Tropentag, September 18-20, 2019, Kassel

"Filling gaps and removing traps
for sustainable resource management"

Decision Support Tool to Aid Wetlands Policy Making in East-Africa

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Abstract

Wetlands provide good source of natural water, which is available throughout the year. Research conducted in the past, have shown that wetlands are being converted into agriculture productions sites at an alarming rate, this could be attributed to the unproductive state of upland agricultural soils; due over cultivation, unfavorable climate, land segmentation and population pressure. Majority of East-Africa countries are at different stages of formulating wetland policy that will guide wetland conservation and wise use. However, there is inadequate information and knowledge about the extent and scale of wetlands and how they are being utilized. This can be attributed to the lack of a clear universal accepted definition of what wetlands are, since wetlands naturally differ in size, scale, elevation, soil physical and chemical properties, seasonality and vulnerability status; that is the extent to which wetland have been used and converted to other landforms to the detriment of losing their original state. With the limited definition of what wetlands are, some countries are considering broader wetland policy that will cover all possible types of wetlands without putting into consideration, the unique nature of wetlands in relation to their typology. There is also limited input from stakeholders, who might relay directly and indirectly on wetlands as a source of income.

In the GlobE Wetlands Project (www.wetlands-africa.de), a Decision Support Tool (DST) was developed, based on input from wetlands policy makers and stakeholders in the four East-Africa countries; Kenya, Tanzania, Rwanda and Uganda. The DST development process, incorporated views from wetland policy makers and stakeholders, provided open access information on wetlands and other data that directly or indirectly affected wetlands conservation and use. This information was presented in the DST using a decision tree concept, which was developed with input from wetlands experts, discussed and approved by wetland policy makers and stakeholder. It summarized decision making steps in a way that prioritized wetlands conservation and also looked at wise use in the context of biophysical and socio-economical nature of wetlands and its surrounding by factoring in humanitarian, alternative livelihood, typology, land use and land cover changes into the decision making process.

Keywords: Decision making, decision support, East Africa, policy making, software engineering, wetlands

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