

Kenya's water shortage



**ASSIGN
BUSTER**

Kenya has a lowest access to safe water and is classified as a water-stressed nation in the world. (United Nations, 2008). For many years Kenya has experienced severe issues such as droughts, the contamination of drinking water, poor management of water supply, expanding population and inequality in water distribution, as a result, millions of Kenyans cannot access to pure water as well as constrains the development in socio-economic areas.

Principally, the water system of Kenya is dependent on drainage basins water systems, but where, indeed, the water distributions in the basins face deficiencies. To eradicate frequent water shortage problem obviously the permanent solutions are necessary. The objective of this project is to examine two main possible solutions, which can be methods to abate water scarcity.

The harvesting rainwater is one of the implemented solutions to reduce the use of drinking water for household consumption, agriculture, industrial as well as other purposes. The climate of Kenya is tropical with erratic rainfalls (about 1.050-2,000 mm per year), which cause the environmental disasters; therefore it is convoluted to let the rainfall to deteriorate the economy, whilst it is good chance to harness it in human consumption. According to the Global Water Partnership, 'The water harvesting system is an approach that provides the reconciled development of water, land and related resources to optimize economic and social welfare without detriments on the sustainability of environmental systems'.

Many scientists have investigated the potential and reability of water harvesting system in their reports (Gould 1995, Mugerwa 2007, Enfors 2009, Relma 2009). The Kenya Rainwater Association implemented this project several times in arid and semi - arid regions of Kenya. As results show, it is economically beneficial, as the technologies of rainwater harvesting system are simple, available and can be replicated in water - problem areas.

Another benefit of the rainwater harvesting system involve aspects related to the sanitation of water (the drinking -water quality) (Malesu et al. 2007). By the purification technology of this system the quality water has improved, because rainwater is not so contaminated compared to the earth surface water. Moreover, it demands not complex technology for asepticism of water from microbiological pathogens. Many Kenyans consumed the treated rainwater not only for agriculture as well as for drinking, that by statistics of N. Aroka, which was done in rural areas of Kenya, the sanitation-related diseases especially, malaria and anemia have been decreased. After the realizing of rainwater harvesting, the number of urbanization of people has diminished in some areas of Kenya.

The second alternative solutions of water shortage in Kenya is solar water disinfection which was approved by World Health Organisation , using the specific technology is supplied with sun's ultraviolet rays. One of the good aspects is that, the solar system is naturally available also the apparatus is pretty cheaper than other purification systems, that allow poor people in Kenya slums to get safe water. Secondly by statics of Kenya Water Department the solar water disinfection destroys all harmful microbiological pathogens, supporting people with safe water.

The water shortage in Kenya cause the terrible problems in health of humanity, agriculture, industry and other areas, worsening the economy of country . To tackle the water scarcity to give opportunities to Kenyans for safe water the possible two solutions has been examined, which both of them economically and technically available, considering that the Kenya is one of the under-developed countries.