



# **Partners for Water and Sanitation**

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## **Follow-Up Visit to Plateau State Jos, Nigeria**

### **Briefing Note**

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# 1 Briefing Note from April 2008 Visit

Partners for Water and Sanitation (PAWS) is a collaboration of government, private sector and NGO organisations dedicated to solving problems associated with providing access to water and sanitation in developing countries. The initial focus of the partnership is Africa.

This report is a briefing note to summarise our visit to the Plateau State Commissioner for Water Resources in Jos, Plateau State. The visit was to follow-up on previous technical visits by PAWS in December 2006 and March 2007, to provide support to a WaterAid Nigeria supported project in Kabong, Jos. The Kabong project is an initiative by WaterAid Nigeria (WANG) to provide access to clean water for the urban poor. WANG requested technical assistance from PAWS to understand why the project had stalled and guidance on their options for supplying water to the suburb of Kabong. The technical reports for the previous visits are available on request.

During a one week technical visit at the end of December 2006 and a follow up technical visit of three days in March 2007, we carried out a number of meetings, interview sessions, measurements and site visits of existing water supply installations run by the incumbent water provider, the Plateau State Water Board (PSWB), and those commissioned by WANG to supply water to the Kabong area.

We concluded that:

- The assets commissioned by WANG and installed by PSWB were not built in the most appropriate location and apparently without consideration to all technical issues. These assets may or may not be useful in the future, but the conditions under which they will be useful are limited.
- A further, more important reason for the lack of supply to the suburb of Kabong is due to a generalised water shortage in the city of Jos.
- It is possible to supply the suburb using existing (pre-Kabong project) assets and available water supply, however this would mean depriving residents of other parts of the city with the amount of water they are used to. The total lack of water delivered through the distribution network in Kabong is essentially due to inequitable water rationing.
- PSWB required advocacy and technical assistance to determine a more equitable distribution of the existing water supply in Jos and in supporting any proposals for a strategic solution to the water supply situation in Jos.
- The long term solution to the lack of treated water in Kabong is to increase supply to the city and to dedicate some or all of the increase in supply to the suburb.

- The Water Management Committee institutional arrangements are (as yet) unclear and need to be clarified. In addition to this, the proposed model is based heavily on a rural setting and suffers from a lack of legal legitimacy in an urban context. The latter is the most significant non-technical risk to the project's success.

A visit to the Plateau State Water Resources Commissioner was to obtain information on the global plan of the State Government on Water Supply in Jos. We also took the opportunity to get an update from the acting General Manager of the Plateau State Water Board, Engr. Zaka Fom, whom we had met in December 2006 and March 2007.

It appears that the Water Board has not made any significant improvement to service delivery since our previous visits in 2006 & 2007, and in fact the situation at the main town supply (Yakubu Gowon Reservoir) had deteriorated with the loss of a transformer due to fluctuating power supply from NEPA. This had exacerbated water shortages in Jos.

The general manager also informed us that billing and collection rates were still low, with revenues only of the order of ₦20m per month. We note that given a population of 1.5 million, and retail price per jerry can of ₦20, if we assume each customer consumes (and pays the market price for) 1 litre of potable water per day (and uses non-potable water for washing etc), the total water market should generate at least ~~₦~~1.5m per day, giving a total of around ₦45m per month.

To take an alternative view on resources spent on water, if we assume the entire population of Jos earns the poverty level income of \$1 per person per day (100₦), and 5% of this is spent on water consumption, this would generate 1,500,000 people x 5% in water revenues, which is ~~₦~~7.5m per day, or ~~₦~~225m per month.

We raise the first point to demonstrate the huge supply and demand gap, and resulting “unofficial” water economy which must exist in Jos (porters, borehole drillers, trucking, mai ruwa, etc). The second point demonstrates the existence of a local supply of finance, which is not being tapped by the water board.

In its current operational state, PSWB appears to charge inadequate tariffs and then collects a further inadequate fraction of what is due. Contrary to popular belief, lowering tariffs below the cost of supply does not result in cheap water for consumers, because when supply cannot be maintained (no money for maintenance), demand will very quickly set the market price for water. The result is cheap or free water for some consumers (for those who are literally and figuratively “well connected” and for those getting illegal water) and very expensive water for everyone else (especially the poor).

PSWB and the Water Commissioner mentioned their interest in external funding sources. We note that Yakubu Gowon dam and treatment works was constructed in 1981 and refurbished recently ( around 2000). This was presumably debt funded, and the equipment we saw during the site visits had been almost wholly neglected to the point of inoperability. We would expect pumps and motors installed in 2000 to be working until at least 2015, or longer if carefully maintained. Such pumps can in fact have their asset lives stretched up to 30 years with careful maintenance and refurbishment.



The current market price of water demonstrates a high willingness and ability to pay for at least small quantities of water (assuming high price elasticity for potable water). We are of the opinion any funding considerations for PSWB should be accompanied by the mobilisation of local funding by the board itself, through the application and collection of correct tariffs. The usual excuse that customers will not pay before service is improved can be ignored because customers are paying and services are currently non-existent. With some innovative or lateral thinking, with which PAWS could assist, it should be possible to incrementally increase service levels and revenue without the large capital injections that are traditionally demanded. During the meeting with the State Water Commissioner, who naturally promised he would do everything humanly possible to improve the water supply situation in Jos, we offered technical assistance for the development of a business plan to reverse the declining fortunes of the Water Board.

While PAWS does not provide any funding, we anticipate that our assistance in implementing fundamental utility reforms, drawing on the international experience of the consultants, could be useful in obtaining sources of external finance. In our opinion, reforms initiated by PSWB or the Plateau State Government, and supported (rather than imposed) by external bodies, will be well perceived and could set the PSWB apart as a leading public water utility in Nigeria.

Detailed reports from November 2006 and March 2007 visits, regarding WaterAid Nigeria's work with a view to supplying water to Kabong, which were designed and implemented by members PSWB staff are available for more information.

Of concern, are the number of unknown connections that exist within Jos and the degree of leakage observed everywhere in the city when attempting to supply water to the Kabong community.

The reports also demonstrate the limited capacity of PSWB (with a reported total one trained engineer in their staff, who is the interim General Manager), and also the state of the infrastructure we visited in 2006.