



Situation report

The severe drought which set in early in 2022 and continued through early 2023 continued through to the long rains of April and May. The poor long rains and continued heavy grazing pressure saw a poor recovery of pastures. By August 2023 satellite imagery of Kajiado County showed low pasture availability across the Amboseli ecosystem. The only remaining areas with substantial grazing are in the Amboseli, and Kimana swamps.

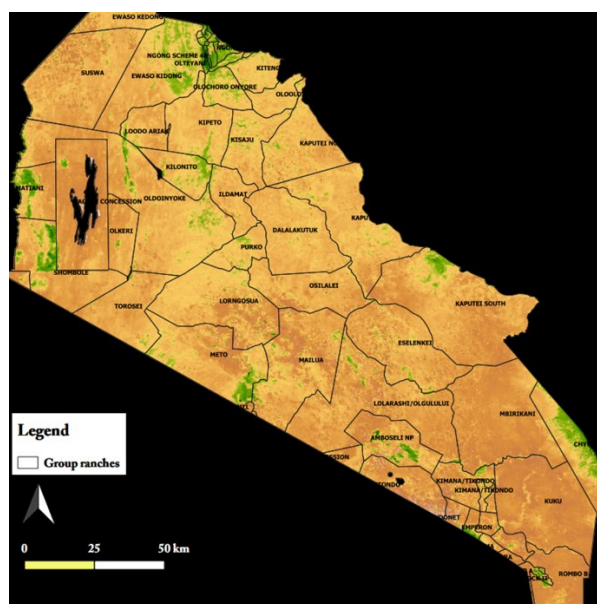


Figure 1: Figure 1: EVI Satellite imagery showing areas of residual greenery in group ranches across Kajiado County. Eastern Kajiado, which received weak rain in April and May, is the driest region. Within the Amboseli ecosystem, rains were poorest on Kuku and Rombo, leading to an influx of cattle onto Lolorashi Group Ranch and into Amboseli National Park.

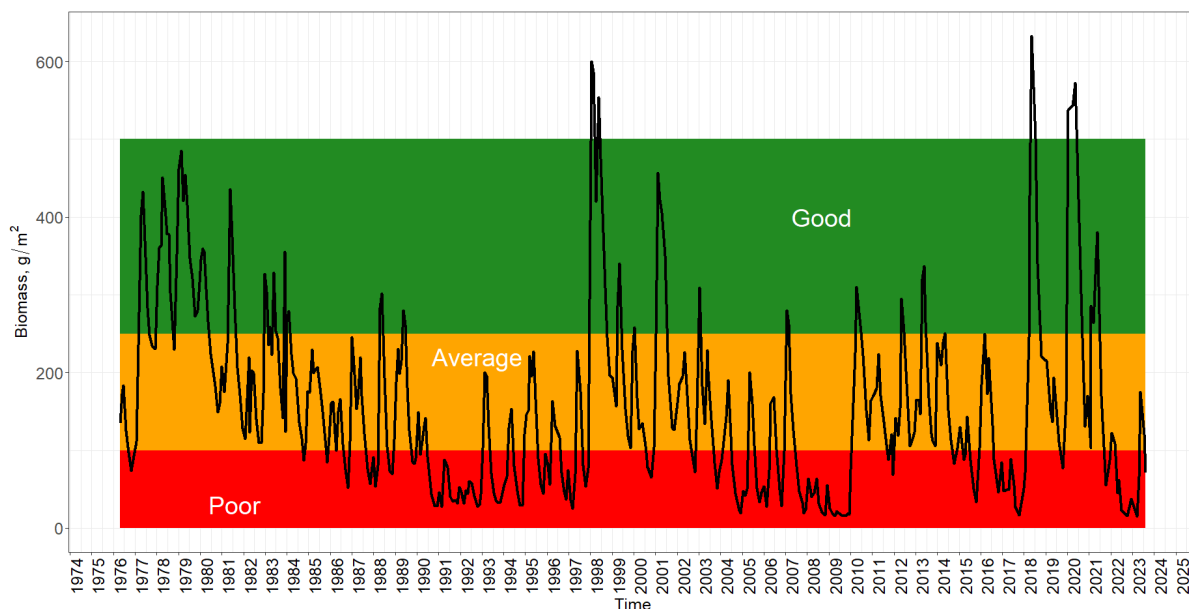


Figure 2: ACP's long-term pasture barometer shows pasture abundance (biomass) rising barely into the orange zone during the April-May rains before falling back into the red zone in August. The poor recovery was due to a combination of weak long rains following the prolonged heavy grazing of the 2022-2023 drought.

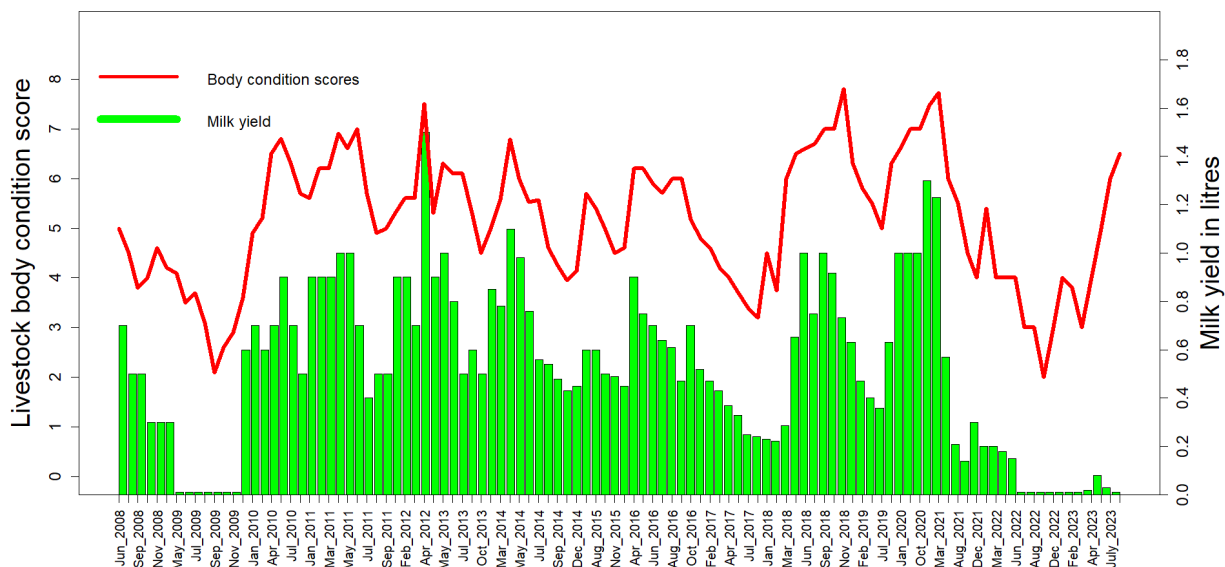


Figure 3: Body condition in cattle has recovered despite the poor long rains in April-May rains. The recovery is due to temporary flush of grazing coupled with a sharp drop in cattle, sheep and goat numbers due to drought mortality and livestock sales. The extremely poor condition of cattle during the drought is delaying calving and a recovery of milk yields far longer than in the post-2009 drought. Milk production is unlikely to recover significantly until the end of 2023 and early 2024.

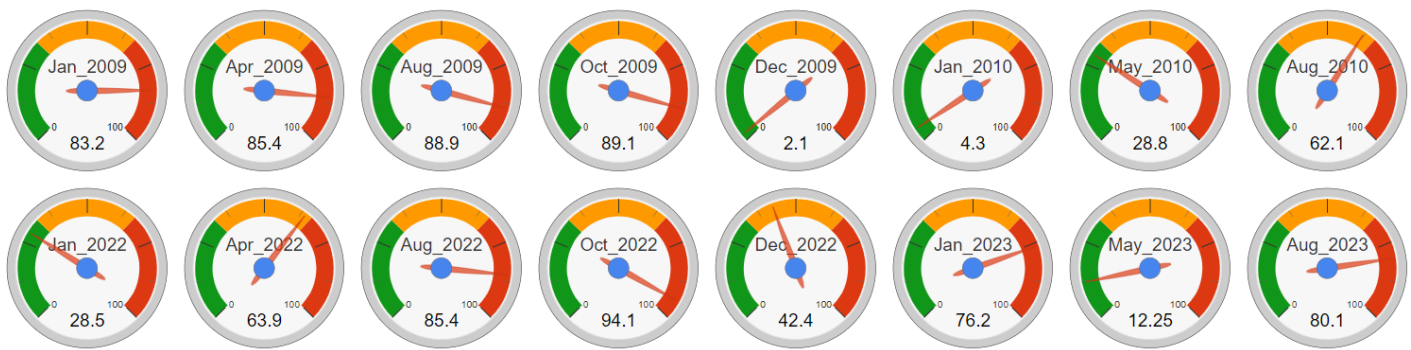


Figure 4: Grazing pressure comparing the course of the 2022-2023 drought with the 2009 drought. The grazing pressure at the start of 2022 was far lower than in 2009 and would have been sufficient to carry most animals through the drought if not for the influx of 140,000 cattle from outside Amboseli. The influx caused the drought to be as severe as 2009 and the recovery to be far slower.

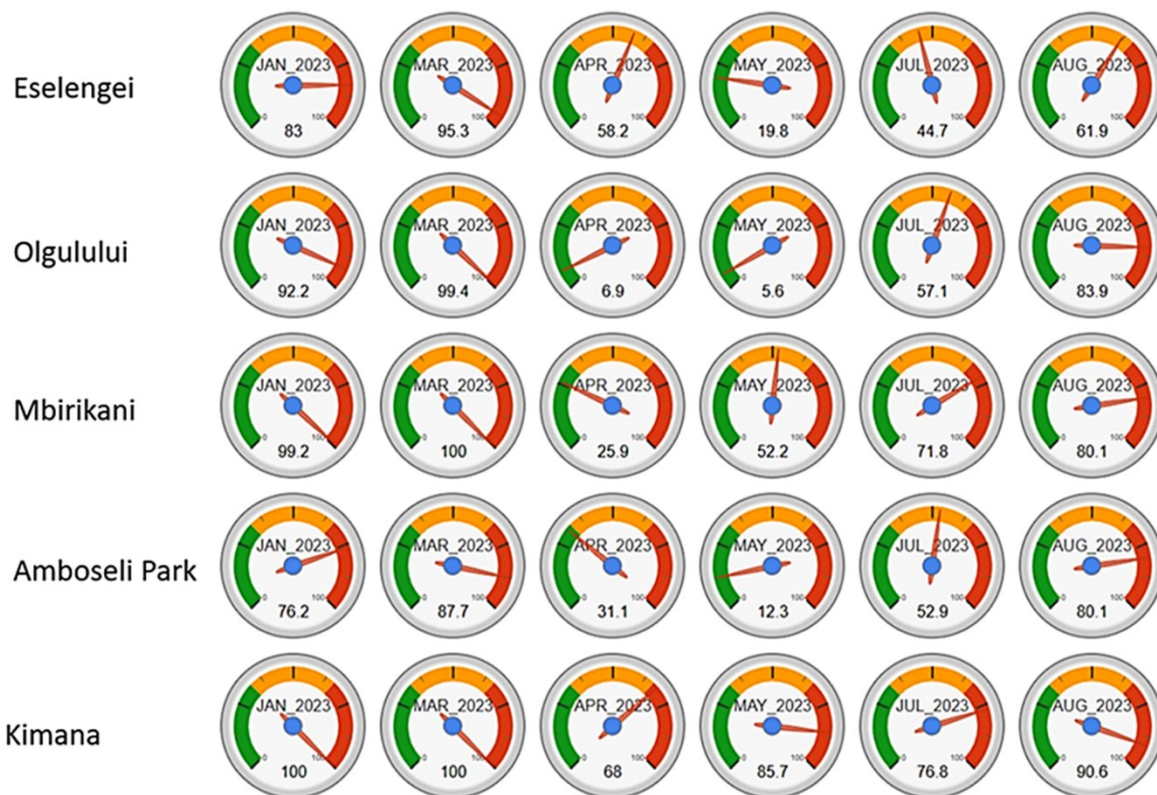


Figure 5: The grazing pressure for each group ranch shows subdivided Kimana to have experienced earlier and more severe grazing than Amboseli National Park and other ranches. The pressure switched to Mbirikani, which had the best long rains, and later to the national park. Eselengei, which had reasonable long rains and few cattle incursions, experienced the lowest grazing pressure.

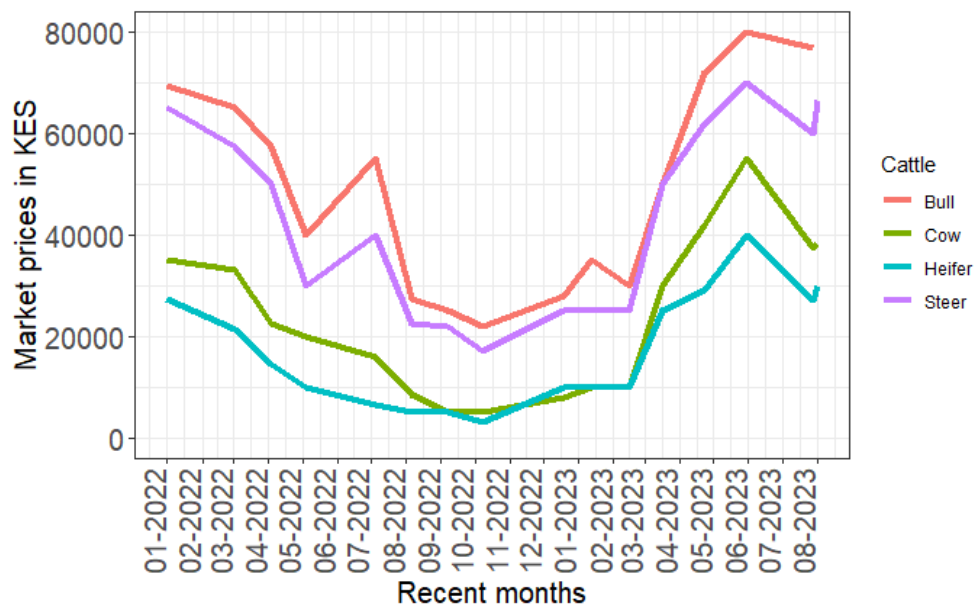


Figure 6: Livestock market prices have rebounded since the long rains in April and May due to the recovery of body condition (Figure 3) and drop in drought-stricken cattle up for sale.

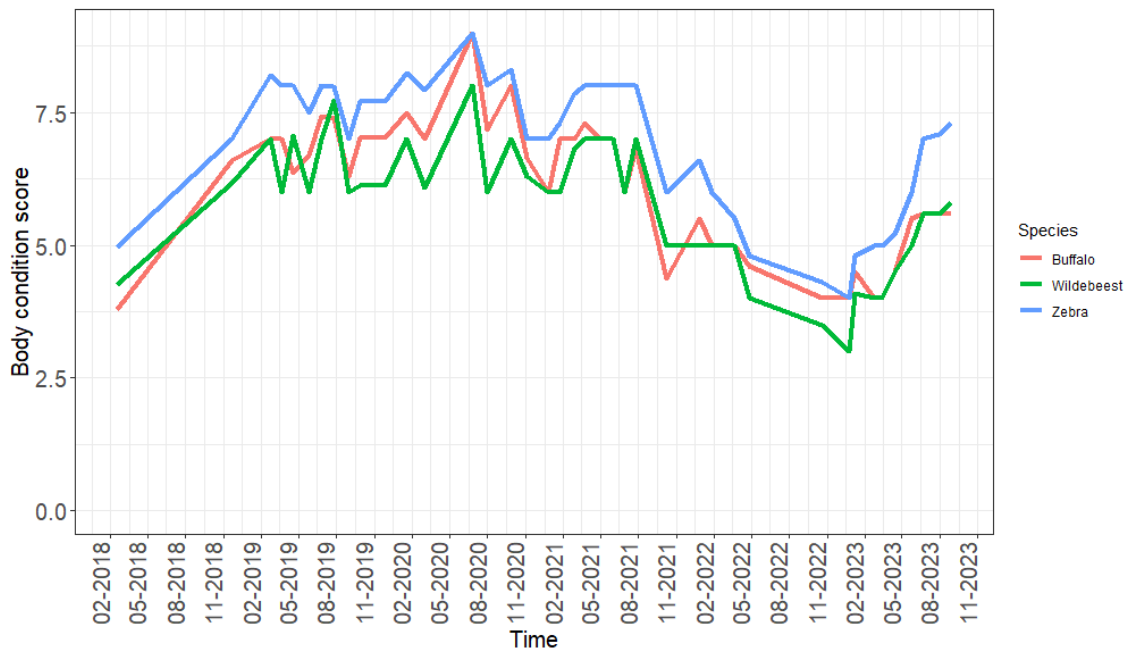


Figure 7: Body condition of buffaloes, wildebeest and zebras has recovered since the long rains.

Current conditions and outlook

Despite the poor range conditions due to prolonged heavy grazing during the 2023-2023 drought and poor long rains, the condition of livestock and wildlife should see them through to the October short rains if not unduly delayed. The protracted delay in cattle calving due to suppressed pregnancy during the drought will, however, delay milk production far longer than in the 2009 drought recovery. The many months to recovery will severely curb food supplies for pastoral families heavily depended on cattle. A narrative account of the current situation from the herder's perspective is given in the accompanying ACP report by Sakimba Kimiti.

ACP commissioned the Department of Remote Sensing and Regional Surveys to conduct an aerial count of eastern Kajiado at end of August to assess livestock and wildlife losses since the onset of the 2022-2023 drought. A report on the findings of the count is also given in an accompanying ACP report at

www.amboseliconservation.org.

Amboseli Drought Narrative: Adaptation Strategies of Herders in Amboseli Ecosystem to Climate Variability and Drought

By Sakimba Kimiti

The Amboseli ecosystem is currently showing promising signs of impending cloudy weather, hinting at the onset of the short rains and the eagerly awaited El Niño rains. This follows a period of uneven rains from March to May 2023 which were very patchy, leading to the migration and settlement of herds from Kuku, Kimana, and Rombo along the edges of Amboseli National Park.

In an effort to maintain the ecological balance and minimize disruption to wildlife, visiting herders were urged to distribute their livestock across different sections of the park, thereby preventing overcrowding and overgrazing. Throughout the season, grazing management meetings were convened to address the issue of livestock accessing grass inside the park.

Herds were strategically allocated to both the northern and southern sides of the park. Notably, some herds from the southern side, particularly those residing in Embarinkoi, Esiteti, Oldule, and Irmisigiyo, shared grazing areas with herds across the border in Tanzania. Grazing land on the Tanzanian side is highly degraded and has led herders accessing vegetation on the Kenyan side which is just a few kilometers away. Following the influx of cattle, joint meetings have attempted to organize, regulate and plan grazing plans among the shared users to avoid the advantage Tanzanian herders otherwise have in ignoring restricted access to late season pastures. The joint grazing plans ensure the pastures available can sustain herds through the dry season.

South of Amboseli, livestock have regularly accessed the swamps of the Nkongu Narok during the dry season. The swamps are reserved for use after the depletion of the wet season pastures. Individual herders delay livestock access to the swamps when mosquitoes and other biting flies make grazing uncomfortable for animals. Animals also get stuck in the soft mud. To avoid animals getting stuck, herders pile dirt and cow dung to create solid paths for animals into the deeper swamps. Herders alternate swamp and bushland grazing to minimize the risk of foot rot, foot-and-mouth disease, diarrhea, and other diseases such as East Coast fever and malignant catarrh fever transmitted by wildlife.

On the northern side of the park, visiting herds spread their herds across Risa, Nchakita, Nkiito, Meshanani, and Emurua Oloibor, as well to certain parts of Eselenkei. The northern herds use two grazing locations: the park swamps and the Imughuri River where waters flowing down the Ol Kajiado River create flood plain grasses. Vegetation in the floodplain lasts far longer than on black cotton soils and on higher elevations. Herders partition pastures into grazing blocks to spread foraging and prevent overgrazing.

The acceptance of grazing inside the park during the dry conditions of the last few months resulted from negotiations between herders and park management. The agreement regulated the number of herds by partitioning villages into blocks and scheduling grazing days to avoid overcrowding. The plans ensured livestock herds avoided scaring off wildlife and disrupting tourist viewing and ensured close cooperation between herders and the park management.

In response to the heavy livestock use of the swamps, some herders have started moving towards the Chyulu Hills in recent weeks to access good pastures left over from the rains. The Chyulu Hills are typically reserved as a late season reserve for the Mbirikani group ranch. The long distance from water incurs cost to herders having to transport water for livestock. Wealthier herders are willing to invest in provisioning water supplies every two days despite the cost. Well-managed herds have the capacity to reproduce and grow faster than those without such management, making the effort and cost worthwhile.

The recurrent and severe droughts have seen herders improve their coping skills. Herders are now engaging in early planning to mitigate extensive livestock losses. Strategies include purchasing and storing hay, destocking, heeding drought alerts, stockpiling maize stalks, and utilizing livestock supplements while prices are still reasonable. Additionally, some individuals have established their own grass banks. As a result, the minimal livestock losses observed during the 2022-23 drought compared to the 2009 testify to the adaptive capacity of herders. The mitigation measures adopted during the drought should carry forward and help herders anticipate future droughts better and incur fewer livestock losses