CASE STUDIES SUMMARIES

A. Kenya Climate Change Adaptation Programme (KCCAP)

KCCAP is a 5-year, USD \$10 million intervention (2018-2023) funded by the Adaptation Fund and implemented by the National Environment Management Authority (NEMA) in 14 counties in Kenya. This intervention aimed to build resilience in agriculture through climate-resilient water management systems (effective irrigation schemes, water pans, integrated shorelines, and Mangrove ecosystem management). Modelled around the concept of the adaptation village, the interventions aimed to integrate community-led infrastructure to support the water-food nexus – facilitated by capacity building for local communities. Adopting a WEFE approach, the project adopted several adaptation practices (pastoralism and irrigated horticulture) in delivering solar-powered boreholes serving communities within a 10-kilometre radius of the adaptation village.

B. The Upscale Project

The Upscale project is a 5-year (2020-2025) Euros €7.66 million project funded by the European Union and implemented by the International Centre of Insect Physiology and Ecology (ICIPE) in East Africa (Kenya, Uganda, Tanzania, Ethiopia, and Rwanda). It aimed to execute climate-smart agricultural practices through integrated agro-ecological management using push-pull technology,¹ which is an innovative, environmentally friendly pest and weed management strategy primarily used in agriculture. This involves planting a repellent plant (usually Desmodium, a legume) in the main crop field (e.g., maize or sorghum). The Desmodium plant produces chemicals that repel stem borers and prevent them from laying eggs on the main crop. Desmodium has deep roots that fix nitrogen, improving soil fertility. It also suppresses the parasitic weed Striga through its allelopathic properties, inhibiting the weed's growth. Around the perimeter of the field, trap crops (typically Napier grass or Brachiaria grass) are planted. These crops are more attractive to pests like stem borers than the main crop. The pests are drawn to these trap crops ("pulled" away from the maize or sorghum), where they lay their eggs. The push-pull approach aims to deliver climate-resilient agriculture and leverage NbS for the benefit of biodiversity and a sustainable environment. The study focused on the project's activities in Kenya, (Ebukola Village, Vihiga County).

C. Building resilience of communities living in Degraded wetlands, forests and savannas of Rwanda through an Ecosystem-Based Adaptation Approach (Green Gicumbi)

This was a 5-year (2017-2022), US \$14.7 million project funded by the Green Climate Fund (GCF) and implemented by the Rwandan Environmental Management Authority (REMA). The project's aim was to enhance the adaptation capacity of local communities in Northern Rwanda by implementing NbS and Ecosystem-based Adaptation (EbA) actions in forests, savannas and wetlands. The project delivered three integrated components i) Watershed protection and climate resilient agriculture, sustainable forest management and sustainable energy through improved cooking stoves and biogas digesters in the community to reduce the biomass of trees consumed as firewood, as well as reafforestation ii) Government-led climate resilient settlements, which sought to relocate 100 households from high climate risk zones to new durable and green buildings in the Gicumbi district of Northern Rwanda, and iii) Knowledge transfer and mainstreaming aimed at capacity building vulnerable communities against existing climate risks such as floods and landslides.

¹https://en.wikipedia.org/wiki/Push%E2%80%93pull_agricultural_pest_management#:~:text=Push%E2%80%93pull%20technology%20is%20an,often%20infested%20by%20stem%20borers

D. Promoting Climate Smart Agriculture for improved rural livelihoods and climate resilience in the climate-vulnerable Eastern Province of Rwanda (PCSA-Rwanda)

This is a 3-year (2022-2025) programme with a budget of \$883,457 USD. It has been funded by the Africa Development Bank and implemented by the International Center for Research in Agroforestry (ICRAF), in partnership with the Center of Excellence in Biodiversity & Natural Resource Management at the University of Rwanda (CoEB) and Rwanda Agriculture and Animal Resource Development Board (RAB). The programme's main objective is to leverage solar-powered irrigation systems, climate-smart agriculture and support small agri-business through grants to enhance food security and act as an incentive to adopt climate-smart agricultural practices. It also promotes the adoption of drought-resistant crops, and fruit tree farming as an agroforestry adaptation intervention against food insecurity. Beekeeping and composting are further prioritised.

E. Building resilient communities, wetland ecosystems and associated catchments in Uganda (BRCWE-Uganda)

This is an 8-year project whose implementation cycle started in 2017, and it is expected to end in 2025. The intervention is being financed through a grant of USD \$44.3 million. Its main objective is to seek to restore and manage wetland hydrology and its associated forests through nature-based solution interventions. It further aims to promote Good Agricultural Practices (GAP) and alternative livelihood options in the wetland catchment areas. Additionally, this intervention hopes to strengthen access to climate and early warning information for Ugandan farmers and other target communities to support wetland management. The target beneficiaries are located in the south-western and eastern regions of Uganda.

F. Implementation of concrete adaptation measures to reduce vulnerability of livelihood and economy of coastal communities in Tanzania (ICAM-Tanzania)

This 5-year (2017-2022), USD \$5 million intervention, funded by the Adaptation Fund and implemented by the office of the Vice President, aimed to lessen the negative impacts of sea levels rising and to change precipitation patterns and floods affecting coastal infrastructure and settlements in Ilala and Temeke Districts of Dar es Salaam. The project also supported early warning systems by creating and operating a climate change observatory for Tanzania; documenting lessons learned, and implementing capacity building of local authorities in developing the Integrated Coastal Area Management Plan.

G. Arusha Sustainable Urban Water and Sanitation Delivery Project (ASUWSDP)

This 6-year, US \$170 million project (2016-2022), funded by the African Development bank and implemented by the Arusha Urban Water Supply and Sanitation Authority (AUWSA), aimed to coordinate the provision of safe, reliable and sustainable water and sanitation services in the city of Arusha, Tanzania. With a focus on WEFE, the intervention involved improving sanitation infrastructure and services improvement, supporting water supply infrastructure and services improvement and providing institutional support and project delivery. About 600,000 people in Arusha and 250,000 additional people benefited from the project.