proceed, as described in the programme, Annex 3. Rehabilitation of old boreholes, drilled in the project area before the project started, will continue according to the practical possibilities. The Central Water Committee will be consulted for location of the sites.

Construction of institutional latrines will proceed at schools as much as the community involvement will allow. All the clinics have already been equipped with a latrine. The programme is as Annex 4. At each school a 3 or 4 units pit latrine will be constructed. Need for more units is there, but WSSPOR has experienced that the communities are not able to contribute for more units.

The quality of sand used in brick making may be a problem, because at certain locations the soil is saline. Quality control by means of sand samples taken and sent to DWA's soil laboratory for analysis will be introduced.

Corrugated iron sheet pit latrines will be sold as private latrines at full cost recovery. Other simplified pit latrine types (see chapter 3.7) will be sold.

All water point and sanitation construction will be used as practical contracting training for contractor trainees. Trials to get private latrines done through open competitive tendering will be made. NONCA members will be encouraged to tender, using the contractor trainees as their sub-contractors.

The target is, that WSSPOR will gradually stop construction of private latrines. The clients should approach directly the contractors trained by WSSPOR, NONCA members or other local contractors.

WSSPOR will not actually be involved in the construction of piped water schemes. Small extension branches, stand pipes and other facilities may be done by the project.

## 4. LOGISTICS

The project operates mainly with the communities all over the vast project area. This means heavy use of the project vehicles. The replacement of the oldest vehicles before they are scraps without any resale value will continue. The budget includes an allocation for this purpose.

Procurement of construction materials and consumables will gradually be transferred to the communities and contractors. However, this is a slow process. During 1995 major part of the procurement will still be made through the project. The GRN contribution will be used for procurement of construction materials such as cement, steel, drilling materials, pipes, hand pumps etc. The project will take care of the practical procurement and invoice DWA accordingly. The budget allocation has been made.

As part of the reorganization of DWA the construction section in Oshakati will be closed early 1995. DRWS Cuvelai may move to the construction offices. The possibility to promote integration and improve practical collaboration between WSSPOR and DRWS by moving WSSPOR office from MAWRD Ongwediva to the new DRWS Oshakati office will be looked at.

## 5. PERSONNEL

The work plan is based on the consultant's staff (long term technical advisers) and project staff defined in the Project Document, supported by short term consultants and trainers.

The staffing schedule appears in Annex 6.

### *Consultant's Staff (Advisers)*

#### Project Coordinator (PC)

- PC will be working throughout the year.
- The present PC will complete his contract on 31.7.1995

#### Senior Community Development Adviser (SCDA)

- The expatriate SCDA will work for one year (until 31.7.1995), as decided by the Steering Committee on 3 February 1994.
- After this period the duties will be taken over by the present Namibian JCDO.

#### Community Development Officers (CDO1 and CDO2)

- The Project Document includes two JCDO's. One has been transferred to work as the Assistant Business Development Adviser, as decided by the Steering Committee on 26 May 1994. The other will take over from the SCDA on 1.8.1995. She will be promoted to Community development Officer (CDO1) with effect from 1.1.1995.
- A new Namibian Community Development Officer (CDO2) will start working in the project from March 1995, because the expanding community development tasks can not be fulfilled by the CDO1 alone, who is expected to take over from the SCDA.

#### Field Coordinator (FC)

- FC will be working throughout the year.
- The present expatriate FC will complete his contract on 31.12.1994, and the present Namibian Assistant Field Coordinator will take over from 1.1.1995 as part of the project staff.

#### Business Development Adviser (BDA)

- According to the Project Document the BDA will work until 31.3.1995. To achieve the project's objectives, it is necessary that the post is prolonged to 31.3.1996.
- The post will be prolonged with a new title "Construction Capacity Development Adviser" (CCDA). The job description will be reformulated to emphasize development of the local construction capacity. The person should have building technical background and be experienced in costing and tendering.
- The present BDA will complete his contract on 31.3.1995.

#### Assistant Business Development Officer (ABDO)

- Post was approved by the Steering Committee on 26 May 1994. One of the two JCDO's is being trained for business development duties.
- ABDO will be working throughout the year.

#### *Project Staff*

The project staff is defined in the Project Document. The following posts are included in the Work Plan 1995: Field Coordinator; Stores Officer; Water Supply Construction Supervisor; Sanitation Construction Supervisor; Handyman; Lorry Driver; Drilling Foreman; Drillers (two); Security Officers (three); Assistant Accountant; Typist; Driver; and Cleaner.

#### The differences with the Project Document:

- Assistant Field Coordinator does not exist any more, since the Field Coordinator will complete his contract on 31.12.1994 and the Assistant Field Coordinator will take over.
- Hand Pump Installation Supervisor is not included, since the shallow wells are mainly done with a bucket lifting system, and the hand pumps at boreholes can be supervised by the Water Point Construction Supervisor.

#### *Staff seconded by DWA to WSSPOR*

The Project Document names in the present DWA set-up the following officers to work in the project: Director of DRWS (part time); Chief Engineering Technician of Cuvélai Region (part time); Design Technician (full time); Community Representative Trainer/Control Rural Water Extension Officer (part time); two Rural Water Extension Officers (from 1.4.1995 onwards); and two drillers.

#### The differences with the Project Document:

- The Director of DRWS has nominated the Chief, Rural Engineering Services to work as the Project Director on his behalf.
- Rural Water Extension Officers commence their work in the beginning of 1995, because of the magnitude of community development tasks. These include new WPCs along the Omafo - Eenhana rural piped scheme and at water points, as well as support to already established WPCs.

- The two drillers will most probably be needed for DWA's own works already during the first quarter of 1995.

#### *Short Term Consultants*

The WSSPOR approach to the use of short term consultants is process oriented "Training of trainers" and "Learning by doing". This means that the consultants will not be hired merely to do a survey and write report. They will train the staff in the methodology they use, and work through their assignment in close collaboration with DWA and WSSPOR staff. One individual may work in more than one capacity. The need for short term consultants is presented below. The use of them will be decided by the Steering Committee.

#### Planning and Design Consultant (PDC)

- The PDC will work as a short term consultant, as presented in the Project Document.
- The main task is to finalize WSSDP together with the Design Technician, training him in preparing rural water supply master plans. As part of the finishing process, PDC will participate in the water use and needs assessment and compile the latest ground water data that is available in DWA.

#### Social Impact Assessment Consultant

- To complement the EIA, a SIA will be carried out by a consultant able to contribute to the human resource development by training project staff in gender analysis and impact assessment.

#### Participatory Assessment, Monitoring and Evaluation Consultant

- The project urgently needs to develop community based indicators for assessing, monitoring and evaluation of its development activities. The consultant will facilitate the development of such a system through training and field testing.

#### Field Operations Consultant (FOC)

- The four months of the Field Coordinator's post during 1995, presented in the Project Document, have been modified to two months' support to the Namibian Field Coordinator.
- The main tasks are to evaluate the performance of the Namibian field coordinator and to train him accordingly.
- The present Field Coordinator will take care of this assignment.

#### Senior Institution Development Consultant

- To give support in the establishment and training of the Inter-Sectoral Development Committees (Chapter 3.3).
- To support the institutional development of DWA and ORC.
- To work as a resource person in the workshops (IDCs, support to ORC and DWA) to

be organized by WSSPOR. The approach is to work as a process consultant, get the participant learn by doing.

**Junior Institution Development Consultant**

- The workshops to be organized by the WSSPOR will be run by a team of two consultants.

**Market Survey Consultant**

- Will carry out a market survey to determine the demand for construction services in the project area.

**Construction Consultant**

- To support in technical development (Chapter 3.7) by introducing experience gained elsewhere, and by training WSSPOR staff to train community members and contractors.

**Technical Consultant**

- To work as resource person in Construction Capacity Development.
- Main tasks will be to evaluate the performance of contractor trainees and to train them both on the job and at a training facility.

**Socio-economist**

- To develop socio-economic analysis for the water use and needs assessment.
- To train WSSPOR staff to carry out the assessment.

**Ground water expert**

- To support the finalization of the WSSDP and development of the next revision of the WSSDP.
- To train WSSPOR staff to understand basic principles of hydrogeology.
- May be seconded by DWA, if the work load will allow.

**Artist**

- To work together with SCDA, JCDO's and RWEO's in the development of training material, handouts and posters.
- To train WSSPOR staff in visual thinking, to help them understand basic principles of visual presentation.

*Trainers*

Communication Skills Trainer

- To support the training of project staff.
- To support the training of contractors.
- To train JCDO's in training of communication skills.

Plumbing Trainer

- To support the training facility, as part of the Construction Capacity Building.
- To train the trainers of the facility.

Metal Works Trainer

- To support the training facility, as part of the Construction Capacity Building.
- To train the trainers of the facility.

Management Trainer

- Will provide bookkeeping and financial training for the Assistant Accountant and the Assistant Business Development Officer.
- May be a local training institute, such as IMLT.

## 6. PROJECT BUDGET

The project budget for 1995 is based on the work plan and personnel schedule. The total budget for the year is FIM 8 300 000, out of which FIM 7 260 000 is FINNIDA's contribution, and FIM 1 040 000 (12,5 % of the total) the contribution of the Government of Namibia. Additionally, the communities are expected to contribute in form of land, labour, sand and water needed for the physical implementation.

Annex 7 is a presentation of the budget by item. The cash flow estimate by quarter appears in Annex 8.

## **7. RISKS, ASSUMPTIONS AND EXTERNAL FACTORS**

It should be noted that the current combined human resources for community development of WSSPOR and DWA in the Region are insufficient to carry out the suggested activities on community mobilization for WPCs, and that they therefore depend on a substantial increase in staff.

The work plan is based on the assumption that the changes in staffing as described in Chapter 5 will be successful. The following assumptions are worth mentioning:

- The new Field Coordinator is ready to be in charge of the physical implementation.
- The CDO is capable to work as SCDA.

The physical implementation of the project activities relies on the community development work. If it is slower than anticipated, there will be delays in water point and sanitation construction.

The construction capacity development is based on close collaboration with the business community in Cuvelai Region. It is anticipated that there will be interest enough for the local capacity to develop.

The work plan can not be followed, if the capacity of staff and the absorption capacity of the target group will be exceeded.

The structure of the DWA is under development; the responsibility for bulk water supply might be commercialized, while rural water supply will remain within the DWA. It remains to be seen, how the changes still unknown will affect the project.

**WORK PLAN SCHEDULE STEP BY STEP**



WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

WORK PLAN 1995: STEP BY STEP

STEP 1: CONSULTATION

Objectives:

- To empower women and men to initiate, construct and manage their water supply and sanitation systems.
- To prepare development plans for water supply and sanitation for the project area.

| ACTIVITIES  | OUTPUT  | BENEFICIARIES                                     | INDICATORS  | RESPONSIBLE                               | TIMING |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
|---|---|---|---|---|--------|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|
|   |   |   |   |   | J      | F | M | A | M | J | J | A | S | O | N | D |  |  |  |  |  |  |
| 1. WSSDP (5.3.1.)<br>1.1. Water Use/Needs Assessment<br>1.2. Social Impact Assessment<br>1.3. Land Use Plan   | Methodology developed<br>Methodology developed<br>Methodology developed                             | DWA, WSSPOR<br>DWA, WSSPOR<br>MLRR, CM            | Plan for assessment<br>Plan for SIA<br>Progress plan developed                            | PC, SCDA<br>SCDA<br>PC                    |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 2. Monitoring and Evaluation (new)<br>2.1. PAME<br>2.1. PAME with WPCs<br>2.2. Evaluation of construction   | Methodology developed<br>Continuous monitoring<br>Methodology developed                             | WPC, WSSPOR<br>WPC, CM, CL<br>CM, Contr. trainees | Plan for PAME<br>Improved work planning<br>Quality criteria                               | SCDA<br>SCDA, JCDO<br>FC                  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 3. Inter-Sectoral Development Committees (5.1.1.)<br>3.1. Consultation with ORC<br>3.2. Consultation with extensionists<br>3.3. Consultation with communities<br>3.4. Development of ICBMPs | IDC strategy developed<br>IDC strategy developed<br>IDC strategy developed<br>Methodology developed | CM, WPC<br>CM, WPC<br>CM, WPC<br>CM, WPC          | Community based dev. priorities   | PC, SCDA<br>SCDA, CDO<br>CDO<br>SCDA, CDO |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 4. Water Point Committees (5.1.1.)<br>4.1. New WPCs<br>4.2. Old WPCs  | Applicants approached<br>Communication  | CL, CM<br>WPC, CL, CM                             | Applications followed-up<br>Training needs identified                                     | CDO<br>SCDA, CDO                          |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 5. Sanitation Extension Strategy (new)<br>5.1. Identification of CBOs   | CBOs mobilized for<br>Sanitation extension  | CBO   | CBO interest in sanitation extension  | SCDA, CDO                                 |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 6. Cost-sharing Policy (5.1.2.)<br>6.1. Consultation with DWA<br>6.2. Consultation with other NGOs<br>6.3. Consultation with communities  | A basis for cost sharing<br>with communities  | DWA   | DWA priorities identified<br>NGO priorities identified<br>Community priorities identified | SCDA<br>SCDA, CDO<br>CDO                  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 7. Technical Development (5.1.3.,5.1.4.)<br>7.1. Water Point Technology<br>7.2. Sanitation Technology   | New technical alternatives<br>developed with users  | CM, DWA   | User involvement in technology dev.   | FC, SCDA,<br>CDO                          |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |

WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

| ACTIVITIES   | OUTPUT                           | BENEFICIARIES       | INDICATORS                       | RESPONSIBLE   | TIMING |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
|--|----------------------------------|---------------------|----------------------------------|---------------|--------|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|
|  |                                  |                     |                                  |               | J      | F | M | A | M | J | J | A | S | O | N | D |  |  |  |  |  |  |
| 8. Contractor Training (5.2.1.)                          |                                  |                     |                                  |               |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8.1. Market Survey                                       | Demand for construction services | Contr.trainees      | Market assessment done           | BDA           |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8.2. Training Needs Assessment                           | Report                           | Contr.trainees      | Evaluation of trainees done      | BDA, ABDO     |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8.3. Assessment of existing institutions                 | Report                           | Regional facilities | Institutions evaluated           | BDA, ABDO     |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8.4. Assessment of new trainees                          | 20 new trainee candidates        | Contr.trainees      | New trainees identified          | CCDA, ABDO    |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 9. Organizing Material Supply (5.2.2.)                   |                                  |                     |                                  |               |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 9.1. Meeting with selected suppliers                     | Procurement plan                 | Suppliers           | Suppliers aware of objectives    | BDA, ABDO     |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 9.2. Assessing training needs of suppliers               | Training plan                    | Suppliers           | Training plan prepared           | BDA, ABDO     |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 10. Organizing Transportation (5.2.3.)                   |                                  |                     |                                  |               |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 10.1. Meeting with selected transporters                 | Procurement plan                 | Transporters        | Transporters aware of objectives | BDA, ABDO     |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 10.2. Assessing training needs of transporters           | Training plan                    | Transporters        | Training plan prepared           | BDA, ABDO     |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 11. WatSan Information and Monitoring System (5.3.4.)    |                                  |                     |                                  |               |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 11.1. Assessment of needs                                | Report guidelines                | WSSPOR/DWA          | Output specifications reviewed   | BDA           |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 11.2. Introduction of system to staff                    | Training plan                    | Staff               | Responsibilities outlined        | BDA           |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 12. Staff Training                                       |                                  |                     |                                  |               |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 12.1. Training needs assessment                          | Report                           | Staff               | Evaluation of staff done         | PC            |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 13. Physical Implementation                              |                                  |                     |                                  |               |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 13.1. Consultation with communities                      | Demand from communities          | CM                  | Applications for WAtSAN          | FC, SCDA, CDO |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 14. Reporting, Monitoring, Evaluation                    |                                  |                     |                                  |               |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 14.1 Consultation with DWA and FINNIDA (Mid-term review) | Monitoring the project           | WSSPOR, DWA         | Progress controlled              | PC            |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |

WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

STEP 2: AGREEMENTS

Objectives:

-To develop local contracting capacity for water supply and sanitation construction.

| ACTIVITES   | OUTPUT   | BENEFICIARIES        | INDICATORS   | RESPONSIBLE      | TIMING |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
|---|--|----------------------|--|------------------|--------|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|
|   |  |                      |  |                  | J      | F | M | A | M | J | J | A | S | O | N | D |  |  |  |  |  |  |
| 1. WSSDP (5.3.1.)                                     | Water use/needs assessment<br>Social impact assessment | DWA<br>DWA           | Assessment approved<br>Plan approved               | PC, SCDA<br>SCDA |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
|   | Land use plan<br>Agreement with DWA                    | DWA, MLRR<br>DWA     | Report approved<br>Plan approved<br>WSSDP approved | SCDA<br>PC<br>PC |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 2. Monitoring and Evaluation (new)                    |  |                      |  |                  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 2.1. PAME with WPCs                                   | Com. based indicators                                  | CM                   | Strategy for WPC evaluation                        | SCDA, CDO        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 2.2. Evaluation of construction                       | Criteria agreed  | CM, Contr. trainees  | Quality criteria                                   | FC               |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 3. Intersectoral Development Committees (5.1.1.)      | IDC concept developed                                  | IDC, CM, DWA         | IDCs ready to be established                       | SCDA, CDO        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 4. Water Point Committees (5.1.1.)                    |  |                      |  |                  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 4.1. New WPCs   | Community organizing                                   | CM                   | New WPCs   | CDO              |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 4.2. Old WPCs   | Agreement with WPCs                                    | WPC, CM              | Strategy for strengthening old WPCs                | SCDA, CDO        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 5. Sanitation Extension Strategy (new)                | Cooperation with CBOs                                  | CBOs                 | Strategy for sanitation extension                  | SCDA, CDO        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 6. Cost-sharing strategy (5.1.2.)                     | Agreement between users/DWA                            | DWA, CM              | Strategy for cost sharing                          | SCDA, CDO        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 7. Technical development (5.1.3., 5.1.4.)             | Expanded technical options                             | DWA, CM              | Expanded choice of technical options               | FC, SCDA,        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8. Contractor Training (5.2.1.)                       |  |                      |  |                  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8.1. Selection of training approach                   | Training plan  | Contr.trainees       | Training programme designed                        | CCDA, ABDO       |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8.2. Selection of training facility                   | Report   | Regional institution | Training programme prepared                        | CCDA, ABDO       |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8.3. Selection of new trainees                        | 10 new trainees  | Contractors          | New training group selected                        | CCDA, ABDO       |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 9. Material Supply (5.2.2.)                           |  |                      |  |                  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 9.1. Agreement with suppliers                         | Agreement signed                                       | Suppliers            | Suppliers aware of responsibilities                | BDA, ABDO        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 10. Transporters (5.2.3.)                             |  |                      |  |                  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 10.1. Agreement with transporters                     | Agreement signed                                       | Transporters         | Transporters aware of responsibilities             | BDA, ABDO.       |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 11. WatSan Information and Monitoring System (5.3.4.) |  |                      |  |                  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 11.1. Meeting with staff                              | System concept   | Staff                | Responsibilities outlined                          | BDA              |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 12. Staff Training                                    |  |                      |  |                  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 12.1. Training programme                              | Training plan agreed                                   | Staff                | Staff aware of training                            | PC, BDA          |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 13. Physical Implementation                           |  |                      |  |                  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 13.1. Agreements with communities                     | Implementation plan                                    | CM, Trainees         | Contracts signed                                   | FC               |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |

WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

STEP 3: TRAINING

Objectives:

- To support skill development in organizing and communication, construction and design, and small business development through training.
- To support local production and supply of construction materials, and local transportation capacity.

| ACTIVITIES  | OUTPUT                               | BENEFICIARIES       | INDICATORS                             | RESPONSIBLE    | TIMING |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
|---|--------------------------------------|---------------------|--|----------------|--------|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|
|   |                                      |                     |  |                | J      | F | M | A | M | J | J | A | S | O | N | D |  |  |  |  |  |  |
| 1. Water Supply Development Plan (5.3.1.)         | WSSDP as guideline for detailed work | DWA, WSSPOR         | WSSDP adopted                          | PC, PDA        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 1.2. Social Impact Assessment                     | Staff training                       | WSSPOR              | staff able to contribute to SIA        | SCDA           |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 2. Monitoring and Evaluation (new)                |                                      |                     |  |                |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 2.1. Training in PAME                             | Skills in PAME                       | Staff, CM           | Skills for continuous M&E              | SCDA           |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 3. Inter-sectoral Development Committees (5.1.1.) | Support to IDCs                      | IDC, DWA, WSSPOR    | Improved communication channels        | PC, SCDA       |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 3.1.. Wörkshops                                   |                                      |                     |  |                |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 4. Water Point Committees (5.1.1.)                | Support to WPC training              | WPC                 | Materials used in training of WPCs     | SCDA, CDO      |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 4.1. WPC training material development            | Skill development                    | WPC                 | Improved WP management skills          | CDO            |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 4.2. Member training                              |                                      |                     |  |                |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 5. Sanitation extension strategy (new)            | Develop extension skills             | CBO                 | CBOs able to carry out sanitation ext. | SCDA, CDO      |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 5.1. Training of CBOs                             | Support to sanitation extension      | MOHSS, DWA          | Materials used in extension            | SCDA, CDO      |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 5.2. Sanitation extension material                |                                      |                     |  |                |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 6. Cost-sharing strategy (5.1.2.)                 | Develop cost-sharing strategies      | DWA, CL             | Improved communication                 | PC, SCDA       |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 6.1. Workshop                                     |                                      |                     |  |                |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 7. Technological development (5.1.3., 5.1.4.)     | Appropriate technology               | CM, DWA             | Affordable and sustainable options     | FC, AFC        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 7.1. Water point technology                       |                                      |                     |  |                |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 7.2. Sanitation technology                        |                                      |                     |  |                |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8. Contractor training (5.2.1.)                   |                                      |                     |  |                |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8.1. Technical training                           |                                      |                     |  |                |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Brick making                                    | Quality work                         | Contractor trainees | Improved quality of work               | BDA/CCDA, TC   |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Brick laying                                    | Quality work                         | Contractor trainees | Improved quality of work               | BDA/CCDA, TC   |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Concrete making                                 | Quality work                         | Contractor trainees | Improved quality of work               | BDA/CCDA, TC   |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Introduction to dumpy level                     | Quality work                         | Contractor trainees | Improved quality of work               | BDA/CCDA, TC   |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Setting out of a building                       | Quality work                         | Contractor trainees | Improved quality of work               | BDA/CCDA, TC   |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8.2. Business training                            |                                      |                     |  |                |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Bills of Quantities and costing                 | Contracting skills                   | Contractor trainees | Ability for competitive tendering      | BDA/CCDA, TC   |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Basic arithmetics                               | Contracting skills                   | Contractor trainees | Ability for competitive tendering      | BDA/CCDA, ABDO |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Cash management                                 | Contracting skills                   | Contractor trainees | Ability for competitive tendering      | BDA/CCDA, ABDO |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Tendering                                       | Contracting skills                   | Contractor trainees | Ability for competitive tendering      | PC, BDA/CCDA   |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8.3 Community as working environment              | Community skills                     | Contractor trainees | Ability to work with communities       | SCDA, CDO      |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |

WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

| ACTIVITIES  | OUTPUT             | BENEFICIARIES   | INDICATORS                             | RESPONSIBLE | TIMING |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
|---|--------------------|-----------------|--|-------------|--------|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|
|   |                    |                 |  |             | J      | F | M | A | M | J | J | A | S | O | N | D |  |  |  |  |  |  |
| 9. Material Supply (5.2.2)                            |                    |                 |  |             |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 9.1. Shop layout                                      | Business skills    | Suppliers       | Improved business practices            | BDA, ABDO   |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 9.2. Cash management                                  | Business skills    | Suppliers       | Improved business practices            | CCDA, ABDO  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 9.3. Customer relations                               | Business skills    | Suppliers       | Improved business practices            | CCDA, ABDO  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 9.4. Stock management                                 | Business skills    | Suppliers       | Improved business practices            | CCDA, ABDO  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 10. Transporters (5.2.3.)                             |                    |                 |  |             |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 10.1. Training in transport rates                     | Business skills    | Transporters    | Improved business practices            | CCDA, ABDO  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 10.2. Training in cash management                     | Business skills    | Transporters    | Improved business practices            | CCDA, ABDO  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 10.3. Training in transport management                | Business skills    | Transporters    | Improved business practices            | CCDA, ABDO  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 11. WatSan Information and Monitoring System (5.3.4.) |                    |                 |  |             |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 11.1. Staff training                                  | Reporting          | Staff           | Responsibilities shared                | BDA/CCDA    |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 11.2. Counterpart training                            | Workplan           | Counterparts    | M&E responsibility                     | BDA/CCDA    |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 12. Staff training (5.1.1.)                           |                    |                 |  |             |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 12.1. ABDO  |                    |                 |  |             |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Basic Bookkeeping                                   | Training programme | ABDO            | Ability to analyse business data       | BDA         |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Business management                                 | Training programme | ABDO            | Ability to monitor business activities | CCDA        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Basic technical training                            | Training programme | ABDO            | Ability to manage training             | BDA/CCDA    |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Monitoring and Evaluation                           | Training programme | ABDO, UNICEF    | M & E of community development         | CCDA, SCDA  |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 12.2. JCDO  |                    |                 |  |             |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Work planning                                       | Staff training     | CDO             | Improved work plans                    | SCDA        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Community records                                   | Staff training     | CDO             | Improved information output            | SCDA        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Training skills                                     | Staff training     | CDO             | Improved training of WPCs              | SCDA        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - PAME  | Staff training     | CDO             | M & E of community dev.                | SCDA        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 12.3. AFC   |                    |                 |  |             |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 12.4. Assistant Accountant                            |                    |                 |  |             |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - advanced bookkeeping                                | Training programme | Ass. Accountant | Ability to carry out bookkeeping       | CCDA        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - management of cash and bank                         | Training programme | Ass. Accountant | Ability to carry out bookkeeping       | CCDA        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - financial statements                                | Training programme | Ass. Accountant | Ability to carry out bookkeeping       | CCDA        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - accounting  | Training programme | Ass. Accountant | Ability to carry out bookkeeping       | CCDA        |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 12.5. Other WSSPOR staff                              |                    |                 |  |             |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| - Training plan                                       | Staff training     | WSSPOR staff    | Improved skills                        | PC, CCDA    |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |

WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

STEP 4: TECHNICAL INPUT

Objectives:

- To give technical assistance, with material and financial support, to community based management of water supply and sanitation systems.
- To establish a water supply and sanitation information system serving the needs of the Government as well as those of the communities.
- To support the drilling programme in the area.

| ACTIVITIES   | OUTPUT  | BENEFICIARIES          | INDICATORS  | RESPONSIBLE         | TIMING |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
|--|---|------------------------|---|---------------------|--------|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|
|  |   |                        |   |                     | J      | F | M | A | M | J | J | A | S | O | N | D |  |  |  |  |  |  |
| 1. WSSDP (5.3.1 – 5.3.2)<br>1.2. Social Impact Assessment  | Plan finalized<br>SIA carried out             | DWA, CM<br>WSSPOR, DWA | Plan in use<br>Social impacts known                           | PC, DT, PDC<br>SCDA |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 2. Monitoring and Evaluation (new)   | PAME tested                                   | CM, WSSPOR             | Continuous monitoring   | SCDA, CDO           |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 3. Inter-sectoral Development committees (5.1.1.)<br>3.1. Establishment of IDCs<br>3.2. Action based on ICBMPs | Action based on community<br>based priorities | CM, IDCs               | Communication of dev. priorities<br>bottom-up                 | SCDA, CDO           |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 4. Water Point Committees (5.1.1.)   | WPC established                               | CM, CL                 | Communities initiating, managing and<br>constructing WPs      | SCDA, CDO           |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 5. Sanitation extension strategy (new)   | Strategy implemented                          | CM, CBOS               | CBOs doing san. extension                                     | SCDA, CDO           |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 6. Cost-sharing strategy (5.1.2.)  | Strategy tested                               | DWA                    | Cost-sharing developed  | SCDA, CDO           |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 7. Technical Development (5.1.3., 5.1.4.)  | Construction                                  | CM                     | Broad choice of technical options<br>available to communities | FC, AFC             |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 8. Contractor Training (5.2.1.)<br>8.1. Curriculum support and basic tools to<br>an existing training facility | Facility available                            | Contr. trainees        | Practical training done in a facility                         | PC, CCDA            |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |
| 11. WatSan Information and Monitoring System (5.3.4.)<br>11.1. Hardware upgrading (if necessary)               | Upgraded PCs                                  | Staff                  | Improved job efficiency                                       | BDA/CCDA            |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |

WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

| ACTIVITIES  | OUTPUT  | BENEFICIARIES | INDICATORS   | RESPONSIBLE                           | TIMING |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |
|---|---|---------------|--|---------------------------------------|--------|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|
|   |   |               |  |                                       | J      | F | M | A | M | J | J | A | S | O | N | D |  |  |  |  |  |  |  |  |
| 13. Physical Implementation (5.1.3 – 5.1.4)         |   |               |  |                                       |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |
| 13.1. Shallow well construction (5.1.3.)            | Low-cost shallow wells                              | CM            | 20 new wells in operation  | FC, AFC, WSV                          |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |
| 13.2. Borehole construction (5.1.3.)                | Boreholes drilled by project crew                   | CM            | 10 new boreholes in operation  | FC, AFC, WSV                          |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |
| 13.3. Pipeline construction (5.1.3.)                | Omafo-Eenhana rural piped water scheme constructed  | CM            | Community mobilization done<br>WPC's established, O&M by community<br>Water points constructed | SCDA, CDA, DT<br>SCDA, CDA, DT<br>DWA |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |
| 13.4. Latrine construction (institutional) (5.1.4.) | Sanitation facilities for schools and clinics       | CM            | Latrines for 27 schools constructed  | FC, AFC, SSV<br>FC, AFC, SSV          |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |
| 13.5. Latrine construction (private) (5.1.4.)       | Sanitation facilities for households and businesses | CM            | Latrines for households constructed<br>Latrines for businesses constructed                     | FC, AFC, SSV<br>FC, AFC, SSV          |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |
| 14. Reporting, Monitoring and Evaluation            |   |               |  |                                       |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |
| 14.1. Monthly Progress Reports                      | Report  | DWA, FINNIDA  | Reports timely delivered   | PC                                    |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |
| 14.2 Quarterly Financial Reports                    | Report  | DWA, FINNIDA  | Reports timely delivered   | PC                                    |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |
| 14.3 Annual Progress Reports                        | Report  | DWA, FINNIDA  | Report approved by SC  | PC                                    |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |
| 14.4. Work Plan 1996                                | Work Plan 1996                                      | DWA, FINNIDA  | Work Plan approved by SB   | PC                                    |        |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |

WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

WORK PLAN 1995

PHYSICAL IMPLEMENTATION – SHALLOW WELL CONSTRUCTION SCHEDULE

| CONSTITUENCY    | VILLAGE    | CONTACT PERSON      | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----------------|------------|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Engela          | Engela     | Tobias Moses        |     | ■   |     |     |     |     |     |     |     |     |     |     |
|                 | Omatunda   | Simon Sheelongo     |     | ■   |     |     |     |     |     |     |     |     |     |     |
|                 | Ongudi     | Sebulon Shalihakwa  |     |     | ■   | ■   |     |     |     |     |     |     |     |     |
|                 | Onamulunga | Alina Shilikunye    |     |     | ■   | ■   |     |     |     |     |     |     |     |     |
|                 | Onamukalo  | Vilho Erastus       |     |     |     |     | ■   | ■   |     |     |     |     |     |     |
| Endola          | Etilashi   | Jason Heita         |     | ■   |     |     |     |     |     |     |     |     |     |     |
|                 | Epundi     | Johannes Heita      |     |     | ■   | ■   |     |     |     |     |     |     |     |     |
|                 | Omaonde    | Paulus Kamoleo      |     |     |     |     | ■   | ■   |     |     |     |     |     |     |
|                 | Ongonga    | Medusalem Kashamane |     |     |     |     | ■   | ■   |     |     |     |     |     |     |
| Ongenga         | Eengoshi   | Olavi Hamata        |     |     |     |     |     | ■   | ■   |     |     |     |     |     |
|                 | Engava     | Leonard Hamambo     |     |     |     |     |     | ■   | ■   |     |     |     |     |     |
|                 | Ohambembe  | Daniel Hamukwaya    |     |     |     |     |     |     |     | ■   | ■   |     |     |     |
|                 | Omatangela | Elja Kanana         |     |     |     |     |     |     |     | ■   | ■   |     |     |     |
|                 | Ohandiva   | Joeph Shangala      |     |     |     |     |     |     |     | ■   | ■   |     |     |     |
| Ohangwena       | Oitando    | Natanael Mukudekwa  |     |     |     |     |     | ■   | ■   |     |     |     |     |     |
|                 | Oshali     | Timoteus Hamalwa    |     |     |     |     |     |     |     |     | ■   | ■   |     |     |
|                 | Ongonga    | Paulus Ngenogesho   |     |     |     |     |     |     |     |     | ■   | ■   |     |     |
|                 | Omhedi     | Petrus Nghatanga    |     |     |     |     |     |     |     |     | ■   | ■   |     |     |
|                 | Ohalushu   | Shetty Kaulungwa    |     |     |     |     |     |     |     |     |     |     | ■   | ■   |
|                 | Omahenge   | Paulus Hamukoshi    |     |     |     |     |     |     |     |     |     |     | ■   | ■   |
| 5 PRIVATE WELLS | Clients    |                     | ■   | ■   | ■   | ■   | ■   | ■   | ■   | ■   | ■   | ■   | ■   |     |
|                 |            |                     |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |            |                     |     |     |     |     |     |     |     |     |     |     |     |     |

ANNEX 2



WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

WORK PLAN 1995

PHYSICAL IMPLEMENTATION – BOREHOLE CONSTRUCTION SCHEDULE

| CONSTITUENCY | VILLAGE    | CONTACT PERSON    | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|------------|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Eenhana      | Epale      | Amakai Hainoongo  |     | ■   |     |     |     |     |     |     |     |     |     |     |
|              | Egambo     | Anna Nangolo      |     |     | ■   |     |     |     |     |     |     |     |     |     |
|              | Onaisati   | Mr Shifotoka      |     |     |     | ■   |     |     |     |     |     |     |     |     |
|              | Ombaladila | Adolf Hashikutuwa |     |     |     |     | ■   |     |     |     |     |     |     |     |
|              | Ouholamo   |                   |     |     |     |     |     | ■   |     |     |     |     |     |     |
|              | Unnamed    |                   |     |     |     |     |     |     | ■   |     |     |     |     |     |
|              | Unnamed    |                   |     |     |     |     |     |     |     | ■   |     |     |     |     |
|              | Unnamed    |                   |     |     |     |     |     |     |     |     | ■   |     |     |     |
|              | Unnamed    |                   |     |     |     |     |     |     |     |     |     | ■   |     |     |
|              | Unnamed    |                   |     |     |     |     |     |     |     |     |     |     | ■   |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |
|              |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |

ANNEX 3

WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

WORK PLAN 1995

PHYSICAL IMPLEMENTATION – LATRINE CONSTRUCTION SCHEDULE

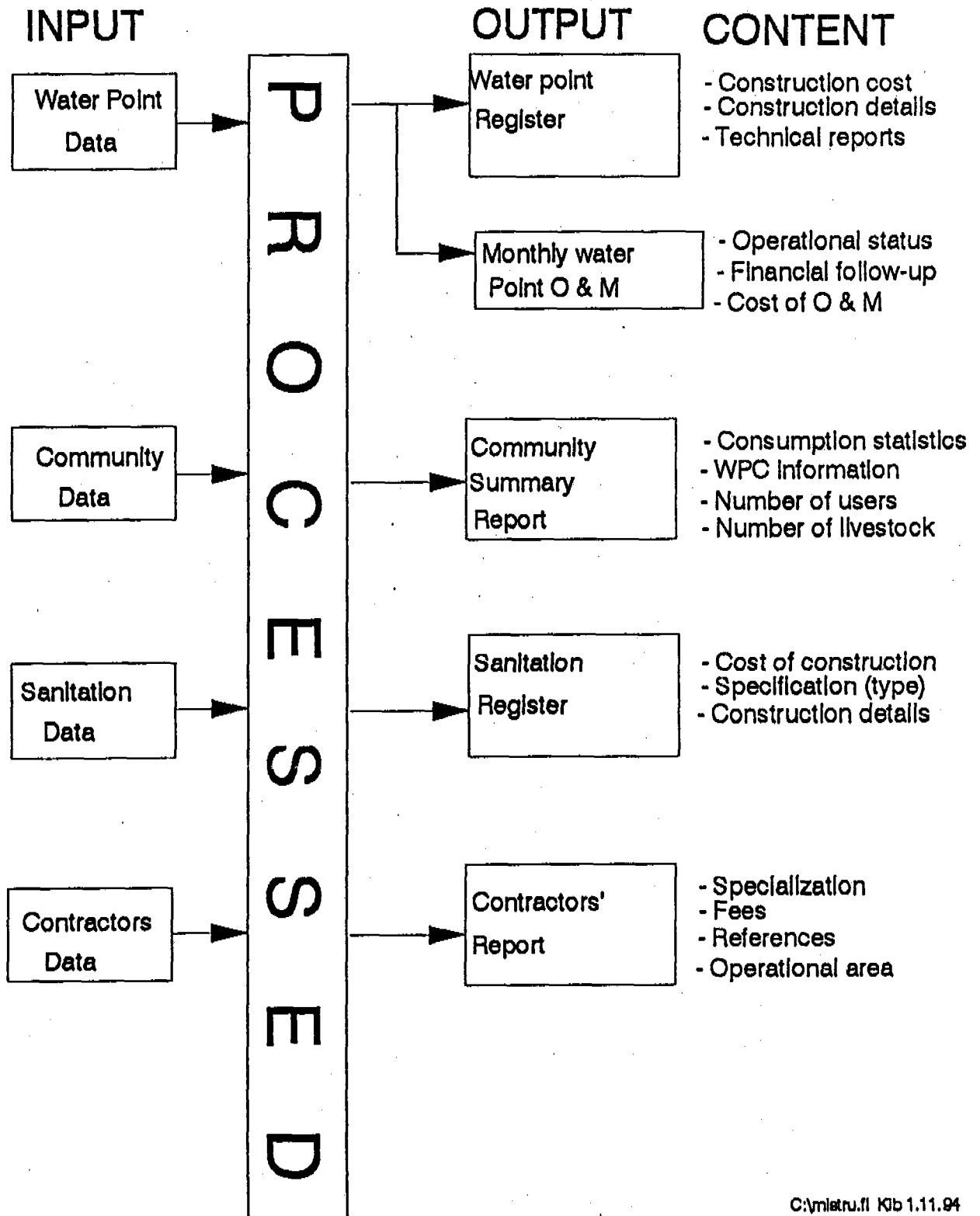
| CONSTITUENCY     | SCHOOL                            | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|------------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Endola           | Omuve Senior Primary School       |     | ■   | ■   |     |     |     |     |     |     |     |     |     |
|                  | Nanghonda Combined School         |     | ■   | ■   |     |     |     |     |     |     |     |     |     |
| Engela           | Oipya Combined School             |     | ■   | ■   |     |     |     |     |     |     |     |     |     |
|                  | Epundi Primary School             |     | ■   | ■   |     |     |     |     |     |     |     |     |     |
| Ohangwena        | School Inspectors' Office         |     | ■   | ■   |     |     |     |     |     |     |     |     |     |
|                  | Okelemba Junior Primary School    |     | ■   | ■   |     |     |     |     |     |     |     |     |     |
| Ongenga          | Onghala Combined School           |     |     |     | ■   | ■   |     |     |     |     |     |     |     |
|                  | Omungwelume Combined School       |     |     |     | ■   | ■   |     |     |     |     |     |     |     |
|                  | Omungwelume Junior Primary School |     |     |     | ■   | ■   |     |     |     |     |     |     |     |
|                  | Oipanda Combined School           |     |     |     | ■   | ■   |     |     |     |     |     |     |     |
|                  | Elahalapava Combined School       |     |     |     | ■   | ■   |     |     |     |     |     |     |     |
|                  | Oramindi Combined School          |     |     |     |     |     | ■   | ■   |     |     |     |     |     |
|                  | Oshan Junior Primary School       |     |     |     |     |     | ■   | ■   |     |     |     |     |     |
| Eenhana          | Eenhana Combined School           |     |     |     |     |     | ■   | ■   |     |     |     |     |     |
|                  | Onakalunga Combined School        |     |     |     |     |     | ■   | ■   |     |     |     |     |     |
|                  | Oshikonda Combined School         |     |     |     |     |     | ■   | ■   |     |     |     |     |     |
| Oshikango        | Edundja Junior Primary School     |     |     |     |     |     |     |     | ■   | ■   |     |     |     |
|                  | Enghandja Junior Primary School   |     |     |     |     |     |     |     | ■   | ■   |     |     |     |
| Ondobe           | Efindi Combined School            |     |     |     |     |     |     |     | ■   | ■   |     |     |     |
|                  | Oshandi Combined School           |     |     |     |     |     |     |     | ■   | ■   |     |     |     |
|                  | Omakondo Combined School          |     |     |     |     |     |     |     | ■   | ■   |     |     |     |
|                  | Etomba Combined School            |     |     |     |     |     |     |     |     |     | ■   | ■   |     |
| Ohangwena        | Egambo Combined School            |     |     |     |     |     |     |     |     |     | ■   | ■   |     |
|                  | Oshitambi Combined School         |     |     |     |     |     |     |     |     |     | ■   | ■   |     |
|                  | Ewatelo Combined School           |     |     |     |     |     |     |     |     |     | ■   | ■   |     |
| Endola           | Omahenge Junior Primary School    |     |     |     |     |     |     |     |     |     | ■   | ■   |     |
|                  | Ongonga Combined School           |     |     |     |     |     |     |     |     |     | ■   | ■   |     |
| PRIVATE LATRINES | [ 15 ]                            | ■   | ■   | ■   | ■   | ■   | ■   | ■   | ■   | ■   | ■   | ■   |     |

ANNEX 4

**INFORMATION AND MONITORING SYSTEM FOR CONSTRUCTED WATER SUPPLY  
AND SANITATION IN THE PROJECT AREA**

# Water Supply and Sanitation Project In Ohangwena Region

## STRUCTURE OF THE MIS



WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

WORK PLAN 1995

ANNEX 6

STAFFING SCHEDULE

| POST  | REMARKS                   | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  | OCT  | NOV  | DEC  |
|---|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| <i>Consultant's Staff</i>                         |                           |      |      |      |      |      |      |      |      |      |      |      |      |
| Project Coordinator                               |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Senior Community Development Adviser              | Expat. SCDA until 31.7.95 | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Community Development Officer                     | Takes over SCDA 1.8.95    | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Community Development Officer                     |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Business Development Adviser                      |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Construction Capacity Development Adviser         |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Assistant Business Development Officer            |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| <i>Project Staff</i>                              |                           |      |      |      |      |      |      |      |      |      |      |      |      |
| Field Coordinator                                 | Present AFC               | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Stores Officer                                    |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Water Supply Construction Supervisor              |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Sanitation Construction Supervisor                |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Handyman  |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Lorry Driver                                      |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Drilling Foreman                                  |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Driller   |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Driller   |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Security Officer                                  |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Security Officer                                  |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Security Officer                                  |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Assistant Accountant                              |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Typist  |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Driver  |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Cleaner   |                           | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| <i>Staff seconded by DWA to WSSPOR</i>            |                           |      |      |      |      |      |      |      |      |      |      |      |      |
| Chief: RES/DRWS (part time)                       |                           | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
| Chief Eng. Technician, Cuvelai (part time)        | PC's Counterpart          | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
| Control Rural Water Extension Officer (part time) | SCDA's counterpart        | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Design Technician                                 | Seconded to WSSPOR        | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Rural Water Extension Officer                     | Seconded to WSSPOR        | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Rural Water Extension Officer                     | Seconded to WSSPOR        | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Driller   | Seconded to WSSPOR        | **** | **** |      |      |      |      |      |      |      |      |      |      |
| Driller   | Seconded to WSSPOR        | **** | **** |      |      |      |      |      |      |      |      |      |      |
| <i>Short Term Consultants</i>                     |                           |      |      |      |      |      |      |      |      |      |      |      |      |
| Planning and Design Consultant                    |                           | **** | **** | **** |      |      |      |      |      |      |      |      |      |
| Social Impact Assessment Consultant               |                           |      |      |      |      |      |      | **** | **** |      |      |      |      |
| PAME Consultant                                   |                           |      |      | **** |      |      |      |      |      |      |      |      |      |
| Field Operations Consultant                       | Former expat. FC          |      |      | **** | **** |      |      |      |      |      |      |      |      |
| Senior Institution Development Consultant         |                           |      |      | **** |      |      | **** |      |      |      |      | **** |      |
| Junior Institution Development Consultant         |                           |      |      | **** |      |      | **** |      |      |      |      | **** |      |
| Construction Consultant                           |                           |      |      |      |      |      |      |      |      | **** |      |      |      |
| Market Survey Consultant                          |                           |      |      | *    | *    |      |      |      |      |      |      |      |      |
| Technical Consultant (Part time)                  |                           | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
| Socio-economist                                   |                           | **** |      |      |      |      |      |      |      |      |      |      |      |
| Ground Water Expert                               | DWA, if possible          | *    | *    | *    |      |      |      |      |      |      |      |      |      |
| Artist  | Needed occasionally       | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
| <i>Trainers</i>                                   |                           |      |      |      |      |      |      |      |      |      |      |      |      |
| Communication Skills Trainer                      |                           | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
| Plumbing Trainer                                  | Needed occasionally       | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
| Metal Works Trainer                               | Needed occasionally       | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
| Management Trainer (IMLT)                         | Needed occasionally       | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |

| BUDGET ITEM                                       | DESCRIPTION   | TOTAL<br>FIM 1 000 |
|---|---|--------------------|
| <b>1. DIRECT TA--PERSONNEL COSTS</b>              |   | <b>3,795</b>       |
| Advisers  | Consultancy fees only.                                    | 2,176              |
| - CDO1 and CDO2 (two persons)                     |   | 480                |
| - ABDO  |   | 240                |
| - BDA/CCDA  |   | 529                |
| - PC  |   | 662                |
| - SCDA  |   | 265                |
| Short term consultants, expatriate                | Consultancy fees only. Non-Namibian.                      | 656                |
| - PDC   |   | 156                |
| - SIA Consultant                                  |   | 104                |
| - Field Operatoins Consultant                     |   | 88                 |
| - Senior Inst. Dev. Consultant                    |   | 90                 |
| - Junior Inst. Dev. Consultant                    |   | 71                 |
| - Construction Consultant                         |   | 95                 |
| - PAME Consultant                                 |   | 52                 |
| Short term consultants, Namibian                  | Consultancy fees only. Namibian.                          | 466                |
| - Technical consultant                            |   | 166                |
| - Water needs ass. / Socio-econ.                  |   | 68                 |
| - Ground water expert                             |   | 45                 |
| - Artist; posters etc.                            |   | 33                 |
| - Market Survey Consultant                        |   | 112                |
| - MIS programming                                 |   | 40                 |
| Trainers  | Fees, salaries, social costs.                             | 167                |
| - Plumbing Trainer                                |   | 35                 |
| - Metal Works Trainer                             |   | 35                 |
| - Communication Skills Trainer                    |   | 30                 |
| - Management Trainer (IMLT)                       |   | 67                 |
| Home office support                               | Consultancy fee.  | 330                |
| <b>2. REIMBURSABLE TECHNICAL ASSISTANCE COSTS</b> |   | <b>227</b>         |
| International travel                              | Advisers, consultants, trainers when necessary.           | 227                |
| - Tickets   |   | 108                |
| - Hotel   |   | 21                 |
| - Per diems                                       |   | 56                 |
| - Personal freights                               |   | 42                 |
| <b>3. INVESTMENT COMMODITIES FOR OPERATIONS</b>   |   | <b>902</b>         |
| Construction materials                            | Cement, timber, moulds, prefabricated items, ...          | 352                |
| Drilling equipment                                | Tools and equipment, other than consumables.              | 60                 |
| Project vehicles                                  | Investment.   | 350                |
| - Replace Corolla N 71546 W                       |   | 150                |
| - Replace Double cab N 33318 W                    |   | 100                |
| - Replace Double cab N 33322 W                    |   | 100                |
| Training facilities                               | Curriculum support, basic tools for an existing facility  | 140                |
| <b>4. CONSUMABLES FOR OPERATIONS</b>              |   | <b>370</b>         |
| Counterpart and staff training                    | Training costs and materials, computers etc.              | 8                  |
| Community development                             | Meetings, workshops, demonstration material...            | 110                |
| Construction capacity building                    | Meetings, workshops, training events, material...         | 84                 |
| Construction consumables                          | Tools, nails, paint, overalls, gloves,...                 | 168                |
| <b>5. OTHER COSTS</b>                             |   | <b>1,671</b>       |
| Trainees  | Per diems and other comperension for trainees.            | 40                 |
| Contractors                                       | Contractor trainees' fees for building performance.       | 320                |
| Project vehicles' running costs                   | Fuel, service, insurance, repair, spares, tyres,...       | 456                |
| Local travel                                      | Advisers, consultants, trainers when necessary.           | 86                 |
| - Hotel   |   | 44                 |
| - Per diems                                       |   | 26                 |
| - Other   |   | 16                 |
| Housing   | Rents, maintenance, equipment.                            | 28                 |
| Local salaries                                    | Incl. social costs. Namibian staff and casuals.           | 400                |
| Recurrent, Namibia                                | Office costs, copies, telecommunication,...               | 240                |
| Recurrent, Finland                                | Office costs, copies, telecommunication,...               | 100                |
| <b>9. GRN COSTS</b>                               |   | <b>1,040</b>       |
| Construction materials, water supply              | Cement, timber, moulds, drilling materials, ...           | 648                |
| Construction consumables                          | Drilling consumables, fuel for drilling, tools, nails,... | 232                |
| Contractors                                       | Namibian contractors' fees, water supply constr.          | 80                 |
| Local consulting                                  | Namibian consultants' fees and costs.                     | 80                 |
| <b>CONTINGENCIES</b>                              | To be agreed in Steering Committee.                       | <b>295</b>         |
| <b>TOTAL FINNIDA</b>                              |   | <b>7,260</b>       |
| <b>TOTAL GRN</b>                                  |   | <b>1,040</b>       |
| <b>GRAND TOTAL</b>                                |   | <b>8,300</b>       |

WATER SUPPLY AND SANITATION PROJECT IN OHANGWENA REGION

CASH FLOW ESTIMATE

ANNEX 8

Amounts in FIM

| FC cost code                                     | Job # cost code | Client's cost code | Budget item                            | Budget 1995      |                  |                  |                  | TOTAL 1995       |
|--|-----------------|--------------------|--|------------------|------------------|------------------|------------------|------------------|
|  |                 |                    |  | 1st quarter      | 2nd quarter      | 3rd quarter      | 4rd quarter      |                  |
| <b>1 DIRECT TA--PERSONNEL COSTS</b>              |                 |                    |  | <b>1,157,100</b> | <b>1,107,100</b> | <b>760,850</b>   | <b>769,800</b>   | <b>3,794,850</b> |
|  | 11              |                    | 1 Expatriate advisers                  | 610,200          | 610,200          | 477,900          | 477,900          | 2,176,200        |
|  | 13              |                    | 1 Short term consultants, expatriate   | 203,400          | 253,800          | 101,100          | 97,800           | 656,100          |
|  | 15              |                    | 2 Short term consultants, Namibian     | 225,900          | 119,250          | 50,250           | 70,250           | 465,650          |
|  | 17              |                    | 2 Trainers                             | 35,100           | 41,350           | 49,100           | 41,350           | 166,900          |
|  | 19              |                    | 1 Home office support                  | 82,500           | 82,500           | 82,500           | 82,500           | 330,000          |
| <b>2 REIMBURSABLE TECHNICAL ASSISTANCE COSTS</b> |                 |                    |  | <b>39,200</b>    | <b>80,000</b>    | <b>88,000</b>    | <b>19,650</b>    | <b>226,850</b>   |
|  | 21              |                    | 1 International travel                 | 39,200           | 80,000           | 88,000           | 19,650           | 226,850          |
| <b>3 INVESTMENT COMMODITIES FOR OPERATIONS</b>   |                 |                    |  | <b>103,000</b>   | <b>203,000</b>   | <b>323,000</b>   | <b>273,000</b>   | <b>902,000</b>   |
|  | 31              |                    | 2 Construction materials               | 88,000           | 88,000           | 88,000           | 88,000           | 352,000          |
|  | 33              |                    | 2 Drilling equipment                   | 15,000           | 15,000           | 15,000           | 15,000           | 60,000           |
|  | 35              |                    | 1 Project vehicles                     | 0                | 100,000          | 150,000          | 100,000          | 350,000          |
|  | 37              |                    | 2 Training facilities                  | 0                | 0                | 70,000           | 70,000           | 140,000          |
| <b>4 CONSUMABLES FOR OPERATIONS</b>              |                 |                    |  | <b>90,000</b>    | <b>111,600</b>   | <b>90,000</b>    | <b>78,800</b>    | <b>370,400</b>   |
|  | 41              |                    | 2 Counterpart and staff training       | 2,800            | 1,400            | 2,800            | 1,400            | 8,400            |
|  | 43              |                    | 2 Community development                | 20,000           | 50,000           | 20,000           | 20,000           | 110,000          |
|  | 45              |                    | 2 Construction capacity building       | 25,200           | 18,200           | 25,200           | 15,400           | 84,000           |
|  | 47              |                    | 2 Construction consumables             | 42,000           | 42,000           | 42,000           | 42,000           | 168,000          |
| <b>5 OTHER COSTS</b>                             |                 |                    |  | <b>425,725</b>   | <b>414,588</b>   | <b>415,600</b>   | <b>414,588</b>   | <b>1,670,500</b> |
|  | 51              |                    | 2 Trainees                             | 10,000           | 10,000           | 10,000           | 10,000           | 40,000           |
|  | 52              |                    | 2 Contractors                          | 80,000           | 80,000           | 80,000           | 80,000           | 320,000          |
|  | 53              |                    | 2 Project vehicles' running costs      | 114,000          | 114,000          | 114,000          | 114,000          | 456,000          |
|  | 54              |                    | 2 Local travel                         | 29,625           | 18,488           | 19,500           | 18,488           | 86,100           |
|  | 55              |                    | 2 Housing                              | 7,100            | 7,100            | 7,100            | 7,100            | 28,400           |
|  | 56              |                    | 2 Local salaries                       | 100,000          | 100,000          | 100,000          | 100,000          | 400,000          |
|  | 57              |                    | 2 Recurrent, Namibia                   | 60,000           | 60,000           | 60,000           | 60,000           | 240,000          |
|  | 58              |                    | 1 Recurrent, Finland                   | 25,000           | 25,000           | 25,000           | 25,000           | 100,000          |
| <b>9 GRN COSTS</b>                               |                 |                    |  | <b>260,000</b>   | <b>260,000</b>   | <b>260,000</b>   | <b>260,000</b>   | <b>1,040,000</b> |
|  | 61              |                    | 2 Construction materials, water supply | 162,000          | 162,000          | 162,000          | 162,000          | 648,000          |
|  | 63              |                    | 2 Construction consumables             | 58,000           | 58,000           | 58,000           | 58,000           | 232,000          |
|  | 65              |                    | 2 Contractors                          | 20,000           | 20,000           | 20,000           | 20,000           | 80,000           |
|  | 67              |                    | 2 Local consulting                     | 20,000           | 20,000           | 20,000           | 20,000           | 80,000           |
| <b>CONTINGENCIES</b>                             |                 |                    |  |                  |                  |                  |                  | <b>295,000</b>   |
| <b>TOTAL FINNIDA</b>                             |                 |                    |  | <b>1,815,025</b> | <b>1,916,288</b> | <b>1,677,450</b> | <b>1,555,838</b> | <b>7,259,600</b> |
| <b>TOTAL GRN</b>                                 |                 |                    |  | <b>260,000</b>   | <b>260,000</b>   | <b>260,000</b>   | <b>260,000</b>   | <b>1,040,000</b> |
| <b>GRAND TOTAL</b>                               |                 |                    |  | <b>2,075,025</b> | <b>2,176,288</b> | <b>1,937,450</b> | <b>1,815,838</b> | <b>8,299,600</b> |