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By Christian Henning, Mahamadou Tankari, and Johannes Ziesmer

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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), the African Union Development Agency-New Partnership for Africa's Development (AUDA-NEPAD), Regional Economic Communities (RECs), and Member States in driving agricultural transformation toward a self-reliant and productive Africa.

The recently adopted [Kampala CAADP Declaration](#) on *“Building Resilient and Sustainable Agri-food Systems in Africa”* and the associated [CAADP Strategy and Action Plan \(2026-2035\)](#) will build on the success and deepen the progress achieved after two decades of CAADP implementation, during which Africa significantly improved in economic and agricultural growth, poverty reduction, nutrition outcomes, and agricultural trade expansion. The next 10-year cycle of CAADP implementation must further deepen its focus to incorporate lessons while responding to emerging issues to accelerate sustainable food system transformation within a context of climate change and multifaceted stressors and shocks.

The longevity and continued success of CAADP can be attributed to its credibility as a shared framework designed to guide Member States toward agricultural transformation and economic growth. Driven by the CAADP principles and values, with emphasis on African ownership and mutual accountability, alongside review and benchmarking, data and analytics have been central to CAADP's evidence-based planning and implementation approach. As Africa prepares for the implementation phase of the Kampala CAADP Declaration, which comes into force on January 1, 2026, evidence and robust data analysis will continue to remain indispensable to the successful implementation on the ground. This is the rationale behind AKADEMIYA2063's **Kampala Policy Brief Series**.

The purpose of the policy briefs is to serve as reference documents for policy analysts and planners across AU Member States as they prepare their programs in response to the Kampala CAADP Declaration. The policy briefs will provide a synthesis of a large body of research tackling topics of strategic relevance to Africa's development agenda in parallel with key issues to be addressed during the new phase of CAADP implementation to provide insights, analyze emerging ideas, review crosscutting thematic areas, and propose policy recommendations that can be replicated for sustainable impact.

The evidence presented in the Kampala Policy Brief Series is derived from published research and data by AKADEMIYA2063's scientists and collaborators across Africa and outside the continent. These lessons are made accessible to policymakers, non-state actors, and other practitioners at the continental, regional, and national levels, as well as development partners, to support the implementation of CAADP 2026-2035. In addition to packaging the lessons and insights into comprehensive yet accessible knowledge products, AKADEMIYA2063 is facilitating policy dialogue through webinars. During these sessions, the findings are presented to a broad range of stakeholders to guide programmatic interventions supporting the implementation of the Kampala CAADP Agenda.



Abstract

The new Comprehensive Africa Agriculture Development Programme (CAADP) Strategy and Action Plan (2026–2035), under the Kampala Declaration, shifts from agriculture-led growth to a broader agrifood systems approach, recognizing links between agriculture, nutrition, development, and sustainability. This requires integrated, evidence-based policies backed by strong national data systems. To support this, AKADEMIYA2063 developed the **CAADP Policy Tool**—an integrated framework that guides policy choices, simulates future scenarios, and supports pro-poor growth planning. The tool enables governments to assess the effectiveness of public investments and policy mixes in achieving outcomes such as poverty reduction, climate resilience, and sustainable development. This policy brief presents the

theoretical and methodological foundations of the tool and illustrates its application in 38 African countries based on BR data. The CAADP Policy Tool’s flexible architecture combines the policy–growth and growth–development goal dimensions, allowing for adaptive, country-specific planning. By linking policy actions to measurable development indicators, it enhances transparency, accountability, and trust in the policymaking process. Findings highlight the importance of context-specific, goal-oriented budgeting over uniform targets. The tool reveals that while total public spending correlates strongly with poverty and income goals, it is less predictive for nutrition and environmental outcomes—suggesting that these areas have received less historical focus.



Introduction

Sustainable economic growth is widely recognized as vital for guiding developing countries out of poverty and into middle-income status, with public policy serving as a key driver (Saith 1981; Gaiha 1989; Sen 1997; Fan, Hazell, and Thorat 2000; Diao et al. 2012). In sub-Saharan Africa, a strong and resilient agricultural sector is especially critical for such growth. The CAADP framework, initiated with the Maputo Declaration and reinforced by the Malabo Declaration and the recently adopted Kampala Declaration in January 2025, underscores the importance of well-targeted public investments in agriculture. Yet, operationalizing these strategies remains challenging: governments must determine the optimal total investment for agriculture, decide how best to allocate resources across policy programs, and align these decisions with country-specific contexts.

In addition, the new CAADP Strategy and Action Plan (2026–2035), under the Kampala Declaration, marks a shift from agriculture-led growth to a broader agrifood systems approach, recognizing the interconnectedness of agriculture, nutrition, economic development, and sustainability. This transformation requires

integrated, evidence-based policies supported by strong national data and analytical systems. Innovative modeling approaches—combining scientific evidence, empirical data, and expert knowledge—are crucial for addressing uncertainties in the relationships between policy, growth, poverty reduction, and malnutrition. These approaches support policymakers in selecting the right policy mix, assessing trade-offs, and tracking progress through measurable indicators. In this context, AKADEMIYA2063 has developed the CAADP Policy Tool that offers comprehensive policy evaluation, future scenario simulations, and policy planning. The tool helps identify optimal policies and gaps, adapt current strategies, and foster more effective pro-poor growth.

This policy brief outlines the theoretical and methodological foundations of the CAADP Policy Tool. It provides an illustration for conducting an ex-post analysis of the impact of national CAADP policies under Malabo on development outcomes, including poverty reduction and nutrition in 38 countries. Following this introduction, the second section presents the theoretical and methodological framework underlying the tool. The third

section outlines the CAADP policy inputs aligned with the Malabo Declaration. The fourth section examines how variations in total public budget allocations affect progress toward key development goals. The sixth section focuses on the formulation of country-specific optimal

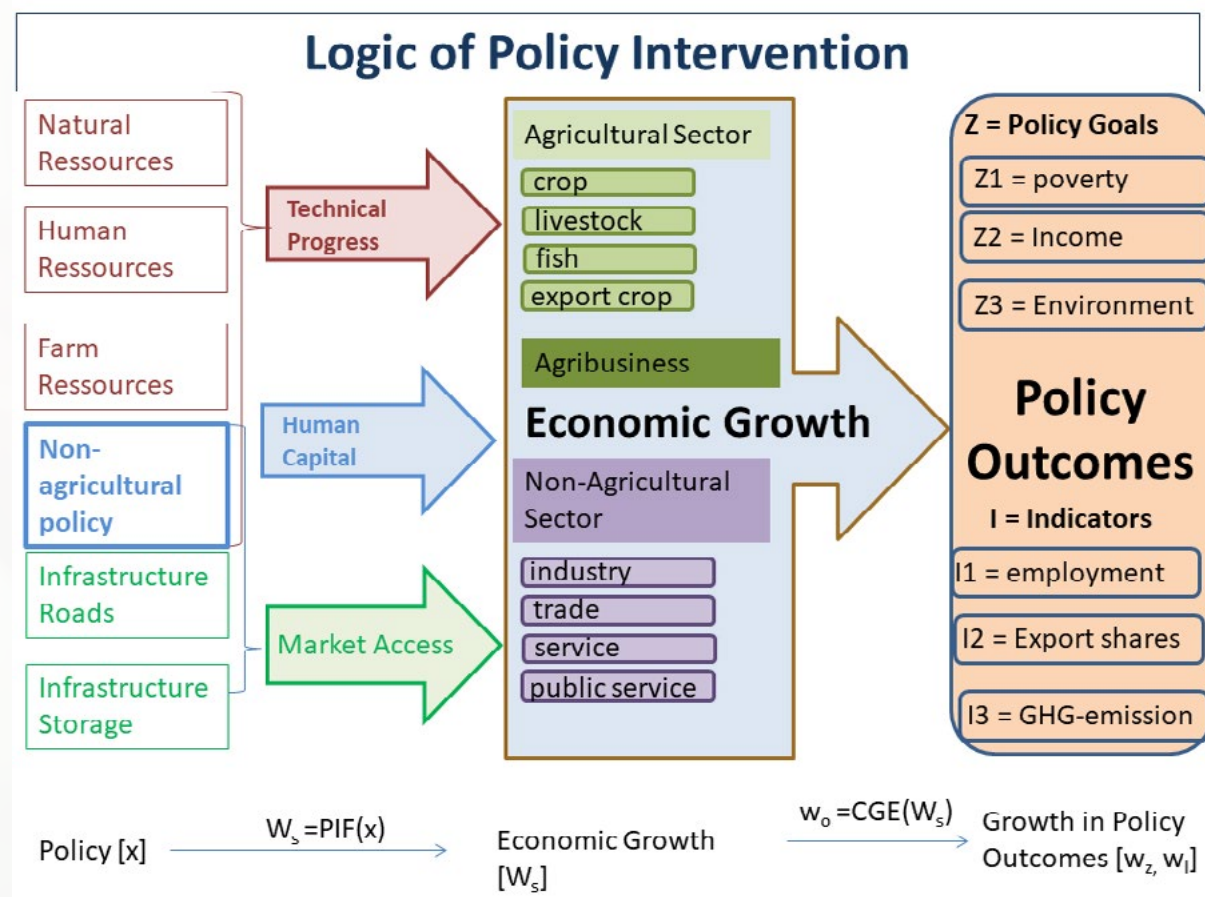
CAADP investment plans, highlighting policy gaps identified in 38 countries under the Malabo framework. The final section presents the conclusion, summarizing key insights and recommendations as well as giving an outlook on future work.

2. Theoretical and Methodological Framework

An effective development strategy relies on a clearly articulated intervention logic or theory of change. Within the CAADP, this logic is built on the principle of agricultural-led pro-poor growth, driven by technical progress and other policy levers. Since the United Nations Food Systems Summit (2021), CAADP's focus has broadened to encompass sustainable agrifood systems transformation, integrating social (poverty and nutrition), economic (income, employment), and environmental (natural resource management, greenhouse gas reduction) goals. Yet, even under this expanded vision, a sustainable increase in agricultural productivity remains a central pillar of the post-Malabo CAADP Agenda.

The basic intervention logic of both the past and future CAADP Agenda is summarized in Figure 1.

Figure 1: The logic of policy intervention under the CAADP Agenda.



Source: Authors' compilation based on Henning et al. (2017).

Notes: GHG = "greenhouse gas"; PIF = "policy impact function"; CGE = "Computable General Equilibrium" (model).

The intervention logic for sustainable growth processes can be subdivided into two: the growth–goal and the policy–growth linkages, respectively. A key premise of CAADP is that sectoral growth—especially agricultural—can generate multiple, often interdependent, development outcomes. These outcomes include poverty reduction, improved nutrition, and environmental sustainability. To capture both the growth–goal and policy–growth linkages within a single framework, we employ the Computable General Political Economy (CGPE) model (Henning, Badiane, and Krampe 2018; Ziesmer et al. 2023). This integrative approach merges Policy Impact Functions (PIFs) with CGE-based modeling to show how a specific policy package (e.g., public investment in agricultural research, infrastructure, or input subsidies) translates into changes in sectoral productivity or market access, and subsequently, how those changes influence poverty, nutrition, or environmental goals.

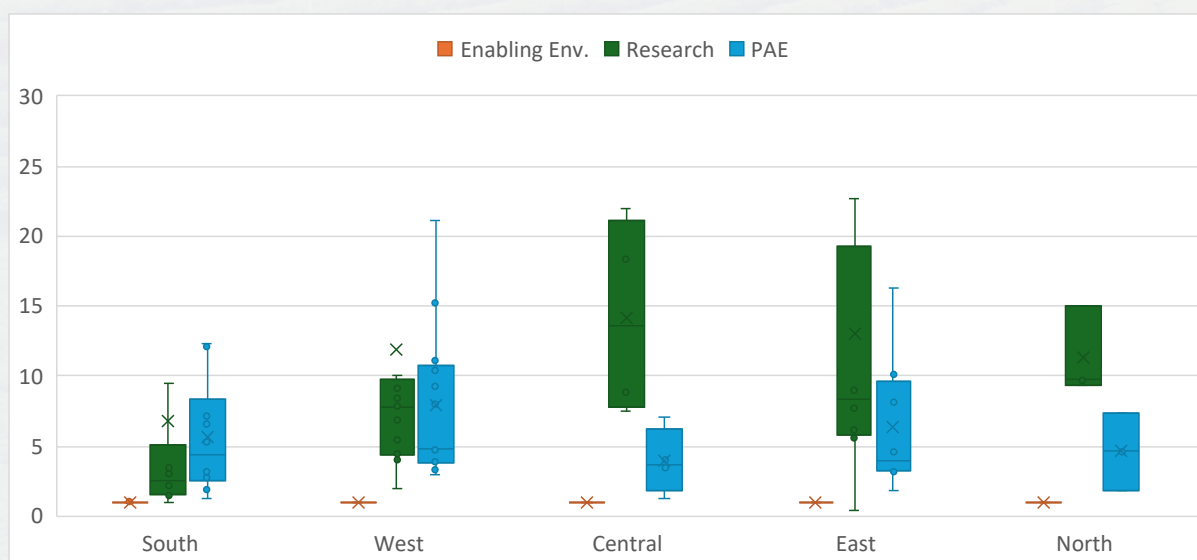
To identify and estimate the parameters linking policies to growth and growth to goals, Artificial Intelligence (AI), Metamodeling, and Bayesian Estimation have been conducted on several data types, including CAADP Biennial Review (BR) Data and Expert Elicitation and Statistical Data which are insights from policymakers, field practitioners, and sector experts are collected to inform model assumptions and refine parameters where data gaps exist.

3. Public Agricultural Expenditure Under Malabo

A central policy input under CAADP corresponds to public investments in different policy programs, summarized in the NAIP formulated by each country. Across the 38 African countries in our sample, public agricultural expenditure as a share of the total state budget (x_{PAE}) averages 6.4 percent, but varies widely—from below 2 percent in Angola, Chad, and Egypt to above 10 percent in Ethiopia, Mali, and Malawi. This contrast highlights that only seven countries meet or exceed the Malabo target of dedicating 10 percent of public budgets to agriculture (see Figure 2).

However, when it comes to promoting productivity gains in the agricultural sector, the more relevant measure is the share of public agricultural expenditures in agricultural Gross Domestic Product (GDP). Accordingly, we also reported the latter measure based on the BR data in Figure 3.

Figure 2: Public agricultural expenditure allocations by African region, base run, by type.



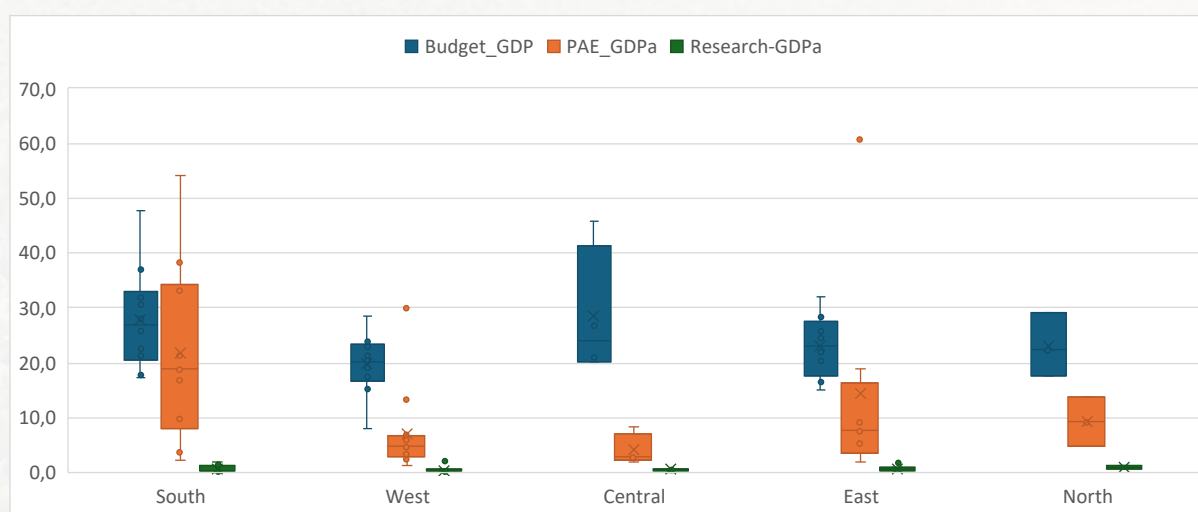
Source: Authors' computations.

Note: PAE = "Public Agricultural Expenditure."

When viewed relative to GDP, the total state budget averages 24 percent in the base run, ranging from 8 percent (Nigeria) to 47 percent (Lesotho). However, as can be seen from Figure 3, agricultural expenditure as a share of agricultural GDP also spans from 1.4 percent (Nigeria) to over 60 percent (Djibouti), with West and Central Africa generally allocating less than 6 percent, while Southern Africa averages above 10 percent.

Spending on agricultural research as a share of total agriculture expenditures under CAADP amounts to 11 percent on average. Agricultural research allocations range from minimal values of below 1 percent in Djibouti and Lesotho to values above 20 percent in Ghana, Nigeria, and Uganda (see Figure 2).

Figure 3: Total state budget as a share of GDP, public agricultural expenditures as a share of agricultural GDP, and public expenditures on agricultural research as a share of agricultural GDP, by African regions, base run.



Source: Authors' computations.

Notes: The "Budget_GDP" legend category corresponds to the GDP share of the total state budget. The "PAE_GDPa" legend category corresponds to the share of agriculture expenditure in agricultural GDP. The "Research-GDPa" legend category corresponds to public expenditures on agriculture as a share of agricultural GDP.

However, as shown in Figure 3, for agricultural research, most countries also fail to meet the commonly referenced 1 percent benchmark. It remained stable, averaging just 0.6 percent for spending on research in relation to agricultural GDP.

A specific focus of the CAADP process is on the quality of the political processes contributing to agricultural development. In particular, under the CAADP Agenda, three aspects of the CAADP policy process have been identified: (i) commitment to the CAADP process, (ii) mutual accountability, and (iii) intra-African trade. Accordingly, since the Malabo Declaration, specific indicators have been developed to track countries' investments into the three CAADP principles. In the BR data, seven policy impact indicators related to the three components of the enabling environment, which determine the quality of the CAADP policy process, are reported

Moreover, in the CAADP investment plans, specific policy programs investing in the enabling environment and fostering the institutionalization of CAADP principles have been formulated. In the CGPE approach, specific policy impacts resulting from CAADP investments in the enabling environment are considered as an increased overall efficiency of investments.

Nevertheless, total CAADP expenditures allocated to the enabling environment (x_{EE}) are comparatively low in all countries. Accordingly, seven BR indicators, which capture the overall quality of policy processes under CAADP, also register relatively low average scores (below 50 from a maximum of 100). However, budget allocations across the different components of the CAADP process vary significantly across African countries. Based on reported BR data, countries spent, on average, 51 percent of their enabling-environment budgets on improving mutual accountability, followed by 38 percent for CAADP process improvements, and 9.7 percent on enhancing intra-African trade.

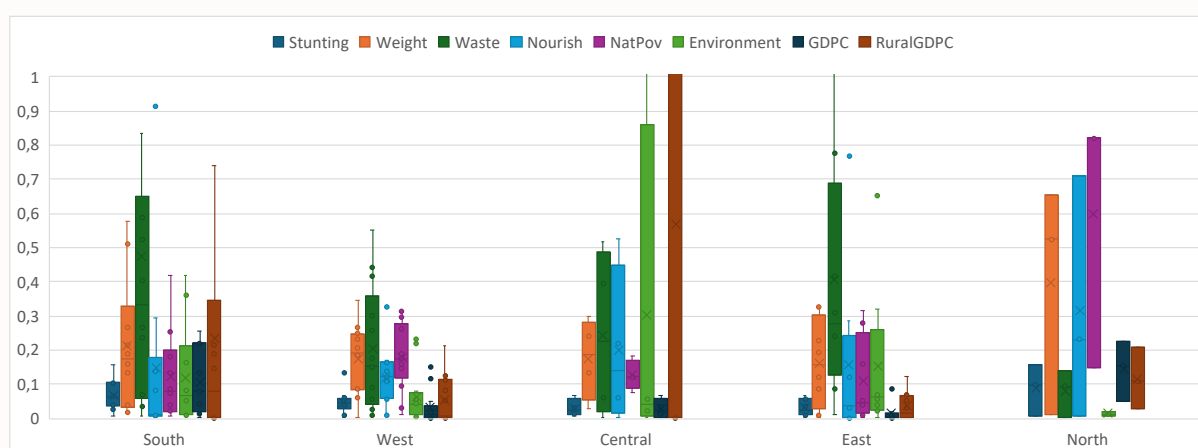
4. Measuring the Impact of Public Expenditure on Development Goals

This section explores how changes in total public budget allocations influence the achievement of development goals. Drawing from the CGPE framework, budget elasticities indicate how responsive a goal is to changes in overall public expenditure; for example, they show the percentage change in goal achievement resulting from a 1 percent increase in total government spending. As shown in Figure 4, budget elasticities under the Malabo National Agriculture Investment Plans (NAIPs) are consistently below 1.0 across all 38 African countries and for all development goals analyzed. This implies diminishing returns to scale: increasing the total public budget by 1 percent leads to a less-than-proportional improvement in outcomes, such as poverty reduction, improved nutrition, economic growth, or environmental sustainability. However, when interpreting budget elasticities, one has to take into account that these indicate the percentage change in biennial growth rates of goal achievements induced by a one percent increase in total budget expenditures. Accordingly, an elasticity below 1, for example, for Per-Capita Income, would not imply inefficient budget spending.

Interestingly, the degree of responsiveness varies across goal categories (see Figure 4). Poverty and nutrition-related goals—such as reducing undernourishment or stunting—tend to be more responsive to increases in public spending. Their median elasticities range from 0.048 to 0.238, suggesting that these goals can be improved more efficiently with moderate increases in budget allocations. In contrast, economic and environmental goals exhibit lower responsiveness, with median elasticities ranging from 0.028 to 0.047. These areas may require larger or more targeted investments to achieve measurable improvements.

The analysis also highlights regional disparities in responsiveness. For instance, the elasticity for reducing child wasting is notably lower in North Africa compared to other regions, indicating that achieving progress in this specific area may be more challenging or may depend on additional non-budgetary factors such as institutional capacity or demographic pressures. To understand the practical implications of these elasticities, the study converts them into cost elasticities—i.e., the additional percentage of the total budget required to achieve a 1 percent increase in goal performance. The results suggest that even modest gains in development outcomes can require substantial fiscal effort. **Depending on the goal, countries may need to increase their budgets by anywhere between 4.3 percent and 23 percent above current levels to achieve a one percentage point improvement in biennial growth rates. This has important implications for policy planning under CAADP. While some goals—especially those related to poverty and nutrition—may respond relatively well to budget increases, others, particularly economic and environmental objectives, are more resource-intensive and may require complementary strategies beyond simply increasing expenditure.**

In conclusion, while increasing public budgets can contribute to development progress, the scale of improvement depends not only on how much is spent, but also on how efficiently funds are allocated and targeted to specific policy priority areas, such as research and extension or infrastructure. Strategic prioritization, combined with improvements in implementation and institutional quality, will be crucial to maximizing the impact of public investment under the CAADP framework. Applying our approach, budget allocations that optimally fit specific needs and framework conditions of an individual country can be identified. This will be demonstrated in the next section.

Figure 4: Total budget elasticities [$\sum \theta_{ij}$] for policy goals, by African region.

Source: Authors' computations.

Notes: Stunting = prevalence of stunting among children under 5 years. Weight = prevalence of underweight children under 5 years. Waste = prevalence of wasting among children under 5 years. Nourish = proportion of population that is undernourished, %. NatPov = poverty headcount, %, at national poverty line. GDPC = per capita GDP.

5. Identifying Policy Gaps and Country-Specific Optimal CAADP Investment Plans

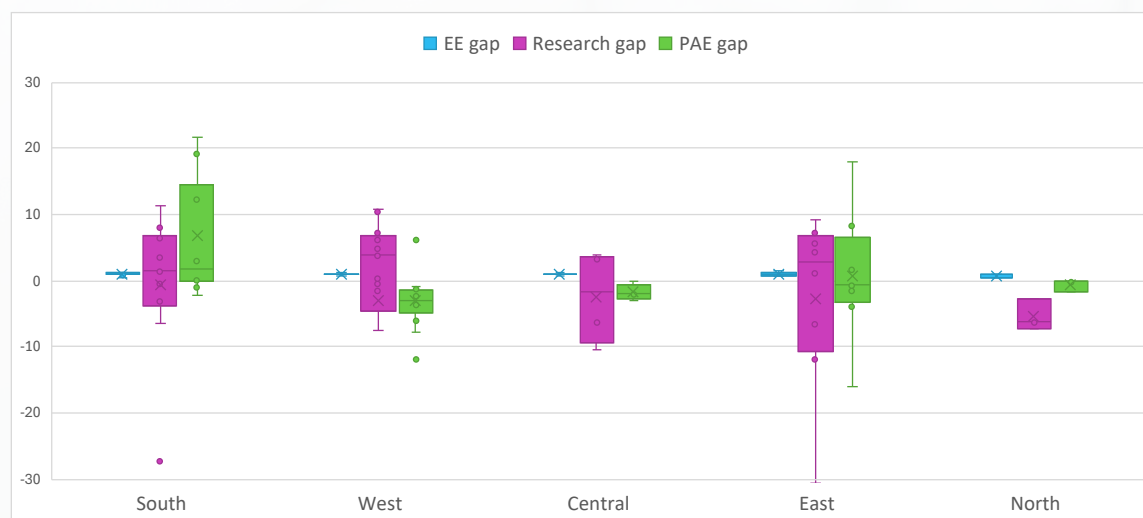
Beyond the policy–goal elasticities discussed above, it is relevant to understand to what extent goal achievements can be increased if CAADP investments are reallocated toward a specific policy program or pillar. To identify optimal CAADP investment strategies, it is essential to consider the relative importance of different development goals, which may vary across countries due to differing economic, social, and political priorities. These relative importances may significantly differ across countries. Accordingly, for an effective domestication of the Kampala Declaration, national interests must be reflected in various policy goals. To demonstrate the utility of the CAADP Policy Tool, we examine how it can help countries in implementing the effective domestication of the Kampala CAADP Declaration. We achieve this by identifying the most effective way to reallocate public spending across various CAADP programs. This is achieved by aiming to meet multiple goals simultaneously, while staying within the existing budget and treating all goals as equally important.

Comparing optimal to current policies reveals relevant policy gaps—the extent and direction in which investments should be adjusted. As shown in Figure 5.1, these indicate where spending should increase (positive gap) or decrease (negative gap) to improve efficiency. On average, the gap in agricultural expenditure is small (+0.14 percentage points). In comparison, the median gap is negative (-1.13 points), suggesting that most countries are currently over-investing in agriculture. This implies that they could achieve the same results with less overall budget expenditure or realize higher achievements with the same total CAADP budget by reallocating expenditures across CAADP programs.

Interestingly, most countries appear to invest too little in agricultural research, with a typical shortfall of about 1.3 percentage points. However, the average gap is negative (-3.4 points) because a few countries spend far more than needed.

Hence, these findings also clearly call for more context-specific, goal-sensitive agricultural investment strategies. Uniform targets, such as the 10 percent CAADP benchmark, may not accurately reflect optimal policy needs. Instead, countries should align their spending more closely with the impact potential, sectoral context, and cost-effectiveness, especially for research and governance-related investments.

Figure 5.1: Policy gap in public agricultural expenditure allocations by type, percent, by African region.



Source: Authors' computations derived from Computable General Political Economy model.

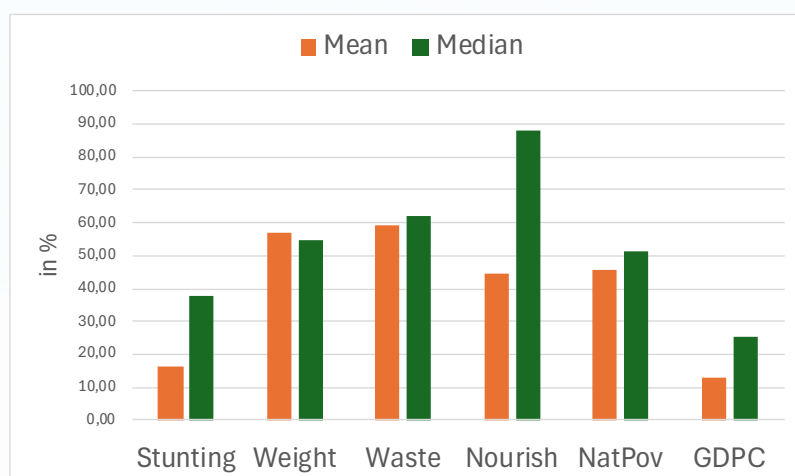
Note: EE = "enabling environment"; PAE = "public agricultural expenditure".

This analysis reveals a clear pattern regarding investments aimed at enhancing the quality of the CAADP process. In particular, our study reveals a widespread underinvestment in the enabling environment. In fact, investing in CAADP principles helps improve decision-making by strengthening the use of evidence and mutual accountability. This leads to a more effective use of limited public funds across all 38 African countries. The latter might be especially important for the designs of future NAIPS under the Kampala Declaration, given the rapidly changing and evolving post-ODA¹ landscape. In this regard, our analysis suggests that improving the quality of the CAADP process proves to be an effective strategy for mitigating the effects of future reductions in ODA.

To illustrate the importance of allocating budget expenditures optimally, we calculated for each goal the share of additional growth rate induced by an optimal policy setup in relation to observed growth rates in the base run. In Figure 5.2, the median and mean of these shares have been calculated for the 38 African countries examined. As can be seen, the impact of optimal budget allocations is significant—average annual goal achievements increase by between 13 and 59 percent, with medians ranging from 25 to 88 percent. In particular, progress toward achieving the malnutrition and poverty reduction goals has increased significantly. In contrast, growth in per capita income is comparatively lower.

¹ Official Development Assistance.

Figure 5.2: Change in goal achievements induced by optimal policies in relation to base run, mean, and median change in %.



Source: Authors' computations.

Notes: Stunting = prevalence of stunting among children under 5 years. Weight = prevalence of underweight children under 5 years. Waste = prevalence of wasting among children under 5 years. Nourish = proportion of population that is undernourished, %. NatPov = poverty headcount, %, at national poverty line. GDPC = per capita GDP.

6. Conclusion and Policy Implications

The new CAADP Strategy and Action Plan (2026–2035), under the Kampala Declaration, shifts from agriculture-led growth to a holistic agrifood systems approach, emphasizing integrated, evidence-based policies and targeted public investments. Implementing this vision requires governments to optimize investments, allocate resources effectively, and tailor their strategies to the specific national contexts. This brief introduces the CAADP Policy Tool, developed to support informed policymaking.

The tool is an integrated model linking policy choices to growth and development goals. It identifies the most effective investment strategies for outcomes such as poverty reduction and climate resilience, and can be updated with new data or insights, ensuring policy relevance over time. Its application has shown that context-specific, goal-oriented budgeting outperforms one-size-fits-all targets. It also promotes transparency and stakeholder trust by linking inputs to measurable results. A key policy recommendation is to invest more in enhancing the quality of the political process and creating enabling environments, as well as expanding the availability of data, tools, and indicators to better support nutrition, environmental sustainability, and climate resilience. The findings presented here draw from an ex-post CGPE analysis under the Malabo Declaration. Current efforts focus on ex-ante applications of a comprehensive CGPE framework to identify optimal country-level policy designs aligned with the Kampala Declaration, considering evolving global dynamic framework conditions such as shifts in global trade, aid, or global policy reforms like the European Union (EU) Green Deal.

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ABOUT AKADEMIYA2063

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 Agenda 2063 and grounded in the recognition of the central importance of strong knowledge and evidence 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 changing livelihoods for the better.

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 the African Union's Agenda 2063 of transforming national economies to boost 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 partnerships and outreach activities. For more information, visit www.akademiya2063.org.



Building Resilient and Sustainable Agrifood Systems in Africa



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