Title: Enhancing Food Security and Reducing Food Waste in Rural Nigeria

Project Summary
Our project aims to reduce food waste and enhance the livelihood of farmers, individuals, and businesses in the rural communities in Ijah and Oka. With an alarming 2.4 billion tonnes of food lost annually in Nigeria, our project specifically addresses the 30% crop loss experienced in these communities due to inadequate preservation methods. Our solution educates 200 farmers in climate-smart agricultural practices, introduces one solar air dryer/food processing facility in each community, and can preserve 3 tonnes of crops and serve 500 individuals and businesses, significantly reducing spoilage and transforming raw produce into higher-value products.

Problem statement
Food waste contributes significantly to global warming, and anything done to reduce food waste will address the impact of climate change. In Nigeria, 2.4 billion tonnes of food are lost yearly due to poor harvest and storage facilities. In rural communities like Ijah and Oka, up to 30% of crops are lost annually due to the lack of preservation facilities. These losses affect the potential income of farmers, threaten food security, and exacerbate poverty among rural households.

Solution

Our solution is to teach 200 farmers climate-smart techniques such as promoting the use of improved crop seed and economic tree seedlings, staggered planting, staking, and deploying one solar air dryer/ food processing facility each in both communities with the capacity to preserve 3 tonnes of crops. These facilities will serve as a hub for preserving crops such as maize, sweet potatoes, groundnut, cassava, tomatoes, and chilli pepper, significantly reducing spoilage and serving 500 individuals and businesses across the communities. Additionally, the facility will aid in transforming raw produce into value-added products, increasing their income from the sale of their produce at higher prices during the season.

Long term impact
Our project is expected to substantially reduce food waste and enhance food security by preserving an additional 750 tonnes of crops on average in 5 years. We expect an increase in the income of 200 farmers by allowing them to sell preserved and value-added products at higher market prices. Indirectly, our project will impact 1000 individuals and businesses within the communities by providing them with access to preserved food, which is less likely to spoil and can be sold or consumed over a longer period. We expect to establish 500 new businesses within 8 years spanning various sectors, including agriculture, food processing, and distribution.

Monitoring and Evaluation

We will develop a comprehensive M&E plan to track the progress and effectiveness of the initiative. Key indicators will include the volume of crops preserved, the reduction in spoilage rates, the increase in income for participating farmers, and the overall improvement in community food security. Feedback from the farmers and community members will be integral to the continuous improvement of the project.

Budget

To accomplish our project impact, we will require the sum of 24,000 USD.

	Budget Item	Unit	Cost Per Unit(USD)	Total (USD)
1	Materials			
	Solar Dryer/Food Processor	2	2500	5000
	Improved Seedlings/Economic trees	5000	1	5000
	Staking Materials	500	2	1000
2	Human Resources			
	Project Manager	1	1500	1500
	Trainers	2	500	1000
	Support Staffs	1	500	500
3	Capacity Building			
	Training for farmers on climate-smart agriculture (in Ijah and Oka)	2	1000	2000

4	Monitoring and Evaluation			
	Progress tracking, data collection & analysis (in ijah and Oka)	2	1500	3000
5	Contingency	-	-	1000
	Total Budget Cost			20,000
	Admin cost (20%) - this will cover cost of travel/transportation expenses to project location, general project supplies, taxes, phone and internet services, project volunteers.			4000
	Total Budget			24,000