PROMISING RESILIENCE PRACTICES

PEACE, PROSPERITY AND REGIONAL INTEGRATION

Enhancing Equitable Access to Water Resources for Pastoral Communities

Water infrastructure development has increased access to water for livestock and reduced livestock mortality, particularly during the 4-6-month dry season. Access to water for human consumption increased from 43 percent in 2011 to 68 percent in 2016. Community members, especially women, have diversified their livelihood activities

Introduction

Livestock is the main source of livelihood in the drought prone and agro-pastoral Karamoja sub-region. Securing access to water is therefore critical for livestock rearing. Livestock access water from various sources such as boreholes, ponds, valley tanks, dams and seasonal rivers.

The predominant source of water, particularly for human consumption, is the borehole. Only 68 percent of the population has access to safe water. Even then, water supply coverage by village is 44 percent meaning that most villages in the sub-region do not have a water source (MWE, 2017a). This indicates an uneven distribution of water sources across the sub-region and consequently, a high level of inequity in access to water (MWE, 2017b).

Water scarcity is a major constraint to livestock production in Karamoja, especially during the six-month dry season which runs from October to March. During this period, access to water for livestock is a challenge as most seasonal water sources dry up (Aklilu, 2016). During these stress periods, some herders use river-bed sand dugout wells in major rivers to water livestock. Dams store sufficient water throughout the dry season but their distribution is limited, thereby restricting livestock access to water (Mugerwa , 2014).

Securing equitable access to water is important to enhance the resilience of dryland production systems and agro-pastoral communities. Water sources in Karamoja can be harnessed and put to multiple uses to support diversified livelihoods, such as brick making, aquaculture and small-scale irrigation for vegetable growing. This can be done by constructing multi-purpose dams, valley tanks and wind-powered watering systems in various locations to ensure water availability for pastoral communities.

INTERVENTION AREA
Water resources development and management

LOCATION
Karamoja sub-region

STAKEHOLDERS AND PARTNERS
Agro-pastoral communities; Ministry of Water and Environment; Karamoja Affairs, Office of the Prime Minister; Ministry of Water and Environment (MWE); District Local Governments

Methodological approach

- Feasibility studies for sites for multi-purpose dams, hydrological siting of boreholes, wind-powered watering systems;
- Construction of the water sources with community engagement and participation;
- Establishment of a management structure in the communities which will be responsible for the maintenance and operations of the infrastructure i.e. Water User Committees (WUS);
- Building the capacity of WUS to manage the water facilities;
- Handover of built water sources to the communities.

Results

- Improved water infrastructure has reduced the time needed to access water for livestock, particularly during the 4-6-month dry season, which has reduced livestock mortality due to inadequate water, and generally improved livestock productivity.
- Access to water for human consumption increased from 43 percent in 2011 to 68 percent in 2016.
- Women grow vegetables by drip irrigation using water from the multi-purpose dams. This has contributed to improved household food and nutrition security from consumption of vegetables particularly during the dry season when vegetables are typically difficult to access. Sales of surplus vegetables has contributed to household income.

Access to water for human consumption increased from 43 percent in 2011 to 68 percent in 2016

Constraints

- Poor operation and maintenance by communities may result in build-up of silt, which make the dams shallow and dry up sooner, shortening the period that they would provide water.
- Vandalism, including the removal of pipes, metals, and other installations may render some water sources inoperative.

Sustainability and replicability

- Ensuring community participation in siting of water sources to meet the needs of pastoralists and women.
- Engagement with the communities and establishment of community water use committees responsible for collecting contributions for maintenance of the sources.
- Appropriately siting the water sources to ensure water availability throughout the year.
- Cooperation with Ministry of Agriculture, Animal Industry and Fisheries and non-governmental organisations to train communities on how to use the infrastructure for crop irrigation, which enables both women and men to benefit from the water sources.
- Training communities on basic maintenance and operation of water sources.
- Involvement of local government institutions e.g. works, production and community services departments.
- Provision of water using a mix of methods (i.e. valley tanks, dams, wind-powered systems, etc.) is being replicated across Karamoja and the cattle corridor.

Additional information

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