

IDEV

Independent Development Evaluation
African Development Bank

From experience to knowledge...
From knowledge to action...
From action to impact

AfDB's Technology for African Agriculture Transformation (TAAT) Program – Phase I

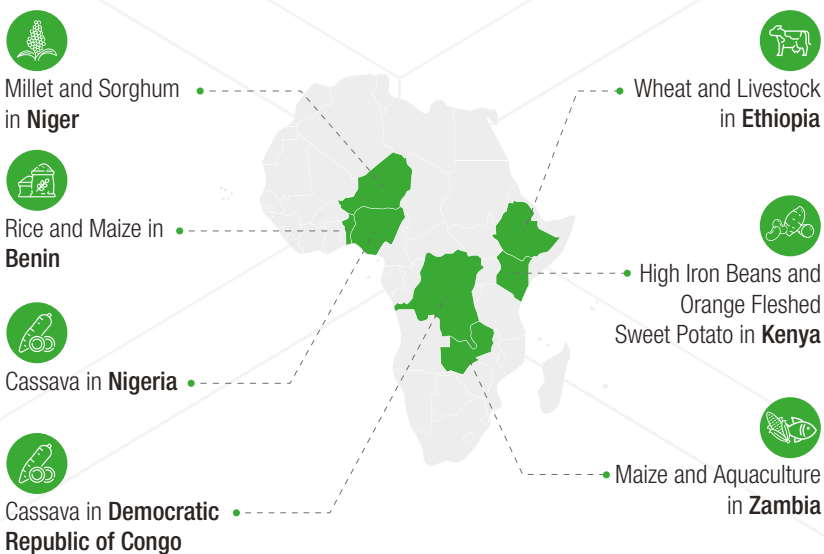
What did IDEV evaluate?

Independent Development Evaluation (IDEV) of the African Development Bank Group (AfDB or "the Bank") conducted a project cluster evaluation of the AfDB's Technology for African Agricultural Transformation (TAAT) program's first phase over the 2018-2021 period. The main goal of TAAT-I was to deploy proven agricultural technologies to raise the productivity and production of selected agricultural commodities. The three inherent priorities were: creating

an enabling environment, facilitating effective technology delivery; and raising agricultural production and productivity.

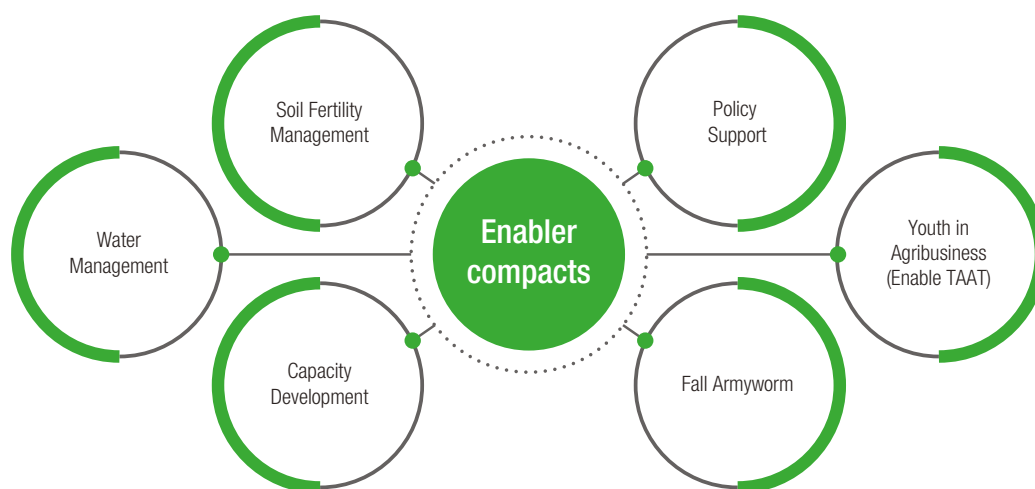
The purpose of this evaluation was to provide the Board and Management of the Bank, TAAT Execution Agents, Implementation Partners, and Regional Member Countries (RMCs) with findings, lessons and recommendations that will strengthen the implementation of the TAAT-II program, the African Emergency Food Production Facility and other future related Bank programs and initiatives.

Figure 1: Commodity compacts in selected countries



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Figure 2: Enabler compacts



The evaluation assessed the relevance, coherence, effectiveness, efficiency, and sustainability of the TAAT-I program, drawing lessons and good practices from different compacts and contexts. It covered all nine commodity compacts, and for each commodity compact also examined all applicable six enabler compacts in seven purposively sampled countries (see Figures 1 and 2).

What did IDEV find?

Overall, the relevance of the TAAT-I agricultural development and transformation program was satisfactory, as the program was aligned and coherent with strategies and initiatives of the Bank, as well as the priorities and needs of RMCs. However, the design was compromised by the limited resources in relation to the scope of interventions at country level and expected results. The evaluation also assessed the program as satisfactory with respect to coherence. However, within the Bank, the involvement of AfDB Country Offices during implementation was also limited due to the central coordination of the program from AfDB Headquarters. This also affected the ability of implementing partners to effectively engage in national coordination mechanisms for agricultural programs and projects. Externally, the evaluation found the program to be coherent with agricultural transformation initiatives of the African Union and its regional bodies, other development partners, and non-governmental organizations.

With respect to effectiveness, the program made good progress towards its output targets despite the challenges experienced in the three interrelated priority areas. The evaluation also demonstrated the need for improvement in the implementation to ensure effectiveness. Nonetheless, the evaluation led to valuable findings in line with the three interrelated objectives of the program as follows:

Enabling environment for the uptake of technologies by farmers

At both the regional and the national level, TAAT-I was found effective in advancing policy reforms and regulations for the adoption of the technologies promoted by the program. This led to the identification of the 64 policy gaps which ultimately resulted in the revision and

adoption of 29 policy, legal, and regulatory frameworks and in particular, leading to improvement of seed production systems of 15 countries. It accomplished tangible results in promoting the mobility of agricultural technologies, inputs and products across borders. By the end of the program period, TAAT-I had reached **18.9 million people** (against a target of 20.2 million) in campaigns to raise awareness about TAAT interventions and technologies. The evaluation also found positive outcomes from TAAT-I's work to develop capacity in centers of the Consultative Group for International Agricultural Research and the National Agricultural Research and Extension Systems and among the private sector.

Facilitating delivery of improved technologies to farmers

The program supported and promoted 133 technologies bundles (and 208 individual technologies for adoption) and also strengthened 102 seed systems along regional agro-ecological zones for both national entities and the private sector in 29 countries. Some of the key cutting edge technologies included Semi-Autotrophic Hydroponics with IITA, Fortenza Duo for Fall Armyworm control with Syngenta, and cassava processing equipment fabrication with the private sector (notably, Niji Agro Solutions in Nigeria). Other cutting-edge technologies included the monosex tilapia technology with World Fish and a thermostable vaccine for sheep and goats with the International Livestock Research Institute, among others.

Overall, 833,374 district-level extension agents were trained, leading to nearly half a million (497,275) people trained on new technologies out of which 2,789 were able to establish small or medium-sized agribusinesses. Ultimately, the program contributed to the creation of 49,621 jobs out of which 112,774 (44 percent) were for women.

The implementation was however characterized by challenges in resource allocation and disbursements, as well as procurement of commodities, often requiring Implementing Partners to use resources from other sources. COVID-19 also negatively affected the implementation of the program. Despite progress in creating an enabling environment technology delivery infrastructure, only **10.9 million beneficiaries** ultimately used technology products and services against a target of 40.5 million.

Raising agricultural production and productivity

The evaluation found mixed results for the program's contribution to increased agricultural production and productivity. Overall, by the end of the program, six of nine commodity compacts (67 percent) had achieved over 70 percent of their yield targets. Only four compacts (33 percent) reached their targets fully. Productivity also increased in the aquaculture compact which achieved 73 and 59 percent in the yield targets for Tilapia and Catfish respectively. The livestock compact achieved 71 percent of its productivity target by the end of the program. The key factors responsible for increased production and productivity include: use of improved seeds, planting materials and breeds; adoption of Good Agricultural Practices and feed; and use of irrigation and other soil fertility and water conservation measures.

Nonetheless, TAAT-I's contribution to increased yield was constrained by limited land sizes and limited capacity by Government agencies, private sector, and non-governmental organizations to provide and sustain quality extension services, and cost of inputs such as fertilizer, chemicals, and others. In addition, the evaluation found that limited funding to critical partners, such as National Agricultural Research and Extension Systems centers, and inadequate attention to emerging and potential social, economic, environmental, and climate change-related threats posed major risks to the program sustainability.

What lessons did IDEV draw?

- Bank-supported operations executed and implemented by third-party organizations need strong linkages and coordination with AfDB country offices to engage effectively with RMC institutions and other stakeholders if they are to influence policies and strategies. They also need to better coordinate with programs supported by other development partners.
- A simple and agile program design is vital for efficient implementation and the achievement of results.
- The private sector's participation in commodity compacts is critical to scaling-up and sustainability.

- Beyond the adoption of technology, support services are critical for agricultural transformation and modernization, especially when programs target youths and other vulnerable populations.
- Strong links with research and effective feedback mechanisms are critical to continuously update technology catalogues and meet farmers' demands for improved technologies.

What did IDEV recommend?

- Strengthen the design and implementation arrangements for TAAT-II and future, related programs.
- Pursue increased private sector participation in TAAT-II and related agriculture operations.
- Strengthen the monitoring, evaluation, and learning systems of TAAT-II and future related programs by integrating the design of a monitoring, evaluation, and learning system from the onset and providing adequate resources, both human and financial, to operationalize the system in a timely fashion.

What was the methodological approach?

The evaluation was guided by a theory of change and a results-based logical framework. It adopted a mixed-methods approach, based on three interrelated components, and a robust methodology that collected and analyzed qualitative and quantitative data to triangulate results and validate findings. The three components of the mixed-methods approach were a desk review of program-related documents, key informant interviews, and country case studies. For the country case studies, the evaluation reviewed country-level documents, conducted country and community-level interviews, held community and beneficiary-level focus group discussions, and undertook observation visits.



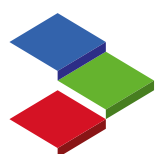
About IDEV

Independent Development Evaluation (IDEV) at the African Development Bank conducts independent evaluations of Bank operations, policies, and strategies, working across projects, sectors, themes, regions, and countries. By conducting independent evaluations and proactively sharing best practices, IDEV ensures that the Bank and its stakeholders learn from experience and plan and deliver development results to the highest possible standards.

What did Management respond?

Management welcomed IDEV's project cluster evaluation of the Technologies for African Agricultural Transformation Program – Phase I. The evaluation highlights the positive impact as well as shortcomings of the program, identifies lessons learned and provides valuable recommendations that management noted for improving the design and implementation of future Bank interventions in the agriculture sector, and particularly during TAAT-II implementation (2022-2025). ■

Evaluation Task Manager:	Andson Nsune, Principal Evaluation Officer, IDEV.1
Team Members:	Latéfa Conè Camara, Evaluation Officer, IDEV.1; Eustace Uzor, Evaluation Officer, IDEV.1; Stéphanie Yoboue, Evaluation Officer, IDEV.1; and Boubacar Ly, Senior Evaluation Officer, IDEV.1
Publication coordinated by:	Raky Gassama, Senior Knowledge Management Officer, IDEV.3; Najade Lindsay, Knowledge Management Officer, IDEV.3; and Kate Stoney, Senior Communication Officer, IDEV.3
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IDEV

Independent Development Evaluation
African Development Bank

African Development Bank Group
Avenue Joseph Anoma 01 BP 1387, Abidjan 01 Côte d'Ivoire
Phone: +225 27 20 26 28 41
Email: idevhelpdesk@afdb.org

