ICRISAT in Nigeria

Country overview

Although Nigeria depends heavily on the oil industry for its revenues, it is predominantly an agrarian society. According to the FAO, approximately 70% of the population engages in agricultural production at a subsistence level. During the first quarter of 2021, agriculture contributed to 21.09% of the total Gross Domestic Product.

Nigeria’s agricultural sector faces many challenges such as poor land tenure system, low level of irrigation farming, climate change and land degradation. Low technology, high production cost and poor distribution of inputs, limited financing, high post-harvest losses and poor access to markets are the other challenges. Food imports have increased in Nigeria due to an increase in population.

ICRISAT is recognized in Nigeria for championing sorghum, millet and groundnut value chain development, climate smart agricultural activities including bio-reclamation of degraded lands and crop residue utilization by livestock.

Partnerships

ICRISAT’s key partners in Nigeria include the Federal Ministry of Agriculture and Rural Development, Agricultural Research Council of Nigeria (ARCN), Institute for Agricultural Research Ahmadu Bello University Zaria (IAR), Centre for Dryland Agriculture Bayero University Kano (CDA), State-based Agricultural Development Projects and the National Agricultural Seeds Council. Civil society partners are SASAKAWA Africa Association and Women Farmers Advancement Network.

ICRISAT partners with the Africa Development Bank (AfDB) on its Special Agro-Industrial Processing Zones (SAPZs) to provide world-class infrastructure to help develop competitive value chains and transform rural areas into zones of prosperity. ICRISAT contributes to two of AfDB’s High 5s, namely, Feed Africa and Improve the Quality of Life of the People of Africa.
Milestones

- **1976-85**: The Semi-Arid Food Grain Research and Development project funded by USAID catalyzed the adoption of several sorghum and pearl millet varieties in Nigeria.

- **1988**: Through the Institute for Agricultural Research (IAR) 2 sorghum varieties and 2 hybrids were released.

- **2001**: IAR released SAMNUT 21, SAMNUT 22 and SAMNUT 23 (high yielding, early-maturing, rosette-resistant groundnut varieties) through IAR.

- **2012**: Through the Government of Nigeria’s Agricultural Transformation Agenda, ICRISAT has worked towards the development of sorghum and groundnut value chains and through the CGIAR Fund for Grain Legumes, has leveraged legumes to help combat hunger, poverty and environmental degradation.

- **2014**: Scaling of groundnut seed, remote sensing for agriculture transformation (ISABELA project), development of sorghum and pearl millet hybrids, and commercialization/industrialization of sorghum. (USAID, Bill & Melinda Gates Foundation, GIZ, and the Government of Nigeria)

- **2015**, the Agricultural Transformation Agenda Support Program Phase 1 (ATASP-1) was launched by the Government of Nigeria to develop commodity value chains for staple crops like sorghum to ensure sustainable growth in rural income.

- **2016-2020**: In three years, the Sorghum and Millets Compact of the Technologies for African Agricultural Transformation (TAAT) funded by the African Development Fund, produced more than 2700 tons of different class of seed of sorghum and millet.

- The Africa Food Prize winning Tropical Legumes project has revived groundnut cultivation. The adoption rate of improved groundnut varieties increased from 8% at baseline to 57%. 2019:

- The Accelerated Variety and Seed System for Cereals and Legumes (AVISA) project was launched to consolidate the previous efforts of the Tropical Legumes Project. Nigeria has reported 21% productivity gains from a package of improved practices in pearl millet.

- **2021-2022**: Feed the Future North-east Nigeria Integrated Agriculture Activity funded by USAID is focused on promoting yield increasing technologies, diversify home consumption of food and link farmers to markets.

Ongoing projects

- **2022-2027**: Nigeria is a beneficiary of the USAID SERVIR West Africa program that uses geospatial and digital tools to assist governments in taking more informed decisions in four areas: food security and agriculture; water and hydro-climatic disasters; weather and climate and land cover, land use change, and ecosystem services.

  - ‘Integrated Seed System Development’ and ‘Technical Backstopping to Kano State Agro-Pastoral Development Project’ that are ongoing, are respectively funded by Wageningen University, Netherlands, and the Islamic Development Bank.

Key Outcomes

- In Nigeria, a total of **23 varieties** released leading to greater food security
  - **11** SORGHUM
  - **06** PEARL MILLET
  - **06** GROUNDNUT

Seeds distribution during the pandemic: Close to **2 tons** of improved seed of sorghum, millet and cowpea were distributed to **1282 farmers** to plant 233 ha through the CGIAR Fund for a Resilient Post-COVID Food System, **8258 farmers** also received **48149 kg** of seeds through ICTISAT initiatives with other partners.

Digital tech for government innovation: A fully automated system for plot level monitoring agCelerant developed with technical support from ICRISAT orchestrates financial and technical support for **15 million** farmers in Nigeria.