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COMMUNITY PARTICIPATION AND HEALTH EDUCATION
IN RURAL WATER PROGRAMMES - MOZAMBIQUE INITIAL EXPERIENCES

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COMMUNITY PARTICIPATION AND HEALTH EDUCATION IN RURAL
WATER PROGRAMMES - MOZAMBIQUE INITIAL EXPERIENCES

1. THE WATER SUPPLY AND SANITATION SECTOR - CURRENT STATUS

Population

The People's Republic of Mozambique, situated on the east coast of Africa, has a land area of 801,590 sq.Km, with a land border of 4,330 Km, and a coast line of 2,470 Km.

The population figures are as follows (in thousands):

<u>Year</u>	<u>Urban</u>	<u>Rural</u>	<u>Total</u>
1980 (census)	2,000	10,130	12,130
1986 (projected*)	2,680	11,820	14,500

The rural population makes 81.5% and the average density is 18.09 persons per sq.Km.

The country is divided into 10 provinces, 110 districts and around 1,000 localities (the 1980 census situation).

The population estimates of the three largest and most important political and economic cities are: Maputo - 1,012,000, Beira - 306,000 and Nampula - 212,000 inhabitants.

* Based on the overall population growth rate of 3.0%, urban population of 5.0% and rural population of 2.6%.

Present Coverage and Decade Objectives

According to the Mozambique Water Supply and Sanitation Decade Plan document, prepared by a joint team of the World Health Organisation (WHO) and the Swedish International Development Authority (SIDA) in collaboration with the respective national entities, the estimated coverage of the population by water supply and sanitation in the year 1980 was as follows:

<u>Water Supply</u>		<u>Sanitation</u>	
Urban sector:	47.5%	Urban:	66.5%
Rural sector:	3.0%	Rural:	10.0%
Overall coverage:	9.5%	Overall:	19.7%

The estimates made by UDAAS (the National Water Supply and Sanitation Agency) in the year 1983 show a slight increase in the rural sector only:

<u>Water Supply</u>	<u>Sanitation</u>
47.5% urban coverage	67.0% urban coverage
6.0% rural coverage	12.0% rural coverage
13.3% total coverage	21.0% total coverage

The most recent estimates (1985) by UDAAS, show a further increase in the rural sector - 10% water supply coverage, but without any significant progress in the urban sector and the rural sanitation.

Accordingly, the Government 1981-1990 Decade Objectives

- to make piped potable water accessible to 75 per cent of the urban population,

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- to provide a protected potable water source to 75 per cent of the rural population, specifically to provide one source of safe water per 100 families (500 persons),
- to provide sewer services to 50 per cent of the urban population served with piped water latrines within their homes and to serve another 30 per cent with septic tanks and pit latrines, and
- to extend excreta disposal systems to all rural population living in communal villages (70% of the total rural population), seems at this stage to be well overestimated and too optimistic to be achieved under the present circumstances.

Major Constraints to the Sector Development

In a descending order of influence, they may be listed as follows:

- Continuous war situation since the country's independence caused first by foreign military interventions and then by insurgency activities;
- Severe and prolonged effects of the recent droughts;
- Deep economic crisis resulting in extreme shortage of financial and material resources, specifically foreign currency for the provision of equipment, materials and technical expertise;
- Inadequate international aid, both multilateral and bilateral;
- Shortage of manpower, acute shortage of medium and high level qualified personnel in particular;
- Weak/understaffed sectoral agencies at national and provincial level;

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- Scarcity or non-existence of regional and district level sectoral infrastructures;
- Non-reliability of the local market, etc.

Institutional Responsibilities

At the national level, the National Directorate for Water Affairs (DNA) under the Ministry of Construction and Water (MCA) is responsible for the long-term planning and development of water resources, water resources management policy, coordination, planning and supervision of new projects, fund allocation, water quality management and pollution control.

The National Water Supply and Sanitation Agency (UDDAS) is responsible for urban and rural water supply and urban sanitation, and it has been created to provide technical assistance to all waterworks and the provincial directorates of construction and water. It also coordinates and supervises implementation of all foreign aided projects (including UNICEF).

The National Directorate of Preventive Medicine (DNMP) under the Ministry of Health (MS) is responsible for the control of drinking water quality and environmental health, including programming of rural sanitation. It is also responsible for sanitary and health education.

The National Institute for Physical planning (INPF) is responsible for the implementation of peri-urban sanitation programmes, which is a separate institution neither organisationally linked with MS nor MCA.

At the provincial level, the projects are prepared and executed by the Provincial Directorates of Construction and Water (DPCA) and in some provinces by UDAAS Provincial Delegations and the regional 'Sanitary Workshops' created to serve three to four districts. These workshops

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in addition to execution of various projects, provide training facilities for the workshop management staff, and members of the well construction brigades, repair and maintenance teams.

The Provincial Health Directorates (DPS) are responsible among others for implementation of rural sanitation projects as well as for sanitary and health education. It is a relatively well set-up organisation which reached even the communal village level.

UNICEF Assistance

UNICEF has been supporting Mozambique water programmes since 1975, but on a somewhat larger scale from 1977, when implementation of the Mueda Plateau Project took place. This project comprising five big piped systems, when completed, will serve some 141,900 rural people. Three schemes of Phase I were inaugurated in late 1984, while the first scheme of Phase II will be commissioned this year, and the last one in 1987.

The present commitments cover the period of five years (till 1990) and includes as many as nine projects amounting to US\$ 3.98 million. These are: the DNA Centre of Professional Training (training of basic level technicians), Community Participation and Health Education in Cabo Delgado, Mueda Plateau Water Project Phase II, Pemba Region Water Supply (technical assistance only), Nhamatanda and Gorongosa Districts Water Project, Project Support Services, Compilation of Hydrogeological Map of Mozambique and the Inhambane Emergency Water Programme (two projects).

In addition, approval is awaited for the first Rural Sanitation (Improved Latrines) Project in Cabo Delgado, worth US\$ 218,500 and for a new emergency water and sanitation programme (six projects) worth US\$ 2,746,100.

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2. COMMUNITY PARTICIPATION AND HEALTH EDUCATION, CABO DELGADO

The Project

This is the first project in Mozambique that integrates water supply, community participation, health education and social communication activities.

The first year (1985) was designed to be an experimental phase to analyse the most cost effective way of project implementation as well as its replicability to the whole province in the first instance and subsequently to other provinces.

The project is designed to support and complement a large scale well construction and borehole drilling programme executed jointly by HELVETAS and the UDAAS Delegation of Cabo Delgado Province within which, among others, some 150 new dug-wells and 50 tubewells are foreseen to be constructed and equipped with handpumps and bucket-rope devices per annum. Each scheme is to provide potable water for 100 families (or 500 persons on average).

It is a six-year (1985-1990) project with UNICEF input of US\$ 255,700. In addition, US\$ 330,000 has been allocated for the Social Communication Project, specifically designed to support the community participation and health education activities.

Objectives

The overall objectives of the project are as follows:

- To increase multisectoral co-operation at the national, provincial and particularly at the district and village levels.

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- To increase community involvement, women in particular, in the planning, construction, operation and maintenance of water schemes.
- To increase the consumption rate of water from present 7 to 20 litres per capita per day of approximately 100,000 inhabitants.
- To ensure access of approximately 100,000 inhabitants to a safe drinking water source.
- To ensure 100 per cent utilisation of wells constructed, and
- To reduce the incidence of water-borne and water-related diseases to a maximum possible extent.

Collaborating Agencies

At the national level, UDAAS Headquarters, Maputo has assumed overall responsibilities for coordination and implementation of the project activities.

UDAAS has been supported by the Health Education Department (CES) of the Ministry of Health (MS), and the National Cabinet of Social Communications (GNCS).

At the provincial level, following are the entities actively involved in the project execution:

- UDAAS Delegation of Cabo Delgado (the Director UDAAS Delegation is a direct supervisor of the project),
- HELVETAS, the Swiss Association of Technical Assistance responsible for the execution of the water supply project assisted by Swiss Government,

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- OMM, the Provincial Organisation of Mozambican Women,
- DPS, the Provincial Directorate of Health, Cabo Delgado, and
- GPCS, the Provincial Cabinet of Social Communications, Cabo Delgado.

Training of Animadores

The project coordinator assumed duties in January 1985 to prepare training material, to initiate recruitment of candidates and to organise a two-month training course.

As many as six manuals were used during the training course: five newly compiled viz. Mathematics, Portuguese, Water Supply, Sanitary Education and Mobilisation, and the existing one on Basic Sanitation.

Some of these manuals such as Mathematics, Portuguese and Water Supply were prepared at Pemba by the project coordinator in collaboration with the Social Communication Delegation, others by the Health Education Department, Maputo.

In addition, various drawings, photos and puppet shows were utilised, and two new field manuals on Utilisation of Well and Maintenance of Well Equipped with Bucket and Rope, prepared by UDAAS Headquarters, were tested during the course as well.

The first recruitment of candidates was made by OMM but unfortunately only few of them passed the entrance test. The second recruitment made by UDAAS Sanitary Workshop was successful.

The course started at Pemba on 15 April and was concluded on 15 June 1985. Besides the project coordinator, the lecturers were drawn from the Cabinet of Social Communications and from the Ministry of Health, both from the provincial Directorate and from Maputo.

Finally, 14 promotion workers (8 female and 6 male) passed the course successfully, regardless of their former different educational level. And, upon completion, they all were employed by UDAAS and posted in one of the five existing UDAAS Sanitary Workshop in Cabo Delgado: Pemba, Montepuez, Mocimboa da Praia, Macomia and Chiure (see also Annex 1).

Field Activities

Unfortunately, the project coordinator, a cooperant, had to leave Mozambique after the course completion, which seriously affected the project as there was nobody experienced enough to supervise and evaluate the performance of each promotion worker as well as to evaluate the working methods. As a temporary solution, supervision in the southern region of Cabo Delgado was undertaken by one of the UDAAS technicians (who passed the animadores course) and in the south by heads of the technical department.

At the village level, the animadores work in groups of two: one female and one male. And, their activities include minimum six type visits, the objectives of which are briefly described below:

First Visit: Introduction of the well construction programme; acquaintance with village water problems.

Second Visit: Presentation of survey results and discussion with community members; agreement with community to accommodate UDAAS construction teams; definition of village contribution and formation of village groups for construction.

Third Visit: Stimulation of well construction and problems/solution, if any; formation of maintenance group and assignment of responsibilities; health education.

Fourth Visit: Handing over and inauguration of schemes.

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Maintenance Visit: Ensuring maintenance and daily cleaning.

Specific Visit: Conform to existence of specific problems.

As it can be seen from Annex 1, in 1985 the animadores covered 84 communal villages and paid 282 visits. And, both UDAAS and HELVETAS were very satisfied with their initial achievements.

Internal Evaluation

The final internal evaluation of the project results, including a two-day seminar, took place at Pemba from 14 through 19 February 1986.

The first stage of the evaluation process was the collection of data and information on project activities and achievements through a questionnaire developed and distributed earlier by UDAAS HQs and the Health Education Department, Maputo.

The second i.e. data processing and evaluation were completed jointly by all entities that were actively involved in the project preparation and execution.

And, finally, the seminar was held with participation of all the promotion workers but one (sick leave), all members of the evaluation team as well as the representatives from UDAAS, HELVETAS, UNICEF and the concerned provincial directorates and delegations.

The seminar was working at plenary and group sessions, and the five topics chosen for discussion were as follows:

- Animation contribution to better involvement of population in the project activities.

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- Animation contribution to better maintenance of pumps and wells.
- Animation contribution to better utilisation of water supplied through new wells.
- What kind of health education and animation must be accomplished to guarantee its continuity?
- What are the major problems that confront the animation?

A detail report on evaluation and seminar was prepared but not distributed as yet. However, some general conclusions drawn from the evaluation exercise and seminar are as follows:

- Despite many difficulties and inexperience, the performance of promotion workers was satisfactory and achievements significant. They showed willingness and readiness to cope with all problems that faced the animation exercise.
- They were well accepted and treated by community members, and the community response under new prevailing reduced circumstances was quite good.
- The animadores need audio visual material (posters, etc) and field manuals to work more successfully at the village level.
- Their feeling is that more than three visits need to be introduced during the construction phase, at the beginning of animation exercise in particular.
- Refresher courses need to be organised soon.

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- Manuals for health education are too general and abstract, hence they need to be more concrete and specific-oriented towards actual needs of the water programme.
- APEs (the village health workers) are supposed to continue health education upon the construction phase, but they are not available in every village, and where available - they are not familiar with health education related to water programme. Refresher courses need to be arranged for them, as well.

At the end of this presentation, it is also worth mentioning that

- A more comprehensive evaluation of both the Potable Water Supply Programme (executed by HELVETAS) and the Community Participation and Health Education Project will take place in December 1986 with possible participation of some external specialists.
- The Ministry of Health and UDAAS, after a careful assessment of achievements in Cabo Delgado, at a special meeting held on 7 March 1986, have agreed to maintain close co-operation at all levels (village, provincial, national) in order to gradually continue with 'the animation programme' in rural water supply programmes throughout the country.

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Community Participation and Health Education Project
(Executed jointly by HELVETAS and UDAAS Delegation, Cabo Delgado)

1. Placement of promotion workers (animadores)

<u>District</u>	<u>Male</u>	<u>Female</u>	<u>TOTAL</u>
- North Region (the three districts of Mocimboa da Praia, Palma, Macomia)	3	3	6
- Mueda District	1	1	2
- Pemba District	1	3*	4
- Mecúfi District	1	1	2
	6	8	14

* One female promotor assigned to Montepuez has been placed at Pemba, on a temporary basis (for security reasons)

2. District-wise Promotor's Activities

<u>District</u>	<u>N.^o of villages covered</u>	<u>N.^o of visits made</u>
Mocimboa da Praia	26	93
Macomia	20	88
Palma	4	21
Mueda	7	20
Pemba	20	38
Mecúfi	7	22
	84	282

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<u>Type of Visit</u>	<u>NO of Visit Made</u>
First visit	27
Second visit	33
Third Visit	36
Fourth Visit	26
Maintenance Visit	65
Specific Visit	95
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Source: HELVETAS 1985 Annual Report, Pemba, Dec. 1985

Potable Water Supply Programme in Cabo Delgado
(Executed by HELVETAS, Switzerland)

1. Construction Progress

<u>Activity</u>	<u>YEAR 1984</u>	<u>YEAR 1985</u>	<u>TOTAL</u>
Construction of new wells	105	94	199
Recuperation of wells	24	98	122
Construction of new tubewells	3	7	10
Recuperation of tubewells	14	21	35
Installation of new handpumps	35	50	85
Installation of bucket-rope devices	-	103	103
Recuperation /repair of handpumps	110	111	221
Construction of new washing places	17	112	129
Repair of washing places	-	11	11
Test drilling, n ^o of boreholes	-	310	310

2. Per Capita Investement (1984 estimates)

Assumptions: 250 inhabitants per well, consumption rate - 20 l/p/d;
total cost included

- New hand dug well without pump	US\$	11.10
- Recuperated well without pump	"	6.90
- Tubewell with handpump (av. depth 40m)	"	67.10
- Recuperated tubewell with handpump (average depth 40m)	"	33.50

Comparisons with other projects

- Mueda Plateau Water Project (piped water, 1984)	"	40.00
- Tanzania, Shinyangu Shallow Well Project (1974-78)		
* well with handpump	"	7.50
* well without handpump	"	6.50
* tubewell with handpump	"	17.50

Source: HELVETAS Annual Report, Pemba, March 1985