



Pupils dance and enact a 'flood narration' during an English class. Inset: A newly built evacuation centre at Rae Kanyaika Primary School in Nyando.

The people of Nyando therefore had reason to smile on 27th May 2010 when the flood management program implemented through Japan's Grant Aid for Environment and Climate Change was officially launched. To mark the occasion, the guests of honour planted banana plants to symbolize improved livelihood after implementation of the project. How significant this will be when the bananas are harvested at the handing over of the project in mid 2011 when it comes to an end.

Water Supply in Embu Town

A story is told in Embu of a child who rushed to the mother yelling in alarm "Mummy, Mummy! It's raining in the house!!" The poor child was totally bewildered by the sight of water spraying out of the shower. The shower had never worked since he was born several years before and the tap must have been left on by a disappointed would-be-user.

With a supply ranging from 2,800m³/day depending on the season against a demand of 7,000m³/day, residents of Embu Town had suffered water shortages for a long time with the lucky ones only getting it for a few hours a day.

Although GoK had already requested for Grant Aid to improve the water supply, the Embu Water and Sanitation Company Ltd. (EWASCO) took the initiative to source for whatever supplies they could get from private companies to construct a new intake and lay a new 315/350mm pipeline from Ruringazi River to ease some of the demand in the meantime. Construction of water treatment facilities was also slowly progressing. However, in view of projected demand from an increasing

population, it was necessary to augment the water supply and also enhance EWASCO's human resources capacity.

The design of the Grant Aid Project is therefore such that the current production of 10,000m³/day will be increased to 23,000m³/day to serve 87% of the population by 2015 and the construction phase is set to commence in early 2011. The project will include improvement of the intake, construction of a new water treatment plant, installation of transmission and distribution pipelines and construction of a distribution reservoir. Capacity development in the area of operation and maintenance will also be done.

Apart from enjoying reliable supply of safe water, Embu Town residents will also benefit from continuing to pay the same tariffs. EWASCO is one of the Water Service Providers (WSPs) that will benefit from another Project, the Project for Management of Non-Revenue Water (NRW) and it is therefore envisaged that reduction of NRW will create "surplus" water supply that will earn EWASCO additional revenue. We can therefore safely say in a positive way, that it will no longer rain in Embu but pour!

Kapsabet Town: Enhancing Water Treatment and Supply

Home to a host of Kenya's world-renowned record breaking long distance runners, Kapsabet town lies 350 kms away from Nairobi in the northwestern part of the Great Rift Valley. The town is located at the equator in the rolling Nandi Hills at an altitude of about 2,000m above sea level. With an annual average rainfall of 2,179mm occurring over a third



Ongoing construction of the new Water treatment plant at Kapsabet.

of the year, served by two perennial rivers and dotted with over 30 springs and streams, the area is a farmer's heaven ideal for dairy, horticulture and cereal farming. With such an abundant supply of water, one may wonder why the people of Kapsabet would wish for any intervention?

The story of Kapsabet is the same as that of your average small and medium town in Kenya. Efficient, adequate and good quality water supply has been impeded by dilapidated infrastructure constructed by the colonial government over 60 years ago with minimal expansion in the 1980s. The abandonment of the first phase facilities constructed in 1948 due to deterioration eventually led to a reduction of the total water treatment design capacity from 820m³/day to only 550m³/day by 2006. This was not enough even for the only 15% of the urban dwellers served since even the available water had to be rationed. Having to labour and set aside time for this activity and at the risk of contracting water-borne diseases, people were forced to resort to traditional sources and fetch water from the springs and streams most of which are unprotected.

The 4th, December, 2009 was therefore a great day for the residents of Kapsabet and all stakeholders at a colourful ground-breaking ceremony graced by the Minister for Water and Irrigation heralded the beginning of the Project for Augmentation of Water Supply System in Kapsabet Town and the end of water shortage woes. Since then, construction that will include improvement of the intake facilities, new water treatment plant, and installation of pumps and meters has been ongoing. The Project will also include a soft component to address operation and maintenance issues including leakage prevention and detection, management

of meters and improvement of business operations including billing, accounting and customer care.

Cutting Losses: More Water More Revenue

With the commercialization of water service provision through the water sector reforms, most of the over 100 Water Service Providers (WSPs) are caught in a trap. On one hand, they are expected to improve service delivery while on the other hand most of their infrastructure is aged and needs replacement, or requires expansion to meet the increased water demand. At the same time, regardless of the state of the infrastructure, human resources capacity is key to efficient service provision.

While various valid reasons may be advanced for this state of affairs, the bottom line is that even where infrastructure may not be in such bad shape, it is evident that high Non-Revenue Water (NRW) estimated to be an average of 70% in the country, and lack of the necessary capacity to address this problem are major factors that plague WSPs. This is a major constraint to commercialization of WSPs as uncontrolled water losses deprive them of much needed revenues hence affecting their day to day operations and stunting their growth. It is therefore common for customers to resign to their fate and silently suffer not just shortage and rationing but lack of the commodity as a whole .

NRW is composed of technical losses arising from unauthorized consumption and meter inaccuracies, and commercial losses resulting from various kinds of leakages, and authorized unbilled consumption