



THE AFRICAN GROWTH & DEVELOPMENT POLICY (AGRODEP) MODELING CONSORTIUM

A Network of African Economic Modelers

**THE AFRICAN GROWTH & DEVELOPMENT POLICY
(AGRODEP) MODELING CONSORTIUM**

A Network of African Economic Modelers



AKADEMIYA



Background

Africa has made remarkable progress over the last 20 years. The continent overcame tremendous challenges and reversed years of stagnation by improving the quality of governance and policymaking. In particular, policies have become progressively better as they have become more informed by evidence-based analysis and subjected to more open and inclusive dialogue and review. This has, in turn, permitted African countries to reap the benefits of higher-quality planning and implementation in terms of better development outcomes.

Africa is simultaneously undergoing an important policy renewal process, including in the agricultural sector, under the leadership of the African Union Commission (AUC) and the African Union Development Agency-New Partnership for Africa's Development (AUDA-NEPAD). Strong leadership and a strategic focus at the continental level through initiatives such as the Comprehensive Africa Agriculture Development Programme (CAADP), the [Climate Change and Resilient Development Strategy and Action Plan](#), the [Green Recovery Action Plan](#), the [Africa Strategy for Disaster Risk Reduction](#), the [Africa Regional Nutrition Strategy](#), the African Continental Free Trade Area (AfCFTA) agreement, and the [Malabo Declaration](#), that have strengthened practices of mutual accountability and inclusive, evidence-based policy formulation, implementation, and review.

Nonetheless, Africa continues to face enormous challenges, from the adverse effects of climate change, economic and health shocks, conflicts, growing youth unemployment, poor adoption of and access to modern technologies, to the lack of timely and high-quality data to inform decision-making and limited capacities for policy analysis and implementation. Moreover and particularly since the COVID-19 pandemic, the continent has had to grapple with high inflation, slower economic growth, rising hunger levels and number of poor people, and high levels of public debt that have left many African countries in debt distress. Addressing these challenges, including the impacts of the COVID-19 pandemic and the Russia-Ukraine war, requires a reboot of the continent's development agenda alongside urgent and concerted effort to transform Africa's food systems and strengthen a culture of evidence-based decision-making, accountable policy systems and regular review while improving its data systems and institutional capacities needed to generate and use evidence for well-informed policymaking and implementation.

Against the preceding context, and to respond to the growing demand for home-grown policy-relevant research, there is a need for strengthened capacities, targeted partnerships, and broadened linkages to the ongoing policy debate in Africa's leading policy and development institutions through a mechanism designed to:

1. **Mobilize a critical mass of modeling experts within Africa's policy research and analysis community.**
2. **Broaden access to innovative research methodologies.**
3. **Facilitate collaboration among Africa-based experts and with the global research community.**

The African Growth and Development Policy (AGRODEP) Modeling Consortium was established to serve as a mechanism to help African countries maintain their strategic focus by optimizing policies and strategies across the continent. The Consortium has a network of African researchers who are equipped with the skills, modeling, and data infrastructure to lead this effort by creating the conditions for a rigorous testing of the validity and added value of the modeling scenarios and statistical information routinely fed into the policy debate in Africa, with the goal of raising the quality of policy outcomes across the continent.

AGRODEP – A Network of Economic Modelers Driving Strategic Development & Agricultural Growth for Africa

Led by AKADEMIYA2063, AGRODEP is enabling a critical mass of world-class economic modelers across Africa to take a leading role in addressing strategic development issues across the continent, including helping meet the analytical needs of the CAADP implementation agenda.

AGRODEP facilitates the use of economic modeling tools, promotes access to data, provides training, research grants, and networking opportunities to its network of Africa-based experts, equally supporting collaboration between these experts and their peers outside the continent to build a dynamic research community that can respond to the continent’s emerging and long-term needs.

Through its interventions, AGRODEP is building skills and expertise in the scientific community and facilitating collaboration among African and global researchers. It gives its members access to high-quality, adaptable tools that can be used to address knowledge gaps and demands emanating from country and regional-level priorities.



Quick Facts



Established in 2010, AGRODEP is led by AKADEMIYA2063.

Initially facilitated by the International Food Policy Research Institute (IFPRI), in partnership with African sub-regional research organizations.



AGRODEP boasts a network of 230+ members from 36 African countries, 28% of whom are women.

Offers training courses on economic models and analysis and networking opportunities.



AGRODEP provides a shared modeling platform facilitating access to about two dozen fully coded, thoroughly documented core economic models with related databases for ease of replication.

Facilitates access to over 300 datasets covering data used for economic analysis & policy research related to growth & development in Africa.





AGRODEP Program Components

AGRODEP consists of three key components.

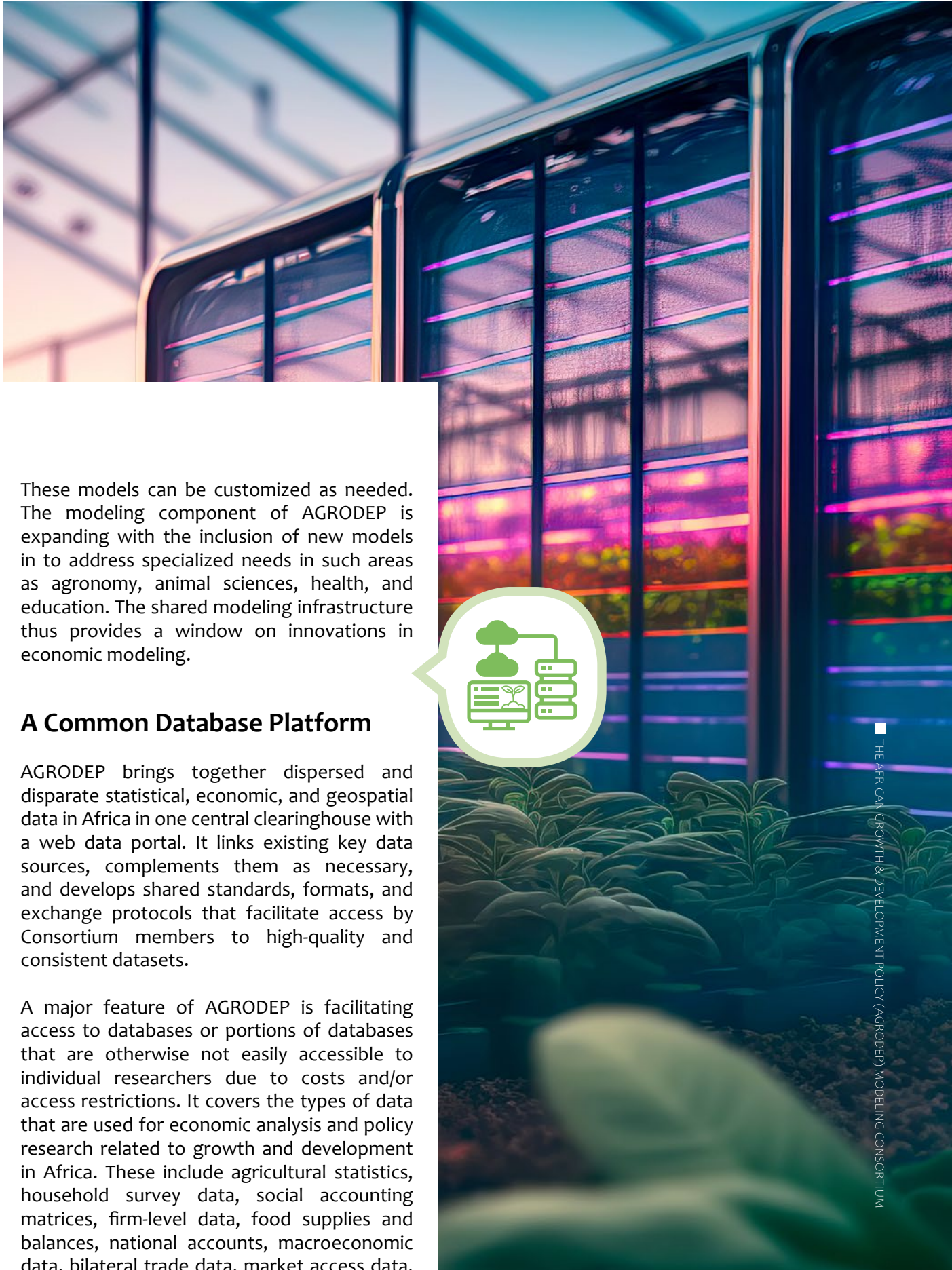


A Shared Modeling Infrastructure

The AGRODEP Consortium promotes access to state-of-the-art economic modeling tools to enable high-quality, locally based research. It does so by providing a platform for sharing existing core economic models dealing with sector, national, and international policy issues as well as long-term projections in areas such as agricultural growth and poverty, trade, nutrition, climate change, natural resources management, and science and technology.

The shared modeling infrastructure is based on six main categories of simulation and estimation models:

- Multi-country, multi-sector computable general equilibrium (CGE) model of the world economy such as MIRAGE (Modeling International Relationships in Applied General Equilibrium).
- Single country CGE models, primarily the models of IFPRI and of the Poverty and Economic Policy (PEP) network.
- Multi-market agricultural partial equilibrium (PE) models, focusing on spatial modeling and on non-spatial partial equilibrium modeling.
- Partial equilibrium trade models, dedicated to the analysis of trade issues at the tariff line level and aimed at providing key tools for supporting trade negotiations.
- Econometric models, including different types of gravity models.
- Supply and Demand estimation models, in particular standard supply/demand estimation models and price and income elasticity estimation models.



These models can be customized as needed. The modeling component of AGRODEP is expanding with the inclusion of new models in to address specialized needs in such areas as agronomy, animal sciences, health, and education. The shared modeling infrastructure thus provides a window on innovations in economic modeling.

A Common Database Platform

AGRODEP brings together dispersed and disparate statistical, economic, and geospatial data in Africa in one central clearinghouse with a web data portal. It links existing key data sources, complements them as necessary, and develops shared standards, formats, and exchange protocols that facilitate access by Consortium members to high-quality and consistent datasets.

A major feature of AGRODEP is facilitating access to databases or portions of databases that are otherwise not easily accessible to individual researchers due to costs and/or access restrictions. It covers the types of data that are used for economic analysis and policy research related to growth and development in Africa. These include agricultural statistics, household survey data, social accounting matrices, firm-level data, food supplies and balances, national accounts, macroeconomic data, bilateral trade data, market access data, transport costs, migration data, geospatial data, and various development indicators.



A Network of Experts

AGRODEP facilitates a network of its members around collaboration and the exchange of data, modeling techniques, joint analysis, reporting, and strategic debate. The AGRODEP network of experts includes members' meetings and conferences, thematic networks, capacity building and training workshops, grants and awards, and policy analysis and advisory services.



1. **Members' meetings and conferences:** The AGRODEP Modeling Consortium organizes members' meetings and conferences where AGRODEP members present their latest research and receive feedback from their peers and leading researchers from AKADEMIYA2063 and AGRODEP partners and friends. Members' meetings can also take on formats where AGRODEP members learn from world experts about state-of-the-art methodologies and tools used to quantitatively address current and emerging research topics.

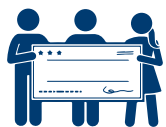


2. **Thematic Networks:** The Consortium establishes specific thematically or technically focused interest groups or networks to serve as fora for scientific exchange, training, and capacity building. The objective is to use the expertise across the Consortium to strengthen policy research and analysis capacities and to use the members' research findings to raise the quality of policy debate and broaden it beyond the traditional sphere of policymakers and researchers to include other stakeholder groups.

Currently, AGRODEP members convene around six thematic networks that cover: Climate Change, Impact Evaluation, Resilience Index Measurement and Analysis (RIMA), Sanitary and Phytosanitary (SPS) Regimes, Value Chain Analysis, and Regional Trade and Integration.



3. **Capacity building and training workshops:** AGRODEP organizes training courses and workshops on current AGRODEP models and toolboxes or on economic tools and techniques in order to upgrade the skills of its members, promote technical and methodological innovation, and ensure that the Consortium remains a world-class entity.



4. **Grants and awards:** The Consortium offers funding opportunities in the form of research grants and awards for its members to carry out advanced analyses, publish in leading journals, and travel to international conferences to present their work.



5. **Policy analysis and advisory services (PAAS):** The PAAS activity builds on AGRODEP's capacity-strengthening activities by providing sound policy analysis and advisory services to policymakers and other key stakeholders in Africa, in response to the emerging and long-term needs of African agendas such as CAADP and AfCFTA. Under PAAS, experienced AGRODEP members are teamed up with mentors to form PAAS teams that are supported by AGRODEP's library of economic models and data and capacity strengthening opportunities.

AGRODEP Members

AGRODEP's regular membership has grown to over 230 African researchers from 36 countries, 28 percent of whom are women.

The Modeling Consortium has three types of members:



Regular Members:

Regular AGRODEP membership is offered exclusively to African researchers living in Africa. They must have obtained a PhD within the last 15 years, currently be pursuing a PhD degree, or possess a Master's degree in combination with relevant technical skills and experience. Members gain full and free access to cutting-edge economic research tools, data, and training as well as opportunities to apply for competitive research grants.



Affiliate Members:

Affiliate membership is offered to regular members who have relocated out of Africa, as well as to qualified African researchers living outside Africa and qualified African researchers who work in non-African organizations within Africa. AGRODEP affiliate members can access all AGRODEP resources (data and models), as well as contribute to AGRODEP's activities through publications, trainings, and reviews but are not eligible for financial grants.



Friends of AGRODEP:

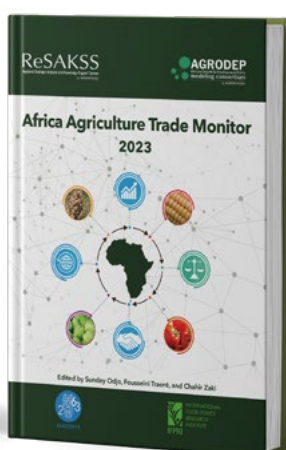
Individuals or institutions that contribute to the network's activities but are not currently AGRODEP or Affiliate members. These include institutions based within or outside Africa that provide technical or institutional support to the Consortium.

AGRODEP Publications

Africa Agriculture Trade Monitor (AATM)

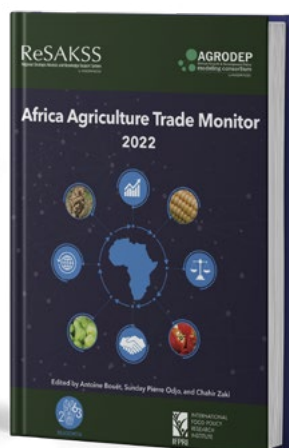
The Africa Agriculture Trade Monitor (AATM) is produced and published under the African Growth and Development Policy (AGRODEP) Modeling Consortium and the Regional Strategic Analysis and Knowledge Support System (ReSAKSS) programs as a collaborative effort by AKADEMIYA2063 and the International Food Policy Research Institute (IFPRI).

The annual flagship report is a leading continental publication and a key source of evidence on trends in African agricultural trade and policies, using high-quality data and analytics to review Africa's progress in the area of trade in general, including critical topics for trade in Africa's agrifood sector.



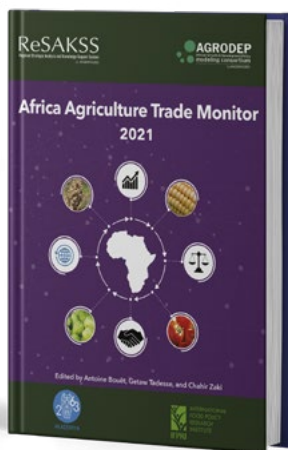
AFRICA AGRICULTURE TRADE MONITOR 2023

The sixth edition of the AATM provides thorough analysis of regional and continental trade in agriculture and selected value chains using accurate statistics. This edition focuses on the role of regional trade agreements in boosting intra-African trade, the nutritional content of major traded products, the competitiveness of the cotton value chain, and the impact of the Russia-Ukraine war on African agriculture, trade, and food systems. The report equally examines the patterns of trade integration of the East African Community (EAC) and analyzes the main factors limiting the free movement of agricultural goods within the region.



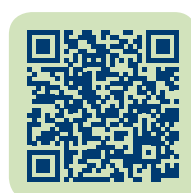
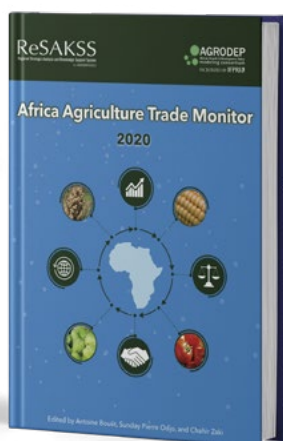
AFRICA AGRICULTURE TRADE MONITOR 2022

The 2022 AATM analyzes regional and continental trade in agriculture and selected value chains using accurate statistics. The 2022 edition adds an analysis of the nutritional content of African trade and looks closely at trade in processed products, equally examining the potentially transformative impact of the African Continental Free Trade Area (AfCFTA) on the region's economies. Finally, at the regional level, it analyzes the evolution of intra- as well as extra-regional trade flows and trade policy of one of Africa's Regional Economic Communities (RECs), the Economic Community of Central African States (ECCAS).



AFRICA AGRICULTURE TRADE MONITOR 2021

The 2021 AATM looks in depth at the impact of COVID-19 on African agricultural trade and overall economic performance. The report finds that the measures undertaken by African governments to limit the spread of the disease may have contributed to Africa's relatively low illness and mortality rates but had significant adverse impacts on African agricultural trade. Concerning policy responses, while international cooperation has been relatively better than during the 2007–2009 food-price crisis, trade disruptions during the pandemic underline the need to further coordinate policies across borders to ensure the continued functioning of markets.



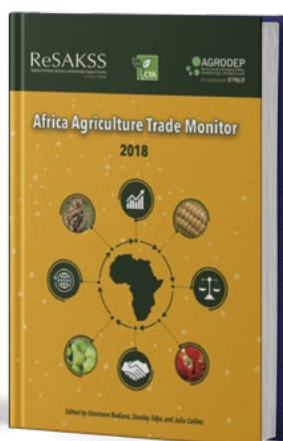
AFRICA AGRICULTURE TRADE MONITOR 2020

The 2020 AATM builds on the 2019 edition and attempts to identify the recent developments in African intraregional and extraregional trade in agriculture. Given the importance of informal cross-border trade for the region, the 2020 AATM dedicates a chapter to analyzing this trade by examining its definitions, measurement, and effects. Finally, the Southern African region is featured at the regional level, with a special focus on the Southern African Development Community (SADC).



AFRICA AGRICULTURE TRADE MONITOR 2019

The 2019 AATM assesses emerging and long-term trends and drivers shaping Africa's trade in agricultural products and evaluates the possible impacts of current trade tensions. The 2019 report focuses on intraregional trade and competitiveness, with chapters on measuring regional trade integration and competitiveness of agriculture, a feature chapter on the potential impact of global trade tensions, and an in-depth look at trade integration in the Eastern and Southern Africa region.



AFRICA AGRICULTURE TRADE MONITOR 2018

The first edition of the AATM examines recent trends, current status, and future outlook of African agricultural trade in global and regional markets, finding that boosting intra-African trade and deepening regional integration offers an effective vehicle to speed up Africa's economic transformation. Increasing the volumes of intra-African trade in agricultural products and eliminating non-tariff barriers can boost industrialization and enhance competitiveness at country and industry levels through higher investments in connectivity and infrastructure, both physical and digital.

Other Publications

The AGRODEP Publications and Resources library is a repository of AGRODEP-related content designed to contribute to scientific research, promote advances in research by AGRODEP members, and drive the visibility of the AGRODEP Modeling Consortium. The site also provides access to external references related to models, data, or topics relevant to AGRODEP's objectives.

These publications include:



Technical Notes: Papers which focus on technical issues concerning models and data



Working Papers: Publications from the AGRODEP Working Paper series



Data Reports: Papers that provide technical information related to AGRODEP datasets



Newsletters: Periodic newsletters providing updates on AGRODEP activities

AGRODEP Resources

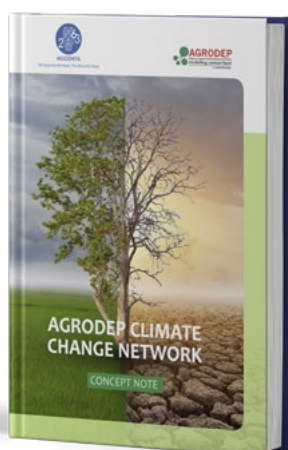


AGRODEP Thematic Networks



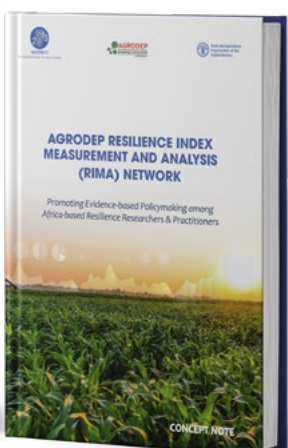
SANITARY AND PHYTOSANITARY (SPS) NETWORK

The objective of the SPS Network is to facilitate policy and scientific exchange and collaboration on SPS issues between network members and international researchers as well as contribute to the advancement of Africa's SPS agenda through policy analysis and research. AKADEMIYA2063 aims to establish the Network as part of a project on "Improving Sanitary and Phytosanitary (SPS) Systems in Africa for Food Security and Trade," carried out in partnership with the African Union Commission, Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment (AUC-DARBE) and the U.S. Department of Agriculture's Foreign Agricultural Service (USDA-FAS).



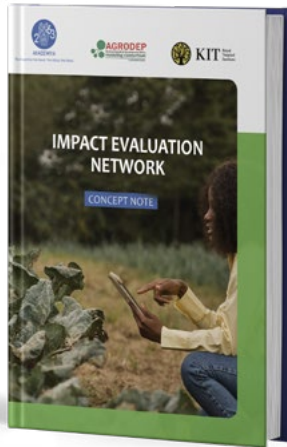
CLIMATE CHANGE NETWORK

As part of strengthening Climate Change capacities in Africa, AKADEMIYA2063 seeks to establish AGRODEP Climate Change Network (ACCN) made up of African scientists and practitioners working on Climate Change issues in Africa who would be equipped with data, analytical tools, and training on Climate Change issues in order to help advance the Climate Change agenda in Africa as well as promote policy and scientific exchange and collaboration on Climate Change issues.



RESILIENCE INDEX MEASUREMENT AND ANALYSIS (RIMA) NETWORK

The Food and Agriculture Organization of the United Nations (FAO) has been at the forefront of resilience analyses since the late 2010's, notably with the development of the Resilience Index Measurement and Analysis (RIMA) methodology, which has proven effective in measuring resilience for project monitoring and evaluation as well as needs assessment. FAO and AKADEMIYA2063 have joined efforts to establish a network bringing together Africa-based practitioners and researchers working on resilience. The AGRODEP-RIMA network has two main targets: (i) Government officials, notably CAADP Focal Points involved in the Malabo Declaration Biennial Review process; and (ii) Researchers. This initiative will be launched and operationalized by FAO and AKADEMIYA2063, as part of the broader support to the AUC agenda.



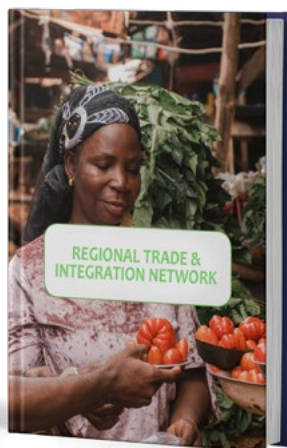
IMPACT EVALUATION NETWORK

The goal of the AGRODEP Impact Evaluation Network is to disseminate knowledge about state-of-the-art impact evaluation tools and methods, actively engage African professionals in impact evaluation studies, and to facilitate discussion and resource-sharing among local, regional, and international researchers. The Network will be facilitated by AKADEMIYA2063 in partnership with the KIT Royal Tropical Institute.



VALUE CHAIN ANALYSIS NETWORK

The AGRODEP Value Chain Analysis Network provides selected researchers with the latest technical and topical developments in the field of value chain analysis. Members of the network gain access to training courses in the area of agricultural value chains, with a focus on the conceptual issues and the applied, quantitative approaches of value chain analysis to four perspectives: (i) agricultural distortions and value chains, (ii) trade policy and value chains, (iii) Food and nutrition security and value chains, and (iv) quantitative tools for value chains.



REGIONAL TRADE & INTEGRATION NETWORK

Building on the AGRODEP African Continental Free Trade Area (AfCFTA) Taskforce created in November 2018, the Regional Trade and Integration network will support stakeholders with access to timely and high-quality data and analytics to guide responses to current and future trade-related shocks. A key component of this network will be the Africa Agricultural Trade Outlook (AfTOP) portal, which will provide a centralized, user-friendly and interactive online platform that brings high-quality information on African trade of agricultural and food commodities on four main components: (i) Global trade outlook focusing on developments in global trade and markets, (ii) Regional trade outlook focusing on dynamics in regional trade and markets, (iii) Africa Agriculture Trade Monitor (AATM) on current trade performance and issues, and (iv) African Continental Free Trade Area (AfCFTA) agreement and implementation issues.

AGRODEP Governance Bodies

AGRODEP has two governance groups: a Consortium Board and a Technical Advisory Committee.

Consortium Board

The AGRODEP Consortium Board plays a vital role in safeguarding the effectiveness and impact of AGRODEP and providing strategic direction for AGRODEP activities in terms of management, policy, operations, and resource mobilization. The Board helps to ensure that AGRODEP remains focused on its mission and is ran effectively to meet the technical needs of its members and effectively contributes to agricultural and development policy discourse in Africa.

Technical Advisory Committee

The Technical Advisory Committee provides guidance on technical and methodological issues. A key objective of the Committee is to ensure that AGRODEP is at the forefront of technical innovation and is meeting the technical needs of its members. The Committee is composed of leading experts from the economic research and policy community who are invited in their personal capacity.





 www.agrodep.org

 www.akademiya2063.org

    @AKADEMIYA2063

GET IN TOUCH

AGRODEP Headquarters

AKADEMIYA2063

Kicukiro/Niboye KK 341 St 22 | P.O. Box 1855
Kigali, Rwanda

 +250 788 318 315

 kigali-contact@akademiya2063.org

 info-agrodep@agrodep.org

AKADEMIYA2063

Lot N*3 Almadies | P.O. Box 24 933
Dakar-Senegal

 +221 338 652 881

 dakar-contact@akademiya2063.org