

<b>Project.</b>	<b>Water and sanitation for schools in Cabo Delgado</b>
<b>Country ;</b>	<b>Mozambique</b>
<b>Period:</b>	December 2009 – December 2011
<b>Total budget:</b>	24.500 Euro
<b>Number of facilities:</b>	78 Latrines 26 rainwater harvesting systems 100 sifon filters 3900 Children awareness training on Hygiene etc
<b>No of people reached:</b>	3900 children
<b>Local organization.</b>	Grupo de Saneamiento de Bilibiza
<b>Org. in Netherlands;</b>	Arrakis
<b>Formulated by :</b>	Jan de Jongh & Henk Holtslag

### Context

A primary school is a “centre par excellence” where future adults should learn about basic practical knowledge, like on safe water, health, sanitation, etc. In general it is very worthwhile to invest in hardware like latrines and water facilities and educate the pupils in awareness on the need for hygiene the importance of water for health and income. Within Qirimbas Park in Cabo Delgado Northern Mozambique, there are 26 very poor developed schools which lack basic conditions latrines and water. Arrakis who works in this region via other activities started, with the help of funds from individuals to build 9 latrines at 4 Schools. These latrines are already serving a total of 624 pupils. Other schools are very interested and have asked for similar facilities. The provisions given to the schools with this project are the first steps of a transformation process of these schools resulting in educating their pupils to become **“developers for their own region where they come from”** rather than educate them for jobs, which are not available anyway. This education method has been developed by FUNDAEC ([www.fundaec.org](http://www.fundaec.org)) and has been rewarded by the club of Budapest to be “most considerable revolution of education systems in the 20 th century”. This means that the pupils should learn to use local resources in a sustainable way. Several positive projects and programmes in the region are ongoing, from which knowledge can be derived. An example is the concept of Farmers Clubs. These are being developed by ADPP, financially supported by USDA, EU and FACT. Farmers are trained to do conservation farming, growing vegetables with rope pump irrigation for own use and for the local market. The school pupils can assist the farmers in the FC’s common demo fields and learn in a playful way the basics of conservation farming and become familiar with the use and maintenance of the water technologies at the same time.

### Objectives

- To provide access to safe drinking water and sanitation at 26 schools in Cabo Delgado.
- To develop these schools as outstanding example schools in the long term.

### Results

- Safe drinking water, sanitation and hygiene education at a cost of around € 950 per school (€ 6.5 per child)

### Scope of work Step wise approach

One by one latrines will be built in these schools one for Boys and one for Girls. In a number of schools rainwater harvesting systems will be constructed consisting of roof plates, rainwater gutters, and a low cost storage tank of wire cement with a content of 4 Cubic meters. Since development of the schools along the lines sketched above requires time and funding, a step wise approach is followed,

consisting of clearly defined sub-project activities with its own required budget. When sufficient funds have been found for one school activities will start and if more funds are coming the school will start. All investments will be combined with awareness raising actions under school pupils, done by the teachers, of which many have been educated at EPF. A method to use “comic books” for this is being applied.

**Budget**

Cost for 3 latrines / school is on average (slabs + reinforced holes)	<b>€ 75</b>
<b>The total budget for 26 schools for 78 latrines is</b>	<b>€ 1.950</b>
<b>Cost of water supply with rooftop catchment</b> school on average is €825 (tin roof, gutters, storage tank of 4 cub meter)	
<b>The budget for rainwater catchment for 26 schools is</b>	<b>€ 21.450</b>
1 sifon filter per 40 children; total 100 filters incl, spares + training	<b>€ 1.100</b>
<hr/> <b>Total Budget</b>	<b>€ 24.500,-</b>

**Implementing organisation**

The NGO “*Grupo de Saneamento de Bilibiza*”, (see Annex) is fabricating latrines and cement bricks, in improving the schools in the region, in a step by step process. **Arrakis** has started to support this local organization, by providing funds and giving Technical Assistance.

It is well known to them that latrines, one for girls and one for boys will contribute to less dropouts. Especially more girls will attend the school, having their own latrine now. (compared to having only the open bush before)



***Pupils from the primary school 1o de Maio, with the school building at the background***

*Photo: Jan de Jongh, Arrakis, June 2009*

## PROGRESS

### Result of the first subproject

September 2009:

9 latrines ( ) have been build and installed at **4 Schools**. (individuals have provided the funds to Arrakis). These 9 latrines are already serving in total 624 pupils. See table below.

Name of village	Nr of teachers	Nr of latrines built	Nr of latrines needed	Nr of pupils
Nicuita	4	3	5	272
Nanua	3	2	3	150
1o de Maio	3	2	2	102
25 de Setembro	2	2	2	100
<b>Total</b>		<b>9</b>	<b>12</b>	<b>624</b>

## SUPPORTING PHOTO'S

### *Primary school of 25 de Setembro:*

Number of children: 100 1- 5<sup>th</sup> grade, 2 teachers

Building (6x3 m.)very poor thatched roof.



*The schoolbuilding*



*Head teacher with students ( saterday)*






*The two latrines being installed*





*Typical example of a "Comic"*

**School: Primero de Maio; Improvements with latrines**

	
<p><b><i>The primary school building</i></b></p>	<p><b><i>The blackboard and school banks</i></b></p>
	
<p><b><i>One of the latrine “houses”</i></b></p>	<p><b><i>The latrine is well kept.</i></b></p>

**RAIN WATER CATCHMENT, Improving roofs with corrugated plates and rain water gutters plus low cost tanks to collect rainwater**

	
<p><b><i>An example of a house build for a Farmers Club chief. School buildings could be similar with a tin roof, rainwater gutters and a storage tank.</i></b></p>	<p><b><i>Training in use of siphon filter In Itoculo Mozambique</i></b></p>

**RAIN WATER CATCHMENT SYSTEM:**


Tin roof, rainwater gutters, collection tank of 4 cub meter .

Materials needed:

Tin roof: MTN 10.000 or € 260  
Gutters plus tank MTN 7.600 or € 200  
Part of labour costs MTN 15.000 or € 365  
**Total MTN 32.600 or € 825**

**ANNEX: 2**

**Registration form of Grupo de Saneamento de Bilibiza”.**

  
REPUBLICA DE MOÇAMBIQUE  
PROVINCIA DE CABO DELGADO  
GOVERNO DO DISTRITO DE QUISSANGA  
SECRETARIA DISTRITAL

**DESPACHO**

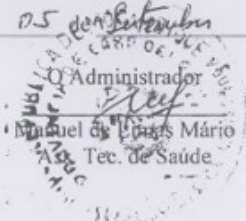
Um grupo de cidadãos da Associação “GRUPO DE SANEAMENTO DE BILIBIZA” requereu a Administração do Distrito de QUISSANGA, o seu reconhecimento como pessoa jurídica, juntando ao pedido os respectivos estatutos de constituição.

Apreciados os documentos submetidos, verifica-se que se trata de uma associação DE SANEAMENTO DO MEIO, que prossegue fins lícitos, não lucrativos, determinados e legalmente possíveis e que o acto de constituição e os estatutos da mesma cumprem o escopo e os requisitos exigidos por Lei nada obstando ao seu reconhecimento.

Os Órgãos sociais da referida associação, eleitos por período de 02 anos renováveis uma única vez, são:  
BACTIR AFUNO, HORACIO AMBRÓSIO, FALOME JASINE,  
SARANQUE JASINE, JOÃO MARTINS, JUNIO EUCÉNIO,  
DANIEL JÚLIO, AÇAÍSSÉ MOISÉS, VAHACURA SUAINÉ,  
FLORIANO A. NVOU

Nestes termos e no disposto no Artigo 5 n° 1 do Decreto-Lei n° 2/2006, de 3 de Maio, vai reconhecido a Associação GRUPO DE SANEAMENTO DE BILIBIZA

Quissanga, aos 05 de Setembro de 2008

  
Administrador  
Miguel de Jesus Mário  
Tec. de Saúde