

**EUROPEAN UNION EMERGENCY TRUST FUND FOR STABILITY
AND ADDRESSING THE ROOT CAUSES OF IRREGULAR MIGRATION AND DISPLACED
PERSONS IN AFRICA (EUTF)**

CROSS-BORDER ANALYSIS AND MAPPING

Cluster 1: Southwest Ethiopia-Northwest Kenya

August 2016

1. Methodology



Figure 1: Cluster (Source: IGAD)

Data collection particularly focused on interviews and focus group discussions at Zone level (in Jinka) and then in four *Woredas* (Salamago, Hamer, Dassenech and Nyangatom). Three focus group discussions were held in Hamer and Dassenech *Woredaseach* with representatives of elders, young herdsmen and women.

We started doing interviews, document collection and observations in South Omo on August 1. In the first three days (August 1 to August 3), we interviewed officials and experts from various departments of the South Omo Zone government in Jinka. On August 4, we travelled to Hanna, Salamago *Woredato* do more interviews and also observe situations in the villages and sugar plantations of the Bodi. We did more interviews in Jinka on August 5, and went to Hamer *Woreda*, the following day. We conducted focus group discussions and interviews over the weekend (6 and 7 August) in Turmi and its surroundings. On 8 August we were in Omorate, Dassenech *Woreda*, where we did more interviews, focus group discussions and observations. On 9 August, we travelled to Kangaten, Nyangatom *Woreda*, where we interviewed experts. On our way back, we made a detour to a Kara village and did interviews with Kara youth. We travelled back to Jinka on 10 August, and did a second round of interviews with officials and experts there with additional insights we garnered from the *Woredas*. We started the return trip to Addis Ababa in the afternoon of 12 August.

As crossing into Turkana County from Omorate was not possible for security reasons, we relied on literature review and information provided by a researcher with eight years of experience in Turkana, Nyangatom and neighbouring parts of South Sudan as well as other informants familiar with the area.

The research team also held focus group discussion with a total of 36 individuals, with six individuals representing older men, young men and women each, in Hamer and Dassenech.

2. General Description of the Context of the Cluster

What is the size, population and ethnic composition of the border area? Specify the exact size and location of the border areas being studied.

The South Omo Cluster includes parts of South Omo Zone¹ in Southern Nations, Nationalities and Peoples (SNNP) regional state of Ethiopia and Turkana County in Kenya. It forms part of the bigger Karamoja Cluster of the Intergovernmental Authority on Development (IGAD), and is predominantly inhabited by agro-pastoralists.

The area of South Omo Zone amounts to 24,249 km². The Zone has eight *Woredas* and the Jinka town administration (the Zone Capital). Sixteen ethnic groups are considered indigenous to the Zone, while a good number of Ethiopians from other parts of the country also live there. According to the population projections for 2016/17 based on the population and housing census conducted in 2007 (Central Statistical Agency, 2008), the Zone has a total population of 767,915 (see Table 1).

Table 1: Population Characteristics of South Omo Zone

No.	Woreda/Town Administration	Population			Land area (km ²)	Population density
		Urban	Rural	Total		
1	Semen Ari	3,762	85,775	89,537	281	318.64
2	Debub Ari	17,111	236,699	253,810	1,521	166.87
3	Maale	1,461	110,425	111,885	1,432	78.13
4	Dassenech	3,773	66,360	70,133	2,226	31.51
5	Bena Tsemay	3,442	66,975	70,418	2,923	24.09
6	Hamer	5,135	74,284	79,419	5,990	13.26
7	Nyangatom	-	23,250	23,250	2,652	8.77
8	Salamago	1,970	35,104	37,074	4,450	8.33
9	Jinka	32,389	-	32,389	2,774	11.68
Zone Total		69,044	698,871	767,915	24,249	31.67

Source: Own computation based on figures provided by the Zone's Finance and Economic Department

As can be seen in Table 1, most of the Zone's *Woredas* are sparsely populated and most of the population lives in rural areas. The densely populated *Woredas* are inhabited by the Ari and Maale ethnic groups. This is explained by the settled form of agrarian livelihood followed by members of these ethnic groups. The remaining five *Woredas* (Bena Tsemay, Dassenech, Hamer, Nyangatom, and Salamago) are inhabited by ethnic groups practicing agro-pastoralism. Rain-fed agriculture contributes significantly towards the annual consumption in the Bena Tsemay *Woreda*. The same could be said for some parts of Hamer *Woreda*, in higher altitude area near Dimeka, the *Woreda* capital. Flood retreat agriculture is practiced in the remaining *Woredas* in areas close to the Omo, Mago and Woyto Rivers (see figure 1).

Population density figures do not necessarily reflect resource abundance. Dassenech *Woreda* which is among the most resource strapped is the one with the highest

¹ Zone is a middle level administrative rank in Ethiopia, which in order of decreasing importance includes: federal-region-Zone-*Woreda*-*Kebele*.

population density from the agro-pastoralist *Woredas*,² while Salamago *Woreda* which receives bimodal rain in some parts is the least dense. This could however change, as the expected huge influx of labour force from the highlands to work in the sugarcane plantations in Salamago and Nyangatom *Woredas* would significantly alter the population size of these *Woredas* as well as the Zone. The Ethiopian Sugar Corporation and the Zone's administrators expect job opportunities to be created for about 400,000 to 700,000 individuals. This would double the Zone's population, although most of the incoming labour force will be concentrated in Salamago and Nyangatom *Woredas*, where it could reduce indigenous communities to making up less than ten % of the *Woreda* population.

In **Turkana**, according to the 2009 census figures, there are some 855,399 residents, which represents an increase from only 143,000 residents in 1979. This suggests that Turkana has a very high population growth rate (6.4 %), and that the County's population would reach 1.4 million in 2017, a tenfold increase in less than four decades (Turkana County Government and United Nations Joint Programme, 2015). This makes the Turkana the largest in terms of population size and livestock population (which is directly proportional to population) in the Cluster. Its 68,680 Km² land area makes Turkana one of the largest counties in Kenya, but the entire territory is in semi-arid (19%), arid (42%) or very arid (38%) ecological zones (Turkana County Government and United Nations Joint Programme, 2015).

Turkana has a low population density, which is related to the ecologically determined sparseness and nomadic lifestyle of the population. However, significant increase in population due to mega-projects is expected in Turkana. The Lamu Port South Sudan Ethiopia Transport (LAPSSET) Corridor, the discovery of fossil fuel and planned infrastructure projects (such as an international airport in Lokichoggio and Resort City at Eliye Springs) all indicate that there will be an influx of labour into the county.

What infrastructure is available on each side of the border? What cross-border infrastructure is available (roads, shared facilities, etc.)

The Government of Ethiopia (GoE) is proactively working to improve road infrastructure, including asphaltting the road from Key Afer to the Kenyan border through Omorate town (close to 200 km) and on vast irrigation schemes in the Omo valley. In addition, the GoE is supporting the gradual development of service infrastructures, such as schools, as part of the villagization scheme being implemented by the regional government.

Other infrastructure, including health centres, schools, police posts and community gardens,³ has been slowly expanding in Turkana since independence and continues to do so with the help of many international NGOs, including Oxfam and Churches.

² Although the Dassenech are among the main food aid recipients in recent years, they used to be the most productive and 'exporters' of grain to the valley due to their access to large sections of Omo floodplains, thus making use of the moisture and 'natural fertilizers' coming in the form of alluvial soil. This explains the high population density in the *Woreda*.

³ Community gardens are in most regions the only viable form of improving the livelihoods especially of victims of livestock loss by self-reliant food production. They significantly improve health and food security for benefitting households at moderate costs.

Infrastructure availed by either the GoK or the GoE so far are often not, however, built to be shared; rather they serve the interests of the respective states in the borderlands. There are some facilities built by churches that are shared by communities on either side. For example, a school on the Kenyan side of the border, near Omorate town, built by the Catholic Church is attended by children of the Dassenech, Nyangatom and Turkana. A protestant church in Kibbish, Nyangatom *Woreda* is occasionally attended by followers from across the border too. The Turkana also come to Turmi for medical treatment at the Health Centre there. Injured Dassenech have at times been brought to Lodwar District Hospital by Catholic missionaries from Tòdenyang. The GoE's intention to upgrade the Health Centre in Turmi to a hospital could further increase the service it gives to the Turkana population across the border.

How are resources managed and are there any joint or shared resource management mechanisms?

The resources most valuable to residents of the study area are mainly livestock, water, grazing land and flood retreat agricultural land, with opportunistic rain-fed cultivation practiced where possible. Through highly differentiated and flexible seasonal migration with their diverse types of livestock, the local community is able to maximize the utilization of vast areas with low resource density.

Migration is conducted to access grazing areas and water points, mainly by young men but (most extensively by young men in Turkana) at times also by older men, women or entire families. In insecure areas, agglomerations of family herds often combine to increase defence capacity. Women engage in flood recession agriculture, after the floods of the Omo, Woyto or Mago retreat from the banks, and do most of the rain-fed cultivation. The alluvial soil brought from the highlands, together with the moisture retained in the soil, makes flood retreat agriculture especially productive. This by definition necessitates access to the coveted riverbank areas.

As such, all agro-pastoral ethnic groups have access to some flood-retreat agricultural lands, yet to very different extent. The Dassenech have exclusive access to very large flood-retreat agriculture land. Among the Nyangatom, certain sections own the riverbank cultivation sites, but allow members of other groups to use them under certain conditions. This acts as an important 'insurance' mechanism for those losing their pastoralist livelihood in situations of natural disaster.⁴ A section of the Hamar negotiates with the Kara and Erbore (in the same *Woreda*, but having control over areas bordering the Omo and Woyto, respectively) to cultivate their lands after them. This means that *Kebeles* located nearby to recession agriculture lands are more food secure than those neighbourhoods that are further away.

Non-governmental organizations (NGOs) support resource management initiatives. Before the enactment of the 2009 Charities and Societies Proclamation (No. 621/2009) in Ethiopia, NGOs mainly used to integrate their resource management (particularly rangeland management works) with conflict prevention and resolution works. After the passing of the law into force, NGO activity in resource management

⁴ I. Eulenberger, personal communication

activities has much reduced in the Zone. However, NGO activities are reviving in more recent years.

Box 1: How indigenous institutions protect critical resources efficiently

Overuse of resources in drylands is largely prevented by the disequilibrium between wet-season abundance and dry-season scarcity that kills of up to 80% of the livestock. Stock numbers thus depend on drought-time availability of fodder and water. The most critical parts of rangeland socio-ecological system are therefore on the few areas (c.5-20%) where water and fodder are available all of the year. Remarkably, the indigenous communities manage and protect these vital resources without central or policing institutions far more successfully and sustainably than many populations relying on states and other formal organisations. This is achieved by a system of social behaviour control building on cultural norms, customary rights, consensus-oriented grass-roots decision making and territorial organisation of sub-ethnic groups, all socialised by traditional pastoralist education. In spite of the mobility and flexibility it enables, this system is far from leaving access rights undefined below the level of the ethnic community.^{5*}

Among the pastoralist communities, kin groups hold customary rights especially on settlement and wet-season areas, cultivation sites and special resources, including trees, whereas the most important dry-season grazing reserves are commonly held by larger agglomerations. Access can be rigidly restricted to certain times and users and such regulations are enforced by efficient communal institutions and sanctions. However, to grant the degree of flexibility on which survival often depends, a family or small migrant group belonging to the ethnic group dominating an area (but to a territorial section that does not normally use this area) would normally be allowed to graze and water their stock there for some days. However, after the end of that accommodation, it will be expected to leave, unless it makes other arrangements with the people entitled to such decisions. This will normally be ad hoc councils formed by representatives of the agglomeration of families holding customary usage rights. These agglomerations, among which prominent elders and diviners can have strong influence, also keep certain key areas, especially those with resources that become critical in the dry season, off limits for everyone for most of the year. And if a non-local group is larger or wants to spend more time in an area on which other segments of that ethnic society have customary rights, they need to obtain permission first. It will normally be granted at least for a period, in fulfilment of the principle of reciprocal amity as key component of the system of behavioural and ethical standards on which everyone is likely to rely in certain moments. However, access can traditionally be denied or revoked after a time, or when the locals' own survival is at stake, e.g. in case of epizootics.^{6*}

Early (but still widespread) assumptions that the rangelands in Turkana and elsewhere in Northern Kenya is "degraded" by "overuse" has been repeatedly disproved by more recent research as based on misunderstandings.⁷ One main factor preventing degradation by pastoralist overuse is the disequilibrium character of the dryland

⁵ I.Eulenberger, personal communication and (2015); Gulliver 1951, Little & Leslie 1992*

⁶ Eulenberger forthcoming

⁷ Eulenberger / OTuRN (forthcoming); Little & Leslie 1992; McCabe 2004;

ecosystem, the other one is the indigenous system of resource management by socio-cultural behaviour control (see Box 1).

Degradation through overuse does occur where the indigenous system is weakened by the impact of modernisation processes. This is especially the case around the permanent settlements that have mushroomed since the introduction of the aid industry, missions and increasing government interventions, mostly in order to cope with the massive population increase resulting from the work of these same organisations, beginning after the forceful submission of the Turkana under colonial rule during the first two decades of the 20th century. The permanent provision of water, food and services at these locations, together with the inability of more and more destitute Turkana to fully re-join the pastoralist economy, combines decreased mobility with desperate need for income, resulting in local resource overuse if traditional control mechanisms are eroded. However, as these traditional control mechanisms continue to function well in many areas, environmental degradation is far less extensive than one would expect given that a majority of Turkana depends on food aid today.⁸

In Turkana, a large number of NGOs (for details see Annex III) is working on developing resource-based livelihoods, including: pastoralism as the only viable use of c.90% of the territory; small-scale irrigation projects along the few permanent watercourses; and a vast range of other aid and development activities for many decades. However, most of NGOs do not focus on the rangelands and other productive resources, but rather on services and humanitarian issues. These, however, do usually not lead to increases in productivity but further increase pressure on key resources.

The use of enclosures to rehabilitate degraded rangelands is controversial. While a study on a 30 years old small-scale project in Kalatum, Turkana County, shows that there is better rangeland recovery and vegetation cover status in enclosed areas and recommends the scaling up of such practices and that, for best results, the local community should actively engage in such work (Kigomo and Muturi, 2013).⁹ Local communities are usually against such measures as they insist in being in charge and successful in resource management and conservation. While in spots with high pressure and low control efficiency, especially where large numbers of people have come to settle more recently, this might be worth testing, the high costs and low acceptance are problematic. The best example of rangeland management with little/no state or NGO intervention in the South Omo cluster could be the case of the Qaina and Beshada enclosures in Hamer *Woreda* (see Box 2 below).

⁸ Eulenberger / OTuRN (forthcoming).

⁹ At the core of the success in this rare experiment seems to be the full community ownership. After an introduction by scientists, “traditional rules and regulations guiding the management and maintenance of enclosures” were applied and enforced “by council of elders selected from surrounding villages” and assigned youth (p.169), i.e. the enclosures were integrated into the traditional indigenous range management system and gradually expanded from 5 to 23ha.

Box 2: Fenced communal land enclosure in Turmi and unfenced communal land enclosure in Beshada in Hamer district

In response to irregularities and disruptions to the pattern and amount of rainfall, and the subsequent occurrence of droughts year after year, it has been a while since communities in Hamer district have closed lands near to their villages.

Compared to communal land enclosures initiated by non-community stakeholders, those run by the local community have been successful in rehabilitating degraded rangelands and providing income earning opportunities. Most important here is the ability of land enclosures to help revive the emergence of strong informal rangeland management institutions.

Two forms of such enclosures exist in Hamer. The communal enclosure in Qiana, for example, is a fenced communal enclosure composed of a publicly elected land enclosure committee. This helps a number of households benefit from the sale of grass and the provision of credit services for households to run petty trading in the village and to cover medical costs at time of need.

The other form of communal land enclosure is significant in terms of the scale of land coverage and the nature of the management involved. This is found within the Beshada area, where the local chief ordered a huge hill (grazing land for the Beshada, Hamer and Kara) to be closed by word of mouth. An encroachment into it results in social sanctions, and entrance by other groups requires an application for acceptance and often only in parts of the land.

Both types are contributing to the appropriate use of the resources on the rangelands, restoring the eco-system functions and setting up norms and regulatory mechanisms along with institutionalizing enforcing management bodies. Gender issues are also taken into account where, particularly in the first communal rangeland management case, women and youth have places in the newly formed rangeland management committees (Samuel, 2015).

The GoE has shown a greater interest in the resources of the area since the mid-2000s. Initially, the interest was mainly targeted to garnering greater foreign currency earnings from the tourism sector, witnessed in the transfer of the administration of the Omo National Park to African Parks Foundation PLC. This did not, however, come to fruition. Later, the GoE came with greater vigour with the intention of establishing sugarcane plantations through the state-owned Ethiopian Sugar Corporation and also opening the area to private investors.

There are a number of EU, DFID and USAID supported projects addressing land and resources governance in Turkana County. Support to Land Governance in Sub-Saharan Africa, in the scope of the Voluntary Guidelines project (2013-2016) by EU; Drylands Management Program (2011-2014) by USAID; and Arid Lands Support Program (2012-2017) by DFID are some. The EU funds the SHARE-Reviving ASAL Economies through Livestock Opportunities and Improved Coordination (RAELOC) with FAO being an implementing organization. In South Omo Zone, and in other parts of Ethiopia as well, the FAO, in partnership with the Ministry of Livestock and Fisheries, actively undertakes disease surveillance and particularly works on PPR using EU fund to finance its projects. The project's office at the Ministry monitors field conditions in South Omo and intervenes when an outbreak of diseases occurs. The team of experts

work with the community and relevant government offices and have active presence. In Somali and Afar pastoral areas, international NGOs such as VSF Germany and VSF Swiss also work along with FAO and the government. A cross border project on this in both South Omo and Turkana highly benefits both sides and supports ongoing efforts on the fight against PPR and other diseases.

Competition is also visible regarding fish resources on Lake Turkana. Some 861 Dassenech fish on the Ethiopian side of the Lake which is more productive, owing to its fresh water qualities and the presence of breeding grounds on this side of the Lake. In Turkana, however, there are some 6,000 fulltime fishermen and an additional 1,000 in Marsabit. Most of these fishermen are sedentarised dropouts from agro-pastoralism (SI, 2015). Figures of fishing population are contested however, depending on when one does the counting, reliability of the process and the extent to which those relying on the value chain are counted. Mbogo (2010 cited in Avery 2010) talks about a rise of the fishing population from 2,600 to 8,160 between 2006 and 2007. While the trend towards increase is credible, the massive change in such a short interval suggests (a) counting issues, putting the whole figure in doubt, and (b) a high seasonal and/or annual fluctuation of fishing activities between localities and/or time periods.¹⁰ From his own research experience, Eulenberger (personal communication) confirms that some of the most productive zones, i.e. especially the area around Tòdenyang and Lóarengak (i.e. near the Ethiopian border) have thousands of people fishing in one year and around zero in the next when insecurity rises. Therefore, the importance of fishing as a base of livelihood and existence of a much larger population, ranging in the tens if not hundreds of thousands, is not to be underestimated. The lake-shore districts of north-eastern Turkana (Kàtaboi, Riokomòr, Ngisiger and Tòdenyang) have around 50,000 inhabitants and apart from relief food, fishing is the main source of food and income, in this zone probably before pastoralism. The districts of the fishing zones of central Turkana between the mouth of the Turkwell and Ferguson's Gulf (Kalokol and Kerio) have more than 100,000 inhabitants. So about 200,000 Turkana live along the lake shore and benefit in one way or the other from fishing.¹¹

An example of joint resource management, although a minor one, is the attempt to eradicate an invasive species, *Prosopis juliflora*, which is increasingly taking over Nyangatom and Turkana grazing lands, and now expanding into Dassenech lands also. This is through a joint operation by the Regional Pastoral Livelihoods Resilience Project (RPLRP). Eradication of *Prosopis* and replacing it with selected fodder species,¹² has started on the Ethiopian side,¹³ and the Kenyan side is expected to follow suit. If such exercises are not done jointly, the progress made on one side will be countered by new seeds brought from the other. Coordinated activity is starting, and local officials expect that this will be one of the joint resource management activities they will be undertaking.

¹⁰ Eulenberger (personal communication).

¹¹ Eulenberger (personal communication).

¹² In Kenya (and other parts of Ethiopia, Afar region mainly) there are examples of using *Prosopis* for various purposes, rather than simply attempting to eradicate it (see Muturi et al., 2014).

¹³ RPLRP functions in seven of the nine *Kebeles* of Nyangatom *Woreda* adjacent to Turkana, in all of which *Prosopis* is a common problem.

What economic activities are practiced in the border areas? What economic and social connections exist between communities on both sides of the border?

There are no formally established economic institutions that cut across the border, but social connections have always been part of the daily coexistence dynamics through pastoralist migration, visits, trade, interactions of local government officials, religious gatherings, education and so on.

Pastoralism is the main provider to the mobile and semi-sedentary communities in both sides of the Omo Valley (Kenya and Ethiopia). It sustains the lives of people and their livestock in this fragile, conflict prone and largely neglected region. Livestock are not raised with market considerations, but both in times of need and for goods like food and clothes, agro-pastoralists sell livestock.

Fishing: Apart from inter-ethnic livestock and crop trade and petty trading activities, an economic activity of important scale and concern is fishery activity in Lake Turkana and the Omo River delta. According to various key interviewees in South Omo Zone, the Ethiopian side of the lake has rich fish resources¹⁴. Bubwa and Haddo settlements close to Lake Turkana as well as Omorate, Aedboren, Muguji, Kangaten, Kara and Bacha are fishing sites along the river that depend on free movement of various fish species.

In Turkana, by far most the productive fishing sites are those close to the Omo delta (which is bisected by the official border but under effective control of Dassenech communities) where most of the fish populating the lake spawns due to extensive seasonal flooding of fertile lowlands and the nutrients brought by the floods. Fish from the Turkana coast is on high demand because of its taste and quality and is sold in Nairobi, Lake Victoria and the Congo. Much of the c.200.000 Turkana living along the lake shore depend in one way or another on fishing.¹⁵

According to officials in Jinka, the average harvest per kilometre square from the lake and the river is 10,000 and 2,020 kilograms respectively. The estimated fish caught is the highest in Bubwa and Haddo areas with annual production of approximately 19,200 and 2,000 tons per kilometre square from inside the lake. The South Omo Zone Livestock and Fishery Resource Development Extension Work Process Owner report indicated that there are 31 fish species identified in Lake Turkana and Omo River. Tilapia, Nile perch, Hitrotis, Clarias, Distichodous, Barbou, Labeo and Protoptereus are species with high demand in market.

Small-scale seasonal agriculture is commonly practiced in the Cluster. In South Omo all pastoral groups have exclusive or negotiated access to river banks, and engage in flood retreat agriculture. For most ethnic groups in South Omo such cultivation is practiced along the Omo River, while some use Mago and Woyto. Similarly, in Turkana, retreat agriculture is conducted in lands prone to flooding, at the lower Omo and western escarpments of Lake Turkana. In Turkana irrigated agriculture is practiced along the Turkwel and Kerio Rivers, mainly growing maize and sorghum.

¹⁴ The total area of the Lake Turkana is nearly 6,400 km², of which 33.13% is under the Ethiopian territory.

¹⁵ Eulenberger, personal communication

With reference to water resources specifically, what kinds of water management systems are in place, and are there any shared cross border systems or ways in which water management on each side of the border comes into contact with the other side (including in generating conflict)?

Water management at the micro-level is handled by clans and ethnic groups. If a community lives far away from a permanent water source, the available source of water is hand dug wells in dry riverbeds or common water points and taps built by NGOs. In extremely dry years it will be more difficult to get water from river beds, and communities might be coerced into migrating in search of water.

Box 3: Micro-Water Management in Nyangatom

Kakuta is located in the Nakua area, not along the Omo, thus water resource dynamics there are based on the Kibish river. Water development projects in *Kebeles* such as Kakuta are implemented with the assistance of NGOs. A water committee is established per pump, and trainings are given on maintenance (four individuals), access rights/use management (two individuals) and for one cashier. Members of the committee rarely (or never) meet as such. In practice, the senior elder of the nearest hamlet to a pump will assume the role of managing pumps, rather than a committee.

Kibish river, which functions as the boundary dividing Ethiopia and Kenya, serves as the main natural source of water for the Nakua area. This is despite the fact that it is dry for most of the year. Wells are hand dug, to some 6 to 7 metres depth, on the dry river bed. In extremely dry years (such as 2010) these hand dug wells will run dry, and members of the local community go to Kenyan Kibish (some 30 km with donkeys) to access permanent boreholes. In times of peace, family contacts and friendship bonds across the border facilitate access to the boreholes.

The people of Kakuta have been promised permanent access to water from irrigation canals and channels that will service the expected sugar plantations. Although they are agro-pastoralists, they do not currently practice irrigation at all; their horticulture is all rain-fed or flood retreat (on the Kibish and the Omo¹⁶). So water from the sugar plantations channels will mean a change in agricultural techniques.

Coming to *Kebeles* adjacent to the Omo, in Kangaten, the *Woreda* capital, there is a centralized water provision system with households getting piped water and paying for the same. In Chare and Kopriye, rainwater harvested using ground catchment cisterns is connected to pumps. Although water committees do not function as planned, management is better than in Kakuta. No one pays for their water, as initially envisaged. Shenkora and Ayepa *Kebeles* (where villagization is under implementation) use generators to pump and store water. Water committees are not functional throughout the *Woreda*. In Ayepa village there is a central tap and water is supplied for a fee.

Source: David Pertaub (PhD candidate, University College of London)

¹⁶ Although Kakuta is in the Nakua, not Omo part of Nyangatome, part of the seasonal migration patterns of the Ngikapung territorial section used to involve some wives moving across to the banks of the Omo and cultivating there after the flood.

Dams on the Omo River: The most consequential water infrastructure the GoE is engaging in is the Gibe III hydro-electric dam to the north of the cluster. This dam is intended to generate 1,800 MW of electricity. There are plans to construct a new hydro-power plant in Konta Special *Woreda*, close to its border with Salamago *Woreda*, which has the capacity to generate 1,470 MW.¹⁷ These dams have big reservoirs, and their impact on the water system of the Cluster could be felt at the time of filling, regulating the river flow, and on ecological services the floods offer.

Villagization Program in South Omo: Recognizing that water is a very critical resource in the Cluster and that the implications of development projects like dam construction and irrigated agriculture threaten local livelihoods, the GoE has launched a villagization scheme that is meant to better secure livelihoods. Major livelihood decisions on the part of members of the local community are made considering the availability of water. Agro-pastoralists make decisions to engage in seasonal migration with their herd and to engage in retreat agriculture are made with considerations of river water.

Villagization attempts are made in a 'water-centred' manner. All village centres to be established are premised on the availability of water, usually after the construction/provision of irrigation facilities, through MDG/SDG funds. This is for example the case in Salamago *Woreda*, where the Ethiopian Sugar Corporation is providing irrigation water for the maize (0.5 ha) and sugarcane (0.75 ha) fields of the villagized households. The same consideration is given in Dassenech, Kara, Hamer, Mursi and Nyangatom villagization programs.

One of the most serious cases so far is the complete utilization of the Woyto River waters before they reach their historical destination in Chew Bahir (Lake Stephanie). This has dashed the possibility of engaging in flood retreat agriculture and dry season grazing by the Erbore and a section of the Hamer (near Asile and Minogelti *Kebeles*). Moreover, this might lead to the drying of the Chew Bahir wetlands leading to various socio-ecological consequences. When it comes to trans-boundary waters the Zone officials argue that the issue is political, and that it will be handled by the Ministry of Foreign Affairs.

There is a need for GoE and GoK to engage with one another, experts and affected populations to study the possible consequences of dam construction and water withdrawals, and propose effective mitigation strategies.¹⁸ Similarly there is a need to engage in a similar study for other smaller non-trans-boundary waters or tributary rivers of the Omo. Otherwise the possibility of harsh consequences on the lives and livelihoods of the downstream communities are inevitable.

¹⁷ Gibe V dam is also planned to be constructed in the Zone, with power generation capacity of some 660 MW.

¹⁸ There is an emerging organisation with that aim, the Omo-Turkana Research Network (OTuRN), which brings together an interdisciplinary group of experts to pool and process relevant knowledge in dialogue with the governments, communities and NGOs engaged in the region (see Hodbod & Stevenson, 2016). It currently promotes research and discussions on how to create cross-border coordination in development planning and security production to use the potential for synergy between scientific knowledge, indigenous knowledge, governance and modern intervention technology to protect and enhance ecosystem services, livelihoods and extractable value production. Key themes are regulated cross-border mobility, irrigated dry-season fodder production and livestock sales in return for fodder and services.

Discovered aquifer in Turkana: In September 2013 it was announced that some 250 billion cubic metres of water is found underneath dry Turkana. This is a game changer, given the fact that it is “more than 900 times the country’s current water assets” and that it has the potential to “provide for the next 70 years” (Nyanjom, 2014). These hopes were dashed two years later, as first tests of the water proved that it is too salty for consumption.

What are the sources of vulnerabilities in the border areas?

The main sources of vulnerability in the border areas are (1) periodic and unpredictable resource scarcity and recurrent disasters (droughts, epizootics, etc.); (2) mounting pressure on critical resources, especially land and water, by (a) land alienation to agro-industry schemes, (b) rapid population growth and (c) climate change and ecosystem degradation.

Drought, resource scarcity and food insecurity: Drought is a persistent marker of the Cluster, leaving many food insecure and aid dependent. The frequency and severity of drought appears to be on the rise, usually attributed to impacts of climate change. In South Omo Zone, the most drought prone and food insecure *Woredas* are Dassenech, Hamar and Nyangatom (in decreasing order). Severe impacts from climate change through disrupted patterns and inadequate rainfall, together with the filling of Gibe III dam have aggravated food insecurity and conflict. This has left thousands of people in South Omo Zone, mainly in Hamar, Dassenech and Nyangatom *Woredas*, food insecure and dependent on relief in 2015/16.¹⁹ This triggered migration in search for water, grazing and agricultural land and forced people to encroach conservation areas and threaten water intensive investment projects in some parts of the Zone.

Problems of drought and resource scarcity are further complicated by the ever increasing human and livestock population on both sides of the border. Pressure on rangelands is contributing to rangeland degradation, and to decreases in productive capacity of the fragile environment. This is particularly noticeable in Turkana, where a tenfold increase in human population (and probably a much higher increase in livestock population) has occurred in the past four decades. This indicates that the old modes of livelihood are being strained to the limits and that new, alternative modes of livelihood are much needed in the area. Potential alternative livelihood schemes could be small-scale irrigation projects, fodder production and development as a business, working more on expanding and exploiting the fish resources of the Lake, and promoting trade.

Unemployment is not a major concern in South Omo Zone. The 2007 Population and Housing Census indicates that there were only 2,892 individuals (0.01 %) were unemployed from a total of 306,162 economically active population in the Zone.²⁰ Given the massive job opportunities created by the sugar development project in the

²⁰ The reliability of this statistics may be questioned on the validity of the survey questions (mainly prepared for highland settled agriculture areas, thus producing more unemployed in agrarian areas and towns on South Omo as well). Even if, for example, a young man keeps his father’s herd he will consider himself as employed. In farming areas however a young man tilling his father’s land is considered as landless and unemployed.

Zone and other infrastructure projects, the Cluster will be absorbing unemployed people from other parts Ethiopia.

Development Interventions: If not properly handled, commercial agriculture will add pressure on local livelihoods.²¹ This added threat to local vulnerabilities could come in the form of land alienations (which might have been used for grazing, cultivation, migration and rituals) or through the withdrawal of water beyond the capacity of the water source. Thus the threat could be at the particular area of intervention or could be felt further downstream.

Another effect that has so far been neglected but is currently on OTuRN's research agenda is the potential drop of ground water levels around the lake and the decrease of rainfall in a vast region due to the loss of humidity if the lake surface reduces, as expected, to less than half of its present size. About five million people depend on these resources and might suffer severe damage to their livelihoods. Rain is the main factor limiting biomass production in the region and thus determinant of both most cultivation and the entire livestock economy. Pastoralists rely heavily on hand-dug wells and even modern boreholes become very quickly dysfunctional when groundwater recedes and sand blocks pumping shafts, with repairs being very costly. In view of the extent of the expected problems, the general economic trade-off of irrigated sugarcane and cotton production seems to be highly unfavourable. Therefore, Eulenberger and OTuRN (forthcoming) suggest a shift to a smart use of South Omo's irrigation potential for less water-intensive food and dry-season fodder production combined with systematic cross-border livestock migrations to make full use of the abundant wet-season grazing in Turkana and the Elemi Triangle. They expect this modernised reactivation of pre-colonial migration patterns to not only increase the productivity of the region's pastoralist economy but also the development of efficient security and economic cross-border cooperation of the governments and a massive improvement in inter-ethnic relations through the creation of strong incentives by the resource-sharing system, as well as an amicable solution to the problems of the disputed Elemi Triangle (Eulenberger forthcoming).

Specific Context in Terms of Migration and Stability

What are the forms of migration in the area (displacement due to what? Labour migration? Seasonal migration for pastoral grazing or agricultural practices? Resettlement? Migration as a result of environmental change, etc.

The research has identified two waves of *irregular migration* in the past (both from Ethiopia to Kenya), which are no longer active. The first and the larger wave of migration which used the Zone as a transit corridor was at the downfall of the Derg (in 1991) and the second wave lasted the first two years of this decade, 2010/11 and 2011/12. In 1991, as the triumphant forces of the Ethiopian Peoples' Revolutionary Democracy Front (EPRDF) strove to control Addis Ababa most of the southern parts of

²¹ Land leased to investors is in thousands in some *Woredas*, and much lower in others: 64,050.7 ha in Hamer; 33,238 ha in Nyangatom; 25,505.7 ha in Dassenech; 8,290.1 ha in South Ari; 7,979 ha in Bena Tsemay; 300 ha in Maale and only 50 ha in North Ari.

the country were in disarray, with collapse of state institutions. Many members of the Ethiopian Working Party and high ranking government and military officials fled the country through South Omo, specifically through Omorate, into Kenya. Although these were the main migrants, some residents of the Zone, including from agro-pastoral communities, are said to have migrated and reached the US and Europe as refugees.

The later wave of migration is by young men and women from the densely populated highlands of the SNNP regional state, particularly Kambatta, Wolaita and Hadiya areas. The intended destination is South Africa, and the source areas are known for making the bulk of the Ethiopian migrants to South Africa. As Ethiopians can legally cross into Kenya by getting a visa on arrival, the Immigration Post in Omorate has little/no capacity to forbid Ethiopians with the right papers, usually only a passport, from crossing into Kenya. That there is no border post near the border on the Kenyan side (it is located more than 200 km from the border) helps the migrants to head to Kakuma refugee camp or farther afield into Uganda or Tanzania en route to South Africa. There is no official statistics at the Zone/*Woreda* government or at the Omorate Immigration Post on the scale of migration, but every interviewee agrees that it was 'huge'. Most of these migrants left their home regions for better economic opportunities, often pulled by the news of successful migrants from their villages and pushed by poverty, unemployment and family/peer pressure.

Currently, there is a complex web of migration processes in the South Omo Zone. This web is however on the main restricted to within the borders or the respective countries.

Seasonal migration with stock: As most residents of the Cluster live off agro-pastoralism, seasonal migration in search of better pasture and water is a constituent part of their economic and social life. The migration route and length of stay at a particular rangeland are dictated by resource availability, existing power dynamics and, more recently, by administrative demarcations. The drier a particular year is the longer, both spatially and temporally, the migration will be, leading to crossing into the rangelands of neighbouring ethnic groups (particularly between the Hamer, Dassenech and Nyangatom) and into protected areas (into Mago National Park (the Hamer and Mursi) and the Nyangatom into the Omo National Park). This will spark conflict with the other groups of resource users, including the state (which has triggered the recent fight between the Hamer and the government).²²

Seasonal migration with herd could be limited within the Ethiopian boundary, or extend beyond it. Pastoral communities at the border, the Hamer, the Dassenech and the Nyangatom, in extreme dry years could go into Turkana and adjacent rangelands in Northern Kenya. The Nyangatom also have the option of crossing into South Sudan;

²² Another case of conflict generated due to migration will be overstaying one's invite. Over the past two decades, the Hamer built alliances and positive relations with the relatively smaller ethnic groups in their *Woreda*, the Erbore and Kara, leading to the latter giving the Hamer access to their rangelands and flood retreat agriculture land on a negotiated basis. Such an arrangement between the Hamer (in Asile *Kebele*) and the Erbore broke as the Hamer stayed longer than usual and started cultivating the land the Erbore consider theirs. Bigger macro-processes emanating from El Nino and upstream water withdrawals by commercial farms contributed to these changes, and consequently to violent conflict between the two, claiming many lives.

as they consider the Toposa, located at the border in South Sudan, as their allies and have various social, cultural and economic ties.

As summarized in the Figure below livestock migration in Turkana takes various routes. Communities bordering South Sudan and Uganda could cross international boundaries in search of resources. Similarly those neighbouring other counties (particularly West Pokot and Samburu) also do cross the dividing lines.



Figure 2: Livestock migration routes in Kenya (source: GoK, 2015)

Little is known about migration through Turkana except that it is a destination for Ethiopians from South Omo and other areas. Some of them end up in the refugee camps of Kakuma (Turkana) and Daadab. Kakuma, with a permanent population of over 100,000 is by far the largest settlement in Turkana, and is also a main destination for refugees from South Sudan. Although the resulting pressure on local resources, especially wooded vegetation, has caused degradation and conflict with local Turkana, (as well as other issues between them, the refugees and the implementing agencies), a new camp is being built at Kalobeyéi, between Kákuma and Lokichòkio, under the lead of the UNHCR. Refugees from South Sudan and Somalia, as well as a proportionate number of needy Turkana, are supposed to benefit here from services and guided but self-managed irrigated food production. The idea of settling additional population in a region with acute resource scarcity has raised concerns in Turkana and the appeasement with services has still to prove its efficiency.

Access to retreat agriculture land: A relatively small-scale migration, in terms of the distance covered, is also practiced to access flood retreat agriculture lands. Such lands are found at the banks of major rivers which get flooded and covered with alluvial soil brought from the highlands, making them fertile and moist enough for one or more harvest.

Labour migration from North and South Ari *Woredas*,²³ and much farther from the Zone (particularly from Konso, Kambatta, Wolaita and Hadiya) to Salamago and Nyangatom *Woredas* has been on the increase in the past decade. Increasing need for labour power for various public infrastructure projects and for commercial farms, particularly the activities of the Ethiopian Sugar Corporation first in Salamago and then in Nyangatom *Woredas*, has enticed migration from the densely populated highlands of the region and the whole country. There is a similar expected influx of labour from other parts of Kenya to Turkana County attracted by the LAPSSET Corridor and related infrastructure projects, mainly Eliye Springs Resort City, there. Oil drilling and wind farms in Turkana could invite labour force from other parts of Kenya.

Population relocation schemes:²⁴ State sanctioned population relocation schemes, villagization and resettlement, are also found in the agro-pastoral *Woredas* of South Omo Zone, not on the Kenyan side. Both schemes make part of the government's attempt to ensure food security. Villagization intends to congregate agro-pastoral households within a five kilometres radius into one village, where water, health, education, animal health, agricultural extension etc are provided. Villagization is more advanced in Bodi and Mursi areas of Salamago *Woreda*, as the new villages use the canals of the sugarcane plantations. In Hamer, Dassenech and Nyangatom *Woredas* failure to build functional irrigation facilities has hampered the success of the scheme and contributed to their conflict with the Erbore as the Hamer put more pressure on the Erbore's wetlands to cultivate crops and graze their livestock.

Resettlement involves movement of people from food insecure areas with severe land scarcity over long distances to sparsely populated areas. After its re-introduction as one food security strategy in 2001, resettlement has been restricted to within a regional state pursuant to the ethno-linguistic federal arrangement in place.

Table 2: Resettlement to Salamago *Woreda*

No.	Ethnic group	Households (HHs) resettled in 2011/12 (No.)	HHs in villages in 2016 (No.)	Success (%)
1	Sidama	405	222	54.8 %
2	Gedeo	286	71	24.8 %
3	Wolaita	500	377	75.4 %
4	Kambatta	254	106	41.7 %
5	Konso	200	190	95 %
6	Hadiya	212	145	68.4 %
	TOTAL	1,857	1,111	59.8 %

As Salamago *Woreda* is the least densely populated from the Zone (see Table 1), the regional government has been sending young people from its densely populated

²³ Including child labour migration and use, according to some informants.

²⁴ There is no such scheme in Turkana County's Integrated Development Plan.

highlands there. The first to arrive were 826 households from Konso in 2005/6. Some eight years later, a second batch of a total of 1,857 households from six ethnic groups (see Table 2) was sent to the *Woreda* by the regional government.

Is irregular migration (exit without authorisation, displacement, engagement in smuggling or trafficking networks) going on in this cluster? What information can be gathered about this? Are the numbers and frequency of migration known? Who is migrating? From where to where? Are the moves likely to be temporary or permanent?

Currently there is no noticeable irregular migration in the Cluster. As stated above, the dominant (almost exclusive) trend of migration was from the Ethiopian side from areas north of the cluster towards Kenya. According to informants, there is an exceptionally rare migration of residents of the Zone into Kenya due to conflict and/or other socio-economic pressures and marriages. The frequency and magnitude of migration for market, grazing, water and to visit relatives is very little and is temporary.

The utilization of South Omo Zone as a migration corridor has stopped, and no one is recorded as passing through this Zone as irregular migrants into Kenya. In contrast, the Moyale transit corridor appears to be bustling. This indicates that the push factors compelling Ethiopians to migrate and the network of traffickers and smugglers are still active. Thus there is a good degree of likelihood that the expected increase in population of the Zone, due to labour migration from the southern highlands of Ethiopia, will lead to re-initiating the utilization of South Omo as a corridor.

What are the reasons that people move or migrate?

The main reason forcing people to move is resource scarcity, broadly economic. The seasonal migration of agro-pastoralists is necessitated by the very nature of the ecology this form of livelihood is adapted to and thrives in. Ecological uncertainties and erratic nature of rainfall makes the arid lowlands suitable for an extensive mode of livelihood, such as agro-pastoralism. Thus, seasonal migration is an essential component of agro-pastoralism and the key to the sustenance of this economic system to access rangelands and water points. Basically, migration patterns of agro-pastoralists are underpinned by the constant need to adjust to local resource dynamics and thus search for 'greener pastures'.

Labour migration is animated by high rate of land scarcity in the densely populated source areas in the SNNP regional states. Most migrants from these areas are land hungry youth with little possibility to get access to farm land through formal processes (as the government no longer intends to re-distribute land, and as more or less all areas suited for farming are already being farmed) and with no employable skill. The creation of jobs in their thousands for the unskilled youth is pulling the young from the southern highlands, while land scarcity and food insecurity and unemployment serve as push factors. The government planned and executed resettlement scheme could be taken as recognition of the high pressures on livelihoods in those highlands.

Similarly, villagization is taken as the only path to develop the agro-pastoral communities and provide social services to agro-pastoral communities. This scheme is intended to convert the agro-pastoralist into an agriculturalist through the provision of irrigation water and an intensive skilling campaign through extension services. This in due course, government officials believe, will lead to eliminating the structural causes for seasonal migration of agro-pastoral communities.

Other Actors and Existing Activities

What responses are already provided by other donors, non-governmental and civil society organisations, IGAD, and partner state governments to address migration, displacement and instability? The team should map who is working in the area, on each side of the border. Any cross border activities should be noted. The activities of each actor should be noted, and a brief summary of what is known about each activity should be provided.

In South Omo Zone, 24 NGOs are recorded as actively working at the start of the 2016/17 fiscal year (see Annex II). None of these NGOs work in a cross-border context rather in specific *Woredas* of the Zone on a specific sector.²⁵ The NGOs working on projects with direct bearing on livelihood support and resilience are Action for Development (AFD), Catholic, VITA, South Omo People's Development Association (SOPDA), Global Team for Local Initiatives (GTLI), and Farm Africa. These organizations work on rangeland management, agriculture, water (for drinking and sanitation), and agricultural marketing. IRC has secured funds (some 50 million Birr over three years) to start working on WASH works. Other NGOs registered at the Zone, but yet to come with a funded project are Arid Land Pastoral Development Organization and Omo Pastoralist Development Organization.

There are various bilateral and multilateral donor supported projects implemented through government organs. Productive Safety Net Program is such a program, which supports asset poor households by giving food items and cash (alternatively for three months each) in return for engagement in public works. The Agricultural Growth Program (AGP) is a World Bank funded program which is implemented in selected *Woredas* with reliable and sufficient moisture, and in North Ari and Maale *Woredas* of the Zone. The main objective of AGP is increasing agricultural productivity. SLM, RPLRP and DRSLP could also be mentioned as examples of such projects.

When it comes to conflict issues, a USAID funded project Strengthening Institutions for Peace and Development II (SIPED II) is being implemented by PACT to build the capacity and effectiveness of peace infrastructure by working with the Conflict Prevention and Resolution Directorate General of the Ministry of Federal and Pastoral Areas Development Affairs. They particularly work to strengthen the efficiency of peace committees established at *Woreda* and *Kebele* levels, particularly in conflict prone areas. One of the few NGOs to work on peace and conflict activities in Ethiopia, the Peace and Development Centre (PDC) also completed a project in the Cluster, with a cross-border dimension.

²⁵ An NGO called VSF used to work in the borderlands of Kenya and Ethiopia, particularly on animal health and veterinary services. Its project has now phased out.

In Turkana, USAID together with The Millennium Water Alliance, CARE International, Catholic Relief Services, Food for the Hungry, and World Vision runs the Resilience and Economic Growth in Arid Lands program, worth \$65 million (USAID, 2014) and The Kenya Arid Lands Disaster Risk Reduction Water, Sanitation and Hygiene program “to ensure that people living in Kenya’s arid lands plan for, adapt to, and increase their ability to recover from shocks and stresses, such as drought or flood.” (Johnson 2013) These programs claim to be “strengthening and diversifying livelihoods”. The veterinary component involved certainly does that, but “diversification” usually means supporting non-pastoralist activities, which are frequently unproductive or encroach on pastoralist resources. Here “diversification” translates, as so often, into “jumpstarting small business ventures” (USAID, 2014), which largely means more unemployed literates pushing into an already saturated market for petty trade, thus further diminishing its profits without producing anything.²⁶

In a similar endeavour, UNDP, FAO, UNICEF, WHO, ILO and IOM just completed a USD 6.1 million, 3.5-year project partnering with Turkana county government and local NGOs in March 2016. Located amidst productive rangelands as main productive factor and base for independent livelihoods, it focussed on the usual priorities like education, basic health care²⁷ and access to water “for vulnerable populations”, which means mainly for the destitute, largely stockless inhabitants of permanent settlements that not only are already on drip-feed by the international aid system but actually its product. It also contains components like “raising awareness on child labour”, which implies a systemic bias against an indispensable base for mobile pastoralism, i.e. pastoralist education.²⁸ When it comes to rangeland rehabilitation NGOs like the Japanese Overseas Forestry Consultants Association implement rehabilitation works in the severely degraded areas surrounding Kakuma Refugee Camp (Muturi et al., 2014).

Activities on the Kenyan side have an express market orientation. This can be viewed in the activities of Oxfam (through an EU funded project), USAID and Solidarities International (SI). Oxfam’s ‘Sustainable Livelihoods through Value Chain Development for Pastoral Communities in Turkana’ focuses on the entire fish value chain starting from the very fishing and landing facilities. Oxfam (2014) is working with Catholic Diocese of Lodwar to provide saving and lending services to the Turkana.²⁹ USAID is implementing a project ‘Kenya Markets Trust’ which intends to promote market development in Northern Kenya (Oxfam, 2014). SI uses a holistic approach to reduce pastoralist vulnerability to drought by working on natural resource management works and to increase agro-pastoralist revenue by gearing livestock, fishing and fodder works towards the market. SI also works towards increasing the scale of rainwater harvested annually through the use of earth pans. Moreover, SI (2015) is involved in activities aimed at better managing *Prosopis* trees.

²⁶ I. Eulenberger, personal communication

²⁷ Health services, which are certainly desirable and can increase productivity by reducing illness-related losses, and are the core theme of the 2014-18 Country Development Cooperation Strategy (CDCS) of USAID-Kenya (2014), do not per se create more production or better chances on international markets or resource protection but commonly neglect family planning and thus increase pressure on resources as they accelerate population increases.

²⁸ I. Eulenberger, personal communication

²⁹ Omo Micro-Finance, run by the regional government, functions in South Omo Zone, but not in the agro-pastoral *Woredas* closer to the border.

On the Turkana side, Catholic Diocese, Raim Raim, ACTED, Kenya Conference of Catholic Priests and SAPCONE are the NGOs actively working on peace building, conflict resolution and prevention. There is a USAID project called Peace III which is being implemented in a cross border setting, with PACT Kenya and Mercy Corps being the main implementers too. The project intends to build durable peace and secure livelihoods and promote cross-border conflict management among pastoralist communities. Peace and Development Centre is the local implementer on the South Omo side.

What priorities does IGAD identify for each cluster? What activities might be implemented there?

IGAD works on a limited number of activities in the Cluster. The Authority's most important/singular focus in the past was collection, analysis and dissemination of conflict early warning information for early response geared towards prevention, within the bigger Karamojong Cluster. This is conducted within the Conflict Early Warning and Response Mechanism (CEWARN). By contributing to conflict prevention and management CEWARN contributes towards reducing conflict induced pressure on livelihoods and resource access, and thereby helps to build resilience.

As of the 2015/16 fiscal year however IGAD is "responsible for the coordination and implementation" of two regional projects at regional level (Ministry of Agriculture, 2014). The first one is Regional Pastoral Livelihoods Resilience Project, a five-year project funded by the World Bank for a total of 75 million USD. It is being implemented in Ethiopia, Kenya and Uganda. Although it commenced on the Ethiopian side of the Cluster this fiscal year, it was functional in previous years on the Kenyan side and other parts (Afar and Somali regions) of Ethiopia. The project works on natural resource management, market, livelihood and disaster risk management. The second project, Drought Resilience Sustainable Livelihoods Project (DRSLP) is also a five-year project. It is funded by the African Development Bank for a total of 43-45 million USD, with similar components except the disaster risk management component. DRSLP has a national focus, but with regional dimension.

Please include activities carried out under existing protocols and working arrangements that span national borders, particularly where official cooperation is constrained. Also identify risks and constraints to implementing such activities.

There are a number of protocols, action plans and regional task forces which could be useful to the Cluster. Some of these are The Nairobi Protocol for the Prevention, Control and Reduction of Small Arms and Light Weapons in the Great Lakes Region and the Horn of Africa; the African Union's Policy Framework for Pastoralism in Africa; IGAD's Regional Consultative Process on Migration; AU's Migration Policy Framework for Africa; IGAD's Environment and Natural Resources Strategy; and IGAD's Regional Water Resources Policy. When it comes to activities emanating from such protocols and processes there is none on the ground.

What activities would you recommend be undertaken in these areas? What additional information may be needed to carry out the activities?

Below is a list of activities we recommend for the Cluster. It should be noted that resilience to shocks, both natural and man-made, is a key issue in the South Omo cluster, and one that cuts across the suggested interventions (below). Local resilience is undermined by a range of shocks, including unpredictable weather patterns, environmental degradation, recurrent disasters (drought and epizootics) and resource pressure caused by population growth and large-scale development projects. These have placed significant pressure on livelihoods and food security, and generated conflict and instability between groups competing for access to land, water and fishing rights.

1) Conduct a detailed and systematic land and water resources mapping exercise in a participatory manner for the entire Cluster

Such a study should account wet and dry season rangelands for all agro-pastoral communities, village and agricultural areas for all villagized households, protected areas on both sides of the border (Omo and Mago National Parks, Murle Controlled Hunting Area and Stephanie Wildlife Sanctuary on the Ethiopian side and Sibilo National Park, Central Island National Park, South Island National Park), cultural tourism attraction points, sugar development zones, areas slotted for commercial agriculture and the like. The water and land requirements of all these land use systems, and the attendant population increase should also be accounted for.

Pre-existing studies conducted in a piecemeal approach could be helpful in this effort. The Ministry of Water, Irrigation and Energy will have studies on water resources of the Omo Basin; the Gibe III project office/Ethiopian Electric Power and African Development Bank will have documents relating to the socio-economic and environmental impacts of Gibe III/IV dams; the River Basin Development Authority is preparing studies on water resources in the Woyto Valley and a water certification scheme for the whole country; Sugar Corporation could share its studies and plans as well. Other collaborating agencies could be the Ethiopian Wildlife Conservation Agency (EWCA), the Ethiopian Tourism Council, federal and regional water works enterprises, and pastoral areas development experts/officials. Relevant authorities in Kenya, such as the Ministry of Fisheries Development and the National Drought Management Authority, should also be brought on board.

A potential implementing partner could be the Horn of Africa Regional Environmental Centre/Network (HoAREC/N), which is mainly funded by the Netherlands Embassy in Addis Ababa and is implementing a detailed land use study for Gambella regional state. It also has a working relationship with the EU and IGAD. In South Omo, it used to conduct a climate change adaptation and mitigation project in Nyangatome *Woreda*. Currently it is one of the donors/assisting agencies of GTLI. IGAD could play the role of coordinating activities at regional levels.

2) Integrated Water Management Interventions

The findings of the above-mentioned study should serve as a blueprint for developing targeted integrated water management interventions. As described in more detail in the body of the report, water is an important and scarce resource that has been the

source of much conflict and tension within and across borders. At the local level, management of resources such as water and land have tended to be regulated by communities themselves. However, these systems often come under pressure and break down during times of water scarcity and drought. Furthermore, the presence of large-scale development projects such as sugar cane and cotton farms and the Gibe III dam have exacerbated water availability on downstream communities, such as the Dassenech, Erboere and Turkana. In this context, water issues reach beyond local level dynamics to impact on national and international relations as well. Nevertheless, there does not appear to be a shared resource use/management scheme between Ethiopia and Kenya, or between national counties and zones. In this context, interventions should support integrated and transboundary water management efforts. This would help to ensure fair and sustainable access to water sources and thereby build resilience, strengthen livelihoods and reduce instability. At a local level, interventions could also support activities such as water harvesting and the expansion of existing water sources, such as wells and boreholes.

Potential implementing agencies when it comes to projects within Ethiopia could include AFD, Catholic, GTLI, VITA, Farm Africa and EParDA. Potential implementers on the Kenyan side include Catholic Diocese, Regal IR program, United States African Development Foundation and ACTED. IGAD could take the responsibility of facilitating coordination of activities by the implementing agencies in either country over transboundary water resources.

3) *Ensuring Peacebuilding is Integrated to Development Works*

Insecurity breeds instability and hampers efforts to bring about stability and development by state and non-state actors. As such, peace and stability should be taken as simultaneously a precondition and an outcome of socio-economic improvement. There are many cases of development works suspended for security considerations for a few months at a time. In addition to the time lag, episodes of violent conflict often lead to deterioration of trust and social capital between groups. Thus, efforts aimed at bringing stability and resilience in the socio-economic and political systems of communities in the Cluster should be a priority.

Such activity could be implemented at various stages of the conflict process. Early warning information, using field monitors and area specific conflict indicators, will help generate conflict data, which, with proper analysis and decision making, could help prevent conflicts before they erupt and/or manage conflicts before escalation. After conflicts erupt, well studied conflict resolution and transformation tools and practices shall be employed to make sure that the conflictual relationships underlying the conflict structure be changed. Furthermore, the structural factors pushing conflicting parties into violence should be well studied in a participatory manner. Based on findings of such a study, state and non-state actors could collaborate with the community in alleviating resource scarcity and promote inter-dependence between communities.

The USAID funded Strengthening Institutions for Peace and Development II (SIPED II) implemented by PACT could serve as a good entry point. SIPED II intends to build the efficiency of the peace architecture at national, regional and *Woreda* levels. IGAD's CEWARN also used to collect and analyse early warning information from the area, particularly Dassenech and Nyangatom *Woredas* and Turkana County, as these make part of the Karamojong Cluster. This initiative has been stopped for more than six months now, but the hope is that it will be re-initiated soon. In the lead up to this re-

starting, it would be advisable to integrate CEWARN's information collection and analysis system with the national peace architecture of both countries.

The Peace and Development Centre (PDC) completed a project entitled 'Strengthening Local Cross-Border Conflict Management in Lake Turkana-South Omo Cross Border Area'. There appears to be joint planning and implementation of security works by relevant state officials. Meetings are not regularly held, rather the frequency and timing of meetings is dictated by the security situation on the ground.

The list of potential implementing agencies on the Ethiopian side is limited: only PDC and PACT. On the Kenyan side potential implementing partners could be Raim Raim, PACT Kenya, Mercy Corps, and KCCP.

4) Support Pastoralism through Rehabilitation of Rangelands and livestock health

Access to a good rangeland is crucial for a well performing and stable agro-pastoral system. Deterioration in rangeland conditions adds pressure to the livelihood system and tests its resilience. Seasonal migration to other locations and 'emergency options' will be increasingly employed as the quality of rangelands further declines. Pressure on rangelands is increasing due to a range of factors, including: increase in number of pastoral households and their herd; other natural and anthropogenic factors, such as climate change; withdrawal of sometimes important rangelands from the pastoral system for commercial agriculture, dams built upstream; and serious threat of invasive species (such as *Prosopis juliflora* in Nyangatom and Turkana).

Indeed the informal institutions of agro-pastoralists have intimate knowledge of the rangelands and how to rehabilitate them. Such knowledge is increasingly being eroded by different macro- and micro-level processes and is often ignored by actors in the formal sector/institutions. Building on local knowledge through participatory approaches would help local ownership and sustenance of the outcomes.

In South Omo detailed experience and lessons could be drawn from the Pastoral Community Development Program (PCDP). Started as a five year program, it is now in its third phase, and is funded by the World Bank and the International Fund for Agriculture and implemented by the Ethiopian government. The main issues covered by PCDP are sustainable livelihood enhancement, pastoral risk management, participatory learning and risk management and coordination. PCDP's activities are anchored on range management and supporting pastoral livelihoods, and in situations where there are already established villages it supports the building of water facilities.

Some NGOs (such as AFD, Farm Africa, VITA, DRSL and RPLR) are already engaged in rangeland rehabilitation works in the Zone, and could serve as implementers on the Ethiopian side. On the Kenyan side, the Japanese Overseas Forestry Consultants Association and Kenya's Forestry Research Institute implemented rehabilitation works in the severely degraded areas surrounding Kakuma Refugee Camp (Muturi et al., 2014). Other NGOs that could serve as implementing agencies on the Kenyan side include Regal IG program, United States African Development Foundation, PACT, Mercy Corps, Oxfam-GB, SI, SAPCONE and the FAO.

It is only RPLR that works in the border areas of both Kenya and Ethiopia. However, there are limitations in joint planning and implementation of activities. For example, the Ethiopian project office establishes enclosures on the Ethiopian side without considering the resource dynamics of the Turkana across the border. Worse,

eradication of *Prosopis* should be implemented in a coordinated approach to reduce the risks of re-introduction of the invasive species. However, eradication on the Ethiopian side started without any coordination with the partners across the border.

Therefore, it is recommended hereby to establish enclosures and rangeland rehabilitation works in border areas in a manner which builds the resilience of communities on both sides of the border. Such an activity should be based on findings of a detailed land and water resources study, and provision of certificates to communally held grazing lands, such as enclosures, could increase pastoral tenure security and promote the likelihood of improvement in rangeland conditions. On communal land certification initiatives in Ethiopia, the works of *Woreda* Level Participatory Land Use Planning (WPLUP) project, conducted by the Rural Land Administration and Use Directorate of the Ministry of Agriculture and Natural Resources, Oxfam GB and GiZ could be consulted. Moreover, as water resources are also crucial for the functioning of the system, it is imperative to consider water provision to livestock in projects dealing with rangeland rehabilitation.

On the other side, livestock, the most important form of asset in the Cluster, are usually very prone to various diseases which lead to reduced productivity (meat and milk) and death. There is the potential also for disease to be transmitted from one side of the border to the other during seasonal migration and raiding. Therefore conducting vaccination and other necessary veterinary interventions on both sides of the border in a coordinated fashion will be beneficial. VSF is the most preferable implementer to such a project on both sides of the border, with IGAD assuming regional coordination roles.

5) Livelihood Diversification and Promotion of Inter-dependence through the creation of a Joint Fish Resources Development Zone

Agro-pastoralism is facing multiple stress factors. It is no longer sufficient to fulfil the sustenance needs of households. The degree to which cattle keeping should be complemented by other sources of income varies temporally and spatially. Periods or years with good pasture and water availability will require little external support, while communities in locations with resource availability generally show higher reliance on livestock keeping (like in Salamago).

Fishing is one of the oldest practices to supplement livestock rearing, especially in Dassenech areas. The Dassenech have access to the very productive fresh waters of Lake Turkana and also to the Omo River. The Nyangatom and Kara also fish on the River. The Bacha, a small ethnic group in Salamago *Woreda*, make most of their living from fishing. The Zone has a huge potential, particularly in Dassenech. But there is little, not to say no, support to this sector, although it faces serious challenges in the production (expensive nets to catch Nile Perch, no facilities (like motor boats, landing sites, etc), no financial support) and market sides. Despite the huge level of production in Bubwa, a border town in Dassenech, there is no restaurant in towns of the Zone serving fish. While licensed traders on the Ethiopian side sell the Nile Perch in Arba Minch and Addis Ababa, Tilapia, which makes most of the catch, is sold to Somali traders.

Kenya has already developed a Lake Turkana Master Plan covering both the eastern and western shores of the Lake in Marsabit and Turkana Counties, respectively. This Master Plan identifies key challenges the sector faces, including infrastructure (roads to far away markets, refrigerated trucks, ice making facilities close-by, poor landing facilities), finance, skills, awareness, political issues (conflict between clans and ethnic groups, within Kenya or across the border) and ecological. Mega-development projects upstream in Ethiopia (Gibe III particularly) are mentioned as affecting the most important source of water to the Lake. Moreover, the document also highlights that more regulation should be placed to make sure that net size and other fishing practices are not harmful to sustainable fishing and fishing population over the longer term (Ministry of Agriculture, Livestock and Fisheries, 2016).

Therefore, it is visible that both Ethiopia and Kenya are striving to make the most from the fish resources of the Lake. To eliminate such a threat and develop a synergetic relationship we recommend the establishment of joint economic zone in the border area, where the fishing and fish marketing is regulated by a body with members drawn from the Ethiopian and Kenyan governments. Proceeds from the production, processing and trade could be divided according to a pre-agreed formula. While the old markets, reaching Uganda, Tanzania and D.R. Congo, could be maintained and new ones in Ethiopia (particularly the incoming labour force to work in the sugar plantations) could be created through awareness raising works. Young men and women organized into micro- and small- enterprises could be supported through skills trainings (fishing, entrepreneurship and processing) and provision of necessary facilities (such as refrigerated trucks) and financial support.

The newly established Ethiopian Ministry of Livestock and Fisheries Resources Development and the regional and Zone Livestock and Fisheries Resources Development Bureau and Department could play a significant role in coordinating the activities. Omo Micro-Finance and the Zone's Youth and Sport Department could coordinate activities relating to establishment of MSEs and extending loans. As the sector did not get significant attention, there are no NGOs with working experience on the Ethiopian side of the border, thus it is practically impossible to recommend a potential implementer based on past experience of NGOs in South Omo Zone. On the Kenyan side, there is a well-coordinated work on Lake Turkana by the collaboration of the Ministry of Fisheries Development, and NGOs (such as Oxfam GB and SI). Lessons should be capture from this initiative, and similar initiatives replicated in the border area. IGAD is well placed to coordinate activities and programs on both sides of the border.

Implementation of this kind of project, should importantly be preceded by an investigation into the implications of the filling and regulation of the Gibe III (and possibly Gibe IV and V) dams upstream to recommend potential mitigation strategies.

6) *Promote Sustainable Regional Tourism*

The GoE established a Tourism Council, chaired by the Prime Minister with the intention of increasing the revenue the country gets from the sector. The sector raised close to 30 million Birr (about 1.5 million USD) in the 2015/16 fiscal year for the Zone, and there is potential for a further increase if the Zone's potentials are properly utilized. The Zone's natural attractions (wild life and scenery), cultural heritage and the fact that a UNESCO registered site (registered in 1980 for hominid remains discovery) is found in the Zone could be conjoined with attractions on the Kenyan side (potential for paleo-tourism in the area where the 'Turkana Boy' was discovered,

stone artefacts several millions years' old, decorated pottery from some 6,000 BC, cemeteries and burial mounds from 355-165 BC, all suggesting that Turkana was a centre of human civilization, see Turkana County Government and United Nations Joint Programme, 2015) to promoting tourism sustainably.

Such an activity entails a coordinated and multi-sectoral approach. A range of interventions should be designed to improve hotel and hospitality industry in relevant towns of the Cluster, infrastructure should be further improved³⁰ and, more importantly guides should be well trained.

A project to deal with these challenges could better focus on building the capacity of guides and the hospitality industry through continuous trainings. If proper infrastructure is in place (an all-weather road already in place on the Ethiopian side till the border with Kenya) a cross country tourism sector could be developed. Some interviewees stated that there are a few tourists coming through Kenya to visit South Omo, some going to north Ethiopia and others returning back from there. With proper advertising and infrastructure such a market could be further developed. This is in line with Turkana's Integrated Development Plan, which has 'establishing Turkana as a tourism destination' among the flagship projects.

7) *Integrate Commercial Agriculture and Agro-Pastoralism*

Most commentators take commercial agriculture and agro-pastoralism as mutually exclusive, taking the former as being achieved at the expense of the latter. It is acceptable that commercial agriculture withdraws valuable resources from agro-pastoralism and reduces agro-pastoralists' resilience and coping capacity. However, there is also room for some integration between the two economic activities to reduce conflict and create inter-dependence in which both actors benefit.

One example could be job creation in commercial agriculture, the downside being the low number of jobs created and the unskilled, temporary and low paying nature of the jobs. Executing corporate social responsibility in the form of creating water access to agro-pastoralists and preparing their land at no/subsidized fees could contribute a lot too. At the very least allowing agro-pastoralists to use leftovers/by-products could augment the productivity of the livestock sector. A case in point will be the sugar industrialization scheme in South Omo. Cane tops and molasses could be used to fatten livestock and help transform local livelihoods.

Potential implementers on the Ethiopian side could be drawn from AFD, Farm Africa, and VITA. Activities could be integrated with activities of DRSL and RPLR projects. On the Kenyan side, NGOs that could serve as implementing agencies, include Regal IG program, United States African Development Foundation, PACT, Mercy Corps, Oxfam-GB, SI, SAPCONE and the FAO.

³⁰ Good news in this regard will be the building of an airport in Jinka. The runway is completed, and it is now left with the construction of the waiting area and departure/arrival halls.

Please provide an assessment of best practice and lessons learned from existing interventions (including what has worked and what has not worked, especially in terms of existing cross-border mechanisms), risks and potential mitigating measures against them.

Of the numerous interventions the following could be taken as best practices and lessons learned:

- a) *Enclosures in Hamer*: By revitalizing traditional institutions and practices of rangeland management, the Hamer have established communal enclosures. These areas of enclosure helped rangelands regenerate and gullies are now covered by vegetation, reducing the risk of further land degradation.
- b) *Access to Irrigation in Bodi areas*: the villagization scheme is the most advanced and more successful in Salamago *Woreda*, in Bodi areas, than any other area in South Omo Zone. This is mainly because of the provision of free irrigation water for the village residents from the facilities of the sugar corporation. This attracted the Bodi into joining the villages, taking their land certificates and ploughing their land. Some households have harvested maize twice until now, and they are expecting to benefit from the sugarcane outgrower scheme they are becoming part of. One cooperative per village is being established, in which 512 of the 1,430 villagized households became members of, with membership of Bodi households who collected their land certificate.

The outgrower scheme also gives another lesson, that such mega commercial farms and agro-pastoralism could have a symbiotic relationship. The Bodi stand to benefit from selling sugarcane to the sugar mills, while the sugar corporation could give/sell the cane top and molasses to agro-pastoralists to be used as feed.

- c) *Non-State Actors' Involvement in Peace Dialogues*: Raim Raim and EPaRDA have been facilitating the continuous holding of peace dialogue forums involving the Dassenech and Turkana. When their engagement started bearing fruit the Charities and Societies Proclamation came into effect in Ethiopia, barring EPaRDA from engaging in such activities. Farm Africa also used to engage in conflict management and resolution works in the past. This has undercut the potential building of a cooperative and peaceful relationship between the two ethnic groups.

Now it is only the Catholic Church which engages in peace making and conflict management activities on the Ethiopian side. Even then, the Church mainly assists state actors by availing vehicles and funds. As recent as 14 August 2016 the Catholic Churches of Ethiopia and Kenya functioning along the border held a discussion on how to promote a culture of peace in border communities. The Church also trains shepherds through its 'Shepherds for Peace' program. Supporting such an initiative could help make the borderlands more peaceful and to create interdependence/cooperation.

Moreover, such dialogues should be rooted in local culture. A case in point which best illustrates this need is the peace modality negotiated and agreed between the Dassenech and Hamer. This modality puts an agreed number of

goats to be paid for every individual killed and wounded. This has led to reduced conflict between the two ethnic groups in the past three years.

- d) *Greater integration of agro-pastoralism in the market:* Activities on the Ethiopian side of the Cluster are intended to build the necessary physical and institutional infrastructure to strengthen the resilience of agro-pastoralists. On the Kenyan side, however, many initiatives are directed towards engaging agro-pastoralists in market exchanges in a manner which benefits them. This will be more effective over the long term, and should be taken as a lesson.
- e) *Drought Early Warning in Northern Kenya:* Kenya's Rural Development Program being implemented by the National Drought Management Authority has a project which focuses on drought early warning information generation and building up rapid response capability in Turkana County. Given the fact that drought is a common occurrence and among the main sources of vulnerability in these lowlands, and that early warning will help reduce its negative impacts, the GoE should take lessons to have a more comprehensive drought early warning information gathering and rapid response mechanism which is adapted and useful to agro-pastoralists and lowlands, in South Omo and beyond.

References

- Abbink, J.(2009). The fate of the Suri: conflict and group tension on the south-west Ethiopian frontier. In: Schlee & Watson (eds.) *Changing identifications and alliances in North-East Africa*, Vol. 1: Ethiopia and Kenya, New York etc.: Berghahn, pp.35-51
- Adano, Wario. (2012). Pastoralist Resources, Conflict and Climate Change in the Horn of Africa. In: Mulugeta G. B and Butera, J.B. (eds). *Climate Change and Pastoralism: Traditional Coping Mechanisms and Conflict in the Horn of Africa*. Institute for Peace and Security Studies and University for Peace: Addis Ababa. Pp. 307-327.
- Avery, S. (2010). *Hydrological Impacts of Ethiopia's Omo Basin on Kenya's Lake Turkana Water Levels and Fisheries*. Final Report. African Development Bank, Retrieved from http://www.afdb.org/fileadmin/uploads/afdb/Documents/Compliance-Review/REPORT_NOV_2010_S_AVERY_TURKANA_Small_file.pdf
- Central Statistical Agency. (2008). CSA. The 2007 *population and housing census of Ethiopia: Statistical report for Southern Nations, Nationalities and Peoples' Region*. Addis Ababa, Ethiopia.
- Eaton, D.(2008). The Business of Peace: Raiding and peace work along the Kenya-Uganda Border. *African Affairs*, 107(426): 89–110, 243–259.
- Eulenberger, I. (forthcoming). *Elemi Triangle: resources, conflicts and uncertainty. Emerging structures, trends and opportunities of a contested pastoral-ist frontier region between Kenya, South Sudan and Ethiopia*. PAX Netherlands & Rift Valley Institute
- Eulenberger, I.& OtuRN (forthcoming). *Pastoralism and irrigated agriculture in the Omo-Turkana region: threats and opportunities*. Omo-Turkana Research Network
- Eulenberger, I.(2015). Gifts, Guns and Governmen: South Sudan and its Southeast. In: Sandra Calkins, Enrico Ille & Richard Rottenburg (eds.), *Emerging Orders in the Sudans*, Bamenda: Langaa RPCIG, pp.153-196
- _____.(2014). *Pastoralists, Politics and Resources: Emerging Land Issues in the Ateker Region of Northeast Africa*. Presentation at the annual conference of the American Anthropological Association, Washington, DC.
- _____. (2013). Pastoralists, Conflicts and Politics: Aspects of South Sudan's Kenyan Frontier. In: Vaughan, Christopher, Mareike Schomerus & Lotje de Vries (eds) *The Borderlands of South Sudan: Authority and identity in*

contemporary and historical perspectives, New York, etc.: Palgrave Macmillan, 67-88

Flood, G. (2002) [1975]. 'Development in Ethiopia'. In *The Best of Anthropology Today*, ed. J. Benthall. Routledge, London and New York, pp. 81–91 [5–9].

Gownaris et al. (forthcoming). Fisheries and Water Level Fluctuations in the World's Largest 1 Desert Lake. *Ecohydrology*.

Government of Kenya (GoK). (2015). The 2015 Long Rains Season Assessment Report. Kenya Food Security Steering Group. Retrieved on 22 August from <https://www.wfp.org/sites/default/files/2015%20LRA%20National%20Report%20Final.pdf>

Gulliver, Philip Hugh.(1951). *A Preliminary Survey of the Turkana*. A Report compiled for the Government of Kenya, Cape Town: University.

Hodbod, J. and Stevenson, E. (2015). *Large-scale transformation in the Omo-Turkana Basin: Implications for social-ecological systems*. Unpublished draft.

Hodbod, Jennifer. (2013). *The Impacts of Biofuel Expansion on the Resilience of Social-Ecological Systems in Ethiopia*. Doctoral dissertation, University of East Anglia. <https://ueaeprints.uea.ac.uk/48024/>.

Hogg, R.S. (1985). *The Socio-Economic Responses of Nomadic Pastoralists to Permanent Settlement and Irrigation Agriculture*. ODA ESCOR Report no. 3714

Jama, B, Zeila A (2005). Agroforestry in the drylands of eastern Africa: a call to action. ICRAF Working Paper no. 1, World Agroforestry Centre.

Huho, J. M. (2012). Conflict Resolution among Pastoral Communities in West Pokot County, Kenya: A Missing Link. *Academic Research International*, 3(3): 458-468.

Kenya National Bureau of Statistics and Society for International Development (2013). Exploring Kenya's Inequality: Pulling Apart or Pooling Together? Retrieved on 22 August 2016 from <http://inequalities.sidint.net/kenya/wp-content/uploads/sites/2/2013/09/Turkana.pdf>.

Kigomo, J.N. and Muturi, G.M. (2013). Impacts of enclosures in rehabilitation of degraded rangelands of Turkana County, Kenya. *Journal of Ecology and the Natural Environment*, 5(7): 165-171.

Le Ster, M.(2011). *Conflicts over water around Lake Turkana: Armed violence between Turkana and Dassanetch*. In: Mambo! Recent research findings in Eastern Africa, Volume IX n° 3 (IFRA Nairobi)

Lokiyo, E.L. (2014). Trans Border Conflict Between the Turkana and Pokot in Kainuk and Alale Divisions, Kenya (1995-2013). Unpublished MA Thesis, Kenyatta University.

Mercy Fekadu. (2016). *Small Arms and Security governance: The Case of the Nyangatom people of southwest Ethiopia*. (Unpublished doctoral dissertation). Addis Ababa University & Leipzig University, Addis Ababa/ Leipzig.

Ministry of Agriculture. (2014). Regional Pastoral Livelihoods Resilience Project (RPLRP). Project Implementation Manual. Addis Ababa, Ethiopia.

Ministry of Agriculture, Livestock and Fisheries. (2016). *Lake Turkana Fisheries Management Plan*. State Department of Fisheries. Nairobi, Kenya.

Mulugeta, Gebrehiwot Berhe, ed. (2014). *A Delicate Balance: Land Use, Minority Rights and Social Stability in the Horn of Africa*. Addis Ababa: Institute for Peace and Security Studies (IPSS), Addis Ababa Univ.

Muturi, G.M., Kariuki, J.G., Machua, J.M. Kamondo, B. Tuwei, P., Wanjiku, J. and Ochieng, D. (eds.). (2014). *Rehabilitation of Degraded Areas Surrounding Kakuma Refugee Camp*. KEFRI/JOFCA Technical Report No. 2.

The Nairobi Protocol for the Prevention, Control and Reduction of Small Arms and Light Weapons in the Great Lakes Region and the Horn of Africa (21 April 2004), http://www.recsasec.org/publications/Nairobi_Protocol.pdf

Nyanjom, O. (2014). Remarginalising Kenyan Pastoralists: The Hidden Curse of National Growth and Development. *African Study Monographs*, Suppl. 50: 43-72.

Oxfam. (2014). Sustainable livelihoods through value chain development for Pastoral Communities in Turkana. Second Year Semi-Annual Report.

Proclamation No. 621/2009. Charities and Societies Proclamation. Federal Negarit Gazette, 15th year, No. 25. FDRE. Pp. 4521-4567. (13 February 2009).

Rockström, Johan, Louise Karlberg, Suhas P. Wani, Jennie Barron, Nuhu Hatibu, Theib Oweis, Adriana Bruggeman, Jalali Farahani, and Zhu Qiang. (2010). "Managing Water in Rainfed agriculture—The Need for a Paradigm Shift." *Agricultural Water Management, Comprehensive Assessment of Water Management in Agriculture*, 97 (4): 543–50. doi:10.1016/j.agwat.2009.09.009.

Sagawa, T.(2010). Local potential for peace. Trans-ethnic cross-cutting ties among the Daasanech and their neighbors. In: Echi Christina Gabbert & Sophia Thubauville (eds.), *To live with others : essays on cultural neighborhood in southern Ethiopia*. Köln: Köppe, pp. 99-127.

Samuel Tefera. (2015). *Re-harmonizing the changes in livestock mobility, land use and sedenterization in Hamer, South-western Ethiopia*. Unpublished PhD Dissertation. Kyoto University.

Schilling, J., Opiyo, F. EO., and Scheffran, J. (2012). Raiding pastoral livelihoods: motives and effects of violent conflict in north-western Kenya. *Pastoralism: Research, Policy and Practice*, 2(25).

Schlee, Günther. (2013). Why states still destroy pastoralism and how they can learn that in their own interest they should not. *Nomadic Peoples* 17 (2): 6–19.

Seré, Carlos. (2010). Backing Smallholder Farmers Today Could Avert Food Crises Tomorrow. *The Guardian*, October 14, sec. Global development. <http://www.theguardian.com/global-development/poverty-matters/2010/oct/14/smallholder-farmers-agribusiness-investment>.

SI. (2015). *Improving preparedness and prevention to drought in pastoralist and agro pastoralist communities of northern Marsabit County*. Grant Application to the EU.

Tornay, S. (2009). Modernization in the Lower Omo Valley and adjacent marches of Eastern Equatoria, Sudan. In: Günther Schlee & Elizabeth E. Watson (eds.), *Changing identifications and alliances in North-East Africa; Vol. 1: Ethiopia and Kenya*; pp.77-86.

USAID.(2014). *Resilience and Economic Growth in Arid Lands – Improving Resilience*. Project fact sheet. Retrieved on 16 August 2016 from <https://www.usaid.gov/kenya/fact-sheets/resilience-and-economic-growth-arid-lands-improving-resilience>

List of NGOs active in the South Omo Zone³¹

	CSO	Project Title	Project Area	Sector	Project Budget (Birr)	Project Period
1	AFD	Investing in Children in South Omo Zone	Hamer, Nyangatom, Bena Tsema, Dassenech	Education	1,684,461	January-December 2016
		Building Resilience and Adaptation to Climate Extremes and Disaster (BRACED)	Hamer	Integrated (Water, WYC, Agriculture and Cooperatives)	10,989,574	August 2015-July 2018
		PPA Dassenech Community Livelihood Enhancement Project	Dassenech	Agriculture & Marketing Cooperative	4,550,000	January 2015-December 2015
		Enhancing Integrated Participatory Natural Resource Management in Hammer Woreda-Consolidation Phase	Hammer	Agriculture, Education and Marketing	2,548,000	January 2016-December 2016
2	AMREF	SAFE, Surgery, Antibiotics, Face Washing and Environment Health Project	North Ari & South Ari	Integrated (Water, Health and Education)	19,297,867	December 31, 2013- November 30, 2017
		Scaling-up, Ensuring Health through integration of TB, Malaria, HIV AIDS, & MNCH Program in South Omo Ethiopia	South Ari, Dassenech & Salamago	Health	3,350,700	July 2014-July 2016
		Strengthening the Capacity of Partners and Community in the Eradication of Polio	S/Ari, Maale, Bena Tsema, N/Ari, Dassenech and Nyangatom	Health	17,321,959	October 2012-September 2017

³¹ At the start of the 2016/17 fiscal year.

	CSO	Project Title	Project Area	Sector	Project Budget (Birr)	Project Period
		Enhancing Immunization Services in the Low Performing and Hard to Reach Area	S/Ari, Maale, Bena Tsemay, Sakamago, N/Ari, Dassenech	Health	8,845,128	April 2015-March 2018
		Sustainable Agriculture and Food Security Enhancement through Integrated Recovery Support Mechanism	Hamer and Dassenech	Health	7,000,000	January 2014-December 2016
3	Catholic	Integrated Community Based Development Program in South Omo Zone, Hammer Woreda (cc-ICDP)	Hamer	Integrated(Education, Health and ...	18,114,145	April 1,2013-March 31, 2016
		Integrated Community Based Development Project	Malle	ntegrated (Agriculture, Water, Women and Education)	11,615,427	August 2014-July 2017
		Integrated Community Based Project	Dassenech	Integrated (Agriculture, Water, Women and Education)	11,020,815	August 2014-July 2018
		Drought Recovery Response in Some of the Draught Affected Kebele in Dassenech	Dassenech	Integrated(Agriculture and Water)	2,502,580	January 2016-June 2016
4	EECMY	Improve Reproductive Health and Economic Conditions of Women and Girls	Dassenech, Hamer and Bena Tsemay	Integrated	2,200,000	January 2014-December 2015
		Bena Tsemay Pastoral Community Development Project	Bena Tsemay	Integrated(Agriculture, Health, Women and Education)	3,600,000	January 2015- December 2017
5	EKHC	Institution and Community Empowerment SNNPR(ICEP-Gilgal)	S.Ari and N.Ari Woreda	Integrated(WYC and Agriculture)	2, 776,904	July 2013-June 2018
6	IDE	Sustainable Agriculture and Food Security Enhancement through Integrated Recovery Support Mechanism (SAFE Project)	Hamer and Dassenech	Agriculture	7,934,255	June 2014-December 2016

	CSO	Project Title	Project Area	Sector	Project Budget (Birr)	Project Period
7	Omo Child Ethiopia	Hamer and Bena Tsemay Woreda Harmful Traditional Practice Reduction, Care and Support Project	Hamer and Bena Tsemay	WCY & Agriculture	16,800,000	July 2014-June 2019
8	Save the Children	Improving New Generations to Improve Nutrition and Economic Opportunities	South Ari and North Ari	Agriculture and Health	8,703,417	May 2012-December 2016
		Increasing Access to Education for Marginalized Children in South Omo Zone	Hamer, Dassenech & Nyangatom	Education and WCA	18,559,447	July 2015-Dember 2017
		Investing in Children in South Omo Zone of SNNPRS	Hamer, Nyangatom, Dassenech and Bena Tsemay	Education, WCA, Labor and Social..	34,520,480	May 2015-December 2018
		Promote the Survival and Development of Children	Hamer, Dassenech & Nyangatom	Health, Education and WCA	16,859,303	January 1, 2015- December 31, 2017
		Building a Global Model of Emergent Literacy and Maths Innovation and Generation Evidence in Ethiopia	Hamer, Nyangatom, Dassenech and Bena Tsemay	Education	2,340,520	January 2015-Dember 2017
9	GTLI	Building Pastoralist Resilience Network in South West Ethiopia (BPRN)-Phase II	Dassenech	Health, Water & Agriculture	5,833,863	August 2015- April 2016
10	NLM	Reducing Maternal Mortality Project (RMMP)	Hamer, Maale, North Ari, South Ari, Dassenech	Health	11,659,907	January 2012-December 2016
11	WSA	Enhancing Economic Empowerment of Women	Maale and Jinka	Integrated (Cooperative and WCY)	1,238,644	April 2015-Dember 2015
		Improving Livelihood for the Poor through Access to ICS in South Omo Zone	Bena Tsemay and South Ari	Integrated (Cooperative, Agriculture, Water and WCY)	6,130,933	October 2014-September 2016
		Building Resilience and Adaptation to Climate Extremes and Disaster	Bena Tsemay	Integrated (Cooperative, Agriculture, Water and WCY)	8,066,840	July 2015-December 2017

	CSO	Project Title	Project Area	Sector	Project Budget (Birr)	Project Period
12	ORBIS	Establishing Comprehensive Rural Eye Health in Two Districts and Jinka Town of South Omo Zone of SNNPRS	South Ari, Jinka Town and North Ari	Education and Health	28,865,601	December 2013-December 2017
13	VITA	Sustainable Agricultural and Food Security Enhancement through Integrated Support Mechanism (SAFE)	Hamer and Dassenech	Agriculture and Cooperative	24,125,490	January 1, 2014- December 31, 2016
14	SOPDA	Lasting Difference through Reaching Hard to Reach Segments Project	South Ari	Education, Health, Agriculture, Labour, Social and..	625,065	Jan 2014-December 31, 2015
		Improving Livelihood Services and Assets for Pastoral Women in Bena Tsemay Woreda	Bena Tsemay	WCY & Agriculture	2,462,272	January 2015-January 2016
15	CUAMM	Strengthening Maternal & Child Health Care Service	Dassenech & Hamer	Health	6,817,660	September 2014-September 2016
		Strengthening Maternal and Child Health Care Services in Dassenech, Hamer and Maale Woredas of South Omo	Dassenech, Maale and Hamer	Health	29,826,523	January 2016-June 2018
16	BiG Beyond Ethiopia	Hamer Empowerment & Mago National Park Conservation	Hamer	Health, Education, Culture and Tourism	4,736,986	November 2014-November 2016
17	Goal Ethiopia	Nutrition Intervention through Community Based Management of Acute Malnutrition	Dassenech	Health and Agriculture	2,053,738	December 2014-September 2015
18	SIM	SIIM Integrated Mursi Development Project	Salamago	Health and Education	4,714,760	November 2014-October 2017
19	Farm Africa	Building Resilience and Adaptation to Climate Extremes and Disaster (BRACED)	Benatsemay, Hamer, Maale, and Salamango	Agriculture and Cooperatives	33,212,036	August 2015-December 2017
20	Humedica Ethiopia	Kara Health Service Project	Hamer	Health	13,856,120	September 2014-August 2018
21	Nutrition Plus Holistic	Increase demand for and Utilization of Reproductive Maternal and Neonatal Health	Dassenech, Bena Tsemay, Hammer, Maale	Health and WCY	13,986,767	June 2015-May 2018

	CSO	Project Title	Project Area	Sector	Project Budget (Birr)	Project Period
		(RMNH)	and Salamango			
22	Communita Volintari Peri	Community Based Water Supply and Sanitation	Semen Ari	Water	12,478,061	August 2015-August 2018
23	IRC	Lowland Water, Sanitation and Hygiene Project		Health and Water	50,135,446	December 2015-November 2018
24	COC	Community Action to Combat Gender Based Violence	Bena Tsemay and Salamango	Women and Children	2,200,618	2016-June 2018
25	Swedish Philadelphia Church Mission (SPCM)		Nyangatome	Health, Water, Relief		
26	Norwegian Lutheran Mission	Through Mekane Eyesus Evangelical Church of Ethiopia	Benna-Tsemay, Nyangatome	Education, Health, Relief		
27	Sudanese Interior Mission		Salamago, Aari, Benna-Tsemay	Education, Health, Veterinary		
28	UNICEF		Mainly at Zonal level, different <i>Woredas</i>	Health and nutrition, water and sanitation, basic education of children		
29	PCDP		All pastoral <i>Woredas</i> of the Zone	Water, livestock		
30	AGP	Scaling up of agricultural best practices in <i>Woredas</i> with reliable moisture	South Ari, North Ari	Agriculture		

	CSO	Project Title	Project Area	Sector	Project Budget (Birr)	Project Period
31	EPaRDA	Not active in recent years	Hamer, Dassenech	Community risk management, pastoralist livelihood improvement and natural resources and environmental improvement issues		

List of NGOs active in Turkana County

No.	NGO	Activity	Remark
1	REGAL IR program	Diversifying livelihoods, livestock value chain inclusiveness, NRM, disaster risk reduction, conflict management, and improving nutrition are its strategic objectives.	Also active in Isiolo, Garissa, Wajir and Marsabit.
2	Catholic Diocese	health, conflict prevention, capacity building and provision of services and laying out infrastructures such as schools, water points, irrigation schemes etc.	
3	Caritas	health, home based care providers support	
4	Danish Refugee Council	livelihood/ self-reliance programs, support refuge- host community activities, and humanitarian support with UNHCR in Kakuma and other camps	
5	Kenya AIDS NGOs Consortium (KANC)	HIV/ AIDS control, prevention and awareness raising programs	
6	IRC	health extension, HIV/AIDS, reproductive health	

7	Save the Children	education, disability, nutrition, maternal and new born child health issues	
8	United States African Development Foundation (USADF)	agriculture and irrigation such as the Achukule irrigation project	An independent agency of the US government that operates at local level to support economic development
9	VSF Germany	Livestock disease and veterinary services	
10	Impact Research on Development (IRDO)	design, implementation, and evaluation of HIV/AIDS research and intervention programs to improve health status of individuals and local communities	
11	Adeso (formerly Horn Relief)	food security, emergency and capacity building	
12	UN in Kenya	transformative governance; human capital development; inclusive and sustainable economic growth; environmental sustainability, land management and human security components.	Through its development assistance framework (2014-2018) it mobilizes UN agencies and funding sources to support Turkana County's Integrated Development Plan (CIDP) in collaboration with the Turkana County government.
13	Raim-Raim	Peace-making, community dialogue and conflict resolution	The main stakeholder engaged in such activities in Turkana (Lokiyo, 2014)
14	World Vision	Education, water and sanitation	
15	Action Aid	Food security	
16	ACTED	Inter-community agreements for peaceful, shared use and management of natural resources	With USAID funding
17	PACT Kenya and Mercy Corps	Creating conditions for durable peace and secure livelihoods and cross-border conflict management among pastoralist communities	Peace III project, USAID funded, and being run in Lokichogio/Kapoeata, South Omo/Turkana, West pokot/Amurdar areas
18	KCCP	Promotion of peace culture and conflict transformation	Kenyan Conference of Catholic Bishops

19	SAPCONE	Peace, water and sanitation, education, health, child protection, land rights and livelihoods	
20	IOM in collaboration with the Turkana County department of Culture	Opened a Community and Cultural Centre in Lokirama, Turkana	United Nations Fund for Human Security supports activities to strengthen human security in Turkana.
21	FAO	Livelihood support and improving resilience through a project entitled 'Reviving ASAL Economies Through Livestock Opportunities and Improved Coordination' (RAELOC)	EU funded (7,380,000 USD) to be implemented between May 2014 and March 2018