

Malawi - The Warm Heart of Africa
INTEGRATED APPROACHES TO WATER REFORM (COMPARATIVE
LAW PERSPECTIVE)
CASE STUDY: LILONGWE WATER BOARD

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An overview (introduction)

Integrated approaches is an objective attracting different water reform players to development and management, diverse strands of natural resource development and of environmental management impacting on water reforms. Lilongwe water Board is a statutory Corporation and one of the five water boards in Malawi under ministry of irrigation and water Development, and incorporated under the water works Act No.17 of 1995 with purpose of supplying wholesome water serving population of 600,000 people plus in the city of Lilongwe and its surrounding peri-urban areas. Growing concern and awareness about the health of water reforms has resulted into greater community involvement in decision- making and on-going action the management of natural resources of the country. Integration is therefore reflected in regulatory legislation on the use of economic and pursuing functional integration of government water board. Legislation, which regulates the priority ranking of the environment, support function of water resources in the allocation of that wisdom and choice of the proposed development and use which mandates the Environmental Impact Assessment. The water board is committed to comply with policies and goals agreed on Commission on Sustainable Development (CSD-13), Agenda 21, the Johannesburg Plan of Implementation and Millennium Declaration. By providing adequate supply of wholesome water and quality services to all customers in an efficient and effective manner while being environmentally conscious and friendly. Lilongwe water board gets its water from Lilongwe River, which has its source in Dzalanyama Hills. The Catchment's area is approximately 1,870 square kms Lilongwe river flows through vast agricultural area, which makes the treatment of water costly. The demand of water is currently estimated to be growing at 4 percent per annum due to urbanization, population growth, industrial growth and increase in standard of living. This ecological system is stressed and notably reduced environmental functions are observed. It then provides evidence of integration being pursued across the water reform /environment. Finally, the integration participation of water users in managing water reforms or aquifers is paramount; if the water board is to achieve its main goal.

Managing rivers in Malawi

- Integrated approaches from relevant stakeholders and NGOs are carrying out awareness campaigns to empower communities in soil and water conservation programmes to rehabilitate water catchments areas.
- Encourage reforestation programmes to reduce run-off, erosion, and siltation increases recharge of water resources through conveyed normal environmental flows.

- Plant multipurpose trees, shrubs and grasses to stabilize rock and wooden structures from erosion- control across the gully channels
- Government and NGOs are working around the clock conducting awareness campaign meetings on water quality management and rehabilitate river banks and catchment areas of water bodies to improve water quality.
- Control the activities that lead to water pollution like disposal of effluent, poor agricultural practices, etc that may affect aquatic fauna eco- systems (PPP may be charged)
- Protect water catchment areas from flooding through implementation of soil and water conservation measures in catchment areas, for instance constructions of dykes, conservation agriculture, and review of wetland policies.
- Systematic Environmental Impact Assessment (EIA) to all activities which are likely to cause adverse impacts to environment.
- Incorporate applicable regional and international instruments in the country's water utilization and management.
- Integrate in the water sector borne sanitation measures.

Situation Analysis

Expanding population

Malawi has a population of 12 million, with growth rate of 3.32 percent; almost half of the population consists of children below 15 years of age.

As Malawi is already rather densely populated in 1998, 105 persons per square kilometer of land; the high population growth is placing considerable and increasing strains on the country's natural environment.

Malawi's fertility rate has remained high at 6.7 percent is perhaps one of the highest in the world, over 90 percent of the population directly drive their livelihoods from natural resources like water thus land pressure is a big problem resulting in encroachment and cultivation on marginal and delicate lands leading to worst forms of environmental degradation.

Climate has a multi – dimensional impact on the economy, especially agricultural production due to the climate rainfall variability.

Recently the country experienced significant variations in weather pattern ranging from severe drought conditions to extreme flood events, (further explained in examples and costs).

Examples and costs involved

Malawi is blessed with river network, the lakes and aquifers whereas there has been measurable progress in the development of water resources in some areas as borehole construction and piped water supply, a lot more needs to be done to conserve and protect catchments areas to avoid further degradation and depletion of water resources.

- Of concern in catchments management, the alarming rate of devegetation in the country has contributed to high levels of run-off, erosion, siltation and severe flooding, worse last year's dry-spell was attributed to this observable fact.
- Rapid population growth which growth rate is at 3.32% has meant people settling in marginal lands that are delicate for agricultural activities. This coupled with unfriendly environmental practices and agro- chemicals and pesticides have increased incidences of water quality deterioration.

- Degradation of catchments areas have resulted in heavy siltation in the lower plains as can be evidenced by the number of bridges that are getting silted up, and environmental flows are completely disrupted. Shire - Zambezi water way a good example is at the under environmental rehabilitation.
- Severe famine which claimed lives as a result of harsh drought and the current roar floods have also asserted a good number of crop hectares.
- Climate has a multi – dimensional impact on the economy, especially agricultural production due to the climate rainfall variability. Recently it experienced significant variations in weather pattern ranging from severe drought conditions to extreme flood events. These two occurrences of climate change were all attributed to the worst forms of environmental degradation that the country is trying to nurse. However, as a result low incomes and food shortages have severely hit the country. The extreme climate events that can cause floods, droughts, other weather conditions and climate related disasters have negative repercussions on the national economy; it can also trigger disasters such as bloody diarrhoea and cholera.
- Inadequate systematic finance and capacity, programmes on sediment and water quality monitoring and hydrological surveys have also lacked back increasing the misery of livelihood in the country people have no strength to demand for a clean and healthy environment.

Interventions by FECO-Malawi in brief

Forum for Environmental Communicators (FECO) is among the organizations working hand in hand with the Government of Malawi to maintain and manage the natural resources and environment of the country. The forum struggles to highlight adverse impacts and works with government to implement water reforms and other environmental conservation programmes that benefits all the citizens of the country.

In global perspective FECO-Malawi is in the campaign with global water partnership focused on provision of sustainable water resources to expanding populations of Malawi and the world at large.

FECO-Malawi pursued the feasibility of establishing long-term relationship with government departments to resolve and develop environmental monitoring support partnership with other NGOs and community participation.

FECO- Malawian non- governmental organization whose aim is to raise public awareness on natural resources and environment is also a focal point for the highlights of the implementation of conservation programmes through media and other channels.

Empowering the general public capable of utilizing the acquired information, knowledge and skills to achieve friendly environment for better livelihoods

FECO is a Member of the Civil Society Organizations conducting a national campaign for raising the profile of millennium development goals (MGDS). Our focus is mainly centred on;

- Goal No. 1- Eradicate extreme poverty and hunger.
- Goal No. 6- Combat HIV/AIDS and other diseases and
- Goal No. 7- Ensure environmental Sustainability.

Recommendations

The government of Malawi together with NGOS (FECO) has embarked on the principles dimensions: economic growth, social equity and environmental protection. In September 2000, 147 Heads of state and Malawi inclusive signed the Millennium Declaration and reaffirmed their support for the principle of sustainable development and Agenda 21. They also agreed on the MDGs which included: “to integrate principles of sustainable development into country’s policies and programmes and reverse the loss of environmental resources” A national sustainable development strategy is a coordinated, participatory and interactive process of thoughts and actions to achieve economic, environmental and social objectives in a balanced and integrated manner.

- There is need for feasibility study to understand the occurrence of ground water and seasonal fluctuations in order to know the changing trend of flows.
- In view of the current agricultural activities, where a lot of chemical fertilizers are being used, there is need to know how much is ending up in the rivers and catchments areas.
- There is also a need to know the amount of sediment since the programme concentrates on estimation of suspended solids and solids that have not dissolved.
- The vision towards water reforms is that of good environmental stewardship in support of sustainable development and poverty easing.
- Of concern is not only the environment, but also the people who drive livelihoods from it, especially resource poor, vulnerable groups and the people affected by HIV/AIDS.

Benefits of water reforms

Socio-economic

- Strengthened food security through irrigation
- Increase in soil fertility and less loss of top soils highly rich in humus.
- The income and nutritional status of vulnerable groups for instance HIV/AIDS affected households can be increase through various activities that can be allocated to a clean and healthy environment; for example blue farming, bee keeping and mushroom production.
- Improved poverty levels through integrated aquaculture –agriculture.
- Less environmental health risks notably diseases

Environmental

- More constant water flows in rivers, cleaner water due to less erosion, siltation and less flooding.
- An environmental flow that supports aquatic and terrestrial functions is guaranteed.
- Stabilizing climate changes.

Way forward

1. To develop and implement, consultations with key sectors, management plans for integrated water management to ensure that utilization of water resources are sustainably.
2. To promote and devise methods of harvesting rain water using cost effective technologies which can be easily managed and maintained by the local communities.

3. Review existing information on wetlands and other delicate eco systems and where necessary, undertake further studies in order to develop guidelines for their proper utilization.
4. Undertake a comprehensive national study of the potential dam sites on rivers and combine the evaluation of suitable dam sites with catchment conservation
5. Rehabilitate catchment areas; bore holes and gravity- fed water supplies as a safeguard to reduce the impact of supply stocks from droughts.
6. Empower the local communities to participate in the maintenance of water supplies.
7. Domesticating provisions of regional and international instruments on integrated water resource management.
8. Promote integrated watershed management practices for water conservation at all levels of management.
9. Encourage family planning practices.
10. Introduce water catchment and river line conservation at all levels.
11. Introduce community water association to ensure full community participation in water utilization and management.
12. There must be a policy that does not exempt government institutions from paying water bills and other pollution charges.
13. Develop a comprehensive approach to water and areas it affects such as health, agriculture, industry, environment instead of looking at it in terms of drinking and sanitation.
14. Directors of water boards should change from having ministries and political appointees only to inclusion of NGOs, civil societies, trade union, to ensure wider participation in management.

Conclusion

Water resource management is an imperative issue that needs integrated approach, together we resolve and preserve environment.