THE 2009 DROUGHT: A CRISIS IN RANGELAND DEVELOPMENT

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Nairobi
7th September 2009

Kenya's worst drought in living memory has been overshadowed by political and economic crises and the destruction of the Mau Forest. Now, with 10 million people short of food, the drought has captured national attention.

Over half a million people have left their homes in Kenya's rangelands in search of forage. Over 100,000 people have fled Wajir for Ethiopia and Somalia. The Uaso Nyiro River, lifeline for the pastoralists of Samburu and Isiolo Districts, has dried. Thousands of herders have moved onto highland pastures. Over 38,000 cattle have died of starvation, disease and cold on Mt Kenya alone. A quarter of the children in the worst hit areas are malnourished. Scores of pastoralists have died in clashes over pasture and water. Several security personnel have been killed battling rustlers and bandits. Scores of elephants, giraffe and zebra have been poached in Shaba National Reserve and tourist lodges have been closed due to the insecurity.

The mass migration has slowed the impact of drought by a few months, but cattle deaths are now rising fast. Based on current trends, if the drought continues until October, a quarter million cattle will die in Kajiado and 3 million cattle countrywide. That amounts to a staggering Ksh 360 million ($5 million) loss, based on pre-drought prices and excludes sheep and goat deaths.

The 2009 drought is a tragedy for millions of subsistence farmers, herders, the environment and wildlife in the rangelands that cover three quarters of Kenya,.

Loath to sell cattle if there is any hope of rains, pastoralists have been caught with large emaciated herds. Sale prices have plunged. A few weeks ago a cow sold for 12,000/=. Today the price has dropped below 2,000/= and is falling fast. Wealthier herders are buying grass and crop residues to spare their best milk cows and breeding bulls. The poorest herders are dumping animals for as little as 500/= to avoid being left with nothing.

The 2009 drought is worse than anything I've seen in 40 years of research in Kenya's rangelands. The strong reciprocal bonds that held pastoral societies together in past droughts are breaking down. Members of families, clans and sections are moving individually, wherever they can find grazing and water. Herders are crowding into the Nairobi suburbs from Amboseli, Sultan Hamud, Kajiado, Magadi and as far as Narok. Most families will lose their animals far from home. The dislocation is harshest on

women and children left behind by the men out searching for forage and jobs or selling emaciated animals.

The rains will bring no respite. Cold and damp, bloat and disease will kill thousands more animals. It will be months more before animals recover, give birth and produce milk for herders. By then public attention and emergency aid will have ebbed, leaving pastoralists harder pressed than before the drought. Most families will have to sell animals to survive the post-drought food gap, further depressing herd recovery. Families without sufficient animals to recover will be forced to sell their land and move to towns at a time when jobs are shrinking and food costs rising. With drought expected to slash Kenya's maize harvest from 30 million bags to 15 million, food costs are sure to rise higher yet. The drought will also deepen Kenya's poverty gap: rich herders, farmers and land speculators are already snapping up pastoral lands at bargain prices.

If it is still too early to weigh the full social and economic impact of drought, one thing is clear: Kenya's 2009 drought is destroying any hope of pastoralists resuming a traditional way of life. Even the most conservative elders are talking of switching from subsistence milk herds to beef cattle that fetch triple the market price. But the switch will be long and hard even for progressive families. It will take years to build a commercial herd and restore depleted pastures.

The year 2009 will be as transformative for Kenya's rangelands as the Dust Bowl was for the American prairies in the 1930s. Then, a similar combination of overworked land and drought scattered tens of tens of thousands of small-hold farmers and ranchers from two million acres of degraded prairie in search of jobs at the height of economic depression. Kenya faces drought with far more people on the land, a far higher growth rate and greater poverty. We also have a fraction of the government support President Franklin Roosevelt marshaled though his New Deal rescue plan and the Civilian Conservation Corps he dispatched to help ailing farmers.

The impact of prolonged drought is also taking a toll of the land, natural resources and wildlife. The picture in southern Kajiado where I have monitored grasslands since 1967 is dire and repeated all across the rangelands. Here pastures are more denuded than I've ever seen them. Tall sedges in the permanent swamps--used in droughts by wildlife and livestock-- have been grazed to a lawn. Buffalo, zebra and wildebeest are grazing belly-deep in search of forage and hundreds are dying of starvation and disease. Elephant calves, unable to follow their mothers into the swamps, are starving. Elephants are also dying in Laikipia, Tsavo and Samburu. Kenya Wildlife Service is having to feed emaciated hippos at Mzima Springs. Rangers are pushing cattle out of parks by day and herders are driving them ever deeper in at night.

The poverty and desperation among rangeland families is measured in wildlife poached for food and cash, and in a surge of trees felled for charcoal. Large acacias have been

hacked down over much of the rangelands. Bushes once too small to be profitable are now being cut for charcoal. Sheet and gulley erosion is spreading down slopes across the rangelands where bush once protected the soils. The cost to Kenya as a whole is measured in the sedimentation of our rivers and lakes, the loss of fisheries and reduced hydroelectricity for our national grid.

What explains the severity of the 2009 drought?

There is no doubt that failed rains are the immediate cause of Kenya's poor maize harvest, forage shortage and drying water supplies. The long rains failed over most of Kenya after poor rains in 2008. But rains have failed as badly in the past with nothing like this level of impact on the rangelands.

The tragedy of the 2009 drought stems from three decades of failed policy and lack of development in the rangelands rather than poor rains or climate change. During the 2000 drought I wrote an article in the Nation newspaper titled "Drought: Kenyans Have Not Seen Anything Yet," warning about worse to come unless the systematic causes of rangeland degradation were tackled. In a second article, "What We Can Do to Ease Life for Pastoral Nomads?" I suggested measures for reducing drought vulnerability. Little has been done to address the systemic causes of drought in the nine years since.

The systemic causes of recurrent drought include the steady loss of pastoral lands over many decades; a rapidly rising human population; fear of land loss and in many areas settlement on plots too small for each family. Ultimately the problem comes down to far too few livestock to support pastoral families--yet far too many for the land--and few options for them to join Kenya's mainstream economy. There simply isn't the land or the drought refuges left to support a migratory subsistence lifestyle, much less permanent settlement on 100 acre plots. The problems are exaggerated by the loss of traditional husbandry knowledge among young herders, many of whom are hired hands, and by uncontrolled settlement of prime grazing lands and drought refuges.

The upshot of years of failed policy and national indifference is that droughts now recur once every four or five years rather than every ten. Today, the depth of drought is better predicted today by livestock cycles than by rainfall. Pasture production has fallen sharply due to continuous heavy grazing and erosion. The huge drop in water discharge into the rangelands caused by urban growth and farming has added to the pasture shortfall: wetland and riverine pastures vital for late season grazing by livestock and wildlife have shrunk.

Kenya's present disaster could have been averted by sound government policies and investments in the rangeland after the severe 1970s drought. Instead, since then, extension services have shrunk, pastures have deteriorated, livestock numbers have fallen by 3 percent a year and wildlife populations have halved in and outside our parks. The

low population density of the rangelands, and their small contribution to the national exchequer, has given the pastoral regions little political leverage in the scramble for social services--this despite producing over half the nation's livestock.

What can be done to reverse the worsening droughts in our rangelands?

If far too little and too late, the government is right to buy up rangeland cattle as an emergency measure. Money spent buying emaciated cattle before they die puts cash in herders' pocket, lowers dependency, cuts the costs of famine relief and raises the chances of getting the hardiest animals through the drought. Buying up surplus stock also spares the rangelands worse damage and conserves their vital ecological services, including water capture, fisheries production, hydroelectricity generation, wildlife conservation and tourism. The 50 billion shillings or so I estimate it would take to buy up cattle that will otherwise die before the end of the drought will save ten times that cost next year alone, and avoid a far worse human catastrophe.

Restoring the rangelands after the drought will take short and long-term measures.

The most important step is to provide land, water and personal security for rangeland families. Most still have no title to their land or guarantees on resource use. No serious investment will be made in the rangelands until tenure and rights are secured. Government must also remove illegal weapons and stamp out the cattle rustling and banditry that are destabilizing northern Kenya.

Along with security, government must invest in roads, communications, livestock and agricultural extension services, value-added farming and ranching industries, commercial development, market outlets, drought insurance schemes and an expansion of credit services, small loans and saving societies. The cell phone has done wonders to ease the plight of pastoralists in the 2009 drought. If the low credit limit on phone transfers were lifted, it would stimulate commerce among thousands of rural families who have taken to digital transactions for lack of banking facilities.

We must also face the hard reality that land is too scarce to support the existing rangelands population. Top priority must therefore be placed on speeding up the stalled economic and demographic transition and preventing an even worse poverty trap. Rather than add millions more to our urban slums, we should invest in basic services, infrastructure, family planning clinics and training in order to diversify livelihoods in our rural towns like Isiolo, Mandera and Lokichogio.

Rangeland restoration and development also calls for rebuilding the strong social networks and institutions fractured by the collapse of traditional governance and the failure of central government to fill the void. The most urgently needed are agro-pastoral producer bodies, landowner associations and development forums.

A number of start-up institutions are making headway. They include the South Rift Association of Landowners (SORALO) and the Northern Rangelands Trust (NRT), both dedicated to improving livestock practices, conserving the land, diversifying livelihoods and promoting the development of women and youth groups. Each has set up wildlife conservancies, tourism enterprises and begun pasture management and livestock development programs. SORALO has set up a cattlemen's association and a resource centre to monitor rangeland conditions using local assessors. In collaboration with the African Conservation Centre, the centre is conducting drought surveys, setting up a drought warning system and exploring mitigation measures.

Finally, we must explore ways to avoid subdivision into small plots causing even worse damage. Evidence from rangeland studies shows that seasonal use of pastures and grass banking improves land and livestock health and resilience to drought. We should therefore explore reciprocal grazing systems of the sort adopted by Australian ranches to counter drought. Traditional reciprocal arrangements among pastoralists lend themselves to such grazing plans.

Unless we build the capacity to restore and conserve the rangelands now, future droughts will be far more devastating. If we do act now, we also lay the ground work to counter climate change. Kenya stands to benefit by linking the two. The rangelands, after all account for 70% of our total wood production, the equivalent as a carbon sink and offer our largest source of renewable energy. By tapping the global carbon market, growing wood lots and producing biomass fuels, wind and solar energy, and by conserving grass banks and opening up grass trading markets, pastoralists will boost their incomes and ease their transition from subsistence to commercial husbandry. Adding wildlife conservancies and ecotourism to their portfolio of options will help diversify the rangeland economy and build resilience to drought and climate change.