

REPORT ON THE HAND PUMP SPONSORED BY MICHAEL NUGENT – 2011



Figure 1: Community members in Kawama at the hand pump



Figure 2: Community members accessing water

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INTRODUCTION

HfH Zambia was founded in Zambia in 1984, and implements three programs namely; the Rural Housing Program, Zambia Urban Housing Program and Vulnerable Group Housing Program as indicated below:

1. The Rural Housing Program (PIKK project) targets viable but poor people in rural areas (farmers, teachers, nurses, SME's etc) in Chibombo, Kaoma, Chongwe and Masainti and Mpongwe districts providing basic housing services. This model encompasses newly built houses, as well as renovations and rehabilitations. It runs on a revolving fund. The home loan repayment period is five years.
2. The Zambia Urban Housing Program (ZamUHP) targets the low-low income bracket (families who cannot access mortgages from financial institutions) in the urban and peri-urban areas of Lusaka and Ndola. The home loan period is five years.
3. Vulnerable Group Housing (VGH) programme. This program's goal is to provide appropriate, subsidized housing solutions to vulnerable groups in Zambia and it specifically concentrates on orphaned and vulnerable children (OVC). Please see attached HfH Zambia OVC selection criteria.

This report is based on a designated donation request made given to HfH Zambia from **Gonzanga Parents** in 2010-2011 towards the installation of one hand pump in Kawama (B) project in Ndola. Kawama (B) was founded in 2004 and a total of 210 housing units were constructed during the years 2005-2010.

OVERVIEW OF KAWAMA

Many townships in Zambia that lack development are poverty traps – imprisoning hundreds in the depths of despair, facing severe vulnerabilities, extreme poverty, insecurity and disease. Basic services such as access to clean water, sanitation, health facilities and schools are not always available or inadequate. This is the case in Kawama Township. The community's only source of water was from an illegal source, which came from a broken pipe of the water provider Kafubu Water and Sewerage Company. This broken pipe provided water to the community, with an average population of 1,680, for washing, bathing and drinking. **(The minimum standard for a water point is 40 families = approximately 240 individuals per water point).**

In the year 2007, Kafubu Water and Sewerage Company constructed a water kiosk for which community members had to pay 50 kwacha per 20 litres of water and the average consumption was 210 litres per family in a day. Due to high poverty levels in the community 59% of the community members were not able to access the water due to the cost associated with the service. The rundown installation systems, leakages and vandalism of pipes have all contributed to the inadequate supply and contamination of water. The situation is compounded by inadequate sanitary facilities for the disposal of liquid, solid and medical waste. This in turn predisposes a large proportion of Ndola residents those drawing their water from shallow unprotected wells, to diarrhoea diseases such as cholera and dysentery (Ndola DSA, 2005)

The economic situation is that 15% of the total population in Kawama is in formal employment, 25% depends on small business at the local market (average income of 10,000 kwacha per day).

60% of the population depends on small scale farming from the neighbouring Congo (with an average of 30 to 40 bags harvested per year). Out of this number, the families are able to keep 15 bags of the total harvest for themselves and they sell the rest at the price of approximately 25,000 kwacha per bag.

ACCESS TO WATER IN KAWAMA

Imagine a life without safe water flowing from your tap. Imagine then, if every morning you had to get up at the crack of dawn and walk for miles down to the nearest water point to collect your family's water, and then had to pay for this water daily.

The major challenge that community members experience is the over whelming population in the surrounding areas which also does not have enough water points. As disturbing and untenable as this may seem, it is the plight of many Zambians today.

WATER FLOWS IN KAWAMA

Despite the challenges associated with efforts to improve access to water Kawama, the completion of the M. Nugent hand pump project has greatly improved access to water for the residents in Kawama. In June 2011, Habitat for Humanity Zambia identified the drilling company and engaged them to drill the borehole after the water level had normalised following the heavy rainfall that had hit the country.

The project has brought dignity and improved sanitation to the residents whose lives were once at risk of disease. Waiting to draw water from the few water points in the community has greatly reduced waiting time and is allowing families to do other more productive works to earn a living. The people can now boast of safe, clean water and at reporting time the new hand pump area was brimming with activity.

"This means that the women are no longer forced to travel long distances in order to get clean water and due to the introduction of a third hand pump it will lessen the queue. Most families spend many hours a day fetching water for household use", explains Waveson Hamuchankwi, project manager at HFH Zambia

"The clean water in the neighbourhood costs less than the unsafe drinking water which used to be pumped illegally. Also my house is just near this hand pump which has been drilled and installed so we will sleep well knowing tomorrow we can have water at no cost", says Francis Mwansa

Often, residents had to pay K50 for a 20-litre container of water which made it hard for them to meet other basic needs. Most of the residents could not afford even a small amount to pay for water.

As a result of this water project to date, more than 1,680 people in Kawama have benefited from the hand pump. *"It is up to local committees to maintain and protect this pump, we have applied a participatory approach and it will be run by the local community leadership who are beneficiaries. By improving access to safe water, the project will improve the lives of hundreds of people and help reduce poverty levels and medical expenses due to waterborne diseases,*

explains Joseph Munsanje, National Director at HFH Zambia. “*the hand pump is able to provide water to exactly those people who - in the past - were too poor to pay for water that was being sold.*”, Musoli Kashinga (Mrs.), Programms Manager at HFH Zambia

Expected outputs

1. Drilling and installation of one hand pump in Kawama
2. Improved health
3. Improved livelihoods

BILL OF QUANTITY

| Activity | Unit cost | Frequency | Total cost | | |
|---|-----------|-----------|-------------------|--|--------------|
| | K | K | K | | € |
| 7,000.00 | | | | | |
| Siting with Geophysical/Devine Method | 800,000 | 1 | 800,000 | | 114.29 |
| Mobilisation and demobilisation | 1,000,000 | 1 | 1,000,000 | | 142.86 |
| Establishment of machinery and personnell | 1,500,000 | 1 | 1,500,000 | | 214.29 |
| Drilling to 64meters | 8,700,000 | 1 | 8,700,000 | | 1,242.86 |
| Supply and installation of Plain/Perforated Casing up to loose fromation or maximum 30 metres | 3,500,000 | 1 | 3,500,000 | | 500.00 |
| Gravel Packing | 1,500,000 | 1 | 1,500,000 | | 214.29 |
| Borehole development and blow yield test to estimate the well capacity | 1,000,000 | 1 | 1,000,000 | | 142.86 |
| Installations | | | | | |
| Supply and installation of Indian Mar II Hand Pump | 8,000,000 | 1 | 8,000,000 | | 1,142.86 |
| | - | | | | |
| | - | | | | |
| | - | | | | |
| Cost of a wet well | | | 26,000,000 | | 3,714 |

CONCLUSION

Many people in Zambia’s urban townships have to pay to fill their buckets with water from the one tap in the area or access it from an illegal point. HFH Zambia programs strive to provide a holistic solution to complement its housing projects; water is one of them.

THANK YOU TO THE PEOPLE OF IRELAND FOR YOUR SUPPORT!