

## PPP Pipeline Projects

### Niger State 5 Million Hectares Food Security Project

S/N	Sponsoring MDA	Contributing MDA	Project Name	Sector	Estimated Project Cost	Climate Screening Assessment
1	Ministry of Agriculture, Niger State	Governor's Office	Niger State 5 Million Hectares Food Security Project	Food Security	\$5 billion USD	The project aligns with national adaptation goals and climate mitigation strategies. It incorporates climate-smart agricultural practices and renewable energy infrastructure to minimize emissions and strengthen climate resilience. Additional steps are recommended to improve water efficiency, GHG monitoring, and training for climate adaptation practices.

#### Basic Project Information

- **Project Name:** Niger State 5 Million Hectares Food Security Project
- **Sector:** Food Security
- **Estimated Project Cost:** \$5 Billion USD
- **Location:** 25 Local Government Areas (LGAs) in Niger State, Nigeria
- **Partners:** Ministry of Agriculture, Niger State; Sammya Ng Ltd; various Non-Governmental Organizations (NGOs)

The **Niger State 5 Million Hectares Food Security Project** is a transformative Public-Private Partnership (PPP) project led by the Niger State Government. This project, implemented across 5 million hectares of agricultural land, is designed to secure food production, reduce import dependency, and enhance economic resilience for local communities by establishing an efficient and sustainable food system.

#### Climate Screening Assessment

The climate screening process evaluates the project's potential alignment with international climate goals, Nigeria's national climate targets, and best practices in sustainable agriculture. This project aims to address food security through climate-adaptive agriculture, logistical networks, and infrastructure, positioning Niger State as a leader in resilient agriculture.

##### 1. Primary Purpose of the Project

- The project primarily addresses **food security** by promoting agricultural productivity and creating a stable food supply chain for Niger State. With the state's large arable land, this initiative aims to bolster local food production to meet a growing population's needs, reduce reliance on imported food, and establish a self-sustaining agricultural ecosystem.

##### 2. Alignment with National Climate-Change Mitigation and Adaptation Targets

- Nigeria's **Nationally Determined Contributions (NDCs)** prioritize climate adaptation in agriculture, emphasizing food security, efficient water usage, and resilient agricultural practices. The project aligns with these national goals by targeting food security and incorporating sustainable land use to mitigate climate impacts. This project can further support national targets by incorporating climate-resilient practices, efficient water management, and modern agricultural techniques.

### 3. Greenhouse Gas (GHG) Emissions Impact

- Large-scale agriculture typically poses risks of moderate to high GHG emissions, notably from machinery use, irrigation systems, and fertilizer application. These emissions contribute to methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) output, which are common in intensive agriculture. However, the project can mitigate these emissions through:
  - **Climate-Smart Agricultural (CSA) Practices:** Techniques like precision farming, reduced tillage, and soil carbon sequestration can substantially lower emissions.
  - **Agroforestry and Carbon Offset Initiatives:** Integrating agroforestry within the project can offset emissions by capturing carbon in trees and soil.
  - **Renewable Energy:** Using renewable energy sources, like solar power for processing facilities, will significantly reduce the carbon footprint of production and storage.

### 4. Climate Mitigation and Adaptation Features

The project incorporates several climate adaptation and mitigation strategies that align with Nigeria's national climate objectives:

- **Climate-Smart Agriculture (CSA):**
  - **Low Emission Farming:** The project is designed to incorporate CSA techniques such as precision agriculture and organic farming to reduce reliance on fertilizers and improve soil health.
  - **Efficient Irrigation Systems:** Drip and rainwater harvesting systems are recommended for water conservation, which would not only improve resource efficiency but also contribute to climate adaptation.
- **Renewable Energy:** To minimize carbon emissions, solar power and other renewable energy sources should be used for irrigation, processing, and storage facilities.
- **Climate-Resilient Infrastructure:** The project will incorporate resilient storage facilities and logistics networks that can withstand extreme weather events such as heavy rains or droughts, ensuring continued productivity despite climate challenges.
- **Capacity Building for Climate Adaptation:** Training programs are critical to building local farmers' understanding of climate-smart practices, empowering them to increase productivity while minimizing environmental impacts.

### 5. Economic and Social Benefits

The project's alignment with climate goals presents a significant opportunity for economic and social benefits:

- **Food Security Enhancement:** By cultivating vast tracts of land, this project will stabilize food supply chains, reduce food import dependency, and improve nutritional security for Niger State residents.
- **Job Creation:** The project will stimulate job creation across sectors including agriculture, logistics, and food processing, helping to reduce unemployment.
- **Rural Development:** Expanding agricultural activities and infrastructure will generate economic growth in rural areas, raising income levels and improving overall living standards.
- **Private Sector Growth:** The PPP model will encourage private sector investments in modern agricultural technologies and practices, driving innovation and efficiency in the sector.
- **Revenue Generation:** Increased agricultural productivity will lead to higher tax revenues and potential export opportunities, boosting the state's income.

### 6. Return on Investment (ROI) and Sustainability

- With a **\$5 billion investment**, this project is expected to provide high returns by reducing food import costs, stimulating local economies, and enhancing self-sufficiency. The project's design, focusing on climate resilience, is expected to create long-term socio-economic value for Niger State by securing food production and supporting a sustainable agricultural model for the future.