

# **Assesment of Climate Change Impacts on Natural Resources and the Different Gender among the Pastoralist Communities of Samburu, Kenya**

**Author: Hyrine, Munga Gesare**

## **Abstract:**

Climate change due to anthropogenic induced global warming is one of the greatest and defining challenges of the current and future centuries. The Intergovernmental Panel on Climate Change (IPCC) has unequivocally affirmed it and directly linked it to anthropogenic Green-House Gases (GHGs) emissions from fossil fuel burning and land use changes. Although the impacts of climate change are global, they will be differently felt and distributed among different regions, generations, age classes, income groups, occupations and genders. Pastoralists, who inhabit the Arid and Semi-Arid Lands (ASALs), are among the people most likely to be affected by these impacts because of their high sensitivity and vulnerability, low adaptive capacities and resistance to climate change. For several years, they have been managing climate variability, however, the unprecedented rate arid scale of human induced climate change impacts; droughts and floods are beginning to pose bigger and more challenges to their livelihood sustainability. These impacts are affecting men, women and children differently due to different household roles; use of natural resources; differential access to resources, technology and education. This study was carried out in Wamba Division in the eastern area of Samburu County, to assess impacts of climate change on natural resources and gender. Specifically the study focused on identifying the key natural resources in the district and their use by different gender, assessing impacts of climatic hazards (drought and flood) on the key natural resources the subsequent effects on different gender and determination of gender specific coping strategies. Semi structured questionnaires were administered to 36 households (Manyattas) per ranch randomly selected from five community group ranches. Key informant interviews, focus group discussions and specified transect walks were undertaken. The study revealed a 99.4% awareness level of climate change among communities. The most observed indicators included prolonged droughts (93.9%), loss of pasture (98.8%), increase in livestock diseases (81.1 %), and drying of water sources (78.9%). Key natural resources in the area in order of importance were rated as water, pasture, mountains and hills, medicinal plants, forests, wild animals and crops. The study showed females use natural resources more than males due to gender roles. Females main roles were herding of livestock, milking, collecting water, firewood, building materials, wild fruits and berries, fodder and charcoal burning whereas males roles included watering livestock, honey and bush meat provision. There were significant differences between livestock numbers owned in 2010 and those owned in 2005 and 2000 at  $p < 0.05$ . A general trend of increasing malaria, typhoid, common cold and diarrhoea were observed and emergence and re-emergence of new livestock diseases. The study further revealed the females felt more impacts of drought and flood compared to males due to their many roles that rely on natural resources. The impacts on females were emotional and physical due to increased productive and reproductive roles. Impacts on males were more psychological. Females coped by livelihood diversification and diet change while males coped through herd management. Both genders used medicinal plants to treat and alleviate livestock and human diseases. The study recommends for the relevant ministries to introduce and train pastoralists on apiculture to supplement the already failing livestock production due to climate change. It also recommends for activities or projects that can reduce women workload like provision of reliable clean and potable water and gender mainstreaming in climate change mitigation and adaptation policies.