INDEPENDENT EVALUATION OF AGRA'S POLICY PROJECT - THE MICRO REFORMS FOR AFRICAN AGRIBUSINESS (MIRA) PROJECT

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AGRA Growing Africa's Agriculture

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Kauthar and nadyah and a relative was planting sweet potato between the cassava
Left: A cow is milked in Tanga, Tanzania. Faustina Akyoo, milks one of her five dairy cows in Tanga, Tanzania | Cover photo credit: murkas farming | photo credit: ILRI/Paul Karaimu).

Alliance for a Green Revolution in Africa (AGRA)

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LIST OF ABBREVIATIONS

ABP	Anchor Borrowers Program (Nigeria)
ACT	Agriculture Council of Tanzania
AFAP	African Fertilizer and Agribusiness Partnership
AfDB	African Development Bank
AGRA	Alliance for a Green Revolution in Africa
ANSAF	Agriculture Non-State Actors Foundation (Tanzania)
APRP	Agricultural Policy Reform Project
ATA	Agricultural Transformation Agency (Ethiopia)
BMGF	Bill and Melinda Gates Foundation
BPS	Fertilizer Bulk Procurement System (of Tanzania)
CAADP	Comprehensive Africa Agriculture Development Programme
CORAF	Conférence des Responsables de la Recherche Agronomique Africains
CSO	Civil Society Organization
DAC	Development Assistance Committee (of OECD)
DEC	Development Economics Global Practice (of the World Bank)
DLI	Disbursement -linked Indicator
DPL	Development Policy Loan
EBA	Enabling the Business of Agriculture (of World Bank)
ECOWAS	Economic Community of West African States
FASDEP	Food and Agriculture Sector Development Policy (of Ghana)
FEPSAN	Fertilizer Producers and Suppliers Association of Nigeria
FMARD/FISS	Federal Ministry of Agriculture and Rural Development/Farm Input Supply Services (Nigeria)
FO	Farmer Organization
FST	Fertilizer Society of Tanzania
IFDC	International Fertilizer Development Center
IFPRI	International Food Policy Research Institute
INERA	Institut de l'Environnement et de Recherches Agricoles (Burkina Faso)

ISFM	Integrated Soil Fertility Management
ISTA	International Seed Testing Association
MAAH/DGPER	Ministère de l'Agriculture et des Aménagements Hydro-agricoles/ Direction Générale de la Promotion de l'Economie Rurale (Burkina Faso)
MAAH/DGPV	Direction Générale des Productions Végétales
MAFAP	Monitoring and Analyzing Food and Agricultural Policies Program (FAO implemented and BMGF funded)
MARHASA	Ministère de l'Agriculture, des Ressources Hydrauliques, de l'assainissement et de la Sécurité Alimentaire (prior name of MOA in Burkina Faso ; now MAAH)
MFI	Micro-Finance Institute
MIRA	Micro Reforms for African Agribusiness
MOA	Ministry of Agriculture
MOFA/CSD	Ministry of Food and Agriculture (Ghana), Crop Services Directorate
MOFA/PPMED	Ministry of Food and Agriculture, Policy, Planning, Monitoring and Evaluation Directorate
MOFA/PPRSD	Ministry of Food and Agriculture, Plant Protection and Regulatory Services Directorate
MVIWATA	Tanzania Farmers Groups Network
NASC	National Agricultural Seed Council (of Nigeria)
NASTAG	National Seed Trade Association of Ghana
NDC	National Democratic Congress (Ghana)
NPP	New Patriotic Party (Ghana)
OCP	Office chérifien des phosphates (Morocco)
P4R	Program for Results
PACA	Partnership for Aflatoxin Control in Africa
PAP	Program Action Plan
PFI	Presidential Fertilizer Initiative
PFJ	Planting for Food and Jobs (initiative of Government of Ghana)
PI	Principal Investigator
PIATA	Partnership for Inclusive Agricultural Transformation In Africa
PS	Private Sector

PSDTF	Private Sector Development Task Force
RED & FS	Rural Economic Development and Food Security
REGIS/AG	Resilience and Economic Growth in the Sahel – Accelerated Growth (USAID Project)
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
SEEDAN	Seed Entrepreneurs Association of Nigeria
SMART	Specific, Measurable, Attainable, Relevant, Time Bound
SONAGESS	Société nationale de gestion des stocks de sécurité alimentaire du Burkina Faso
SUMATRA	Surface and Marine Transport Regulatory Authority (of Tanzania)
TAHA	Tanzania Horticultural Association
TASTA	Tanzanian Seed Trade Association
TBS	Tanzania Bureau of Standards
TFC	Tanzania Fertilizer Company Ltd.
TFRA	Tanzania Fertilizer Regulatory Authority
TOC	Theory of Change
TPA	Tanzania Ports Authority
TRA	Tanzania Revenue Authorities
VC	Value Chain
WAFP	West Africa Fertilizer Project
WASP	West Africa Seed Program
WBG	World Bank Group
WRS	Warehouse Receipt System

EXECUTIVE SUMMARY

The overall objective of this consultancy is to conduct an evaluation of the Micro-Reforms for African Agribusiness (MIRA) project. MIRA was funded by the Bill and Melinda Gates Foundation (BMGF). The Grant Agreement was signed in August 2013 and actual implementation at country-level finished in December 2018.[1] The project was implemented in five focus countries: Burkina Faso, Ethiopia, Ghana, Nigeria, and Tanzania. MIRA aimed at measurably improving the enabling business environment in order to expand investments in agribusiness firms in agricultural value chains. The Project Development Objective (PDO) was defined as follows: "At least 25 significant policy and regulatory reforms approved across the five countries within five years that induce measurable changes in private sector perceptions of agribusiness investment enabling environments." However, we recommend holding the project only accountable up to the approval of the policies and reforms, with the longer-term outcomes and impacts (including "measurable changes in private sector perceptions…") being beyond the direct control of MIRA. This is particularly true given the relatively short implementation period of approximately five and a half years.

AGRA's tender identified the following objectives for the evaluation of MIRA:

- Provide program management teams with information for priority setting for future fund allocation and investment decisions
- Address upward accountability concerning usage of funds
- Address downward accountability towards governments, stakeholders and beneficiaries
- Provide lessons for adapting current and future programs (both internally and externally)

The report focuses primarily on the first and the last objectives. As this evaluation is not an audit of internal financial flows, it will be difficult to address upward accountability concerning usage of funds in any depth. However, AGRA has audited 10 of the 11 grantees of MIRA using a well-formulated and thorough set of metrics, so this covers the second objective well. Further, overall accountability was addressed at least partly, since the evaluation assessed to what extent the envisaged objectives have been achieved. We examined downward accountability towards governments, stakeholders and beneficiaries in the broadest sense of the term, as MIRA has emphasized an inclusive, participatory and consensus-driven process to regulatory and policy reform. Therefore, we examined information and communication flows, feedback mechanisms, and consultation processes during reform efforts.

The evaluation approach focused primarily on policy and regulatory reform processes and outcomes. MIRA has pioneered a consultative approach engaging multiple stakeholders in

1 *During implementation, the closing date was extended to December 31, 2019. However, this extension was mainly to allow for completion of cross-country activities, such as this evaluation.*

comprehensive regulatory reform efforts, which is evaluated and compared to other approaches to regulatory reform. Limited attention was paid to longer-term outcomes and impacts, since these are considered to be beyond the scope of the project. Given this evaluation orientation, most of the assessment is qualitative. The evaluation methodology includes various instruments to address the diverse set of review questions and allow for systematic triangulation of findings.

These instruments include: (i) a comprehensive desk review; (ii) development of a Theory of Change; (iii); specification of evaluation questions based on the five DAC evaluation criteria; (iv) visits to all five MIRA countries with focus on key informant interviews and additional data collection; and (v) deep dives into prominent reform issues to provide more in-depth discussion of the evaluation criteria.

The MIRA program was highly relevant, since it addressed pressing concerns of its target group and reflected the priorities of BMGF and AGRA. MIRA was very well aligned with BMGF's Agriculture Development Strategy and AGRA's overall approach to integrated agriculture. Further, MIRA is very coherent with AGRA's Policy and State Capability Division. Its relevance is confirmed by the AGRA Strategy 2017-2021, which came into effect during MIRA implementation. In all five focus countries, the MIRA project was well suited to the priorities and policies of the respective governments. The definition of the reform programs in each country was informed by the views of the target group, agro-enterprises and commercially oriented farms. MIRA identified reforms that are highly relevant to improve the agribusiness environment in the selected countries. 14 of the 25 targeted reforms were related to agricultural inputs. This emphasis was relevant, as increased productivity is a necessary condition to lift farmers out of low-income traps. However, MIRA also covered many other topics, in particular related to marketing and trade, which accounted for 7 targeted reforms (for a complete list of the targeted reforms see Table 3, page 18).

MIRA has almost fully achieved its PDO, since 20 of the targeted 25 policy reforms and regulations (representing 80%) have been approved during its implementation period[2]. An additional five policy and regulatory reforms are under review and might be fully approved eventually. In this context, it is important to realize that the de facto implementation period for MIRA coordinating agencies ended up being 3.5 to 4 years given the delay in actual implementation start at country-level. Some remaining reform efforts appeared to be stalled due to a number of reasons, including: (i) opposition from a government agency; (ii) change in administrations leading to a particular reform effort no longer being considered a priority; (iii) failure to complete a reform before a legislative session ended; and (iv) late introduction into the MIRA reform cycle, leaving a reform effort incomplete or under development. Further, it should be noted that there have been spill-over effects of the MIRA model to other AGRA countries, e.g. Kenya, Malawi, Mozambique, Rwanda, Uganda and Mali. In those countries, the MIRA approach has been adopted successfully and lead to approval of policy reforms.

2 *20 approved policies and regulations include the Ethiopia Seed Policy, which was approved on February 27, 2020 and therefore about two months after the project closing date.*

The intermediate outcomes one “government buy-in to the need for regulatory reforms” and two “regulation reform process underway in focus countries” has been almost fully and fully achieved respectively. MIRA strengthened and sharpened African Governments’ appetite and demand for regulatory reforms beyond MIRA’s implementation period. However, it is important to note that rather long delays at the inception of MIRA – this particularly relates to component 1 – affected the project’s overall performance. Most activities and outputs envisaged for these two components have been completed successfully.

The third intermediate outcome “awareness of regulations raised in domestic and international private sector” and the fourth intermediate outcome “built government and private sector capacity and commitment to continuously reform regulations” were partly achieved. From the country visits, we came to the conclusion that the communication of new or updated regulations was not always very effective. Private sector and other stake-holders were usually less receptive for such communication unless reforms were fully approved. Concerning intermediate outcome four, the emphasis was on mentoring MIRA coordinators and partly government staff and private sector participation in national agricultural advocacy forums. As a consequence of the focus on reaching the PDO of actual reform approval, promotion of reforms and capacity building was not the top priority.

The MIRA project was rather efficient and its approach can be considered as a policy reform accelerator. However, using an inclusive and consultative approach can also be resource-intensive. AGRA MIRA support for consultancies, validation meetings and public hearings actually sped up the process. MIRA was complementary to and realized synergies with other donor projects and resources. However, MIRA activities were implemented mainly in parallel with other donor efforts, though not necessarily or formally coordinated with them.

There are early indications of positive impacts due to the policy reforms facilitated by MIRA. Impacts of the approved regulatory and policy reforms are beyond what MIRA should be held accountable for. Overall perceptions of the policy environment, not to mention increase of actual private sector investments, require a time horizon beyond the 5.5-year MIRA implementation period. Further, in particular the latter depend on numerous other external factors out of MIRA’s control. Still, there a various early indications for positive impacts. For example, in Tanzania there are increased licensed numbers of private companies accessing protected public breeder seeds for multiplication. The degree to which further and widespread impacts in terms of the perceived enabling environment and actual private sector investments will be achieved largely depends on how effectively the reforms will be actually implemented.

Given its inclusive and consultative process, the sustainability of MIRA-initiated reforms can be considered as high. It can be assumed that the highly participatory characteristic of the MIRA approach, with its inclusive and consultative processes, will lead to more long-lasting and comprehensive impacts than the traditional “top-down” approaches to policy reforms. However, sustainability of reforms also highly depends on their implementation quality. Funding and time will be needed to complete drafting and dissemination of implementing texts, by-laws and sub-regulatory details. Involving decentralized levels for implementation is key. In addition, a wide range of other factors, such as infrastructure investments, need to be tackled to improve the business environment. Completing regulatory reform often requires further funding, which may

not be forthcoming from governments with limited capacity to raise revenue through taxes and user fees.

MIRA had numerous positive design and implementation characteristics (for details see chapter 4). The following key bullet points are supposed to highlight what MIRA or similar AGRA policy programs could do differently in the future:

- Actual policy and regulatory reform implementation should be a key design element of policy programs, though AGRA support of implementation needs to be carefully delimited.
- Enabling the agriculture business environment, requires a comprehensive approach to policy limitations, including complex and sensitive “macro-reforms”.
- If longer-term outcomes and impacts are envisaged (e.g. increased private sector investments and adoption at farm level), complementary investments are needed (e.g. in infrastructure and various other public goods). These investments would need to come from complementary investment programs. Improved access to finance is also key.
- Effective and efficient program design and implementation require an in-depth understanding of the political economy in the agriculture sector (plus the identification of a “reform champion”).
- Programs aimed at policy approval require a flexible design in order to quickly react to “windows of opportunity”.
- A stronger focus on capacity development and communication further enhance program’s impacts and sustainability.
- Internal (AGRA) and external (e.g. BMGF, other donors, governments) expectations of what policy programs can realistically achieve in which time frame should be carefully managed.
- An improved and well-defined M&E system is key for program management (to take corrective action), identification of lessons learned, and upward and downward accountability. It should also be designed to capture early outcomes and impacts of regulatory reform, ideally through formal surveys. This will provide evidence to donors that the reforms are indeed having an impact at the agribusiness system and small farm levels.

Given the encouraging achievements of the MIRA approach, the importance of policy and regulation reforms for agriculture and rural development, and the coherence with AGRA’s overall approach on integrated agriculture, we strongly recommend to continue with MIRA-type of policy programs. Given its uniqueness, the MIRA approach to policy reforms constitute a niche for AGRA.

The report identifies three options for a future MIRA-type of policy programs. Option 1 would be an expansion of the MIRA approach to additional AGRA focus countries. Option 2 would

focus on actual reform implementation in the current five countries. Option 3 “Expand MIRA to a comprehensive programmatic policy approach” is the most ambitious and complex option for a future program. It is basically a combination of options 1 and 2.

AGRA’s comparative advantage would be that of an Africa-led convener and “neutral broker” of urgently needed agricultural policy reforms in Africa, with the moral suasion that a non-African institution might lack. Options 1-3 would each enable AGRA to expand its niche on policy reform work. However, option 3 could pave the way for an Africa-led policy flagship program and could position AGRA as a key convener and broker for policy reforms that can benefit smallholder famers and agribusiness SMEs. AGRA has the clout (which could be strengthened further) to bring all the key players together and facilitate a real integrated approach to agricultural policy reforms. A flagship program would also be more ambitious in terms of scope. It should probably aim at covering a more significant – if not the entire – impact pathway for policy reforms as visualized in the Theory of Change in Section 1.2. The scope would also increase in terms of geographical coverage by covering additional AGRA focus countries (maybe eventually all 11 countries).

The extent to which the MIRA approach can be institutionalized within AGRA country programs depends on the complexity and coverage of the future program. Option 2 would probably require limited guidance and management from AGRA HQ. Option 1 would require some more intense management oversight from HQ, particularly at design and early implementation stage. Option 3 would depend to a significant extent on close management by the Policy and State Capacity Division. Nevertheless, in case of option 1 and 2, the Policy and State Capability Division in Nairobi should still continue to play an important role in working closely with the 11 priority country programs. It should for example: (i) provide analytical input into the next five year round of Country Strategies; (ii) help to identify regulatory constraints that need to be addressed and in developing approaches to tackling those issues; (iii) provide grant funding selectively to priority reform efforts; and (iv) closely monitor and evaluate the effectiveness of MIRA-like reform efforts and their implementation and impacts. However, it should be noted that grant funds for the 2017-2021 period have been fully allocated in MIRA and other AGRA priority countries. Therefore, without MIRA supplemental funds there would be a two year plus gap (from end 2018 to start-up in 2021).

An option for an additional thematic focus would be policies and regulation for creating an enabling digitalization environment. Digitalization will have a significant impact on the entire agriculture value chain. African countries will need to harness and deploy digital technologies, since this will determine the future competitiveness and sustainability of African agriculture and its contribution to its economies. According to the Malabo Mont-pellier Panel Report “Byte by Byte” from 2019 (and many other reports and publications), the so-called Fourth Industrial Revolution can be an opportunity for African countries to leapfrog and lead the way in the application of digital technologies along the agriculture value chain. The speed and effectiveness at which an agricultural system transforms to become more data and technology driven is largely dependent on an enabling institutional environment. Such an environment would allow and encourage effective, equitable, and fair management, usage and exchange of data and information.

TABLE OF CONTENTS

ANNEXES

LIST OF TABLES

Antonio Chapala displays items he sells at his AGRA dealer shop on August 8th, 2016 in Mozambique. Antonio Chapala opened his agricultural supply shop after going through a AGRA program where he was trained on how to run a agricultural business given a grant to help him open the shop. His shop allows local farmers to buy seeds and other items in their community rather than having to pay extra money to travel to town to acquire the same goods. It also provides him and his family a better livelihood.
| Cover photo credit: Murkas farming/ AGRA |

1 INTRODUCTION AND METHODOLOGY

1.1 The Federal Ministry of Agriculture and Rural Development

The overall objective of this consultancy is to conduct an evaluation of the Micro-Reforms for African Agribusiness (MIRA) project[3]. MIRA aimed at measurably improving the enabling business environment in order to expand investments in agribusiness firms in agricultural value chains. The MIRA Results Tracker defines the vision of success of MIRA and the most significant result as follows: "At least 25 significant policy and regulatory reforms approved across the five countries within five years that induce measurable changes in private sector perceptions of agribusiness investment enabling environments." As part of this evaluation, this result is considered also as the Project Development Objective (PDO) on which the assessment of effectiveness and the other DAC evaluation criteria is based. However, we recommend holding the project only accountable up to the approval of the policies and reforms, with the longer-term outcomes and impacts (including "measurable changes in private sector perceptions…") being beyond the direct control of MIRA. This is particularly true given the relatively short implementation period of approximately five and a half years.

Given the inclusive and consultative nature, the MIRA project has had a strong reform process orientation. This approach necessarily takes time. MIRA has undertaken an innovative reform process that leads to consensus building through prior analysis of reform issues, clear priority setting, consultations between governments and key private sector and NGO stakeholders, parliamentary debate and approval, and finally Presidential review and assent. As such, the project has focused neither on reform implementation design, nor on implementation rollout. Nor has MIRA promised quick or large short-run impacts on farmers and agro-enterprises. However, there is some evidence that improved regulations are having an effect on the agribusiness system, which the evaluation team also documented in the following chapters.

AGRA's tender identified the following objectives for the evaluation of MIRA:

- Provide program management teams with information for priority setting for future fund allocation and investment decisions
- Address upward accountability concerning usage of funds
- Address downward accountability towards governments, stakeholders and beneficiaries
- Provide lessons for adapting current and future programs (both internally and externally)

The report focuses primarily on the first and the last objectives. As this evaluation is not an audit of internal financial flows, it will be difficult to address upward accountability concerning

3 *MIRA was funded by the Bill and Melinda Gates Foundation (BMGF). The Grant Agreement was signed in August 2013 and actual implementation at country-level finished in December 2018. During implementation, the closing date was extended to December 31, 2019. However, this extension was mainly to allow for completion of cross-country activities, such as this evaluation.*

usage of funds in any depth. However, AGRA has audited 10 of the 11 grantees of MIRA using a well-formulated and thorough set of metrics, so this covers the second objective well. Further, accountability will be addressed to some extent, since the evaluation will assess to what extent the envisaged objectives have been achieved. We examined downward accountability towards governments, stakeholders and beneficiaries in the broadest sense of the term, as MIRA has emphasized an inclusive, participatory and consensus-driven process to regulatory and policy reform. Therefore, we assessed information and communication flows, feedback mechanisms, and consultation processes during reform efforts.

The evaluation has sought to "tell the story" of MIRA's approach, and identify where its activities and processes worked well and where they could be improved. Further, the team derived recommendations on how MIRA (or its micro-reform approach) could be adapted to serve AGRA country programs during the implementation of the AGRA 2017-2021 Strategy, with its decentralized, country-driven, programmatic priorities and emphasis on building state capability.

This report is structured the following way: it includes an Executive Summary with the main messages. Following this introductory section 1.1, section 1.2 provides a methodological overview of the evaluation approach. First, we present the MIRA project's Theory of Change (TOC), which identifies activities, outputs, intermediate outcomes, and longer-term outcomes and possible impacts. Second, we present the DAC evaluation criteria of relevance, effectiveness, efficiency, impacts and sustainability in detail, laying out a series of key evaluation questions to address each criterion. Chapter 2 provides an overview of MIRA country projects, and some basic information on the project, e.g. total financial volume and implementation period. We also provide some basic analysis on the thematic portfolio. Chapter 3 addresses the evaluation questions derived from the DAC evaluation criteria plus the higher-level learning questions. We have drawn heavily from our in-country discussions and other interviews with MIRA implementers, stakeholders and observers/partners. We bring in specific findings from our in-depth interviews. Chapter 4 addresses the (higher) level questions. Chapter 5 focuses on conclusions and recommendations for AGRA's future policy and regulatory reform work. In the annex, we include lists of people and organizations interviewed and documents consulted.

1.2 Methodology

The evaluation approach focused primarily on policy and regulatory reform processes and outcomes. MIRA has pioneered a consultative approach engaging multiple stakeholders in comprehensive regulatory reform efforts, which is evaluated and compared to other approaches to regulatory reform. Limited attention was paid to longer-term outcomes and impacts, since these are considered to be beyond the scope of the project. Given this evaluation orientation, most of the assessment is qualitative. The evaluation methodology includes various instruments to address the diverse set of review questions and allow for systematic triangulation of findings. These instruments include: (i) a comprehensive desk review; (ii) development of a Theory of Change; (iii); specification of evaluation questions based on the five DAC evaluation criteria; (iv) visits to all five MIRA countries with focus on key informant interviews and additional data collection; and (v) deep dives into prominent reform issues to provide more in-depth discussion of the evaluation criteria. In the following paragraphs, we will focus on the Theory of Change

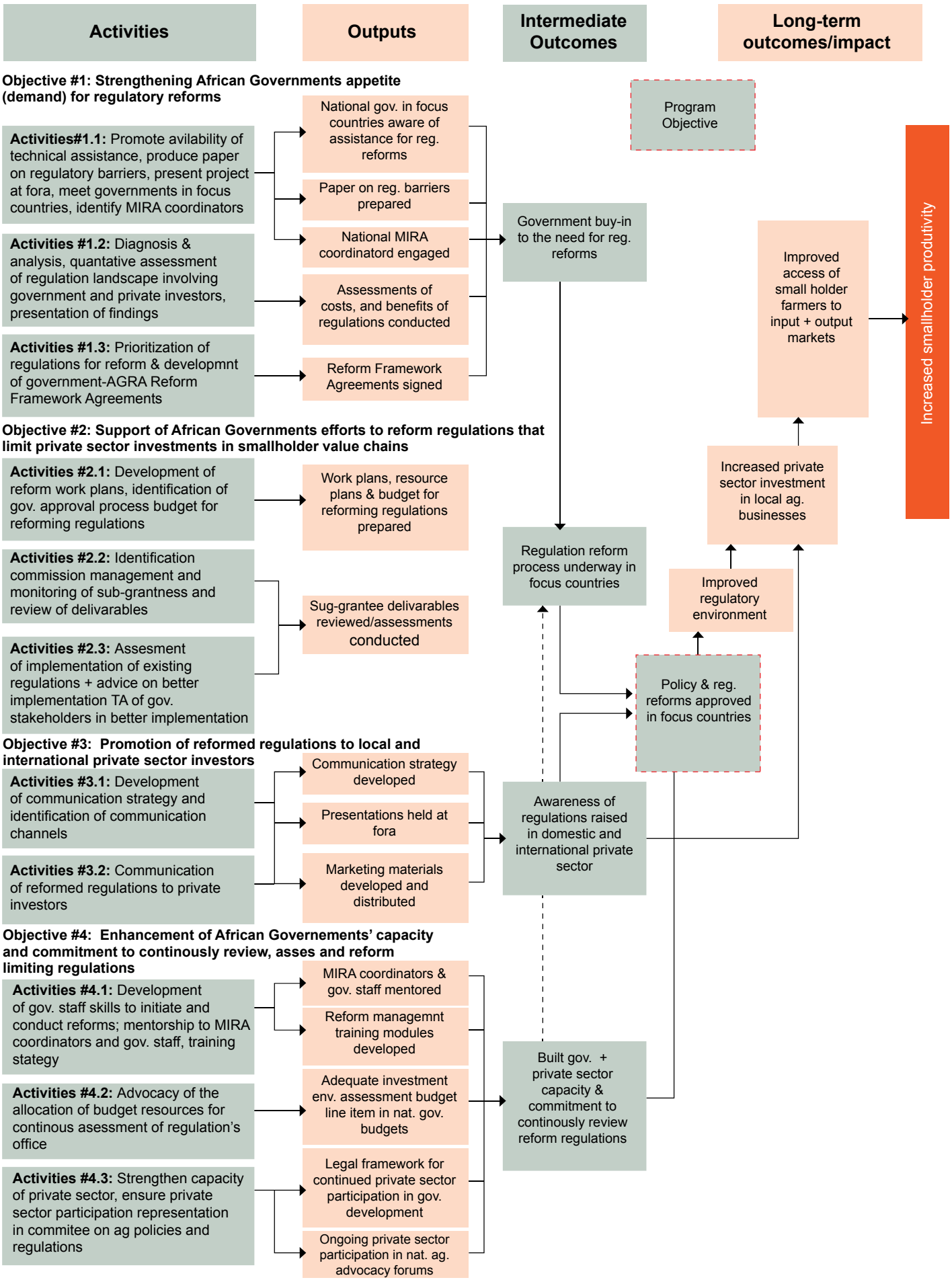
and the DAC evaluation criteria, since details are relevant for the following sections. The other evaluation instruments require probably less further explanations.

The Theory of Change (TOC) provides the overall framework for the evaluation of the MIRA project. The TOC helps to review and clarify hypotheses about impact pathways, i.e. the causal linkages between activities, outputs, (intermediate) outcomes/project objectives, and impacts. Conclusions can be drawn whether the results chains defined at design stage appear logical from an ex-post perspective and whether these results chains actually materialized during implementation. While the question of attribution cannot be answered with absolute certainty, the TOC helps to assess whether it is reasonable to assume that the project has or will contribute to higher-level outcomes and impacts. However, it should be noted that the MIRA project can be only held accountable up to the program objective level. Longer-term outcomes and impacts are beyond the program's control and implementation time frame.

The TOC helps to "tell the story of MIRA", i.e. whether and through which processes the envisaged objective has been achieved. As part of the evaluation, we did not only assess to what extent the targets with respect to outputs and outcomes have been met, but we also analyzed which external factors affected the implementation and whether – in addition to the intended outcomes and impacts – unintended ones can be observed. Different MIRA project documents contain elements closely related to the TOC. These documents include, for example, the Project Performance Monitoring Plan in the Grant Proposal, the Results Framework in the "Results Tracker", and the document "Impact Pathways". We used these documents as the basis for deriving the Theory of Change as illustrated in Figure 1.

All four MIRA components are necessary conditions to reach the objective of approved policy reforms and regulations. MIRA has been structured along four objectives, which can also be considered as components. However, the strongest causal relation to the PDO can be identified for the first two components, which focus on creating the demand for reforms and providing support for the actual reform process respectively. The third and fourth component on promotion of reformed regulations and on enhancing governments' capacity to continuously reform regulations go beyond actual policy approval. These components are important factors contributing to actual reform implementation and to sustainability of reform processes. However, in order for a project to measurably improve the private sector's perception of the agribusiness environment leading eventually to increased investments various other factors (which were not directly addressed by MIRA) need to be considered. Those factors include for example infrastructure and an overall acknowledgment of the important role the private sector has to play for agricultural development.

The TOC illustrates that there are reasonable causal linkages along the impacts pathway. All four components indicate logical causal linkages between the identified activities, outputs, and outcomes. Hence, it can be reasonably assumed that if the identified activities and outputs have been carried out in an appropriate way, MIRA contributed effectively to policy and reform approval. One example would be that the activities of developing reform work plans (including budget allocation) and contracting qualified TA providers would lead to useful analytical work (e.g. on legal aspects, cost-benefit analyses) as an output. This output would inform the process on reforming limiting policies and regulations (as an intermediate outcome) resulting in (in combination with other activities, outputs, and intermediate outcomes) policy approval.


Activities
Outputs
Intermediate Outcomes
Long-term outcomes/impact
Objective #1: Strengthening African Governments appetite (demand) for regulatory reforms
Activities#1.1: Promote avilability of technical assistance, produce paper on regulatory barriers, present project at fora, meet governments in focus countries, identify MIRA coordinators
Activities #1.2: Diagnosis & analysis, quantative assessment of regulation landscape involving government and private investors, presentation of findings
Activities #1.3: Prioritization of regulations for reform & developmnt of government-AGRA Reform Framework Agreements
National gov. in focus countries aware of assistance for reg. reforms
Paper on reg. barriers prepared
National MIRA coordinatord engaged
Assessments of costs, and benefits of regulations conducted
Reform Framework Agreements signed
Program Objective
Government buy-in to the need for reg. reforms
Improved access of small holder farmers to input + output markets
Increased smallholder produtivity
Objective #2: Support of African Governments efforts to reform regulations that limit private sector investments in smallholder value chains
Activities #2.1: Development of reform work plans, identification of gov. approval process budget for reforming regulations
Activities #2.2: Identification commission management and monitoring of sub-grantness and review of delivarables
Activities #2.3: Assesment of implementation of existing regulations + advice on better implementation TA of gov. stakeholders in better implementation
Work plans, resource plans & budget for reforming regulations prepared
Sug-grantee delivarables reviewed/assessments conducted
Regulation reform process underway in focus countries
Increased private sector investment in local ag. businesses
Improved regulatory environment
Policy & reg. reforms approved in focus countries
Objective #3: Promotion of reformed regulations to local and international private sector investors
Activities #3.1: Development of communication strategy and identification of communication channels
Activities #3.2: Communication of reformed regulations to private investors
Communication strategy developed
Presentations held at fora
Marketing materials developed and distributed
Awareness of regulations raised in domestic and international private sector
Objective #4: Enhancement of African Governements' capacity and commitment to continously review, asses and reform limiting regulations
Activities #4.1: Development of gov. staff skills to initiate and conduct reforms; mentorship to MIRA coordinators and gov. staff, training stategy
Activities #4.2: Advocacy of the allocation of budget resources for continous asessment of regulation's office
Activities #4.3: Strengthen capacity of private sector, ensure private sector participation representation in commitee on ag policies and regulations
MIRA coordinators & gov. staff mentored
Reform managemnt training modules developed
Adequate investment env. assessment budget line item in nat. gov. budgets
Legal framework for continued private sector participation in gov. development
Ongoing private sector participation in nat. ag. advocacy forums
Built gov. + private sector capacity & commitment to continously review reform regulations

The identification of the main evaluation questions is guided by the five OECD DAC Evaluation Criteria relevance, effectiveness, efficiency, impacts, and sustainability. Rather than getting bogged down in a micro investigation of every regulatory reform process, the DAC criteria ensure that the overall key questions are addressed and respondents have an opportunity to reflect on the most important evaluation questions. The identification of the specific questions was informed by the initial screening of project documents, and the kick-off calls with AGRA and BMGF. Table 1 lists the main evaluation questions along the DAC criteria and indicates the instruments and sources used during data collection. We did not intend to strictly apply each question for each country. The questions served more as guidance to answer the overall leading questions of the evaluation.

Table 1: DAC criteria and main evaluation questions

DAC criteria (plus lessons) and lead evaluation question		
	Guiding evaluation questions	**Instrument/source**
Relevance **To what extent is the MIRA project suited to the priorities and policies of the target group, recipient and donor?**		
	Is the overall MIRA project well aligned with strategies/policies of BMGF, AGRA, and country governments?	Respective documents of BMGF, AGRA, governments
	To what extent are the objectives of the MIRA project still valid?	Key informant interviews (and focus groups) plus documents above
	Are the activities and outputs aligned with the intended outcomes and impacts?	Program documents (including Theory of Change, impact pathway)
	Did the program identify significant regulations and policies to spur agribusiness investments (while acknowledging the other prioritization criteria for regulation selection)?	Key informant interviews and focus groups, preparatory studies and the studies conducted by the TA providers (e.g. cost-benefit analysis, legal assessment, technical assessments), literature
Effectiveness **To what extent did the MIRA project achieve its objectives?**		
	To what extent did the program achieve the outputs and outcomes defined in the Results Framework?	Results Tracker, Progress Narratives, other program documents. Triangulation with key informants and focus groups.
	What were the major factors influencing the (non)achievements of the objectives?	Key informant interviews, focus groups
	Has the MIRA project management and implementation structure proven to be effective (involving e.g. AGRA Program Officers, National MIRA Coordinators, TA providers, international partners (World Bank, USAID, AU/NEPAD)?	Key informant interviews, focus groups (including from the list in the left column)

DAC criteria (plus lessons) and lead evaluation question		
	Guiding evaluation questions	**Instrument/source**
	Has the choice of instrument/approach proven to be effective (e.g. awareness raising, stock-taking, analyses, promotion, capacity development)?	Key informant interviews, focus groups
	What was the process of regulation formulation, approvals, and implementation? Was the process inclusive and responsive to the needs of various stakeholders (in particular the private sector)? Note: also important for sustainability.	Key informant interviews, focus groups, program documents (e.g. Progress Narratives)
	Have political economy issues been explicitly considered in program design and implementation?	Program documents, key informant interviews, focus groups
	How well did the MIRA approach fit into the regular government process of policy/regulation formulation, approval and implementation? Note: also important for efficiency.	Key informant interviews, focus groups
	Did the risks identified at design stage materialize and did the proposed mitigation measures help to manage risks?	Key informants, focus groups
	Are the outcome (and output) indicators SMART?	Review of M&E documents
Efficiency **How efficient was the MIRA project designed and implemented?**		
	How long did the process of regulation and policy approval/implementation take (in comparison to the timeline envisaged at design stage; in comparison to policy reforms initiated by other programs in the country plus global experience)?	Key informant interviews, M&E documents (Progress Narratives)
	What are the transaction costs of the MIRA approach vis-à-vis a “regular” reform process in the respective country (and other SSA countries/global experience)?	Key informant interviews, literature research, consultant expertise
	Were the program activities cost-efficient? Were there specific processes that affected speed of implementation (e.g. procurement)?	Review of program documents (e.g. Progress Narratives), key informant interviews
	How did the MIRA project fit into the portfolio of other policy/regulation-related	Key informant interviews, focus groups, review of respective program documents).

DAC criteria (plus lessons) and lead evaluation question		
	Guiding evaluation questions	**Instrument/source**
	projects in each of the focus countries? (e.g. other AGRA supported programs, such as Policy Hubs, MAFAP, PIATA; World Bank (EBA), DFID, GIZ). Note: also relates to effectiveness, sustainability	
	Did MIRA crowd-in/leverage additional or complementary finance (e.g. by the government, other development partners, the private sector)?	Key informant interviews, program documents
Impact **What were the major changes produced by the MIRA project (positive and negative; intended and unintended)?**		
	What difference did the program make to the direct beneficiaries (government policy analysts and decision makers, private investors and agribusinesses, other agricultural policy stakeholders (e.g. donor agencies, industry associations, CSOs/NGOs)?	Key informant interviews (see list in left column), program documents, focus groups
	How likely will the intended longer-terms outcomes and impacts (e.g. conducive agribusiness investment environment (improved EBA indicators, increased number of agribusiness registration), increased private sector investments), increased access of smallholder farmers to input and output markets be achieved? Are there already indications?	Key informant interviews, focus groups
	Have there been any unintended (positive and negative) consequences to date of regulatory reforms?	Key informant interviews, focus groups, M&E documents
Sustainability **Are the benefits of the MIRA project likely to continue after donor funding has been withdrawn?**		
	How likely will the benefits of the program sustain after funding ceases? Will there be sustainable funding? Will the reforms continue to be implemented and new ones initiated? Will capacity be built continuously?	Key informant interviews, focus groups, M&E documents
	What are major factors and risks affecting the sustainability of the program?	Key informant interviews, focus groups, M&E documents
	How likely is it that the program benefits will be replicated and/or scaled? Are there	Key informant interviews, focus groups, M&E documents

DAC criteria (plus lessons) and lead evaluation question		
	Guiding evaluation questions	**Instrument/source**
	already indications and/or emerging opportunities?	
	Is the program's lifespan realistic or too short or too long given its objectives?	Key informant interviews, focus groups, M&E documents
	How strong is the buy-in to the initiated and additional reforms from the major stakeholders ("appetite for more")?	Key informant interviews, focus groups, M&E documents

In addition to analysing the DAC evaluation criteria, the evaluation addressed higher-level learning questions. This evaluation has been done in a collaborative and consultative mode, where we have learned from MIRA implementers and their stakeholders. Key informants were asked to share their perspectives on lessons learnt. Higher-level questions that we addressed include the following:

- What are the key design features and enabling circumstances of donor-supported programs for creating conducive policy and regulatory environments for private sector investment in local agribusinesses operating in smallholder value chains?
- How does MIRA compare to other approaches aimed at policy reforms?
- How does the private sector need to engage with Government, and what analysis do they need to bring forward in order to ensure that Governments reform policy and regulations that limit private sector investment in local agribusinesses?
- What are future options for the MIRA project and the overall AGRA policy work?

2 MIRA PROJECT – COUNTRIES AND THEMATIC PORTFOLIO

2.1 MIRA Countries

The five MIRA countries (Burkina Faso, Ghana, Nigeria, Ethiopia, and Tanzania) are among the 11 AGRA focus countries. The "MIRA 5" are democracies with parliamentary or national assembly political systems and Presidents. There are many political parties in each country though in most cases a handful dominate. All of the countries (except Tanzania) have been under military rule at some point in their independent history. With the exception of Burkina Faso, all the countries have large populations and quite large land areas. Table 2 provides some comparative statistics for the MIRA countries. Burkina Faso

Table 2: Comparative statistics for the MIRA countries

	Burkina Faso	Ghana	Nigeria	Ethiopia	Tanzania
Population (millions, 2018)	19.7	29.8	195.9	109.2	56.3
Urban Population as % Total, 2018	29%	56%	50%	21%	34%
GDP per Capita, 2010 constant $, 2018	709	1.807	2.396	570	957
Agric. Expend as % Total Expend., 2018	12.3%	3.5%	2.3%	8.4%	2.5%
Agric. GDP as % Total GDP, 2018	29%	18%	21%	35%	29%
Agric. GDP Growth Rate, 2018	8.1%	4.8%	2.1%	3.5%	6.0%
Fertilizer Consumption, kg/ha, 2016	22	21	5	14	13
Cereal Import Dependency, 2012	13%	29%	19%	7%	12%
Agric. Production Index, 2016 2004-2006 = 100	125	154	119	188	175
Doing Business Ranking	145	114	146	159	144
EBA Composite Ranking	35.30	50.49	49.17	46.12	57.15
Supplying Seed	14.81	21.72	63.42	55.77	77.47
Registering Fertilizer	5.56	52.71	69.30	5.56	28.39
Trading Food	65.80	42.22	38.51	56.03	30.16
Securing Water	60.00	50.00	50.00	30.00	80.00
Registering Machinery	41.22	82.29	48.80	94.93	66.15
Sustaining Livestock	35.00	55.00	63.30	46.67	45.00
Protecting Plant Health	30.00	60.00	20.00	0.00	40.00
Accessing Finance	30.00	40.00	40.00	80.00	90.00
Net ODA per Capita, 2015, USD/person	55	64	13	32	50
Agric. ODA as % Total ODA, 2017	13%	10%	7%	8%	6%

Sources: World Bank https://data.worldbank.org/; https://www.eba.worldbank.org/; https://www.resakss.org/

and Ethiopia are poorer SSA countries that are the least urbanized. Ghana and Nigeria have higher average per capita GDP and a greater proportion of their populations in urban areas. Agriculture as a percentage of total GDP is higher in the less urbanized countries of Ethiopia (31%), Burkina Faso (29%), and Tanzania (29%) than in Ghana (20%) and Nigeria (21%).

The EBA composite ranking (score 0-100) is highest for Tanzania (57) and lowest for Burkina Faso (35). This means that – according to the EBA 2019 indicators – Tanzania has the most favorite business environment for agriculture followed by Ghana (51), Nigeria (49), and Ethiopia (46). Burkina Faso is showing by far the lowest score on "supplying seed" and "registering fertilizer". For the former indicator Tanzania has the highest score and for the latter indicator Nigeria. Interestingly, Burkina Faso scores highest on "trading food" followed by Ethiopia. Nigeria shows here the lowest score among the five MIRA countries. On "accessing finance" Tanzania scores again highest (90), followed by Ethiopia (80). Burkina Faso ranks bottom (30). Beyond the EBA indicators, some other interesting findings illustrated in the table are that:

- Agricultural expenditure as both a percentage of total government expenditure and as a percentage of agricultural GDP is lowest in Ghana and Nigeria and highest in Burkina Faso.
- Cereal import dependency ratios (2012) were also highest in Ghana and Nigeria.

2.2 MIRA Project Design and Implementation Process

The MIRA project was developed by AGRA's Policy and Advocacy Program in close collaboration with the BMGF. The grant agreement was signed on 9 August 2013. The estimated total project costs were USD 10.98 million. An international tender was put out for bids to do upfront policy/regulatory environment landscaping in the five countries in November 2013. Abt Associates Inc. was awarded the contract in mid-February 2014. This consultancy was designed to help jump-start the MIRA project with recommended regulatory reform topics and priorities; it was completed one year after signing in August 2014. At the beginning of this initial diagnostic assessment, AGRA hired two senior analysts in April 2014 to join its Policy Unit and manage MIRA implementation. One was later assigned to Tanzania to serve as the Policy officer in Dar-Es-Salaam and the other was posted at AGRA Headquarters to provide technical support and backstopping for all MIRA countries.

The actual implementation period of MIRA was about five and a half years. Although the Abt report was not officially validated, it was used as a resource document in an initial series of MIRA-led broad stakeholder consultations in each country in the last quarter of 2014. As part of those consultations, participants were asked to identify regulatory reform priorities and rank order them. Based on these meetings, five regulatory reform priorities were chosen for MIRA implementation in each country in consultation with stakeholders, who included an eventual MIRA coordinating agency (which would later receive grant funds). These meetings represented the actual start date of MIRA as an inclusive and consultative reform project. Hence, it can be assumed that the implementation period was approximately five and a half years (with a closing date of December 31, 2018). Upon the identification of the regulatory reform priorities, to ensure there was government appetite for, and ownership of, these reforms, a Reform Framework Agreement was signed and sent to AGRA seeking financial support as evidence of country ownership of the reforms.

Following the identification of reform priorities, AGRA's Policy Unit developed grant agreements with a MIRA Coordinating Unit in each country. These grantees were all public sector agencies (parts of the MIRA countries' Ministries of Agriculture) with the exception of Nigeria, where an agribusiness lobbying organization, the Nigeria Agribusiness Group (NABG) was tasked with coordination. In each country, the government agency managing MIRA reforms could exercise its prerogative to identify and appoint a lead reform agency outside of government; NABG was chosen by the then Minister of Agriculture. In most cases, the public agency coordinating MIRA was a policy and planning department of the Ministry of Agriculture. Other grantees who played a key role in MIRA implementation included specialized associations, such as the seed association SEEDAN and the fertilizer association FEPSAN in Nigeria. In Tanzania, the Fertilizer Society of Tanzania (FST) and the Tanzania Seed Trade Association (TASTA) received sizeable grants from MIRA. The rationale was to ensure that the reform agenda support the lead government institutions in the reform process, and that the private sector and non-state actors as a group (affected by the absence or inadequacy of the policy) be represented to ensure inclusiveness and ownership by all.

The policy and regulation approval process applied by MIRA was harmonized with the regular government process. Once the MIRA coordinating agency was selected, the reform process could begin in earnest and followed a series of well-defined steps: Initiation, Development, Validation, Approval, Legislation and Implementation. These steps are described in detail in Annex 2, but we briefly define them here.

- **Initiation:** Identification and prioritization of policy or regulatory challenge or problem needing to be addressed. A government technician or the MIRA coordinating agency takes the lead and initiates discussions with other government officials and representatives of private sector stakeholders.
- **Development:** This stage consists of in-depth and appraisal of reform options through subject matter analysis, ex ante economic impact assessment, and legal review and analysis, as well as development of a draft policy, bill or regulations with private sector stakeholders.
- **Validation:** Intensive consultations with stakeholders in the thematic area through workshops to validate studies and draft documents (which may require iterations).
- **Approval:** This stage is a series of steps to obtain the full support of the Ministry of Agriculture, which takes draft materials to the Cabinet (or Council) of Ministers for initial review and approval to go forward with drafting legislation.
- **Legislation**: In this stage, the MIRA coordinating agency engages Parliament (or a National Assembly) in review, discussion, stakeholder consultation and approval of draft regulations (or a law). With Parliamentary approval, the final draft goes to the Office of the President for review and assent.
- **Implementation:** Following assent, regulatory bylaws and implementation guidelines are developed, published and disseminated through a number of communication channels (government gazettes, newspapers, radio/TV/internet web sites, public meetings with stakeholder representatives).

Implementation steps that follow communicating regulatory reforms, and their implications to stakeholders and the general public, are beyond MIRA's mandate. These steps essentially build government capacity to implement the regulations effectively and include hiring, training and equipping of field agents (and laboratory technicians) to implement the regulations in the field. Establishing both a watchdog/ombudsman office and a monitoring and evaluation capability are also recommended to ensure proper implementation of new regulations in practice.

2.3 Thematic Focus of the MIRA Reforms

Many reforms targeted under MIRA focused on seed and fertilizer reforms. Table 3 indicates the 25 reforms targeted by MIRA. In each country, five reforms were identified. The reforms chosen included 14 agricultural input related reforms, focused on seed and fertilizer. These covered harmonization of seed and fertilizer regulations with regional agreements, drafting and passage of national seed and fertilizer regulations, and mechanisms for improving smallholder farmer access to improved inputs. Table 4 shows the allocation of MIRA funding for Ethiopia, Tanzania, Nigeria, Ghana and Burkina Faso by implementing agency and type of consultancy.[4] The share of funding that can be identified as specifically targeted towards the seed and fertilizer sector amounted to 36%, 42%, 54% and 30% for the first four countries. There was also seed and fertilizer-specific funding in Burkina Faso. However, this did not come directly through MIRA but through other funds from the country office.

Agricultural product marketing and trade was another focus of the reforms targeted by MIRA. Seven reforms were designed to address marketing and trade issues. These included, for example, issues of export restrictions, import duties, and warehouse receipt systems. Further, the following thematic areas were covered by individual reforms (i) developing a strategy for high quality cassava flour use in food processing (Ghana); (ii) drafting of an agricultural investment code (of interest mainly to larger commercial farms and investors in Burkina Faso); and (iii) two reforms related to contract farming.

4 - Similar information was not available for Ghana and Burkina Faso.

Table 3: Reforms targeted under MIRA (highlighting those on seed and fertilizer)

Country	Reform – other reforms ✓ **reforms with regard to seed and fertilizer**
Burkina Faso	– Agricultural marketing regulations for public procurement – Agricultural Sector Investment Code – Strategy for a Warehouse Receipt System (WRS) for agricultural products ✓ **Passage and enactment of Seed Act and regulations to domesticate ECOWAS harmonized Seed Laws and regulations** ✓ **Passage and enactment of Fertilizer Act and regulations to domesticate harmonized ECOWAS fertilizer regulations**
Ethiopia	– Taxes on agricultural machinery spare parts, irrigation/drainage equipment – Import duties on agricultural machinery spare parts – Cereals export restrictions – Contract farming ✓ **Develop and approve a National Seed Policy**
Ghana	✓ **Ratification and gazetting of the harmonized ECOWAS seed regulation** ✓ **Ratification and gazetting of the harmonized ECOWAS fertilizer regulation** ✓ **Passage and gazetting of Ghana Seed Draft Regulations** ✓ **Fertilizer subsidy targeting by creating a national farmer registration data base** – Regulations on the use of HQCF (high quality cassava flour) in food products
Nigeria	✓ **Passage and enactment of revised Seed Act** ✓ **Passage and enactment of the Fertilizer Quality Control Bill** ✓ **Institutional arrangements to reach millions of smallholder farmers with soil and crop specific fertilizer blends** ✓ **Institutional arrangements to reach millions of smallholder farmers with certified seed of improved varieties and hybrids** – Institutional governance of commodity price stabilization (warehouse receipt system)
Tanzania	✓ **Improve access by private seed companies to public protected pre-basic and basic seeds** ✓ **Remove barriers to registration of new fertilizer products** ✓ **Improve the delivery of fertilizers** – Improve institutional arrangements in the management of issuance of grain export permits – Develop umbrella contract farming legislation

Table 4: MIRA funding for Ethiopia, Tanzania, Nigeria, Ghana and Burkina Faso

		Organization	Amount (USD)
Ethiopia			
	Implementing Agency		
		ATA	240,000
		ATA (Plant Breeders' Rights regulations)	229,500
		ATA (National Agricultural Trade Policy)	185,000
		Ethiopia Seed Association	204,998
		National MIRA Coordinator	240,000
	Consultancies to technical economic and legal experts		
		New Markets Lab (Contract farming)	59,400
		Fikre Markos (National Seed Policy)	46,800
		BKP (Cereals export restrictions)	61,300
		Segel (Reform Import Duties /VAT on agricultural machinery spare parts, irrigation/drainage equipment, and animal feed ingredients and compound feeds)	44,315
		BKP (Assessment and identification of constraints to private seed sector development)	32,157
		BKP (Exemption from duty and domestic taxes of pesticides and veterinary drug technologies and equipment)	89,780
	Total MIRA funding		**1,433,250**
	Seed specific funding		**513,455**
	Share of seed and fertilizer-specific funding		**36%**
Tanzania			
	Implementing Agency		
		Policy and Planning Department, Ministry of Agriculture	393,701
		Fertilizer Society of Tanzania	211,688
		Tanzania Seed Trade association	199,770
	Consultancies to technical economic and legal experts		
		Nexlaw (all targeted reforms)	114,790
		Economic and Social Research Foundation (ESRF) (all 5 targeted reforms)	52,542
	Total MIRA Funding		**972,491**
	Seed-specific funding		**199,770**
	Fertilizer-specific funding		**211,688**
	Share of seed and fertilizer-specific funding		**42%**

		Organization	Amount (USD)
Nigeria			
	Implementing Agency		
		The Nigeria Agribusiness Group (NABG)	298,826
		National Programme for Food Security (NPFS), Federal Ministry of Agriculture and Rural Development (Presidential Fertilizer Initiative)	105,263
		Seed Entrepreneurs Association of Nigeria	190,103
		The Fertilizer Producers and Suppliers Association of Nigeria	285,587
	Consultancies to technical economic and legal experts		
		Professor Yemi Akinseye-George	106,875
		African Centre for Shared Development Capacity Building (ACSDCB) (Professor Olu Ajakaiye)	156,100
	Total MIRA Funding		**1,078,696**
	Seed-specific funding		**190,103**
	Fertilizer-specific funding		**390,850**
	Share of seed and fertilizer-specific funding		**54%**
Ghana			
	Implementing Agency		
		Ministry of Food and Agriculture; Policy, Planning and Monitoring and Evaluation Department	300,000
	Consultancies to technical economic and legal experts		
		Appiah Associates (legal analysis)	94,000
		CDC Intl Consulting (economic analysis)	201,365
		Design/pilot test e-data base (for subsidized inputs)	249,728
	Total MIRA Funding		**845,093**
	Seed-specific funding		0
	Fertilizer-specific funding		249,728
	Share of seed and fertilizer-specific funding		**30%**
Burkina Faso			
	Implementing Agency		
		MAAH/DGPER (Ministry of Agriculture, Dept. For Policy and Economic Research	299,370
	Consultancies to technical economic and legal experts		
		Initiatives Conseil International (legal analysis)	76,000
		BGB Meridien Consulting	72,312
	Total MIRA Funding		**447,682**
	Seed-specific funding		**0**
	Fertilizer-specific funding		**0**

3 ANALYSIS OF DAC EVALUATION CRITERIA

3.1 Relevance

Main evaluation question:

To what extent is the MIRA project suited to the priorities and policies of the target group, implementing entity (AGRA) and donor (BMGF)?

The MIRA project reflects the priorities of the Bill and Melinda Gates Foundation (BMGF) as the funding organization. As the Grant Proposal points out, the project aligns very well with BMGF's Agricultural Development Strategy, i.e. by (i) increasing smallholder productivity through improved access to input technologies and output market opportunities; (ii) leveraging the private sector; (iii) leveraging the foundation's existing investments (e.g. AGRA Policy Hubs, the Enabling the Business of Agriculture Indicators, CAADP process); (iv) being catalytic; (v) focusing on national grant-making and ownership; and (vi) targeting measurable outcomes. As the BMGF played a major role in designing the MIRA project, MIRA reflects the interest of the Gates Foundation policy team in identifying "micro" regulations and processes that can deter agribusiness investment.

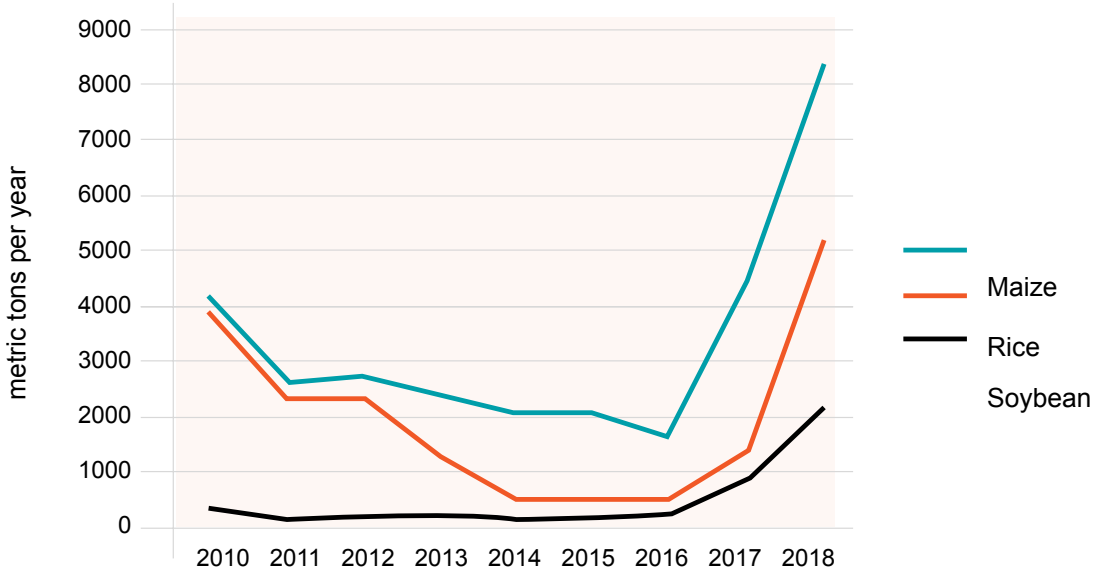
MIRA is also very much aligned with AGRA's overall integrated approach to agriculture and specifically its Policy and State Capability. The MIRA Grant Proposal clearly states the project's relevance for AGRA at time of approval in 2013 by pointing to the fact that micro-reform imperatives motivating this project are central to the agenda of AGRA's Policy and Advocacy Program and to the impact and success of the organization's overall portfolio. The AGRA Strategy 2017-2021, which came into effect during MIRA implementation, reconfirms the program's relevance. According to that strategy, AGRA's overall goal is to catalyze and sustain an inclusive agricultural transformation in Africa to increase incomes and food security. This overall goal is supposed to be achieved through four objectives. While MIRA relates to all four objectives, objective 2 and 3 are of particular relevance, since they include intermediate outcomes, such as intermediate outcome 4.1 "increased SMEs producing improved technologies for smallholder farmers across value chains", intermediate outcome 4.2 "improved operational efficiencies of SMEs along the focus agricultural value chains"; intermediate outcome 5.1 "expanded access to structure markets for value chain actors", intermediate outcome 5.4 "reduced transaction costs for actors within focus value chains.

In all five countries, the MIRA project was well suited to the priorities and policies of the respective governments. According to the National MIRA Project Coordinators in Tanzania and Ethiopia, MIRA was very relevant and was endorsed by the respective Ministry of Agriculture. In both countries, MIRA was preceded by scoping studies and technical analyses on seed and fertilizer industries and agricultural business sector export processes and environment, which received a lot of recognition from government. In Ghana, the Planting for Food and Jobs (PFJ) Initiative of the incoming National Patriotic Party (NPP)[5] - led government, implemented in early 2017,

5 *NPP won the late 2016 election in a Parliamentary system so has a Chief Executive (President), appoints all Cabinet Ministers (and their Deputies and Permanent Secretaries), and enjoys a legislative majority. NDC, the National Democratic Congress, ruled from late 2008 to end 2016. Full national elections are scheduled for December 2020.*

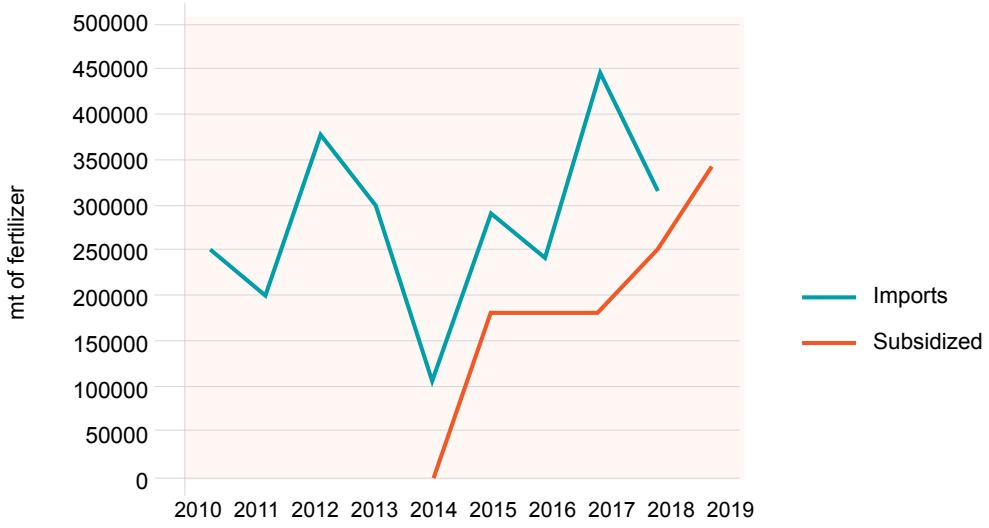
reinforced the need for seed and fertilizer reforms, which had languished under the previous administration. It became a high priority to push through regulatory reforms that would improve farmers' access to certified seed and quality fertilizer under a redesigned subsidy program. The convergence of regulatory reform and a better designed and funded subsidy program led to significant increases in distribution of seed and fertilizer in 2017 through 2019, contrasting with the declines in the final years of the previous administration. This is shown in Figure 2 and Figure 3, using certified seed production data and fertilizer imports and distribution under the subsidy program as proxies for farm-level input use.

Figure 2: Certified Seed Production in Ghana 2010-2018



Source: National Seed Trade Association of Ghana

Figure 3: Fertilizer Imports and Subsidized Quantities, Ghana 2010-2019



Source: Africa Fertilizer.org, "Fertilizer Information 2019, Ghana"

In Nigeria and Burkina Faso there was political momentum to address input-related policies and regulations. In Nigeria, the decline in oil export revenues in 2015/16 highlighted the need to discontinue the costly and inefficient Growth Enhancement Scheme (GES) approach to input subsidies of the previous administration. As a consequence, government launched the Presidential Fertilizer Initiative (PFI) as a means of stimulating private sector investment in fertilizer blending and increased private sector participation in the fertilizer processing and distribution system.

This in turn made it clear that the Farm Input Support Services Department of the Federal Ministry of Agriculture and Rural Development (FMARD/FISS) needed to monitor and regulate the fertilizer industry and distribution system to ensure that farmers receive high quality inputs. In Burkina Faso, the proposed reforms for fertilizer and seed were broadly supported, though the agricultural research establishment (INERA, Institut de l'Environnement et de Recherches Agricoles) opposed certain provisions of the ECOWAS seed law, so it was not fully "domesticated." There was also support for developing a warehouse receipt system (WRS) that goes beyond traditional 'warrantage' (staple crop inventory management) projects in Burkina. However, including this as a MIRA priority reform was premature, as strong economic analysis of such a scheme which included how the food security agency SONAGESS (Société nationale de gestion des stocks de sécurité alimentaire du Burkina Faso) would operate with a private sector led WRS needed to be done (perhaps by MAFAP) before it could be presented to the National Assembly and Council of Ministers.

The definition of the reform programs was informed by the views of the target group, agro-enterprises and commercially oriented farms[6] . Following the initial regulatory reform landscaping studies of 2014, AGRA organized stakeholder workshops in coordination with the five country Ministries of Agriculture. Representatives of farmer, industry and trade associations were invited. Participants were broken into several groups to identify important policy and regulatory priority topics. The groups included those focusing on seed, fertilizer, mechanization, finance and product marketing. Seed and fertilizer reform issues received the most attention.

This may have been due to the kickoff meeting participants' view that agricultural productivity is far too low in the five MIRA countries, in large part due to use of inferior seed and poor quality or too little fertilizer. In all five countries, the initial MIRA stakeholder workshops were successful in bringing together relevant private and public sector parties and in identifying a significant number of regulatory priorities. A subset of these options was deemed crucial, feasible to tackle over a 3.5 to 4 year[7] MIRA implementation period, and likely to have positive consequences on agribusiness investment and farmer productivity and sales. Much of what the program implemented emanated from industry stakeholders.

MIRA identified reforms that are highly relevant to improve the agribusiness environment in the selected countries. This is particularly true for reforms in the input subsectors, which were the focus of numerous MIRA-initiated micro-reforms. This subsector is significantly impacted by input subsidy programs. In West Africa, these subsidy programs represent a major hurdle

6 *By "commercially oriented farms", we are referring to farms that purchase inputs (seed, fertilizer, other agri-chemicals and sometimes mechanization services) and produce either entirely or partially for the market, depending on whether the crops they produce are in part auto-consumed. A small farm may be commercially oriented.*

7 *In Burkina Faso, the MIRA implementing agency, DGPER, did not receive its grant until July 2015.*

for agricultural and private sector development. After more than 10 years of seed and fertilizer subsidies, use of improved, certified seed and fertilizer has increased in Burkina Faso and Ghana.

However, the costs of these programs have been significant.[8] As a consequence, Ministries of Agriculture continue to underinvest in core public goods, such as agricultural research and extension. Further investments in other key measures to develop a high quality input value chain, e.g. seed certification and inspection, and fertilizer quality control through laboratory testing and inspections at different levels of the distribution system, remained low. Both Burkina Faso and Ghana have inadequately equipped laboratories. Certification and inspection staff lack resources (e.g. transport, fuel allowances, equipment, adequate training) to work effectively. Without sufficient support, seed and fertilizer quality control will remain substandard, which is evidenced by numerous cases of (i) fake seed or seed of poor quality (low germination rates), (ii) fertilizer formulations that do not match product specifications printed on bags, and (iii) contamination of fertilizers with foreign matter (excess filler, sand, dirt) and heavy metals. Authorizing the private sector to perform some of these functions could be one way to improve efficiency and performance of functions generally and historically viewed as residing in the public sector. There is resistance in most African governments to outsourcing these functions, given perceptions of inadequate private sector experience, potential conflicts of interest and bias, private sector misrepresentation or adulteration of agricultural inputs. There is the strong belief that government agencies should and could perform these functions better if adequate resources were made available.

Reforms targeting product marketing and trade were also highly relevant, though they proved more difficult to achieve. Examples included the reform efforts to develop a legal and regulatory basis for warehouse receipt systems and contract farming arrangements. Furthermore, some reforms targeted restrictions on cereals exports, which has been a persistent issue in many SSA countries that fear liberalizing exports of staples could undermine domestic food security. While warehouse receipt systems could benefit farmers who can use the receipts to obtain bank credit, the concept is new and many banks are not familiar with the concept. Financial institutions perceive any lending to small farmers as risky, not to mention characterized by prohibitively high transactions costs. If micro-finance institutions and commercial banks would accept warehouse receipts aggregated to the producer organization level, risks could be lowered for lenders. The fact that a loan would go to an organization, preferably one with a good track record and a documented financial history, would greatly reduce banks' perception of risk.

The design of MIRA—supporting private sector advocacy groups as grantees—was a well-chosen avenue to achieve the desired objective. Industry and commodity/trade associations could potentially be effective advocates for undertaking regulatory reform in high priority areas. However, in many African countries these organizations are chronically underfunded and rely in large part on donor funding. Membership fees are typically set too low to fund policy and regulatory analytical work. Moreover, the executive secretaries of most of these organizations are not specialists in the industry or commodity/input trade of members. Unless there is an approved and transparent mechanism to generate regular income, such as an export cess

8 In Ghana, 23.7% of the MOFA's budget was allocated to seed and fertilizer subsidies in 2018.

or levy (typically on a cash crop such as cotton, coffee or cocoa) private sector advocacy organizations are likely to be under-resourced. This can compromise their involvement and financing key activities to support policy reforms that affect them. Supporting governments to reform their regulations governing the agribusiness sector was clearly a relevant objective. Governments often lack reform efficiency zeal and stamina. It takes a disciplined technocratic perspective to sustain the long-term view, which is that streamlined and workable regulatory regimes lead to greater investment over time, which will eventually increase government revenue through taxes, tariffs, and service/user fees. In many African countries, a very large proportion of economic activity is carried out in-formally and escapes the fiscal net. Hence, governments have few ways to increase tax revenue, and larger farms and firms end up bearing a disproportionate share of taxes and fees. These larger enterprises also often end up being the target of rent-seeking government employees, who insist on frequent and costly inspections and whose tax assessments and penalties seem excessive (and often arbitrary).

3.2 Effectiveness

Main evaluation question: To what extent did the MIRA project achieve its objectives?

The Project Development Objective (PDO) of the MIRA project has been defined as "At least 25 significant policy and regulatory reforms approved across the five countries within five years that induce measurable changes in private sector perceptions of agribusiness investment enabling environments." The assessment of effectiveness (and other DAC evaluation criteria) is based on this PDO. However, we recommend holding the project only accountable up to the approval of the policies and reforms, with the longer-term outcomes and impacts (including "measurable changes in private sector perceptions…") being beyond the direct control of MIRA. This is particularly true given the relatively short implementation period of 5.5 years.

MIRA almost fully achieved its PDO, since 20of the targeted 25 policy reforms and regulations have been approved during its implementation period (see Table 5).[9] An additional five policy and regulatory reforms are under review and might be fully approved eventually. In this context, it is important to realize that the de facto implementation period for MIRA coordinating agencies ended up being 3.5 to 4 years given the delay in actual implementation start at country-level. Additional grants from the AGRA country offices support these efforts of getting the remaining reforms approved. In each MIRA focus country four reforms were approved. Discussion triggered by MIRA however led to the identification of additional reforms to be pursued in Tanzania and Ethiopia (see section 3.4 on impacts). Further, it should be noted that there have been spill-over effects of the MIRA model to other AGRA countries, e.g. Kenya, Malawi, Mozambique, Rwanda, Uganda and Mali. In those countries, the MIRA approach has been adopted successfully and lead to approval of policy reforms.

The majority of the approved policies and regulations focus on seeds and fertilizers. 12 of the 20 approved policies and regulations were related to input systems (seeds and fertilizer). As mentioned before, this focus is understandable given the importance of these inputs to improve productivity at farm level. Six approved reforms focused on marketing and trade (including one on procurement of staples and one on a warehouse receipt system). Two others focused on a digital registration system and an investment code.

9 *20 approved policies and regulations include the Ethiopia Seed Policy, which has been approved on February 27, 2020 and therefore about two month after the project closing date.*

Table 5: Approved policy and regulatory reforms in MIRA focus countries

Reform	Country	
	Ethiopia	
1	**1**	Exemption from import duty and domestic taxes of pesticides and veterinary drug technologies and equipment
2	**2**	Exemption from import duties and domestic taxes on agricultural machinery spare parts, irrigation/drainage equipment, and animal feed ingredients and compound feeds
3	**3**	Develop and approve Directive/Guidelines for streamlining of policy processes and procedures under which cereals export restrictions are introduced and revoked
4	**4**	Develop and approve National Seed Policy
	Tanzania	
5	**1**	Improve access by private seed companies to publicly protected pre-basic and basic seeds
6	**2**	Barriers to registration of new fertilizer products due to requirement of 3 seasons of testing and payment of $10,000 for each season
7	**3**	Improve the delivery of fertilizers
8	**4**	Ease, efficiency, and institutional arrangement in the management of issuance of grain export permit system
	Ghana	
9	**1**	Ratification and gazetting of the harmonized ECOWAS seed regulations
10	**2**	Approval, passage and gazetting of Seed Regulations. Establish of a National Seed Council to oversee enforcement of regulations
11	**3**	Ratification and gazetting of the harmonized ECOWAS fertilizer regulations. Standardizes rules on fertilizer quality control
12	**4**	A digitized national farmer registration system has been created for multiple purposes, not only fertilizer subsidy tracking
	Burkina Faso	
13	**1**	Agricultural Sector Investment Code
14	**2**	Regulations on domestic sourcing of staples by public institutions
15	**3**	ECOWAS harmonized fertilizer laws and regulations
16	**4**	Facilitate updating and approval of (i) a strategy for a Warehouse Receipt System (WRS) for agricultural products
	Nigeria	
17	**1**	Update National Seed Council Bill (Seed Decree)
18	**2**	Fertilizer Quality Control Bill
19	**3**	President's Fertilizer Initiative
20	**4**	Institutional arrangements to provide improved seed (maize hybrids) to many farmers

The intermediate outcome “government buy-in to the need for regulatory reforms” has been almost fully achieved. This intermediate outcome originates from objective 1 (or component 1) “strengthening and sharpening government demand for regulatory reform”. The strong buy-in became obvious during key informant interviews in all five countries and is evidenced by the PDO achievement level. Due to its consultative and inclusive approach, “buy-in” was built directly into project design. The MIRA regulatory reform process was effective in bringing together key stakeholders and raising awareness of the negative effects of incomplete or inadequate policy and regulatory regimes. In-country discussions and provided project documents (such as the “Progress Narratives”) confirmed that most of the activities and outputs planned for at project design stage have been implemented. The latter include for example National MIRA Coordinators engaged, assessments of costs and benefits of regulations conducted, and Reforms Framework Agreements signed.

However, long delays at the inception of MIRA and during procurement processes (in Ethiopia) affected the implementation schedule and to some extent MIRA’s performance. Objective 1 (or component 1) was supposed to be implemented in particular during early project stages. Although all key activities have been carried out eventually, some experienced significant delays and thereby affected the remaining results chain (not only of component 1, but also the other components). Although the BMGF grant to AGRA for MIRA originally covered the five-year period from late 2013 to end December 2018, initial country stakeholder workshops were not held until the end of 2014 or the beginning of 2015. This delay effectively limited the implementation period to a maximum of four years in each country. By the time the MIRA coordinating agency (in Burkina Faso and Ghana) received its grant from AGRA’s Policy Unit, up to another half year had passed, resulting in an implementation window of 3.5 years. The MIRA coordinating agencies in most countries felt that this period was too short, leading either to top level changes in laws and regulations without sufficient time (and resources) to address the next steps in the regulatory reform process, or to unfinished business.

MIRA strengthened and sharpened African Governments’ appetite and demand for regulatory reforms beyond MIRA’s implementation period. In Burkina Faso, the AGRA Country Office is funding some of the next steps for harmonization of national and ECOWAS seed regulations, and in the drafting and disseminating of investment code supplementary texts. Another donor, AfDB, is funding additional analytical work on warehouse receipt programs. This is a complex undertaking in a country with a dominant public food security agency that buys, stores and sells key staple crops, and a seemingly oligopolistic private grain trade (at the wholesale and regional trade levels). In Ghana, the AGRA Country Office has considered the MIRA agenda completed (with the exception of the high-quality cassava flour initiative). The AGRA country office policy and partnerships officer (hired in March 2018) is pursuing a new set of policy reform priorities, including funding MOFA/PPMED to draft a new agricultural strategy (FASDEP III, Food and Agriculture Sector Development Policy). The two other Ghana Country Office grants are addressing the issue of agricultural crop insurance, and tackling aflatoxin contamination. In both Tanzania and Ethiopia, new topics for regulatory reforms have already been identified and are being discussed with stakeholders (see section 3.3 on efficiency).

The second intermediate outcome “regulation reform process underway in focus countries” has been fully achieved. This intermediate outcome relates to objective 2 (or component 2) “planning, coordinating and managing regulatory reforms and approvals”. The fact that 25

policy reforms have been fully approved or have basically been tabled for approval indicates that the process chosen by MIRA worked well. Most envisaged activities and outputs have been completed successfully as indicated by project documents and confirmed by key informant interviews. Examples for the latter include work-plans and budgets for reforming regulations prepared, signed contracts with sub-grantee service providers and sub-grantee deliverable (e.g. cost-benefit analyses, policy briefs, legal assessments).

The quality of the deliverables of the national consultants (sub-grantees) was generally good. The quality of analytical work of technical service providers to underpin reform focus was good and highly appreciated in Tanzania and Ethiopia. In Nigeria, both the lead legal consultant and economic impact team leader are eminent practitioners with strong personal networks of senior government, private association, university/research institute, and CSO managers. Their technical contributions and high-level contacts were instrumental in pushing regulatory reforms through to completion. A notable exception was work contracted to a series of Ghanaian contractors to develop a fertilizer subsidy data base so that the fertilizer subsidy could be administered electronically rather than through a cumbersome paper voucher program. Several key informants questioned the competency of the contractors chosen.

One observation to improve the tracking of regulatory reforms and their impacts, which can be done by local survey firms, is to set up a strong M&E system, including periodic surveys (baseline, mid-term, end line). Surveys of agribusinesses (SMEs) and farms could be designed to quantify their use of improved inputs and farm-level productivity gains at farm level, as well as agribusiness investments in plant and equipment (including processing units, warehouses, trucks), and engagement with small farmers through contracts or out-grower arrangements. This type of information generated by a strong M&E unit also benefits final project evaluations.

The third intermediate outcome “awareness of regulations raised in domestic and international private sector” was only partly achieved. The relevant objective 3 (component 3) is “promote reformed regulations to local and international private sector investors, in order to raise awareness about improved agribusiness enabling environments in Africa”. The idea was to prepare communication strategies and marketing material and give presentations at relevant conferences and workshops. As for other outcomes, outputs, and activities it is difficult to assess whether the envisaged targets have been achieved, since in numerous cases no targets have been quantified. Further, there is no M&E reporting format, which summarizes the quantitative status for each indicator. Project documents, such as the “Progress Narratives” maintained by the MIRA Project Officer in Nairobi, indicate various activities and outputs concerning the third intermediate outcome have been carried out. For example, in the case of the Ethiopian Seed Association, two seed dialogue briefs have been prepared and three national and regional fora that included 45-60 participants and 12 roundtables were organized and run. However, in the case of the Ethiopian Agricultural Transformation Agency (ATA), project documents state that “…communication of the reforms was not fully done”. Overall, it appears from the documents that these activities and outputs have been carried out to varying degrees.

From the country visits, we come to the conclusion that the communication of new or updated regulations was not always very effective. National level announcements and meetings did not always permeate down to the regional or state level. Regulations and implementing texts were invariably drafted in the official language, English, French, Swahili or Amharic, and not

in a number of major national languages. In Burkina Faso, for example, DGPER (Ministère de l'Agriculture et des Aménagements Hydro-agricoles/ Direction Générale de la Promotion de l'Economie Rurale) noted that the investment code (and eventual accompanying texts and guidelines) should be written in French, translated into More, Dioula, Gourmantché and Peul for the national Burkinabe audience. It should also be made available in English for foreign investors.[10] In Tanzania, the dissemination of MIRA project results to farmers was not done properly. TASTA (Tanzanian Seed Trade Association) and FST (Fertilizer Society of Tanzania) used the AGRA grant but did not reach out to agro-dealers and farmers associations, such as the Tanganyika Farmers Association (TFA) and the Tanzania Farmers Groups Network (MVIWATA). What should possibly change in the future would be the involvement of final users of the intended changes. Farmers can be engaged through their organizations, such as the TFA, MVIWATA, and TAHA as well as apex advocacy organizations in agriculture like the Agriculture Council of Tanzania (ACT) and Agriculture Non-State Actors Foundation (ANSAF).

Effective promotion of reformed regulations to local and international private investors was also affected by the fact that numerous reforms were approved at a rather late stage of MIRA implementation. It should be acknowledged that MIRA project management coped with this challenge by conducting communication and promotion activities simultaneously to the reform approval process. However, the private sector and other stake-holders were usually less receptive for such communication unless reforms were fully approved. Also, based on our country visits we got the impression that understandably the major focus of MIRA project management and involved stakeholders was on making sure that the actual reforms went successfully through the politically sensitive approval process. Therefore, promotion of these reforms was not the top priority.

The fourth intermediate outcome "built government and private sector capacity and commitment to continuously reform regulations" was partly achieved. The relevant objective 4 (component 4) is "enhancement of African Governments' capacity to continuously review, assess and reform limiting regulations". Some of the targeted outputs include (i) MIRA coordinators and government staff mentored, (ii) reform management training modules developed, (iii) adequate investment environment assessment budget line item in place in five national Government budgets; (iv) legal framework to ensure continued private sector participation in Government committees on agricultural regulations; and (v) ongoing private sector participation in national agricultural advocacy forums.

Document review and key informant interviews revealed that focus was on (i) and (v), and partly (iii). MIRA coordinators and government staff were excellently mentored by AGRA project management by closely advising them throughout the approval process. A good practice example here is the mode of collaboration between MIRA project management in the Nairobi

10 *In Ghana, interviewees noted that although English is the official language, key government documents affecting agribusiness and agricultural production investments should be translated into Twi (Akan), Ewe, Fante, and one or more northern Ghana languages. In Nigeria there are even more ethnic/language groups, although the major languages are Yoruba, Ibo and Hausa. A counter-argument to extensive translations might be that most of the stakeholders and potential investors in agribusiness value chains have enough formal education to read and understand regulations in the official language. (Or it can be argued that agribusiness industry or commodity associations should undertake translations in local languages at their own expense).*

AGRA Policy Unit and the Ethiopian National MIRA Coordinator. A very trustful mentor-mentee relationship was built, which was a decisive factor for the results achieved in Ethiopia. The MIRA approach built national capacity for regulatory reform in part by using national consultants, who generally performed well. The government staff in the MIRA Coordination agency were also engaged and learned by doing and consulting a range of stakeholders. This approach built capacity more effectively than if expatriate advisors and consultants had been used.

MIRA strengthened private sector interest and built private sector capacity to participate in the national agriculture policy dialogue. In Tanzania, the two private sector grantees, Fertilizer Society of Tanzania and Tanzanian Seed Traders Association, explained that their organizations have realized the potential and usefulness of targeted and evidence-based dialogue with policy makers on regulatory affairs and felt emboldened to continue that work. As a result of the MIRA experience both are in the process of strengthening their governance structures and financial capacity. Similarly, in Ethiopia, the members of the Ethiopian Seed Association (ESA), which was a MIRA grantee, are increasing their financial contributions in terms of higher membership dues after experiencing the effects of MIRA. ESA has been recognized by policy makers as a voice representing the private seed sector and was invited to different fora organized by the Ministry of Agriculture. For example, ESA is now a regular member of the National Seed Advisory Team working closely with the Ministry on a broad range of seed-related issues. In Nigeria, an Agribusiness Inter-Ministerial Working Group Platform was created to spur the dialogue with the private sector and articulate action plans for policy and regulatory reforms in key areas of farm inputs, financing, market development and pest and disease control. Further, an adequate investment environment assessment budget line item is now in place in Nigeria's government budget. In addition, AFAP is leading work on drafting workable regulations to implement the Fertilizer Quality Act. AFAP/Nigeria is led by a highly capable Nigerian who organized a stakeholder meeting to review draft regulations line by line on 26 November 2019.

While some significant achievements are certainly acknowledged, the attention to strengthening capacities, communication and commitment to continuously reform regulations was limited by the focus on reaching the targeted number of policy reforms. This observation has also been shared when discussing intermediate outcome 3. According to our in-country discussions and document reviews, envisaged outputs such as reform management training modules, the budget line items, and legal frameworks to ensure continued private sector participation have only been partly addressed.

With respect to attribution, based on the strong causal linkages along the impact pathway, it is concluded that MIRA project had a significant impact on approval of policy reforms. The results chain illustrated by the Theory of Change indicate strong and logical causal linkages between activities, outputs, outcomes and the PDO. This is particularly true for objectives 1 and 2 (components 1 and 2). Hence, it is reasonable to conclude that MIRA had a significant impact on the eventual approval of policy reforms.

However, attributing the reform approvals entirely to MIRA is difficult, because relevant activities had been carried out even before MIRA started. With respect to MIRA attribution in achieving fertilizer regulatory reforms in Tanzania for example, using triangulation of information, there seemed to have occurred interventions at least a year earlier before commencement of the MIRA project. The Tanzania Horticulture Association (TAHA)[11] is cited to have undertaken evidence-

based lobbying in 2015 on the Fertilizer Act 2009 and Fertilizer Regulations. In Ethiopia, the project followed up on the regulations and policies to spur agribusiness investments previously identified by the Rural Economic Development and Food Security (RED & FS) Private Sector Development Task Force (PSDTF) - Sector Working Group of the Agriculture Growth Technical Committee in 2015.

Still it needs to be acknowledged that the MIRA project took on promising initiatives, sped-up the approval process, ensured quality and inclusiveness, and showed critical persistence to facilitate ultimate reform approval.[12] In West Africa, other donors (particularly USAID) provided direct and indirect support to the reform process, particularly for seed (West Africa Seed Project, implemented by CORAF) and fertilizer (West Africa Fertilizer Project, implemented by IFDC). But MIRA's persistent advocacy and technical support of regulatory reforms were critical to seeing the reform process through to completion. In other cases, changes in government (through elections), sources of government revenue (decline of petroleum prices in 2015/16 affecting Nigeria), and other circumstances helped to create a favorable environment for reform.

In addition, external factors, such as changes in government administrations impacted MIRA's regulatory reform efforts:

- In Ghana the political party in power – NDC from 2008 to 2016 – wanted to upgrade cassava processing and use cassava flour in bread production. After NPP won the election in late 2016, the new administration did not consider the cassava value chain a high priority, so the high-quality cassava flour (HQCF) initiative was dropped.[13]
- After a long period of anti-government protests, Ethiopia saw a regime change in 2018. In April 2018, Abiy Ahmed was elected as prime minister following the resignation of his predecessor, Hailemariam Desalegn. He started an accelerated reform agenda with a strong focus on private sector development.
- In Tanzania, the leadership of the Ministry of Agriculture changed three times during MIRA implementation. As a result, priorities and attention shifted, which created delays. In Burkina Faso, there were three Ministers of Agriculture during MIRA implementation.

Overall, adequate risks and mitigation measures have been identified during MIRA preparation and largely during implementation. The Grant Proposal identified various risks concerning implementation and results plus organizational risks. Some risks did not materialize (e.g., service providers are non-existent or unwilling to adapt their services to the needs of agreed reform plans). Other risks were adequately addressed by identified risk mitigation measures. Examples include the risk of "difficulty of sustaining effective partnerships and collaboration

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11 *See Ashley Elliot, Independent Consultant. 2016. Tanzania, Registering & Certifying Inputs: Updated Assessment of Key Constraints & Recommendations for Change. AECF, KPMG International Development Advisory Services (IDAS) Africa. Pp. 8, 33.*

12 *For a detailed discussion on "efficiency" see Section 4.3. Quality is evidenced by the fact that many reforms were approved eventually. Also, the way the approval process was designed (including selected pieces of analytical work) ensured high quality.*

13 *The legal review of Ghana regulatory reforms questioned whether the HQCF initiative should have even made the short list of reform priorities, as no policy statement had been prepared beyond a concept note (not shared with UNIQUE), and it was not clear what the policy or regulatory issue would be for stakeholder consideration. This 'reform' seemed to be more a food processing technology pilot project, not any particular set of regulations.*

among all crucial stakeholders in reform processes". The mitigation measure identified (and very successfully implemented) was "AGRA will clearly and consistently communicate the case for an inclusive approach to design and implementation of reform initiatives". Numerous identified risks were related to the role of the National MIRA Coordinators. However, the key to success (i.e. the way this risk was successfully addressed) was the selection of excellent individuals with the political clout and network. In Nigeria, the initial choice of the Nigerian Agribusiness Group (NABG) as the MIRA coordinating unit ended up being too broad gauged, as this private sector organization's mandate and membership was high level and not focused well on the specific regulatory reforms being addressed. AGRA's Policy Unit grant to NABG grant was followed by grants to more targeted private sector advocacy groups such as FEPSAN (Fertilizer Producers and Suppliers Association of Nigeria) and SEEDAN (Seed Entrepreneurs Association of Nigeria), which were more effective in helping to drive input regulatory reform, and to the Presidential Fertilizer Initiative, which proved effective in increasing local blending of fertilizer and overall fertilizer use. However, some few risks were identified, but could only be mitigated partly, such as the risk of "delays in recruiting staff" (see paragraph below).

The MIRA project management and implementation structure has proven to be effective with some challenges related to filling in-country positions. A key reason for this was the judicious choice of the MIRA implementing agency in each country. AGRA support to MIRA was constrained in Burkina Faso, because the Senior Program Officer from the Policy and Advocacy Unit was located in Nairobi and did not speak French. Further, there was not an AGRA country office in Ouagadougou until the very end of 2017, and the Burkina Faso AGRA office has no policy specialist.[14] In Ghana, a former MOFA employee familiar with MIRA was hired by the Accra AGRA office as a policy and partnership officer to manage the final year of MIRA implementation in March 2018. In Ethiopia, the AGRA Program Officer played also the role of the National MIRA Coordinator, which was regarded as a key factor in working hand in hand with the government. In Nigeria, a policy/partnership officer was only hired in May 2019. From the evaluation team's perspective, however, the policy/partnership officers spent far more of their time on partnerships than policy.

To increase effectiveness further, MIRA regulatory reform efforts would benefit from having even stronger and relevant AGRA Country Office policy reform process and analysis capacities. For example in Burkina Faso, there is no officer dedicated to policy and partnerships work. However, the Country Office has provided grants to follow up on MIRA reforms. As a consequence of limited country office capacities and delays in recruiting key staff, the workload of MIRA project management based in Nairobi was very heavy. This overload of existing staff was further exacerbated by the fact that MIRA-like reforms were pursued in the other 5 AGRA focus countries. While MIRA project management was very dedicated and qualified, these factors led to some delays and affected MIRA's performance, particularly in getting grants to MIRA collaborating agencies and consultants. A major reason for the delays was the BMGF insistence on following a rigorous yet time-intensive procurement process.

14 There was reportedly a French-speaking policy officer in the regional AGRA office in Accra for at least two years of the MIRA implementation period, but he left AGRA for an FAO job and most of the MIRA backstopping responsibility fell to the Policy Unit in Nairobi.

3.3 Efficiency

Main evaluation question:
How efficiently was the MIRA project designed and implemented?

The approach used by MIRA was well-aligned with Government policy processes, yet in many ways more systematic and disciplined. The external resources provided by AGRA MIRA allowed for more intensive and frequent consultation with stakeholders, a decisive strength of the program. Under a previous AGRA policy program on Policy Hubs in five countries, AGRA initiated reform work that often was not completed. In the case of seed regulatory reforms in Ghana, MIRA completed the work that the Policy Hub's Seed Node had begun but not finished.

It is also important to point out that despite a perception that MIRA was rather slow to bring about reforms, MIRA actually speeded up the normal timetable to get reforms completed. Typically, the administrative and legislative processes of agricultural policy formulation and implementation in African countries involves the following six stages:

- **Stage 1:** Initiation of reform discussions and review of existing legislation and regulations (if any)
- **Stage 2:** Development of draft reform documents, supported by legal, economic and technical analyses
- **Stage 3:** Validation of supporting study findings and draft reform documents
- **Stage 4:** Approval by relevant government agencies (a MOA department (and lawyers); legislative committee (and procedural body)
- **Stage 5:** Legislation (drafted in committee, vetted in houses of legislature, read and approved)
- **Stage 6:** Executive branch review and assent

Table 6 illustrates the time required to bring regulatory reforms for the MIRA approach compared to a scenario without MIRA or a similar policy reform accelerator. According to key informant interviews and AGRA, for all five countries, the MIRA approach for reforms on fertilizers and seeds has been significantly faster than without this type of support. In average, the MIRA-approach is roughly two to three times faster reaching policy approval compared to regular government processes. For example, in Burkina Faso fertilizer reforms without assistance would take 11 years, while applying the MIRA approach would only take 5 years.

Using an inclusive and consultative approach can be resource-intensive. However, this intensity is expected to be outweighed by the shorter time period required for approval, implementation quality and sustainability.[15] The periodic workshops caused delays, but they were deemed essential to raising awareness and building consensus over regulatory reform content and next steps. The transactions costs were high due to the associated costs of a major consultative

15 The issue of "sustainability" will be discussed in section 4.5.

phase, rounds of Parliamentary "readings" (review), and public hearings. Having a donor behind all these processes leads to the expectation of per diems that attendees largely pocket, "sitting fees" for various meetings, and expensive consultancies (which may include multiple rounds). Bringing together a large number of stakeholder participants for a workshop in a central location is costly, as it is common practice to pay for transport, provide lodging and food, and even provide a supplementary "per diem" to cover dinners and miscellaneous expenses.

To reduce these outlays, African governments could make important draft documents available to key stakeholders (or perhaps even the greater public) for review and comments during a fixed period, say 1-2 months, rather than convening a large number of participants to a formal workshop. However, in countries where internet access is poor and limited, and where not all stakeholders are proficient in the official language, putting key documents for review on websites may not work well and lead to under-representation of the views of smaller, less well-funded entities.

Table 6: Time (in years) required to bring regulatory reforms through the six stages of the reform process

Country	Reform	With/without reform assistance	Stage						Total
			1	2	3	4	5	6	
Burkina Faso	Fertilizer	Without	1	1	2	3	3	1	11
		With	1	1	1	1	1	0	5
Ghana	Seed	Without	1	2	2	2	3	1	11
		With	1	1	1	1	1	0	5
Ethiopia	Seed (PBR)	Without	1	2	1	2	5	0	11
		With	0.5	0.5	0.5	0.5	0.5	0.5	3
Nigeria	Seed	Without	1	3	3	4	5	1	17
		With	0.5	0.5	0.5	0.5	1	1	4
	Fertilizer	Without	1	2	2	2	8	0	15
		With	1	1	1	1	1	0	5
Tanzania	Seed	Without	1	1	1	1	1	0	5
		With	0.5	0.5	0.5	0.5	0.5	0.5	3
	Fertilizer	Without	1	1	1	2	2	1	8
		With	0.5	0.5	0.5	0.5	0.5	0.5	3

AGRA's Internal Audit Unit (IAU) conducted audits of 10 of the 11 MIRA Grantees. Every internal audit conducted by AGRA has three objectives:

- Assessment of delivery of project milestones in relation to elapsed project period
- Assessment of reliability of financial reports submitted to AGRA by the project
- Compliance with the provisions of the grant agreement letter.

Ratings provide a mixed picture, as shown in Table 7. While four audits came to the conclusion that the adequacy of the overall internal control systems was good, in three cases the rating was "needs improvement" because overall performance was weak and frequently fell below expected levels.[16]

Table 7: Summary of ratings of grantee audit reports by AGRA's Internal Audit Unit

Country	Grantee	Rating		
		Good	Satisfactory	Needs Improvement
Tanzania	FST		✓	
	MOA	✓		
	TASTA	✓		
Ethiopia	ATA	✓		
	ESA			✓
Ghana	MOFA		✓	
Nigeria	NABG			✓
	SEEDAN		✓	
	FEPSAN	✓		
Burkina Faso	MARHASA (became MAAH)			✓

MIRA was able to realize synergies and be complementary to other donor projects and resources. MIRA's seed and fertilizer reform work overlapped with and benefitted from USAID policy projects. In the case of West Africa, this synergy was most notable in the regional seed and fertilizer programs, e.g. (West Africa Seed Program (WASP), implemented by CORAF), WAFP (West Africa Fertilizer Program), and EnGRAIS (a second phase regional fertilizer and ISFM (integrated soil fertility management) project). These projects technically reinforced the need to harmonize national seed and fertilizer regulations with ECOWAS agreements.

USAID funded country-specific projects also worked on many of the same issues constraining agricultural input use, which indirectly supported MIRA efforts and helped build a critical mass of analysis, advocacy and reform momentum. The USD 15 million USAID/Ghana funded Agriculture Policy Support Project (APSP, 2013-2018) focused significant effort on seed policy, regulations and their operationalization (see APSP Final Report, 2018). These projects raised awareness of the need to improve the enabling environment for private sector importers, producers, and distributors of improved inputs, reinforcing MIRA's focused work on specific regulatory issues. In Burkina Faso, the USD 34.4 million REGIS-AG Project of USAID (2015-2020) works with small farmers in vulnerable zones to improve their productivity, access to inputs, and market access. This project hired national consultants to develop a plan for

16 *In the annexes of each internal audit report, there are explanations of risk ratings (high, medium, low) and report ratings (excellent, good, satisfactory, needs improvement, unsatisfactory) for each "grade."*

strengthening the seed production and distribution systems. Two well-attended workshops were held in 2018 and 2019.

In Ghana, the USAID/Ghana funded Agricultural Technology Transfer (ATT) Project, implemented from 2013 to 2018 with a total budget of $22 million, supported upgrading of three laboratories for testing seed and fertilizer in northern Ghana. This was an important investment that is supporting implementation of the MIRA-driven seed and regulatory reforms. In Ethiopia, access to finance was identified as an important issue for the seed sector and taken up by Integrated Seed System Development (ISSD) and GIZ. In Tanzania, TASTA enabled the training of TOSCI seed inspectors with funding from the German company Bayer. These efforts complemented MIRA objectives.

MIRA has been a niche regulatory reform program that has complemented other multi-lateral and bilateral policy and regulatory work underway (see discussion under Higher Level Learning Questions beginning in chapter 4). It is noteworthy that MIRA activities were implemented in parallel with other donor efforts, though not necessarily or formally coordinated with them. There has been indirect information sharing through government implementing agencies of MIRA and/or cross-donor/Ministry of Agriculture working groups that meet periodically to discuss agricultural and rural development issues.

3.4 Impact

Main evaluation question:
What were the major changes produced by the MIRA project (positive and negative; intended and unintended)?

The evaluation found that there are early indications of positive impacts due to the policy reforms facilitated by MIRA. As stated in previous sections, impacts of the approved regulatory and policy reforms are beyond what MIRA should be held accountable for. Overall perceptions of the policy environment, not to mention increase of actual private sector investments, require a time horizon beyond the 5.5-year MIRA implementation period. Further, in particular the latter depend on numerous other external factors out of MIRA's control. In any case, it is very encouraging to notice that country visits and key informant interviews revealed some promising developments.

In Tanzania, positive changes in the seed and fertilizer sectors occurred as a result of the reforms:

- TASTA indicated that early indications of direct effectiveness or impact of the undertaken regulatory reforms were related to increased licensed numbers of private companies accessing protected public breeder seeds for multiplication.
- Before the reform of fertilizer regulations, overlapping roles of multiple institutions involved in fertilizer imports led to significant transactions costs. The involved institutions included Surface and Marine Transport Regulatory Authority (SUMATRA), Tanzania Ports Authority (TPA), Tanzania Fertilizer Regulatory Authority (TFRA), Tanzania Bureau of Standards (TBS), Weights and Measure Agency, Tanzania Atomic Energy Commission (TAEC), and Tanzania Revenue Authorities (TRA). Because of unclear and

overlapping responsibilities, clearances of fertilizer cargo at ports were delayed resulting in fertilizer importers incurring high demurrage payments. These were reduced as the responsibilities of these institutions were simplified and regulatory requirements were reduced due to the new Fertilizer Regulations 2017. Taxes and fees charged by various regulatory authorities during importation and clearing of fertilizers were abolished. The changes were facilitated by MIRA.

- Further, due to MIRA policy reforms, companies are now showing interest in investing in blending fertilizer as testing costs have been reduced. Fertilizer registration and blending before MIRA intervention required 3-year seasons of testing, each year paying US$10,000. The registration fees and testing seasons were reduced to single season at US$ 10,000 instead of three seasons at US$10,000 per season. A cited example of such interest is the Tanzania Fertilizer Company Ltd (TFC) and the OCP Morocco Joint Venture. The registration fees and testing seasons were reduced to single season at US$ 10,000 instead of three seasons at US$10,000 per season.

Discussion triggered by MIRA led to the identification of additional reforms to be pursued. In Ethiopia this include the Development of National Agriculture Trade Policy and improvements of the Plant Breeders Rights Regulations. In Tanzania the “crop cess” on cross-district transit of seed was abolished, the Tanzanian seed testing laboratory became an accredited ISTA (International Seed Testing Association) member in 2018, and seed labeling fees were reduced from 500 TSH to 200 TSH per 2 kg bag. In 2019 SeedCo, an international seed company with a local subsidiary in Tanzania, exported approximately 1,000 MT of certified seeds to Kenya. In addition, a Dutch Company exported vegetable seeds multiplied in Tanzania under greenhouses to the Netherlands. These exports were possible as a result of international ISTA accreditation and the regulatory reforms facilitated by MIRA.

In Burkina Faso and Ghana, MIRA has been instrumental in crafting an enabling environment that will lead to improvements in input distribution and agricultural productivity over the longer run. In both of these countries, there have been recent investments in blending facilities. In Ghana, this has been stimulated in large part by the expansion of the fertilizer subsidy program through the Planting for Food and Jobs initiative of the NPP-led government, which began in early 2017. The fertilizer subsector in Burkina Faso is far less developed than in Ghana, although there are now two blending facilities (a third one is under construction), yet the subsidy program influences incentives faced by the private sector. The seed value chain is similar; one key informant noted that “the seed market in Burkina is a subsidy market.” One Burkinabe seed company reported having unsold stocks of 2,000 MT of maize seed from 2018/19, which the firm partly attributed to a weak private sector market and partly to a cancelled Ghana order.

Going forward, MIRA could address well-funded government programs such as input subsidies that structure opportunities faced by private firms and may distort incentives. Perhaps in concert with other AGRA programs, such as the Regional Trade Program (funded by DFID), issues such as fertilizer trade should be addressed across borders (in adjacent trading partners such as Burkina Faso and Ghana). It is estimated (not verified) that up to 50,000 MT of heavily subsidized (50% of cost to farmers) Ghanaian fertilizer (urea and NPK) ends up in Burkina Faso, due to subsidy induced price incentives to smuggle from Ghana and willingly accept imports of Ghanaian fertilizer in Burkina Faso. There are several major Ghanaian importers/ blenders of fertilizer products that would like to trade fertilizer regionally in a competitive market,

particularly to Sahelian countries. The current subsidy system in Ghana, with quotas that do not reflect underlying capacity of the companies in the fertilizer industry, limits the larger, better financed and equipped fertilizer companies from importing/blending more and supplying both a larger share of the Ghanaian market, as well as regional buyers.

In Nigeria, MIRA facilitated reforms contributed to a revival of the national fertilizer blending industry. The Presidential Fertilizer Initiative (PFI), implemented for three cropping seasons (2017 through 2019), was a key reform that got the government out of direct distribution of fertilizer to provision of subsidies to farmers via supply chain interventions, notably in the blending industry, which distributed NPK fertilizer through agro-dealers. This reform corrected many of the abuses of the Federal Government's GES (Growth Enhancement Scheme), implemented under the previous Administration in 2013-2016. While not a perfect vehicle for motivating the private sector, the PFI did revive the largely moribund blending industry in Nigeria by banning compound NPK imports and incentivizing blenders to mix N (urea), P (DAP) and K (MOP). DAP was imported from OCP/Morocco for two years at below international market prices. Urea is produced in Nigeria by two firms, Indorama[17] and Notore, with a third urea processing plant slated to come on stream (to be operated by Dangote).

The degree to which further and widespread impacts in terms of the perceived enabling environment and actual private sector investments will be achieved, largely depends on how effectively the reforms will be actually implemented. Due to the strong causal linkages of the results chain and regional/global experience concerning the effects of improved policies and regulations, it can be expected that the private sector will actually perceive the business environment as being improved, resulting in an actual increase of private sector investments. However, the extent to which this will happen very much depends on how effectively the reforms will be actually implemented. Actual implementation did not happen as part of MIRA (and MIRA was never intended to ensure successful implementation), but is a necessary condition for reaching these longer-term impacts. Effective implementation will require significant investments in outreach to stakeholders at all levels, training of government regulators and inspectors (and adding field staff), investments in equipment, facilities (such as laboratories) and transport. It will also require monitoring of implementation progress, the capacity to respond to stakeholder complaints, and the ability to make mid-course adjustments in the course of implementation.

There are also some unintended consequences of regulatory reforms supported by MIRA. One of the reforms successfully completed in Burkina Faso with unintended consequences was the decree that allows the government to procure locally produced foods for government functions and public institutions (such as schools, hospitals, military installations, prisons). This widely applauded initiative has been implemented effectively at the federal level in cases where SONAGESS buys locally produced staples from producer groups and provides them to government agencies at the national level. However, procurement was devolved to the local (commune) level in many cases, and there are allegations of abuses, where commune mayors allocate purchasing quotas to people who have no experience or capacity (e.g. trucks,

17 - Indorama exports significant volumes of urea from Nigeria to other West African countries and Brazil. The total exports were 837,000 MT in 2016.

warehouses) in procuring large volumes of grain or cowpeas for public institutions. This is a case where a well-intentioned regulation has been subverted in part by implementation decisions. Unintended impacts need to be considered carefully as part of actual reform implementation, and risk mitigation measures should be identified and implemented.

3.4.1 Deep Dives into Input Subsidies

The purpose of this section is to put the reform efforts by MIRA into the context of the overall ambition of improving the enabling agribusiness environment. Based on the examples of input subsidies in Ghana and Nigeria, this section illustrates that the policy and regulation approval facilitated by MIRA has been a major achievement. However, further and additional efforts are needed to have medium and longer-term impacts, such as increased investments by the private sector and eventually increased adoption of improved technologies at farm levels. These additional efforts include the actual implementation of the approved policies, additional policy reform (including very complex and sensitive reforms such as subsidies), and investments in infrastructure and other public goods.

3.4.1.1 Ghana

In Ghana, a major achievement of MIRA has been that it facilitated the ratification and gazetting of the harmonized ECOWAS fertilizer regulations. Thereby, the program contributed to the establishment of a legal basis for 'truth in labeling' quality control and standardized rules on fertilizer quality control. Hence, MIRA addressed a major constraint of the development of the fertilizer subsector, i.e. widespread sales, distribution and usage of low-quality fertilizer. Overcoming this constraint is certainly a key prerequisite for further growth of agribusiness investments in this subsector.

However, as next steps implementation and enforcement of these regulations need to be ensured. A strong regulatory framework and enforcement capacity can increase competition in the fertilizer subsector. By putting in place a strong regulatory framework, MIRA has set the stage for a flourishing of private sector trade in seed and fertilizer. Now budgetary resources need to be allocated by the government to proper implementation of regulations, training, monitoring of the trade, and enforcement of standards (on weight, nutrient content, minimal foreign matter content including heavy metals). Advances in digitalization might lead to new solutions for quality control of fertilizers. Further, labeling and bagging requirements need to be addressed. By minimizing fertilizer adulteration, mislabeling, dilution of foliar fertilizer, short weights and other practices with negative consequences for farmers, the government will create a competitive landscape for fertilizer importation, blending, distribution, and retailing. Thereby, firms that supply high-quality inputs will be rewarded and fraud will be reduced significantly.

So far, regulation enforcement has been a challenge. Inspections take place concentrated at the ports of Tema and Takoradi. PPRSD has two inspectors per region who carry our periodic inspections on fertilizer and also register firms distributing fertilizer and their products sold. However, PPRSD field staff lack transportation (vehicles, motorcycles) and fuel allowances that would enable them to do more thorough inspections. The number of inspectors in the field is limited. As a result, making enforcement beyond the ports into the hinterland is ineffective

and spotty. In order to monitor and discipline the fertilizer subsector, the Government of Ghana will need to add and train inspectors, complete the reference laboratory at PPRSD, and provide the necessary resources for field inspectors to do their jobs properly (transport, sampling equipment). Without this implementation capacity, the ECOWAS rules and quality standards will remain aspirational but not enforceable.

In order to create an enabling environment for agribusiness in the fertilizer subsector, additional major policy constraints need to be tackled – in particular the issue of fertilizer subsidies. The fertilizer subsector in which MIRA operated was impacted by heavy subsidies. After steeply declining in 2014, the only year without subsidies since 2008, use of subsidized fertilizer expanded significantly in 2018 and 2019. The main reason for this development was the Planting for Food and Jobs (PFJ) Program subsidizing the cost of certified seed and fertilizer by 50%. From 2015 on, investment in fertilizer blending facilities also increased from two to six units, although utilization rates are reported to not exceed 20%. Demand for fertilizer on specialty crops, particularly fruits and vegetables, and tree crops has grown, but most fertilizer is used on food crops (especially maize, rice, soy-beans), and most of that fertilizer is subsidized. It is important to note that an estimated 23.4% of the MOFA budget was allocated to seed and fertilizer subsidies in 2018 (estimate from MOFA/PPMED).

The subsidy program has significant impacts on the fertilizer industry structure. Given the predominance of the input subsidy program, the private sector has limited capacity to forecast seed and fertilizer demand independent of the subsidies. Although the number of fertilizer subsidy participants burgeoned from six firms in 2016 to 29 in 2018, investment in upcountry input distributions networks has lagged. Larger, established fertilizer importers claim that many of the new entrants lack warehouse facilities and any distribution capacity. Even with this influx of participants in the subsidy program, the (largest) four-firm concentration ratio was 66% in 2017. It is also important to note that registered and licensed agro-input dealers tend to be concentrated in towns and have not established ‘last mile’ distribution capability. As many farmers are far from towns, they are unable to participate in the subsidy program, which requires that farmers register at regional centers.

The fertilizer subsidy program also affects trade with neighboring countries. Given the disparity between the magnitude of the fertilizer subsidies in Ghana and neighboring countries, an estimated 50,000 MT of Ghanaian fertilizer was smuggled across the Ghanaian border, most notably to Burkina Faso, in 2018. In 2019, there were some well-publicized crackdowns on smugglers, but the volume of unofficial exports probably was nearly as high as 2018. A major fertilizer company in Ghana noted that (legal) fertilizer exports to neighboring countries could increase significantly, but that the subsidy undermines any incentive for neighboring countries to import fertilizer from Ghanaian companies at market prices when they can obtain it at a deep discount from smugglers.

Optimization of fertilizer application has been another challenge of the fertilizer subsidy program. Although the range of fertilizer types and formulations imported since 2016 has increased, with different NPK formulations for different crops (see IFDC’s “Ghana Fertilizer Value Chain Optimization Study” of August 2019), there is limited soil testing and therefore less than complete targeting of fertilizer to different crop/soil combinations. Blending facilities allow larger importers to tailor NPK formulations to customers able to pay for specific crop/soil

needs, but these customers tend to be large commercial farms. From most accounts, targeting of subsidized fertilizer to the smallest, resource poor farmers has not been very successful.

Micro-regulatory and macro-policy reforms (e.g. on subsidies) can be mutually reinforcing. The Ghanaian experience suggests that input marketing reform requires complementary work at the micro and macro level. The former would set in place a workable legal and regulatory framework. The latter would address policy issues that constrain investment and public expenditure priority setting to ensure proper implementation and enforcement of new regulations.

Re-design or even more likely a steady phasing out the fertilizer subsidy program should be considered seriously as the next option for policy reforms. The subsidy program has conditioned the private sector to respond to government signals—intentions, budgetary promises of support, and delivery targets to farmers. After input subsidies over 11 of the past 12 years, it is time to phase out the program and let importers, blenders, wholesalers, agro-dealers and farmers respond to market signals. This will encourage development of distribution networks that reach beyond upcountry regional centers and the largest towns to rural areas. Input subsidies could be replaced by improving access to credit for wholesale distributors and agro-dealers to ensure that they are able to procure imported or blended fertilizer before planting.

They would also be able to store these stocks in smaller towns and market centers that are closer to the farming population. Indirect subsidies could be applied to transport fertilizer upcountry, particularly in last mile distribution. This could help keep fertilizer costs to farmers at reasonable levels, but ultimately costs need to reflect world market prices, which fluctuate. Remember that fertilizer subsidies were put in place when petroleum, natural gas and fertilizer prices were higher in real terms than they are today. Subsidies were designed to cushion the blow of cyclically high prices, but this is no longer a justifiable rationale. World fertilizer prices trended downward in the second half of the past decade to lower real price levels than 2007/2008.

Phasing out of fertilizer (and seed) subsidies will allow scarce MOFA funds to be allocated to other functions (regulation, research, extension, upgrading of laboratories) that will support the emergence of a commercial farming sector that values high quality inputs and is willing to purchase them. It will also eliminate fraud and rent-seeking behavior, not to mention massive smuggled exports to neighboring countries. By eliminating the fertilizer subsidies, the incentive for smuggling will be removed and leakages of $15.74 million[18] will be prevented. Some analysts argue that further refinements to subsidy programs, such as e-vouchers, full electronic tracking of fertilizer distribution, and a system of private sector delivery of fertilizer (eliminating Ministries of Agriculture and state/regional governments from fertilizer distribution), will lead to desired outcomes. This may be true, but phasing out the subsidy system will also lead to positive sustainable outcomes over time that release Government funding for other important

18 *The USD15.74 million figure is calculated using October 2018 CIF prices for urea and NPK (an unweighted aver-age of five types) reported by IFDC in its Fertilizer Value Chain Optimization Study, and assuming 50,000 MT of fertilizer are smuggled (this is the mean of the range of IFDC cited guesstimates of smuggled volumes, a range of 20,000 to 80,000 MT). Half of the smuggled volume is assumed to be urea and half NPK mixtures.*

public goods and functions serving agriculture. Fertilizer use without subsidies might decline in the short run but eventually bounce back or surpass subsidy program levels.

Political Timing of 2021 could be propitious for Subsidy Phase-Out. If the NPP Administration wins a second term and Parliamentary majority in 2020, this will provide the necessary political capital to phase out the input subsidies. The subsidy program will continue to operate in 2020, as the national elections will be in late 2020. Farmers are voters and might vote against the current party in power (NPP) if the subsidies were removed or greatly reduced in an election year, even if many farmers do not benefit fully from the subsidy program.[19] One large established importer with a blending facility advocates phasing out the subsidy, assuming the NPP Administration is re-elected in 2020, as this will lead to better targeting of fertilizer clients (with the ability and willingness to pay) over time and greater investment in upcountry distribution networks. At the same time, many of the subsidy import quota recipients would drop out, as they have not invested in warehouses and distribution systems and lack the financial capacity to compete with better established firms. As the fertilizer industry matures post-subsidy, firms' ability to estimate demand should improve, in part as the uncertainties of the subsidy system will disappear. These include uncertainties about the size of the government subsidy program, MOFA budgetary allocations to subsidies, and MOFA's capacity to reimburse subsidy participants on a timely basis (often limited, leading to long delays in repayment).

3.4.1.2 Nigeria

By addressing fertilizer quality control, MIRA lifted a major constraint for the development of the fertilizer subsector in Nigeria. The program successfully facilitated the approval of the Fertilizer Quality Control Bill. This was a very important first step to developing a well-functioning fertilizer supply and distribution system. Some of the fertilizer distributed since 2013 has been poor quality—short weights, N, P and K content not corresponding to labeled proportions, and many allegations of adulteration by sellers adding extra filler or foreign matter such as sand, dirt or cement. Without a proper regulatory framework, Nigerian fertilizer use, the lowest per hectare among the five MIRA countries, will stall as many farmers do not trust fertilizer quality. AFAP is leading an effort to develop workable fertilizer regulations pursuant to passage of the bill in October 2019. AFAP hosted a meeting on 26 November 2019 in Lagos to review draft fertilizer regulations, with participation from both the private and the public stakeholders. The final copy of the reviewed regulations will be available at a later date. However, implementation of the bill will be challenge and need to be addressed if its positive impacts were to be realized. A first challenge will be to reorient FMARD/FISS away from being a fertilizer subsidy implementation agency in a largely publicly controlled distribution system. Instead it should play a key regulatory, inspection and enforcement role that ensures that the private sector does not adulterate, mislabel or short weight fertilizer products sold to farmers.

19 *It is reported that many small farmers do not receive subsidized inputs or that they receive them late (for optimal timing of use to maximize productivity). Other farmers are alleged to be unconvinced of fertilizer efficacy, which be due in some cases to adulteration or to use of an NPK formulation that does not match the crop/soil requirements of a particular production zone. It is also claimed that some small farmers sell some of their subsidy 'coupons' to third parties who may be aggregators or possibly smugglers. If a farmer sells half his/her allocation and applies fertilizer at suboptimal rates, this will not convince him/her of the economic value of using fertilizer. Productivity gains will be muted and the full potential of certified seeds will not be realized.*

A second challenge will be to expand the number and quality/knowledge of inspectors. A third challenge will be to properly equip these inspectors so they have adequate transport allowances, field sampling and simple testing tools. They should also be able to send samples to well-equipped laboratories capable of doing a series of more complex tests. FISS has asked for support from donor agencies and their implementing partners (such as IFDC) to make these investments, though it can be argued that the Nigerian Government should budget adequately to cover these costs.

While politically sensitive and therefore difficult to tackle, he subsidy program constitutes another limitation to private sector development. Nigeria is the largest aggregate consumer of fertilizer in Sub-Saharan Africa. It surpasses South Africa, although the latter applied 60 kg/ha on average from 2011 to 2016.[20] This is much higher than the 5.5 kg of fertilizer applied per arable hectare in Nigeria in 2016. As a producer of urea Nigeria has imported virtually no urea since 2016 while exporting increasing amounts, estimated at 837,000 MT in 2017.[21] Two firms, Notore and Indorama, are urea producers while Dangote has invested in a urea production plant that will supposedly come on stream in 2020.

The fertilizer subsidy program has had a major impact on the Nigerian fertilizer subsector, but compared to Burkina Faso and Ghana, subsidized fertilizer represents a far lower proportion of fertilizer sold. An AGRA report (2018)[22] estimates that the Presidential Fertilizer Initiative (PFI) and direct government procurement accounted for 35% of the fertilizer market in 2017. While the public sector share was about 525,750 MT, the private sector share was approximately 976,500 MT. PFI provided 427,000 MT of fertilizer or 81% of the public sector share.

Obviously, the PFI has significant impacts on the fertilizer industry structure in Nigeria. The fertilizer industry has numerous importers, 33 blenders (with 24 functional as of mid-2018), and at least 3,000 registered and licensed agro-input dealers (who are members of the Nigeria Agro Inputs Dealers Association (NAIDA). NAIDA members do not usually include rural distributors of inputs, who are typically not registered. The resurgence of the operating blenders was due to the Presidential Fertilizer Initiative and the decision to ban NPK imports into Nigeria of early 2019. Many of these blenders had not been operating before PFI began, but they were assigned market shares by PFI. Some observers think that there is excess blending capacity at this point, especially with seven new blending plant investments announced by mid-2018. Others point out that imported compound NPK fertilizers are considered to be higher quality and consistency than locally blended fertilizer, which uses mechanical mixing technology, as opposed to chemical binding.

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20 - https://knoema.com/atlas/South-Africa/Fertilizer-consumption for RSA estimates. World Bank data for fertilizer consumption (kilograms per hectare of arable land) show 2016 figures of 21.8 kg/ha for Burkina Faso, 14.4 kg/ha for Ethiopia, 20.9 kg/ha for Ghana, 5.5 kg/ha for Nigeria, 58.5 kg/ha for South Africa, and 12.6 kg/ha for Tanzania.

21 - AFAP, "The Nigeria Fertilizer Value Chain: - Impediments and Recommendations: A needs assessment carried out on the fertilizer sector in Nigeria," January 2017.

22 - Although funded by AGRA, the report "Assessment of Fertilizer Distribution and Opportunities for Developing Fertilizer Blends" was carried out by IFDC and AFAP.

Overall, the PFI did not contribute to private sector development in the fertilizer subsector. The AGRA report "Assessment of Fertilizer Distribution and Opportunities for Developing Fertilizer Blends" from June 2018 states:

> "The outcome of the PFI was such that rather than complementing private fertilizer systems, it competed against and disrupted them. The relationships between majority of supply chain actors were suspended for the PFI, the drive to differentiate products by producing differentiated blends was stymied, importation of compounds and urea was discouraged with difficult permit processes, and the concern for farmer availability was abandoned by the supply chain actors for the PFI. Moreover, the volumes of fertilizers anticipated through the PFI could not be achieved, primarily because of the constrained design. With the PFI, it is unlikely that the fertilizer quality has improved. To the contrary, the absence of a strong quality control system coupled with the weakness of the technical capacities of the blenders is likely to have yielded products of doubtful quality."

The AGRA report calls for sustained investment in monitoring, inspection and regulation of the fertilizer subsector plus significant capacity building of the government regulatory body, FMARD/FISS. According to this report FMARD/FISS "is completely unprepared (resources and attitude) for the role" and will require "assistance with recruitment, internal policies regarding regulatory control processes, and specifications (and probably budget support) for equipment and tools." It also calls for training, strengthening and certification of all fertilizer subsector participants, including blenders and agro-input dealers.

As for Ghana, the Nigeria case illustrates that implementation and enforcement of the MIRA reform plus addressing additional key policy constraints is essential for improving the enabling agribusiness environment. It will be necessary to implement the new quality control regulations through a strengthened government-run inspection, testing and enforcement service. In both Ghana and Nigeria, the government agencies charged with implementing these regulations are under-staffed (particularly with respect to field agents), under-resourced (limited funding to pay for transport (vehicles, motorcycles, fuel); lack of testing tools), not adequately trained, and lacking certified testing labs.

All these efforts, while necessary and laudable, do not ensure that African countries will have competitive and demand driven input supply/distribution systems. One major obstacle to this is likely to be input subsidy programs. On one level, it can be argued that subsidy programs create demand for improved (certified) seed and fertilizer. However, there is limited empirical evidence to support that. On another level, subsidy systems create dependencies, as farmers often wait (beyond optimal planting times) for improved seed and (later in the production cycle than desirable) fertilizer.

There are also the unintended consequences of diversion of subsidized fertilizer to secondary markets (including in other countries, which encourages smuggling). There is also likely to be rent-seeking behavior on the part of government or district level agents administering subsidy programs. It has been reported that some farmers sell half their subsidized fertilizer and apply the remainder at sub-optimal rates per hectare. This will lead to unsatisfactory and discouraging yields for those farmers, whose conclusion might be that the improved inputs are not very cost

effective. Finally, there are typically big delays in paying suppliers of government-run subsidy programs, including companies that multiply certified seed and those that import fertilizer. These delays discourage continued participation in subsidy schemes. Some firms, especially seed producers in Nigeria, have been reportedly bankrupted by government payment delays.

Probably the best way to increase improved seed and fertilizer use is to encourage competition in importation, blending and distribution. Farmers will buy high-quality inputs from suppliers they trust. These suppliers have professional reputations to build and maintain and they will not sell inferior, fake or adulterated inputs. If there were a viable extension system, it could help to educate farmers so they would become more savvy consumers. A strong extension system could also recommend or endorse input wholesale distributors and agro-input dealers that provide high-quality inputs. Village-based agents or community-based agents could help in this regard, as defending farmers' interests and serving as informal guarantors of the professionalism of selected agro-input dealers. Training programs of agro-dealers have strived to increase the technical knowledge of participants, so that they can play an informal extension role on sales of seed, fertilizer and agrichemicals.

3.5 Sustainability

Main evaluation question: Are the benefits of the MIRA project likely to continue after donor funding has been withdrawn?

Sustainability of MIRA-initiated reforms highly depends on their implementation quality. MIRA successfully brought numerous reforms and regulation to final approval. In some cases, early implementation was supported. However, sustainability of the initiated reforms largely depends on systematic implementation. The lifespan of MIRA was too short to address this aspect comprehensively. Funding and time will be needed to complete drafting and dissemination of implementing texts, by-laws and sub-regulatory details. Involving decentralized levels for implementation is key. In addition, a wide range of other factors, such as infrastructure investments and foreign exchange constraints, need to be tackled to improve the business environment. Completing regulatory reform often requires further funding, which may not be forthcoming from governments with limited capacity to raise revenue through taxes and user fees. As a result, full implementation often depends on the MIRA implementing agency's capacity to leverage other funds from donors and foundations.

MIRA seems to have supplemented salaries paid to ministry staff, which may be a risk to sustainability. Table 8 below shows the breakdown of grant budgets for MOFA/PPMED in Ghana and the NABG in Nigeria. A large percentage of the funds were budgeted for "personnel costs" (45% in Ghana), another 13.4% allocated to hiring of a "technical assistant" and 4% for "consultancies". This translates to 63% for staff and consultants and 22% for equipment—representing 85% of the coordinating agency's grant funds. The question is what the extent was to which the largest cost category, "personnel costs", ended up being salary supplements paid to existing MOFA staff. Also interesting to note is that the "awareness creation" line item was only 4% of budgeted funds. In the case of NABG in Nigeria, not all project funds were used, but in the original budget, 52% of the funds were allocated to personnel and consultant costs. The awareness creation line item was only 4%, while the equipment costs represented 20%. In breaking down these budgets, one concludes that 50-60% of the funds 'bought'

additional staff capacity (or in the case of the public agency may have supplemented existing government salaries). The grants also covered the cost of holding meetings, consultations and other stakeholder events (4-7%) and media use and communications (5-6%).

Table 8: Breakdown of illustrative grant budgets for MIRA coordinating agencies

Cost Categories	Ghana		Nigeria	
	USD	%	USD	%
Personnel	135,984	45.4	108,000	36.1
Consultants	12,000	4.0	12,000	4.0
Tech. asst.	39,984	13.4	36,000	12.0
Subtotal: staff, consultants	**187,968**	**62.8**	**156,000**	**52.2**
Equipment	46,400	15.5	46,400	15.5
Vehicle OC	20,000	6.7	13,200	4.4
Subtotal: equipment & operating costs	**66,400**	**22.2**	**59,600**	**19.9**
Media/comms	16,000	5.3	17,265	5.8
Meetings	13,000	4.3	21,000	7.0
Other Costs	16,050	5.4	44,960	15.0
Total	**299,418**	**100.0**	**298,825**	**100.0**

MIRA's focus on capacity development will certainly increase the likelihood of sustainability. One distinct feature of the MIRA approach was its focus on capacity development throughout the policy and reform approval process. Government staff, including the National MIRA Coordinators, were advised and mentored on how to facilitate policy reforms. They learned how to move the reform process along while engaging with stakeholders and incorporating some of their suggestions into draft legislation. Additional capacity has been built by the relevant and pointed analytical and advisory work carried out mainly by national consultants (e.g. cost-benefit analyses, regulatory impact assessments and legal advice).

MIRA has generated some demand for monitoring of implementation progress and fine-tuning of regulations to continuously improve the regulatory regime. In the medium term, monitoring of implementation of new regulations, to see that implementation gets done well, is an important role for private sector advocacy groups, civil society, NGOs, and (independent) research organizations to play. They can bring implementation deficiencies to the attention of regulatory authorities, to an ombudsman, or the press (in cases where those authorities do not encourage private sector or CSO input or criticism). High quality monitoring can inform reform implementation and identify corrective action. Further, it improves upward and downward accountability.

Due to the positive experience with the MIRA approach, there might be appetite for further reforms in the focus countries and beyond. However, various challenges can be expected. It is fully understandable that MIRA did not focus on the most complex policies and regulations. Rather the "lower-hanging fruits" were picked. This also means that if the plan would be to

replicate the MIRA approach in the five focus countries to other AGRA countries and other policy and regulatory issues, more complex policy and regulatory reforms would need to be taken on. Political economy aspects, including mapping of key stakeholders and analyzing what they would stand to gain or lose ex ante, would probably need to be considered even more explicitly. Government's appetite for more policy and regulatory reform usually requires a technocratic champion in a key ministry (as bureaucratic inertia tends to be the norm) and at least some higher-level political buy-in.

It should be emphasized that the highly participatory characteristic of the MIRA approach, with its inclusive and consultative processes, will lead to more long-lasting and comprehensive impacts than the traditional "top-down" approaches to policy reforms. While being relatively costly and resource-intensive, the MIRA approach has proven to create stronger buy-in and a sense of ownership than the commonly applied top-down approaches. The acceptance of the reforms will be higher and actual implementation can be expected to face less resistance by advocacy groups and the private sector, as these groups have been brought along during the entire MIRA reform process and have been able to raise issues that could constrain implementation.

In addition to the BMGF, other donors might become interested in supporting more inclusive and consultative approaches to policy reforms. Discussions in the focus countries revealed that there is a high appreciation of the inclusive and consultative approach to policy reforms applied by MIRA. This might increase the appetite for BMGF and other donors to increasingly support MIRA-like approaches. However, promotion of the MIRA approach would need to be intensified. Further, while "inclusiveness" and "participation" are certainly attributes by which donor organizations are attracted, donor organizations prefer to see visible and short-term impacts to the ultimate beneficiaries – a challenge that policy support is facing in general independent of the exact approach. Getting the government to buy-in and allocate funds for MIRA-like reform work, after MIRA has closed out, might be a good test of sustainability. Cases where governments did provide funds were the Presidential Fertilizer Initiative (PFI) in Nigeria. In Burkina Faso, the MIRA coordinating entity, the DGPER of the Ministry of Agriculture, provided supplemental funds for some of the meetings and consultations (usually due to delays in AGRA/Nairobi disbursements of tranches of grant funding). In these cases, there is a recognition that policy and reform are not one-off processes but require adjustments and additional reforms as economic circumstances change, new constraints emerge, and as implementation weaknesses become apparent.

The sustainability of the longevity of the achieved reforms also depends on the type of reform. Bills that have been passed by parliament will last for some time, as laws are not changed frequently. Regulations that consisted of government letters, edicts/decrees, or directives are much easier to change and their duration depends very much on the whims and priorities of the current administrations.

Grants for policy and regulatory reform continue. As MIRA closed at the end of 2019 MIRA-supportive or MIRA-like grants have been made by AGRA Country Programs. These included grants that essentially have continued MIRA's unfinished agenda, providing a final push to getting laws enacted, as well as some grants for developing bylaws, explanatory texts and

implementation guidelines to move from enacted laws to implemented regulations. In some cases, such as Ghana, the Country Office chose to provide grants to address other policy and regulatory issues, such as aflatoxin control, product-based insurance policy and risk sharing in agricultural lending. Other non-MIRA vehicles such as TASAI (The African Seed Access Index), the Regional Trade program funded by DFID, and the African Agricultural Technology Foundation (AATF) grants to three of the MIRA countries (Ethiopia, Ghana, Tanzania) addressed in part priority policy issues identified by MIRA.

These grants are all helping to identify, validate and prioritize country-specific regulatory and policy implementation challenges, develop detailed and fully costed action plans of country-specific policy intervention options, and advocate government agencies to act on resolv-ing identified implementation challenges. Based on the number and amount of non-MIRA AGRA grants, we conclude that policy and regulatory work are high priority for AGRA HQ and the priority country programs. MIRA has helped to stimulate a wide range of policy related work, most of which uses the systematic and consultative approach pioneered by MIRA. This is an important secondary benefit of the MIRA project.

4 (HIGHER LEVEL) LEARNING QUESTIONS

4.1 Key Design Features and Enabling Circumstances

> What are the key design features and enabling circumstances of donor-supported programs for creating conducive policy and regulatory environments for private sector investment in local agribusinesses operating in smallholder value chains?

Private Sector Engagement with Government. The private sector needs to play a central role in advocating for policy and regulatory reforms that stimulate private investment. Further, private sector advocacy organizations need sufficiently broad representation to serve as credible advocates for small farms and firms. Therefore, governments and donors need to ensure that broadly representative organizations play a key role in the reform process. This may take some time or require restructuring of some existing associations in SSA countries, where a trade/industry group may be financed by a small number of prominent firms with disproportionate influence and high-level political access.

Analysis and Advocacy Efforts. It is unusual for a private sector association or group in Africa to pay for analytical work in support of policy advocacy. Analysis is usually funded by donors, though may be carried out by national think tanks, consulting firms, or universities, who in turn are often funded by donors. Evidence should go beyond anecdotes and complaints to clearly identify problems and potential solutions.

Political economy aspects need to be understood, acknowledged and explicitly addressed as part of project design and implementation. Agriculture policies are often highly contested. Different groups pursue different, in many cases conflicting, interests. Groups or coalitions might consist of government agencies, CSOs, NGOs, agricultural researcher institutes, and the private sector. Groups are coalitions that share similar policy beliefs. At the early design stage, the project implementing entity should map out and analyze who are the major groups and what their interests/beliefs. This can differ depending on the specific policy at hand. The project implementing entity should understand the dynamics between the groups upfront and try to understand where common interests and willingness for compromise exists. In line with the MIRA approach, sound analytical work (such as cost-benefit analyses, public expenditure reviews and regulatory impact assessments) should be used as one means for demonstrating likely results of reform and public expenditure gaps/needs, both of which can contribute to consensus building. However, one should be aware that evidence emerging from such work is often used selectively in line with the respective policy interests. Further, chances that fundamental policy beliefs change due to analytical evidence are slim. Project implementing entities should play the role of “neutral brokers”. If perceived as representing certain interests, their leverage and acceptance are likely to be affected.

Further, for an efficient and successful policy approval and implementation process, the identification of a “reform champion” is key. This “reform champion” should be well connected with and accepted by various interest groups in both the public and private sectors. He/she should be highly experienced in moderating and facilitating sensitive policy processes.

Demand-driven, inclusive and consultative policy approval process: As mentioned in previous section, this MIRA approach has been appreciated by all stakeholders increasing buy-in and a sense of ownership, ultimately increasing the changes of successful approval and implementation. This type of approach also increases the likelihood of sustainability. Prior dialogue and consensus with key stakeholders regarding the process and priority reforms is essential. Experience has shown that the more traditional supply-driven and top-down approaches of policy reform have been less successful.

Actual policy and regulatory reform implementation should be a key design element. The design of many projects which focus on policy reform processes stop at approval and actual implementation is often an afterthought. However, implementation does not happen automatically and requires the preparation of implementing texts. By-laws and sub-regulatory details need to be defined. The success of implementation is also affected by political economy aspects mentioned above. Past experience has shown that if disbursement of donor resources is too closely linked to approval of policy reforms, these reforms are not implemented in many cases. However, financial incentives should not be dismissed categorically. New financial instruments, such as Programs for Results, which are supporting the implementation of government strategies and where disbursement is triggered by carefully designed disbursement-linked indicators, can constitute appropriate instruments. At the same time, it should be acknowledged that reaching approvals of policy reforms ends up being a lengthy process and including actual implementation would go beyond the average implementation period of donor-funded projects. Here longer-terms commitment in terms of programs or phased approaches should be considered.

Complementary investments are necessary conditions for reaching longer-term and more ambitious outcomes and impacts of policy reforms. For triggering private sector development and investments, it is not sufficient to focus solely on the approval of policy reforms. As part of project design, the implementing entity needs to identify major constraints to catalyzing private sector investments aimed at ultimately benefitting smallholder farmers. This understanding can be gained through existing studies or additional ones commenced as part of project preparation. In many cases, useful analyses are already available. Further, the implementing entity should seek dialogue with government, other development partners, private sector representatives, and research organizations to identify major constraints and discuss how synergies of complementary investments and programs can be utilized. The focus should be on public good provision. As part of our in-country interviews, constraints such as infrastructure, access to finance, and foreign exchange restrictions have been mentioned.

Policy limitations need to be addressed comprehensively, including sensitive and complex reforms. As discussed as part of the “deep dives”, it is absolutely necessary and important step to address the kind of “micro-reforms” identified by MIRA. However, it is equally important to tackle a comprehensive package of reforms, including those which are sensitive and complex. Examples are the subsidy programs in Ghana and Nigeria. Reforming these policies might take longer and be more costly, but they need to be addressed if outcomes, such as increased private sector investments and increased adoption of high-quality inputs are the ultimate goals of policy programs.

The expectations of donors and other stakeholders, in terms of tangible impacts of policy reforms at farm level (such as adoption of improved inputs and technologies), need to be carefully

managed. First, the time horizon would go much beyond regular programs and secondly, adoption at farm level depends on numerous other factors outside of the control of a policy program. Policy and regulatory reform is a necessary precondition for private investment and productivity enhancements (along entire value chains), but certainly not a sufficient condition. Poor infrastructure and inadequate access to agricultural production and agribusiness finance (from seasonal production credit to credit lines for working capital and longer-term investment capital), not to mention incomplete or flawed implementation of regulatory reform, are common constraining factors to successful reform outcomes and impacts. Nonetheless, any early outcomes of policy reforms need to be consistently communicated to policy makers and those in positions of influence. Otherwise, if not well communicated, the people in positions of influence can be negative champions of policy reforms – claiming that there is no value and impact in policy reforms of this nature.

Design of policy reform projects should provide for sufficient flexibility to use "windows of opportunities". As experienced during MIRA implementation, "windows of opportunities" to successful initiate policy reform processes open and close rapidly. This observation is confirmed by research on policy reforms, which highlight the key role of "timing", in particular for highly contested reforms. Usually, windows open for three reasons. First, there is the build-up of political pressure due to (sector) problems that require urgent attention. Second, a convincing policy option becomes available, and third a conducive policy situation emerges (e.g. due to a change in government or a key Minister, or a short-fall in government revenue). In the agriculture sector, some policies are linked to agriculture production cycles or country budget processes. Therefore, it is important that project design gives the implementing entity sufficient degrees of freedom to quickly react and take advantage of emerging opportunities. This flexibility can be ensured by attaching fewer strings, for example related to: (i) definition of indicators; (ii) upfront definition of the exact reforms to be approved; (iii) specification of the approval process to be followed; and (iv) strict definition and allocation of expenditure categories.

It is Important for AGRA to hire staff with expertise in regulatory and policy analysis, effective advocacy techniques, and reform process management, and not expect the AGRA country office policy hires to spend most of their time trying to develop partnerships with other donors and in-country organizations in order to leverage additional funds for AGRA programs. These are really two separate roles which we advise separating. It may also be useful to share cross-African country success stories, lessons learned and approaches that worked well in bringing about policy/regulatory reform. This regional sharing of experience could be done in sub-regional workshops (one in East/Southern Africa, and one in West Africa); these workshops need to involve actual (MIRA) country participants and key grantees in the reform process, not just AGRA staff.

4.2 Comparison to Other Approaches

> AGRA's Policy approach involves a combination of regular and local TA, embedded in investment operations, Development Policy Lending, & Program for Results

MIRA has some very distinct features, which clearly differentiate it from other policy reform approaches. As mentioned in previous sections, MIRA applies an innovative inclusive and

consultative approach to regulatory and policy reform. Key design elements include: (i) systematic integration of key stakeholders in entire reform process (in particular the private sector and key farm/trade associations and CSOs); (ii) policy reform prioritization and specification/formulation based on analytical and advisory work conducted by TA providers (legal, economic, policy issues); (iii) identification of a national "reform champion" from the government system to facilitate and moderate the reform process (National MIRA Coordinators), including mentoring by AGRA staff (AGRA Program Officer); (iv) a strong focus on capacity development to ensure continuous reform efforts; and (v) communication to raise awareness of the improved agribusiness environment.

By building consensus among national actors in government, the private sector and civil society, MIRA has been able to secure national ownership of the regulatory reform agenda. Using local consultants to do legal and economic analyses has also contributed to national ownership. MIRA did not depend on foreign advisors embedded in ministries or running stand-alone research programs with independent funding sources, expatriate managers and senior analysts, and no strong requirement to build local capacity. Nor did it use foreign consultants with episodic and limited commitment to the reform process.

The MIRA approach is likely to lead to more enduring and sustainable reforms as a process with buy-in from all the key stakeholders. There are well-trained and talented analysts in all the MIRA countries who can provide the necessary analytical horsepower to examine legal and economic issues, supplemented occasionally by foreign consultants with highly specialized expertise in a particular reform topic and valuable cross-country comparative perspective.

To better understand pros and cons of the MIRA approach it can be compared with some alternative approaches to doing agricultural policy reform work in developing countries. Table 9 illustrates key characteristics, strengths and weaknesses of these other approaches. One such alternative approach to MIRA is budget support (or Development Policy Lending), which is contingent on successfully completed steps in the policy and regulatory reform process. This was a hallmark of the USAID funded Agricultural Policy Reform Project (APRP) in Egypt (1996-2002).

An advantage of this approach is to tie budgetary support to several ministries working on a broad program of agricultural policy reform to specific accomplishments, which enforces accountability. The disadvantage is that imposing hard deadlines and forcing compliance is not necessarily the best way to achieve local buy-in, particularly when expatriate advisors, each of whom worked in a team with Egyptian professionals, are involved in designing the steps in the reform program. There was also a tendency to break policy and regulatory reforms into a series of relatively easy to achieve infra-marginal steps, which tended to draw out the reform process (but ensured achievement of those steps from year to year and hence disbursement of USAID funds to the participating ministries).

Table 9: Approaches aimed at policy reforms

Approach	Key characteristics	Strengths	Challenges/Constraints
AGRA MIRA	▪ Consultative and inclusive policy reform process (including numerous consultations, public hearings, validation workshops) ▪ Policy reform process informed by focused pieces of analytical work (legal, economic, technical) ▪ Reform process completely driven by national actors in government, private sector and civil society (private sector advocacy groups as grantees) ▪ Comprehensive coverage of the entire impact pathway up to policy approval (including capacity development and communication)	▪ National ownership of reform agenda ▪ Capacity development directly built into policy reform process. Capacity built on the job within key government agencies, private sector advocacy organizations, and local consulting industry ▪ Policy reform accelerator that speeds-up regular government process ▪ Increased sustainability and impacts expected (in comparison to "top-down approaches") ▪ Demand for further reform whetted and stakeholders encouraged by MIRA successes and their voice strengthened through the MIRA reform process (which can be further replicated)	▪ Continued efforts and resources needed to ensure actual implementation of approved policies and regulations
EBA, World Bank	▪ Remote completion of questionnaires by key informants ('correspondents') on 8 agribusiness indicator categories ▪ Rounds of reviews of data & literature and follow-up clarification and internal to the WBG vetting of results ▪ Focuses on de jure laws and regulations	▪ Broad country coverage (n=101 for 2019) on many legal and regulatory issues affecting farmers and agribusinesses, allowing for international comparability ▪ Through 4 rounds has stimulated some legal reforms (see 2019 EBA Report) ▪ Low scores can provide impetus for reform--the so-called "name and shame" phenomenon pioneered by Doing Business	▪ Stops at potential impetus for reforms (but does not support actual reform process and capacity development)

Approach	Key characteristics	Strengths	Challenges/Constraints
International Policy Research Institutes	▪ Stand-alone research programs with independent funding sources ▪ Sometimes expatriate managers run these programs, with local or regional hire senior analysts who are typically foreign trained. ▪ This approach is largely supply driven and offers recommendations that may not be taken up by policy makers.	▪ High quality of technical advice based on very solid and comprehensive analytical work ▪ Policy briefs are reasonably succinct and well written. ▪ Survey research findings provide a rigorous evidence base to studies and their policy recommendations.	▪ Not clear extent to which approach takes country demand for policy work into account ▪ Does not target actual policy reform processes and implementation ▪ Challenge of communication of results and policy recommendations based on complex analyses and modelling work
Tony Blair Institute model	▪ Foreign advisors embedded in ministries ▪ Active in 14 SSA countries ▪ Supports development of democratic institutions in globalization era in mainly fragile states	▪ Highly trained, experienced technicians can assist technocrats in ministries to build internal support for reform. ▪ They can also build local analytical capacity on the job or through short-term training courses (STTCs).	▪ Foreign advisors may lack sufficient knowledge of political economy, key actors, language/culture, and how policy decisions get made. ▪ Does not target actual policy reform implementation (reviewers' understanding)
USAID APRP	▪ Foreign advisors embedded in ministries but paired with 1-2 well-qualified national analysts (senior & junior) who were contract hires (and not MOA employees) ▪ In Egypt, APRP had specialized units for policy reform design & implementation, as well as monitoring, verification and evaluation. ▪ 5 tranches of funds totaling $245 million (1997 to 2002). Funds could be used by GOE for implementation	▪ High quality, timely technical work was produced and provided evidence to industry & trade associations willing to use it. ▪ Many reform efforts used a gradual and incremental approach to build consensus within government. Reforms were often segmented into workable steps across years/funding tranches.	▪ Capacity built on the job, but key national analysts were not permanent MOA employees. ▪ More ministry staff could have been involved in the work and trained on the job. ▪ Most work not translated into Arabic and project team language was mainly English.

Table 9: Approaches aimed at policy reforms (Cont'd)

Approach	Key characteristics	Strengths	Challenges/Constraints
USAID Feed the Future	▪ Value chain approach, which focuses on developing inclusive marketing systems that target small farmers	▪ Policy/regulatory reform efforts are tied to specific value chain constraints & hence more limited in scope and doable. ▪ Grants to private associations (agro-input dealers, commodity traders & processors) build private sector advocacy capacity and organization service delivery.	▪ Bilateral donor projects are grant-funded to cover project staff but do not usually build much sustainable capacity. ▪ Does not target actual policy reform implementation (reviewers' understanding). ▪ Association activities, including advocacy, end up being dependent on further grants.
Development Policy Lending/ Budget Support	▪ Policy loans lay out specific reform targets and timetables. ▪ Tranches of funds (typically budgetary support to the MOA) are released upon achievement of upfront-agreed reforms or disbursement-linked indicators.	▪ Large funding tranches can motivate reform efforts. ▪ Timetables demand steady progress in order to release funds. In theory, reform topics & targets are set with significant government input. ▪ Well defined indicators can provide adequate incentives.	▪ Might encourage loan recipients to focus on achieving targets/indicators triggering disbursement (at expense of important aspects, such as capacity development).

A similar, but still different approach to budget support/DPLs, is the relatively new financing instrument called Program for Results (P4R) increasingly applied by the World Bank. A PforR has four main features: (i) finances and supports government programs; (ii) disburses upon achievement of program results; (iii) focuses on strengthening institutional capacity and processes and procedures needed for the programs to achieve their desired results; and (iv) provides assurance that Bank financing is used appropriately and that the programs' environmental and social aspects are addressed. Key design elements are Disbursement-Linked Indicators (DLIs) and the Program Action Plans (PAPs). The former are indicators, which define targets for triggering disbursements. The latter are agreed measures to further strengthen the capacities of government and stakeholders. Thereby, the PAPs are supposed to increase the likelihood that the desired results are achieved and sustainable country systems are built.

The Agriculture PforR in Rwanda, which had a strong private sector and value chain focus, was the first PforR applied in the agriculture sector globally (2014-2018). The review conducted by UNIQUE in 2018 revealed numerous strengths, but also a couple of challenges. The strengths included for example the focus on results (given the disbursement incentive) and country ownership (by fully aligning the PforR with the government Transformation of Agriculture Sector Program). Since the application of the PforR instrument was seen by the Government of Rwanda as a signal of trust, a constructive dialogue on essential policy reforms in the agriculture sector was made possible. While the PDO had a strong value chain and private sector development component, there were some challenges in reaching those objectives.

This might be for three reasons: (i) the technical assessments conducted as part of program design did not explicitly enough analyze barriers for private sector development. Hence, measures for overcoming those barriers did not figure prominently in the program design; (ii) the dialogue with the private sector could have been more direct and intense to better understand which policies and regulations should be reformed; and (iii) there was no DLI linked to private sector development. Hence, there was no direct financial incentive to create an improved enabling environment. However, it should be noted that the World Bank learned important lessons and explicitly considered them in the design of the successor program PforR 2, which has an even stronger focus on private sector and value chain development.

Some bilateral donors address policy and regulatory reform issues through projects that focus on selected value chains. These projects are invariably grant-funded, and the projects provide technical and management training to farmers and small businesses (typically through farmer organizations (FOs) and associations).

These projects often seek to improve smallholder and agribusiness access to credit (often using loan guarantees with banks and MFIs). Most USAID value chain projects have a grant component, which can range from 10 to 40 % of total project funding. These grants can be made to FOs, commodity/trade associations, women's groups, and key firms that commit to working with smallholder farmers (often through contractual outgrower arrangements). Expatriates are usually the project directors, while nearly all other positions are staffed with local hires in project management/accounting, technical areas, training, organizational capacity building, and M&E.

Many USAID value chain projects under its Feed the Future Initiative have addressed productivity constraints and marketing/trade issues affecting smallholder staple crops such as maize,

rice, groundnuts, cowpeas, and soybeans. Issues that arise include topics such as aflatoxin control, improving storage (through using hermetically sealed bags), small-scale processing technology and rural value addition, and the need for improved seed and well-targeted, high quality agrichemical inputs (fertilizer, herbicides, pesticides). These productivity and technology issues often have micro-regulatory dimensions, even when the value chain projects do not have explicit policy components. They may also have capacity building dimensions in that training of government (implementing) agents is provided or some equipment is imported, such as soil testing kits, moisture meters, and laboratory equipment.

The Enabling the Business of Agriculture (EBA) initiative of the World Bank assesses laws and regulations in agriculture. The data set identifies actionable reforms to remove obstacles for farmers seeking to grow their business. Hence, EBA is more about awareness creation, transparency and incentive provision for policy reforms. In contrast to MIRA, EBA does not actually aim at directly facilitating the actual reform process of specific policies and regulations. EBA and MIRA are very complementary, since the former ranks and points to areas for improvement, while the latter consults EBA to identify challenges and improve the ranking.

The most recent EBA report for 2019 covers 101 countries with a good mix of high-income countries (28 OECD countries), some 30 middle income countries and over 40 low-income countries. Predictably, the high-income countries score far better on almost all indicators than the low-income countries. EBA asserts that "The Enabling the Business of Agriculture indicators measure the strength of regulation combined with their efficient implementation, which is captured through the time and cost of regulatory processes." The 2019 EBA report notes that 67 regulatory reforms were carried out in 47 of 101 countries, with "more than half of the observed reforms were in the areas of supplying seed, protecting plant health and accessing finance."

Beyond MIRA, AGRA supports an integrated approach to agriculture. A recurrent theme in interviews in the five Sub-Saharan Africa (SSA) countries has been inadequate funding of government functions such as seed certification, laboratory testing, and warehouse and sales point inspections of agri-inputs. Agricultural research and extension are also under-funded, even in countries where federal expenditure on agriculture achieves the CAADP target, such as Burkina Faso (8.5% to 11.6% from 2011 to 2015, though 9.7% in 2017).[23]

Producer access to finance is also often cited as an enduring constraint, which is one justification for the continuation of costly and inefficiently delivered input subsidy programs and a reason for under-utilization of improved seed and fertilizer by small farmers.[24] Poor

23 *Agricultural expenditure as a percentage of agricultural value added was 9.2% in 2017 and fell in the 7.5% to 10.9% range from 2010 to 2017 (source: ReSAKSS). As a percentage of total government expenditure, agriculture received 8.5% to 11.6% from 2010 to 2017.*

24 *There are allegations, particularly in Ghana, of small farmers receiving their fertilizer quotas and selling half of the fertilizer into the secondary market. This leads to suboptimal application rates per hectare and hence lower than expected (and advertised) yields. This dampens small farmer demand for fertilizer, as they reason its appli-cation does not lead to anticipated results.*

quality rural roads and limited market opportunities for smallholders far from urban areas are also mentioned as constraints to use of high-quality, purchased inputs.[25] Given poor market access, investments to improve crop productivity and thereby expand marketed surplus make little sense for resource-constrained small farmers. These farmers hesitate to invest in improved inputs, particularly where seasonal production credit is not available, when market outlets are not assured, or buyers limited (and hence offer prices low).

In recognition of these inter-relationships and the systemic factors behind low productivity and commercialization of smallholder agriculture, AGRA country programs are taking a systems approach in higher-productivity zones. Producers are linked to buyers (an assured market), larger-volume input distributors, and a source of finance (commercial or agricultural banks as well as micro-finance institutions).

This is characterized as "enhanced partnerships among off-takers and financial service providers." AGRA's 2017 Operational Plan for Burkina Faso calls for an "inclusive agricultural transformation," "off-taker partnerships between processors, traders and producers that lead to assured markets," "expansion of the micro-policy reform model to address a broader set of enabling environment issues," and "enhanced sector coordination, implementation and accountability." The MIRA micro-regulatory reform approach therefore remains part of most Country Offices' strategy. However, such integrated approaches are complex and require excellent and continuous coordination between government, donors, implementing entities, the private sector, and all other key stakeholders. Hence, stakeholder harmonization is key and donors/implementing entities should coordinate their support to maximize synergies and complementarities of their investments based on comparative advantages.

4.3 Private Sector Engagement

> How does the private sector need to engage with Government, and what analysis do they need to bring forward in order to ensure that Governments reform policy and regulations that limit private sector investment in local agribusinesses?

The private sector needs to play a central role in advocating policy and regulatory reforms that stimulate private investment. The agricultural private sector includes many different types of organizations, e.g. farmer organizations; women's associations; other economic interest groups; trade, commodity and industry associations; interprofessional organizations; organizations representing financial service providers (commercial banks, agriculture sector banks, micro-finance institutions, rural banks and savings associations, patient and venture capital funds), and other groups organized around value chains. Some argue that the private sector also includes non-state actors, such as NGOs, CSOs, and other organizations representing the rural sector. Others characterize these civil society organizations as the "space between the

25 *By increasing the number of trained agro-dealers in some SSA countries, the distance from producers to input sellers has decreased significantly during the past couple decades, lowering farmer purchasing costs. AGRA and USAID have funded programs to strengthen agro-input dealer associations that have included training of dealers in technical issues related to input use, storage and best practices, as well as financial and inventory manage-ment. Nevertheless, most dealers remain town based and last mile distribution of inputs to farmers continues to be problematic.*

government and the market." This diversity illustrates that the private sector needs sufficiently broad representation as part of policy reform processes to ensure that the interests of small farms and firms are addressed.

MIRA ensured that a wide range of private sector stakeholders is consulted during the selection of targeted reforms and the actual approval process. In many countries, the trade, commodity and industry associations and Chambers of Commerce tend to be dominated by larger players with both economic and political clout. The board members of such associations often have high-level political access to Ministers, Permanent Secretaries, and other key decision-makers in the public sector. Instead of having decisions about regulations and policies affecting the agriculture sector made non-transparently in meetings among heavyweights, MIRA has sought to broaden and deepen policy dialogue in the reform process. This takes time and leads to higher costs in the form of iterative consultations,[26] but the outcomes (in terms of policy/regulatory reforms) have wider approval and buy-in. And this consultative process ensures that decisions that disproportionately benefit elites or the wealthiest and largest firms/farms do not become the norm. This process also limits possible rent-seeking among public officials who regard their position in the reform process as a property right (designed to yield personal benefits).

There are a number of ways in which private sector groups can engage with governments:

- Draft position papers or other advocacy documents (pamphlets, briefs, policy notes, etc.) to share with members and policy-makers.
- Fund or sponsor (with donor financial support) analytical exercises to support advocacy, including value chain studies, analyses of the negative effects of certain fees, taxes, or regulatory procedures on firm/farm operations and profitability.
- Provide agricultural production and marketing information to their membership and public officials.
- Hold meetings at the subnational level to engage with their broader membership, learning regional perspectives and communicating those to key association and farm organization officials and national governments.
- Provide training to members on regulatory/policy issues, why they are important, how to analyze or think about them, and the positions formulated by the advocacy organizations.
- Insist on periodic government-led meetings or forums on key policies and regulations, as well as any changes in rules and government agency mandates. Also insist on periods for public commentary on proposed changes to regulations or new laws. This commentary could be provided via internet or through well-publicized meetings of key Parliamentary committees or regulatory agencies.
- Serve an omnibus or watchdog function as new regulations are implemented to ensure that public regulators understand and properly communicate and enforce the new

26 *The CAADP process of formulating 'compacts' has also been consultative, but typically CAADP consultations engaging the private sector, civil society and government are broader-gauged than more narrowly focused MIRA regulatory reform efforts. The consultative mechanisms are similar but the substantive foci are very different.*

regulations. Play a whistle-blower function if government agents accept bribes (or other services), misinterpret and mishandle the new regulations (or insist that they do not apply), or otherwise shirk or undermine their regulatory functions.

- Serve as a networking platform for agribusinesses that can share information on market opportunities or complementary capabilities (that may lead to business deals), and for farmers who can share information about best agronomic practices, inputs and technologies, and market outlets.

An important benefit of private sector engagement with government is to build the public sector's trust of the private sector and understand private firm and farm perspectives. In the process of dialogue and consultation, private firms also learn the preoccupations and constraints (financial, political, institutional) of public officials. The private sector can therefore both understand (and help to craft) government perceptions of private firms and the regulatory role that governments can and should play. Most serious firms are in business for the long haul and committed to a level playing field and desire sufficient regulation to prevent the anti-competitive and harmful practices of certain unprofessional or unethical market participants.

The gradualist and inclusive MIRA reform process has whetted the appetite of both the private sector and government policy-makers for more and better analysis and continued assessment of regulatory constraints to private agribusiness investment. More and better analysis does not necessarily mean more complex and costly research.

To be accessible and understood by busy policy-makers and association/private firm executives, policy and regulatory analysis needs to be clearly presented in formats that are reader-friendly for non-technical experts. Ideally, government and the private sector need to ask for the analytical work to be done locally so that it is demand driven and not supplied by outside organizations that dictate the research agenda and the approaches or methods used.

Policy briefs that are succinct and focused on research implications and policy recommendations are strongly recommended. AGRA can play a useful role in consolidating packaging and interpreting research findings and analyses that may be challenging for harried bureaucrats and entrepreneurs to fully comprehend.

Sources of policy and regulatory analysis may range from local universities and research institutes to consulting firms, think tanks and policy analysis units within Ministries of Agriculture and Trade.[27] USAID, DFID and other donors have built local capacity in African countries, and high-quality local policy and regulatory analyses have high credibility, as government and private sector users of their research outputs appreciate that the findings are based in local political, economic, institutional and cultural realities and hence appropriately contextual. MIRA has also been innovative in contracting local law firms to analyze legal issues and implications of regulatory changes.

27 - Good examples include Indaba Agricultural Policy Research Institute in Zambia, Tegemeo Institute in Kenya, and iAGRI at Sokoine University in Tanzania. These three research organizations are known for high-quality, impartial policy work; USAID has provided both financial and technical resources to launch these institutes.

4.4 Future Options for Design

Future Options for Design of the MIRA Project

Option 1: Same basic approach (with new design features), additional countries

One option could be to implement the current MIRA approach in the other 6 AGRA countries. As mentioned in previous sections, MIRA's inclusive and consultative approach has been very much appreciated by all stakeholders in the 5 focus countries. MIRA successfully facilitated the approval of numerous policy and regulation reforms. This has been a significant achievement and needs to be highly acknowledged. Given this success, it would be an obvious option to expand the approach to the other 6 AGRA countries (Kenya, Malawi, Mali, Mozambique, Rwanda, and Uganda). It would certainly be important to assess the appetite for addressing policy constraints in those countries with the government and private sector at an early stage. Developing tables of AGRA Country Office grants made under the 2017-2021 strategic country plans would show the extent to which policy and regulatory analysis and advocacy have been prioritized (independent of MIRA).

Some design features should be modified to further improve program performance. These modifications would include:

- More explicit consideration of political economy issues (AGRA as "neutral broker"): Very explicit consideration of political economy issues is essential for effectively and efficiently reaching reform approval (see section 4.1). This is particularly true for highly contested and complex reforms. A stakeholder mapping of the various interest groups plus a comprehensive political economy analysis should be conducted at the early design stage. This would help MIRA to understand and foresee potential conflicts and to identify widely accepted National MIRA Coordinators as "reform champions". MIRA should be perceived as a truly "neutral broker", who is moderating and facilitating the process without indicating strong preferences. A wide range of policy options should be considered.
- Strengthening components 3 on communication and component 4 on capacity development: Both components have been neglected to some extent, since the focus of MIRA was on reaching the target number of approved reforms. Program design should very carefully define what activities should be conducted realistically by whom and by when. A stronger focus on both components would even further increase sustainability and support actual reform implementation. For both components, MIRA should think creatively and apply innovative formats and tools, which have been applied by other development partners and organizations. For both, the advances of digitalization should be checked carefully, since they open new opportunities concerning learning and communication formats.
- Increase flexibility of program design: Policy reform programs need to apply a significant degree of flexibility, in particular due to political economy issues. "Windows of opportunity" open and close very rapidly. Hence, timing is key and there should be fewer strings attached in order to allow program management to react promptly. This should relate to (i) definition of indicators; (ii) upfront definition of the exact reforms to be approved; (iii) specification of the approval process to be followed; and (iv) strict definition and allocation of expenditure categories.

- Role and type of analytical and advisory work: Reform processes informed by analytical and advisory work can have a higher chance of success. This design element should be maintained and further strengthened. More care and thought should be given to which type of analytical work is the most helpful one given a specific context/reform. Cost-benefit analyses might make sense in many cases, but other analyses should also be considered (e.g. Public Expenditure Reviews, Poverty and Social Impact Analyses, Political Economy Analyses, Cost Effectiveness Analyses). However, the limitations should also be clear. Interest groups may use evidence strategically and selectively. In addition, analytical work is unlikely to change deep core beliefs of actors, particularly those who benefit from current inefficient regulations or would be negatively affected by reforms.

- Hiring of AGRA Program Officer: There needs to be dedicated AGRA Program Officer mentoring and advising of National MIRA Coordinators. They need to be very experienced in policy process management. Delayed recruitments led to overloading existing staff with implications on the timeline.

- Improve M&E system and Theory of Change: For the current MIRA project, numerous M&E tools and formats have been developed at design and implementation stages. However, various formats and tools were discontinued since they turned out to be too complex or not adapted to MIRA specificities. Some indicators in the Results Framework were not SMART. There is no overview available reporting on the status and progress of the defined indicators at activity, output and outcome levels. A stronger M&E/MIS system could also track the status of reform processes and inform corrective actions. Furthermore, a more explicit exante Theory of Change, which illustrates causal linkages between activities, outputs, and outcomes, is very well suited to inform project design, reflect on design logic and identify risks. All new World Bank projects, for example, are obliged to define an explicit exante TOC as part of project preparation.

Help Manage the Level of ambition: In order to avoid false expectations, it is important that Senior Management and donors are informed clearly and upfront what policy reform programs can achieve and what not (particularly within the time period of regular donor-funded programs). By looking at the Grant Proposal, we get the impression that MIRA had been too ambitious at design stage. This might affect how policy programs are perceived (despite their crucial importance for agriculture and rural development) with implications for **future funding.**

Option 2: Continue in 5 focus countries with emphasis on reform implementation

Another option for MIRA would be to directly build on the achievements of the first phase and continue with actual reform implementation in the original five focus countries. MIRA made significant achievements in the first phase by getting 20 policy reforms approved. However, approval of policy reforms is only a necessary but not sufficient condition to improve the enabling agribusiness environment and ultimately increasing private sector investments. Another key step in that direction is to facilitate the actual implementation of approved reforms. To do so and to go beyond initial high-level regulatory measures or decrees requires substantial efforts, which should not be underestimated. Implementation details need to be defined through supplementary texts. Further, implementation guidelines and procedures need to be described, and schedules of fees for services and penalties for non-compliance need to be specified. Also,

these steps require further consultations with key stakeholders. In many cases, the success of reform implementation depends on the engagement at decentralized levels. Involving local government is therefore key. Specialists (e.g. lawyers, policy experts, economists) need to be contracted to conduct those tasks.

Without additional funding from external sources, there is significant risk that reforms get implemented only partly and with adverse effects. If supplementary funds (which are not usually coming from government budgets) are not available, the work will not get done.[28] Furthermore, if there is no funding for follow-up meetings and public consultation, review of proposed measures by stakeholders may not be done at all or done in-completely (by the largest, financially strongest and most vocal organizations or firms). As noted earlier, alternatives to validation and review workshops can be devised to allow for public and stakeholder commentary on proposed regulation details. If MIRA were extended, it should address unfinished business from the first phase by funding national consultants to draft clarifying texts, bylaws, implementation rules and guidelines for regulatory changes approved during phase one. Then sufficient resources should be provided for consultations with stakeholders to review these texts and propose any modifications.

Following edits and approval of the additional texts, the regulations will need to be announced publicly and communicated widely, and some training of government implementing (and enforcing) agents will need to take place. Some MIRA investment in M&E of implementation may also be required, including periodic reviews with private sector key informants and representatives of farm and industry/trade organizations. There may also be need for an ombudsman or watchdog office to field complaints about any private sector malfeasance or rent-seeking government behavior in implementing new regulations. Providing for ongoing monitoring, rather than doing an evaluation at the end of the project, allows for interim changes, mid-course adjustments, and learning while implementing.

Facilitating actual implementation of policy reforms could be an important niche for AGRA's policy program in line with its integrated approach to agriculture development. It would be advantageous to AGRA's policy program if it can take the successfully introduced concept of inclusive and consultative policy reform process further and demonstrate that it is able to facilitate implementation of these reforms. Working explicitly along this entire continuum from identification of policy reforms to actual approval and implementation is something which is hardly ever done by any other organization in the development space. It would be in line with AGRA's overall ambition of bringing key actors and institutions for agriculture development together. Also, it would bring its policy work – which is often considered to be abstract and too far away from impacts on-the-ground – one important step closer to providing solutions to on-farm challenges.

28 There is typically a lag of 2-3 years between enactment of a law and issuing of supporting regulations.

Option 3: Expand MIRA to a comprehensive programmatic policy approach

The most ambitious way forward would constitute a combination of options 1 and 2. A future MIRA project could do both (i) facilitating actual implementation of policy reforms it initiated and brought to approval; and (ii) expand its innovative approach to other AGRA countries. Synergies and lessons from the first MIRA project could be used most effectively and efficiently. If AGRA would go for this most ambitious option, the areas for improvements discussed for option 1 need to be explicitly addressed. Careful design, including the definition of the organizational set-up, would be essential. Synergies with other programs, such as MAFAP, need to be worked out explicitly and communicated to donors and partners.

This option could pave the way for an Africa-led policy flagship program and could position AGRA as a key convener and broker for policy reforms that can benefit smallholder famers and agribusiness SMEs. If AGRA's vision is to be a key player for agriculture policy reforms, this would require a close look at its comparative advantage and funding of a program at scale. AGRA should probably neither aim at becoming an agricultural think tank nor a TA provider, nor an investment implementing entity. For all of the above, there are highly qualified existing organizations with long track records. However, AGRA's comparative advantage would be that of an Africa-led convener and neutral broker of urgently needed agricultural policy reforms in Africa, with the moral suasion that a non-African institution might lack. It has the clout (which could be strengthened further) to bring all the key players together and facilitate a real integrated approach to agricultural policy reforms. A flagship would also be more ambitious in terms of scope. It should probably aim at covering a more significant – if not the entire – impact pathway for policy reforms as visualized in the Theory of Change in section 1.2. The scope would also increase in terms of geographical coverage by covering additional AGRA focus countries (maybe eventually all 11 countries).

However, program design and implementation would require a flexible and proactive approach to program management. As mentioned above, lessons from the first MIRA project need to be kept in mind and applied very carefully. Risk identification and mitigation need explicit attention, so does the organizational set-up (program steering structure involving AGRA Senior Management). Numerous staff with expertise in policy reform management need to be recruited with continuous in-country presence from the very beginning. As for any ambitious and innovative flagship program, program management requires a flexible and proactive approach. Program management should be given sufficient degrees of freedom to tap into emerging opportunities immediately. Further, progress needs to be monitored carefully allowing for short-term corrective action. Upfront risk identification and mitigation is a key element of program design. Finally, it might be adequate to apply a phased approach (for example with respect to combining options 1 and 2), in order to reduce complexity and allow for a learning by doing approach.

The program's institutional setup would need to be looked at carefully. We recommend that each country office hire a program officer who covers policy and regulatory issues, works with governments to identify priorities and provide financial and technical support to working on those priorities, and participate actively in cross-donor and cross-government agency working groups on agriculture, food security, and nutrition. There is also scope for AGRA country offices to coordinate better with other donors funding policy, regulatory and institutional strengthening

work. Examples of that are USAID project funded support to seed sector reform in both Burkina Faso (by REGIS-AG) and Ghana (by APSP), whose work seemed to duplicate (in some respects) what MIRA was trying to do.

A new thematic focus: Policies and Regulations for an Enabling Digitalization Environment

An option for an additional thematic focus would be policies and regulation for creating an enabling digitalization environment. Digitalization will have a significant impact on the entire agriculture value chain. African countries will need to harness and deploy digital technologies, since this will determine the future competitiveness and sustainability of African agriculture and its contribution to its economies. According to the Malabo Montpellier Panel Report "Byte by Byte" (and many other reports and publications), the so-called Fourth Industrial Revolution can be an opportunity for African countries to leapfrog and lead the way in the application of digital technologies along the agriculture value chain. The speed and effectiveness at which an agricultural system transforms to become more data and technology driven is largely dependent on an enabling institutional environment. Such an environment would allow and encourage effective, equitable, and fair management, usage and exchange of data and information.

An enabling digitalization environment would depend on various elements, which could be addressed by suitable policies and regulations. According to the Malabo Montpellier Panel Report (2019), this would include seven elements: (i) regulation for the use of digital technologies; (ii) fiscal incentives to encourage an environment in which the private sector can leverage its innovation capacities; (iii) emphasis on skills development to improve digital literacy; (iv) research and development; (v) last mile infrastructure to connect those in remote rural areas to ICT services; (vi) the creation of information and innovation hubs that stimulate the generation of new ideas; and (vii) South-South cooperation. All these elements should be promoted as part of policies and regulations.

Another recommendation is to review relevant work done in the recent past on important policy issues and distill cross-country lessons learned. One example is the ten-country study of fertilizer subsidy programs, where one of the authors of this study attended a regional workshop in Ghana in April 2017. Pursuant to that, AGRA has been working with the Government of Kenya to adopt a smart subsidy model; work on similar smart subsidy programs are underway in Burkina Faso, Ghana and Mali. There is often reference to "smart subsidies," but not much agreement on what works best[29]. An additional recommendation is

29 *An exception is "Practices and Policy Options for the Improved Design and Implementation of Fertilizer Subsidy Programs in Sub-Saharan Africa," by Maria Wanzala-Mlobela (NEPAD Agency), Porfirio Fuentes (IFDC) and Solomon Mkumbwa (FAO), 2013. A more recent report is "Guide for Subsidy Programs: Improving the Design and Implementation of Fertilizer Subsidy Programs in West Africa. Proposed Guidelines for Smart Subsidy Programs," IFDC for USAID, February 2019.*

to review how country program priorities and policy agendas were developed for the 2017-2021 strategy implementation period and assess how effectively the policy/regulatory issues identified by these plans have been addressed. This exercise could provide useful input to the development of AGRA's 2030 strategy.

Option 4: Phasing-out MIRA

Phasing out MIRA without any immediate successor program would mean losing out on the significant achievements made. The achievements of MIRA are obvious (see previous sections). However, the main benefits and impacts still remain to be realized. They include realizing the full potential of approved policy reforms for (small) agribusinesses (in terms of an enabling environment leading to increased investments) and ultimately small-holder farmers. The investments made by MIRA so far, would maybe not be to no purpose, but the risk is very high that no follow-up will be undertaken to bring the approved reforms to full implementation. Policy work is certainly at a more abstract level and more distant to on-farm impact, but definitely a necessary condition for sustainable growth and poverty reduction in the agriculture sector. It is a key element of an integrated approach for agriculture as envisaged by the AGRA strategy.

5 CONCLUSIONS AND RECOMMENDATIONS

The MIRA project was highly relevant, since it addressed relevant concerns of its target group and reflected the priorities of BMGF and AGRA. MIRA was very well aligned with BMGF's Agriculture Development Strategy and AGRA's overall approach to integrated agriculture. Further, MIRA is very coherent with AGRA's Policy and Strategic Partnership Division. Its relevance is confirmed by the AGRA Strategy 2017-2021, which came into effect during MIRA implementation. The close collaboration between AGRA and BMGF during the design phase further strengthened the aligned of the program with the strategy and priorities of both institutions. In all five focus countries, the MIRA project was well suited to the priorities and policies of the respective governments. The definition of the reform programs in each country was informed by the views of the target group, agro-enterprises and commercially oriented farms. MIRA identified reforms that are highly relevant to improve the agribusiness environment in the selected countries.

The MIRA focus on reforms related to agricultural inputs was relevant, as increased productivity is a necessary condition to lift farmers out of low-income traps. Reforms targeting product marketing and trade were also highly relevant, though they proved more difficult to achieve. While MIRA also addressed output marketing issues in four of five countries by attempting to pass laws or regulations that improved staple food crop storage and would enable farmers to use warehouse receipts to borrow money to buy agricultural inputs or equipment. Other product marketing deficiencies, such as the poor condition and seasonal impracticability of rural roads, hurt small farmers in more remoted rural areas, were not addressed by MIRA. However, infrastructure investments using AGRA funds were clearly beyond the scope of MIRA.

MIRA almost fully achieved its PDO, since 20 of the targeted 25 policy reforms and regulations have been approved during its implementation period (see Table 10). An additional five policy and regulatory reforms are under review and might be fully approved eventually. In most of the cases of partial reform success, the government (MIRA coordinating agency) and its key stakeholders would have benefited from another 12-18 months of time. In this context, it is important to realize that the de facto implementation period for MIRA coordinating agencies ended up being 3.5 to 4 years given the delay in actual implementation start at country-level. Some remaining reform efforts appeared to be stalled due to a number of reasons: (i) opposition from a government agency; (ii) change in administrations leading to a particular reform effort no longer being considered a priority; (iii) failure to complete a reform before a legislative session ended; and (iv) late introduction into the MIRA reform cycle, leaving a reform effort incomplete or under development.

Table 10: Status of MIRA-supported policy reforms

Country	# Reforms achieved	# Reforms in progress	Total reforms attempted
Burkina Faso	4	1	5
Ethiopia	4	1	5
Ghana	4	1	5
Nigeria	4	1	5
Tanzania	4	1	5
TOTAL	**20**	**5**	**25**

Note: Partial achievement means that the reform effort was far along in the process of getting approved, awaiting Presidential assent or approval of the national legislature.

The intermediate outcomes one "government buy-in to the need for regulatory reforms" and two "regulation reform process underway in focus countries" has been almost fully and fully achieved respectively. MIRA strengthened and sharpened African Governments' appetite and demand for regulatory reforms beyond MIRA's implementation period. However, it is important to note that rather long delays at the inception of MIRA – this particularly relates to component 1 – affect the program's overall performance. Most activities and outputs envisaged for these two components have been completed successfully.

The third intermediate outcome "awareness of regulations raised in domestic and international private sector" and the fourth intermediate outcome "built government and private sector capacity and commitment to continuously reform regulations" were partly achieved. Based on the project documents it is difficult to assess whether all the envisaged activities and outputs have been carried out. From the country visits, we come to the conclusion that the communication of new or updated regulations was not always very effective. Effective promotion of reformed regulations to local and international private investors was also affected by the fact that numerous reforms were approved at a rather late stage of MIRA implementation. Hence, there was not sufficient time left for comprehensive and systematic communication. Private sector and other stakeholders were usually less receptive for such communication unless reforms were fully approved. Concerning intermediate outcome four, the emphasis was on mentoring MIRA coordinators and partly government staff and private sector participation in national agricultural advocacy forums.

As a consequence of the focus on reaching the PDO of actual reform approval, promotion of these reforms and capacity building was not the top priority. As for any project, the focus of implementation is targeted towards achieving the project development objective (PDO). The rather weak causal linkages between component 3 and 4 on reform promotion and capacity building and the PDO, implies that the program objective could also be reached with a less stringent attention to these two components.

With respect to attribution, it can be concluded that the MIRA project had a significant impact on approval of policy reforms. The results chain illustrated by the Theory of Change indicate strong and logical causal linkages between activities, outputs, outcomes and the PDO. This is

particularly true for objectives 1 and 2 (components 1 and 2). Hence, it can be concluded that MIRA had a significant impact on the eventual approval of policy reforms.

The MIRA project management and implementation structure has proven to be effective with some challenges related to filling in-country positions. A key reason for this was the judicious choice of the MIRA implementing agency in each country. However, there were challenges with recruiting in-country MIRA, in particular in Burkina Faso, Ghana, and Nigeria. This had a significant impact of the workload of the Senior Program Officer of the Policy and Advocacy Unit based in Nairobi with effects on program implementation.

The MIRA project has been able to speed up the process for policy and regulation reform approval compared to a scenario without a similar policy reform accelerator. However, using an inclusive and consultative approach can also be resource-intensive. AGRA MIRA support for consultancies, validation meetings and public hearings actually sped up the process.

MIRA was able to realize synergies and be complementary to other donor projects and resources. This is particularly true for various USAID-funded projects in Ghana and Burkina Faso. MIRA activities were implemented mainly in parallel with other donor efforts, though not necessarily or formally coordinated with them. There was reported to be indirect information sharing through government implementing agencies of MIRA and/or cross-donor/Ministry of Agriculture working groups that meet periodically to discuss agricultural and rural development issues. A preliminary conclusion is that AGRA could engage other donors on the ground in its priority countries even more explicitly. This could lead to coordinating and sequencing AGRA reform programs and donor projects on policy and regulatory issues of mutual interest and priority.

There are early indications of positive impacts due to the policy reforms facilitated by MIRA. Impacts of the approved regulatory and policy reforms are beyond what MIRA should be held accountable for. Overall perceptions of the policy environment, not to mention increase of actual private sector investments, require a time horizon beyond the 5.5-year MIRA implementation period. Further, in particular the latter depend on numerous other external factors out of MIRA's control. Still, there are various early indications for positive impacts. For example, in Tanzania there are increased licensed numbers of private companies accessing protected public breeder seeds for multiplication. In Nigeria, MIRA facilitated reforms contributed to a revival of the national fertilizer blending industry. Further, discussions triggered by MIRA led to the identification of additional reforms to be pursued.

The degree to which further and widespread impacts in terms of the perceived enabling environment and actual private sector investments will be achieved, largely depends on how effectively the reforms will be actually implemented. Actual implementation was kick-started by MIRA (and MIRA was never intended to ensure successful implementation), but is a necessary condition for reaching these longer-term impacts. Effective implementation will require significant investments in outreach to stakeholders at all levels, training of government regulators and inspectors (and adding field staff), investments in equipment, facilities (such as laboratories) and transport. It will also require monitoring of implementation progress, the capacity to respond to stakeholder complaints, and the ability to make mid-course adjustments in the course of implementation.

Sustainability of MIRA-initiated reforms highly depends on their implementation quality. The lifespan of MIRA was too short to address this aspect comprehensively. Funding and time will be needed to complete drafting and dissemination of implementing texts, by-laws and sub-regulatory details. Involving decentralized levels for implementation is key. In addition, a wide range of other factors, such as infrastructure investments and foreign exchange constraints, need to be tackled to improve the business environment. Completing regulatory reform often requires further funding, which may not be forthcoming from governments with limited capacity to raise revenue through taxes and user fees. As a result, full implementation often depends on the MIRA implementing agency's capacity to leverage other funds from donors and foundations. A risk to sustainability is that MIRA seems to have supplemented salaries paid to Ministry staff.

It can be assumed that the highly participatory characteristic of the MIRA approach, with its inclusive and consultative processes, will lead to more long-lasting and comprehensive impacts than the traditional "top-down" approaches to policy reforms. While being relatively costly and resource-intensive, the MIRA approach is likely to create stronger buy-in and a sense of ownership than the commonly applied top-down approaches. The acceptance of the reforms might be higher and actual implementation can be expected to face less resistance by advocacy groups and the private sector, as these groups have been brought along during the entire MIRA reform process and have been able to raise issues that could constrain implementation. Further, MIRA's focus on capacity development will certainly increase the likelihood of sustainability.

Sustainability of the MIRA approach and its initiated reforms also depend to governments' spending for agriculture. At a broader level, government budgets allocated to Ministries of Agriculture and related agencies have fallen short of the 10% CAADP target. While the Government of Burkina Faso allocated 9.7% of its budget to agriculture in 2017, the figures for Ghana (0.7%) and Nigeria (2.0%) are dismally low. SSA governments need to adequately fund government institutions and programs serving agriculture, to increase the ability to sustain MIRA-type regulatory reforms.

Based on the analyses above, we provide a summary rating of MIRA for each DAC criteria. The applied ratings range from "high" to "substantial", "modest", and negligible". Relevance would attain the rating "high". Effectiveness and sustainability are rated "substantial" – the second highest rating. Efficiency and Impacts are both rated "modest – substantial".

Table 11: Overall rating of MIRA performance based on DAC Criteria

DAC Criteria	Rating
Relevance	High
Effectiveness	Substantial
Efficiency	Substantial
Impacts	Modest - Substantial
Sustainability	Substantial

Chapter 4 on "Higher Level Learning Questions" already identified numerous recommendations, which will not be repeated here in detail. The following key bullet points are supposed to highlight what MIRA or similar AGRA policy programs could do differently in the future (the many positive design and implementation characteristics are not mentioned here. For details see chapter 4):

- Actual policy and regulatory reform implementation should be a key design element of policy programs, though AGRA support should not fully fund implementation. Support for development of regulatory bylaws, guidelines, and clarifying texts is needed. Greater support for communication and outreach programs that build awareness of completed reforms in the private sector and civil society is also recommended.
- Regulatory reform is rarely a one-off process or achievement. Typically, it reveals other regulatory needs and institutional and implementation weaknesses in governments.
- Successful implementation of new regulations may require addressing other policy issues, particularly more complex and sensitive "macro" policies and institutional arrangements (where government takes on roles or functions that could be done by the private sector or where the private sector is 'crowded out' of a market).
- If longer-term outcomes and impacts are envisaged (e.g. increased private sector investments and adoption at farm level), complementary investments are needed (e.g. in infrastructure and various other public goods), as well as changes in tax regimes, exchange rate policies, and other key features of the investment landscape. These investments would need to come from complementary investment programs or policy work that addresses the macro constraints.
- Effective and efficient program design and implementation require an in-depth understanding of the political economy in the agriculture sector (plus the identification of a "reform champion").
- Programs aimed at policy approval require a flexible design in order to quickly react to "windows of opportunity".
- A stronger focus on capacity development and communication would further enhance the program's impacts and sustainability. Both increase stakeholder buy-in to reforms.
- Internal (AGRA) and external (e.g. BMGF, other donors, governments) expectations of what policy programs can realistically achieve in project time frames should be carefully managed.
- An improved and well-defined M&E system is key for program management (to take corrective action), identification of lessons learned, and upward and downward accountability. It can also feature a survey research component to measure and track impacts of regulatory reform on farms and firms.

Given the encouraging achievements of the MIRA approach, the importance of policy and regulation reforms for agriculture and rural development, and the coherence with AGRA's overall approach on integrated agriculture, we strongly recommend to continue with MIRA-type of policy programs. Given its uniqueness, the MIRA approach to policy reforms constitute a niche for AGRA. The MIRA approach is complementary to approaches to policy reforms applied by other organizations, development partners and research institutes.

Options 1-3 described in chapter 4, would each enable AGRA to expand its niche on policy reform work. However, options 3 could pave the way for an Africa-led policy flagship program and could position AGRA as a key convener and broker for policy reforms that can benefit smallholder famers and agribusiness SMEs. AGRA's comparative advantage would be that of an Africa-led convener and neutral broker of urgently needed agricultural policy reforms in Africa, with the moral suasion that a non-African institution might lack. It has the clout (which could be strengthened further) to bring all the key players together and facilitate a real integrated approach to agricultural policy reforms. A flagship would also be more ambitious in terms of scope. It should probably aim at covering a more significant – if not the entire – impact pathway for policy reforms as visualized in the Theory of Change in section 1.2. The scope would also increase in terms of geographical coverage by covering additional AGRA focus countries (maybe eventually all 11 countries).

The extent to which the MIRA approach to agriculture policy and regulatory reforms can be institutionalized within AGRA country programs depends on the complexity and coverage of the future program. Option 2, which would focus on implementation in the current five countries, would probably require limited guidance and management from AGRA HQ (assuming in-country positions are filled). Option 1, which would expand the existing MIRA approach to additional AGRA focus countries, would require some more intense management oversight from the HQ, particularly at design and early implementation stage.

Option 3, which is the most ambitious and complex option, would depend to a significant extent on close management by the Policy and Strategic Partnerships Division. The division would probably also expand its team in Nairobi. In case of option 1 and 2, the Policy and Strategic Partnership Division in Nairobi should still continue to play an important role in working closely with the 11 priority country programs. It should for example: (i) provide analytical input into the next five year round of Country Strategies; (ii) help to identify regulatory constraints that need to be addressed and in developing approaches to tackling those issues; (iii) provide grant funding selectively to priority reform efforts; and (iv) closely monitor and evaluating the effectiveness of MIRA-like reform efforts and their implementation and impacts. However, it should be noted that grant funds for the 2017-2021 period have been fully allocated in MIRA and other AGRA priority countries. Therefore, without MIRA supplemental funds, unlikely to come on stream before 2021, there will have been a two year plus gap (from end 2018 to start-up in 2021).

An option for an additional thematic focus would be policies and regulation for creating an enabling digitalization environment. Digitalization will have a significant impact on the entire agriculture value chain. African countries will need to harness and deploy digital technologies, since this will determine the future competitiveness and sustainability of African agriculture and its contribution to its economies. According to the Malabo Mont-pellier Panel Report "Byte by Byte" from 2019 (and many other reports and publications), the so-called Fourth Industrial Revolution can be an opportunity for African countries to leapfrog and lead the way in the application of digital technologies along the agriculture value chain. The speed and effectiveness at which an agricultural system transforms to become more data and technology driven is largely dependent on an enabling institutional environment. Such an environment would allow and encourage effective, equitable, and fair management, usage and exchange of data and information.

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ANNEXES

Annex 1: Key Informants and Stakeholders Consulted

BURKINA FASO

AGRA, Jules Somé, Country Manager

Association de Distributeurs et Détaillants d'Intrants Agricoles (AGRODIA), TANGOGOSSE Yamine, Président et

CILSS, Djimé Adoum, Directeur Général

CNFA, Ed Keturakis, Vice-President

Confédération des Paysans du Faso (CPF), Issaka PORGO, Secrétaire Permanent CPF

Ets KONDITAMDE KING-AGRO,

Fédération des Professionnels Agricoles du Burkina (FEPAB), Madame KONE Haoua, Chargé de programme et Coordonnateur: M. BIRBA Athnase

Institut de l'Environnement et de Recherches Agricoles (INERA/Département productions végétales), Bonkoungou Saidou, Head of Production Unit

MAAH, DGPER, Dr Abdelaziz OUEDRAOGO, Directeur Général

MAAH, DGPER, David TIEMTORE, Direction du développement des marchés des produits agricoles

MAAH, DGPER, Issaka TINGRI, AGRA Policy Advisor; Economiste Planificateur, Conseiller en études et analyses

MAAH, DGPV, Direction générale des productions végétales, ZONGO, Pascal - Director Dept of Inputs and Production Development

MAAH, DGPV, Directeur Général

NANKOSEM, David ABASSIRI, DG et Joseph TARAMA et Salia YAO Collaborateurs

Société TROPIC – AGROCHEM, Directeur : An-Hassane SIENOU et Collaboratrice Madame KAFANDO

SONAGESS, PALE, Eric - Socio Economist

Union Nationale des Producteurs de Coton (UNPCB), BYEN Abdoul Rayim, Représentation Régionale UNPCB à Ouaga

Union Nationale des Producteurs Semenciers (UNPSB), Inoussa OUEDRAOGO

ETHIOPIA

Mengesha Tadesse, MIRA Coordinator and Policy Advisor

H.E. Eyasu Abraha, State Minister of Agriculture

Amsale Mengistu, Senior Program Officer, BMGF Ethiopia

Mirafe Marcos, Senior Director, Agribusiness & Markets, ATA

Fikre Markos, Advisor, Ministry of Agriculture

Ethiopian Seed Association (ESA) Lemma Dessalgne

Bart Minten, International Food Policy Research Institute

Vikas Choudhary, World Bank

GHANA

ACDI/VOCA, Christel Tshikudi, COP, USAID ADVANCE II Project

AGRA, Dorothy Effa, Policy and Partnerships Officer

AGRA, Forster Boateng, Regional West Africa Director

AGRA, Victor Antwi, Inputs & Agro-Input Dealer Specialist

Appiah Associates, Estelle Appiah, Director

Appiah Associates, Vesper Suglo, Agriculture Consultant

GAIDA (Ghana Agro-Input Dealers Association), Afia Nyantakyi, VP Greater Accra & Central Region

GFAP, King David Amoah, President, based in Techiman

IFDC, Robin Wheeler, COP, USAID Regional Fertilizer Project, EnGRAIS

MOFA/CSD (Crop Services Directorate), Seth Osei Akoto, Director

MOFA/CSD, Michael Owusu, Fertilizer Lead

MOFA/PPMED (Policy, Planning and Monitoring and Evaluation Directorate), Daniel Ohemeng-Boateng, former Director and MIRA Coordinator

MOFA/PPMED, Josephine Quagraine, Tech. Coordinator, MIRA

MOFA/PPMED, Charles Ayueboro, Policy Lead, MIRA

MOFA/PPRSD (Plant Protection and Regulatory Services Directorate), Dr. Felicia Amprofi, Director

MOFA/PPRSD, Ernest Osei Assibey, Head, Fertilizer Division MOFA/PPRSD, Seed Division, Deputy Director, Seed Division

NASTAG, Thomas Havor, President

Omni Fertilizer, Dominic Donkor, Commercial Director

YARA, Danquah Addo-Yobo, Regional Director

NIGERIA

ACSDCB, African Centre for Shared Development Capacity Building, Olu Ajakaiye, Director

AFAP, African Fertilizer and Agribusiness Partnership, Ayodele Balogun, Director

AFEX Commodities Exchange Limited, Iruansi Itoandon, Commercial Manager and Farhat Kunmi-Olayiwola, Partnerships

AGRA, Thomas Aroyoko, Policy and Partnerships Officer

AGRA, Gbemisola Bakare, Program Manager

AGRA, Michael Opare-Darkwah, Internal Audit Officer, AGRA Regional Office

FEPSAN (Fertilizer Producers and Suppliers Association of Nigeria), Gideon Nedegu, Executive Secretary

FMARD, FISS (Farm Input Supply Services), Engineer Jatto, Director

FMARD, FISS (Farm Input Supply Services), Sunday Eric Oke

IFDC, Samuel Ali, Fertilizer Market Analyst, former FEPSAN staff

IFDC, Kido Kouassi, Sub-Regional Coordinator

IFPRI, Kwaw Andam, Nigeria Strategy Support Program (NSSP)

Indorama, Balbir Singh, Head Agronomist

Mamora Seeds, Ltd. & VP in Agro-Dealer Association, Rufu Adekunle Lawal

NABG, National Agribusiness Group, Temitope Oluwo, Executive Manager

NASC, National Agricultural Seeds Council, Folarin Okelola, Advisor to Director, Dr. Phillip Olusegun Ojo,

Dahiru Rabiu, Asst. Dir.

SEEDAN (Seed Entrepreneurs Association of Nigeria), Ibrahim ABDULLAHI, Executive Secretary and Adigun Stephen, agronomist

USAID Agribusiness Finance Project, James Ebuetse, JAA, Policy/Business Enabling Environment Component Lead

YAG Associates, Prof. Yemi Akinseye- George, legal consultant to MIRA

TANZANIA

NexLaw Advocates, Mr. Ayoub Mtafya, Advocate/Partner,

NexLaw Advocates Dr. Saudin J. Mwakaje, Advocate/Partner

Tanzania Fertilizer Company Ltd & Fertilizer Society of Tanzania, Mr. Salum K. Mkumba, General Manager & Chairman

Economic and Social Research Foundation, Ms. Vivian Kazi-Mateng'e, Head of Commissioned Research Department

World Bank Group, Ms. Emma Isinika Modamba, Sr. Agriculture Economist

Premium Agro Chem Ltd & Fertilizer Society of Tanzania, Mr. Akash Shah, Director & Treasurer

Ministry of Agriculture, Mr. Gungu M. Mibavu, Assistant Director of Policy Planning & National MIRA Coordinator

Tanzania Seed Trade Association, Mr. Baldwin Shuma (Bob), Executive Director

AGRA Tanzania Country Office, Mr. Liston Njoroge, Program Officer (Policy & Advocacy)

Annex 2: Stages of Administrative and Legislative Processes of Agricultural

Policy Formulation and Implementation in African Countries

There are six stages in the regulatory reform process as understood and practiced by AGRA MIRA in collaboration with African Governments and stakeholders. Each stage is elaborated in greater detail below.

- Initiation
- Development
- Validation
- Approval
- Legislation
- Implementation

Initiation

- Identification and prioritization of policy or regulatory challenge or problem needing to be addressed.
- This is usually done by a government technician, a desk officer responsible for the policy thematic area, or a contract hire who is part of the MIRA Coordinating Entity, through dialogue with other stakeholders to confirm that this is indeed a problem. Alternatively, the MIRA coordinating agency takes the initiative to discuss with implementing partners: Ministry of Agriculture, Ministry of Trade, Research, Cooperatives.
- After the technician identifies and elaborates the problem, the issue is discussed with government experts in that thematic area to develop a concept note.
- Initial consultation of a limited group of key stakeholders outside government.

Development

- Analyze in depth and appraise reform options through subject matter analysis, ex ante economic impact assessment (Regulatory Impact assessment, Cost Benefit Analysis, economic modeling), legal review and analysis, and estimation of public expenditure requirements to implement proposed options.
- Development of a draft policy, bill or regulations with private sector stakeholders. A Task Force may undertake this or a consulting lawyer may take the lead and share it with a small team of stakeholders.
- A wide range of stakeholders is consulted at this stage including agricultural research institutes, the extension service, private sector associations (seed, fertilizer, agricultural finance, agricultural commodity trade, agro-industries such as processors), the agricultural/agribusiness committee of the Chamber of Commerce, farm/producer organizations, various non-state actors, and other NGOs and CSOs (which may include women's organizations, SME/entrepreneur associations, consumer advocacy groups, youth groups).

Validation

- Intensive consultations with stakeholders in the thematic area through workshops to validate studies and draft documents, which lay out the rationale for the proposed reform, summarize analytical findings from consultant inputs, and provide some detail on the specific reform(s) to be proposed and why.
- Organize meetings/convenings/workshops to bring these key people to validate draft documents. This may require several iterations.

Approval

- The leader of the Task Force submits the draft documents, succinctly summarized, to the Permanent Secretary/Chief Director of the Ministry of Agriculture, who reviews them and submits the initial policy draft to the Minister of Agriculture (and his legal team).
- The Minister gives the documents to the Attorney General's office.
- The lawyers draft the documents to fit the legal context of the country.
- The Policy directorate or unit within the Ministry of Agriculture prepares a Cabinet Memorandum to justify the need for the reform.
- Once the policy draft and the Cabinet Memorandum is prepared, the Minister of Agriculture presents these to the Cabinet/Council of Ministers (all ministers chaired by the President or Prime Minister).
- The Cabinet may ask for modifications and send the documents back to the Minister and the Permanent Secretary. Consequently, the Permanent Secretary/Chief Director will ensure that the documents are respond well to requested changes before sending these to the Cabinet. This requires several iterations.
- Advocacy by non-governmental stakeholders (done in parallel) plays a crucial role in getting the reforms prioritized and pushing them through this stage of government approval.

Legislation

- Once Cabinet approval is received, the documents go to the appropriate Parliamentary Committees. This usually includes the Select Agricultural Committee as well as a Legal Affairs Committee. If the reform is a Legal Instrument, it may go to a different select committee for review and approval.
- MOA technicians organize workshops with the Parliamentary Agricultural Committee (PAC). This may involve more than a single workshop. Issues raised during the workshops, as well as proposals for how to address these, are discussed.
- Once the PAC is satisfied with the revisions, the documents will be laid in Parliament. All the Parliamentarians will be given the document and be given time to go through them.
    - The Draft Bill is published and the First Reading is done in the National Assembly Committee.
    - It is advisable to have a period (of a month or two) for public commentary on the draft legislation. Stakeholder comments can be made via email or a letter/memo, or a public

meeting with the Agriculture Committee and other key Parliamentarians can be held for public comment and debate.

- Parliament then discusses the documents in full session. When Parliamentarians are satisfied with the edits, they will approve the draft legislation for Presidential assent.
- The President will give the documents legal status.
- The Act will be passed to the regulatory authority for implementation.

IMPLEMENTATION

- Development and approval of regulations: Every law spells out regulations (legal instruments) that are guiding procedures for its implementation and enforcement.
- Regulations detail services to be provided and provide a framework and instructions for who will be trained and how. Drafting of implementation guidelines and procedures is typically required.
- Regulations also spell out who will benefit, which is what generates impact. Hence, Legal Instruments are very important.
- Communication of the reforms and legislative changes to agribusiness firms, farmers and the general public, who all have to comply with the new rules. Communications channels usually include government gazettes, newspapers, radio/TV/internet web sites, public meetings with stakeholder representatives.
- Supporting interpretation and translation of the law by policy enforcers: local authorities, regulatory inspectors, customs officers, policemen, magistrates, judges. Translation of laws, regulations and implementation guidelines into local languages may need to be done; associations representing stakeholders can be approached about doing this.
- Development of standard operating procedures and guidance documents for government agencies to operationalize the policy and regulatory changes.
- Advocacy for allocation of funding in the government budget is required.
- Capacity building of implementing agencies (training of new & existing staff; provision of equipment (transport, testing tools).
- Monitoring & evaluation and review: M&E Units within government generate the relevant information, and policy analysts determine whether or not the policy is addressing the problem, and whether or not implementation is proceeding well. Analysts provide revisions in the agenda, formulation or implementation.
- Advocacy by watchdogs (CSOs, trade and industry associations, farmer organizations) for implementation of regulations to ensure that implementation is done properly & fairly, and is not subverted by rent-seeking officials or lax enforcement.

Next page: Participants at a farmers' training workshop in Nandi county. Participants at a farmers' feedback workshop organized by the Mazingira Centre team, on 5th to 9th Feb.2018 in Nandi county | photo credit: ILRI/Jesse Owino |


KIMBO


CATTLE HEAT DETECTION AND HEAT SIGNS
AND BOMET, KENYA
BREEDING A DAIRY COW
FODDER MANAGEMENT
ILRI

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BILL & MELINDA GATES foundation
Federal Ministry for Economic Cooperation and Development
The ROCKEFELLER FOUNDATION
UKaid from the British people
USAID FROM THE AMERICAN PEOPLE