







# **TAAT Cassava Compact**

# **Highlights**

- In Tanzania and Nigeria, farmers recently obtained yields of 20.4-38.0 t/ha compared with 5.8-10.5 t/ha yield in farms without the new technologies
- Household incomes have increased to US\$ 2858 from US\$ 2598 at the start of the project, representing an increase of 10%
- Foundation seeds managed by farmers was 20,328,750 cuttings while breeder seeds (Plantlets using SAH technology) was 47,065
- 1.5 million beneficiaries reached in 12 countries, of which 3,000 farmers have adopted improved postharvest technologies

# What was the problem?

There continues to be limited engagement from the private sector in seed production of vegetatively propagated crops due to the absence of smart and cost-saving seed propagation technology. The incidence of yield suppressing diseases such as cassava brown streak virus combined with the absence of supply-demand relationships in the cassava sector lead to a high-risk operating environment that discouraged commercial seed enterprises. However, the importance of cassava to livelihoods, together with increasing demand for industrial products such as chips, high-quality cassava flour (HQCF), starch, and ethanol, is now being recognized as important outputs of the cassava value chain thereby stimulating opportunities for the private sector in commercial seed production and processing. For example, studies have shown that the value of cassava commercially traded for industrial use in Nigeria could potentially reach \$91 million annually with over 134,000 farmers brought into formal supply chains of processing enterprises generating an income increase by up to 74%. The Cassava Compact strives to make cassava an agro-industrial commodity by linking smallholders seed and root growers to the commercial opportunities and thereby increase their income and food security.

# **Compact description**

The Cassava Compact seeks to achieve rapid cassava intensification by raising farm-level productivity, improving

the efficiency of post-harvest processing and increasing market opportunities for value chain actors. Activities of the Cassva Compact focus on building a strong network of private and public-sector partners, input suppliers, national institutions, agro-industrial processors, agribusiness development specialists, and credit providers.

# **What are TAAT Cassava Objectives?**

• To scale-out modern cassava production systems that operate in synergy with supporting policy environments



TAAT-supported SAH Laboratory in DRC



A Beninese farmer harvests Cassava after adoption of TAAT technologies

- and assured markets to catalyze private-sector investments in intermediate cassava production
- To promote intermediate and advanced agro-processing industries and linkages with the famers to expand the market for smallholder farmers
- To apply ICT platforms for business support and technology delivery
- To strengthen the marketing and entrepreneurial capacity of smallholders farmers and stimulate commercial financing of cassava-based businesses with priority focus on ensuring Africa's women and youth are part of the cassava value chain

# What are the TAAT Cassava Technologies?

- Improved and high-yielding cassava varieties
- Nutrient-dense (pro-Vitamin A) cassava varieties
- Rapid propagation of virus-free planting materials
- Good Agricultural Technology Practices (GATP) that include tillage, optimum plant spacing, use of fertilizer, and herbicides

- Mechanized processing of cassava, including mechanical drying and mobile processing system for farm-gate operations
- ICT for connecting value chain actors and promoting market linkage

# What have we achieved so far?

Over 1.5 million beneficiaries have been reached in 12 countries where the Cassava Compact has footprint, 40% of the beneficiaries are female. More than 230 demonstration sites were established for technology demonstrations, and approximately 50,000 people have been trained on cassava specific technologies. Eighty-one thousand (81,000) beneficiaries are currently accessing and using cassava technology products and services across twelve countries under TAAT. About 3,000 farmers have obtained new knowledge on cassava technologies and using improved post-harvest technologies. Nearly 240 million cassava plantlets and planting stakes have been produced as breeder and foundation seeds.

Business cases: The deployment and use of good agricultural technology practices (GATP) in Tanzania led to an average yield of 38.6 t/ha representing productivity increase of 292.6 - 615 % for GATP farms over the traditional production practice. Additionally, profitability analysis of the Mobile Cassava Processing Plant (MCPP) for farm-gate processing of cassava in Nigeria confirms the innovation to be profitable, viable and sustainable. The Internal Rate of Return (IRR) for gari processing was 49% while the Return On Investment (ROI) was 156% over a period of three years.

#### Were there any key challenges or lessons learned?

- Incidence of cassava disease pandemic requires the development of robust seed systems to increase root growers' access to clean planting materials, attract private sector seed actors to achieve the desired increase in farm-level productivity and stimulate further commercialization of cassava products.
- Private seed companies interested in investing in the Early Generation Seed (EGS) business needs to adopt new seed propagation technologies and partner with public sector seed producers to achieve a successful business with higher efficiency and low costs.
- Availability of low-cost credit to farmers is essential for technology adoption at commercial scale because the lack of financing
- A fundamental requirement for achieving sustainability and profitability of the cassava subsector is the establishment of commercial relations among the cassava value chain actors seed producers, root growers, processors, marketers, industrial users, exporters, and other actors.

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