

**Ministry of Foreign Affairs DANIDA
of Denmark**

Resource Mobilisation for Development

Anti-Corruption and Domestic Resource Mobilisation Programme 2023 – 2026

Research and Capacity Building for Domestic Resource Mobilisation

**The University of Copenhagen Development Economics Research Group (UCPH-
DERG) in partnership with the Global Trade Analysis Project (GTAP)**

2025 End of Calendar Year Report

26 February 2026

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1. Introduction

The project document for the present project was formally approved by Danida on 1 September 2025. The document outlines the background, objectives and management arrangements for the partnership between the University of Copenhagen Development Economics Research Group (UCPH-DERG) ('implementing partner'), the Global Trade Analysis Project (GTAP) ('the associated partner' and jointly 'the project partners') and the Ministry of Foreign Affairs of Denmark (MFA) to advance the objectives of Denmark's 'Resource Mobilisation for Development. Anti-Corruption and Domestic Resource Mobilisation Programme 2023-2026' ('the overall programme').

The project was swiftly established as a UCPH project under KU project number 127766, and the first of three disbursements of funds to UCPH amounting to DKK 3,212,651 (Q3 2025) was requested and effectuated by Danida. The second disbursement (Q1 2026) amounting to DKK 4,250,665 was also requested and disbursed. The partners also engaged with their respective legal departments to develop the needed UCPH-DERG-GTAP services agreement. This proved time-consuming and the agreement was only formally signed on 30 October 2025. While this did not delay project activities getting underway per se as the project PIs have remained in continuous contact it did delay the submission of the inception report.

The present 2025 End of Calendar Report provides in Sections 2 and 3 information on concrete initial steps taken under each of the two components before concluding remarks in Section 4. At the overall project level, the following activities can be noted:

- The advisory panel was formally established in 2025 with the following members:
 - Elizabeth Gavin is a Senior Economist in the Fiscal Affairs Department of the International Monetary Fund. She has in-depth experience with revenue issues in Africa and plays a leading role in the collection of data on revenue on the continent and beyond.
 - Stephen Karingi is the Director of the Macroeconomics, Finance and Governance Division in UNECA. He has been a major force in helping to establish African Continental Free Trade Area (AfCFTA), and he is keenly aware of the importance of the border in revenue collection.
 - Jane Nalunga is the Executive Director of the Southern and Eastern Africa Trade Negotiations Institute, which is a non-government organization seated in Uganda. She is an expert in trade, tax, and investment.

The first advisory panel meeting was held on 28 October, including mutual introductions, briefing on project objectives, and exchanges on proposed next steps alongside suggestions from the members of the panel. The panel endorsed the project document and suggested that many of the activities foreseen are important as proof of concept activities that can be scaled up in a next stage. Various locations for training and training partners were also identified.

One important suggestion made by Dr Stephen Karingi is that the project is welcome to rely on The UN Economic Commission for Africa's (UNECA) Committee of Experts of the Conference of African Ministers of Finance, Planning, and Economic Development and the Conference of the African Ministers as venues and opportunities to present and disseminate study findings.

The first Steering Group meeting was held on 25 November 2025 with representatives from Danida HQs and relevant embassies. The following agenda was adopted:

- Welcome and round of introductions
- Objectives and aims of the project
- Updates on components 1+2
- Work plan first half of 2026
- Discussion
- Conclusion

The meeting was most helpful in introducing the project to the Embassies and helpful advice was provided. Partners recognised that the first meeting was introductory and exploratory but there was widespread agreement of the way forward. A second Steering group meeting should be scheduled around June 2026.

Finally:

- Contacts were during 2025 deepened with UNECA, and in-depth discussions were held with Dr Karingi's office during in-person visits by both PIs Both to Addis Ababa, during early October. This promises well for the ability to disseminate project findings and obtain policymakers feedback.
- A meeting with the team conducting the mid-term review of the overall Danida supported 'Resource Mobilisation for Development Anti-Corruption and Domestic

Resource Mobilisation Programme’ within which the present project is integrated has been agreed to be held on 12 November 2025.

It can also be noted that the deadline for applications for the post doc position to be based at UCPH-DERG in Copenhagen was established as mid-November. The appointment committee has been set up and the number of applications amounted to 160+. The final appointment of the chosen candidate is being finalised.

In what follows context and steps taken in each of the two component areas are described in more detail, before concluding remarks.

2. Component 1: Five In-depth Studies

Focus in the first component, which is under the direct responsibility of University of Copenhagen Development Economics Research Group (UCPH-DERG), is on current behaviour and issues with a focus on corruption at the border, social preferences, and dynamic effects of moving from informality to formality. Emphasis is on Ethiopia, Kenya/Uganda, and Tanzania.

While other institutions under the ‘overall programme’ also address these issues, the present project will add frontier research-based evidence to the knowledge generated by the programme overall. In the present project we will work in all cases with well-established collaborators in each country, and implement randomised controlled trials (RCTs) to generate empirical evidence on the effectiveness of policy interventions.

The five studies are:¹

- *Study 1. Does Public Goods Delivery Influence Trust in the State?*

The objective of this project is to strengthen state-citizen relations and enhance the state's ability to collect information and taxes, as well as respond to citizens' needs. To this end, we will administer a randomized controlled trial (RCT) that delivers solar-powered water purifiers to a random sample of households in Singida, a region in Tanzania that periodically suffers from water scarcity.

Work on this project began in September 2025, and the following has already been accomplished:

¹ For further detail please see the programme document.

- Experimental design.
- Discussions with the provider of water purifiers (Solvatten) has been pursued.
- Discussions with local partners in Tanzania, who will distribute the water purifiers and assist with data collection, have been carried out.

We plan to have all agreements in place and a finalized experimental design by early 2026. The intervention will be piloted between February and May 2026, followed by the full implementation in June–July 2026. Partners include UCPH-DERG and Solvatten (the company producing the water purifiers we will distribute as part of the intervention), World Vision (an NGO in charge of distributing them), and NTNU (where project collaborating colleagues from Norway reside). It is highlighted that a driving force behind the project is a Tanzanian scholar (Samwel Nassary), who is doing his PhD there in Trondheim, which will help ensure local anchoring in Tanzania.

- *Study 2. Do incentives to foster official cross-border trade have lasting effects?*

This project will assess the long-term impacts of a randomized controlled trial (RCT) conducted in late 2024 with traders at the border between Kenya and Uganda. The RCT consisted of providing a subsidy to incentivize formal trade and information about the relative risks of choosing official vs unofficial crossings.

Work on this project began in September 2025, and the following has been accomplished:

- Preliminary discussions with local partners, including the Kenya Revenue Authority (KRA).
- Preliminary discussions with the implementing partner, Innovations for Poverty Action (IPA).

The experimental design will be finalized between January and June 2026; and the fieldwork will take place between the second half of 2026 and the first half of 2027; noting that contacts with KRA is ensuring access to the administrative KRA data needed.

- *Study 3. Do job-search programmes have long-term effects on formal employment?*

Promoting formal employment in developing countries remains a critical area of research and a fundamental challenge for governments interested in expanding their tax base. There is however no long-term evidence for one class of interventions that has showed the most promising short-term benefit-to-cost ratios – skill certification. In this study, we will quantify how an intervention conducted in 2021 in Ethiopia affected the amount of tax the state collected as well as the additional benefits individuals received due to the higher rates of

formality. This will be a pioneering endeavour, and the data generated will make fundamental contributions to our understanding of labour markets and formality in developing countries.

Work on this project began in September 2025, and the following has already been accomplished:

- Advanced discussions with implementing partners, who will be in-charge of the survey.
- Development of a preliminary version of the survey instrument.

The survey instrument will be finalized by early 2026, and survey activities will begin in later in 2026.

- *Study 4. Informality and Horizontal Inequality in Optimal Taxation: Evidence from Kenya*

This study will benefit policy makers in Kenya by giving them actionable insights into the preferences of the Kenyan population. This will be done by investigating the relationship between tax evasion and revenue mobilization, focusing on the challenges posed by informal labour markets. Using Kenyan tax and survey data, the research will explore how social preferences for horizontal equity can justify high exemption thresholds in tax systems characterized by significant informality.

Considerable progress has been made during the inception phase. Leveraging previous foundations, we have managed to fully deploy the pilot survey application. Pilot data from Kenya shows that the survey mechanism works and is well-understood by participants. Using the pilot data, we are currently developing new methods for non-parametric aggregation of social weights. This will allow us to capture an even broader array of preferences in the full-scale roll-out which is currently in the planning stage.

Thus: status in early 2026 is:

- Data collection completed and analyzed.
 - Novel insights: the fairness concerns arising due to income tax evasion directly constrains the possibility of implementing redistributive taxation in developing countries and changes the structure of optimal tax systems
- Final paper is being finalized and current results will be presented at CSAE conference in Oxford in March 2026.
- *Study 5. Reducing Taxpayer Attrition Using Compliance-Tested Benefits*

This study aims to become a tool for tax authorities (e.g., the Kenya Revenue Authority, KRA) to increase tax morale and thus compliance, proposing a novel strategy to address the challenge of taxpayer retention. Rather than concentrating on the formalization of informal workers—a strategy deemed ineffective—this project will evaluate methods to reduce taxpayer attrition in developing countries.

This project is currently in the planning stage. To ensure optimal project design we have engaged multiple experts on social protection and taxation in developing countries, including professors (e.g. Prof. Rema Hanna) from the Harvard Kennedy School. A targeting plan for the intervention is being devised with input from machine learning specialists. We are now planning field visits to conduct focus group interview necessary for the proper design of the intervention. Importantly, data availability has been confirmed.

In sum, the five in-depth studies will provide additional tangible analytical input and support to development partnerships, including the tax administrations in the countries mentioned, facilitating evidence-based policy making, where existing evidence is extremely scarce.

Finally, a general policy brief, summarising existing research, has been published. Policymakers globally face a persistent challenge in ensuring fair and effective corporate taxation, especially concerning multinational corporations (MNCs) and their profit shifting activities. This acute for low and middle-income countries (LMICs). They often have smaller tax administrative capacities and a higher reliance on corporate taxes for government revenue.

Profit shifting represents a sizable phenomenon that causes noteworthy tax revenue losses for these countries, and the policy brief addresses the dilemma of how to effectively counter multinational tax avoidance and bolster domestic revenue mobilization in LMICs. See [UNU-WIDER : Policy Brief : Tackling profit shifting in low- and middle-income countries](#).

Two additional policy briefs entitled “Global Profit shifting and cross-country inequalities” and “Detecting hidden wealth and mitigating IFF: policy evaluations” are in the making.

3. Component 2: Research, Data, and Training for Domestic Resource Mobilisation

Context

The Global Trade Analysis Project (GTAP) at Purdue University implements Component 2 of the Research and Capacity Building for Domestic Resource Mobilisation project. The component strengthens analytical capacity to inform fiscal policy and domestic resource mobilization (DRM) and conducts leading analytics. It complements Component 1 by

providing the data, analytical tools, and training necessary to translate research insights into evidence-based policy design. Component 2 is organized into three mutually reinforcing subcomponents: (i) data development, (ii) training, and (iii) simulation and applied analysis.

Subcomponent 2(i): Data Development for Public Finance Analytics

This subcomponent expands and refines the representation of public finance within the GTAP Data Base to strengthen its relevance for fiscal policy analysis in Africa. While the existing GTAP framework captures taxes implicitly, detailed information on income and factor taxes remains limited. The project will therefore construct a dedicated *public finance satellite* to the GTAP Data Base that explicitly identifies income, profit, social security, payroll, and property taxes by factor, industry, and region.

The work will rely primarily on data from the International Monetary Fund's Government Finance Statistics (IMF GFS), complemented by the IMF's World Revenue Longitudinal Database and the OECD Global Revenue Statistics. These sources will be harmonised and mapped onto GTAP's existing economic accounts, providing a transparent link between government revenue categories and model variables. The new dataset will allow researchers and policymakers to trace how taxes on factors and income influence production, trade, and welfare outcomes.

Methodological development will focus on ensuring internal consistency and comparability across Sub-Saharan African economies, recognising data gaps and variations in reporting standards. Collaboration with consortium partners and statistical agencies will support validation. The outcome will be a well-documented, replicable data module that integrates seamlessly with the GTAP v13 release. This satellite will serve as a durable public good, improving the capacity of African governments and researchers to analyse fiscal reforms and revenue strategies in the context of domestic resource mobilisation.

Version 12 of the GTAP Data Base is now complete. The data will be made available to the public in late February. This clears the decks for the data team to turn its attention to public finance issues, building on the experience developed for Version 12.

Subcomponent 2(ii): Training in Economywide Modelling for Domestic Resource Mobilisation

This subcomponent develops and pilots a structured, multi-level training programme in computable general equilibrium (CGE) modelling with general modelling elements and elements tailored to DRM and public-finance applications. Building on GTAP's long history

of capacity development, the programme adopts a modular design to guide participants from foundational knowledge to applied policy analysis.

Three modules are envisaged. *Module 1* introduces the scope and logic of economywide modelling, enabling participants to become informed users of CGE-based evidence. *Module 2* focuses on core modelling skills—data structures, model construction, and interpretation of results—aimed at developing capable research associates. *Module 3* advances participants to the level of junior modellers through specialised topics and rigorous assessments, notably public finance.

A Steering Committee and specialised Module Committees will oversee curriculum design, instructor selection, and quality assurance. A Distance Learning Committee will ensure adherence to best practices in online pedagogy and approve materials prior to release. The pilot offering will concentrate on public finance, targeting staff from ministries of finance, revenue authorities, and research institutions. Participants will engage in hands-on exercises and assessments delivered fully online. Pre- and post-training evaluations will gauge competency gains, and the lessons learned from the pilot will inform the integration of the course into GTAP’s permanent global training portfolio.

By early 2026 two key advances will have been made:

- A more detailed plan for the comprehensive course has been sketched out. This will be refined and will be distributed to stakeholders by the end of March 2026.
- The broader plan to be delivered by the end of March 2026 will contain more detail on the public finance module.

Subcomponent 2(iii): Simulation and Analytical Applications for Policy Design

The third subcomponent applies GTAP’s modelling framework to simulate fiscal and trade policy scenarios relevant to DRM and the African Continental Free Trade Area (AfCFTA). Drawing on the enhanced public-finance data and trained regional analysts, the simulations will assess the implications of alternative tax and trade regimes for revenue, growth, and distributional outcomes.

The analytical approach will follow best practice in policy-focused CGE analysis: defining baseline and reform scenarios, identifying key transmission channels, and quantifying economywide and sectoral impacts. A particular focus will be on comparing *business-as-usual* approaches—where tax and trade policies remain fragmented across countries—with *cooperative* or harmonised approaches that reduce inefficiencies and enhance collective fiscal capacity. The results will highlight opportunities for improved coordination of tariff and

tax regimes, better integration of border revenue management, and more equitable sharing of the gains from trade under AfCFTA.

Two specific areas are expected to be in focus. The first area relates to revenues from mineral exploitation, notably minerals critical to the ongoing clean energy transition. The demand for these Energy Transition Minerals (ETMs) has grown very rapidly in recent years, and this growth is expected to continue. The regional focus is expected to be Southern Africa including the Lobito corridor. The second area of focus relates to assessing potential gains from deeper integration such as formation of a customs union and/or regulatory harmonization in areas such as food safety.

The following can be said about the specific studies as per early 2026.

- Critical minerals
 - A 2017 database for critical minerals is essentially complete. This provides a template for 2023, which will be completed by mid-2026.
 - Work on analysis of critical minerals for Southern Africa has already begun.
 - The PI (Prof Arndt) will present in March at a Workshop organized by the South African Reserve Bank with part of the presentation focused on critical minerals.
 - While in South Africa, Prof Arndt will also advance the critical minerals work, including greater linkages with local institutions.
- The deeper integration work will be prioritized second.

4. Concluding Remarks

The project has gotten off to a very good start. While delays of a legal nature were encountered in the formulation of the GTAP services agreement and noting that post doc recruitment is taking time, the project is on track as evidenced in this 2025 End of Calendar Year Report.

Next immediate steps include the recruitment of the post doc, engagement with the Kenyan Revenue Authority (KRA) and finalisation of survey and intervention designs.

Finally, specific steps will during the first half of 2026 be taken to maximize interaction effects among the two components.