Diocese do Niassa

Igreja Anglicana em Moçambique

2010 ALMA Lent Appeal ~ Water

Rural Water Supply: Well and handpump construction and maintenance

Aims and Objectives

The aim of the work is ultimately to improve the access to water supply in rural Mozambique where currently only 26% of people have access to "improved drinking water sources" in rural areas (UNICEF). The latest census shows that most of the population still obtain their water from unprotected sources. 46.9 per cent use traditional wells without any hand pumps and 17.3 per cent simply take their water from a river or lake (allafrica.com).

Background

The Diocese has facilitated the development of 220 community development committees, 45 of whom have identified water as their primary need. Many of the communities within the Diocese of Niassa currently walk long distances to fetch water from rivers that are polluted and cause illness, and would like to have safer and more convenient water sources.

Total budget: 1,960,000 meticais

Time frame: 2010-2011 (with pilot activities in 2008)

Project

The parts of this are as follows:

1. piloting of a the Vonder Rig
2. well and handpump maintenance training and support
3. repair of at least 20 pumps
4. construction of at least 7 boreholes and handpump installation

Details

1. *piloting of a the Vonder Rig*

The Vonder Rig is a very large hand-operated auger. It uses simple technology to dig a well. It requires community participation, and is much less expensive than machine drilling. The Diocese do Niassa has not previously used this machine.

2. *well and handpump maintenance training and support*

In many communities there are wells with Afridev handpumps that have been installed by the government or other NGOs. However in many communities there is no one who is trained in handpump maintenance, so when they stop working, they are neglected and the community goes back to drawing water from rivers.

Activities:

1. The piloted training with a team of 2 fieldworkers and one technical expert, spending 10 days travelling along the lake shore to 8 different communities. Creation of an inventory of all the pumps which exist and their problems in the northern Lago District of the Niassa Province (an area where the Diocese has previously worked on water issues).

2. Production of a manual in Portuguese and 3 local languages (Chinyanja, Chiyao, and Chimakua) which describes how to dismantle and assemble the pump and included basic rules on the care of the area surrounding the well. Distribution of 3000 copies of this manual.

3. Creation (or re-invigoration) of a "well committee" in 150 communities, with theoretical and practical training on how to carry out regular maintenance checks on the pumps as well as how to diagnose and solve simple problems with worn parts. A minimum of 750 women and 750 men trained to maintain Afridev pumps and identify and replace warn parts.

4. Creation of a distribution system for low-cost (mildly subsidized) spare parts to be purchased by the community

5. Development of a system of monitoring forms by which communities can keep track of the maintenance of the pumps.

3. *repair of at least 20 wells/pumps*

At least twenty wells or pumps that are currently non-functional will be repaired, some by local community members and diocesan fieldworkers, and others by outside technicians.

4. *construction of boreholes and handpump installation*

There are many villages where the community members are still using rivers as their main source of water and in these villages the installation of a hand pump would be beneficial.

The vast majority of communities surveyed prefer the Afridev pump. As it is currently used throughout Northern Mozambique and into Malawi, parts are available and training on maintenance can be transferred between communities. The Afridev pump has also been recommended by the World Bank and the UN as a VLOM (Village Level Operation and Maintenance) standard pump.

Communities where boreholes will be drilled will commit to providing manual labour and locally available materials. The community development committees will be instrumental in setting up the projects and forming well management committees. Though the community development committees of many communities have asked for support with well construction, those with the greatest need and the greatest level of community commitment will have priority.

Well committees will be formed in each area where the project is implemented, whose role it will be to mobilize the communities, help with the siting of the well, co-ordinate the work and supervise the maintenance of the pump after construction. Diocesan technical team members will support the communities through the construction process and will supply the necessary materials that are not available locally. In return, the communities will be asked to provide the manual labour necessary as well as bricks, sand and gravel, and will be required to maintain the pump once it has been fitted. In some circumstances the wells need major repair or maintenance and then an experienced well technician will need to attend to the problem.

Overall budget (in meticais):

internal diocesan code			cost	units		total cost
634710	well construction	pumps and other necessary materials for the well construction	60,000	7	wells	420,000
634710	well construction	pilot work (feasibility study and pilot well)	96,000	1	well/ assessment	96,000
634711	well repair	repair of at least 20 pumps/wells (including Messumba)	23,500	20	wells	470,000
635514	community well training	training in 150 communities	1000	150	communities	150,000
635514	spare parts	initial stock of spare parts (which the community will purchase from the stock so that the stock can be replenished)	400	150	communities	60,000
635514	repair tools	spanners, pump rods with connecting tools in each community	1,000	150	communities	150,000
63231	Travel costs for transport: car rental	The Vonder Rig is being generously lent to us by another NGO in Niassa (in Mandimba) but we must provide transport for it. Also, the pumps, cement, and tubes must be transported from the place where they are purchased to the places where the wells are constructed.	18	3,000	km	54,000
63231	Travel costs for transport: public transport	for travel costs of field workers and technical team members to project sites				36,000
63072	Production of the manual on well maintenance	the manual will be produced in at least five languages: Portuguese, Chinyanja, Chichewa, Makua, and Chiyao.	20	2250	manuals	45,000
	Training of fieldworkers, well maintenance and repair	4-day training course in well repair, 10 fieldworkers, food, lodging and transport to Lichinga	36,000	1	training	36,000
621	Salaries, community field workers	30 months x 4,000 meticais/month	4,000	30	months	120,000
621	Salaries, technical trainers and managers	5 months x 25,000 month/month	17,800	5	months	89,000

63065	Field equipment: tents, lanterns, and rain gear	In lieu of paying lodging costs, field workers will sleep in tents. Fieldworkers are willing to work in the rain, but have no rain gear of their own.				25,000
63061	Office supplies					19,318
63241	Communicatio n costs	cell phone credit for sending SMS's and making phone calls related to the well repair and construction				11,500
63251	Diocesan administrative costs	contributes towards electricity and office maintenance, government taxes, bank fees, auditing, salaries for financial accounting staff and administrative and management staff, and other administrative related activities				178,182
					TOTAL:	**1,960,000**

PART TWO:

Form of Proposal	
Part 1: To be completed by the local church	
Name of the congregation and parish	DRAFT DIOCESAN
Project Name	AFRIDEV Pumps:
Objective of the project	Maintenance, repair, and installation improving access to potable water within the Diocese through a depth capacity for maintenance, repair, and installation of pumps Afridev
In charge of the project:	president: n / a Treasurer: Secretary
If built, who would do it	n / a
What is the local contribution?.	• Teams of Life will provide volunteer work •
Who owns the land?	n / a
Has permission to build?	n / a
What is the total project cost?	MZN 94,466.00 more volunteer work
How much is needed from outside?	MZN 94,466.00 = **£ 1889.32**
Write details of the budget	**Discretion:** **Cost:** Diocesan enhancing capacity in the maintenance and repair of MZN 25,000.00

	pumps Community work for maintenance, repair, and installation of pumps MZN 60,878.18 diocesan administrative costs MZN 8,587.82 MZN 94,466.00
What is the period of the project?	2010-2011
Signature and name the person in charge:	Name: Rebecca J. Vander Meulen position: Director, Department of Mission Signature:
Part 2: To be completed in the District **Episcopal Delegate** **Date**	Date: December 29, 2010
Part 3: To be completed by the Diocese **Received in the diocesan offices** **budget approved** **date of transfer of funds**	n / a n / a *offices:* date: date: