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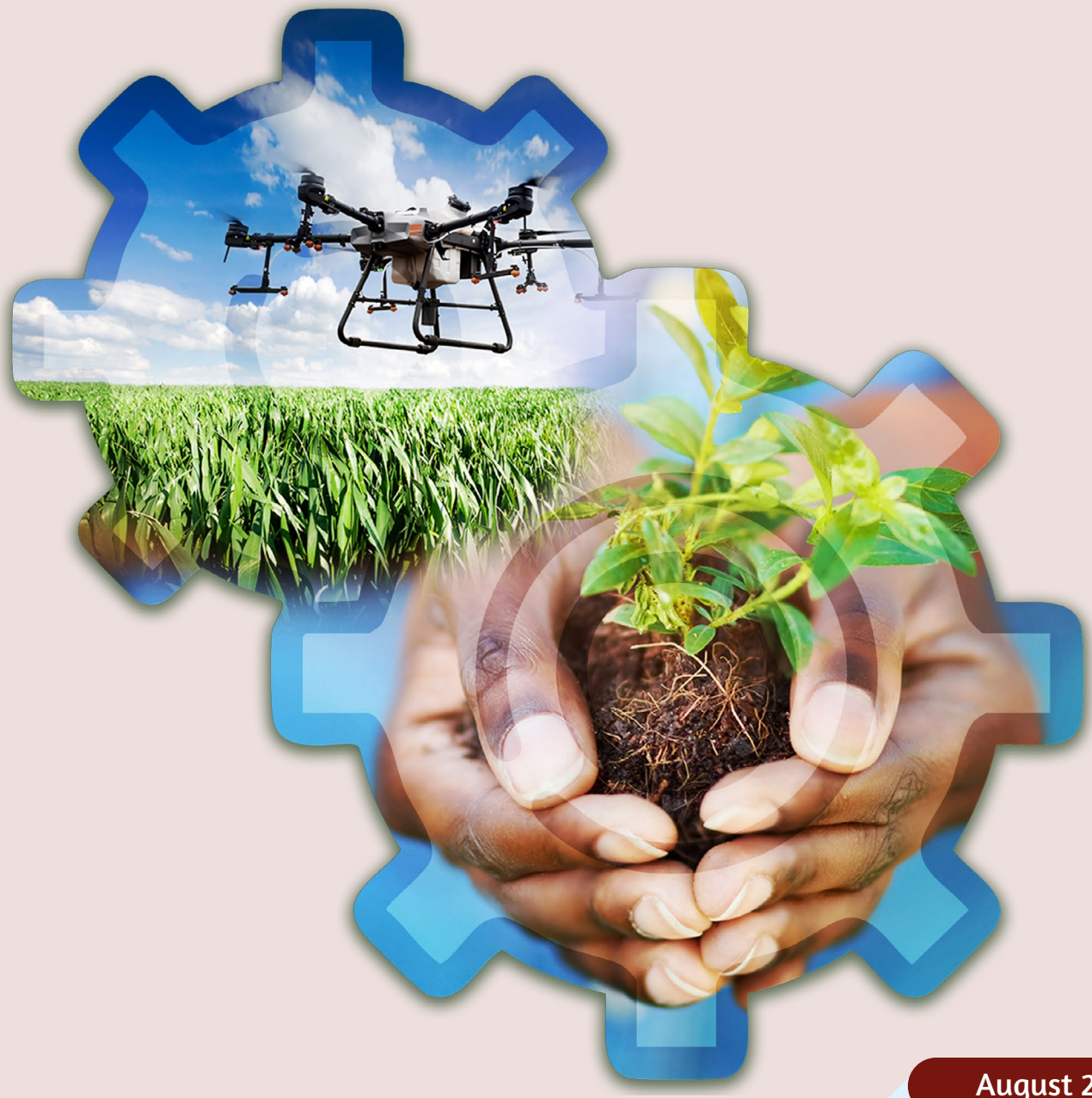
Biennial Review (BR) Data Management and Mutual Accountability Technical Working Group (TWG) 13 Report



August 2025

ReSAKSS Regional Strategic Analysis and Knowledge Support System by AKADEMIYA2063

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KAMPALA TECHNICAL PAPER SERIES

Biennial Review (BR) Data Management and Mutual Accountability

Technical Working Group (TWG) 13 Report

Suggested Citation

Kenao, L., A. A. Obua-Ogwal, and C. Adjorlolo. 2025. *Biennial Review (BR) Data Management and Mutual Accountability – Technical Working Group (TWG) 13 Report*. Kampala Technical Paper Series. Kigali: AKADEMIYA2063. https://doi.org/10.54067/ktps.13

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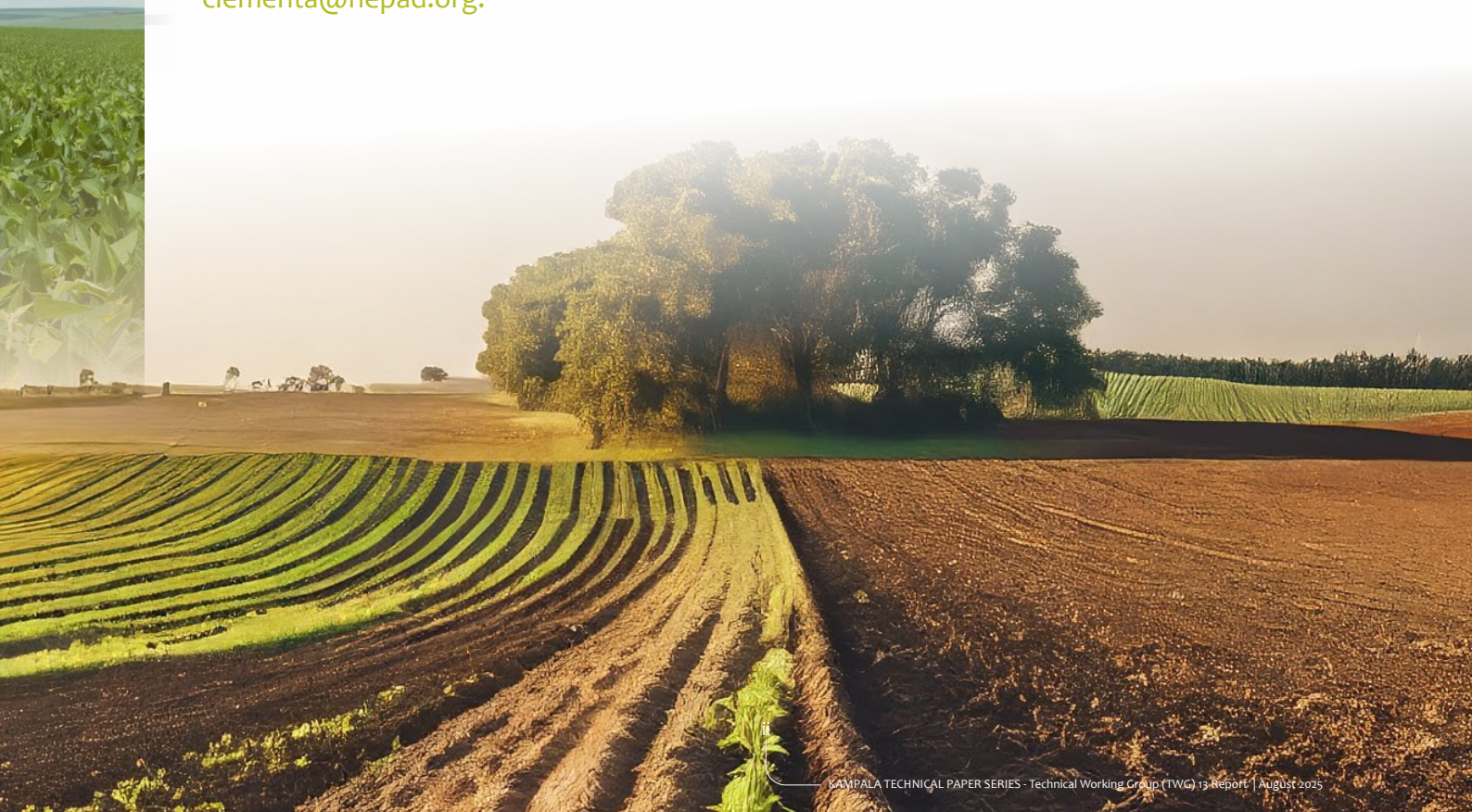

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Abbreviations and Acronyms

AgPERs	Agriculture Public Expenditure Reviews
AI	Artificial Intelligence
APIs	Application Programming Interfaces
ASCII	Agriculture Statistical Data and Information
ATORs	Annual Sector Performance Reports and Annual Trends and Outlook Reports
AU	African Union
AUC	African Union Commission
BR	Biennial Review
BRRD	BR Results Dissemination
BRRU	BR Results Utilization
CAADP	Comprehensive Africa Agriculture Development Programme
DM	Data Management
DPI	Digital Public Infrastructure
DPs	Development Partners
eBR	Electronic BR System
ECI	Existence of Inclusive Institutionalized Mechanisms and Platforms for Mutual Accountability and Peer Review
FAO	Food and Agriculture Organization of the United Nations
FS-KSS	Food System Knowledge Support System
GIS	Geographic Information Systems
IM	Independent Memoranda
ISO	International Organization for Standardization
JSR	Joint Sector Review
MAF	Mutual Accountability Framework
MELA	Monitoring and Evaluation for Land in Africa
MSs	Member States
NAIPS	National Agriculture Investment Plans
AUDA-NEPAD	African Union Development Agency - New Partnership for Africa's Development
NSOs	National Statistical Offices
RECs	Regional Economic Communities
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
RF	Results Framework
SAKSS	Strategic Analysis and Knowledge Support System
SDGs	Sustainable Development Goals
SDMX	Statistical Data and Metadata Exchange
UN	United Nations

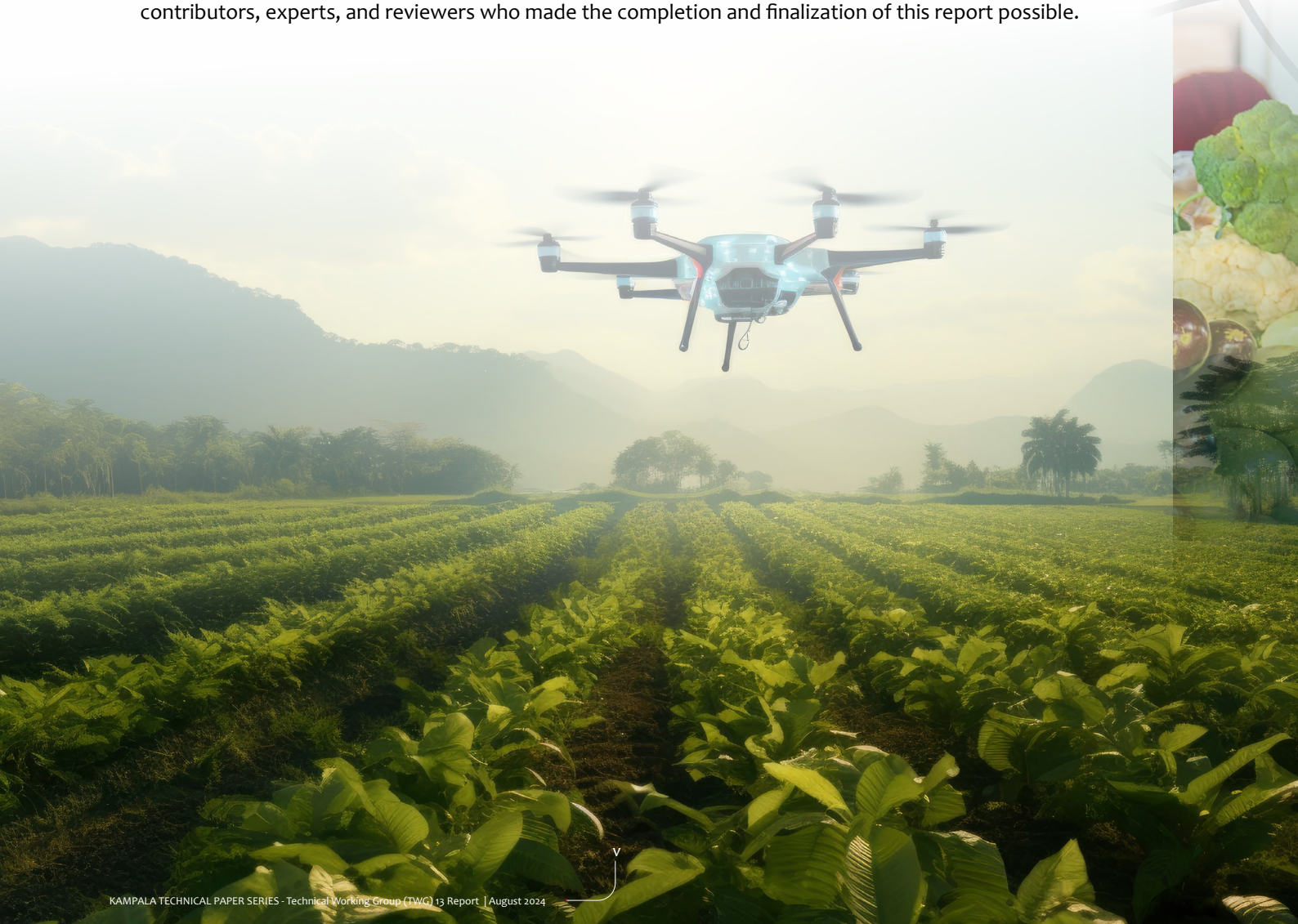
Acknowledgments

The report was developed by the members of Technical Working Group 13 (TWG13) under the overall coordination of the convener – African Union Commission (AUC), and co-convener, African Union Development Agency-New Partnership for Africa's Development (AUDA-NEPAD). Our sincere gratitude is extended to the teams that supported the process at various stages. The experts from partner institutions contributed significantly to the process and the finalization of the TWG13 report.

The contributors to the TWG13 report include:

- AUC
- AUDA-NEPAD
- African Union Inter-African Bureau for Animal Resources (AU-IBAR)
- AKADEMIYA2063
- East African Community (EAC) Secretariat
- Economic Community of West African States (ECOWAS) Commission
- Food and Agriculture Organization of the United Nations (FAO)
- International Food Policy Research Institute (IFPRI)
- International Livestock Research Institute (ILRI)
- International Water Management Institute (IWMI)
- Bill & Melinda Gates Foundation (BMGF)
- US Department of Agriculture (USDA)

The report has benefited from the research and efforts of various authors and experts who contributed to drafting and reviewing the different sections of the document. AUC-DARBE and AUDA-NEPAD thank all the contributors, experts, and reviewers who made the completion and finalization of this report possible.



Editorial

Since its adoption by the African Union (AU) in 2003, the Comprehensive Africa Agriculture Development Programme (CAADP) has been Africa's primary policy framework for agricultural transformation, wealth creation, food security, economic growth, and prosperity. It guides the African Union Commission (AUC), AUDA-NEPAD, Regional Economic Communities (RECs), and Member States in driving food security and agricultural transformation toward a self-reliant and productive Africa.

The continent has witnessed robust economic growth since the launching of the agenda, producing rising average incomes and household consumption expenditures. Evidence indicates steady decreases in the prevalence of poverty and improvement in food security and nutrition, with undernourishment declining in the 2000s and early 2010s and child malnutrition declining consistently throughout the CAADP period. However, progress on many of these indicators has slowed and, in the case of undernourishment, reversed in recent years, especially with recent economic disruptions related to the Russia-Ukraine war, the COVID-19 pandemic, and the climate crisis.

As Africa phases out of ten years of implementing the Malabo Declaration set to conclude in 2025, the Kampala (Post-Malabo) Agenda aims to deepen CAADP's impact and accelerate progress. In early 2024, the AU Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment (AUC-DARBE) and AUDA-NEPAD, in collaboration with critical technical partners, launched the process to develop a Post-Malabo Agenda for Action on CAADP. The CAADP Post-Malabo Agenda development process set out to leverage an inclusive, multistakeholder effort to build on 20 years of CAADP successes while addressing emerging challenges like sustainable food systems, climate change, and resilience to shocks.

Under the framework of the Post-Malabo Agenda development process, AKADEMIYA2063, as a technical partner to AUC-DARBE, was designated to facilitate the **Data and Analytics Workstream**. This entailed the mobilization of African centers of excellence and think tanks organized across 13 Technical Working Groups (TWGs) to lead the research, data, and analytical work to inform the thematic design of the successor to the existing CAADP Agenda. This process leveraged extensive stakeholder consultations, research, and analysis to guide the formulation of a new strategy for the next decade of CAADP implementation.

With the Kampala CAADP Declaration on "Building Resilient and Sustainable Agrifood Systems in Africa" and the associated CAADP Strategy and Action Plan (2026-2035) endorsed by the Extraordinary AU Summit in January 2025 and entering into force in January 2026, there is a real opportunity to leverage knowledge and evidence to enhance Africa's preparedness for its implementation.

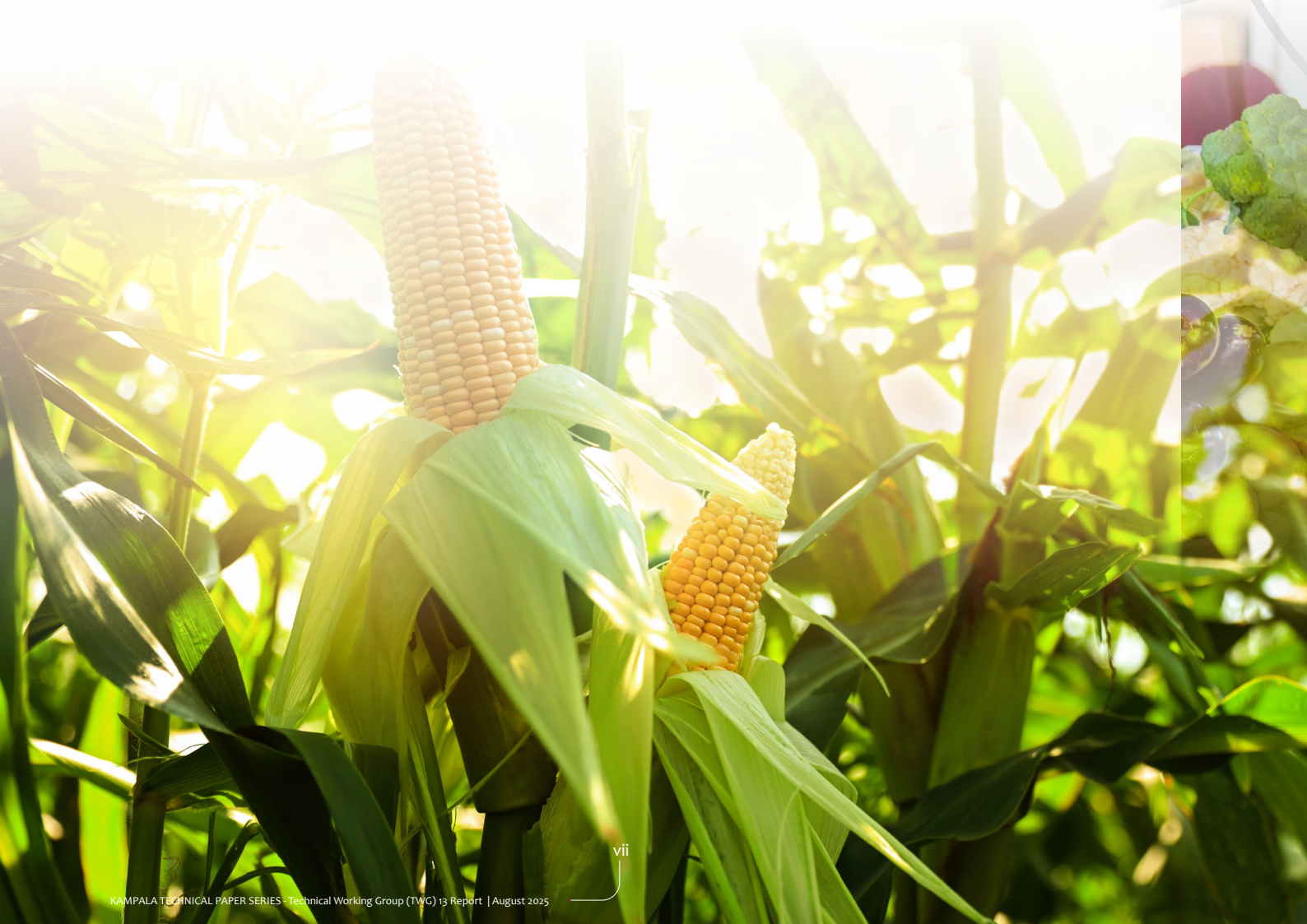
The ***Kampala Technical Paper Series*** presents research developed by the 13 TWGs comprised of African academic institutions, think tanks, centers of excellence, and various CAADP constituencies deployed during the Post-Malabo Agenda development process. The series proposes comprehensive technical content designed to feed into the thematic core of the Kampala Agenda to ensure inclusive, sustainable, and resilient agrifood systems and livelihoods in Africa over the next decade.

With this series, AKADEMIYA2063 aims to make the research available to a wide range of stakeholders and development practitioners while providing insights into the critical priority areas for the continent's agrifood systems transformation. This move is motivated by the belief that the evidence-based recommendations for policy and programmatic interventions will help move the needle toward an agriculture-led, broad-based economic transformation across Africa.

Executive Summary

This report was prepared by TWG13 under the framework of the Post-Malabo CAADP Agenda development process. The contents of this publication were developed following the review of published materials, stakeholder consultation reports, and expert perspectives on data management and mutual accountability issues within the context of CAADP. In this report, the Working Group emphasizes the importance of comprehensive data management and mutual accountability mechanisms to address information needs for evidence-based decision-making and targeted investments in Africa's agrifood systems. The report highlights challenges related to data quality, completeness, and the electronic Biennial Review (eBR) System and mechanism for mutual accountability. TWG13 proposes innovative approaches, such as data clusters, specific sector performance indices, and the adoption of emerging technologies to enhance data management and process effectiveness. The report also stresses the importance of stakeholder engagement and the critical need to strengthen clear guidelines for ethical data sharing and privacy to protect data integrity and stakeholder interests in line with the AU Data Policy.

Critical analysis of reference material and expert dialogues culminated in several priority recommendations. These include strengthening, adapting, and harmonizing existing Mutual Accountability Frameworks (e.g., JSRs, CAADP Review Dialogues), enhancing capacity for data management and analysis, adopting the use of both a statistical progress assessment method and scores for the CAADP reviews, and a proposal for a triannual reporting (TR) cycle for the next 10 years of CAADP. The TWG13 report emphasizes that data is an indispensable asset that drives decision-making processes, policy development, and organizational strategies. Therefore, the Post-Malabo CAADP era must prioritize enhancing the BR data processes and mutual accountability mechanisms to ensure comprehensive, high-quality, reliable, and credible data to support evidence-based decision-making and targeted investments in agricultural and food systems transformation.



1-Introduction

Data is an indispensable asset driving decision-making processes, policy development, and organizational strategies in the contemporary era of rapid technological advancement and digital transformation. Effective data management is crucial for harnessing the full potential of data and ensuring its accuracy, accessibility, and security. As organizations increasingly rely on data to guide their operations and achieve their objectives, the principles of mutual accountability become essential in fostering a culture of transparency, responsibility, and collaboration.

Data management encompasses the practices, policies, and procedures governing data acquisition, validation, storage, protection, and utilization. It is a multidisciplinary approach that integrates technology, governance, and human resources to optimize the value derived from data assets. Proper data management ensures that data is reliable, timely, and relevant, enabling stakeholders to make informed decisions and achieve desired outcomes.

Mutual accountability in data management refers to the shared responsibility among stakeholders to uphold the standards and practices that ensure data integrity and ethical usage. This concept emphasizes the collaborative nature of data governance, where all parties involved, i.e., data providers, users, or stewards, are committed to maintaining the quality and security of data. Mutual accountability fosters trust and cooperation, essential components for effective data management. Simultaneously, mutual accountability for African transformation requires that the data collected be relevant and inform the multiple stakeholder viewpoints influencing policy and investment decisions that are part of the transformation process. This, in turn, helps stakeholders to improve their planning and decision-making.

Incorporating mutual accountability into CAADP data management frameworks involves establishing clear roles and responsibilities among key stakeholders (AUC, AUDA-NEPAD, RECs, national governments, private sector, civil society organizations, farmer organizations, and development partners) involved in the implementation of the CAADP process, promoting transparency in data processes, and implementing monitoring and reporting compliance mechanisms. It also requires a commitment to ethical data practices, including respecting privacy, safeguarding sensitive information, and preventing misuse or abuse of data. By embedding mutual accountability into data management, organizations can enhance their data governance, mitigate risks, and drive better outcomes.

The effective implementation of data management and mutual accountability processes is strongly characterized by principles of country ownership, inclusive participation of all key stakeholders, and evidence-based decision-making (Resnick et al. 2020). Current evidence from independent critical analysis of CAADP BR shows that adherence to these principles can ensure the success and sustainability of the CAADP BR data management and mutual accountability processes. However, to achieve this, the involvement of all key stakeholders is crucial in providing and validating transparent information and reliable data for policy decisions and instilling confidence in the mutual accountability process (Oehmke et al. 2018).

This introduction sets the stage for a comprehensive exploration of data management and mutual accountability, highlighting their significance in today's data-driven landscape. It underscores the need for robust data management practices and the pivotal role of mutual accountability in ensuring data quality, security, and ethical usage. The report also presents suggestions for the next 10 years of managing CAADP data and mutual accountability processes.

1.1 Rationale and Justification

1.1.1 BR Data Management and Mutual Accountability in the Post-Malabo CAADP Agenda

There are several compelling reasons why the Post-Malabo CAADP Agenda must prioritize BR data management and mutual accountability. Firstly, the CAADP BR process is a critical tool for measuring the effectiveness of national, regional, and continental agricultural strategies against the goals established in any process, including the Post-Malabo CAADP Declaration. It provides a structured approach to holding countries accountable for their commitments to developing their agrifood systems, thereby fostering a culture of transparency and

continuous improvement. Secondly, promoting data-driven policy-making is essential for agrifood systems growth, as reliable, high-quality data informs decision-making. Third, data can monitor how agrifood systems growth affects individuals, including previously marginalized populations, identifying strengths that can be leveraged to accelerate growth and people or groups left behind who need additional support.

The BR process emphasizes the use of evidence-based policies to address real-time challenges and optimize agricultural outcomes, ensuring relevant, timely, and effective interventions. Facilitating continuous improvement through regular data collection and analysis enables the identification of gaps and areas requiring additional support. This iterative approach is vital for adapting strategies to overcome emerging challenges such as climate change, food security, and economic instability, thereby ensuring the sustainability and resilience of agricultural and agrifood systems. Moreover, mutual accountability mechanisms enhance inclusiveness in the decision-making process at all levels. With the establishment of a revised set of goals in the Post-Malabo CAADP Agenda, strengthening the existing BR data management and mutual accountability framework will be critical to building on and scaling the achievements and systems established through the Post-Malabo era.

1.1.2 *Importance of Data Management and Mutual Accountability for Africa's Agrifood Systems*

Adept data management and shared accountability are pivotal to the success of Africa's agrifood systems for many reasons. Firstly, meticulous data management is the cornerstone of sustainable agricultural development, furnishing precise information for strategic planning and execution. This practice fortifies the resilience of agrifood systems against environmental, socio-political, and economic upheavals, fostering long-term stability and prosperity.

Secondly, shared accountability mechanisms engage various stakeholders, encompassing governments, civil society, and farmers. This inclusive approach ensures that multiple perspectives are integrated into the agricultural development process, enhancing the effectiveness and legitimacy of policies and programs.

Moreover, robust data management practices augment the transparency and efficiency of agricultural initiatives, garnering trust among stakeholders and ensuring the optimal allocation of resources. Transparent processes facilitate superior monitoring and evaluation, culminating in more effective interventions and outcomes. By concentrating on these domains, Africa's agrifood systems can achieve sustainable growth, resilience, and inclusivity, significantly contributing to the continent's development and prosperity.

1.1.3 *Strengthening Existing Knowledge Support Systems*

Enhancing knowledge support systems (KSS) within the agricultural and food sectors is of paramount importance for several compelling reasons. Firstly, by cultivating stakeholder capacity, these refined systems empower individuals to adeptly utilize data for planning, implementation, and monitoring purposes. This capacity-building is indispensable for the successful execution of agricultural policies and programs within agrifood systems, leading to superior outcomes and profound impact. Secondly, by encouraging innovation, robust knowledge support systems catalyze the dissemination of the latest research and technological advancements, thereby driving innovation in agricultural practices. Enhanced access to state-of-the-art knowledge and technologies can markedly augment productivity and sustainability in the agrifood sector. Lastly, by fostering regional collaboration, knowledge support systems enable the sharing of best practices and lessons learned across diverse regions, promoting greater synergy and more effective solutions to common challenges. Such regional integration is vital for addressing issues that transcend national borders and require coordinated efforts.

1.1.4 *Attention to BR Data and Knowledge Management in the Post-Malabo CAADP/Agrifood Systems*

The Post-Malabo Agenda must recognize the importance of BR data and knowledge management for a number of reasons. For example, as the target year of 2025 for the objectives of the Malabo Declaration draws near, it's crucial to evaluate progress toward achieving these goals. Identifying shortfalls and making necessary adjustments will ensure the achievement of these objectives, sustained momentum, and realization of the desired outcomes.

Robust data and knowledge management systems are fundamental to supporting future agendas. These systems will provide a solid foundation for developing and implementing the Post-Malabo CAADP Agenda,

formulating strategies to tackle new challenges, and ensuring ongoing agricultural transformation. Addressing emerging issues such as climate change, food insecurity, and economic disruptions is vital. Effective data and knowledge management underpin more resilient and adaptive agricultural practices, ensuring that Africa's agrifood systems can withstand pressure and flourish amidst various challenges.

In the CAADP and agrifood systems context, the establishment of a Food System Knowledge Support System (FS-KSS) within CAADP's Biennial Review (BR) Data Management (DM) and Mutual Accountability Framework (MAF) is indispensable. The food systems KSS will be an integrated platform, amalgamating data from diverse sources to facilitate comprehensive analysis and support evidence-based decision-making.

Given the complexity of contemporary food systems, a robust FS-KSS is essential. Agriculture is influenced by climate change, market dynamics, and socio-economic conditions, and stakeholders need access to precise, timely, and comprehensive data to navigate these challenges effectively. Anchored around National Statistical Offices (NSOs), the FS-KSS will enhance coordination and collaboration among various stakeholders, including governments, civil society, and the private sector. The FS-KSS approach ensures that all stakeholders have access to the same information by providing a common platform for data sharing and analysis. This fosters a unified and strategic approach to agricultural development, enhancing resilience and productivity.

1.2 Methodology

Contributors to this technical report on the BR Data Management and Mutual Accountability for the Post-Malabo Agenda applied the following methodology:

Expert coordination: An online engagement exercise was held involving three virtual meetings of the TWG 13 members. This online engagement provided a platform for reviewing the guidance to develop the report, discussing its elements, identifying relevant documentation and evidence, and aligning the key issues and content of the report.

Multistakeholder validation: During the Validation Workshop for the Post-Malabo CAADP Agenda, held in Lusaka, Zambia, from July 25 to 30, 2024, the draft report elements were presented to a broad range of representatives from civil society (non-state actors), the private sector, Member States, regional bodies, AU organs, and development partner organizations. Feedback from the consultation was incorporated into the final draft of the report.

Review of inputs from the stakeholder consultation process: A review was conducted of the 41 Independent Memoranda (IM) solicited as part of the broader CAADP Post-Malabo Agenda consultation process. The review identified specific elements and recommendations outlined within the IMs that referred to BR data management and mutual accountability. In addition, a review was conducted of the reports from the Regional Economic Community consultations held in five regions. These elements and recommendations were incorporated into this report. In addition to reviewing the IMs and regional consultations, an exercise was undertaken to review and align the report's contents with existing continental frameworks and initiatives, including the AU Data Policy Framework and the Monitoring and Evaluation for Land in Africa (MELA).

Review of the five regional consultative meeting reports: This review focused on data recommendations, including issues of data collection, data sharing, monitoring and evaluation, data analytics, stakeholder engagement and multistakeholder partnership, capacity building, data governance and implementation, and the Biennial Review period.

Use of recommendations from the 2023 external audit of the Biennial Review process: The independent audit of the overall BR process established the efficacy of the self-reporting system and suggested measures to strengthen the quality and robustness of the process at national, regional, and continental levels. The recommendations from this report were used to suggest key messages for data collection and BR reporting.

Drafting of the final report: The report was finalized over two days by a dedicated group of individuals participating in the Validation Workshop for the Post-Malabo CAADP Agenda, held in Lusaka. The drafting team members are outlined in the Annex of the report.

2-Drivers of Change and Progress: CAADP Biennial Review and Mutual Accountability Framework

2.1 Overview of the Biennial Review and Mutual Accountability Framework

The CAADP BR constitutes a pivotal mechanism designed to gauge progress and appraise performance concerning the key objectives delineated by the Malabo Declaration. These critical performance indicators form a systematic framework for evaluating the effectiveness of agricultural policies and interventions across AU Member States. The extant data management practices and systems deployed in the BR process are meticulously crafted to amass, collate, scrutinize, and holistically report data. Under the Malabo Declaration, the performance of countries on this theme is tracked by five key indicators:

- Index of Capacity to Generate and Use Agriculture Statistical Data and Information (ASCII). This indicator measures countries' ability to generate and utilize agricultural data and information. The target score is 69 out of 100, which countries are expected to achieve by 2025.
- Existence of Inclusive Institutionalized Mechanisms and Platforms for Mutual Accountability and Peer Review (ECI). This indicator measures the presence of mechanisms and platforms that foster alignment, harmonization, and coordination among multi-sectoral efforts and institutions for peer review and mutual accountability. The target was to achieve 100 percent by 2018.
- Country Biennial Report Submission (BR). This indicator aims to institutionalize the use of the Biennial Review report to support mutual accountability platforms, share experiences among African countries on agricultural development, and promote lessons learned regarding the Malabo Declaration. The target is to conduct a biennial agriculture review process involving tracking, monitoring, and reporting progress, with regular submissions to the AU Assembly.
- Country BR Results Dissemination (BRRD). Added in BR Cycle 4, this indicator encourages countries to disseminate the results and recommendations from the BR process. The target is 100 percent dissemination each BR reporting cycle.
- Country BR Results Utilization (BRRU). This indicator was also added to BR Cycle 4, encouraging countries to utilize the results from the Biennial Reviews. The target is to use 100 percent of the results and recommendations arising from the BR process by 2025.

The data management practices and systems used in the BR process include a series of steps:

- Critical Analysis. The new BR process begins with reviewing the previous cycle, revising BR reporting tools for training, updating the BR Technical Guidelines, Reporting Template, and Technical Notes, and suggesting improvements for the new BR cycle.
- Training. The process begins with training sessions for trainers, who then train national stakeholders at regional and continental workshops.
- Data Collection. Trained national experts mobilize their teams to collect and process data using a BR country reporting template and a BR technical guidelines document.
- Data Entry and Review. The collected data is entered into the eBR and submitted to RECs. Regional and continental BR experts review the data for errors.
- Validation. Data quality is controlled through national, regional, and continental validation meetings, where reviewers interact with country experts to correct errors.
- Analysis and Scoring. The data is analyzed, and scores are produced using a methodology embedded in the eBR system, guided by BR technical notes.

The AUC and its regional organs and agencies securely manage the final data and scores. These comprehensive data management practices ensure the BR process is thorough, accurate, and supportive of mutual accountability and agricultural development goals. The current practice for data management practices and systems used in the BR process can be summarized as follows:

In each BR Cycle, data collection commences with the training of trainers, who then train national stakeholders at regional and continental workshops. Once the data collection is launched, the trained national experts mobilize their national teams to collect and process data using an updated BR country reporting template and a BR technical guidelines document. Once the data is captured on the country reporting profile, it is entered by the country teams in the eBR and submitted to regional economic communities where regional and continental BR experts review it for errors.

For data quality control, the data is vetted at various stages, including a national validation meeting within a country, a regional validation meeting at the regional economic community level, and a continental validation meeting. These validation processes are two-way processes in that reviewers interact with the country expert to correct errors in the data. The data is then analyzed, and scores are produced using a methodology embedded in the eBR system guided by BR technical notes. The final data and scores are held securely by the AUC and its subsidiaries.

2.1.1 Key Performance Indicators and Targets Set by the Malabo Declaration

Based on the 2023 Technical Guidelines for preparing Country Reports on progress in implementing the Malabo Declaration, the CAADP Results Framework (RF) for 2015–2025 contains 58 key performance indicators across three levels.

At Level 1, agriculture is linked to high-level outcomes and impacts, such as wealth generation, food and nutrition security, economic opportunities, poverty reduction, shared prosperity, and resilience and sustainability.

Level 2 encompasses the outputs of inclusive growth from interventions that aim to transform the agriculture sector, including improved agricultural production and productivity, intra-African regional trade and functional markets, expanded local agro-industry and value-chain development, inclusive of women and youth, enhanced livelihood resilience, better management of risks in agriculture, and improved management of natural resources for sustainable agriculture.

Level 3 encompasses the necessary inputs and processes to enhance systemic capacity for CAADP results and create a conducive environment for agricultural transformation. These include effective policy processes, accountable institutions, strengthened evidence-based planning, implementation, review, improved multi-sectoral coordination, partnerships, mutual accountability in sectors related to agriculture, increased public and private investments in agriculture, increased capacity to generate, analyze, and use data, information, knowledge, and innovations (Makombe et al. 2018).

The 2003 Maputo Declaration on Agriculture and Food Security had two primary targets:

- To achieve a 6 percent annual agricultural growth rate at the national level.
- To allocate at least 10 percent of national budgets to the agriculture sector.

Through the 2014 Malabo Declaration on Accelerated Agriculture Growth and Transformation for Shared Prosperity and Improved Livelihoods, African leaders expanded the CAADP agenda with seven broad commitments to transform African agriculture from 2015 to 2025. The seventh of these commitments is ensuring mutual accountability for actions and results. Over the past decade, the results framework has been used to track, monitor, and report on the implementation of measures to fulfill the goals and targets of the Malabo Declaration. The framework specifies anticipated results and impacts as well as benchmarks and milestones for Africa's agricultural development agenda. A continent-wide BR evaluates the progress towards the commitments.

In 2017, the CAADP-Malabo BRs began and presented a mixed bag of progress by country and at the continental level. Most countries are not on track to meet the CAADP Malabo Commitments. CAADP's success is hindered by several factors, including climate change and various geopolitical conflicts, pandemics, economic instability, urbanization, technology, dietary diversification, increased consumption of processed food, and job losses in

the processing sector. Investments by African countries in agricultural water management and irrigation have also been below the current target of 10 percent (Scheumann et al. 2017).

2.1.2 Current Data Management Practices and Systems used in the BR Process

In the initial BR cycle in 2017, countries relied heavily on manual processes for reporting and submitting their data. Reports were created in Microsoft Word and submitted to Regional Economic Communities (RECs) via email. These RECs had the cumbersome task of manually transferring data from MS Word documents to an MS Excel database, which was then sent to the AUC.

2.1.2.1 Electronic Biennial Review (eBR)

The eBR System, introduced in the second BR cycle, is a web-based platform accessible through any device with a web browser, ensuring ease of use and accessibility. It enhances data integrity by ensuring consistency within a single version of the database. Data reporting at the parameter level provides comprehensive and detailed data submission. The system features access levels tailored to user roles, such as member states, RECs, and the AUC. The interface of the eBR platform is designed to be intuitive, making it easy for users to navigate the platform and perform their tasks efficiently. Additionally, scores are computed based on the technical notes, automatically generating scorecards and country profiles, available in the six AU languages – Arabic, English, French, Portuguese, Spanish, and Swahili.

2.1.2.2 BR toolkit

The AU launched the CAADP Toolkit and Knowledge Compendium during the 15th CAADP Partnership Platform in 2019. The Toolkit targets users including AU Heads of State and Government, government officials, media, regional intergovernmental organizations, non-state actor organizations, and farmer organizations. It focuses on the core concepts of CAADP and the results of BR Reports on implementing the Malabo Declaration.

2.1.3 Challenges and Limitations in the Current BR Data Management System: Gaps in Data Collection, Compilation, Analysis, and Reporting

The manual process for reporting and submitting the data in the initial BR in 2017 posed several challenges, including i) Difficulties in integrating various submissions into a single Excel database, ii) High risk of susceptibility to human errors during data transfer, iii) Fragmentation of data across multiple files making it difficult to manage and analyze, and iv) Limited collaboration and a lack of user-friendliness in the reporting process. The eBR system was introduced during the second BR cycle in 2019 to address these issues. It aimed to streamline the data management process, tackle the inefficiencies of the manual method, and improve data quality (Benin, forthcoming).

The eBR system is a centralized data hub and serves as the core repository for all CAADP data. It is a scalable platform that can facilitate data collection, storage, and dissemination of all agrifood systems data, ensuring all stakeholders have access to the information they need. The platform can also be upgraded to provide real-time data analysis capabilities to support dynamic decision-making processes in relation to issues such as weather conditions, market prices, and crop yields, which can help farmers and policymakers respond quickly to emerging challenges and opportunities. However, the current BR data management system has several challenges and limitations, including gaps in data collection, data cleaning, validation, compilation, analysis, and reporting, which hinder the ability to produce accurate and timely insights on the BR data. This is highlighted in various studies and reports, such as Benin et al. (2022) on CAADP BR data improvements and challenges.

Data quality varies across countries, but the trend across BR cycles has been positive, implying that data quality has improved over time. The challenges are many, as highlighted above, and relate to the absence of data for some indicators and parameters (Matchaya et al. 2022), difficulties in triangulating the data provided, limitations in terms of time for data collection, and limited incentives for broader country-level participation of partners. Finance has also proved challenging as most processes involve coalescing the sector players into meetings and workshops.

One of the challenges impeding the proper management of data and mutual accountability in the CAADP BR is the absence of detailed methodologies for data collection on specific indicators. Despite ongoing efforts, the agricultural domain still lacks effective data systems. Obtaining data from assorted sectors and ministries can be arduous, particularly when dealing with administrative processes. Technology can overcome this by ensuring

precise reporting and introducing systems that streamline data entry and automate calculation. It is imperative to furnish the joint sector review (JSR) with the necessary resources to update the BR proficiently, as inadequate human resources are dedicated to collecting data. Moreover, strategic national plans predicated on the BR can reinforce data collection mechanisms. Integrating the JSR and BR procedures into national development planning is crucial in enhancing sector performance and shaping policy (SADC 2024).

The other challenge lies in the deficiency of liability towards data associated with CAADP. This is because organizations and individuals in areas such as health and environment do sufficiently prioritize the BR process. This lack of involvement undermines the credibility of the program and obstructs progress tracking. Member States also have inadequate monitoring and evaluation systems, which hampers the creation of accurate and prompt BR reports. To ensure accountability, it is essential to assimilate the outcomes of the JSR process into national development planning procedures to provide insight into policies and programs that could improve sector performance. Additionally, Member States are advised to conduct JSRs and engage BR stakeholders and development partners – donors (SADC 2024).

Despite improvements brought about by the eBR system, several data challenges and limitations still exist in the current BR process:

2.1.3.1 Gaps in data collection

Differences in data formats, units of measurement, and reporting methodologies can complicate the process of data harmonization. Ensuring that all countries adhere to the same standards remains a significant challenge. Additionally, some countries may submit incomplete datasets for various reasons, including lack of resources, capacity, technical difficulties, information availability, and alignment with existing data collection and reporting systems. This results in gaps in the overall data, affecting the comprehensiveness and accuracy of the BR.

2.1.3.2 Compilation challenges

Ensuring the accuracy and validity of the data submitted by countries is challenging. The eBR system includes parameter restrictions to flag anomalies, but these mechanisms are not foolproof and can miss errors or flag false positives. Although the eBR system automates many processes, some aspects of data handling still require manual intervention, increasing the risk of human error and inefficiencies.

2.1.3.3 Reporting challenges

The mechanisms for feedback on data submissions could be enhanced to support continuous improvement in data quality. Countries often have limited dedicated time to correct their submissions, making it important that feedback is both timely and actionable. The feedback mechanisms sometimes fall short of this goal, leading to delays in addressing data quality issues. Without prompt and precise feedback, countries may find it challenging to make necessary corrections within their constrained timeframes, potentially affecting the review process's overall effectiveness and data accuracy. Enhancing these feedback mechanisms would be beneficial in supporting countries to improve their data quality promptly and efficiently. Furthermore, delays in data submission and processing can impact the timeliness of the reports. Ensuring that all countries submit their data on time remains a persistent challenge.

2.1.3.4 Analysis difficulties

Variations in data quality and completeness make analysis challenging, as inconsistencies can make it difficult for analysts to derive meaningful insights from the data. Additionally, the current eBR system may lack the advanced analytical tools necessary for comprehensive data analysis, limiting the ability of stakeholders (Member States, RECs, and AUC) to perform high-level analysis while the data-entry process is ongoing.

2.1.3.5 Challenges with the use of the eBR system

Training and capacity building are ongoing needs if users are to utilize the eBR system effectively. Differences in user expertise and familiarity with the system can affect data quality and reporting efficiency. Additionally, ensuring the security and privacy of data within the eBR system is critical. While the system employs robust security measures, there is always a risk of data breaches or unauthorized access. Overall, while the eBR system has significantly improved data management practices, ongoing challenges in data collection, compilation, analysis, and reporting need to be addressed further to enhance the effectiveness and reliability of the BR process.

2.1.4 *Mutual Accountability within the Context of CAADP*

Mutual accountability within the CAADP and the 2014 Malabo Declaration involves shared responsibility and collective evaluation among stakeholders to ensure progress towards agricultural development goals. Key practices to maintain mutual accountability include:

- Joint Responsibility and Stakeholder Engagement: Collaborative efforts among stakeholders – governments, development partners, private sector, civil society, and farmers – in planning, implementing, and evaluating agricultural policies and programs to foster ownership and commitment.
- Performance Monitoring: Systematic tracking and evaluation of agricultural initiatives to ensure alignment with goals, identify successes, address challenges, and guide future actions.
- Transparency and Reporting: Open sharing of information and data among stakeholders to ensure accountability and foster trust.
- Corrective Actions: Identify and address gaps, challenges, and inefficiencies to ensure continuous improvement and alignment with development objectives.

The CAADP framework promotes trust, efficient resource utilization, and sustained agricultural growth and food security in Africa. The 2014 Malabo Declaration emphasized mutual accountability, committing to a continental BR of progress across seven key commitments. This included:

- Joint Sector Reviews (JSRs): Forums at country and regional levels where stakeholders review progress, hold each other accountable, and commit to future actions. JSRs enhance accountability, multistakeholder participation, and resource allocation efficiency.
- Regional Strategic Analysis and Knowledge Support System (ReSAKSS): Supports agricultural JSR assessments, enhancing NGO and civil society participation and strengthening multistakeholder engagement (Benin et al. 2020).
- BR Report Mechanism: Tracks AU Member States' progress towards Malabo targets using a scorecard approach with 58 indicators, providing room to track other AU decisions, including those on fertilizer and fisheries.
- Agriculture Sector Working Groups and Performance Reports: National platforms receive input from data collection mechanisms such as JSRs, Agriculture Public Expenditure Reviews (AgPERs), Annual Sector Performance Reports, and Annual Trends and Outlook Reports (ATORs).

At the continental level, the AU Assembly examines a country's performance, compares it with peers, and provides recommendations to improve performance and close gaps. This approach encourages higher-level commitments and guides development partners in supporting impactful areas.

2.2 Key Drivers for Effective CAADP BR Data Management and MAF

Mutual accountability is a mechanism for coordinating all stakeholders' contributions and responsibilities toward advancing CAADP/Malabo goals for continuing and accelerating African transformation. Mutual accountability within the CAADP context refers to all stakeholders' shared responsibility in adhering to agreed-upon principles and commitments. Mechanisms and tools for ensuring stakeholder accountability are embedded in the existing MAF, which includes performance tracking, regular reporting, Joint Sector Review, and peer review processes. These elements foster transparency and trust among Member States and stakeholders. The NEPAD Mutual Accountability Framework outlines these principles in detail (Oruku et al. 2011).

1. **Stakeholder engagement.** Better coordination and active participation from stakeholders at various levels, including Member States (MS), RECs, Development Partners (DPs), and civil society, are crucial for the BR and MAF processes. This engagement ensures comprehensive data collection and inclusive policy implementation. However, participation is challenged by funding and limited awareness of the process in some countries. In addition, the data collection process could recognize the role of data generated by Non-State Actors and other stakeholders.

2. **Framework for CAADP Data Systems**. This encompasses robust mechanisms for data collection, ensuring high data quality, data clustering at the country level for better analysis, and efficient data sharing and reporting. The Post-Malabo process should strengthen the framework that supports the seamless operation of BR processes and provide practical support from technical partners to AU Member States on the ground to enhance their capacity.

3. **Institutional Arrangements and Capacity.** Adequate institutional arrangements and capacity are essential for effective BR data management. This includes trained personnel, proper governance structures, and effective coordination among various institutions. To address this problem, concerted resource mobilization should be carried out. Recent studies have shown that where extra support was available, countries improved their reporting rates more than the improvements registered by other comparable countries (Benin et al. 2020). This approach should be inclusive.

4. **CAADP Data Infrastructure.** Reliable data storage, processing, and sharing infrastructure are fundamental to managing large volumes of data. This infrastructure must be scalable and secure to support the diverse needs of the BR process. The Post-Malabo process should also emphasize that the AU should implement a mechanism to work with the regional economic communities and Member States to improve the effective institutionalization of the CAADP BR process in national M&E systems and accountability mechanisms. Not only should the eBR expand its capacity to store more information, but it should also grant access to countries on time to allow them to update data routinely and in advance of the reporting cycles.

5. **CAADP Knowledge Products.** These products, such as reports, data sets, and best practices, are valuable outputs of the BR process. They provide actionable insights and foster knowledge sharing among stakeholders. The CAADP BR Communication Toolkit[1] Platform is a valuable resource for these products but needs further improvement in the Post-Malabo process. Of crucial importance are also the several BR briefs produced during Malabo implementation and available on several websites, including www.resakss.org[2], www.cgiar.org[3], and www.akademiya2063.org.[4]

6. **Sustainability Strategy.** A long-term sustainability strategy is necessary to maintain the operation and maintenance of BR systems. The Post-Malabo strategy should also include a continental master plan for funding and resource mobilization for BR data management and mutual accountability. The Post-Malabo Declaration Implementation Strategy and Action Plan should provide comprehensive guidelines for detailed strategies. Funding NAIPS from public sources and local partners should be encouraged to ensure sustainability.

7. **Response to Emerging Needs.** The BR process must be responsive to changing data and information needs and emerging technologies. This responsiveness ensures that the BR process remains relevant and practical. Emerging technologies in agriculture have been well documented by organizations such as the World Bank.[5]

8. **CAADP Data Governance Structure.** Strengthening and ensuring a transparent governance framework delineating roles and responsibilities for data collection and management, decision-making processes, and oversight mechanisms is vital for the integrity of the BR process. The AU Data Policy Framework serves as an indispensable reference. The current multi-tiered governance structure at national, regional, and continental levels could be fortified. Key stakeholders, including governments, civil society organizations, development partners, and private sector participants, must be actively engaged. This inclusive approach will guarantee that all voices are heard and that data management and accountability mechanisms remain transparent and effective.

9. **Updating Guidelines for Data Sharing and Privacy.** Clear guidelines for data sharing, privacy, intellectual property rights, and other relevant issues are necessary to protect data integrity and stakeholder interests.

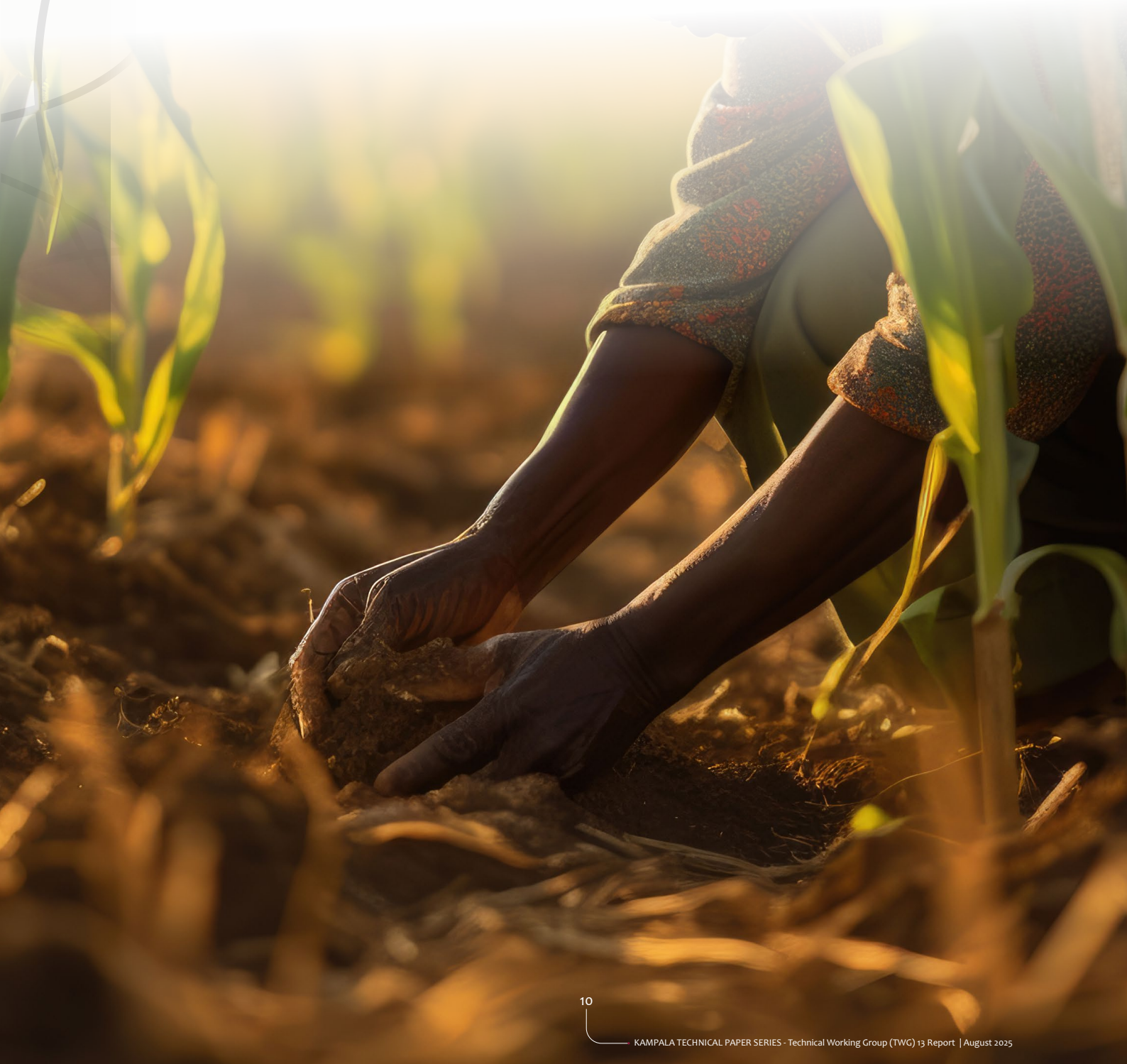
10. **Emerging Issues with the BR Scorecard.** Addressing emerging issues with the BR Scorecard is vital in order to maintain its relevance and accuracy as a performance measurement tool.

11. **CAADP Data Clusters.** Organizing BR data into clusters at the country level facilitates better analysis and reporting, making it easier to identify trends and areas for improvement. The Post-Malabo CAADP BR process should provide methodologies and tools for effective data clustering in all AU Member States. Only a few countries have data clusters, so there should be more emphasis on data clusters in the Post-Malabo era, as these have

1 https://auc.aucaadp.org/caadp-br-toolkit
2 https://www.resakss.org/sites/default/files/2021%20CAADP%20Biennial%20Review%20Brief-Africa-wide.pdf
3 https://www.cgiar.org/
4 https://akademiya2063.org/publications.php?type=caadp
5 https://www.worldbank.org/en/topic/agriculture

been found to improve data reporting and quality. The BR data clusters were established following the seven thematic areas of the Malabo Declaration, with each cluster being responsible for gathering and scrutinizing the data for the corresponding BR parameters and indicators. The clusters are made up of representatives from various organizations that are predominantly involved in generating and utilizing data and statistics (Benin et al. 2020).

Similarly, other mutual accountability operationalizing mechanisms, including the Joint Sector Reviews, should be promoted in the Post-Malabo era. More than half of the countries lack robust joint sector review platforms, yet these are extremely important for evidence-based decision-making (Nhemachena et al. 2017).



3-Towards a Strengthened CAADP Data Management and Mutual Accountability System

This section outlines future trends in Data Management (DM), Mutual Accountability, and Knowledge Systems Support. It explores opportunities provided by these trends for improving mutual accountability processes. Key priorities for data management and mutual accountability over the next 10 years are presented. The proposed revised framework addresses emerging challenges and leverages new opportunities to drive sustainable agricultural and agrifood systems development across the continent.

3.1 Important Trends over the Next 10 Years

No.	Trend	Description	Challenge	Recommendation
1	Multi-Cloud Era	Multi-cloud strategies enhance data flexibility, scalability, and security.	Integration and data segmentation across platforms may pose security risks and management complexities.	Link the eBR to multi-cloud strategies to increase data flexibility and efficiency. Develop robust security protocols to manage segmented data and mitigate risks.
2	Hybrid Cloud Platforms for Regulated Industries	Hybrid cloud platforms provide a balanced solution for regulated industries.	Data ownership and sharing permissions must be managed carefully.	Implement hybrid cloud platforms for BR data management. Expedite the roll-out and adoption of the AU data management policy to streamline processes and ensure data integrity.
3	Organizing Citizen Data	Structured data enhances analytics and informed decision-making.	Structuring unstructured data requires significant resources.	Structure BR data to incorporate key policy questions into data processing tools and algorithms. Invest in technologies that facilitate efficient data organization.
4	Data Security	Evolving cyber threats necessitate advanced security measures.	Increased complexity of multi-cloud environments and Internet of Things (IoT) devices.	Invest in AI-driven threat detection, zero-trust architectures, and regular audits to ensure robust data security. Conduct employee training to build a comprehensive defense strategy.
5	Data Governance and Ethics	Effective data governance ensures accuracy, accessibility, and ethical use.	Maintaining data quality and consistency across regions.	Complete the AU data management policy to establish clear governance principles. Implement standardized practices to maintain data integrity and reliability.
6	Metadata Management	Metadata enhances data intelligence and AI-driven decision transparency.	Ensuring comprehensive metadata management.	Incorporate metadata management practices to improve data transparency and utility. Adopt standards like Statistical Data and Metadata Exchange (SDMX) for metadata quality.
7	Quality Data for Decision-Making	High-quality data is essential for effective planning and decision-making.	Ensuring data accuracy, reliability, and credibility.	Strengthen statistical systems to improve data quality. Use advanced technologies for data collection and validation.
8	Human Capacity Building	People are crucial for driving performance and mutual accountability.	Building human capacity in data management, ethics, and governance.	Invest in training programs to enhance skills in data management and mutual accountability. Promote vertical and horizontal linkages among stakeholders to improve accountability.
9	Blockchain Technologies	Blockchain offers secure and transparent data management solutions.	Integrate blockchain into existing systems.	Explore blockchain technologies for secure data management. Implement pilot projects to assess feasibility and benefits.

3.1.1 Core Priorities for the CAADP Post-Malabo Agenda

- Establish Food System Data Clusters. Create comprehensive data clusters for effective data management and mutual accountability.
- Improve the quality of statistical systems by enhancing national statistical systems for reliable agricultural data.
- Strengthen data management and analysis capacity through a focused training program on areas of deficiency in data management. Incorporating advanced analytical techniques such as big data analytics, artificial intelligence (AI), and geographic information systems (GIS) can significantly enhance data management capacity.
- Strengthen capacity to utilize evidence through Joint Sector Review processes. This facilitates collaborative and inclusive decision-making by bringing together various stakeholders to review and discuss data findings and propose practical solutions to agricultural challenges.
- Strengthen the mutual accountability framework and adopt collaborative efforts. This is essential to achieving common goals and accountability for actions.
- Use a statistical progress assessment method and scores for the CAADP BR.
- Enhance and increase the scope of the existing digital platform (eBR).
- Provide real-time data and insights to enable timely and informed decision-making. The platform will integrate real-time data collection and analysis capabilities, offering stakeholders up-to-date information on weather conditions, market prices, and crop yields to respond swiftly to challenges and opportunities.
- Develop Specific Sector Performance Indices and link them to the National BR clusters. This approach addresses the challenges associated with the limited focus of the current CAADP BR indicator framework. Seal coverage should be broadened to meet the comprehensive food systems approach by developing specific sector performance indices. These should include sector performance indices for aquatic food systems, livestock, land governance, and wildlife. The development of these specific sector indices should leverage the experience of the sectors that have developed and included sector performance indices within the current BR reporting process (i.e., the seed sector performance index and the youth agribusiness performance (YAPI) index currently under development). To facilitate the regular and accurate reporting of these sector performance indices, they could be linked to the proposed national CAADP Cluster mechanisms.

3.1.2 The BR Scoring Method and Issues

It is imperative to enhance the current BR assessment methodologies to ensure they are equitable, context-sensitive, and capable of capturing the multifaceted nature of agricultural and food systems transformation. Addressing methodological and data quality issues can yield a more accurate and encouraging picture of the BR progress, ultimately driving more targeted and effective interventions in the Post-Malabo CAADP Agenda review and mutual accountability mechanism (Benin 2024).

The BR under the Malabo era employs a scorecard based on a relatively rudimentary scoring method. Each of the indicators is censored, normalized, and scored from 0 to 10 (I-Score); these are averaged across indicators for a country to derive an overall score (O-Score) and compared with a benchmark for the review year to determine whether a country is on track to achieve the Malabo Declaration commitments by 2025. Also, the prevalence of missing data is a burgeoning issue that undermines the validity of the assessments. The noticeable decline in the number of countries considered on track to meet the commitments, from 20 in 2017 to zero in 2023, raises concerns about the methodology or the targets. Employing the same set of indicators and targets for all countries without accounting for differing contexts makes it challenging for any country to achieve a perfect score (Benin 2024). Scoring zero for 0 or missing indicators undervalues a country's efforts and achievements. The current averaging method biases the results against key indicators crucial for agricultural transformation.

Addressing the missing data problem necessitates investing in superior data collection methods and infrastructure to ensure more comprehensive and accurate data. The use of statistical imputation techniques to estimate

missing data can mitigate the impact of data gaps on overall scores. Revising and customizing indicators and targets based on country-specific contexts is crucial to make them more achievable and realistic. Furthermore, flexible targets can be implemented and adjusted based on progress and evolving circumstances.

The current BR scoring approach is inherently flawed as the method assumes that the transformation of the agricultural sector occurs in a deterministic environment devoid of shocks, uncertainty, or errors. It presumes that performance categories alone can drive the expected changes in their corresponding commitments. This method also hinders meaningful analysis of changes in commitments resulting from shifts in their respective performance categories.

Similar criticisms have been levied in other sectors where performance metrics fail to capture the complexities of real-world implementation. For instance, measuring hospital performance solely by patient outcomes without considering environmental factors has proven misleading (Schneider et al. 2017). Public administration and policy evaluation studies emphasize the importance of specific indicators for commitments to allow for accurate measurement and accountability. For example, Bovens et al. (2014) argue that clearly defined indicators are crucial for effectively assessing government commitments.

When it comes to improving the scoring methodology, partial credit or a gradient scoring system that recognizes incremental progress should be considered instead of assigning a score of zero for missing or zero indicators. Additionally, it is advisable to introduce metrics that reward progress over time, even if targets are not fully met.

Developing a more balanced weighting system that appropriately emphasizes core indicators related to agricultural transformation can be achieved by using composite indices to better capture multidimensional progress rather than relying solely on average scores. In the Post-Malabo era, it would be beneficial to establish a mechanism for regular review and adjustment of the methodology to ensure it remains relevant and practical. Strengthening stakeholder engagement, including country representatives, to provide input on the assessment framework would also be invaluable.

Suggested Improvements to the BR in the Post-Malabo era include the introduction of Tractable Indicators that provide specific, measurable indicators for each commitment to enable more accurate and meaningful analysis. These indicators should be designed to account for variability and potential shocks in the agricultural sector. The Sustainable Development Goals (SDGs) use specific indicators to track progress on various commitments, which can serve as a model. For instance, SDG 2 (Zero Hunger) includes indicators such as the prevalence of undernourishment and agricultural productivity (United Nations 2020). By incorporating specific indicators for each commitment, the CAADP BR scoring system can become more robust and capable of reflecting the true complexities of agrifood transformation. This approach will allow for a more nuanced analysis of how changes in performance categories impact commitments and provide more precise insights for policymakers.

An independent memorandum by the FAO to the Post-Malabo CAADP Agenda process also advocated for employing a statistical progress assessment method instead of scores in the BR. The submission highlighted that while scores can occasionally offer value and aid interpretation, their application in Malabo BR reporting had the contrary effect. By effectively replacing the input data of the indicators, the BR scores led to a significant loss of information and granularity, engendering confusion about the drivers behind the changes in the underlying indicators. This observation presented two recommendations. Firstly, the original indicator values must be published for transparency and traceability, as was done in the first BR but not subsequently. Secondly, it is strongly advised that superior methods to describe progress are employed, such as a statistical progress assessment indicating how proximal or distant a country is from a target (current status) and its trajectory toward the target (trend). This method of progress assessment is an integral element of global SDG Progress Reports and should similarly be adopted. Recent methodological advancements have extended the scope of statistical progress assessment from the indicator level to encompass target- and goal-level evaluations, which could be particularly beneficial for the Post-Malabo BR.

3.1.3 Enhance and Increase the Scope of the Existing CAADP Digital Platform

3.1.3.1 Data collection

Standardized protocols and tools should be established to ensure consistent data collection across countries, which includes defining indicators, methodologies, and timelines for data submission. Harmonizing these efforts with international standards, such as the International Organization for Standardization (ISO) and SDMX, further ensures consistency and comparability. Implementing cloud-based data collection platforms and mobile data

capture applications streamlines data collection processes and provides real-time data availability. Standardizing data schemas and metadata facilitates interoperability and data sharing, leading to more efficient and effective BR data collection.

3.1.3.2 Data quality

Implementing quality assurance mechanisms, such as data validation, verification, and cleaning procedures, enhances the accuracy and reliability of collected data. This process is supported by automated data validation routines and anomaly detection algorithms, which significantly improve data quality assurance. Data integration from diverse sources, such as surveys, satellite imagery, and climate data, allows for comprehensive analysis.

3.1.3.3 Data clustering

Developing centralized databases or data warehouses facilitates efficient data clustering and integration. The use of big data technologies (e.g., Hadoop, Spark) and distributed computing frameworks enables more efficient data clustering and processing. Data lakes and warehouses can be used for centralized storage and retrieval of large-scale datasets.

3.1.3.4 Data sharing

Establishing secure data-sharing platforms and protocols facilitates stakeholder collaboration while protecting data privacy and confidentiality. Using APIs (Application Programming Interfaces) and data exchange standards, such as SDMX, enables seamless data sharing among stakeholders. Promoting open data initiatives enhances the transparency and accessibility of BR data for researchers, policymakers, and the public, ensuring that BR data can be utilized to its fullest potential.

3.1.3.5 Reporting

Developing standardized reporting protocols and utilizing advanced analytical tools can significantly enhance the reporting process. This ensures the timely and accurate dissemination of information, enabling stakeholders to make informed decisions based on reliable data. By incorporating automated reporting systems, the process becomes more efficient, reducing the time and effort required to compile and present data. Enhanced visualization tools and dashboards can also improve the clarity and accessibility of the reports, making complex data easier to interpret and use. While it has facilitated the collection and reporting of agricultural data, several gaps remain, including i) Lack of consistency in data quality concerning variability in data quality and reporting standards across Member States, which can undermine the reliability of the data, ii) Limited technical capacity in some Member States, which hinders effective data collection, analysis and reporting and iii) Insufficient financial and human resources, which can affect the efficiency and effectiveness of the eBR system.

3.1.4 Improving Data Quality

The quality of the BR data has been a major concern over the four BR cycles. Several issues need attention to improve the reliability and credibility of the BR reports. Furthermore, by integrating advanced technologies, such as big data analytics, artificial intelligence (AI), Geographic Information Systems (GIS), and earth observation technologies, we can significantly improve the precision and utility of agricultural data, leading to more informed decision-making. Data in reputable international databases, which are officially shared with international organizations by National Statistics Offices (NSOs) on behalf of governments, should be the default data source because these will have already undergone rigorous data quality assurance, consistency checks and control, and standardization using internationally adopted standard classifications. Any exception to this should be justified on a case-by-case basis. Consequently, the relevant indicators in this category should be identified, and the sources should be from the National Statistics Offices within the MS.

4- Conclusion and Recommendations

The following key recommendations would enhance the effectiveness of the CAADP data management and mutual accountability frameworks for the next 10 years of the CAADP.

i. **Data management and mutual accountability need to be well-funded at all levels:** national, regional, and continental. Investment in data systems and infrastructure is critical for efficient data management. Setting aside funds for continuous data collection and stakeholder validation systems enhances the quality and credibility of the data. In addition, there needs to be investment in continuous capacity-building efforts, including education and training programs, to strengthen the capacity of Member States and RECs. Building expertise in data management, analysis, and decision-making can strengthen the overall implementation of mutual accountability mechanisms. Furthermore, strategic alliances should be fostered to support targeted investment in building technical and infrastructural capacities for digital technologies and innovations, including AI, Innovative "Internet of Things" products, Big Data, and Machine Learning.

ii. **Strengthen CAADP data governance structure, ethics, monitoring, and evaluation.** This means strengthening key stakeholder platforms involving Member States, regional bodies, and technical institutions to enforce responsibilities, reporting procedures, and review processes, promote transparency, and foster a sense of ownership and commitment. Focus on strengthening stakeholder engagement inclusiveness, enhancing capacity building, improving analytical tools and frameworks, and ensuring accountability. Harmonize the existing mutual accountability frameworks such as the JSR, CAADP reviews, BR dialogues, NDPs, and SDGs for more effective data collection and mutual accountability processes. Integrating the JSR and BR procedures into national development planning is crucial in enhancing sector performance and shaping policy

iii. **Promote the adoption of emerging technologies, such as AI and big data analytics, to improve the efficiency and effectiveness of data management within the CAADP framework.** This should also include adopting international standards, e.g., SDMX (Statistical Data and Metadata exchange). In addition, strengthen the African Digital Infrastructure, including utilizing Digital Public Infrastructure (DPI) through implementing the African Union Digital Transformation Strategy (2020-2030). Data sharing and integration through interoperable data systems at national, regional, and continental levels should be promoted to enhance knowledge and information sharing and inform the future outlook for agrifood systems.

iv. **Enhance the use of existing data from official national databases and recognized international databases as the default.** Countries should avoid setting up a new process that is disconnected from the existing official national data reporting mechanisms.

v. **Enhance BR data quality by leveraging frameworks such as the Strategic Analysis and Knowledge Support System (SAKSS),** which provides credible knowledge and analysis for informed decision-making, thereby enhancing the effectiveness of the BR process.

vi. **Consider adopting a three-year Triennial Reporting (TR) cycle for the next 10 years of CAADP,** with annual data submission, analysis, and feedback for individual Member States, with the continental report compiled only in the third year. The feedback to the Member States would be done annually using a statistical progress assessment method, while the triennial report would use both the statistical progress assessment method and scores for the CAADP reviews. This will provide three continental reports, the last year being considered for developing the next 10-year action plan.

Annex

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43	Alene Arega	CGIAR
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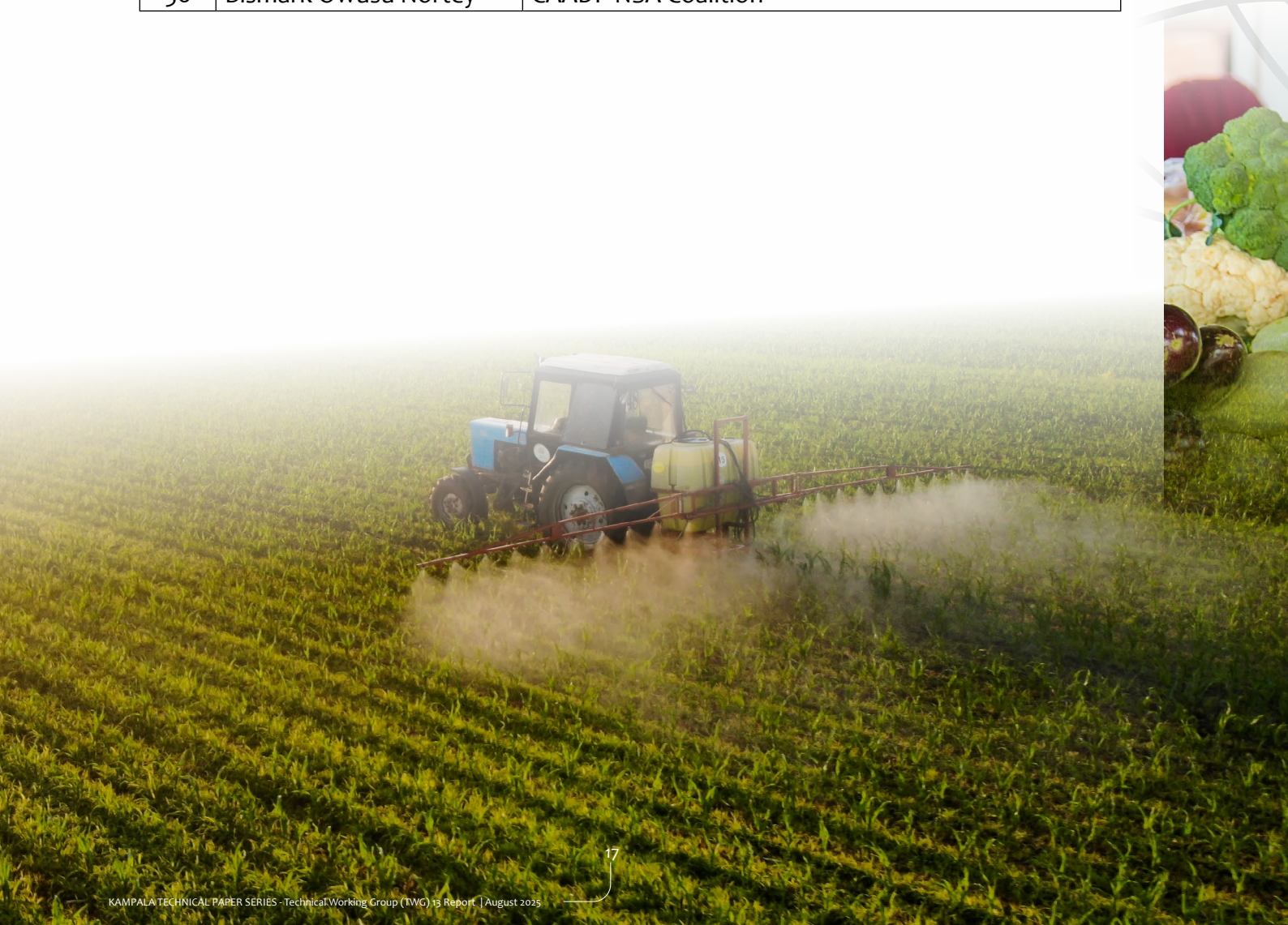
55	Kalifa Bagayoko	Independent Consultant
56	Bismark Owusu Nortey	CAADP NSA Coalition



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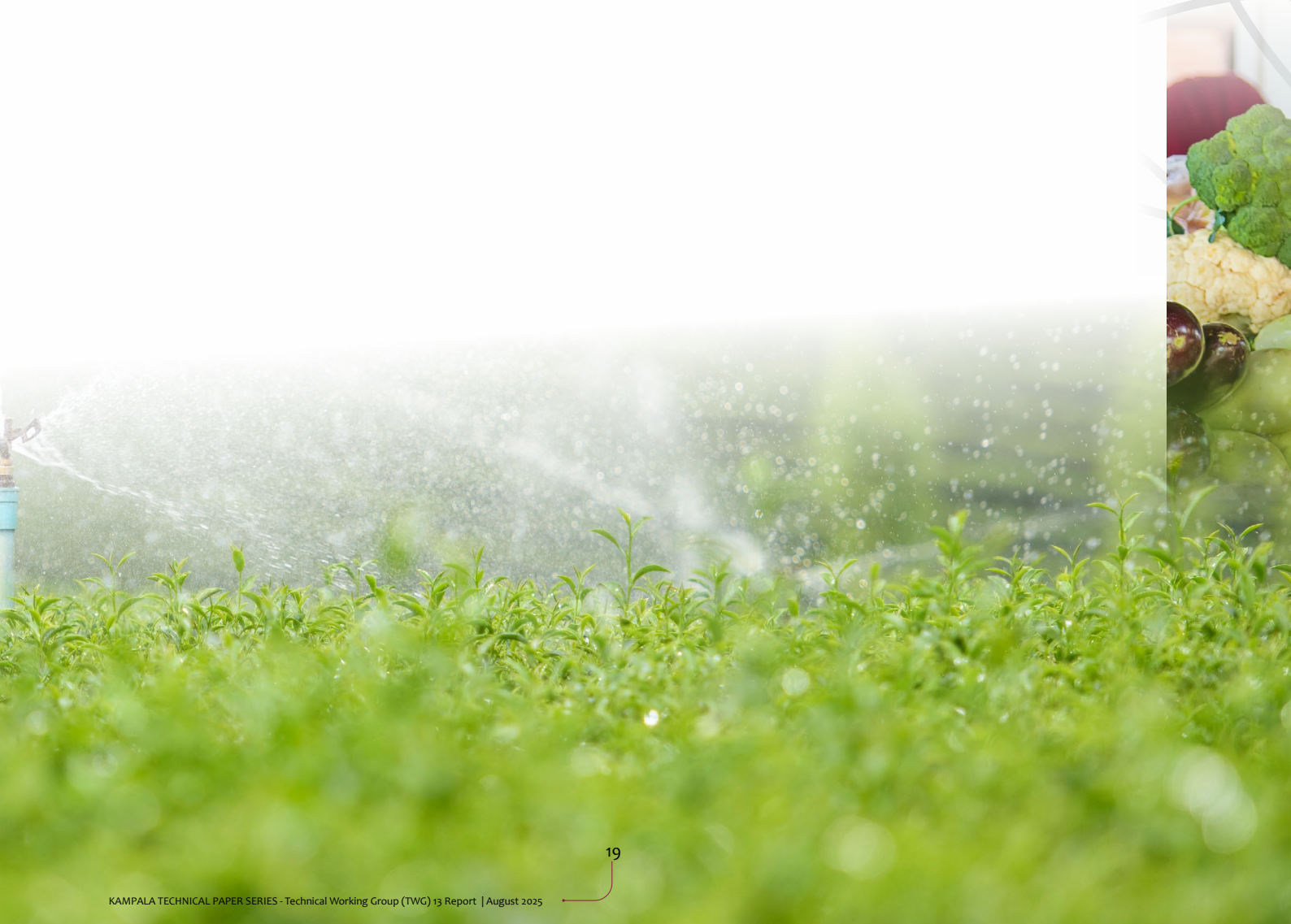
AKADEMIYA2063 is a pan-African non-profit research organization with headquarters in Kigali, Rwanda, and a regional office in Dakar, Senegal. Inspired by the ambitions of the African Union's Agenda 2063 and grounded in the recognition of the central importance of strong knowledge and evidence-based systems, the vision of AKADEMIYA2063 is an Africa with the expertise we need for the Africa we want. This expertise must be responsive to the continent's needs for data and analysis to ensure high-quality policy design and execution. Inclusive, evidence-informed policymaking is key to meeting the continent's development aspirations, creating wealth, and improving livelihoods. AKADEMIYA2063's overall mission is to create, across Africa and led from its headquarters in Rwanda, state-of-the-art technical capacities to support the efforts by the Member States of the African Union to achieve the key goals of Agenda 2063 of transforming national economies to boost economic growth and prosperity. Following from its vision and mission, the main goal of AKADEMIYA2063 is to help meet Africa's needs at the continental, regional, and national levels in terms of data, analytics, and mutual learning for the effective implementation of Agenda 2063 and the realization of its outcomes by a critical mass of countries. AKADEMIYA2063 strives to meet its goals through programs organized under five strategic areas—policy innovation, knowledge systems, capacity creation and deployment, operational support, data management, digital products, and technology—as well as innovative partnerships and outreach activities. For more information, visit www.akademiya2063.org.

This publication was made possible through support provided by the Office of Policy, Analysis, and Engagement, Bureau for Resilience, Environment, and Food Security, U.S. Agency for International Development (USAID) under the terms of Award No. 72REFS24IO00003. The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of USAID.



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