



NIGERIA

Principal Investigator: Dr. Atanda Oladejo

Internship Title: Advancing indigenous fruits and vegetables production through climatesmart approaches in Nigeria.

Time Period: Summer 2025

Project Background: Nigeria, Africa's most populous country, has around 140 million youths, with nearly 60 million aged 15-24. However, many remain unemployed, especially among female gender. To address this, engaging youths in agriculture is crucial by enhancing their skills and opportunities using a value-chain and food-systems approach. Climate change further challenges sub-Saharan Africa, leading to diet shifts towards calorie-dense foods and increasing malnutrition. This is exacerbated by low soil fertility, outdated production methods, technological gaps, and youth indifference in agriculture. This project aims to empower youths, focusing on gender sensitivity, by promoting indigenous crop production. It will introduce innovative, climate-smart agronomic practices, soil amendments, and effective seed management, ultimately enhancing diet diversity, nutrition and reducing unemployment in Nigeria.

| Research Question(s) or | Acceptable Disciplines | Deliverables |
|--|------------------------|---|
| Specific Issues to be Addressed | | |
| How do various soil amendments affect | Agronomy | Collect data from the main |
| soil health, agronomic characteristics, | Seed science | experimental site and selected |
| and seed quality of selected indigenous | Soil science with an | community and school gardens: |
| fruits and vegetables? The fellow will | interest in soil | |
| gather data from the experimental sites | health/sustainable | Physical soil health indicators |
| located at the Obafemi Awolowo | agriculture. | |
| University Teaching and Research Farm | | Agronomic characteristics |
| in Ile-Ife, Nigeria, and /or from selected | | with view of identifying |
| community and school gardens. | | phenotypic responses to |
| | | treatments |
| | | . Card and the of indian |
| | | Seed quality of indigenous fruits and vogetables |
| | | fruits and vegetables |
| | | Demonstrate to project participants |
| | | how to assess: |
| | | |

| In-field physical soil health indicators |
|---|
| Specific tests such as water infiltration and aggregate stability |
| Review the significance and potential misuse of multivariate analysis in: |
| Soil science-related research |
| Fruit and vegetable experiments |
| Analyze all collected data using: |
| Appropriate statistical methods |
| Relevant software tools |







