AgriFI Kenya CLIMATE SMART AGRICULTURAL PRODUCTIVITY PROJECT (CS APP)

Climate Smart Agricultural Productivity Project (CS APP) is co funded by the Government of Kenya and the European Union under the AgriFI Development Programme. It is implemented by the Kenya Agricultural and Livestock Research Organization (KARLO) in collaboration with its partners Kenya Marine and Fisheries Research Institute (KMFRI); International Centre of Insect Physiology and Ecology (ICIPE); and Kenya Veterinary Vaccines Production Institute (Kevevapi). The overall goal of CS APP is to strengthen productive, climate adapted and market integrated small holder agriculture with the aim of reducing national food deficit and improving the sector competitiveness.

KMFRI seeks to leverage on aquaculture technologies to enhance productivity, resilience and competitiveness as well as improving food and nutritional security and livelihood.

Output 1: Low cost and high quality feeds developed

KMFRI will promote utilization of insects for fish feed (mainly black soldier fly larvae-BSF meal) as an alternative animal protein source; this will enhance waste management in an integrated system.

Output 2: High quality broodstock and fingerlings for Nile tilapia and Catfish developed and availed to farmers

Conduct selective breeding of Nile tilapia and catfish at the national research centre (KMFRI-Sagana) and distribute high quality fish broodstock to authenticated multiplication centres. KMFRI will assess the existing hatcheries to ensure quality seed production and adherence to the set standards. The database of functional hatcheries will be updated and made available to farmers through an online based platform. This will ensure proper monitoring and traceability of quality seed and broodstock for improved productivity.

Output 3: Indigenous fish species to boost aquaculture and eventually restock their native environment domesticated and multiplied

Indigenous fish species which can tolerate and adapt to climate change will be tested and validated for domestication and captive breeding in their catchment zones. This will ensure adaptation and mitigation to climate change. This project will target *Labeo victorianus*, Tilapia jipe and Tilapia baringoensis.

Output 4: Information on climate smart aquaculture technology developed and disseminated

An information-sharing platform will be developed for sharing market information across the aquaculture value chain

Beneficiaries

I. Hatchery operators will benefit from quality broodstock which will ensure adequate and quality supply of seed with faster growth, survival and resistance to fish diseases leading to higher investment returns.
II. Availability of quality seed and feed will benefit farmers through lower production and distribution costs, higher yields, uniformity of product and market access.
III. A networking system on markets and supply of products will benefit the entire value chain by reducing transaction costs, time spent and labour.
IV. A healthy environment will benefit stakeholders by ensuring a healthy population, sustainable development and reduced climate change impacts.

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