



ROLE OF GRASSROOTS ENVIRONMENTAL LITERACY: The case of water security at Bwaila Secondary School in Malawi

Yvonne Chasukwa Mwalwenje (1) and Steria Chasukwa (2)

(1) Bwaila Secondary School, P.O. Box 410, Lilongwe, Malawi (yvonnechasukwa@yahoo.com), (2) Steria Chasukwa, Catholic University of Malawi, P.O Box 5452, Limbe, Malawi (chasukwasteria@yahoo.com)

Malawi is popularly known as the Warm Heart of Africa. Malawi has a total land area of 45,747 sq. miles. Of the total area, 80 % is covered by fresh water from Lake Malawi and other rivers. The country boasts that it holds large amounts of fresh water and has the third largest lake in Africa. Ironically, the number of households with reliable water access is low (Water Aid, 2014, UNDP, Human Development Report 2008). Regardless of signs of economic development, water security still remains a challenge in the Warm Heart of Africa.

The problem with access to water prompted the Government of Malawi to introduce a National Water Policy in 1994 with the vision of 'Water and Sanitation for All'. Since then, other water access interventions have impacted on the ability to manage water sustainably. Over the past few years, more inclusive and diversified interventions have been put in place to reverse the situation. For instance, the government of Malawi has taken action to increase the number of water tanks in schools (UNICEF 2005). Several stakeholders' support the government in their role provides policy direction and coordinate management of the water sector.

The outlined National Water and Sanitation Policy strategies includes promoting water conservation and catchment protection; incorporating local governments and communities in planning, development and management of water supplies and sanitation services; rehabilitating the existing infrastructure; creating an enabling environment for public-private partnerships in water supply and sanitation activities; undertaking rehabilitation and reduction of unaccounted-for-water of existing urban, peri-urban, as a priority; promoting economic incentives and opportunities to encourage the participation of small-scale water and sanitation service providers; and promoting water recycling and re-use.

Despite of all these interventions, Malawi still continues to face significant challenges with issues of access and quality of water. The main challenge is the degradation of water resources which result into siltation that blocks the water sources due to rain while in the dry season the water level in reservoirs goes down. Other challenges include inadequate service coverage, insufficient literacy on climate change, inadequate mitigation measures for water related disasters and inadequate promotion of hygiene and sanitation. Bwaila Secondary School in Malawi is no exception in experiencing inadequate water service coverage amidst opportunities such as availability of relatively abundant water resources, political will, active women and youth.

The formal education curriculum in secondary schools has enriched students' knowledge of environmental management in subjects such as Geography, Agriculture and Biology to improve their understanding of natural resource management. However, the primary gap is that students do not use the skills in environmental management acquired from the formal school setting in their day to day life henceforth rendering it to be a mere academic exercise confined within classroom walls. It is against such background that Grassroots Environmental Literacy (GEL), an environmental management social marketing franchise in non-formal education was established to fill in the gap. GEL's mission is to inspire students to become change agents in environmental management in their own lives in both formal and non-formal settings in Malawi. GEL believes that the cultivation of broad-based private and public support is the key to bringing about positive and lasting environmental change hence contributing to water security.

The education sector in general and school attendance in particular is largely affected by water security. Furthermore, technological limitations have also affected the accessibility of water resources. UNICEF (2008) asserts that water resources may be scarce as it is capital intensive to sink a bore hole in Malawi. Bwaila secondary school is one of the examples to illuminate the water challenges. The school has low attendance when water supply is low. Girls are more affected as water shortage affects them hygienically. Consequently, girls cannot attend classes

when there is no water in schools. This has affected the academic performance of girls. Sometimes, the school is prematurely closed as a preventive measure because lack of water access may result in the spread of water borne diseases.

In conclusion, water security at Bwaila Secondary School is a concern because of its impact on the attendance of students and the potential to spread of water borne pathogens. This paper seeks to explore ways of mitigating water problems at Bwaila Secondary School through GEL. GEL proposes that sustainable solution to improve students' attendance at school would be to better equip students in core competencies of water management in non-formal settings in Malawi. Additionally, the GEL will initiate the construction of a water reservoir and promote sanitation and hygiene practice. GEL's believe cultivation of broad-based private and public support to these education initiatives is the key to bringing about positive and lasting way solutions to access to water access issues in Malawi.