



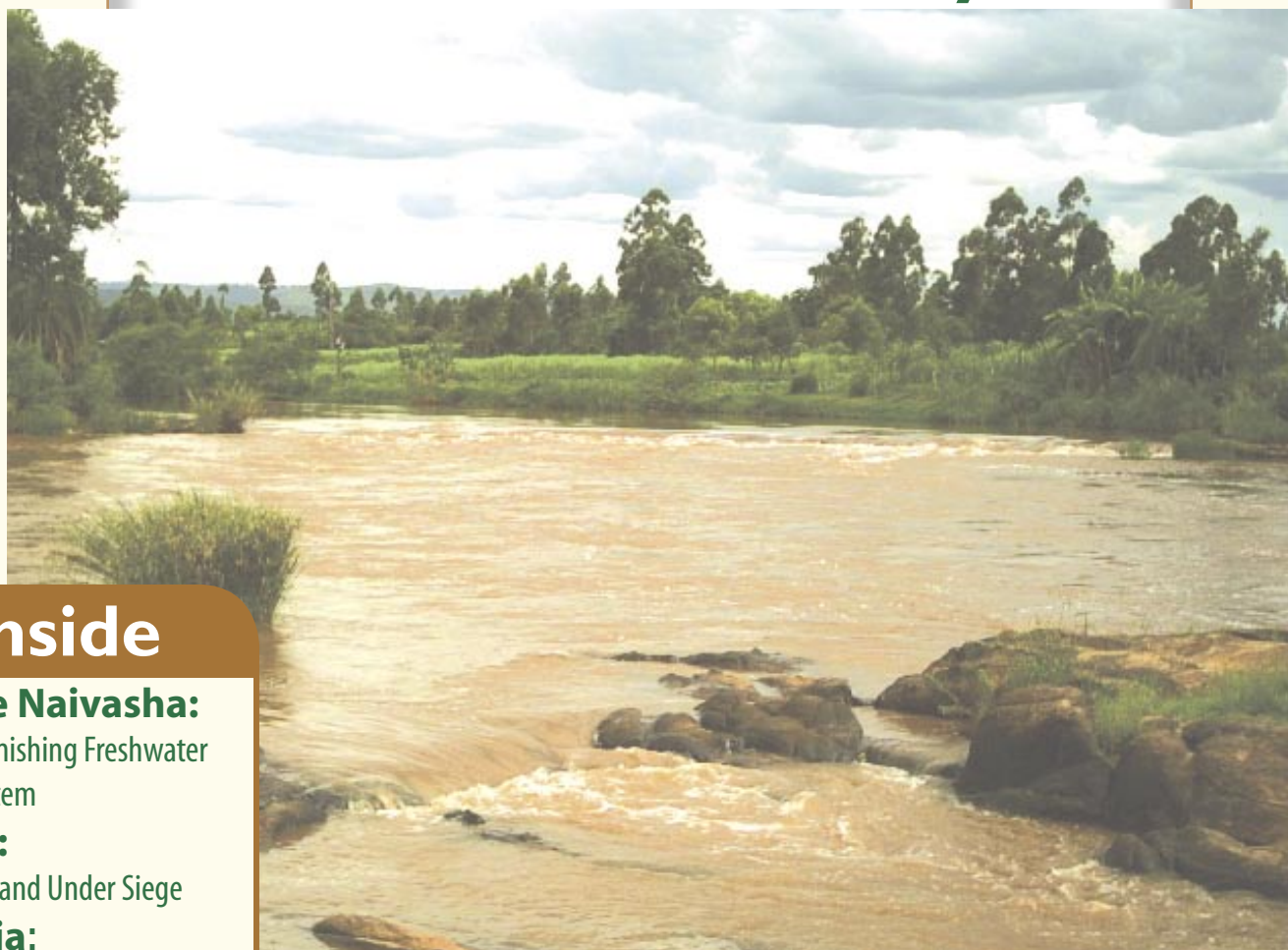
LAND UPDATE

A NEWSLETTER OF KENYA LAND ALLIANCE

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A Survey into the Management and use of Wetlands in Kenya



Inside

Lake Naivasha:

A Diminishing Freshwater Ecosystem

Yala:

A Wetland Under Siege

Nzoia:

Challenges Facing the basin



EDITORIAL

The Role Of Wetlands In Poverty Reduction

Extreme poverty among rural poor people living around wetlands remains a daily reality for more than 56% of Kenya's population, who subsist on less than one dollar a day. Seventy percent of extremely poor households, a majority of who live in rural areas where hunger and poverty prevails, are now being caught up in a new web of lack of access to wetlands as safety-net during hard times due to appropriation of wetlands by private developers. The number of rural households deprived of wetlands, the main source of their livelihood, is increasing daily as a result of expropriation and expansion of commercial activities. If access to wetlands and other common property resources is not treated as a basic human right, the downward spiral of poverty and conflicts this creates will continue.

Strengthening rural communities' organizations, particularly those of customary land users and small-scale farmers, is essential to long-term resolution of wetlands conflicts and improved access to wetlands for sustainable and wise use. The right of these organizations to organize freely and engage in public debate over land and natural resource policy without intimidation and violence by state and private developers' hired goons are fundamental.

Widespread exclusion and impediment of women from gathering and collecting wetland resources, has resulted into impoverishing women more, despite their pivotal role in providing household security. Women and women-headed households around our major wetlands now represent the majority of the poorest

of the poor. Guaranteeing their equal access to wetlands and other natural resources, not as cheap labour, is a prerequisite for eliminating extreme poverty. To the rest of rural poor communities contingent to wetlands, land and natural resources not only represent their main source of food security; it is linked directly to their cultural and spiritual identity. Legal recognition of the special needs of these groups is a basic precondition for self-determination and participation in sustainable development.

It is now internationally accepted that poverty, land rights and the sustainable wise use of wetlands are correlated, and that secure access to wetlands for rural poor is fundamental to improving their livelihoods. Furthermore, wetlands' common ownership by the poor is increasingly recognized as essential to sustained, broad-based economic growth. Although this has repeatedly been recognized by the UN and confirmed in international agreements, failure of national and global institutions to identify problems and implement joint solutions, has often severely limited their ability to increase wetland access and reduce rural poverty. Genuine and meaningful involvement by civil society, including farmers' unions, rural peoples' organizations and NGOs, is a critical ingredient to the achievement of effective policy reforms.

The Kenya Land Alliance calls upon national, regional and global institutions to recommit themselves to empowering poor people by promoting secure access to wetlands and other key natural resources to achieve the common goal of a world free from hunger and poverty.

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Plus... your Letters, Facts, News and much more.

Lake Naivasha

A Diminishing Freshwater Ecosystem

Lake Naivasha is situated in the Kenyan section of the Great Rift Valley, and is one in a chain of eight major lakes found in the valley. It is at an altitude of 1890 metres above sea level. Administratively, it falls within Naivasha division, Nakuru District. Its average surface area is approximately 150 square kilometres, subject to considerable annual fluctuations corresponding to wet and dry spells. The Lake has a width of between 45 and 75 kilometres. It has a catchment area of 1,000 square kilometres and is drained by ephemeral streams that disappear underground before reaching the lake. Primary among them is River Malewa whose source is in the Aberdare Range, Mau Escarpment and Longonot. It supplies 80% of the lake waters, while Rivers Karati and Gilgil contribute the remaining 20%. Lake Naivasha is considered the second largest fresh water body in Kenya after the Kenyan portion of Lake Victoria.

The basin of the lake contains four physically different satellite water bodies comprising the wetland ecosystem. These are: The main Lake Naivasha-a crescent island basin, a crater lake to the southern end known as Lake Oloidien, and Lake Sonachi, commonly known as crater lake.

Source of the Lakes' Freshness

Several factors combine to keep the lake's water fresh. These include; Rain-fall, a large percentage of water being supplied by rivers with fresh water and loss of water via groundwater seepage and exchange with near and offshore sediments and sedimentation of particles to remove solutes.

Ownership of the Wetland

The Lake Naivasha ecosystem is a national resource of great importance and value. The shores of the lake is sur-

Lake Naivasha - An Aerial View



rounded by private land. It is a closed system whose watershed boundary is beyond authority of Naivasha division and the riparian owners. The Government granted the riparian land in the lake to the adjacent landowners who are expected to use it and conserve natural resources therein. For instance, in one of the farms with an area of 460 hectares of riparian land, there exists 251 bird species, 34 mammals including five rodent and eight reptile species. Interviewed stakeholders indicate that there is generally no overall body acting as a custodian of the lake Naivasha wetland. Therefore the wetland is unprotected and use of its resources not well controlled.

Socio-economic and Cultural Values of L. Naivasha

a) Lake Naivasha ecosystem is a source of fresh water that supports the irrigated horticulture and flower growing industry that offers employment to over 30,000 people, a majority of them women, and earns the country foreign exchange.
b) The wetland provides water for

geothermal energy exploration and for use in the power generation and yields some 109 Megawatts to the national grid besides providing employment opportunities. It contributes 60% of the water to the Olkaria power project.

c) The wetland supports commercial fishery that directly or indirectly provides livelihood to over 1,000 members of the local community. The Tilapines, Black bass, and Common carp are especially for commercial purposes. The bass is also taken by rod and line for sport fishing activities.

d) Its littoral zones provide a crucial habitat for fish breeding and foraging by wildlife, which includes hippo, waterbuck, buffalo, and rare species of birds. These are popular with nature loving tourists and local people. It supplies 30% of the warm springs to the northern end of Lake Elementaita, a site that has been given international recognition as an important national heritage.

e) The wetland provides a suitable environment for social activities and

meetings such as organized retreats and camping. Learning institutions organize numerous academic tours to the wetland.

f) The beautiful sceneries within the wetland are often used for filming documentaries.

g) Traditionally, the Maasai community and pastoralists in general use the wetland for watering their livestock.

h) Religious groups value the fresh water as an important resource for baptism and recording of musical videos.

Socio-Economic Challenges

From a population of 7,000 people in 1969, the population of Naivasha town and areas around the lake rose to 190,000 by the year 2001.

This has been attributed to expansion of the flower farms that has led to an increased demand for labourers most of whom live with their families towards the southern side of the lake. Geothermal plant employees and some associated company staff also live adjacent to the lake.

The lake- shore immediately below the settlements, where access is possible, is degraded by pressure of demand for watering livestock and laundry.

Some endangered species that existed two decades ago are presently rarely or never seen. These include the Crested Grebe, Maccua Duck, Saddle-billed Stork among others

Vested interests also do influence land use there. Horticultural development through irrigation, tourism requiring hotels close to the lake, and development of ranches and private land has led to degradation of former woodlands to pave way for such activities.

Ecological Concerns

Presently a paltry 10% of the area formerly covered by papyrus is remaining. This in turn has led to reduction in submerged vegetation that supports aquatic life. Level of water in the lake has been receding at an alarming rate. This is due to a number of factors including: Prolonged dry seasons, trampling by large herds of buffalo, coupled with vegetation clearance and excessive water abstraction and livestock grazing.

Legislative and Institutional Inadequacies

The government has established several sectoral statutes, policies and legislations that impacts on wetlands inscribed under various sectors, all considered directly or indirectly relevant to wetlands conservation and management. Prominent among them is the Environmental Management and Coordination Act (EMCA) 1999, but there is no outright policy legislative and institutional framework on the same.

Hence there is duplicity of functions, and disjointed management of the wetland. A number of institutions like the Lake Naivasha Riparian Association (LNRA), Lake Naivasha Management Implementation Committee (LNMIC) and the Naivasha Municipal Council, among others, expected to manage the wetlands are under-funded, under-supported and are lacking in capacity.

Initiatives Towards Improving Management and Use

- The government has introduced Wetlands Management Education in a number of Institutions of higher learning, an example being the KWS Training Institute in Naivasha.

- Kenya has signed the Ramsar Convention and the Convention on Biological Diversity, CBD. The two are international conventions with specific guidelines on management of wetlands and their resources.

- The LNRA has put in place a management plan whose primary objective is to promote sustainable and wise use of resources in the lake and its surroundings.

- Ecological problems like overpopulation of the water fern (*Silvinia molesta*) and the water hyacinth have been controlled by the introduction of host specific biological control agents / weevils by the Kenya Agricultural Research Institute-KARI.

- The Naivasha Municipal Council with Japanese and German assistance is in the process of upgrading the sewerage network and treatment plant to reduce their risk to the wetland.

- The Fisheries Department and KM-FRI undertakes monitoring of fish stocks and from time to time puts into place fishing bans and also prosecutes poachers.

- The Ministry of Water Resources Management and Development did a detailed water abstraction point survey and stationed a hydrologist and a water bailiff to monitor use of resources.

Shortcomings of the Above Initiatives

Research commissioned by KLA found out that only a minority of stakeholders participate in decision-making process. Furthermore, there are allegations that selection of members to represent stakeholders in such processes is biased. In addition, consensus was not reached on issues contained in the drafted and adopted Management Plan for Lake Naivasha wetland.

A wider section of the local community is also ignorant of various government Acts in place. They assume that the management of the wetland is entirely a responsibility of the KWS, Fisheries Department and Naivasha Municipal Council. The pastoral Maasai community is not directly represented as stakeholders of the wetland, consequently the community feels it does not benefit much from developments in the area. Further they feel their proximity to the geothermal power plant affects their

Yala

A Wetland Under Siege

environment and health. The management of the catchment system is not looked at as a whole and it does not incorporate aspects from the inflowing river catchments.

Areas of Conflict

Resource Users

There is apparent conflict among users as to who is responsible for degrading the wetlands, with the fisherfolk blaming the large-scale farmers for excess water abstraction, who in turn blame the small-scale farmers for siltation of the lake while civil rights groups blame land owners, hoteliers and ranchers for grabbing access corridors to the lake.

Human - wildlife conflicts

Construction of residential estates like Banda and Kihoto on the eastern sides of the wetland has reduced space available for wildlife. As a result, large mammals like hippo and buffaloes have become destructive to particularly small-scale farmers who do not have electric fences.

Inter-institutional conflict

Due to unco-ordinated mechanisms of implementation, there arises conflict as various institutions try to implement similar or different regulations.

Recommendations

A clear system needs to be put in place to identify relevant stakeholders, incorporating them with their roles well defined to enhance development of clear and acceptable wetland management strategies.

There is need for grass-root focused awareness to enable the communities to identify themselves with the wetland as a resource and habitat. They in addition need to be empowered to manage and monitor the wetlands.

KLA and partners need to take bold and strategic approach to ensure vertical and horizontal focus in lobbying for the development of wetland policies.



Large-scale agricultural development remains the biggest threat to wetlands accessibility and sustainability

Its History

The Yala Wetland is a flooded plain, whose area of coverage has been given by various researchers as ranging from 17,500 to 35,000 hectares and runs through the two provinces to the west of Kenya, that is Nyanza and Western Province. It lies within the three districts of Siaya, Bondo and Busia, an area according to the Kenyan National Census report of 1999, with an estimated population of close to a million people. The main source of the swamp water is river Yala, a river that eventually drains into Lake Victoria.

The wetland has three other significant water bodies; Lake Kanyaboli, Lake Namboyo and Lake Sare. Even before Kenya's independence, the swamp was attracting a number of interest groups for a variety of reasons. An initial attempt in the early 1950's to reclaim the swamp for agricultural purposes was thwarted by environmental conservationists who insisted that its rich, diverse and unique biota needed to be conserved. In 1954, a survey was commissioned by the Nile

Water Resources Services to speculate on its development potential. Under the guidance of Sir Alexander Gibbs, it identified the agricultural potential of the swamp. A successful appeal by the Kenya government to the United Nations to assist in the implementation of Sir Gibbs' recommendations led the Food and Agricultural Organization (FAO) to release funds for reclamation of what came to be referred to as Area I measuring around 2,300 hectares. Further developmental activities that took place during the five year life of the project before it ground to a halt in 1970 was the construction of a 9.0 kilometre diversion canal and a protection dyke on River Yala among others. In 1972, an additional research was commissioned by the government to investigate possible developments of the Yala swamp, and it was done by ILACO, a Dutch firm. The firm recommended reclamation of a further 9,200 hectares for agricultural development and a further area known as Area III consisting of 6,000 hectares was to be left as a natural buffer zone.

In 1979, further research was done by F.C Weger Infra Consult and Kitololo. These were completed in 1984, and it is on the basis of this report that the government has sought assistance to reclaim the swamp.

Socio-Cultural and Ecological Importance of Yala

A BP Award-winning research, completed in 2004 by leading researchers and students of Moi University-Eldoret identified a number of socio-cultural importance of the swamp.

According to the findings, 95% of the population of Busoga, Alego and Usigu Divisions that border the swamp, are directly employed in natural resource harvesting from the swamp area through agriculture, fishing, animal husbandry and handicraft making.

A good number are involved in subsistence agriculture growing mainly maize, beans, sorghum and millet. Most of their agriculture is along the 100 metre margin along the wetland area, commonly referred to as Area I that has been in custody of the Lake Basin Development Authority on behalf of the government.

The area, together with River Yala have been the community's only source of water for household use, farming and fishing. It serves as a site for many religious and cultural events including cleansing ceremonies. A number of important herbal medicines are found in the swamp area too.

A Case Study Research done in 2005 by three eminent local scientists (Professors Rasowo, Abila and Manyala) from the area and presently lecturers at Maseno and Moi Universities identified the area as host to a number of near extinct and endangered mammal, and bird species. These include the swamp antelope, commonly known as the Sitatunga, the Sharp Pied Babler

bird among others. According to the report, the swamp further acts as a refuge to fish species extinct in Lake Victoria. These include the Lake Victoria Tilapia (*Oreochromis esculentus*).

An Agro-Investment Plan

The Kenyan government and the Dominion Farms, an international organization based in Oklahoma USA, through the Siaya and Bondo County Councils have since entered a leasehold agreement allowing the firm to take over some 3,700 hectares of swamp for what the firm's Project Investment Plan refers to as a highly mechanized large scale farming project.

The report of August 2005 plans to among other things engage in fish production and processing, cotton production and ginnery, rice cultivation and milling, production of feeds, construction of a multipurpose dam, hydroelectricity generation, large scale production of maize, beans, soybean among a host of other crops.

These ventures, according to Dominion Investment Plan of August 2005 Page 2, would provide employment opportunities for the local populace, enhance supply of food in the region, provide transfer of technology on state of the art agriculture and business practices to the local employees, and generally spur growth and development in the region. To the government, it was to provide additional revenue through taxes and levies and become an international research and training facility for Kenyan students.

Areas of Conflicts

Various stakeholders have raised varied objections and counter-objections to specific aspects of the project and at times the project in its entirety. These range from ecological, environmental, land usage and compensation to viability of the proposed projects.

Market Competition

A number of crops that the project proposes to produce were being grown mainly in the wetland by the locals for subsistence and for the local market.

The BP Award winning report on the Options of the Yala Wetland Management noted that the areas around the wetland had shallow soils, were rocky and with its aridity would deter reliable agricultural activities. This would further aggravate the problem of food insecurity in the area as the community would now be dependent on food grown by the firm on the swamp.

There is also a fear of possible introduction of Genetically Modified Organisms (GMOs) by the firm into the area, an activity whose impact has not been fully understood by the locals and by the stakeholders. The Investment Plan does not explicitly rule out possibility of practicing it.

Land

The gazette notice number 2570 under the Trust Lands Act (CAP 288) of 25th August 1970 issued titles to 63 families allowing them ownership of land.

In a letter to the Kenya Land Alliance dated October 25th 2005, a group from the area, the Yala Swamp Riparian Community, raised objections to what they see as an attempt by Dominion investment group to annex their private parcels of land while making references to the M.O.U it signed with the Siaya County Council yet according to the secretary of the group Mr. Alfred Otieno Ayiro, that land is out of the scope of the said M.O.U as the M.O.U could only touch on the Trust Land. Their letter of objection talks of the firm fencing off land belonging to individuals and evicting them, a strategy not captured in any agreement with the firm.

Multipurpose Dam

A visit to the swamp between the dates of April 2nd and 5th 2006, by a host of stakeholders and Non-Governmental Organizations, (NGOs) accompanying a fact-finding mission from the office of the Director General of the National Environmental Management Authority, witnessed that the construction of the multipurpose dam has already started even before an environmental Impact Assessment is complete and complaints from the landowners in question addressed.

The management of the firm admitted to have cleared the vegetation on the land despite protests from the locals, cut down trees and burnt the grass, then temporarily closed the weir on river Yala ostensibly to see how much flooding as a result of backflows would be.

Locals in whose land the dam is to be, however say this was a way of forcefully evicting them. We witnessed a number of nearby farms that had been flooded and washed away, with the 'community representative,' Mr. Erastus Odindo echoing what he said was the bitterness of his fellow land owners. 'How can we benefit when our animals have nowhere to graze, water is flooding into our homes and destroying our farms and we now have no access to clean water?' he posed when asked what sort of benefits the community hoped to get from the project.

Access Routes and Roads

According to the Dominion Investment Plan August 2005 Page 24 line 2, 'Tight security shall be put in place to prevent the access area being a risk to the project...the road may have to be closed to the public and access roads skirting the farm maintained and improved.' The said road from Daraja transversing the main swamp to Ratuoro shopping centre and health facilities has led to a standoff between the community and the firm. When closed the residents

have to walk around the perimeter of the now fenced off swamp, adding an extra 13 kilometres to their journey to reach the shopping centre and hospital. By the time of the fact finding visit, a notice indicating the times in which the road is accessible to the public had been put up as 6:30 AM to 6:30PM.

Ownership of Lake Kanyaboli, Lake Namboyo and Lake Sare

Page 17 of the firm's investment plan indicates that the firm intends to put upto 800 fish culture cages in Lake Kanyaboli, as part of its aquaculture initiative, a venture with a potential to lock out fishermen who depend on the lake for livelihood as the cages would have to be protected. Further to that, the lake by virtue of being surrounded by land that the firm has lease is likely to be fenced off and taken as property of the firm and not a communal property.

Resettlement and compensation

The issues of resettlement and compensation have not been thoroughly exhausted. During our visit to the area, we witnessed a number of families who had refused to take the compensation money being offered claiming that it was either too little or they weren't properly involved in reaching at the figure.

There was also no proper resettlement arrangement from the project owner and from the Local Council. A number of community members also claim they were intimidated into taking the money by being informed by the area Chief that their lands would go whether or not they accepted the money.

There being no relocation arrangements, the community members who sold off their land are being accused by those who didn't of putting undue pressure on the little available grazing and farming lands, and this presents a scenario of possible conflict.

Environmental Concerns

A Stake holder's Forum to discuss the Environmental Impact Assessment Report, EIA in Kisumu in December 2005 raised up to 95 objections on issues touching on the environment.

The Dominion investment plan proposes to built a number of processing plants and mills within the swamp area. These include a rice mill, fish processing plant, feed mill, cotton ginnery, fuel storage and dispensing station, hydro electric power generators among others.

The stakeholders felt that the capacity of the swamp may not adequately support these, together with potential of polluting the swamp and eventually lake Victoria. They proposed the use of already built processing, milling and ginnery infrastructures in the nearby centres of Ndere and Siaya town less than 10 kilometres from the site or fish processing plants in Kisumu Town.

Local Politics

Presently a lot of politics surrounds the project. This has split the local representatives into various camps. Some locals whose lands are to be taken view the local authorities as collaborators in a ploy to rob them of their livelihoods, while a number of local leaders see the locals as being selfish and anti-development by refusing to give up their land for the common good of the community.

There is a claim that a number of stakeholders have been compromised to either support or not support the project. As such raising any issue on the project however genuine it may be, one is quickly branded as falling in the pro or anti – Dominion alignment.

Challenges Facing The Nzoia River Basin

Chepkoilel River - Upstream



Downstream



Local populations should be encouraged to play a bigger role in wetland ecosystem management

Nzoia River Basin covers an area of 12,842 Km² and drains through several districts on its way to Lake Victoria. These include Uasin Gishu and Trans Nzoia Districts in the Rift Valley Province, Mt. Elgon, Lugari, Teso, Bungoma, Kakamega, Butere-Mumias and Busia Districts in Western Province, and Siaya District- Nyanza Province. River Nzoia is 355 km long with a mean discharge of 118 m³/second and is the largest basin within the Lake Victoria Basin.

The river originates from Cherengany Hills and Mt Elgon at 4320 metres above sea level and is fed by several streams namely Kamukuywa, Sosio, Kimilili, Kibisi, Kuywa, Malakisi, Tisi, Lwakhakha, Suam, Kisawai and Kimothon among others. Generally the river flows very fast with radial to parallel drainage pattern on the upper and middle slopes respectively. On its way to the lake the river drains through small and large-scale maize and wheat farms, coffee plantations, Pan Paper Factory in Webuye, Nzoia and Mumias Sugar Factories.

A Source of Budalangi Flooding and Pollution of Lake Victoria

Runoff from rural and urban centers from areas with mixed land use practices are drained by the river before reaching the Budalangi floodplains. The river is known to cause two major problems; Firstly, the periodic flooding of the Budalangi floodplains which brings with it heavy silt from the deforested upper catchment areas. Secondly, pollution of Lake Victoria as the river drains areas with high agro-industrial activities where a wide range of chemicals including DAP, CAN, herbicides, pesticides, acaricides and persistent organic pollutants (POPs). Further, input of pollutants comes from improperly treated wastewater from industries and urban centers situated along the river which eventually drain into the lake. The wetlands found within the catchment of the Nzoia River Basin differ depending on the section of the basin where they are found. Wetlands in the upper catchment are predominantly riverine in nature, found along the first order streams in the highland areas inter-copped

with natural and man-made dams and a few palustrine wetlands. The middle section of the basin has mainly riverine wetlands but most of the palustrine wetlands have been reclaimed for large-scale agriculture particularly in the sugarcane growing zone of the basin. Palustrine / riverine wetlands again dominate the lower catchments where swamps of different sizes are found.

Towards the banks, River Nzoia forms a wide band of wetlands on both banks particularly between the river and the dykes constructed to contain the floodwaters.

Wetlands in the River Nzoia Basin

River Nzoia is the central feature of all the wetlands in the Nzoia basin. Most wetlands either feed into the river or are formed as a result of water from the river. It has multiple uses to the communities along it, which ranges from subsistence to highly commercial use. The river is the source of water to domestic riparian urban and rural communities as well as to the major industries such as Panpaper Mills, Nzoia and Mumias Sugar Companies acting both as raw material, coolant and for wastewater discharge.

Chepkoilel Wetland

Chepkoilel Wetland is a permanent riverine wetland 10 km long and about 700 m wide at the widest point with an area of 5.6 Km² and a catchment area of 210 Km². This wetland is used for live-stock watering, water abstraction for irrigation at Equator flower farm and smallholder horticulture production of vegetables and tomatoes. Domestically, it supplies water for livestock, provides good grazing grounds, and is a resource for bee keeping. Moi University uses it for its fish farming, and discharge of domestic sewage wastewater. It also

acts as an important wildlife habitat for birds and fish. The wetland serves a major role as it buffers agricultural inputs from the large-scale wheat and maize plantations in its immediate catchment.

Threats Facing Chepkoilel Wetland

The main threats it faces are:

- Encroachment for agriculture.
- Reclamation by planting of Eucalyptus trees at the banks.
- Chemical pollution from flower farms.
- Sewage and aquaculture waste discharges and
- Appearance of invasive plant species.

Budalangi wetland:The entire Budalangi Division fits the classification of a wetland as the division is seasonally under water particularly during the periodic floods that occur in the area when the Nzoia River bursts its banks. It can be grouped as a palustrine wetland. However, the system is composed of heterogeneous wetland habitats consisting of the main Nzoia River, the Nzoia river floodplains, open pools and swamps up to the mouth of Nzoia River into L.Victoria. The wetland area is found in Budalangi Division, Busia District.

Maji Mazuri Wetland:This is a large expansive natural palustrine wetland about 12 Km² located in Soi Division that acts as an important bird habitat especially to the endangered Crested Crane and provides water for commercial use to the Maji Mazuri Roses Flower Farm (Sian Roses Limited)

Ziwa-Sirikwa Dam: These are a series of permanent lacustrine man-made wetlands that were established around 1968 to provide water both for domestic use and for a sisal factory downstream.

Soin/Kiptoror stream and dam:

This is a permanent riverine wetland that is a tributary to Chepkoilel River. It has a dam which is a permanent man-made lacustrine wetland con-

structed during the colonial days and is approximately five hectares.

Saiwa Swamp: A riverine / palustrine wetland which originates from the Kamakira forest and forms the Saiwa Swamp National Park, the only protected wetland within the Nzoia River Basin.

Siaga Wetland: A riverine system found on gently undulating topography. The wetland begins at Mauna dam and runs downstream along Gaula stream to drain directly into Nzoia River. Mauna dam dates back to the colonial era and it is presently serving as a government piped water scheme.

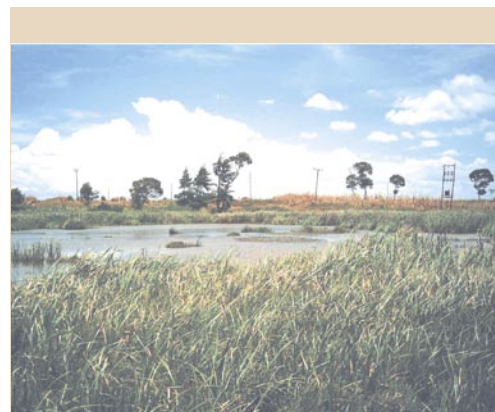
Nyasanda Wetland:Lies in a shallow U-shaped valley and receives its water from a number of underground springs oozing from the foot of the small hills on the upstream of the wetland as well as from the surface runoff.

Other Wetlands in the Nzoia Basin are:

1. Kaplogoi Stream
2. Sosiot wetland
3. Kaptule Wetland
4. Kapkis Wetland
5. Sergoit Dam / Lake Sergoit
6. Kerita swamp
7. Kholera stream
8. Saf Stream Wetland
9. Ukwala wetlands
10. Nambusi Wetland
11. Kisama Wetland
12. Tande Wetland
13. Kipsaina and
14. Anyiko Wetland

Status of Wetland Conservation and Management in the Lake Victoria Basin

The Government of Kenya to date has put in place certain frameworks to address conservation and wise use of wetland ecosystems. The existence of these frameworks however may not create the desired impact as long as there is no national wetland policy in place. Secondly there are attempts to institute people-driven provincial



Kiptoror Stream



Saiwa Swamp

and site-specific wetland management plans to take care of the many wetland ecosystems which occur in non protected areas. Although wetland ecology and management courses exist in some government or private institutions, there is lack of co-ordination and integration of these courses in the formal educational curriculum. Awareness creation on conservation and wise use of wetlands to date has been mainly done by both national and international NGO's.

It is important to note that the wetland policy currently under formulation is the second one, the first having been done by the KWS – Netherlands Wetland Conservation

Programme. It is time to pressurize for a wetland policy as soon as possible to stop the current abuse of wetland ecosystems.

Additional Initiatives on Wetlands Management

i) Capacity Enhancement

To enhance wetland management skills in the country, the government has included wetland education into the curricula of various learning institutions. Some education and awareness materials are now available in different institutions in various forms and formats like books, brochures, pamphlets and newsletters targeting various stakeholders. A number of awareness programmes are also in place, however given the existing low literacy level, most of these initiatives are not reaching the resource users who are the majority and the most important stakeholders.

ii) Recognition of local communities in wetland management

EMCA recognizes the role of local communities and has established a legal framework that empowers local communities to be actively involved in wetland issues in form of various committees and a right to a clean environment. However, the level of awareness is still very low making the full participation of the local communities difficult.

iii) International collaboration

Kenya is signatory to various international conventions like the Ramsar and CBD, that are relevant to international collaboration on the management of wetlands and their resources. This has seen some wetland sites in the Rift Valley like Lakes Naivasha, Nakuru, Bogoria and Baringo being conserved under these conventions' guidelines. Consequently, various management



River Nzoia

Its course with a healthy buffer zone

plans have been developed for various wetland sites like Nakuru, Naivasha and Saiwa to ensure their sustainable use. Without the full participation of the communities, management plans remain mere documents. This can be seen from the Lake Naivasha and Saiwa Swamp Management plans which are not achieving the desired objectives.

iv) Funding

The Government of Kenya through various local and national institutions has availed some funding to various authorities to ensure wetlands are conserved for posterity. For Lake Victoria Basin, this includes bilateral and multilateral arrangements like the Lake Victoria Environmental Management Programme (LVEMP) through the wetlands component. However given the issues to be sorted out in wetland conservation and management, the resources available are too minimal and it will take a long time to feel the impact of such interventions.

Challenges to Conservation and Management of the River Nzoia wetlands

1. Land Ownership/Tenure

Most wetlands in non-protected areas occur in land owned by individuals, trust land and communal lands. Land tenure essentially defines the rules and social contracts whereby individuals and groups acquire, hold, transfer or transmit interests and rights in land tenure. Changes in land tenure have resulted in a lack of land use coordination and environmental insecurity. Perceived free access to land on a 'willing buyer, willing seller' basis and free choice of land use combined with a single-use philosophy has exacerbated wetland loss and degradation.

2. Land Use Trends

Over a period of time there have been some major changes in land use. These changes have, mainly been due to agricultural and land use policies that have severely affected the environment resulting in wetland loss and degradation. Reclamation of wetlands for agricultural development is the biggest threat to national wetland conservation and management. Reclamation is perceived as a form of positive development that is frequently misguided in the sense that greater productivity would result from not leaving the wetlands intact and managing them properly than from reclaiming them. A case in point that needs urgent attention is the ongoing large-scale reclamation of Yala Swamp in the Lake Victoria basin, which threatens to destroy ecological status of the largest wetland in the region.

3. Wetlands Use and Planning

There exist many statutes in Kenya that relate to land and environment. These were enacted independent of each other and are being implemented by various government departments and institutions. Despite the existence of these many legal instruments, there has never been proper and comprehensive land use planning. Instead activities have

been co-ordinated largely at the sectoral level. The consequence of this has been increasing conflicts among different sectors of the government regarding conflicting use and activities leading to wetland loss and degradation.

Inadequacy of legal provisions, incentives and disincentives with regard to the sustainable wetland conservation and management can also lead to unco-ordinated and unsustainable land use and sectoral conflicts. Lack of institutional coordination mechanism and lack of awareness of policies relating to land by the public and lack of their participation in land use policy formulation and amendments are other grey areas.

4. Inadequate Funding Sources

Funding wetland management and conservation strategies has remained the preserve of international donor community and NGOs with very minimal contribution from the government. This has given rise to haphazard and unco-ordinated programmes most of which end before attaining sustainability level. A deliberate effort needs to be put in place to ensure coordination and continuity of wetland conservation programmes being run by all stakeholders.

5. Inadequate Public Education and Awareness

A wide variety of education and awareness materials are available in different institutions in various forms. Much of these however are in hard copies and available to the users in form of books, brochures, pamphlets and newsletters. In other places the information is in audiovisual forms and not available to most of the stakeholders especially the local community.

Since most wetlands occur in the rural areas, some form of extension services should be put in place to create awareness in these areas. These should make

use of print and mass media, and deliberate inclusion of wetland management and wise use principles in both curricula and extra-curricula activities of formal school system.

International Wetland Day celebration should be used to create awareness to the wider public. Wetland ecology and management courses at the universities and tertiary institutions such as Kenya Wildlife Service Training Institute (KWSTI) should be strengthened to give wetland managers and policy makers a strong foundation.

6. Inadequate Policies and Institutional Framework

Policy documents and their implementation are critical in harmonizing the various aspects relating to wetland use and development. In Kenya policies and legislation on wetlands are embodied and inscribed in about 77 sectoral sections of various Acts. This has resulted into duplications and conflicts.

To harmonize these, the country has developed EMCA. Section 42 of this Act deals with wetlands. Though the country has the relevant policy that can guide wetland conservation, the complete implementation and enforcement of EMCA is still lacking.

7. National, Provincial and Site-specific Management Plans

Management plans guide management decisions and interventions. Lack of national and provincial wetland-specific management plans has seen wetlands integrity being compromised and misused due to the failure to apply wetland wise use principles.

This has seen important wetlands like Yala Swamp being turned into ecologically mismanaged ecosystems where their socio-economic potential is compromised

Challenges Facing Trans-boundary Wetlands

Firstly, there is lack of exchange of information amongst and between stakeholders. Secondly, lack of control of point and non-point pollution sources across national borders. There is also lack of awareness on anthropogenic impacts of upstream-downstream linkages on biodiversity and livelihood of riparian communities. Finally, inadequate maintenance of wetland ecosystems, species of plants and animals especially those whose distribution covers adjoining countries e.g. establishment of protected areas and regulating utilization of biological resources especially along migration routes of birds, fish and other animals. Development of management plans for trans-boundary wetlands is extremely important as a first step towards sustainable wetland resource conservation. Local communities from both sides should be involved to ensure a shared vision and national and regional commitment.

Prioritization of Sustainable Management Strategies

It is imperative that community-driven wetland management plans be developed at national provincial and site specific levels. In so doing, attention should be paid to ensure the following guiding principles are addressed adequately. Interventions should aim at:

- Maintaining the essential values / functions of the different wetland types.
- Preserving their multi-functionality.
- Taking into account co-relationships between wetlands and other ecosystems.
- Involving rural, wetland dependent communities in their management.
- Integrating conservation and development activities for sustainable use.

The need for Securing Wetlands as Common Property Resources

The Common Nature of Wetlands and their Importance

Millions of Kenyans live and actively use wetlands as common pool goods, justifiably so because wetlands are classified by National Law or specifically Government Lands Act as public lands, which in many places are actively managed by their inhabitants through common property arrangements. Indeed to many Kenyans wetlands are often left open for livestock grazing, fishing, and as all-inclusive small-scale irrigation areas at different times.

The physical nature of wetlands as a natural resource presents difficulties in excluding other users, yet the selfish use of the wetland resource by one user decreases the availability of the same to others. However, just because they are accessed and managed by many users does not mean that wetlands as common property resource are automatically subject to overuse and degradation. To the contrary, wetlands users in Kenya like elsewhere in the world have defined rules and evolved norms for the regulation and conservation of the shared wetland resource.

The wetlands overuse and degradation are largely associated with various pressures such as privatization, individualization, and commercialization coupled with state appropriation in favour of private developers and damming among others. Wetlands as commons fulfill religious, cultural and recreational functions, but are of particular importance for securing the livelihoods of poorer or disadvantaged groups in the society, including women and landless people. Although the value generated by the use and sale of diverse products from wetlands as commons is not quantified in our national development statistics, it is estimated to be substantial. Quite clearly, wetlands contribution to rural incomes

is significant. If socio-cultural and non-consumptive values are factored in, then wetlands as commons play an even more significant role in the lives of the rural poor. Women in particular are often primary gatherers and collectors of products from the commons especially wetlands. It is crucial that this access is not impeded but indeed strengthened, secured and enhanced not only to sustain and improve livelihoods, but also to provide communities with the incentives necessary for conserving the wetlands as common resource base upon which they depend. Legally recognized property rights to wetlands as shared resource would provide users with incentives to manage the wetlands sustainably. Wetlands as common property have often been referred to as private property of a group, however with one important distinction: such regimes often recognize the rights of secondary or transient resource users, such as seasonal grazing or foraging.

To manage wetlands as commons, users create rules or employ existing norms, often based on custom, to specify who can benefit from the resource and how, including their duties towards maintaining the wetlands. If secure from external pressures, common property regimes can provide communities of users with the necessary incentives for sustainable wetland management. If indeed individuals within the group are secure in their membership in the group and are assured that others will abide by the rules, they will have an incentive to comply with the rules and standards crucial for group functioning.

Policy implications

KLA holds the position and proposes that for wetlands as commons to be secured, there is a need to devolve authority to the lowest level possible

as a sure means of improving the effectiveness of the management of wetland as common pool resources. Thus, while broad principles may be best established at the national level, enforcement requires well defined mechanisms that are backed by the state, and specific rules and regulations should respond to cultural, political and ecological demands at local levels.

This means they should be adopted and implemented at the lowest possible level of governance. Management of policies affecting wetlands as common pool resources should define the broad processes of rights allocation and conflict resolution. It is important to highlight the state's role in defending local rights against outsiders and arbitrating between groups when local systems are unable to resolve conflicts.

Secondly, it is essential for state recognition of common property systems to enable those who depend on wetlands as commons to reap the benefits from these areas. To minimize or deflect external pressures and threats on the commons, it is essential that common properties whether wetlands, forests, fisheries, pasture rangelands, wildlife or minerals are formally recognized. The commons, much more than individually-held properties, are at risk of appropriation from external and internal actors, usually without adequate compensation for users. While formal recognition can include registration of rights of all users as a means of securing their access and use rights, it does not necessarily mean that group resources can subsequently be used as collateral. Records of rights should include secondary rights- such as seasonal rights or rights to exploit only specific resources in an area – and the ways different user groups negotiate their rights with each other.

However, it should be noted that strengthening individual property rights over wetlands can undermine the existence of the commons. When strengthening private individual rights over wetlands, third party effects need to be taken into consideration as secondary use rights might be cut off or undermined. Mechanisms should be established for these users to obtain a share in the benefits or receive adequate, just and prompt compensation. Rights registration systems that seek to minimize restrictions on resource transfer may seem to be more efficient, but if they do not accommodate the rights of other customary users, they may reduce both equity and overall productivity of wetland resource systems.

Devising strategies and mechanisms to strengthen group institutions, and making sure they are accountable and transparent for all members, can increase overall security of commons. It is well-established that secure rights for the collective are important in common property systems.

On the other hand insufficient security for individuals may destabilize group functioning and effectiveness of collective institutions, even where common properties may be officially supported and encouraged. Individual security within a collective setting requires effective enforcement and conflict resolution mechanisms. Thus, creating a climate of transparency and accountability will provide group members with assurance that they will receive benefits from taking care of the commons.

Fostering innovative ways to diversify the livelihoods of commons users can help reach both equity and environmental stewardship objectives. Therefore, there is a need to actively seek income generating opportunities for communities by identifying and supporting community enterprises that

may generate benefits, which diversify the range of livelihoods options as a basis for strengthening community solidarity and incentives for shared resource management.

Lastly, from where we stand within KLA membership our solid proposal is that securing the commons requires empowering local communities to deal with outsiders. The commons do not exist in isolation, but are integrated into national and global economies. However, local people cannot maintain their common resources if powerful outsiders can take/exploit and extract the resources with impunity.

Outside investors can be an important source of funds and expertise to enhance the value of resources, e.g. through ecotourism, but efforts are often needed to build the capacity of communities to negotiate with outsiders so that their resources are not used without their informed consent, and local people receive an appropriate share of the benefits. International policy debates, including trade discussions, should also recognize and respect other forms of property other than individual property.

Position of Kenya Land Alliance on Yala Wetland

KLA holds a position that for thousands of Yala Swamp rural poor people, the use of the swamp as a common property resource governs their livelihoods. Therefore, the sustainable use of the swamp to reduce poverty depends on institutions like NEMA, Water and Agricultural ministries, Fisheries department among others, that govern its use, property rights and collective action. Despite the existing arrangements, which should help in applying already tested standard including a sound understanding of local resource conditions and relationships, the contentious investment project plan is compromising all. Simply put, Yala Swamp encompasses many complex social, economic, cultural and political

relations. The Yala swamp territorial space have very different meanings to different people and groups. We in KLA increasingly hear that 'Land is Life' or in Swahili 'Ardhi ni Uhai,' reflecting the idea that land is more than just a commodity, an economic asset, or an investment opportunity. Land, like that of Yala swamp, in fact, is not merely a livelihood source; it is the basis of people's identity, culture, social standing and helps to establish their powers to represent and defend their interests in the formation of public policy.

Yala swamp, we insist, is better and effectively used on a collective basis rather than being divided in portions invariably leading to ecologically unsustainable units, even in situation of locating a highly ambitious agricultural and industrial set up where large amounts of land is required to be allocated to individuals. Very important resources like Yala exists to:

- a) Provide resources - such as water – that are not as effective when made available privately.
- b) Provide fall back in hard times like during droughts and
- c) Allow people to exploit their private resources effectively.

The debate on use of Yala Swamp, does not consistently reflect the diversity of viewpoints of land and its role in development. This can have the negative and often unintended effect of excluding the concerns of poor men and women from policy consideration. All in all, we advocate for securing of Yala swamp as a common property resource which requires that:

- The Group (residents contingent) has rights that are externally recognised and protected as is the case for private property.
- Individuals are secure in their membership in the group and
- The Group has effective mechanisms to regulate investment and use of the commons to provide assurance that resources will still be there in the future.

FACTS

Did you know that...



Most plastics are made up of tiny particles (usually 1 to 3 mm) called “nurdles”. When plastic degrades, especially on the open ocean, where an astounding volume of plastic has accumulated over the past few decades, these particles are released.

Other plastics are also battered by wind, waves and the energy from sunlight, and end up breaking into even smaller micro-particles. Plastic pollution, including the extremely small pieces of plastic pose an unknown but rapidly increasing threat to many kinds of sea life. It is already so advanced (scarcely 50 years after they first became commonly used), that in some areas of the open ocean, there are six times as much plastic as there are plankton (tiny sea animals.)

One would have to be willfully blind to declare that plastic pollution is not a serious and rapidly increasing threat to the health of our planet’s world-ocean. Animals such as plankton, jellyfish, turtles and seabirds ingest plastic in its various forms, and their digestive tracts are clogged up with the indigestible pieces, which provide absolutely no nutrition. An even more dangerous effect of plastic pollution results from animals’ ability to absorb large amounts of toxic substances such as arsenic, DDE (a long-lasting product of DDT), antibiotics, and chemicals such as oestrogen from birth control pills (oestrogen

passes through the body unchanged), which causes havoc in many marine and fresh water ecosystems.

Even extremely small concentrations, of oestrogen can cause male sea life to become female, with predictable consequences for reproductive success in affected populations!



Recent studies indicate that up to 24 billion tonnes of topsoil is lost annually from the world’s arable land, due to poor agricultural practices.



Trees do not have life expectancies like humans. Some in the Congo Basin are believed to be 4,000 years old or more. How can trees live so long?

The simple answer is that they are not as complex as people. So long as conditions are right, trees continue to live and grow, until something interrupts it.

On average Russians use about 500 liters of water per capita per day - compared to 200 liters in Europe and 120 in Germany. An aging, leaking infrastructure and inefficient industrial facilities are largely to blame for Russia’s profligate water usage.

An acre of trees can remove about thirteen tonnes of dust and gases every year from surrounding environment.

LETTERS TO THE EDITOR

We write to thank you for copies of Land Update and posters you have regularly sent to Namuncha Maasai Community. The views and arguments raised in the October-December 2005 issue constitute ingredients that make the framework of a good National Land Policy. However, we pray that KLA focuses on the issue of 'Displacement of people as a result of Land Clashes.'

In the 1990's we thought land clashes was as a result of KANUISM. NARC is in power now yet land clashes are still a frequent phenomenon. Every other week, we are informed of clashes in Rift Valley. We know that the government of the day will always run to battle sites to separate warring groups, which is good and commendable. However, we notice that as soon as the smoke of burning houses settle down, and blood of the dead dries up, the issue is quickly forgotten just to be remembered when it re-occurs elsewhere.

Land clashes are caused by historical injustice of land distribution. Communities lost their ancestral land to white settlers who evicted them from the highlands to the arid and semi-arid areas with insignificant signs of developmental activities like schools, health facilities, roads, water, and electricity. Then came the black settlers in the name of post independence leaders, freedom fighters, land buying companies and squatters, who took over land without considering its original owners. The wish of the black settlers is to maintain the *Status Quo* designed by colonialists.

Those of us, who lived in the Rift Valley in the 60's, witnessed the scramble for 'free' land in Nakuru District. Some individuals and groups were given land as gifts while others out of guilt, evicted white settlers from their farms and

sold it to their poor kinsmen with total disregard to the original owners who had no idea what was going on then. Consequently, we are likely to witness many more pockets of land clashes, unless urgent remedial steps are taken. We at Namuncha Maasai Community suggest an appointment of a Land Reconciliation Committee (LARECO) whose responsibility will be to identify cases of land disputes, mobilize relevant communities to reconcile them and arrive at decisions on the best way to share land under dispute and then advise the government on implementation and the forms of compensations to be paid out in order to eradicate land clashes once and for all.

Paul Tuukuo OGW
Co-ordinator, Water Project
Namuncha Maasai Community

Iwould like to acknowledge with many thanks copies of the Land Update and other relevant circulars, which have been useful to my organization, especially in matters relating to land administration, environment and natural resources.


It is through such publications that the public can learn and know their land rights. I am sure, through Land Update, we shall be able to continue to share views in land matters with our

Send your views, opinions or contributions to the Editor, Kenya Land Alliance, P.O Box 2177-20100 Nakuru and we will include them in our next issue.

fellow members of Kenya Land Alliance organizations throughout the country for which, as stakeholders, we are ready to contribute satisfactorily to for the sake of public awareness.

Enoch J. Guru
Chairman
Western Environment and Land Reform Alliance (K)

To
 The Editor, Land Update
 Kenya Land Alliance



NEWS

ALL WERE INVOLVED IN FOREST DESTRUCTION BUT GOVERNMENT WAS THE GREATEST CULPRIT

The Government is the greatest culprit and should take responsibility for the destruction of forests in the country, says Councillor Kelena Ole Nchoe of Naisoya ward, Narok.

The Civic leader reiterates that the wanton and immense destruction of the forests that has brought about destruction of water catchments, declining water levels in the wetlands and continued famine in the country, could only have been done under the eye of the Government.

During the stakeholder consultative meeting on the management and conservation of the Mau Complex, organized by Action-Aid Nakuru, from 15th to 17th March 2006, Cllr. Kelena pointed out that since the Government was responsible for issuing titles on forest land, they permitted the excision and settlement that led to the degradation of forests.

The Government must, therefore, revoke all titles issued and resettle the people allocated the forestland elsewhere and spearhead efforts to reclaim Kenya's water catchments, efforts that will be complimented by communities and others in the Civil Society and Private Sector.

Hon. Kipkalya Kones, who was the Chief Guest, added on that we were all involved in the destruction, particularly communities who watched on as trucks carried loads of wood without raising objections. "The greatest problem is not whether we need to conserve the Mau Forests, but how we will reclaim the forestland and resettle the people elsewhere. We must identify who the main culprit is... and that is the Government through the Commissioner of Lands, who illegally issued title deeds on forestland," he says.

The nominated Member of Parliament also said that to ensure that current and future governments desist from taking part in scandals such as land grabbing, the citizens must ensure it settles and compensates those who were settled there, reclaims the forest and ensures people are never allowed in forests again.

COMMUNITIES NOW ABLE TO PARTICIPATE IN FOREST MANAGEMENT

Communities will now be able to participate in the management of forests, according to the new Forest Act, 2005, through forming community forest associations. There is, however, a condition-For community groups to manage forests on collaboration with the Kenya Forest Service, they must be registered forest associations and have a constitution. They will need to enter into contractual agreements with the Kenya Forest Service on how they will manage and benefit from the forests. They will also need to have concrete management plans on how they will manage the forests.

Through such involvement, communities will be able to prevent unlawful and hazardous forest excisions, as a way of conserving the forests, for their benefit and others who are dependent on forests.

The Government, through the Ministry of Environment and Natural Resources and departments has a duty and responsibility to ensure the proper management, use and conservation of forests.

The forest department can only implement the decisions made at the ministry, whose officials must develop legal and policy frameworks that will not only restore the lost glory of our water catchments but also ensure the needs and interests of communities are not forgotten in the process.

MT. ELGON FOREST EVICTEES COMPLAIN OF TORTURE

An event that begun as an operation of dispossessing of residents of illegal fire-arms turned into an eviction exercise in Chepyuk and Kipsigon area of Mt. Elgon. According to a Christian organization working in the area, Catholic Justice and Peace Commission-CJPC-Kitale, the evictions begun December last year, but has been ongoing since. The exercise has left many people homeless, with some seeking refuge at Batenga, Kaptum, Sarya, and Cheptanda in Emya Location. According a representative of the displaced persons Mr. Joseph Kapkara, a school in the area with close to 350 students out of whom 15 are KCPE candidates has been shut down. He further provided CJPC- Kitale with names of 300 families with a total of 1,500 persons he claims had been displaced. While the Conservator of Forests had demarcated the area as forest land, the security department identified it for settlement. This points to unclear policy guidelines and directions from the government.

There were also reported incidents of torture and intimidation over land in the area. The deputy headmaster of Chepyuk Primary School was one of those arrested on 26th of January on claims that he was in possession of a firearm or had information pertaining to illegal firearms. He recounted being taken to Kipsigon police station then to Kapsokwony. He alongside 59 others were interrogated and released without charge. He claims a number of educated persons from his minority community were being targeted by the local administration for raising their voices against land problems in the area and the arrests were meant to intimidate and silence them. In the recent past there have been a number of such evictions in areas like Likia in Nakuru, Timau in Mt. Kenya Forest, Mau Narok, Kipkurere in Nandi, Uasin Gishu District and Burnt Forest. Whereas we do recognise forest areas as key resources to be protected, we ask the authorities to handle such eviction exercises in a humane and just manner.