

## **THE OBINAGU CONCRETE WATER RESERVOIR PROJECT**

### **A DREAM COME THROUGH**

The Obinagu concrete water reservoir project is an initiative of Water for Life in Africa Inc. The project is located at Obinagu Ishiagu in Ivo L.G.A of Ebonyi State, Nigeria.

Obinagu as a typical African rural village is neglected by its government. One of the greatest problems of Obinagu Community is water scarcity. Women and children trek miles to fetch few gallons of water that are not enough for the domestic use in the family. As a result of this problem, many, especially children of this village die of water related diseases such as cholera, e-coli, diarrhea, typhoid fever, guinea worm, etc.

It is as a result of the above that Water for Life in Africa Inc. through Christopher Okorie, an indigene of Obinagu village, who came over to New York City for studies, stepped into the matter, to make a positive difference.

To address this situation of water scarcity in Obinagu, Water for Life in Africa (WLA) drilled six bore holes in different geographical locations within the village. Unfortunately, the effort was fruitless as many of the wells contain little or no water while those that contain enough water were highly mineralized with lethal substances such as sulphur, mercury, lead, etc.

It was as result of the above, coupled with the professional advice arising from underground geophysical studies of the village, that prompted Water for Life in Africa Inc. to consider as last alternative, the option of rain harvestation. It is therefore the idea of this rain harvestation that led to the construction of Obinagu concrete water reservoir project.

The idea of the project is built around the fact that there are two major climate seasons in Obinagu village: The rainy season which lasts for six months, starting from May to October, annually and the Dry Season which lasts for six months starting from November to April annually. It is therefore

hoped that the concrete water reservoir project will be able to harvest the rain fall from the months of May to October annually. During this rainy period, individual households will make use of water from direct rain fall harvested individually with private containers from their house roofs. Meanwhile, water from the concrete reservoir project is stored up to full capacity with rain water collected from public town hall roof.

The water so collected in this concrete water reservoir is stored up for use during the dry season when no drop of water touches down on the village from the sky. Therefore, the Obinagu concrete water project is designed to serve part of the water need of Obinagu village during the drought/dry season for six months.

The construction of Obinagu concrete water reservoir project was started in 2014 but due to whether condition in Nigeria and other militating factors, the completion of the project was delayed but actualized in December, 2016.

The Obinagu concrete water project is designed to hold a capacity of about Seven Hundred Thousand (700,000) liters of water. This would be about One Hundred and Seventy-Five Thousand gallons of water (175,000).

At the moment, the concrete reservoir structure is fully completed, ready to receive storage of rain water. However, the water project is not fully functional due to the following factors:

1. **The dry season (period of no rain)**

As I mentioned earlier, since the construction of the Obinagu concrete water project, it has not rained because we are still within the period of dry season. The last rain experienced in Obinagu was in October, 2016; the next expected rain will start from the month of May, 2017.

2. **Need to Extend Collection Channel to the reservoir**

The fund for the construction of the reservoir was not enough to construct the channel that will direct water from the already existing

community building roof to the reservoir. This minor construction need to be done before the season of the rain by May, 2017.

### **3. Pumping of Water for Reticulation:**

There is need to purchase and install a 2.0 Horse Power Capacity Water Pump for pumping of water from the reservoir to an overhead tank from where the water will be reticulated through the force of gravity to the fetching point.

#### **SUMMARY OF THE REMAINING PART OF THE WORK:**

1. Channeling of the water from the roof of public town hall (10 meters away) to the concrete water reservoir = \$300.
2. Purchase of 2.0 Horse Power Capacity Water Pump = \$200.
3. Piping, Taps, Overhead Tanks, etc. = \$200.

Total cost of material and labour = \$800.

It is hoped that when the above is taken care of, the Obinagu Concrete Water Reservoir Project would be able to provide portable water for drinking purposes for next dry season, starting from November, 2017 upwards.

Meanwhile, the entire people of Obinagu village extend their gratitude to all the living and departed members of Water for Life in Africa and their benefactors and benefactresses. They also pledge their own quota towards the completion of the remaining part of the project. Promising to peacefully and responsibly use and maintain the water project for the purpose for which it was constructed in the first instance.

**Chris Okorie**

*Project Supervisor.*