



Social conflict and water; lessons from north-east Tanzania

DISCUSSION PAPER

The power of water

Access to, and control of, water provides the means for social and economic power. Where water is scarce and livelihoods diverse, competing interests can easily escalate into social conflict where marginalised and vulnerable people are the most affected.

This paper does not intend to offer ready-made solutions to such issues. Rather it seeks to help practitioners and policy makers broaden their understanding of the complexities and implications of engaging in water projects in rural Africa. It particularly highlights the challenges which can face project implementers in arid and semi-arid regions, and identifies the experiences and lessons learnt from the WaterAid Kiteto partnership programme.

Livelihoods

In Kiteto, people have a number of livelihood bases, but there are three main groupings.

Hunter-gathering

Hunter-gatherers are people who live off the land by hunting wild animals and collecting roots, wild berries and honey. Their traditional lifestyle is one in harmony with the land and their societies are known to be egalitarian with the sharing of resources.

In Kiteto the main hunter gatherer group is the Ndorobo. Although they still keep many of their traditions, they are slowly being assimilated by the pastoralists who are a more dominant group, and today some also keep a few cattle or have small farms. The Ndorobo are one of the most vulnerable and marginalised groups of people in Kiteto.

Pastoralism

Pastoralists are people who derive their living mainly from the management of livestock, such as goats, sheep, cattle or camels, which live off natural forage on rangelands. Pastoralism is a way of life and animals also play key roles in their societies' traditions, culture and beliefs. Pastoralists may be nomadic where they move throughout the year with their families and herds, or may be sedentary where they are more or less settled in one defined area. Others practice what is called '*transhumance*' where the community has a settled base from where there is migration during certain parts of the year.

In Kiteto, the majority of pastoralists practice *transhumance* and each village has a slightly different migration pattern, with various sections of the community migrating at different times of the year. In some it may be just the young men who migrate and in others it may be the



The dam between Njoro and Ndaleta village is used by people from all livelihood bases. Some years it dries up.

majority of men, women and children. The migration patterns are determined in response to the changing environment and natural resources, particularly rainfall and grass condition, and so can vary year to year. One common pattern involves travelling away from the *boma* or family home area, during the dry season to dry season pastures and then returning during the rainy season to utilise the pastures and water sources nearer home.

Today many pastoralists in Kiteto also have small plots of land to grow maize and there is an increase in numbers of those who now practice agro-pastoralism, where a reasonably large percentage of their income also comes from farming.

Pastoralist and agro-pastoralist ethnic groups (with main income from pastoralism) in Kiteto include the Maasai, who form approximately half of the district population, the Arusha, Iraaq / Mbulu, Nguu, Gogo and Kamba.



A woman in Njoro village works to install a pipeline through an agricultural area.

Agriculture and farming

Agriculturalists, or farmers, obtain most of their income from farming the land. In Kiteto there are many small peasant farmers, but also landowners with larger farms in the southern part of the district where the rainfall is more stable. These larger farms supply food for people living in Dar es Salaam. Agriculturalist and agro-pastoralist ethnic groups (with their main income from farming) include the Rangi, Gogo, Kamba, Burunge, Meru, Chagga, Beria, Pare, Sambaa and Kaguru.

The main farming method used in Kiteto is slash and burn, where the forest is cut down and then cleared by burning to form farmland. In the past the cleared land was farmed for a few years and then left fallow to recover, but today the recovery periods are not practised and therefore the land is being much more heavily used than in the past. These changes are not sustainable.

The main crops grown include maize, beans, sunflower, pumpkin, finger millet and sorghum. The majority of the crops are grown during the main rainy season which can be erratic due to the semi-arid climate and so crop produce can vary year to year. There is very little water in Kiteto, not one river flows all year round and hence there is limited possibility for irrigation. The main attraction for farming is the current high nutrient level of the soil, which makes it high-yield farming land.

There has always been a level of trade and inter-dependency between the three groups in the area of northern Tanzania and southern Kenya. This includes the trading of maize and beans for milk and animal hides, honey or traditional medicines.

Social and political challenges

Working in areas where there are people who have different livelihoods and where there is competition for scarce resources leads to many social and political challenges, a few of which are identified below.

Cattle herd sizes and the environment

In some areas of Africa pastoralists are blamed for over-use of resources and environmental destruction with increasing herd sizes. However, the pastoralists argue that herd sizes are not increasing. Instead, access to pastures is decreasing with resulting additional restrictions to mobility and access to land. Pastoralists need a certain number of cattle per person to survive years of drought or sickness. When the numbers fall below this base level the pastoralists become vulnerable to poverty and can no longer support themselves. Others argue that the herd sizes are increasing as the size of the cattle herd is linked to power and prestige.

It is clear however, that the traditional management systems of the pastoralists take closely into account the changing environment and respond to it to conserve scarce resources. When practised in its traditional way pastoralism is suited to the vulnerable, semi-arid and arid environments found in many parts of Africa.

Pressure on land from farming

With increasing population pressure in Tanzania there are also increasing agricultural demands on the land. Due to over-use of land in neighbouring districts and tighter control by the authorities, there is a subsequent in-migration of farmers into Kiteto. These include small-scale independent farmers, small-scale farmers who come en-masse as whole communities and larger scale farmers who employ large numbers of migrant labour. Forestland is decreasing and with no recharge of the nutrients to the land through fertilisers or leaving the land fallow, the environment in some areas is quickly deteriorating.

It is a difficult dilemma. People need to eat, but if the land continues to be utilised heavily, will it be able to sustain the growing populations who currently rely on it for their livelihoods whether farming, hunter-gathering, or pastoralism?

Mobility and free land

Pastoralists' mobility and lack of land regulations supporting their way of life, has contributed to the process of land use changes. As the pastoralists migrate they move over large areas of grazing land. They may use land and a water source one year and return the next to find that it has been taken over by farmers who have viewed the land as unused. Likewise pastoralists may move onto land previously used mainly by hunter-gatherers who may have lived on, and utilised, that same land for centuries.



Kiteto is located in north-eastern Tanzania, where the land is semi-arid and the people's livelihoods and traditions are based mainly on pastoralism, hunter-gathering or agriculture.

Take up of new farms and lack of knowledge of land rights

The taking over of large areas of land for farms by both rich farmers and rich pastoralists, including those in leadership positions, is becoming more common. This can be through legal or illegal means. Lack of knowledge of the land laws and processes for application for land, can leave villagers powerless to prevent the, sometimes inequitable, distribution of their village land.

Power differences within groups

As well as the power differences between ethnic groups and people living different lifestyles, there are also power differences within each group. In particular there are differences in power and equity between men and women in all societies in Kiteto. The men are nearly always more powerful than the women. In most situations the women have little if any control over the household resources, they are not able to disagree with their husbands and are traditionally not allowed to participate in community decision making. This is the case in both farming and pastoralist communities.

Within communities there are also differences between the rich and the poor. In the pastoralist communities the rich pastoralists have many cattle and poor pastoralists have few. The power that is wielded at community level by the rich pastoralists with their large herds is significant and needs to be understood. Lack of understanding can lead to failure of water projects and restricted access to water for the less powerful.

Lack of understanding between people of different lifestyles and livelihoods

Hunter-gathering is a traditional lifestyle which is not generally understood by those outside of it, including both pastoralists and farmers. The hunter-gatherer communities of Tanzania are rarely mentioned in national government policies and their way of life is being seriously threatened by changes in land laws, hunting regulations and land use practices. Hunter-gathering as a lifestyle is diminishing as pressures from other, more dominant ways of life are leading to an increasing adoption of pastoralism and sedentary peasant farming.

The pastoralists way of life is also often misunderstood by those outside of their own communities and their lifestyle looked down upon as inferior to that of the sedentary farmer. They are often excluded from national policy making and frequently not mentioned in national policies, except in ways which encourage them to adopt a more sedentary way of life.

Ability to engage in policy debates and internal and external conflict

Both hunter-gatherer and pastoralist communities are limited in their ability to participate in national and local debates about their rights, due to the lack of formal education taken up within their societies. In the case of pastoralists, their limited ability to engage in policy debates can also sometimes be due to their lack of internal cohesion and organisation.

In many parts of Africa conflict between different groups of pastoralists, often over scarce resources, is common. Pastoralists are also often blamed for conflicts with others, even when it is they who have been provoked, due to being perceived as confrontational by outsiders.



Cattle at Ndedo drink from natural ponds during the rainy season and the following couple of months.



The community in Njoro collect water at the tapstand (below) while the men water their cattle at the new trough (above).

Policy makers in many parts of Africa are from a farming background and understand the agricultural mind-set. A lack of understanding of other lifestyles such as pastoralism or hunter-gathering is common. Inaccurate stereotypes persist which then get incorporated into national policies.

Lack of trust

Changing control over resources, lack of open debate on sensitive issues, prejudices, power and corruption issues, and unequal donor – beneficiary relationships, all combine to create a situation where there can be a lack of trust. This complicates working relationships with discussions and debates frequently carrying undercurrents of this mistrust. To be able to work on water, sanitation and hygiene projects or indeed any development projects, the first step is to break through the barrier of mistrust.



Water as a contested resource

Water and land are closely inter-connected. Where someone has access to, and ownership of land, they will also usually have access to, and ownership of the water on that land. In Tanzania all land belongs to the state but can be used by all its citizens, who are free to move anywhere as long as they do not break Tanzanian law. Changing land use and ownership for use (within the context of the state owning all land) can also affect access to water.

Water and in-migration

In areas of water shortage, improving a village's water supply will change the community's dynamics. It is also very likely to change the size of the village and possibly also the livelihoods of the people who live in it. One village in a neighbouring district to Kiteto, which implemented a borehole scheme, had a three-fold increase in population over a five year period.

Borehole schemes, which are quite common in the district, apart from being too difficult to maintain where a cash economy is not prominent, can lead to in-migration of pastoralists and farmers, both of whom are likely to disenfranchise the hunter-gatherer communities. And so, when discussing the possibility of working with hunter-gatherer communities in Kiteto, the issue of in-migration was considered and it was suggested that care must be taken with selecting appropriate technologies if the programme is to become involved with these communities.

The dilemma: To supply water for cattle or not

In mixed villages where the pastoralists are in a minority (villages in Tanzania are artificially demarcated tracts of land up to 80km across), it has been noted that the pastoralists are often excluded, or not involved in the village development activities as much as the other groups. If the programme does not help the community to supply water for their cattle, then it is possible that they will become more excluded, particularly if there is increasing in-migration of more farmers for the improved water services.

When water yield is limited, supplying water for cattle may mean less water and less control for the domestic users. In villages which are totally pastoralist, supplying water for cattle can lead to the take-over by cattle keepers and total lack of power to those collecting for domestic use, who are usually women. But to ignore cattle is almost to ignore the pastoralist communities. Cattle are at the centre of the pastoralists communities lives and are considered part of their families.

Water and changes in use of resources

Water schemes which provide water all year around have, in some instances in Africa, led to changing migration patterns of pastoralists and their animals. Traditional migration patterns are linked to the availability of both water and pasture. When rainfall is limited in one area, water for the animals is scarce. As a result, migration to areas of more plentiful rainfall takes place before the pasture in the dry area has become completely exhausted (and the land environmentally stressed). However if artificial water supplies are developed which supply water all year around then this relationship between water and pasture availability changes, leading to the potential for areas around water points becoming environmentally stressed. When population density is small this will not be a problem, but as population density increases it could become so.

Scattered and mobile communities pose particular challenges

With limited resources, supporting scattered or mobile communities to improve their water services is a difficult and expensive process. One possibility with the pastoralist communities is to implement projects which improve the water situation for the vulnerable people who are often left behind when the rest practice *transhumance*. In this way, the most vulnerable will still be supported with the limited resources available.

Water, power and access

Water is power, particularly where it involves the use or control of money. This is especially true where certain groups in the community, such as women, have limited control over monetary resources. The very poorest may also be excluded due to lack of funds. In the design of one community borehole project, women were to be given domestic water for free and cattle owners had to bring diesel to pump water for their cattle. This was the management strategy designed and agreed by the community representatives at the time. However this translated into women sometimes being expected to sit for the whole day while a few owners of large cattle herds watered their animals. If at the end of the day, when the cattle had finished drinking, there was water left over then the women were able to take the water for domestic use. Likewise it was reported in another community that, at the traditional wells, if the women did not reach there by four o'clock in the morning, then the cattle and their owners would arrive and the women would have to stop collecting water and wait until the cattle had finished drinking.

To prevent exclusion, and/or particular groups taking control of a community resource, project staff have to try hard to develop methodologies which are inclusive, and work with the men and women of the different social groups to help them identify and



Women in Amei fill containers with water and then load them on to their donkey to take home.

respond to these problems. This is neither easy nor quick work and both patience and persistence are necessary. Societies do not change overnight, but when difficult issues are faced and the people concerned are given support, positive change can happen. For example, to overcome the problem of women having to wait for their 'free' borehole water, the community decided to organise a separate fund, managed by the women, to purchase diesel specifically to pump domestic water.

Conflicts over water

When water, land control and access issues become serious they can lead to conflict. In Kiteto these conflicts have even led to the occasional fatality.

In one situation there was a problem of a water source that bordered Kiteto and another district. This large body of water had been used for many years by farming communities in one district and pastoralist communities in Kiteto. Slowly the agricultural community started to move into and farm the area of land in Kiteto previously used by the pastoralists. At first the pastoralists did not react, as in Tanzania people are free to live anywhere, but after the problem became more serious and large areas of land were taken, they asked the authorities to stop the invasion of their land. At this point the agriculturalists tried to stop the pastoralists using the water source for their cattle and a violent conflict started. Police forces and district officials from both districts were mobilised to help solve the problem. However,



Nakwetikya used to collect her water from deep, dangerous holes but now can collect clean water from this tapstand in Ndedo Village.

before it could be resolved, women were raped, one person and a number of cattle were killed, court cases led to some people being put in jail. The people needing to use this water source still remain vulnerable.

Water is the difference between life and death and between poverty and economic development. It is therefore worth fighting for and this makes it a precious, but sensitive, commodity to work with.

Responding to these challenges

It is very clear that livelihoods and land use impact strongly on water projects and that without a very good understanding of all the issues, implementers of interventions can actually make things worse for marginalised, vulnerable people. Development projects with pastoralist communities throughout Africa have been notoriously unsuccessful and so, in Kiteto, a number of actions have been and are being taken to avoid similar failure.

The first, crucial, step was to recognise that problems actually existed. Issues around political, social and economic power, gender equity, personal and cultural belief systems are all extremely sensitive and difficult to acknowledge to oneself, let alone publicly. But encouraging people to talk about them openly in Kiteto enabled programme staff and

community members to begin the process of recognising that there were serious conflicts of interest present. Considerable time and effort was invested in discussions within and between the Kiteto partnership management team, field staff, and project communities to explore the prejudices and assumptions which contributed to potentially damaging misunderstandings. The process was often slow and painful but proved necessary in achieving the mutual trust and respect needed for everyone to work together towards the common goal of improved access to water.

The need for representation in decision-making of all the different social groups (women/men; poor/wealthy; pastoralist/agriculturalist/hunter-gatherer) is perhaps obvious. However, actually achieving cross-representation consistently, and enabling representatives' voices to be heard equally has required constant vigilance. For example, it is very tempting for hard-pressed field staff to proceed with a scheduled community meeting even though only the men have turned up, or those women in attendance are sitting silent outside the discussion circle, or there is no pastoralist representation. A genuine commitment to equity and the ability of key people to remain neutral facilitators of an equity approach has been found to be vital to the success of the programme at all levels.

To work in these environments people need to learn negotiation skills, gender sensitivity, an understanding of different lifestyles and cultures, and the ability to critically analyse the world in which they live, as well as a willingness to help others do the same. Not everyone automatically possesses these skills and it has taken approximately four years for the Kiteto team to acquire these attributes – through training, practice, experimentation and recruitment of both women and men from the different ethnic groups in the locality. Full involvement of the project communities has been an important element in the whole process.

There are no short-cuts to developing effective water projects with communities made up of diverse populations and with conflicting water needs. Such projects are expensive in time, money and human resources but they are essential investments in achieving sustainable outputs which benefit those people whose need is the greatest.



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