Water harvesting technology is a key remedy for the ASAL regions

Residents in Arid and Semi-Arid Lands (ASALs) are always walking for long distance to fetch water for domestic use.

LANCER WAO

The water crisis in Kenya caused by shortage remains a thorn in the flesh of development as envisioned in Vision 2030, Sustainable Development Goals, and Big Four Agenda.

There is no doubt that the government has made significant efforts in creating an enabling environment to ensure access to water for all through the various policies and legislation it has put in place including the adoption of the national policy on Arid and Semi-Arid lands and the lands policy.

However, there is slow implementation and delayed results because of challenges emanating from insufficient funds, low rate of technology adoption, and coordination issues among partners and stakeholders of development in the water sector.

Why we should be more worried about ASALs' lack of water

Arid and Semi-Arid lands are key in the development of Kenya. They support 38 per cent of the population and cover 89 per cent of land in Kenya.

The number of people occupying the areas continues to increase as more move into the regions in search of emerging economic opportunities. These regions predominantly make up the major producers of meat in the country and home at least 90 per cent of the wildlife in Kenya hence a strong backbone for the tourism industry in Kenya.

In terms of their contribution to the economy, it is estimated that the livestock sector contributes at least 12 per cent of the national GDP and 43 per cent of the agriculture GDP and 50 per cent of the workforce in agriculture. Clearly, ASAL's are a strong force in driving the achieving development in Kenya.

This thinking was reiterated three years ago during a meeting for the development of a strategic plan for the ASAL department where the Cabinet Secretary for Devolution, Eugene Wamalwa, expressed the government's confidence in the potential of ASALs in livestock production, crop production and as the next business frontier.

Chebo Chebunyo fetching water while dogs quench their thirsty at Lokiwach water pan in Silale ward in Baringo County . Residents are forced to travel several kilometers in search of water.

KIPSANG JOSEPH,STANDARD

In 2018, the government increased the number of ASAL counties from twenty-three to twenty-nine following recommendations from the National Drought Management Authority.

The move was a result of the need to achieve proper planning and acceleration of development initiatives, and spur investment with the hope of making the areas self-reliant.

In addition, it aligned with the national development agenda in the country at the national level. These are right and needed. However, the more there is no discussion on the obvious critical condition but often-underestimated factor for development in ASALs-water!

While there have been previous efforts to remedy the situation, most of the results are short-lived, because the local communities do not have the sufficient financial capabilities to finance the innovations, stakeholders provide limited room for input from the intended beneficiaries.

The locals must be included in the programs targeting solving the water problems- on a long-term, there is a gap inaccurate information and knowledge on the extent of the water stress and crisis in ASALs and the capacity of the locals armed with the available resources to solve it. Nevertheless, ASAL can build on the benefits of efficient use of water and effective management of water resources to formulate lasting solutions to water shortage through approaches such as adopting water harvesting technologies that can help solve the problems and assure the population in these areas water security.

Why Embrace and Invest in Water Harvesting Technologies

As Kenya continues to battle the impact of Climate Change, the solution to the water shortage and crisis in ASALs should be designed with a focus on achieving an enhanced storage system of the water received from the natural resources and reduce dependency on the limited seasonal water resources.

It involves capturing, storing, and redirecting rainfall and groundwater. The water harvested can be used in myriads of ways that benefit individuals and communities including domestic, livestock rearing, small and large-scale crop farming, and commercial purposes.

One of the qualities that make rainwater harvesting a viable solution to the perennial water shortage in ASALs is that the technologies are easy to install and can be comfortably operated by locals without the constant need to have specialists.

In addition, the technologies have low maintenance costs. Moreover, they give users full control of usage free from the inconveniences and exploitation of some crook water vendors. Water harvesting can be adopted as a household or joint venture depending on the harvesting schemes viable for the area.

Although a non-conventional source of water, effective water harvesting systems are a long-term and sustainable solution to the water crisis in ASALs.

This method has worked in countries like Egypt that is 96 per cent desert with an acute shortage of water resources hence limits in supply. Still, with support from water-harvesting technologies, 20 per cent of the country's GDP comes from the agricultural sector because of successfully adopting the technologies.

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