One year on from the outbreak of violence in South Sudan, the country has devolved into two worlds: the areas affected by conflict, mostly in Greater Upper Nile, and the areas less affected by it. As of December 2014, Greater Equatoria and parts of Greater Bahr el-Ghazal have shown good crop production, robust market functioning, and generally speaking minimal food insecurity.

However these areas are on the front line of a new crisis unfolding in slow motion: the unprecedented displacement of millions of cattle as a result of the conflict that began in December 2013. This has set in motion a number of dynamics that have seriously worsened the condition of livestock and livestock-dependent populations across the country. Most importantly, it has significantly disrupted the most critical element of the nation’s pastoral production system: the seasonal migration of livestock.

The disruption of livestock movement patterns has taken place on two levels:

First, there has been large-scale and long-distance displacement of livestock from the conflict-affected states into agricultural zones outside their traditional pastoral domains. Millions of heads of cattle have moved into Greater Equatoria, Greater Bahr el-Ghazal, and the northeastern tip of Upper Nile State in the last 12 months.

Second, the areas where these herds have relocated have witnessed intensive and continuous movements of livestock concentrated in small areas. The arrival of large numbers of livestock into mostly agricultural areas outside of their grazing areas has challenged the local power structures, squeezed natural resource availability, and altered disease patterns. As a result, tribal conflicts, cattle raids, and disease outbreaks have all intensified on an unprecedented scale, threatening the national herd and tearing at the social, political, and economic fabric of South Sudan.

Methodology

Over the last six months, FAO South Sudan livestock teams have conducted dozens of livestock assessments, disease investigations, and intervention monitoring missions across all 10 states. FAO teams engaged in participatory data collection with communities, conducted focus group discussions with pastoralists, and collected livestock blood samples for laboratory testing.
Normal livestock migrations in South Sudan adhere to seasonal patterns. During the rainy season, herds find pasture on high ground and then, as the dry season arrives, they slowly follow the receding waters back to the *toic*, low grazing areas near watercourses.

Driving large numbers of cattle across the country, and sometimes across international borders, requires herders to navigate through a complex patchwork of tribal territories populated by both farming communities and other pastoralists. Conflict is not uncommon, but historically tensions have been localized and have not threatened to destabilize the dynamics on a wider scale.

When conflict erupted in December 2013, existing patterns of livestock movement were thrown into disarray as pastoralists (mostly Dinka tribesmen from Greater Upper Nile) fled in search of safe pasture.

According to extensive field assessments conducted by FAO livestock experts throughout 2014, where these groups chose to relocate was influenced by a number of factors including levels of insecurity, tribal affiliation, access to pasture, and disease prevalence.

For example, as the conflict swept across Bor in early 2014, one group of Dinka pastoralists from the area were forced to flee with approximately 250,000 head of cattle. Their options were limited: movement north was blocked by the intense fighting and insecurity, and shifting east would mean relocating into an area of Greater Pibor controlled by a rival pastoralist tribe, putting them at risk of cattle raiding. The Juba area, while secure, was known to be rife with livestock diseases, particularly East Coast Fever (ECF). In the end, the group chose the least-worst option and drove their cattle far southward to Nimule, an area on the Ugandan border. However, upon arrival the group soon came into conflict with local farming communities over access to natural resources. Furthermore, the area was infested with tsetse flies, which transmit sleeping sickness in humans, and trypanosomiases in livestock.

For other displaced groups, similar factors came into play. Many pastoralists dislocated by the violence chose to move their herds into Western Equatoria because the area offered good grazing pasture and because the resident farming population was considered more amenable than in pastoralist-controlled areas. Another example is in Aweiral, which has become the primary displacement location for livestock from Bor, and has led to tensions between the different groups of Dinka pastoralists.

For Nuer groups fleeing from the violence in Jonglei, tribal affiliation was paramount, and many chose to move northward so as to remain in predominantly Nuer territory.
THREATENED SOCIAL STABILITY

For nomadic pastoralist communities, moving into one another’s domain is a dangerous venture. Groups are usually well armed and most are experienced fighters. Cattle raids and clashes over access to pasture are often deadly.

Encroaching on land owned by agricultural communities presents a much easier option, as herdsmen hold the advantage in arms. In this environment, the increasing incursion of large numbers of pastoralists and their livestock into established farming communities has given rise to serious tensions that often turn violent.

These conflicts are as much about land tenure and local power structures as they are about access to natural resources. Many of the resident farming communities are resisting the arrival of pastoralists, fearing both the loss of their land and local political influence.

Furthermore, in the wake of the December 2013 conflict, the arming of the civilian population has created a proliferation of automatic weapons among migrating pastoralists, and to some extent local farming communities, that was unheard of in previous decades. Levels of violence in cattle raids and tribal clashes – and the resulting revenge attacks – have spiraled.

Agricultural communities’ concerns over land tenure and natural resources are not unfounded. In the 1990s, groups of Dinka herdsmen seeking temporary refuge from the civil war arrived in Nimule on the border with Uganda. Their stay should have been temporary, but over time these groups laid claim to land for grazing and settlement. In the end they refused to return to their traditional domains, and communities of Dinka pastoralists remain in Nimule to this day, exerting a pull-factor on the Dinka herds displaced by the current conflict.

As the number of pastoralist groups that arrive in these areas increases, levels of mistrust and violence have continued to grow. These dynamics are seriously undermining the social stability in the few areas of the country that have escaped the effects of the larger political conflict.

SPREAD OF DISEASE

The disruption of livestock movement patterns has forced herds to concentrate increasingly
in small areas where they are intermingling with local herds, livestock trade, and wildlife.

As a result, livestock diseases are proliferating, seriously threatening the health of the national herd. Contagions previously confined to the Equatorias are being spread to other areas such as Bahr el-Ghazal where they are infecting healthy herds. The three main diseases affecting livestock are East Coast Fever, Foot and Mouth Disease, and trypanosomiasis.

East Coast Fever is transmitted by ticks and can kill cattle in large numbers. Treatment is very expensive and is only effective at the early stage of infection. As a result of the disrupted cattle migratory patterns, East Coast Fever has spread from the Equatorias to Jonglei and Lakes states. Outbreaks in cattle displaced to the Equatoria states have also been reported.

Foot and Mouth Disease (FMD) outbreaks have been reported in most of the states since last October. FMD infects cloven-footed animals and has a devastating effect on the milk and meat production of cattle.

Trypanosomiasis is a vector-borne disease transmitted by tsetse flies, which live and breed near watercourses. Historically, social upheaval has been a contributing factor in outbreaks of trypanosomiasis in South Sudan. Its resurgence was reported in 1996 due to collapse of veterinary services during the civil war, as social disruptions altered population movements into tsetse habitats. A similar pattern is unfolding today as many herds have moved into areas of Greater Equatoria infested by tsetse flies in their search for safe pastures.

The deterioration in animal health across the country is complicated by a limited response capacity. Veterinary services remain very weak due to lack of means and inadequate human resources. FAO partners are often limited by the technical capacity of their personnel and their ability to provide adequate geographic coverage.

The combination of factors described above is placing an untenable strain on livestock in South Sudan, and there are signs that the national herd is becoming exhausted. Some pastoralist groups are reporting livestock deaths on an alarming scale, some claiming that they have already lost up to 50 percent of their herds to disease.

Should the current trends continue, a wide scale livelihood catastrophe among pastoralist communities is a real possibility.

**FOOD SECURITY & NUTRITION**

In South Sudan, cattle are much more than a source of food. They signal status and wealth, and serve as the main livelihood asset for pastoralist communities. Livestock are sold for cash, slaughtered for cultural practices, bartered for grain, used as payment for penalties, and given for dowry. Only in rare circumstances, for special celebrations or in times of extreme duress, are livestock...
slaughtered and consumed for food.

In this context, the dislocation of massive numbers of livestock into areas outside their normal domains, leading to dramatic rises of disease outbreaks and death, poses a grave threat to the livelihoods and food security of large numbers of pastoral communities across the country.

Loss of cattle or drops in milk production due to disease is also raising the risk of malnutrition in pastoralist groups who rely on milk as an essential part of their diet, particularly for children and pregnant and lactating women.

**WHAT CAN BE DONE?**

The onset of the dry season in December, continuous insecurity in Greater Upper Nile, and the threat of renewed large-scale conflict is affecting where pastoralists will choose to move with their herds in the next months. Whether the displaced pastoralists will return to their traditional dry-season grazing areas, or whether they will remain where they have recently moved – permanently altering their migratory patterns – is unclear.

The government of South Sudan holds ultimate responsibility and should take the lead in the face of this crisis. Under normal circumstances FAO and its partners have a number of tools at their disposal but the capacity to act is constrained by the prevailing situation across the country.

Currently, FAO is scaling up already ongoing livestock interventions by strengthening the cold chain system for livestock vaccines using solar technologies, expanding the community-based animal health network and vaccination programme, deploying its own staff to different locations to lead interventions in areas where partners are conducting disease surveillance, re-establishing local laboratories for diagnosing livestock diseases, and providing supplementary animal feeding to livestock owners where possible.

Coordination with partners already engaged in livestock support has also been strengthened to improve complementarity, effectiveness, monitoring and early warning.