



Kenya Agricultural Research Institute

Lake Victoria Environmental Management Project



WORLD WETLANDS DAY CELEBRATION 2005-KENYA

INTRODUCTION

The world wetlands day celebration in Kenya was held in Nandi North on 2nd February 2005. The celebration was presided over by Chairman of Board of National Environment authority –Kenya. The District was chosen because of Kingwal wetland which is an important site for biodiversity. The theme for this year was| There's wealth in wetland diversity –don't lose it!.

KINGWAL WETLAND

Kingwal wetland is a massive wetland on the catchments of Yala River. The wetland is popular as a habitat for rare Sitatunga, crane birds and wetland forest of *Syzygium* spps.



Pic. 1 Dominant Papyrus in Kingwal swamp

The wetland is a very important resource for both the community living in the catchment and those living downstream of Yala River. What happens upstream affects the wetland while what happens in the wetland affects people living downstream. Cultivation in Kingwal wetland in time of dry season (food stress) is on increase and cause the biggest threat to the system. Extensive maize cultivation and vegetables poses a threat not only to the availability of alternative

products from wetland but also to the ecological functions of wetlands and socio-economic well-being of the community who depends on them. The biggest threat to degradation of Kingwal is linked to dry season which encourages farmers to look to wetland cultivation and leads to burning of wetland vegetation. Another threat is planting of Eucalyptus trees in the wetland which lowers the water table. The growing urban market opportunities do also encourage wetland drainage for vegetation growing.

Continuous wetland cultivation poses serious impact on ecology and socio-economics such as;

1. Destroys the natural habitats for wetland flora and fauna e.g. the rare Sitatunga, Crane birds and syzygium trees.
2. Degrades vulnerable soil organic matter which is stored under waterlogged conditions
3. Reduces the water holding and filtration functions of the wetland.
4. Lowers water tables.
5. Removes access of poor to natural product harvesting and access of all to roof thatching reeds.
6. Removes dry season grazing resources.
7. Reduces the availability of drinking water and increases workloads for women.
8. Loss of medicinal plants



Pic. 2 Cultivated portion of the Wetland

Kingwal wetland is upheld highly in the community as an important pasture during dry season. Traditionally this wetland has been used in the region to provide communal grazing for animals and customary initiation site for Nandi community. The local community has relied on this resource for a long time as a food security

safety valve. New uses for the wetland resources have been introduced in the area especially handcraft making. The newly introduced wetland products provide high returns which exceeds that of crop cultivation. Although wetlands cultivation can provide good crop yields for the first few years, but over time continuous cultivation may lead to declining yields and loss of wetland ecosystem.

FIELD VISITS

The guests from NEMA arrived at Kapsabet Town at 9.00am and proceeded to the D.C's office where they paid courtesy call. They were received by the D.C after which he accompanied the team to the field to tour wetlands sites before assembling for a Baraza at Kaptel centre.



Pic.3 Guests pay courtesy call to theDC.

The first visit was at Kingwal Sitatunga site. On their way, the team stopped at one of the brick making site. The site which has piles of bricks is located on wetlands along Kapsabet –Eldoret road. Due to high demand for bricks, many youth have turned to brick making to earn a living. The activity which is now wide spread in the wetlands is being carried out without undertaking EIA. Lack of proper guidelines on the activity is causing negative impacts on wetlands especially the exposed excavated holes left behind. The team expressed need for the groups to be educated on mitigation measure to be taken after excavating land. It should be made mandatory for anybody involved in brick making to rehabilitate the land to the near state it was before they decommission their activities in order to ensure restoration of wetland.



Pic. 4 Excavation of Bricks in Kingwal swamp

The first site to be visited was at Kingwal Sitatunga site. This is where the massive Kingwal wetlands start. The site has a thick swamp dominated by Typha macrophytes. The site is deep with pool of open water that makes it an important habitat for Sitatunga. Surrounding the site is a stretch of plain land that is part of the wetland but now subdivided for settlement. Towards east and North of the wetland, the area is raised and forms important catchments for the wetland. Water which drains from the catchments collect in the wetland before it flows down stream.



Pic. 5 Kingwal Sitatunga site, visible in the background are Blue gum trees planted on the edges of the wetland

The settlement of people in the wetland has had a serious negative impact. Vast part of the wetland has been drained to create dry land for settlement. The community which has settled in this area is using blue gum trees to dry up the land. Blue gums are grown on the edge of wetland and slowly by slowly they dry the wetland increasing the acreage of dry land. The once extensive wetland which is an important breeding site for Sitatunga has been reduced to a narrow stretch of swamp.

The team which toured this site raised concern for continuous destruction of the swamp. They had even a rare chance to see a live Sitatunga which had strayed into the home stead and was rescued from hungry dogs. Thank to the sensitive community who have realized the importance of Sitatunga for saving the shy animal and keeping

it under safe custody. The animal is among the rare species which are endangered due to the continuous loss of wetlands habitat. The animal is found only in the wetlands. They have evolved over time to develop adaptive features which enable them survive the swampy environment.



Pic.6 Rare Sitatunga

It was learnt that the community living along the wetland have been sensitized to protect the wetland and its biodiversity through support from LVEMP-wetlands Management Component. Already there is an active CBO in the area which has started a tree nursery for indigenous trees.

The team was upset by the deplorable state of the wetland. They advised the community to remove the blue gum trees and instead plant them on higher ground away from water sources. It was recommended that there was need for NEMA to develop wetland management plans guidelines to help conserve the remaining portions of wetland. The community was urged to protect Sitatunga and develop ecotourism in the area to attract tourists. They were also advised to learn from Saiwa national Park which has taken lead to protect Sitatunga habitat.

The next stop was at Sironoi community tree nursery. The site is located on the northern wing of Kingwal wetland. The community has been supported by LVEMP to establish two large nurseries for trees and tea seedlings. The community has big plans to protect wetlands. They have established a large nursery for *Syzygium* trees for planting on the edge of the wetland. The tree which is a wetland friendly is highly valued in the community. Its presence is associated with clean water. Planting of the tree is aimed to protect wetland from encroachment and provide raw materials for the community. The team commended the community for their efforts to protect the environment and promised to support them. During the visit the guest planted *Syzygium* trees as gesture to promote its

conservation.



Pic. 7 Syzygium spp

The final field visit was at a typical water catchments site. The site is an important source of water for the community and River Yala. At the site a water spring has been protected to provide clean water for the community. The spring was protected through support from SIDA and district public health. The spring was commissioned by Director NEMA PROF. Micheka . He led the team to drink water from the source and over 500 trees donated by Forest department and LVEMP were planted at the site to protect the catchments. The family whose spring was protected was thanked for donating land and the community was urged to conserve the trees so that they can continue to get clean

water.



Pic 8. PROF. Micheka commissions protected spring

BARAZA

The climax was the assembly of the team at Kaptel centre. Thousand of people gathered at the centre and had opportunity to visit LVEMP-Wetlands Management Component exhibit of wetland products. The members of community were educated on importance of wetlands and were able to see for themselves various products they can get from using wetland wisely.

During the Baraza, the gathering was entertained by schools and community groups. The DC introduced the guests who addressed the gathering. The guest of honor, PROF. Khamala, chairman of NEMA board, was the key speaker of the day. He sensitized the public on the need to conserve environment with special emphasis on the wetlands. He informed them that wetlands were threatened hence NEMA was in process of developing Wetlands policy and guidelines which

will help to guide on wise use of wetlands. He commended the community for their efforts to protect the environment. He advised them to use the district environment committee which is in place to air their views on environment issues. He assured that NEMA has full mandate to protect Wetlands through provision under section 45 of EMCA 1999. He informed the member of the public that NEMA through Coastal Marine and Freshwater sub-department is committed to ensure that wetlands are conserved by taking full mandate of managing wetland in the country. He reminded the community to use wetlands wisely so that the resource can be beneficial to all. The director General NEMA who closed the baraza, advised the community to take leading role in conserving their environment. He particularly pointed out to the Student from Moi University who were present to make use of GEF funds for conservation of environment by developing proposals for funding.



Pic. 9 PROF. Khamala address the public at Kaptel Centre

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KARI/LVEMP-WETLANDS MANAGEMENT COMPONENT
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