Chapter 16
Effectiveness of Local Community Policy Responses to Climate Change Impact on Ecosystem Services for Biodiversity Conservation in the Semi-Arid Zones

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ABSTRACT

The Ugandan government has decentralized climate change policy strategies at the local government district development planning levels to build local community adaptive capacity for accelerated action for disaster resilience. This chapter focuses on the local community response by Isingiro local government district authority. The purpose is to provide a context of the significance of eco-services and natural biodiversity resources in the semi-arid district, located in the South-Western Uganda, elaborate on the district climate change action plan for community-based adaptation strategies, and the biodiversity conservation district development plan. For decades, most households and local communities have perpetually suffered from the severe climatic stress of galloping heatwaves, shocking floods, ferocious frequent whirlwinds and wind storms, catastrophic droughts, perennial food insecurity, malnutrition, migrations, and famines. The district has adopted strategies to enhance biodiversity conservation for eco-services for food security and sustainable community livelihoods.

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INTRODUCTION

Climate change and variability impact have degraded the fragile ecosystem services and eroded the supply of the natural biodiversity resources in the semi- arid zones of Uganda known as the cattle corridor which occupies almost 40 percent of the total land area in the country. As a result, the Ugandan government launched development planning levels to build local community adaptive capacity for accelerated action for disaster resilience. The purpose is to provide a context of significance of ecoservices and natural biodiversity resources in the semi-arid district, located in the South –Western Uganda, elaborate on the district climate change action plan for community based adaptation strategies, and the biodiversity conservation interventions guided by a five – year district development plan (2020). For decades, most households and local communities have perpetually suffered from the severe climatic stress of galloping heat waves, shocking floods, ferocious frequent whirlwinds and wind storms, catastrophic droughts, food insecurity, and famines. The semi-arid district has adopted accelerated responses to climate change and variability impact; enhance biodiversity conservation and biodiversity based ecoservices for local adaptation strategy for sustainable community livelihoods in Uganda.

ECOSERVICES IN CLIMATE CHANGE REGIME

Furthermore, some of the common social and cultural ecoservices experienced by the local communities in these dry savannah lands are: cultural diversity, arts and crafts, furniture, game hunting, fishing, curios, tourism, settlements, conservation, entertainments, dresses, dances, music, songs, stories or fables or legends, farming, communication, information, ideas, skills, knowledge, roads, power lines, and pipelines, trading centers or markets with a focus on agro-products. Environmental ecoservices: food, medicine, drinks, colors, shades, wind breaks, flood controls, soil conservation, water conservation, climate services, shelter or settlement, beauty, ecotourism, flowers, wood fuel, minerals, raw materials, and political ecoservices: rules and regulations, policies, names, logos, slogans, mottos, emblems, flags, technology, or innovations.

Mainstreaming ecoservices in the implementation of the national and decentralized climate change policy strategy in Uganda (GU, 2015), which is gradually beginning to get off the ground with early adoption of the climate being taken by the most climate change and variability stressed districts like Isingiro district in the South- Western Uganda region. Isingiro district has taken a practical role to mainstream ecoservices in the advent of climate change and variability uncertainty by developing a community based plan to enhance local ecoservices (GU, 2017). The ecosystems services are characterized by different components of the environment or the natural resources which are seen as the local communities' natural, cultural, or fundamental human rights, social, economic, ecological, and local policy participation and their welfare (AU, 2O15). The ecoservices supply in the societal, economic and political structures and systems represent communal livelihoods (INASP, 2016). In abid to enhance the local ecoservices in the district has decided to promote gender equality for women empowerment (GoU, 2012).

Despite the importance of the ecosystems services in Uganda, the arid zones face both the risks and opportunities derived from climate change for socio-cultural, economic, and environmental resources. The climate change and global warming has increased the risks of disasters and opportunities conditions they face. The areas experience the bimodal climatic and weather conditions. The community services in this decentralized local government districts such as Isingiro district have developed plans to en-

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