

WHAT IS CLIMATE SMART AGRICULTURE (CSA)?

Generally, CSA can be described as a farming system that increases productivity, incomes and resilience (adaptation) in a sustainable manner while at the same time reducing greenhouse gases (mitigation) and improving livelihoods of national food and nutrition security.

- CSA contributes to the achievement of sustainable development goals by integrating the three dimensions of development, which are: **economic**, **social** and **environmental**.
- CSA is an approach to developing the technical, policy and investment conditions to achieve sustainable agricultural development for food security under climate change.
- The CSA approach is based on three (3) basic pillars:
 1. **Adaptation** – introducing new varieties that are drought tolerant and disease resistant.
 2. **Mitigation** – addressing the root causes of climate change and how to alleviate them.
 3. **Productivity** – enhance the resilience of livelihoods and ecosystems, reduces and/or removes greenhouse gases (GHGs) and enhances the achievement of national food security and development goals.

WAY FORWARD

Stakeholders at the recent CSA dialogue held in Gbarnga, Bong County have resolved and recommended the following:

- Validation/Adaptation of National policies on Climate Smart Agriculture.
- That the Ministry of Agriculture make sure that Climate Smart Agriculture practices are mainstreamed in all agricultural components.
- That the Government of Liberia through the Ministry of Agriculture establish local partnerships to create awareness and training on Climate Smart Agricultural practices for targeted groups.
- That Climate Smart Agricultural packages such as extension services, farm inputs (improved seeds and tools) are provided to local farmers.
- All LIFAAS policies being promulgated should be inclusive of all stakeholders and enacted into Law by the Liberia National Legislature, and budgetary support provided for them to be effective.
- The Government of Liberia should reestablish an agricultural bank to enable farmers have access to credit.
- That the MOA establish decentralized mechanized lowland farming using creeks and rivers for permanent irrigation of farmers' fields.
- Future CSA workshops should involve key stakeholders including lawmakers, relevant officials from the Ministry of Finance and Development Planning (MFDP), Environmental Protection Agency (EPA), Ministry of Mines and Energy, etc.
- Farmers should have access to finance and linkage to markets.
- Agriculture extension and delivery services should be strengthened and supported.



FACT SHEET

Climate Smart Agriculture (CSA) in Liberia

A Brief on CSA Technologies, Deliveries and Adaptation Strategies
Central Region of Liberia – Bong, Lofa and Nimba Counties



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BACKGROUND

In Liberia, agriculture is predominantly subsistence in nature, rainfall dependent, where the smallholder farmers practice shifting cultivation using small hand tools as well as unimproved local seeds as planting materials, resulting into low agricultural production and productivity. Nevertheless, the sector contributes immensely to the socioeconomic development of the country through food and cash crops production, nutrition diversification, job creation, household income and government revenue generation, and social stability as well as many others.

The sector comprises four broad sub-sectors:

1. **Food crops (rice, root and tubers, plantains and vegetables)**
2. **Tree crops (rubber, oil palm, cocoa and coffee)**
3. **Livestock, and**
4. **Fisheries**



Aquaculture- fish farming

Agriculture is affected by climate change (variation) and extreme weather conditions in Liberia. Environmental factors such as increases in average temperature, wind speed and humidity limit growth and development of crops and livestock. These situations pose advert consequences on average Liberian farmers in terms of food security and poverty reduction. The phenomena that influence the climate are all critical to increase in agriculture productivity.

Over the last decade, attention on the impacts of climate change observed that farming systems are the most vulnerable sectors. Since the 1980s, Liberia has started to experience the induced phenomena of climate change, which include reduced soil moisture, shifts in temperature, erratic rainfall and heat waves. These changes have not only triggered secondary



Caterpillar infestation in 2009

stresses such as the spread of pests, but have decreased crop yield and increased competition for resources, contributing to human migration from village to city, and could even derail the current peace when less attention is paid continually.

Backyard gardening: Utilizing the land space and manure to grow collard greens in jute bags

Notably, Liberia's adaptive and mitigation capacity to climate change and the level of sustainable effective delivery of initiatives to combat climate change is very much inadequate and unsatisfactory to depend on for improvement in food security and poverty reduction.

Additionally, agricultural productivity, which already suffers from land degradation, weak extension services, low inputs and extreme weather events, is even more vulnerable to a changing climate given its reliance on climate-sensitive staple crops such as rice and cassava.

Therefore, there is need to scale up climate-smart farming practices and advices in the national agricultural extension and advisory service delivery system to facilitate increased farmers access to CSA practices and adoption rate empowering them to cope with impacts of climate change phenomena.

TRENDS OF CLIMATE CHANGE

