

Understanding pastoralists and their water, sanitation and hygiene needs

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Background: Pastoralists in Tanzania

This policy brief summarizes the findings from a literature review and research carried out by WaterAid in the districts of Longido and Hanang Districts in Northern Tanzania.

Pastoralists are nomadic people who either move around throughout the year with their families and herds in search for water and pasture, or may be sedentary where they are more or less settled in one defined area. Their mobility or migration patterns are determined in response to the changing environment and natural resources, particularly rainfall and grass condition which varies from year to year. Typically pastoralists have a settled base, and practice a form of transhumance¹ which in this case commonly involves migration of livestock over short distances - from the home area during the dry season, to dry season pastures and then return during the rainy season to utilize pastures and water sources near home. With no reliable supplies of permanent water and pasture, pastoralism enables nomadic people to adapt to an increasingly arid and unpredictable environment by moving livestock according to the shifting availability of these resources.

Nevertheless, ever since colonial times, pastoralists in Tanzania have been side-lined in decision-making processes, resulting in chronic under-investment in pastoralist communities, which has increased their vulnerability. Basic services such as water and sanitation are not adequately provided nor adapted to the pastoralist communities. The crux of the problem is that policy makers have never fully understood the rationale of customary pastoral livelihood systems. Pastoralists are viewed as archaic, unproductive and environmentally damaging relics, which need to be brought into line with “progressive and modern” development. Policies have consistently focused on settling pastoralists as the way to bring them improved services and economic opportunities, but little has been done in understanding the ecological significance of mobile pastoralism.

Access to water affects the vulnerability of pastoralist communities. Pastoralists depend on water for sustaining herds, as well as for their own health and survival. When water availability declines, pastoralists have to move their herds elsewhere to avoid their depletion and consequent impoverishment. Water for livestock needs has received little attention from policy makers and practitioners in the water sector. In some cases, permanent water sources have been constructed, which do not meet the needs of communities and are in conflict with existing patterns of movement of people and livestock and grazing patterns. Hygiene and sanitation projects have generally been seen to be impossible in view of pastoralists’ lifestyle.

This policy brief recognises the rationale of pastoral livelihood systems, and calls for further research and support to develop water supply, sanitation and hygiene solutions that are in harmony with such a livelihood system.

In one village assembly attended by the area Parliament Representative, women submitted a cockerel as a present to her. “It is not to be slaughtered” they insisted, “but whenever it crows let it be a constant reminder to you that we are already awake and searching for water 15kms away. We may use cattle urine to wash ourselves and utensils but we need water for drinking and cooking regardless of how dirty it might be! Please do something for us!”

¹ The Encyclopedia Britannica defines transhumance as a “form of pastoralism or nomadism organized around the migration of [livestock](#) between mountain pastures in warm seasons and lower altitudes the rest of the year. The seasonal migration may also occur between lower and upper latitudes (as in the movement of Siberian [reindeer](#) between the subarctic taiga and the Arctic tundra). Most peoples who practice transhumance also engage in some form of crop cultivation, and there is usually some kind of permanent settlement.

SITUATION OF WATER SUPPLY AND SANITATION IN PASTORALIST COMMUNITIES

Water supply

Pastoralists are concentrated in the water scarce areas, mainly in dry open grasslands or wooded grasslands, where rainfall is infrequent with hardly any perennial or reliable water sources.

The water needs of pastoralists vary depending on the season. Watering of livestock is most critical in the dry season when animals need to drink more often. Surface water sources become scarcer as the dry season progresses.



1. Woman collecting water for domestic use at a cattle drinking point, Chimaligo Sub village, Tanzania/Alex Macro
2. Woman fetching water from a charcos at Kiserian Longido distric, Tanzaniat/Loserian Sangale

Pastoralists, especially women and children walk long distances to fetch water. During the dry season people walk 5-15 kms away to get access to water. This limits the amount of water they can fetch per day. There are very few sources that are improved. In most cases cattle and human beings share the same source – dirty, muddy water from the dam/pond.

There have been efforts to improve availability of water but water treatment is uncommon. Interventions by government and NGOs to support dams as well as traditional wells and charcos have improved availability of water but not cleanliness and safety for domestic consumption.

The construction of water points leads to migration / population growth beyond the water supply capacity. As a result, people queue for up to seven hours to get little water which is only used for drinking and cooking as is insufficient for washing clothes and bathing.

The construction of water points may increase the risk of environmental degradation: if water is made available all year round in pastoralists' dry season grazing areas, they are more likely to return earlier in the year. Larger herds are attracted by the guaranteed availability of water, using land that was previously used only in the dry season by smaller numbers of livestock. This may degrade that land and may, ironically increase the vulnerability of the pastoralists by reducing the carrying capacity of the land.

As sedentary populations continue to grow around water points, the risk of conflict between the pastoralists and farming communities is increased. This is due to the fact that more land is taken over for cultivation and is no longer accessible to pastoralist herds.

Pastoralists should be actively engaged in finding better mechanism of governing water supply interventions in their localities in a bid to improve the maintenance and sustainability of water supply infrastructure – so far COWSOs have not been effective in pastoral communities because they do not accommodate local realities (see section 3 below).

Sanitation and hygiene

Sanitation and hygiene practices are also linked to availability of water. There is generally no awareness of the importance of good sanitation and hygiene practices. Recently, however, school WASH programmes have helped raise awareness, although this is still limited to the younger generation.

Since the major economic activity of pastoralists is livestock keeping, movement is a central feature. There is an understandable reluctance to invest in permanent housing, including a toilet.

Pastoralist homesteads are normally surrounded by bush, providing them with significant cover and privacy. For pastoralists therefore their environment does not make the need for a pit-latrines to provide privacy for defecation or bathing as urgent as in crowded settlements.

Hygiene standards are very poor – during dry season baths are rarely taken, clothes are not washed and food utensils are scraped clean from meal to meal. Water that is fetched is used according to a strict protocol: first weak cattle drink, then drinking and lastly cooking. Any other critical need such as when a mother gives birth to a baby is met through cattle's urine!

Customs and traditions also play an important role in discouraging pastoralists from constructing and using pit-latrines. For example, it is seen as an abomination for men and women to share a toilet amongst pastoralists. When probed further, pastoralists revealed that poor menstrual hygiene by women in pastoral communities is the reason for this situation.

Poor knowledge on how to build and use latrines discourages pastoralists from building toilets. In their view toilets are dirty, stinking and full of house flies. They would rather go to relieve themselves in the surrounding bushes than to walk into latrines soiled with faeces.

The intermittent use of by-laws by the local government coupled with health promotion campaigns that capitalize on engendering a fear of disease and death have not been successful in bringing about a change in sanitation practices among pastoralists. Pit latrines built in response to these external forces have remained just monumental structures until they collapsed.

Toilet paper, water and other anal cleansing materials are not commonly used in pastoral communities.



In one focus group discussion, a participant asked, “tell me, is it wise to leave a cattle herd in the bush, say 10 kms away, just to go home where there is a latrine? Can’t I relieve myself in a nearby bush?”

Photo: An Ant hill hole converted into pit-latrine at Mureru village/Loserian Sangale

POLICY AND ITS IMPACT ON ACCESS TO SERVICES FOR PASTORALISTS

In theory, policies are supposed to respond to the needs of all communities without bias; in practice, they tend to favor politically dominant elites. Pastoralists in Tanzania lack the political weight required to influence policy decisions. First, there is no vibrant and effective pastoralist civil society movement in Tanzania capable of engaging with policy makers to represent and defend the interests of pastoral people. Second, in the eyes of the government, pastoralists represent a “minority vote” – they are relatively few in number, and they occupy what is considered by government to be marginal land of low economic potential.

Pastoralist communities are mobile but the National Water Policy (NAWAPO) insists on permanent water sources, priority to water for human needs rather than cattle and management models that assume permanent settlement rather than nomadic lifestyles.

Resources may be allocated at national level for water interventions but implementation is either not undertaken or not completed on time. For instance, the analysis by the Ministry of Water and Livestock Development (MoLD) of the implementation of water projects for 2008/09 shows that out of the 80 dams planned only 35 (40%) had been completed while 45 (60%) are yet to be completed. This implies that the level of resource allocation from the national level to districts where pastoralist communities are concentrated has been inadequate to support interventions, which would significantly reduce the water supply and sanitation problems.

Interventions are top down which lack community participation particularly in the design of dams and even improved traditional wells as they do not fully reflect their needs and realities. One apparent effect of this is that dams in the villages visited have been designed and built without provision for cattle troughs and a domestic water point.

Local government and Civil Society Organization (CSO) interventions are more reactive than pro-active. Pit latrines and public education packages are mostly carried out following cholera outbreaks. This sort of intervention, which is usually accompanied by use of coercion and threats, is less constructive and not appreciated by community members.

CSO interventions in respect of sanitation and hygiene have mostly been to target construction of pit latrines in schools and health centers but not at household level. For instance, out of 740 households in one village in our research sample, there are only 10 have pit latrines (that have never been used) and none of them meet the international standards of improved sanitation. A few toilets exist in village commercial centers but there are none in the homes of community members.

RECOMMENDATIONS: HOW TO EFFECTIVELY WORK WITH PASTORALIST COMMUNITIES

Water supply

A holistic approach to water supply should be taken by Government, CSOs and service providers. Water for livestock needs (a priority for pastoralists) needs to be integrated in domestic water supply projects. For example, at project design stage, water needs of pastoralist communities can be more correctly determined by considering the human and livestock populations in intervention areas.



Photo: A water point shared by cattle and pastoralists in Chimagilo Subvillage, Tanzania/Alex Macro

Water supply projects should also integrate water treatment. Adopt a two step approach which will help communities to not only reduce the walking distance to get water for domestic and livestock use but also support development of systems for filtering water at the dam to make it clean and safe for human consumption. There is need to consider developing or researching systems to filter dam/pond water to make it clean and safe for human use.

Walking long distances to water sources for domestic and livestock use would be reduced if a range of water technologies that appeal to the community (gravity, borehole, dam or protected wells, traditional wells, charcos) are adopted.

Given that pastoralist communities are mobile, it is likely that smaller, more dispersed water sources using low technology options will be more sustainable than large systems that use mechanical pumping and need external technical skills and inputs to operate and maintain.

Sanitation and hygiene

Sanitation and hygiene promotion materials should be developed and customized for pastoralist communities.

Community members should suggest solutions to culturally sensitive issues of hygiene and sanitation that are acceptable to them – for example, in order to address the taboos surrounding menstrual hygiene, it could be more viable to pilot low cost solutions for menstrual hygiene management such as putting a bucket in a latrine.

Community members need to be exposed to models of pit-latrines that are affordable and appropriate to their situation. Building sanitation centers and providing skills training for selected community masons to pilot pit-latrines suitable for the community could be a solution.

While it is clear that poor sanitary conditions and unhygienic behaviors lead to a high risk of disease, pastoralists do not respond well to by-law threats and hygiene promotion campaigns that engender a fear of disease and death. A better strategy would be to encourage people to change their habits by viewing cleaner and more hygienic practices as something to aspire for.



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