# **Crops Program**

The mandate of the Crops Program at CARI is to:

- Develop improved crop varieties resilient to local climatic conditions and pests.
- Encourage sustainable agricultural practices that conserve resources and protect the environment.
- Increase the availability of staple crops to ensure food security for all Liberians.
- Provide training and resources to local farmers, enabling them to adopt new technologies and improve their farming techniques.

The program four units include rice, tree crops,



maize and vegetables, and root and tuber.



#### Rice research filed



Assorted seedling nursery

## What we offer

- 1. Develop and promote research, innovation, and technologies for high-value products and services.
- 2. Develop modern national information and communication technology infrastructure for sustainable development.
- 3. Develop and strengthen the technical capacity of CARI staff and other stakeholders.
- 4. Strengthen the system for the creation, translation of data, knowledge, and dissemination of information.
- 5. Develop and strengthen strong research linkage with local, and international research and training institutions for mutual benefits.
- 6. Generate and promote technologies and innovations for a demand-driven agricultural product value chain.
- 7. Develop and promote markets and marketing strategies for the agricultural products value chain.
- 8. Facilitate and advocate policy options for enhancing demand-driven agricultural products value chain.
- 9. Strengthen capacity for implementing agricultural products value chain research.
- 10. Enhance research in the availability of knowledge, information, and technologies on agricultural product value chains.



#### **Our Mission:**

To contribute to increased productivity, commercialization and competitiveness of the agricultural sector through the development, promotion and dissemination of demand-driven knowledge, information, technologies and innovations and build capacity for sustainable food and agro-industrial commodities productivity and profitability to enhance livelihoods for all.



#### **Our Core Values**

Our core value highlights our commitment to donors and partners, maintaining our integrity and creating an enabling environment where farmers can improve their livelihoods.

# **Our Seven Thematic Programs**

Crops

Livestock and Fisheries
Natural Resources Management
Post-Harvest and Food Processing
Biotechnology and Laboratory Services
Socio-economics and Applied Statistics





# CARI SERVICE DELIVERY CHARTER

Who are we:

The Central Agricultural Research Institute (CARI) Is a premier Agricultural Research Institute located in Suakoko District, Bong County, Liberia. It is dedicated to enhancing agricultural productivity and sustainability through Innovative and Adaptive Research and Development. CARI's role is crucial in addressing food security challenges and improving farmers' livelihoods across the Country.

#### **Our Mandate**

CARI was established and mandated by the CARI Act (2016) to undertake agricultural research in Liberia. CARI has a broad research mandate covering all food, Tree and industrial crops as well as livestock and fisheries and the agricultural environment.

#### Our Vision:

To become a Centre of Excellence for Agricultural Research, Innovation and Capacity Building for Development, and to contribute to improved quality of life for the people.



# The Biotechnology and Genetic Resource

Program plays a central role in the systematic examination and conservation of seeds. It assumes the critical responsibility of safeguarding and maintaining the quality of seeds, ensuring their extended preservation until they are distributed to end users /farmers.

The Biotechnology and Genetic Resource Management thematic area of research contributes to the attainment of the overall institutional purpose through the attainment of its purpose of generating and promoting biotechnology and genetic resource management knowledge, information, and technologies that respond to clients 'demands and opportunities.



Technician sorts seeds to determine its viability





# Agricultural Mechanization, Irrigation Engineering & Agro-Meteorology

Agriculture mechanization is the process of using machines to replace human or animal labor. It involved using machines partially or entirely. It often requires human input to provide instructions or information. This program is designed to create innovation and technical support for the Agricultural sector and the application of technology to maximize production.

The objectives of an Agricultural mechanization and irrigation engineering program are to provide training for farmers to apply engineering principles to solve problems in agriculture. This includes designing, constructing, and maintaining Agricultural equipment and irrigation systems. The goal of Agricultural mechanization is to increase productivity and production while reducing costs. Mechanization can reduce the physical labor required for farming, which can improve the quality of life for farmers.



CARI agricultural irrigation engineering supplies water to lowland



The lithe machine at the hub manufactures screws and cuts threads

The following are units seven thematic programs

- ♦ Agricultural mechanization
- Irrigation engineering
- Agro-meteorology
- ♦ Natural resource
- ♦ Livestock
- Fisheries
- Biotechnology
- Laboratory & Genetic Resource Management
- Rice
- Tree crops
- Maize & vegetables
- ♦ Root & Tuber
- ♦ Food processing
- Nutrition

## **Aquaculture Livestock & Inland Fisheries**

The Livestock and Fishery Department is an integral part of the CARI research regime and has the mandate to conduct applied, adaptive, and strategic research in developing and providing good quality genetic stocks and quality feed sources and ingredients to livestock and fish farmers in Liberia to increase production and improve productivity.



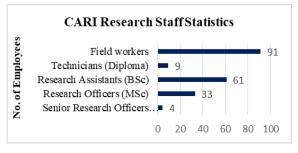
**Beef cattle production** 



F<sub>1</sub> from Exotic boar and Indigenous sow

### **Socioeconomics and Applied Statistics**

The Socioeconomics and Applied Statistics Department is an interdisciplinary field that analyzes the interrelationship between economic activity and social factors. The Department applies statistical methods which are essential for reaching non-questionable conclusions in Experimental research, and social sciences, and Statistically impact society through data-driven analysis and reinforce the discipline's influence.



# **Natural Resource Management**

The Natural Resource Management thematic area of research focuses on five research programs. 1.Improvement of land use planning, 2. Improvement of soil and water conservation, 3. Improvement of integrated soil fertility management, 4. Improvement of irrigation, drainage, and management of problem soils, 5. Improved adaptation and mitigation of effects of climate change.



A clean, healthy plantain sucker that was cultivated at the biotech facility







Organic Pesticides