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Kenya & East Africa Trade and Resilience Analysis - Phase II Analysis Plan

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Phase II Analysis Plan

Kenya & East Africa Trade and Resilience Analysis

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I. INTRODUCTION

This briefing summarizes the recommended next steps for the trade and resilience analysis requested by the USAID Kenya/ East Africa office. Earlier in the project, a Landscape Map was completed to summarize the state of analytical work on trade and resilience in East Africa as well as in other regions. This was based on the findings of a comprehensive desk review and a series of stakeholder interviews undertaken in Kenya and Uganda. A key objective of this project was to identify gaps in the existing analytical work and understanding of the relationships between trade, food security, and resilience.

The landscape mapping exercise identified seven possible areas for future study that would address some of the existing knowledge gaps. Since then, COVID-19 has forced the Mission and the LEAP III team to reassess the feasibility of each option since many would require travel or additional funding. In this document, we present two of the recommended analysis plans that are both able to meet the Mission's learning objectives and provide useful information to guide program design, and which will be feasible within the remaining budget.

The two recommended plans are detailed below but can be broadly summarized as:

- Option A: Analysing the role that cooperative regional storage has within broader regional integration efforts in East Africa.
- Option B: Estimating the dynamic relationship between trade openness and food security across developing countries, including those in East Africa.

The rest of this brief will summarize what would be involved in each option, and will describe the main advantages and disadvantages of each.

II. OPTION A

Balancing Regional Trade and Regional Food Storage

Recently, there has been renewed interest in combining the management of regional food reserves with cross-border trade flows to reduce fluctuations in food consumption. This option is becoming even more critical as the COVID-19 pandemic induces even greater incentives for governments to interfere in trade flows, especially of sensitive commodities. The pandemic, combined with the latest locust infestation and ongoing climate shocks may endanger the progression of efforts towards regional integration.

Kornher and Kalkuhl (2016) argue that while trade integration amongst the Economic Community of West African States (ECOWAS) members is generally more effective than storage in smoothing supply, regional reserve management is required to dampen extreme supply shortfalls. Moreover, they find greater potential for storage cooperation with regard to an emergency reserve and less with regard to a stabilization reserve. This begs the question: “How could further trade and storage cooperation compliment existing regional integration efforts to improve food security in the East African region?” This is particularly relevant within the existing context.

This is a macro-regional question and would require modelling of regional relationships and macroeconomic shocks and parameterization using existing evidence. An analysis focusing on East Africa, that builds on the approach of Kornher and Kalkuhl (2016, 2019), would provide useful insights into the potential for a system that combines cooperative food storage systems with regional trade to improve food security efforts.

This option comes with several advantages:

- This can inform decisions about both regional warehousing and regional integration interventions or efforts in the region. This will be useful to the Mission’s programming, but can also inform dialogue with policy makers and governments with which the Mission is engaged.’
- This may also inform decisions about equality. As the desk review and the stakeholder interviews identified, the distribution of the impacts of regional integration are not generally felt equally, and often have no (or sometimes negative) impacts on the poorest regions. This analysis can help the Mission make decisions that improve equality within the region while also improving regional food security.
- Regional storage, and the ability for agricultural stakeholders to effectively plan was a recurring theme in stakeholder meetings. This analysis will be able to address the issues that are pressing in the region.
- The findings will be highly relevant now and in the near future, with the COVID-19 pandemic putting additional strain on regional cooperation. This analysis will be able to speak to the infrastructure (both physical and policy) needed to respond to this crisis and to future shocks.
- This can rely on publicly available data, so there will be no need to collect new data.

Disadvantages:

- The results will be sensitive to assumptions made and a robustness analysis will be necessary.
- Due to data limitations, it may in some cases be necessary to substitute synthetic data series for actual observations.

III. OPTION B

Estimating the Relationship between Trade Openness and Food Security

This would be a high level, cross-country empirical analysis that builds on the work of Dithmer and Abdulai (2017) and Mary, Saravia-Matus, and Paloma (2019). It would involve a dynamic panel estimation of the relationship between trade openness and food security (trade costs might be a better measure than actual trade flows due to informal trade). This type of analysis may allow us to find causal evidence about whether adoption of more-open trade policies contributed to improved food security outcomes.

One objective would be to sort out exactly why the existing empirical evidence is so unclear. In particular, Mary et al., and Dithmer and Abdulai find conflicting results using different methodologies, data samples and measures. It is important to understand why and what this implies. This empirical analysis would be a relatively straightforward research exercise, but would likely be less informative regarding key mechanisms and implications for policy in any specific country or region.

This option comes with several advantages:

- This will directly address the broad questions originally asked by the Mission.
- This has the potential to resolve and explain the inconsistencies observed in the existing analytical work.
- This analysis can rely on publicly available data, so there will be no need to collect new data.

Disadvantages:

- This analysis would not focus explicitly on the East African region, so it may not be as informative about the Mission's objectives.
- Several choices regarding the details of the econometric methodology may be arbitrary and leave the implications open to interpretation.

IV. REFERENCES

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