

Request for Proposals: Sustain Africa Fertilizer Monitor Index

Summary

IFDC, on behalf of Sustain Africa, is seeking a reputable consultancy to develop a fertilizer and food security risk index in support of Sustain Africa's learning agenda and the Sustain Africa Fertilizer Monitor. The project is funded by USAID.

Specifically, the consultancy will develop an index that will output a risk score for countries in Sub-Saharan Africa for which the required data is available. The risk score takes as input the International fertilizer price, a range of indicators affecting retail fertilizer prices, and time series data on farmer fertilizer purchase and use. It provides as output: A forecast of fertilizer affordability for farmers based on the International fertilizer price and: A forecast of impact on staple food production based on the affordability – and therefore uptake - of fertilizer for smallholder farmers of staple food crops in relation to food prices for net buyers and sellers of staple food crops.

Context

COVID, followed by the International fertilizer price spike in 2022, made fertilizer unavailable and unaffordable for many farmers in SSA. As International fertilizer prices began, in 2023, to return to pre-crisis levels, retail fertilizer prices in national currency in many countries have been slow to follow. In some cases, prices have continued to increase for certain products. High prices at national level therefore no longer reflect high International prices but rather nationally-specific factors such as worsening public finances and depreciating currencies that lead to higher local currency prices of imported fertilizers.

Sustain Africa has commissioned a research project to explore the key causal and correlational drivers that account for the relative differences in retail fertilizer price at national level from the International fertilizer price as well as the resulting impact on staple food crop production. The research project will output two models reflecting these two criteria, initially for six countries: Ghana, Nigeria, Kenya, Malawi, Tanzania and Zambia. The research project is not part of this RFP. The index that is the subject of this RFP builds on the models developed under the research project and comprises the development of an index that will be run on a monthly basis to provide alerts to the Sustain Africa Fertilizer Monitor Board (a group of organisations that will monitor fertilizer price and impact on staple food crop production and determine necessary action) of countries at risk for food security based on the impact of changes in International fertilizer prices, and taking into account shifts in food prices at national level.

Role of the consultancy

The consultancy will:

- Review the output of the research project - in particular the two models for retail fertilizer price and impact on staple food crop production - and propose the indicators that should be included in the index.
- Propose and assign indicator weightings based on the causality / level of correlation established by the two research models as well as qualitative analyses of policies and market dynamics in each of the six countries which might also inform the indicator weightings.
- Provide the index model in a suitable tool (e.g. Excel, Power BI etc.) that will be used as a prototype for a final system that will be integrated into the AfricaFertilizerWatch (note that systems specification or software development for AfricaFertilizerWatch is not part of this consultancy).
- Run the index in the chosen tool for the six focus countries (Ghana, Nigeria, Kenya, Malawi, Tanzania and Zambia) based on the historic data used to develop the models as well as updated datasets for indicators with monthly series. Work with the Project Steering Committee on an iterative basis to adjust the indicators and weightings to reflect current reality on the ground and the reliability of the input data.

- Recommend statistically valid methods for approximating missing data in required data series and also a statistically valid proxy methodology for indicators for which this is possible and for which the required data may be missing for additional countries.
- Test two new countries (TBD) on this basis (proxy and imputing methods) and work with the Project Steering Committee to adjust the proxy methodology to reflect current reality on the ground.
- Produce documentation on the index composition, weightings and data sources, and a user guide for updating the index.
- Be available to respond to questions by the team developing the software interface to integrate the index into the AfricaFertilizerWatch (note that systems specification or software development is not part of this consultancy).

Required competencies

- Proven expertise in developing indices based on complex sets of indicators and weightings and brand recognition for delivering credible results
- Proven economics expertise, preferably at macroeconomic level
- Demonstrated expertise in delivering projects to time and budget
- Some knowledge of the macroeconomic environment in Sub-Saharan Africa would be helpful

Budget ceiling, Deliverables and deadlines

Note that the models that are the output of the separate research project (not part of this RFP) will be available as of April 1 2024. Data collection and model output will be finalised by April 15. Final models will be available as of June 31 2024. All dates below refer to 2024.

1. Report following review of the research models and underlying indicators and recommendations on which indicators to select for the index and what weightings to assign to them – by April 30.
2. Building of the index and iterative testing for the 6 focus countries completed by May 31st
3. Iterative refinement of the index indicators and weightings and final index composition for the 6 countries by June 29
4. Documentation of the index methodology and user guide by June 29th
5. Proposal for valid methods of imputing missing data and methodology for determining and applying proxies for entirely missing data sets for new countries by June 29
6. Testing of two additional countries based on deliverable 5. including iterations with the review team by July 31st
7. Availability to respond to questions by the AfricaFertilizerWatch development team on an ad hoc basis until August 31st

The budget ceiling for this project is USD 100,000.

Please send proposals responding to the required competencies, with a detailed budget, to Frances Bell fbell@afap-partnership.org by March 29th.

Data and IP

As this project is donor-funded, all data and intellectual property (index and methodology) will be made available in the public domain. All data licensed as part of the project (that is not already in the public domain) remains the property of the licensor and may not be used by the consultancy in other projects without written prior consent by the licensor (which may be IFDC or another Sustain Africa Board organisation).

About Sustain Africa

Sustain Africa is a crisis response and resilience initiative to improve availability, affordability and effective and sustainable use of fertilizers while avoiding market distortion. Sustain Africa works as a coordination mechanism to enable private-sector input companies to provide rebated or donated fertilizer, that is blended and distributed by Sustain Africa partners, to farmers with relevant extension services – focused on agronomically-specific farming practices – market linkages for farmers and

credit guarantees for working capital to agro-dealers and suppliers. Fertilizer, seeds and services are provided through appropriate government or private-sector distribution channels and are monitored and evaluated as part of the programme. A key remit in Sustain Africa's country selection and models of working with private-sector input suppliers is to alleviate potential market distortion.

By the end of 2023, Sustain Africa coordinated the provision of affordable fertilizer to 1.6 million farmers in Uganda, Ghana, Mozambique, Malawi and Madagascar. By the end of August 2024, Sustain Africa aims to provide 200.000 MT of rebated / donated fertilizer provided just over 2 million farmers, in 7 countries (Burkina Faso, Ghana, Madagascar, Malawi, Mozambique, Uganda and Zambia) with advisory services in an additional Kenya and Nigeria and support for a soil health pilot project in Tanzania.

A key component of Sustain Africa's remit is a learning agenda. The focus is on identifying effective (and ineffective) measures to mitigate impact of input price hikes on food security and farmer profitability.

<https://sustainafrica-initiative.org>

About IFDC

IFDC is an independent non-profit organization that combines innovative research, market systems development, and strategic partnerships to spread sustainable agricultural solutions for improved soil health, food security, and livelihoods around the world.

Since 1974, IFDC has delivered technologies, practices, and capacity building to increase and sustain food security and agricultural productivity in over 100 developing countries.

IFDC plays a critical role in tackling these global problems through the development and transfer of affordable, effective fertilizer technologies. IFDC's solutions span a wide spectrum of research and development work, including production process research, applied research on soil systems, development of innovative fertilizer products and application technologies, market systems development to strengthen input and output value chains, and policy analysis to enable fertilizer importation, business development, and smallholder adoption of fertilizer and other soil fertility technologies.

<https://ifdc.org/>

About USAID

USAID is the world's premier international development agency and a catalytic actor driving development results. USAID's work advances U.S. national security and economic prosperity, demonstrates American generosity, and promotes a path to recipient self-reliance and resilience. The purpose of foreign aid should be ending the need for its existence, and we provide development assistance to help partner countries on their own development journey to self-reliance – looking at ways to help lift lives, build communities, and establish self-sufficiency.

USAID demonstrates America's good will around the world; increases global stability by addressing the root causes of violence; opens new markets and generates opportunity for trade; creates innovative solutions for once unsolvable development challenges; saves lives; and advances democracy, governance, and peace.

<https://www.usaid.gov/>