

## COLLEGE OF AGRICULTURE AND VETERINARY SCIENCES (CAVS) MOVES TO PROTECT DAM ON MATHARE RIVER FROM INSIDIOUS DEGRADATION



*CAVS Dam (Left) in September 2014 and (Right) in May 2015 - soil erosion upstream and soil creep from construction sites due to destruction of riparian vegetation are contributing to siltation of the Dam (Photo credit: David Mungai, WMI)*

The Kabete Field Station of the University of Nairobi abuts the Mathari River to the north. The river is one of three major rivers that flow from the higher and wetter highlands to the west and north-western parts of Nairobi City. At the lower end of the University property is a beautiful dam which was constructed in the 1940s. Over the years, the dam has provided wholesome water for crop and livestock production as well as fish farming. The Field Station in addition hosts experimental and trial sites for researchers from the University, and national and international research institutes such as ILRI, CIP, ICRAF and KALRO which also depend on water from the dam. The integrity of the riparian zone of the Mathari River, which is crucial for the provision of important ecosystem regulating services [such as soil stabilization and erosion control, water quality regulation, water flow regulation, natural hazard regulation etc], has until about ten years ago been well preserved. However it is now evident that the dam is facing an insidious degradation due to massive development projects which clearly are in violation of several laws and guidelines amongst them the Environmental Impact Assessment and Audit Regulations (2006), the Water Act (2002) the Water Resources Management (Water) Rules of (2006) and , the Integrated National Land Use Guidelines (2011), among others.



*On-going housing construction on Lower Kabete Road showing destruction of the protective riparian vegetation and soil creeping into the dam (Photo credit: David Mungai, WMI)*

The question at the moment is how sewage and waste water from kitchens and bathrooms will be disposed given the steep gradient of the construction sites. If these are likely to end up in the dam, it is obvious that it will be a matter of time before the dam is rendered ecologically dead, just like the infamous Nairobi Dam!



*Realizing the insidious degradation threat to the Dam by human activities CAVS invited officials from the National Environment Management Authority (NEMA) and Water Resources Management Authority (WRMA) in September 2014 and again in April 2015 to come and assess the situation*

Under the dynamic and visionary leadership of Prof. A. W. Mwang'ome, the Principal of the College of Agriculture and Veterinary Sciences, the College embarked in 2009 in a major riparian zone conservation programme to enhance its ecological integrity and adjoining valley sides for the University community, its research collaborators and neighbors as well as for downstream water users and posterity. This has begun with the establishment of a Uni-Biopark along the river. The Park serves as a biodiversity conservation site of indigenous plants that have medicinal and cultural values. To date the College has planted 8,100 trees comprising about 77 species at the site. The aim is to expand the Park gradually by planting more medicinal plants collected from various parts of the country.



*The lower part of the Uni-Biopark where conservation efforts are on-going to protect the Dam and providing scenic beauty in contrast to the increasing impervious cover in the neighborhood which will have adverse eco-hydrological impacts with time if precautionary measures are not taken [*

It can be argued that the beautiful scenery on the University land has added aesthetic value to the surroundings as online property advertisements for the housing schemes around the section of the dam confirms.

In addition to conserving the riparian zone, the College will establish, together with interested stakeholders, a watershed monitoring programme which will focus on water quality and watershed condition. The data will provide a basis for negotiated action plans to avert ecological degradation.

*For more information contact:*

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