Third Party Evaluator's Opinion on
North South Carrier Water Project

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Relevance and effectiveness

In an effort to provide a reliable water supply for the Gaborone and also to minimize mining of water, the Government of Botswana (GOB initiated a water supply programme using both surface and groundwater – the North South Carrier (NSC). The North South Carrier was therefore designed to provide water for Gaborone, but also major villages en-route to the year 2025. The NSC links Letsibogo Dam and major wellfields to Gaborone via a large diameter pipeline ~400kms in length. The NSC was commissioned in 2002 following an agreed policy by the GOB to promote conjunctive use schemes. The idea of a conjunctive use concept allows for good management practice at wellfields. When the levels in Letsibogo Dam are high, then wellfields can be switched off and groundwater levels allowed to recover.

Settlements in Botswana are divided into three categories namely, major villages which includes towns; smaller villages including rural settlements; and remote area dwellers. Provision of water services in the major villages is currently the responsibility of the Water Utilities Corporation (WUC) contrary to their Act that stipulates that they provide only urban centers. The Department of Water Affairs (DWA) supplies the smaller rural villages and rural settlements. Whereas the Ministry of Local Government through the District Council Water Unit is responsible for the provision of water to the remote area dwellers.

No charges are levied by the GOB for rural water supplies for water obtained from communal standpipes. Only yard and household connections are metered. The DWA are responsible for billing and revenue collection in respect of rural water supplies. Remote area dwellers are provided with free water. The Water Utilities Corporation recovers costs from the urban centers, which have metered supplies. The tariffs per m^3 of water for these centers are high and varies per location. i.e. P11.30 per m^3 over and above $25m^3$ used in Gaborone compared to a rate P4.30 for the same volume in Selibe Phikwe. Annual water sales recorded (CSO 1998) were 32,007 x 10^6m^3 which represents only 20% of the annual total water usage nationwide. There is considerable disparity between the WUC tariffs and the rates charged by the DWA for rural villages. The high rates for Gaborone are a reflection of the high capital cost of the NSC, but this cost is not passed on to other villages on the NSC. The future costing of water should be addressed, particularly in relation to the larger villages on the NSC not covered by WUC, to help reduce consumption and ensure that sustainable water usage can be maintained. Since WUC finds itself having to supply water to the major villages, as per the GOB directive, and not stipulated in their act, it can be said that this project has affected their policy and as such always threaten to cut service to these villages and therefore this has to be resolved amicably by possibly updating the WUC Act of 1970.

The populations of the major villages, Mahalapye, Serowe, Palapye, Molepolole and Kanye have increased dramatically. For example at Molepolole: - the population almost doubled from 31,700 in 1991 to 54,600 in 2001. Whereas the projected population statistics given in the 1991 Botswana National Water Master Plan (BNWMP) for Molepolole was 46,500 in 2001 rising to 65,100 by the year 2010. The water demand projections contained in the 1991 BNWMP were based on the projected population statistics which in turn formed the basis for the wellfield and water supply developments implemented during NDP 8 and planned for NDP 9. Clearly the urban population growth rates have outpaced the projections contained in the BNWMP. There is urgent need for a revision of the current and projected water demands as the 1991 BNWMP can no longer be used as a management/planning tool. Significantly the design of the NSC was based on the water demand figures of the 1991 BNWMP. Water

demands based on the both the 2001 census and new higher water usage habits need to be compared with the water demand projections used in designing the NSC. Shortfalls can be predicted and areas where environmental impact might be experienced (i.e.: where wellfields may need to be pumped more than planned) can be recognized. The design of the NSC should be reviewed to see if it can actually cope with increased water demands WUC, which is a semi-autonomous professionally operated public agency is committed to operating in a manner that does not detrimentally impact on the environment while meeting the obligation of supplying quality water. The management has to be praised for having finalized the environmental policy. The Corporation's decision to implement an Environmental Management System is the first and most difficult step towards ISO verification. These efforts are commended and hopefully the corporation will continue on the path to verification.