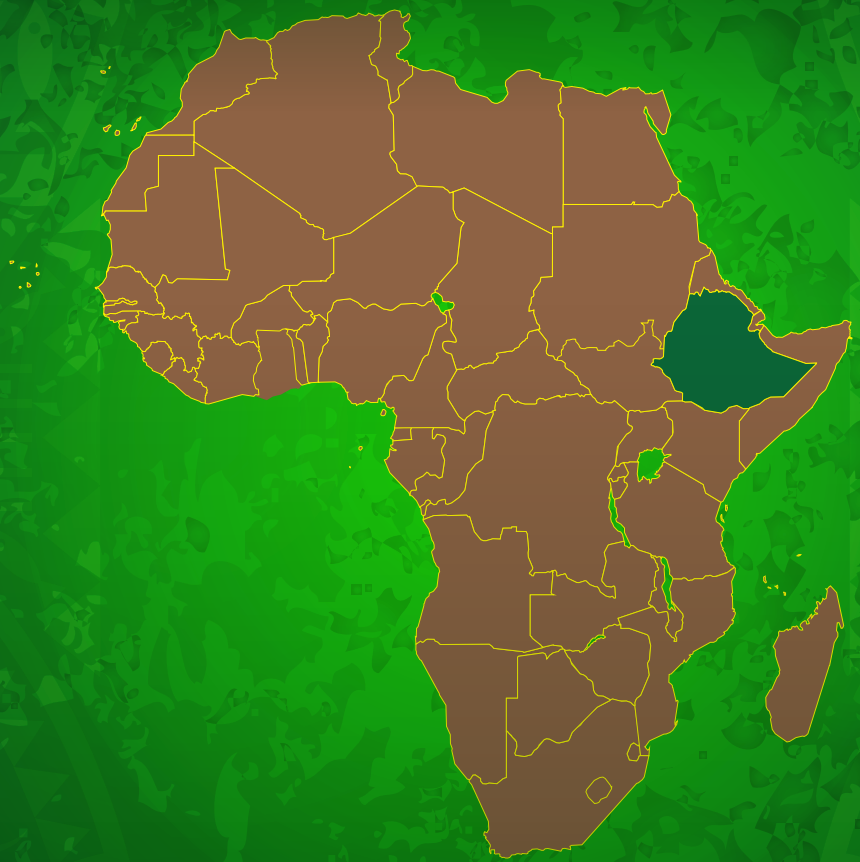
NEPAD
TRANSFORMING AFRICA

ETHIOPIA

JOINT SECTOR REVIEW ASSESSMENT

Advancing Mutual Accountability through Comprehensive, Inclusive, and Technically Robust Review and Dialogue



ETHIOPIA

JOINT SECTOR REVIEW ASSESSMENT

Advancing Mutual Accountability through Comprehensive, Inclusive, and Technically Robust Review and Dialogue

September 2014

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS AND ABBREVIATIONS

ADLI	Agricultural Development-Led Industrialization
ATA	Agriculture Transformation Agency
ATP	Agricultural Transformation Plan
AU	African Union
AUC	African Union Commission
BoARD	Bureau of Agriculture and Rural Development
CAADP	Comprehensive African Agricultural Development Programme
CCRDA	Consortium of Christian Relief and Development Association
CPTF	Cross-pillar Task Force
CSA	Central Statistical Agency
CSO	civil society organization
DFID	Department for International Development–UK
DRMFS	Disaster Risk Management and Food Security
ECX	Ethiopia Commodity Exchange
EFYs	Ethiopian Fiscal Years
EU	European Union
FAIS	Food Aid Information System
FAO	Food and Agriculture Organization of the United Nations
G8	Group of Eight
GDP	gross domestic product
GNI	gross national income
GTP	Growth and Transformation Plan
ha	hectare
kg	kilogram
LoI	letter of intent
M&E	monitoring and evaluation
MDG	Millennium Development Goal
MoA	Ministry of Agriculture

MoFED	Ministry of Finance and Economic Development
MoT	Ministry of Trade
MoU	memorandum of understanding
Mt	metric ton
NAFSIP	National Agriculture and Food Security Investment Plan
NAIP	National Agricultural Investment Plan
NEPAD	New Partnership for Africa's Development
NGO	nongovernmental organization
NPC	National Planning Commission
NSAs	nonstate actors
PASDEP	Plan for Accelerated and Sustainable Development to Eradicate Poverty
PIF	Agricultural Sector Policy and Investment Framework
PPD	Planning and Programming Directorate
PRSP	Poverty Reduction Strategy Program
PSDTF	Private-Sector Development Task Force
PSNP	Productive Safety Net Program
RED&FS	Rural Economic Development & Food Security
RED&FS SWG	Rural Economic Development & Food Security Sector Working Group
SDPRP	Sustainable Development and Poverty Reduction Plan
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
SAKSS	Strategic Analysis and Knowledge Support System
SLM	sustainable land management
SO	Strategic Objective
TC	technical committee
USAID	United States Agency for International Development
WDI	World Development Indicator
WFP	World Food Programme
WMU	Government Welfare Monitoring Unit

EXECUTIVE SUMMARY

Ethiopia's key development objectives are poverty eradication and food security at the household level, with agriculture playing an important role in the achievement of both of these objectives. The major policy framework for doing so is the Agricultural Development-Led Industrialization (ADLI) strategy, which has been the central pillar of Ethiopia's development vision since the 1990s. Agricultural sector growth in the short and medium terms is envisaged as the driver for long-term industrialization and the structural transformation of Ethiopia's economy.

Ethiopia indigenized the Comprehensive Africa Agricultural Development Programme (CAADP) by signing a CAADP Compact in August 2009 and developing the Agricultural Sector Policy and Investment Framework (PIF), which is the country's National Agricultural Investment Plan. PIF is a 10-year plan that targets 8 percent annual growth in agricultural gross domestic product. It prioritizes agricultural subsectors for investment, estimates financing needs, and provides an implementation roadmap. To further support CAADP implementation, Ethiopia signed the G8 [Group of Eight] Cooperation Framework to support the New Alliance for Food Security and Nutrition in 2012. The G8 Cooperation Framework aims to catalyze private-sector investment in seed development, multiplication, and distribution. It also seeks to put mechanisms in place to improve the ability of Ethiopia's private sector to access markets, land, and credit.

One of the guiding principles of CAADP is mutual accountability. A key instrument for realizing this accountability is the joint sector review (JSR). Agriculture JSRs are a key instrument for supporting mutual accountability and for implementing the CAADP Results Framework. Ethiopia carries out annual reviews of PIF under a joint forum of government and development partners, known as the Rural Economic Development and Food Security Sector Working Group (RED&FS SWG). The objectives of these annual assessments are to (1) understand the effectiveness of the mutual accountability framework implemented in Ethiopia; (2) identify best practices that Ethiopia can share with others, while also assessing the actual practices of accountability in the agricultural sector in Ethiopia against best practices; and (3) collect data and information that can inform the planning of future sector reviews.

Using earlier review reports supplemented with information collected from stakeholders during a consultative workshop and from key informants, a review of the status and the quality of consultation in the process of agricultural sector planning, policy formulation, implementation, and review was carried out. While the federal government is responsible for formulating national plans and macro-level policies, regional governments formulate region-specific policies and plans. The review found that government and donors coordinate very well in planning, policy development, and review processes under the RED&FS structure. However, the processes are characterized by minimal involvement of the private sector and nonstate actors, and are strongly influenced by the Prime Minister's Office and central ministries. Key challenges in these processes relate to a lack of human resource capacity, inadequate implementation strategies, and sometimes a lack of a clear understanding of the responsibilities and roles of federal and regional governments in the processes. The other challenges identified included a lack of institutional arrangements to implement policy reforms and programs, and minimal use of evidence-based decisionmaking.

In assessing the quality of the policy context within which PIF is being implemented, the JSR confirmed that Ethiopia has developed a consistent set of policies and strategies for agricultural and rural development that reflect the importance of the sector in the nation's development aspirations. All policies and programs are linked to ADLI. The Poverty Reduction Strategy Program was prepared and implemented in 2001. The Sustainable Development and Poverty Reduction Plan and the Plan for Accelerated and Sustainable Development to End Poverty were formulated and implemented during 2002–2004 and 2005–2010 respectively. Since 2010/2011, the government has been implementing its five-year Growth and Transformation Plan (GTP), which is a comprehensive multisectoral national

development plan for 2010–2015. Under the GTP, several sector-specific development plans were developed, including the Agricultural Transformation Plan, which aims to sustainably improve the production and productivity of smallholder agriculture and strengthen market linkages to curb poverty and food insecurity, especially in the poorest rural households. The implementation of PIF itself is supported by complementary programs, including the Agricultural Growth Program, the New Alliance Cooperation Framework, and the Climate-Resilient Green Economy Strategy. The assessment found that existing policies are supportive of PIF implementation, although the way those policies were formulated was not sufficiently inclusive and their content was not derived from close examination of all available evidence.

In considering the institutional architecture of agricultural and food security policy formulation and implementation, participants in the JSR generally agreed that policymaking for the national development agenda is centralized within the executive branch, while sectoral issues are decentralized to the line ministries, but with substantial influence from the Prime Minister's Office. Donors play a major role in providing technical advice and development funds, while regional governments deal mainly with the actual implementation of projects and programs. The Planning and Programming Directorate (PPD) in the Ministry of Agriculture (MoA) is central to implementing the policy reform agenda. In the context of PIF, PPD prioritizes investments, designs and coordinates projects within the agricultural sector, and assesses the potential impact of sector plans. All other departments in the ministry are also coordinated by PPD. However, there is considerable room for improvement in coordination among federal government institutions and between MoA and regional Bureaus of Agriculture & Rural Development. Government and development partners coordinate their activities under the RED&FS mechanism, which enhances their mutual accountability. While the RED&FS structure allows a majority of the donors to also coordinate their activities, several donors do not participate in it. In addition, nonstate actors are left out of the RED&FS structure.

Progress in meeting respective funding commitments for PIF by key stakeholders—in particular government, development partners, and the private sector—is mixed. The Ethiopian government convened a high-level Business Meeting in December 2010 to validate and endorse PIF and confirm its implementation readiness. The meeting also confirmed funding commitments and agreed-upon processes for implementation. Other financial and nonfinancial commitments were made under the New Alliance initiative in May 2012.

PIF funding requirements involve around US$9.3 billion from the Ethiopian government and US$6.2 billion from development partners over a 10-year period. Considerable resources have been mobilized and spent in the identified priority areas by the government and its development partners. Though no comprehensive data on the amount of financial resources are committed to PIF so far, the data available show that Ethiopia has consistently exceeded the CAADP target of allocating 10 percent of its annual national budget to agriculture. However, total spending on flagship programs in the sector is below the planned amounts for the first five years. One factor in accounting for this funding shortfall is that some development partners have not yet disbursed the funds that they committed.

The Ethiopian government's commitment under this New Alliance initiative primarily involves its undertaking select policy reforms to improve the enabling environment for agricultural development in the country. This reform effort has registered good progress in 7 of the 15 policy commitments. However, there has been little or no progress in three of them. Selected multinational and local companies that are part of the New Alliance agreement have also made good progress on their investment commitments. Similarly, development partners are following through with most of their disbursement commitments made in the context of the cooperation framework for the New Alliance in Ethiopia, albeit with some delays.

The PIF and the New Alliance initiatives operationalize pledges by the Ethiopian government, its development partners, and other stakeholders to transform Ethiopia's agriculture. Therefore, this JSR assessment also considered the performance of the agricultural sector between 2010 and 2013, and established baseline values for key indicators of the sector's performance to serve as a reference for future JSRs and assessment of progress made during the next decade of CAADP in the country.

Overall, the performance of the agricultural sector between 2010 and 2013 has been good. Under the strategic objective of *achieving a sustainable increase in agricultural productivity and production*, actual performance was superior relative to the targeted growth rate. The exceptions to this are lower growth rates than desired in livestock production and labor productivity. Moreover, value-based growth rates in agricultural output and yields were lower than targeted.

Performance under the strategic objective of *accelerating agricultural commercialization and agro-industrial development* was lower than targeted in 5 of the 10 indicators for which data were available. Performance was superior relative to the target for the other five.

Out of the eight indicators under the strategic objective of *reducing degradation and improving productivity of natural resources,* data were insufficient to gauge performance between 2010 and 2013 for four of the indicators. Performance was superior relative to targeted growth for three of the indicators for which data were available.

PIF indicates that progress toward the strategic objective *of achieving universal food security and protecting vulnerable households from natural disasters* is encapsulated in the indicator *annual increase in the number of households graduating from PSNP [Productive Safety Net Program] and other safety net programs.* The number of households that graduated from PSNP declined from year to year during 2010–2013. Although data were insufficient to compute average annual changes, the variables representing the indicator *number and percentage of households experiencing food gaps of three months or more reduced,* trended down. Contrary to targeted changes, food aid imports increased, and food reserve stocks stagnated. Consistent with targeted growth expectations, domestic food aid purchases increased.

The JSR assessment led to the following recommendations to improve implementation and strengthen the monitoring of PIF's implementation:

- Strengthen capacity in various government departments, especially PPD.
- Assist nonstate actors with organizing and promoting their participation in the implementation and progress review of PIF and other agricultural sector plans, and establish more inclusive multistakeholder platforms.
- Carry out studies to understand the barriers to private-sector participation and investment in the agricultural sector.
- Strengthen resource mobilization for effective implementation of PIF.
- Strengthen the sector's monitoring and evaluation system to comprehensively report on all initiatives and support knowledge generation and dissemination to promote evidence-based decisionmaking in line with CAADP principles.
- Update the New Alliance Cooperation Framework to clarify policy commitments and identify barriers to completion of commitments (policy, financial disbursement, and investments); update due dates; and add or remove commitments, and expand them through 2016. To create greater and broader ownership, the

REDF&S should endorsed the New Alliance and should create a more inclusive New Alliance stakeholder group.

- Ensure that the JSR leads to a process to address any program implementation deficiencies found through revisiting and, where needed, redesigning policy and investment commitments. This process of redesign should include inviting new partners, particularly from the private sector, to join in PIF and New Alliance activities and developing new milestone maps and timelines for implementing the two activities.

1. INTRODUCTION

Considerable effort has gone into transforming agricultural productivity at the global, regional, and country levels, because increased agricultural productivity has significant welfare effects at both the household and the national levels. For Sub-Saharan Africa, agricultural growth is more likely to be pro-poor than is industrial growth (Diao et al. 2010, 2012; de Janvry et al. 2010; Christiaensen et al. 2011). Investment in the agricultural sector also bears higher returns (Mogues and Benin 2012). However, Sub-Saharan African countries have been unable to leverage the potential of agriculture. Agricultural productivity in many African countries still lags far behind that of the rest of the world. This is not because of any lack of productive potential. With application of proper technologies, investment, and marketing, all countries are endowed with high agricultural potential.

The Comprehensive Africa Agriculture Development Programme (CAADP) aims to reduce poverty and enhance food and nutrition security in the region in line with the first Millennium Development Goal. CAADP is an African-led and African-owned voluntary continental agenda that has created a strong platform for policy and partnership in agricultural sector development. CAADP requires participating countries to allocate 10 percent of their national budgets to agriculture and food security, and targets an annual agricultural growth of 6 percent. The program emphasizes broad planning and implementation collaboration among government, donors, the private sector, and nonprofit and research organizations. CAADP also embodies the New Partnership for Africa's Development principles of mutual accountability, country ownership, inclusiveness, benchmarking, peer review, and mutual learning (Badiane et al. 2011).

Eradicating poverty and ensuring food security at the household level are among the principal development objectives of the Ethiopian government. Therefore, Ethiopia has a consistent set of policies and strategies for agricultural and rural development that reflect the importance of the sector in the nation's development aspirations. The major policy framework is based on the strategy of Agricultural Development-Led Industrialization (ADLI), which has been the central pillar of Ethiopia's development vision since the 1990s. Agricultural sector growth in the short and medium terms is envisaged as the driver for long-term industrialization of Ethiopia's economy.

As part of the realization of ADLI, the government formulated various policies in which agricultural development and poverty eradication are of major importance. The Poverty Reduction Strategy Program was prepared and implemented in 2001, and the Sustainable Development and Poverty Reduction Plan and the Plan for Accelerated and Sustainable Development to End Poverty were formulated and implemented during 2002–2004 and 2005–2010, respectively.

Since 2010/2011, the government has been implementing its five-year Growth and Transformation Plan (GTP), which is a comprehensive multisectoral national development plan for 2010–2015. Under the GTP, several sector-specific development plans were developed. These include the Agricultural Transformation Plan, which aims to sustainably improve the production and productivity of smallholder agriculture, and strengthen market linkages to curb poverty and food insecurity, especially in the poorest rural households. The sector's main development initiative, the Agricultural Sector Policy and Investment Framework (PIF), developed under the CAADP framework, is supported by complementary programs, including the Agricultural Growth Program, the New Alliance Cooperation Framework, and the Climate-Resilient Green Economy.

Ethiopia indigenized CAADP through its development and adoption of PIF. The CAADP process in a country begins with a stock-taking exercise to review sector programs, strategies, achievements, and gaps across the range of institutions involved in a country's agricultural and food security policy formulation and implementation. This analysis leads to the development of a national CAADP Compact, which is signed by the government and

participating stakeholders. This is followed by formulation, approval, and adoption of the National Agricultural Investment Plan (NAIP), which identifies and prices the country's priority programs and projects, outlines the roles of the different stakeholders, and identifies sources of funds and financing gaps. Finally, an implementation roadmap is formulated.

Ethiopia signed the CAADP Compact in August 2009. The process involved the Ministry of Agriculture and Ministry of Finance and Economic Development; the African Union Commission; the Common Market for Eastern and Southern Africa; and representatives of the private sector, professional associations, and development partners. This was followed by the formulation of PIF in 2010, which is the country's NAIP. PIF is a 10-year plan that targets 8 percent annual growth in agricultural gross domestic product (see Section 3.1 for details). The plan prioritizes areas for investment, estimates financing needs, and provides an implementation roadmap. Implementation of PIF is supported through a joint forum of the government and development partners named the Rural Economic Development and Food Security Sector Working Group (RED&FS SWG). The group is co-chaired by the Minister for Agriculture, the World Bank, and the United States Agency for International Development. The RED&FS SWG was initiated in 2010 and has undertaken two annual reviews, in January 2012 and June 2013.

To further support CAADP implementation in Ethiopia, the country signed the New Alliance Cooperation Framework, which was launched in 2012. The initiative aims to catalyze private-sector investment through Country Investment Plans. Under the framework, Ethiopia aims to increase private-sector participation in seed development, multiplication, and distribution, and to improve the private sector's ability to access markets, land, and credit.

The CAADP guiding principles include mutual accountability, inclusiveness, broad participation, and transparency. A key instrument to mutual accountability is the joint sector review (JSR). Agriculture JSRs support mutual accountability, and help to implement the CAADP Results Framework. JSRs are an integral part of the transition to evidence-based policy planning and implementation. In particular, JSRs provide a platform to collectively review the effectiveness of policies and institutions in the agricultural sector, as well as to assess the extent to which intended results and outcomes in the sector are being realized. They allow state and nonstate stakeholders to hold each other accountable with respect to fulfilling pledges and commitments stipulated in the CAADP compacts, NAIPs, and related cooperation agreements, such as those under the New Alliance for Food Security and Nutrition. By allowing a broad spectrum of stakeholders to gain insights into and influence the sector's overall policies and priorities, JSRs serve as a management and policy support tool for inclusive stakeholder planning, programming, budget preparation and execution, monitoring and evaluation, and overall development of the agricultural sector.

Therefore, the objectives of this assessment are to (1) understand the effectiveness of the mutual accountability framework implemented in Ethiopia; (2) identify best practices that Ethiopia can share with others, and assess the actual practices in Ethiopia against the best practices; and (3) collect data and information that can inform the planning of future sector reviews.

The rest of this report is organized as follows:

- Section 2 discusses the status and quality of the JSR process in Ethiopia.
- Section 3 reviews existing and emerging policies within and outside agriculture affecting implementation of the National Agriculture and Food Security Investment Plan (NAFSIP).
- Section 4 examines key institutions involved in the implementation of NAFSIP and other cooperation agreements. It also assesses the appropriateness of these institutions for their tasks.
- Section 5 reviews important financial and nonfinancial commitments by key stakeholders.

- Section 6 assesses agricultural sector performance and provides baseline values of output and impact indicators for future JSR assessment.
- Conclusions are drawn in Section 7.

2. STATUS AND QUALITY OF THE JSR PROCESS

2.1. Tradition of Consultation

Ethiopia's public sector has contributed considerably to poverty reduction and progress toward achieving the Millennium Development Goals. Economic growth has been robust, and inflation has declined to single digits (NPC 2014). However, the investment requirements for sustaining this growth are large, and securing the associated financing remains a challenge. Moreover, without a greater scope for participation of the private sector, realization of the country's Growth and Transformation Plan (GTP) objectives could be elusive (IMF 2013).

Although the path to policy formulation, implementation, and review is often country-specific, among countries that are engaged in the Comprehensive African Agricultural Development Programme (CAADP) considerable change has been observed. The inclusive, participatory, transparent, evidence-based policymaking process is becoming more widely embraced. Thus, efforts to strengthen joint sector review (JSR) processes in countries implementing CAADP are a welcome development.

In Ethiopia, public consultation and participation are enshrined in the country's Constitution. Article 89, sub-Article 6, of the Constitution states: "Government should at all times promote participation of the people in the formulation of national development policies and programs; it shall also have the duty to support the initiatives of the people in the development endeavours." In the same article, sub-Article 7 stresses the need to ensure equal participation of men and women in all economic and social development endeavors (FDRE 1994).

This section reviews the status and quality of consultation in the process of agricultural sector policy formulation, implementation, and review. The review examines earlier consultative processes in Ethiopia, the stakeholders involved, and their roles. It relies on earlier review reports, supplemented with information collected from stakeholders during a consultative workshop and from key informants, to identify policy gaps and possible improvements.

2.2. Policy Formulation and Consultation

The federal government is responsible for formulating national and macro-level policies, while regional governments formulate region-specific policies. Ethiopia lacks a centralized process for policymaking. Its policy development process is characterized by minimal involvement of the private sector and nonstate actors, and is strongly influenced by the Prime Minister's Office and central ministries.

According to the 2004 Council of Minister's guidelines for policy formulation and ratification (FDRE 2004), a policy reform agenda might be formulated for any of the following reasons:

- To tackle any visible development challenges in the sector or subsector.
- To respond to changes in the international, regional, or local economic and political environments.
- To meet the mandate of specific institutions.

In relation to stakeholder consultation, key informants interviewed for this JSR assessment intimated that in certain situations, stakeholders are engaged during preparation and implementation of policies. For example, regarding policy and strategy issues related to rural and agricultural development, farmers and other key strategic stakeholders are consulted at different levels, including during the drafting of the policy, the preparation of

proclamations, and policy implementation. However, for some strategic issues, the Ethiopian government may formulate and implement policy without significant stakeholder consultation.

The key challenges mentioned during discussions with key informants were related to policy implementation, such as a lack of human resource capacity, implementation strategies, and sometimes a clear understanding of the responsibilities and roles of the federal and regional governments. For example, approval of the recent proclamation on wildlife protection lacked clarity in the division of responsibility between federal and regional governments. Another example was the case of the land registration proclamation, which was formulated at the federal level but requires implementation by regions. The problems emanating from overlap of federal and regional mandates may be associated with a lack of understanding of the Constitution, which clearly stipulates the roles of federal and regional governments. Some overlapping of mandates among sectoral ministries at the federal government level also exists. In such cases, any confusion that arises is addressed through discussions among the ministries.

The other challenge mentioned during discussions with key informants was the lack of institutional arrangements to implement policy reforms or programs. For example, when policy formulation deals with cross-cutting issues, no binding instrument is available for implementing multisectoral plans. This is a major constraint to policy implementation, and may also create conflict between different sectoral policies. For example, each sector and subsector is required to establish a department of environment in its respective institution, as stated by the Environmental Law of Ethiopia. However, in practice, few organizations have established this department. This suggests an absence of accountability, but may also reflect failed coordination. This is mainly because participation of stakeholders and communication before ratification are not as broad as required, leading to implementation problems.

2.3. Progress in CAADP Implementation and Quality of Consultation at Each Stage

Ethiopia is perceived as one of the exemplary countries in terms of implementing CAADP, having achieved important milestones in CAADP implementation between 2008 and 2013. A comprehensive assessment of the country's agricultural sector was conducted in 2008 in preparation for signing the CAADP Compact, which was signed in August 2009. The compact signifies that the country has agreed with the African Union and its partners to implement CAADP. In 2010, the Agricultural Sector Policy and Investment Framework of Ethiopia (PIF) was formulated with the participation of many stakeholders. The government and major donors signed a joint communiqué to clarify their responsibilities. The first progress review of PIF implementation was held in February 2012, and the second was held in May 2013. The two PIF reviews and the consultation processes have followed more or less the same approach. The findings and the quality of participation of various stakeholder groups in these reviews and consultations are summarized in Table 2.1.

TABLE 2.1: MATRIX ON QUALITY OF CONSULTATION IN THE CAADP IMPLEMENTATION PROCESS

Activities	Month and Year	Results from Activity	Participation at Different Stages of Different Actors					
			Govern-ment	Donors	Private Sector	CSOs	NSAs/ NGOs	Women
1. Initiated CAADP stock-taking study.	July 2008	Compiled agricultural and rural development information, and trends and gaps between plans and achievements.	High	High	Low			

Activities	Month and Year	Results from Activity	Participation at Different Stages of Different Actors					
			Govern-ment	Donors	Private Sector	CSOs	NSAs/ NGOs	Women
2. Finalized comprehensive stock-taking study.	July 2009	Identified priority areas that needed attention.	High	High	Low	Low	Low	Low
3. Signed the Ethiopian CAADP Compact.	August 2009	Commitment to support the specified development objectives.	High	High	Low	Low	Low	Low
4. Prepared post-compact investment framework or Policy and Investment Framework (PIF) for 10 years.	August 2010	Priority investment areas in the agriculture sector and their resource requirements estimated	High	High	Low	Low	Low	Low
5. Prepared summary of PIF and distributed it for funding request.	September 2010	Summary PIF	High	High	---	---	---	---
6. Held Business Meeting.	December 2010	Summary of commitment	High	High	Low	Low	Low	Low
7. Developed implementation roadmap.	Early 2011	Road-map	High	High	Low	Low	Low	Low
8. Conducted first-year performance review.	February 2012	Review report	High	High	Mod.	Low	Low	Low
9. Held second-year performance review.	June 2013	Review report	High	High	Mod.	Low	Low	Low

Source: Authors summary based on reports of each stage of CAADP implementation.

Note: CAADP = Comprehensive African Agricultural Development Programme; CSOs = civil society organizations; Mod. = moderate; NGOs = nongovernmental organizations; NSAs = nonstate actors.

The CAADP pursuit of inclusiveness is tightly linked to the aim of developing collective responsibility for agricultural growth and development. Apparent from Table 2.1 is that the roles of the private sector, nonstate actors, civil society organizations (CSOs), and women were limited in the CAADP formulation, implementation, and review processes. While the CAADP signing event of 2009 gathered several actors, doubts remain about whether the actors were adequately engaged (NEPAD 2011).

The next section provides more information about the quality of the consultation process in the first and second PIF annual reviews based on available reports and the JSR consultative workshop held in Addis Ababa on April 24–25, 2014.

2.4. PIF Review and Quality of Consultation

PIF is a key element of the county's 10-year growth and transformation plan. Implementation of PIF is overseen by the Rural Economic Development & Food Security Sector Working Group (RED&FS SWG). Since PIF implementation was launched in 2011, two reviews have been conducted. The first review was conducted on in January 27–28, 2012, and the second was conducted on June 1–2, 2013. The two reviews followed a participatory approach and engaged different stakeholders at different levels. The processes were led by a Joint Task Force and coordinated by the RED&FS Secretariat. Services of national and international consultants were procured. The consultants and members of the RED&FS SWG prepared review reports and issue papers and presented and discussed them at retreats and finally at joint meetings of Ministry of Agriculture (MoA) top management and heads of donor agencies. At the end of the joint meetings, summaries of the way forward were presented. Attendance by state ministers of

MoA during the second review retreat signified high-level commitment to and interest in understanding the progress of, and the challenges facing, PIF implementation (MoA 2012, 2013). While the involvement of government and donor group participants is evident, there is no evidence of participation by the private sector, nongovernmental organizations (NGOs), CSOs, or women.

Lack of broader participation in the CAADP formulation, implementation, and review processes is evident from forums held in 2011 by AfricaLead. During the forums, AfricaLead conducted several training sessions to increase the involvement of the private sector, NGOs, CSOs, and women in CAADP implementation and progress review in Ethiopia. According to nonstate actors who attended the training sessions, the government has made little progress toward realizing this broader participation. However, the government argues that the stakeholders are too many to bring together for a single consultation meeting. So two separate, broad forums have been designed to bring together the large number of private sector, NGO, and CSO actors in the agricultural sector. For example, the forum on June 22–23, 2011, at Debre Birhan, which involved 78 participants, included many senior agricultural professionals.

More information about the quality of the JSR process was gathered during the JSR consultative workshop. Participants not only confirmed the lack of inclusivity, but also highlighted the need for a more evidence-based process, as discussed in subsection 2.5 (see also Table A.1).

2.5. Quality of the Review Process

CAADP advocates for evidence-based policymaking, progress review, and planning. Progress reviews require extensive data collection from primary and secondary sources and from actors at different levels. However, previous reviews and the information gathered during the JSR consultative workshop indicate that there is no coordinated system to compile and analyze data on performance against commitments and progress in the achievement of sector objectives (see Table A.1 for more details). The mechanism for following up on the recommendations for PIF review needs to be strengthened, as not all recommendations of the first and second reviews have been implemented (Table 2.2).

In addition to the PIF reviews, MoA annually reviews the progress of the Agricultural Transformation Plan (ATP), the agricultural part of the GTP. These reviews assess the performance of MoA's ongoing projects. The ATP annual review is designed mainly for the internal purpose of understanding progress made against the plan. Participants in the ATP review range from top officials to unit leaders and senior staff. The extent of other actors' participation is unclear.

TABLE 2.2: RECOMMENDATIONS FROM FIRST AND SECOND PIF REVIEWS

Recommendation	Status of Implementation	Remarks
1. Establish Cross-Pillar Task Force (CPTF) to harmonize activities among different technical committees (TCs) and ministries.	The CPTF established and developed its terms of reference, and had one meeting.	The CPTF needs to be strengthened.
2. Reduce the complexity and rigidity of procurement and fund disbursement procedures.	Not much has been done.	More work is needed for this to be realized.
3. Integrate and mainstream agricultural aspects of the Climate-Resilient Green Economy into the Policy and Investment Framework (PIF)	Considerable progress has been made. Its task force was established under Sustainable Land Management.	Needs to be realized.
4. Establish Livestock and Pastoral TC.	This has been done. State minister was appointed. Two task forces were established and are making progress.	More support is needed for the TC.

Recommendation	Status of Implementation	Remarks
5. Make the Rural Economic Development & Food Security (RED&FS) process more efficient and effective (i.e., TCs need to be chaired by state ministers).	Since second review, all TCs are chaired by state ministers. Hiring of 2 staff is in progress.	Needs to be realized.
6. Mainstream the RED&FS process within the Ministry of Agriculture (MoA).	It is now more integrated, since TCs are chaired by the state ministers.	
7. Incorporate actions agreed upon by the Executive Committee into MoA's annual work plan.	There is some progress from the government side (included in the BSC) but nothing is known from the development partners' side.	
8. Revise and update PIF, and synchronize PIF II with Growth and Transformation Plan II.	In progress.	More work to be done.

Source: Compiled by authors from review MoA documents.

2.6. Gaps in Consultation

Based on an analysis of the key players and actors in the review processes, the following gaps in the consultation process were identified:

- **Limited role of the private sector:** The role of the private sector is indispensable for realization of the envisaged transformation of the economy, and especially the agricultural sector. However, currently, the private sector does not play a significant role in either the RED&FS-led policy and program development or the implementation review processes. In some cases, the private sector may be consulted on the development of new policies, but there is no existing mechanism that regularly supports or includes private-sector participation in these processes.
- **Limited participation of nonstate actors: C**urrently there is no significant engagement of nonstate actors in the implementation and review of PIF. However, according to MoA, the total number of NGOs and CSOs in the country is so large, that engaging all of them is not practicable. Thus, the NGOs have been advised to organize themselves and pick representatives to engage in the RED&FS structure and other sector processes.
- **Lack of participation of women and youth**: As with nonstate actors, there is no evidence that women and youth interests are currently incorporated in PIF and other agricultural sector programs and processes.
- **Unclear mechanism for follow-up:** The mechanism for following up on recommendations from the reviews needs to be strengthened.

The participation of the private sector, NGOs, CSOs, women, and youth should be enhanced by creating awareness, identifying successful models of engagement, sharing experiences, and identifying areas of interest to actors, and then aligning them to agricultural sector investment plans.

3. POLICY REVIEW

3.1. Policy Choice

Poverty eradication is a core objective of the Ethiopian government. Thus, economic growth is pursued as a principal goal to provide the means for ensuring poverty reduction. Since the mid-1990s, Agricultural Development-Led Industrialization (ADLI) has been chosen as the principal economic development strategy. ADLI's objective is to strengthen interdependence between agriculture and industry by increasing the productivity of smallholder farmers, expanding large-scale commercial farms, and restructuring the manufacturing sector to make use of the country's natural and human resources.

As observed earlier, Ethiopia has continued to experience a high rate of economic growth since the 1990s. Maintaining the current momentum of growth requires consistent, inclusive, and prudent fiscal and monetary policies. Maintaining pro-poor expenditures, improving the investment climate, and creating greater room for private-sector participation are core areas of attention. Other areas of focus include enhancing external competitiveness, building adequate foreign reserves, and improving the productivity and quality of traded goods. Sustaining this success depends on public–private partnerships.

Poverty reduction is closely linked to improving the agricultural sector, mainly because millions of Ethiopians depend on agriculture. Consequently, the Ethiopian government has formulated a consistent set of policies and strategies for agricultural and rural development. Some of the policies that have had strong bias toward agriculture include the Poverty Reduction Strategy Program (PRSP), implemented in 2001; the Sustainable Development and Poverty Reduction Program (SDPRP), implemented in 2002–2004; and the Plan for Accelerated and Sustainable Development to End Poverty (PASDEP), implemented in 2005–2010.

PASDEP has since been replaced with the Growth and Transformation Plan (GTP), Ethiopia's national development plan for 2010–2015. GTP has several sector-specific development plans. For agricultural sector development, the plan is the Agricultural Transformation Plan (ATP). ATP is aligned to the Comprehensive African Agricultural Development Programme (CAADP) and the Agricultural Sector Policy and Investment Framework of Ethiopia (PIF), and targets an annual sector growth of 8 percent. ATP and PIF are aligned to the five-year GTP.

The goal of PIF is to "contribute to Ethiopia's achievement of middle income country status by 2020." The development objective of the PIF is to "sustainably increase rural incomes and ensure national food security." This objective embodies the concepts of producing more, selling more, nurturing the environment, eliminating hunger, and protecting the vulnerable against shocks. The strategic objectives of PIF and the CAADP pillars to which they are aligned are summarized in Table 3.1.

TABLE 3.1: ALIGNMENT BETWEEN PIF AND CAADP PILLARS

Strategic Objectives (SOs) of PIF	Alignment to CAADP Pillars
SO 1: To increase agricultural productivity and production.	Pillar IV
SO 2: To accelerate commercialization of smallholder agriculture and agro-processing industrial development.	Pillar II
SO 3: To reduce degradation of the natural environment and improve the productivity of natural resources.	Pillar I
SO 4: To achieve universal food security and protect vulnerable households from natural disasters.	Pillar III

Source: MoA 2010.

PIF acts as a guide for focused investments falling under the CAADP Ethiopia Compact and the thematic areas of the agricultural and rural development sectors. It is also a 10-year roadmap indicating what the budget should be for ongoing programs and for the priority investment areas in the agricultural sector, so as to help the nation achieve its successive development plan targets. PIF initiatives are well aligned with ADLI strategy, which envisages agriculture playing a lead role in the early stages, until industry takes the lead at later stages. This development strategy is justified by both economic and social realities facing the county. These include the high incidence of poverty and unemployment and the availability of land and labor. These resources, combined with modern agricultural practices, improved seeds, and fertilizer are envisaged to play a core role in future agricultural sector development and food security. A steady flow of improved technology from the research system and its application is another core ingredient of the strategy.

Public investment in basic infrastructure like roads, irrigation, power, and human resource development are part of the overall agricultural sector development strategy. So are sustainable follow-up and support and protection of citizens from unexpected changes in international markets. Establishing a more rapid rural–urban linkage, supporting rural nonfarm sector growth through infrastructure development, ensuring access to credit facilities, and linking food surplus and deficit areas through improved infrastructure are also a broader part of the strategy.

The following section reviews existing and emerging policies that affect PIF's implementation.

3.2. Inventory of Existing and Emerging Core Policies since the Mid-1990s

The first-generation PRSP was prepared in 2001, and was later replaced with SDPRP, which was operational between 2001 and 2004/2005. The second-generation poverty reduction strategy, PASDEP 2005–2010, was initiated to accelerate private-sector growth and reduce urban and rural unemployment and poverty. PASDEP sought to do this by creating employment and strengthening public institutions to deliver services. The strategy also focused on greater commercialization of agriculture, development of the private sector, and scaled-up efforts to achieve the Millennium Development Goals (MDGs). PASDEP was later synchronized with and aligned to the MDGs and the CAADP framework.[1] It also took account of policy and institutional innovation in agriculture and rural development, rural–urban linkages, pastoral development, and spatial dimensions of the growth strategy in Ethiopia. This harmonized policy approach, together with strong government commitment toward promoting agricultural growth, has resulted in visible progress in the last two decades. Cereals production tripled from 8.6 tons to 25 million tons, and the average productivity of cereals grew from 1.3 tons to 2.5 tons per hectare. Agricultural gross domestic product grew by more than fourfold. The incidence of poverty at the national level declined markedly between 2004/05 and 2010/11, and the headcount poverty rate dropped from 38.7 percent in 2004/2005 to 29.6 percent in 2010/2011(MoFED 2012).

The third-generation strategy is the GTP of 2010/2011, which covers the period 2011–2015. ATP, as the agricultural sector plan, is the part of GTP designed and implemented to promote the sector's performance. Table 3.2 provides a summary of policy changes between the mid-1990s and 2013.

[1] Ethiopia has made significant progress in terms of implementation of the national CAADP Compact. It was the first country to receive funding from the World Bank's Global Agricultural and Food Security Program. The award was a result of the high-quality and comprehensive PIF developed, as well as the institutional arrangements that the RED&FS SWG put in place based on the Paris Declaration on Aid Effectiveness principles of alignment, harmonization, and coordination.

TABLE 3.2: SUMMARY OF CORE POLICY CHANGES FROM THE MID-1990S TO 2013

Agricultural Development-Led Industrialization—Cornerstone			
Time Period	**Policies and Strategies**	**Core Objectives**	**Core Institutions Involved in the Process**
Transition period May 1991–1997	• Food Security Strategy • Promoting agricultural extension • Federal Democratic Republic of Ethiopia Constitution ratified in 1995 • Macroeconomic policy adjustment • Participatory, Demonstration and Training Extension System was promoted	• Ensuring food security at the household level • Ensuring citizens' democratic rights • Promoting export, investment, private sector • Improving smallholder productivity through provision of credit and information	• Ministry of Finance and Economic Development (MoFED) • Ministry of Agriculture (MoA) • Sectoral ministries and regional governments, Central Statistical Agency (CSA), development partners, research institutes, others
First-generation poverty reduction and development strategy	• Poverty Reduction Strategy Paper (2000) • Sustainable Development and Poverty Reduction Strategy 2002–2004	• Reducing poverty	• MoFED • MoA • Ministry of Trade • Ethiopian Institute of Agricultural Research
Second-generation poverty reduction and development strategy	• Plan for Sustainable Development to End Poverty 2005–2010	• Reducing poverty	• CSA • Ethiopian Grain Trade Enterprise • Ethiopian Development Research Institute, Ethiopia Strategy Support Program (ESSP), Agriculture Transformation Agency (ATA)
Third-generation poverty reduction and development strategy 2005–2010	• Growth and Transformation Plan 2010–2015 (encompasses Agricultural Sector Policy and Investment Framework of Ethiopia and Agricultural Transformation Plan) • Agricultural Growth Program • Climate Resilient Green Economy	• Reducing poverty, promoting trade, promoting industrial sector contribution • Increasing agricultural productivity in 86 selected high potential *woredas* • Implementing sustainable management	• Agricultural Input Supply Enterprise, ECXA, Ethiopia Commodity Exchange, many others • MoA, ATA, ESSP • Ethiopian Edir Mutual Assistance
2012–2015	• New Alliance Cooperation Framework	• Increasing private sector participation in seed development, multiplication, and distribution • Increasing the private sector's ability to access markets by reducing barriers to competitiveness and increasing transparency of requirements • Strengthening land use rights to stimulate investment in agriculture • Increasing availability of credit to the agricultural sector	• MoA, ATA, development partners, private sector, civil society organizations

Source: Compiled by the authors.

3.3. Quality of Policy Planning and Execution

Ethiopia has had a comprehensive policy design and execution system for the agricultural sector since the formulation and implementation of ATP/PIF. The government sets benchmarks against which to measure progress, measurable targets, and institutional arrangements for evaluating progress. The Ministry of Finance and Economic Development (MoFED) provides oversight to development initiatives and tracks progress. For example, the GTP has a policy matrix using benchmark indicators obtained from the existing Government Welfare Monitoring Unit (WMU) within MoFED's Development Planning and Research Directorate (DPRD) (see Tables A.2–A.4). This matrix enables WMU to track the progress of different sectors and provide feedback to the government and development partners. WMU is responsible for developing indicators based on data from the sectoral ministries and the Central Statistical Agency (MoFED 2010b).

ATP has developed detailed targets against which progress is evaluated at least once every year. For example, there are indicators for cultivable land expansion, increase in production and productivity, and plans for improving animal breeds and agricultural input supply between 2009/2010 and 2014/2015 (see Tables A.3 and A.4). At the end of every plan period, progress against the baseline is reviewed, and causes for success or low performance are identified and reconsidered in the following plan year. All agricultural sector plans and strategies have quarterly, semi-annual, and annual review systems to gauge progress against baselines using existing review processes. The PIF review, which is coordinated by the PIF Review Task Team of the RED&FS SWG, has been conducted annually since 2012. As discussed earlier, the PIF review process, which is also examined in detail in Table A.1, is a strong review process, but lacks inclusivity and strong analysis.

3.4. Gaps in Policy Planning and Execution

- Although review mechanisms are in place, progress review requires reliable data and objective analysis. A lack of quality data and analytical capacity limits the quality of information to support the review processes at different levels.
- The policy formulation and implementation processes are not fully inclusive, as they exclude key stakeholders, such as the private sector and other nonstate actors.

3.5. Consistency of Policy and Alignment with the National Agriculture and Food Security Investment Plan

All policy initiatives in Ethiopia are geared toward poverty reduction, and are linked to the long-term development strategy, ADLI. As noted earlier, PIF is a comprehensive agricultural sector development plan that provides a strategic framework for investment in the sector. PIF provides an indicative roadmap for agricultural sector investment for the period 2010–2020. All the government food security programs and support provided by development partners are harmonized with the strategic objectives of PIF.

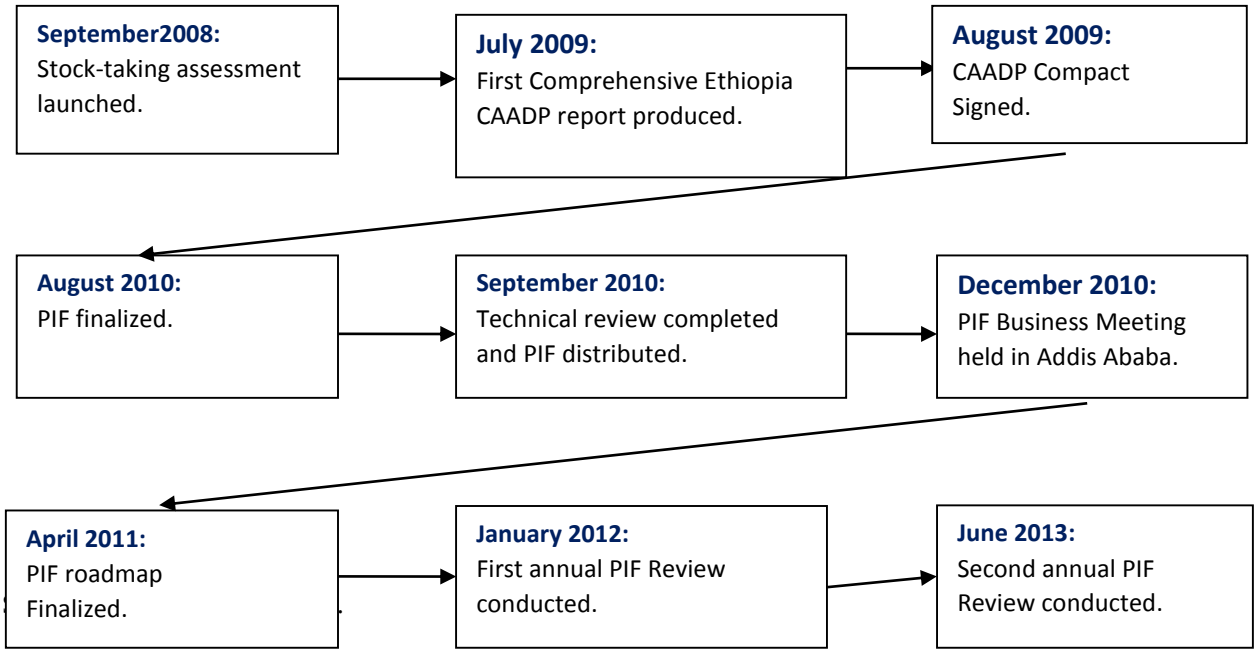
As shown in Table 3.2, successive policy frameworks have consistent development objectives and build on and complement each other in terms of meeting the desired development objectives. However, some gaps exist in certain aspects. For instance, natural resource conservation or management policy and provision of licenses to private investors in agriculture sometime lack alignment with agreed-upon environmental conservation directions. In some instances, forests have been cleared for food or cash crop production by private investors. This calls for the design of a strategy that enables optimization of private investment in agriculture without affecting the

environment. Indeed, private-sector mismanagement may be the result of a lack of a system to closely monitor and evaluate the performance of private licensees.

3.6. Policy Implementation Status in Relation to CAADP and PIF

Ethiopia is often cited as an exemplary case of successful indigenization and implementation of the CAADP framework in line with its own national agricultural development plan. As shown schematically in Figure 3.1, Ethiopia has made visible progress since 2008. The country signed the CAADP Compact in August 2009. Thereafter, it went through several consultation meetings to endorse the identified priority agricultural investments areas, confirm its readiness for implementation, declare funding commitments, and agree on modalities for funding PIF. The country has also conducted two annual progress reviews of PIF, one in January 2012 and the other in June 2013. Currently, plans are underway to launch the third annual PIF review.

FIGURE 3.1: PROGRESS TOWARD CAADP IMPLEMENTATION



Source: Compiled by authors.

Clearly specified legal, regulatory, and operational steps set by the Cabinet and/or Parliament guide the line ministries and technical agencies toward realization of different agricultural policies and strategies. These departments are responsible for implementing and coordinating the set of activities outlined in the policies and strategies.

Despite Ethiopia's success in terms of PIF implementation and progress review, there still are important gaps in several respects. These gaps emanate from inherent capacity shortfalls, especially with regard to human capacity and financial resources. Stakeholders at the JSR consultation meeting in Addis Ababa that MoA organized with technical support from the Regional Strategic Analysis and Knowledge Support System on April 24–25, 2014, discussed the quality of consultation and the status of the review process. The stakeholders also discussed progress made in the implementation of various agricultural development plans and strategies. Participants identified inadequate human capacity in key institutions, funding challenges, and lack of involvement from the private sector

and other nonstate actors as key areas needing attention (Table A.1). Participants included representatives from the government, development partners, the private sector and civil society organizations. They identified the key actions needed to address these challenges and developed specific action plans for each stakeholder group (see Tables A.7A and A.7B).

3.7. Policy Implementation under the New Alliance Cooperation Framework

Ethiopia is one of the beneficiary countries of the New Alliance Cooperation Framework. The initiative aims to catalyze private-sector investment through country investment plans, and thereby support CAADP as the guiding framework for agricultural transformation in Africa.

Under the New Alliance initiative, Ethiopia aims to increase private-sector participation in seed development, multiplication, and distribution. The country also plans to improve the private sector's ability to access markets by reducing barriers to competitiveness and increasing transparency requirements. Strengthening land-use rights to stimulate investment in agriculture and ensuring the availability of credit for the agricultural sector are other core aims of the program. In light of these objectives, the Ethiopian government signed 15 policy commitments to be realized between 2013 and 2015. Out of the 15 commitments, good progress had been made on five by April 2014. Some progress has been recorded for seven commitments, while little or no progress has been realized for three of them. In implementing New Alliance policy commitments, much remains to be done, as detailed in Section 5 of this assessment.

3.8. Policy Implementation Gap

Several gaps exist in the implementation of policies in PIF and in the New Alliance framework in Ethiopia, and a number of constraints need to be addressed:

- Effective policy implementation needs legal, regulatory, and operational systems to be implemented. Moreover, agricultural policies often are cross-cutting. For example, implementation of seed policy needs the coordinated efforts of different actors in production, marketing, and pricing. However, no clear mechanism exists for the coordination and delineation of the responsibilities of these different actors.
- Effective implementation also requires adequate capacity at different levels.
- Implementation of PIF flagship initiatives requires adequate funding, but securing these funds remains a formidable challenge.

Effective evaluation and monitoring of the PIF program needs to be strengthened. At this point, it is difficult to estimate the current funding and disbursements that have so far been committed by the government of Ethiopia, development partners, regional governments, and nongovernmental organizations.

4. INSTITUTIONAL REVIEW

4.1 Nexus between Economic Growth and Effective Institutional Arrangement

It is widely believed that reducing poverty in Ethiopia and other developing countries depends largely on stimulating growth in agriculture, because of its high trickle-down effect. This in turn depends on the level of commitment to implementing agreed-upon development initiatives by the country's leadership and development partners. It also depends on an effective institutional and policy environment, the allocation of adequate resources, and the active participation of all actors (that is, the government, development partners, the private sector, civil society organizations (CSOs), and women's and farmers' associations). This is why the Comprehensive African Agricultural Development Programme (CAADP) places inclusiveness, broad participation, mutual accountability, evidence-based decisionmaking, and transparency as guiding principles in successful implementation of the National Agriculture and Food Security Investment Plan.

Studies have found a positive relationship between the quality of institutions and governance structures and economic growth (Kaufmann et al. 2000, Knack 2003). In this context, it is not surprising that a broad consensus among growth economists, development experts, and international policymakers has begun to view effective institutional structure and good governance as prerequisites to sustained improvements in living standards.

In light of that consensus, this section reviews the institutional architecture of agricultural and food security policy formulation and implementation in Ethiopia. To understand possible constraints, the review mainly examines the institutional components of the agricultural policymaking process and program implementation.

4.2. Institutional Landscape of the Policy and Investment Framework

Ethiopia has a decentralized federal system, with nine regional states and two administrative cities. Regional states are further decentralized into zones and *woredas* (districts) and *kebele* (the lowest administrative unit). Policymaking for the national development agenda is more centralized within the executive branch, while sectoral issues are decentralized to the line ministries. The Prime Minister's Office and the Council of Ministers are high-level policymaking bodies. The Council of Ministers, comprising ministers of the 20 line ministries, is responsible for coordinating policy design and implementing public strategies.

When a policy issue requires support from law, the relevant line ministry will develop the main elements of a proclamation, conduct internal consultation, and submit the draft proclamation to the Council of Ministers. When the issue gets consent, it is tabled for discussion by the Council. If parliamentary approval is needed, the draft proclamation is passed to the standing committees in the House of People's Representatives (including the Rural Development Affairs Standing Committee for Agricultural Issues). The draft proclamation is publicized at this level, and public consultations are held. A report is then presented to the House for voting. Once approved, the draft proclamation goes to the President for signature, and the final proclamation is gazetted in the *Federal Negarit Gazeta*, whereupon it is considered to be a fully approved law.

The Ministry of Agriculture (MoA) is the primary institution within the Ethiopian government that develops agricultural and food security policy and coordinates implementation. It is the core body responsible for CAADP implementation in Ethiopia.

The CAADP country-level process involved three core elements: a stock-taking process whereby relevant stakeholders analyzed current and previous agricultural conditions; roundtable discussions in which broad arrays of actors explored and agreed on policy; and, following signing of the CAADP Compact, the preparation and implementation of a National Agricultural Investment Plan. Stakeholders' involvement in the preparation and implementation of the Agricultural Sector Policy and Investment Framework of Ethiopia (PIF) differed from one group to another. Government and development partners were heavily involved in the process, while private-sector and nonstate actors played minor roles.

The stock-taking assessment was conducted through the collaborative efforts of local professionals and expatriates. Among the stakeholders engaged were the government, development partners, nongovernmental organizations (NGOs) and CSOs. The signing of the CAADP Compact involved MoA and the Ministry of Finance and Economic Development (MoFED); the African Union Commission (AUC); and representatives of the private sector, CSOs, and development partners. However, no one signed on behalf of NGOs, farmers' organizations, or women's organizations.

After PIF's finalization, key partners signed a joint communiqué (December 2010) for sharing costs and defining roles in PIF's implementation. The signatories included MoA and MoFED; AUC and the Common Market for Eastern and Southern Africa; and representatives of CSOs, the private sector, and development partners. The process gave little attention to NGOs, farmers' associations, or women.

4.3. Coordination within Government Institutions

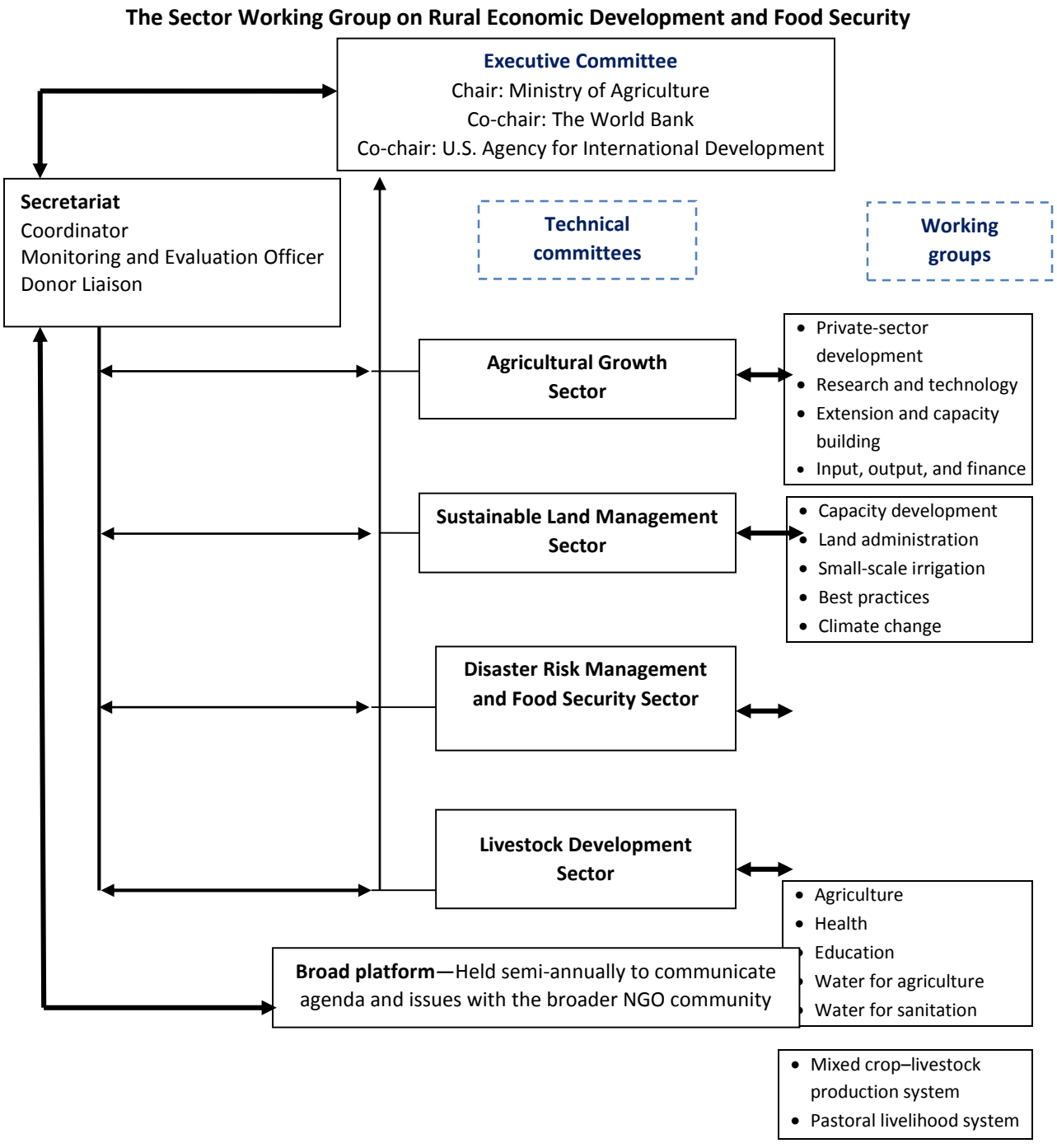
Ethiopian agricultural policy formulation and the country's implementation process both involve MoFED, which initiates the process, and MoA, which initiates sector-specific policies. The Central Statistics Agency provides data for the process, while research centers and universities conduct analysis. Parliament and the Prime Minister's Office mainly ratify and implement policies, while donors play a major role in providing technical advice and funds. Regional governments deal mainly with the actual implementation of projects and programs (ReSAKSS 2013). The agricultural sector development policy is intertwined with macroeconomic aspects of trade and investment, the infrastructure network, input importation and distribution, and environmental protection issues. Indeed, MoA is the institution with primary responsibility for implementing and coordinating sector development policies. The key questions here relate to the extent of coordination among (1) various departments and units within MoA, (2) federal-level ministries and agencies, and (3) MoA and regional agricultural bureaus. These key issues that need attention are discussed below.

4.3.1. Coordination within MoA

MoA has four state ministers responsible, respectively, for Agricultural Growth, Sustainable Land Management, Disaster and Risk Management and Food Security, and Livestock Sector Development. Each state minister runs several departments each with several units. The MoA Planning and Programming Directorate (PPD) is central to implementing the policy reform agenda. PPD prioritizes investments; designs and coordinates projects; and assesses PIF's potential impact. All other departments in the ministry are also coordinated by this department.

To implement agricultural sector plans, the government and development partners created the Rural Economic Development & Food Security Sector Working Group (RED&FS SWG) in April 2008, even before formulation of PIF in 2010. The working group is chaired by the Minister of Agriculture and co-chaired by the World Bank and the United States Agency for International Development (USAID). This enhances the principle of mutual accountability, as envisaged in the CAADP Compact (Figure 4.1).

FIGURE 4.1: CAADP/PIF MANAGEMENT STRUCTURE IN ETHIOPIA



Source: Callihan and Worako 2012.

4.3.2. Coordination among Federal Government Institutions

Some issues cut across sectors. For example, development of the agricultural sector requires mainstreaming gender and environmental management, water use and management, building and management of rural infrastructure, and developing an effective social service delivery system. However, the degree of coordination between MoA and other sector ministries and agencies is unclear. For example, private investors in agriculture who wish to obtain complete government authorization to proceed with investments have to go through the Investment agency, the Ministry of Natural Resource Management, MoA, banks, revenue and customs authorities, and regional agricultural bureaus to obtain separate authorizations.

4.3.3. Coordination between MoA and Regional Bureaus of Agriculture and Rural Development

Regional offices of the Bureau of Agriculture and Rural Development (BoARD) are supported by MoA. Regions have the authority to develop their own policies, but these must be ratified for consistency with federal responsibilities. BoARD is the principal implementer of all agricultural projects and programs at regional, zonal, and *woreda* levels. It also is responsible for overseeing projects specific to zones and *woredas*. Performance of private commercial agricultural projects is also monitored by regional bureaus. The major challenge is that the lower tiers of this structure lack both technical capacity and the financial resources needed to perform their roles effectively and communicate regularly with MoA. Therefore, there is a need to enhance the human and institutional capacities of these bureaus to implement, monitor, and evaluate their activities and review their performance. There is also a need to strengthen communication between MoA and BoARDs.

4.3.4. Coordination among Development Partners

Development partners are well organized to participate in the agricultural sector via the RED&FS mechanism. All partners in the donor group are required to align their programs and projects to PIF flagship programs, depending on their interest and experience. All of the donor members of the RED&FS SWG are required to harmonize their intervention areas to be supportive of PIF or Agricultural Transformation Plan strategic objectives. The donor group for agriculture in Ethiopia plays an important role in terms of aligning partner interventions. However, it is unclear whether all donors fully participate in this structure.

4.4. Participation of Nonstate Actors and CSOs

CAADP offers principles to guide the processes of policy formulation, implementation, and progress review. These principles cover inclusiveness, broad participation, mutual accountability, and transparency. When we consider CAADP implementation against these guiding principles, (that is, inclusion of the private sector and CSOs in policy formulation and discussions at a substantive level), it remains weak in Ethiopia's agricultural sector (AfricaLead and EAT 2013). In some cases, the private sector may be consulted on an ad hoc basis about the development of new policies. However, there is no existing institutional mechanism that guarantees private-sector participation. Several initiatives are currently underway to facilitate private-sector engagement in the PIF process, including commitments under the New Alliance initiative to increase private-sector involvement. Accordingly, a Private Sector Working Group has been established under the RED&FS Agricultural Growth Technical Committee.

Open and free participation of nonstate actors and CSOs in policy formulation is weak. Civil society involvement in policy reform is informal, and is largely limited to ad hoc invitations to attend stakeholder meetings. Nonstate actors and CSOs are represented by the Consortium of Christian Relief and Development Associations (CCRDA), which serves as a forum for more than 300 NGOs and CSOs operating in Ethiopia. CCRDA is a member of the RED&FS Food

Security Task Force. The government reports difficulties in involving civil society due to the large number and disorganized nature of the actors. RED&FS also hosts a bi-annual Broad Platform meeting with private-sector and civil society participation, where the minutes of the meeting are presented to the RED&FS Executive Committee.

As indicated earlier, key informants from MoA reported that nonstate actors and CSOs have serious capacity problems. Even when they are invited to different forums, their turnout and participation have been limited. This is attributed to their limited capacity to engage. The "70–30" Proclamation on spending their total resource apportioned for overhead (30 percent) on development activities (70 percent) has limited their resources to engage effectively on policy matters.

The future success of the agricultural sector's transformation depends on effective participation of all actors in the chain. Some NGOs have a good track record in natural resource management at the grassroots level. Hence, the government and CSOs should develop a guiding framework that spells out the terms of engagement for CSOs and NGOs in policy development, implementation, and review.

Some of the actions needed to strengthen the participation of nonstate actors include conducting an assessment to understand the causes of the current weak performance, designing a clear organized structure that allows nonstate actors to participate directly or through their representatives, and creating a line of communication that will enable sharing of information among them and also with other groups of actors. In addition, nonstate actors and CSOs face capacity problems that need to be addressed.

4.5 Institutional Alignment with PIF and Gaps

As noted earlier, PIF is a comprehensive multi-year food security plan that is part of GTP. PIF is well organized, and its formulation and implementation have been well guided by a government–donor coalition. Except for differences in naming, all agricultural sector plans in Ethiopia have the same strategic objectives and priority investment areas to tackle core bottlenecks that limit performance of the sector.

Although PIF has so far proven effective in defining Ethiopia's sectoral investment priorities, mobilizing resources, and harmonizing efforts among the principal actors, there are concerns about the magnitude of the investments needed to achieve the PIF targets. This raises concerns about whether the targets are realistic and achievable, or whether the amount of money required to achieve the targets can be mobilized. Monitoring and evaluation (M&E) of PIF is currently unsatisfactory, and a major effort will be needed to establish a workable M&E framework during the life of GTP (MoA 2013).

4.6. Institutional Implementation Capacity

MoA and the regional BoARDs are core actors in the implementation of PIF. They are supported by multiple partners, including development partners and the private sector. While PIF is a well-articulated agricultural sector development policy and strategy, its effective implementation still remains a challenge.

A Capacity Needs Assessment Report completed in 2013 (ReSAKSS 2013) identified the major challenges facing agricultural policy formulation, implementation, and review processes in Ethiopia as (1) limited use of evidence; (2) limited policy analysis capacity within public institutions; (3) limited involvement of research institutions and various stakeholders in the policy dialogue; (4) poor or nonexistent data and information management systems; (5) lack of debate to inform policymaking; and (6) constrained physical capacity of tools, such as statistical software packages, and poor knowledge sharing (that is publication, dissemination, and periodic forums). The report proposes a

strategy for capacity strengthening that, if well implemented, could go a long way toward addressing these challenges.

5. REVIEW OF KEY FINANCIAL AND NONFINANCIAL COMMITMENTS

5.1. Key Issues in Agricultural and Rural Development

The African Union (AU) has recognized the importance of raising agricultural production and productivity as the main ingredients for rapid transition out of poverty and food security for the region. The AU has formulated the Comprehensive African Agricultural Development Programme (CAADP) to address fundamental obstacles to African agricultural development, including the sector's reliance on external technical assistance, the lack of African political leadership and commitment, and poor planning and coordination between national and regional stakeholders. The explicit goal of CAADP is to "eliminate hunger and reduce poverty through agriculture."[2]

In pursuance of this objective, the Ethiopian government indigenized the CAADP initiative through the Agricultural Sector Policy and Investment Framework (PIF), and aligned its ongoing agricultural sector development programs to this development framework. For Ethiopia, increasing the productivity of smallholder agriculture is a top priority. However, productivity enhancement must be complemented by efforts to help farmers graduate from purely subsistence farming to semi-commercial farming as a business. The enhancement must also be complemented by an effort to adopt more sustainable natural resource management practices to arrest and reverse environmental degradation by harmonizing the efforts of partners in the sector.

As part of the CAADP process in Ethiopia, a high-level Business Meeting was held in December 2010. The Business Meeting aimed at validating and endorsing PIF and confirming its implementation readiness. It also confirmed funding commitments and agreed on processes for PIF implementation. The meeting was convened by the government of Ethiopia. Participants included national stakeholder groups; the CAADP core institutions from national, regional, and continental levels; donors; and other potential funders (foundations and nontraditional donors).

The aim of this section is to assess progress made in meeting respective commitments by key stakeholders, in particular government, development partners, and the private sector, including farmers' organizations. The review covers commitments and progress made for implementation of both the PIF flagship programs and the New Alliance Cooperation Framework.. The assessment is mainly based on government documents about budgets and other sources of financial data and information.

5.2. PIF Priority Investment Areas and Indicative Financing Plan

During the PIF formulation process, several priority areas for investment were identified and arranged among four strategic objectives. While the government considers that agricultural productivity (Strategic Objective [SO] 1) is the first priority, PIF presents a balanced portfolio of priority investment areas from which the various regions, agro-

[2] Two targets were set in pursuance of this goal: (1) to achieve a 6 percent annual growth in agricultural gross domestic product by 2015, and (2) to increase the allocation of national budgets directed to the agricultural sector to at least 10 percent of national budgets.

ecological zones, and commodity groups can choose, according to their particular circumstances. The strategic objectives and priority investment areas of PIF are indicated in Table 5.1.

TABLE 5.1: PIF STRATEGIC OBJECTIVES AND PRIORITY INVESTMENT AREAS

Strategic Objective 1: Productivity and Production
• Irrigation development • Skill development (including farmers and development agents) • Seed and fertilizer supply • Soil fertility management • Livestock development • Research
Strategic Objective 2: Rural Commercialization
• Market system and infrastructure • Cooperative development • Agricultural credit • Private-sector support
Strategic Objective 3: Natural Resource Management
• Natural resources development
Strategic Objective 4:Disaster Risk Management and Food Security
• Productive Safety Net Program

Source: MoA 2010.

5.3. PIF Financing Plan

The financing plan assumed that 60 percent of the total budget requirements (excluding already committed funds) would be financed by government, and 40 percent would come from external sources in the form of grants and loans. PIF funding requirements involved about US$9.3 billion from the Ethiopian government and US$6.2 billion from development partners over a 10-year period. The breakdown of total funds by the four strategic objectives and priority investment areas is indicated in Table 5.2. The table shows that SO 1 was expected to receive almost half of the total funds (46 percent), while SO 2 was to receive the least amount at about 6 percent. SO 3 and SO 4 were to be allocated roughly equal amounts of about 20 percent each.

TABLE 5.2: PIF FINANCING PLAN, ASSUMING 10 PERCENT PER ANNUM GDP GROWTH (US$ MILLIONS)

Strategic Objectives	Ongoing and Incremental	Million US$	% Share
Strategic Objective 1: Productivity and Production Improvement, including Irrigation	Ongoing	3,942	46.4
	Incremental	3,309	
Strategic Objective 2: Rural Commercialization	Ongoing	574	6.4
	Incremental	421	
Strategic Objective 3: Natural Resource Management	Ongoing	1,955	19.2
	Incremental	1,020	
Strategic Objective 4: Disaster Risk Management and Food Security		3,107	20.0
Contingency		**1,172**	**7.6**
Total fund not committed		**15,499**	**100**

Source: MoA 2010.

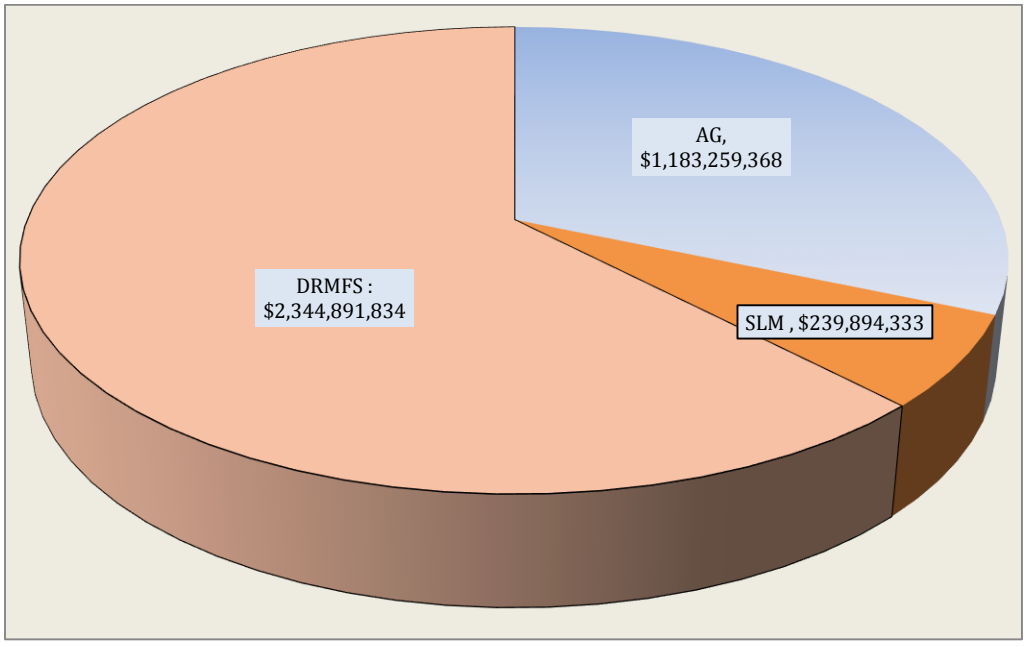
5.4. PIF Investments

The four sources of financing for PIF are (1) the federal and regional governments, (2) beneficiary and community contributions, (3) development partners, and (4) the private sector. PIF envisaged that investments would be in the range of US$15–18 billion over 10 years, depending on the availability of funding from the Ethiopian government. This in turn depends on the rate of gross domestic product (GDP) growth and tax revenues. This level of investment was seen to be sufficient to achieve the Growth and Transformation Plan target of 8 percent growth rate in the agricultural sector GDP. Accordingly, from the launching of its program in late 2010, considerable amounts of resources have been mobilized and spent in the identified priority areas. Though there are no comprehensive data and evidence on the amount of resources committed to PIF so far, indicative data obtained from the Rural Economic Development & Food Security (RED&FS) Secretariat and donor coordinators that are presented below show mixed results.

5.4.1. Investment by RED&FS Sectors (2010–2014)

The total investment on core flagship programs of PIF in the first half of the planning period (that is, from when the program was launched in late 2010 to early 2014) is estimated to be US$3.9 billion or 25.3 percent of the total envisaged amount of US$15.4 billion. Of this total committed investment, agricultural growth (AG) accounts for US$1.18 billion (31.4 percent), sustainable land management (SLM) accounts for US$0.24 billion (6.4 percent), and disaster risk management and food security (DRMFS) accounts for the lion's share—US$2.34 billion, or 62.2 percent—of the total committed investments (see Figure 5.1). While this distribution of committed investments seems inconsistent with the initial plans of allocating the lion's share of funding to the Agricultural Growth Program, a deeper analysis is needed to show clearly whether this is the case. There seem to be considerable overlaps in the types of investments under the RED&FS sectors.

FIGURE 5.1: INVESTMENT BY RED&FS SECTORS (2010–2014)

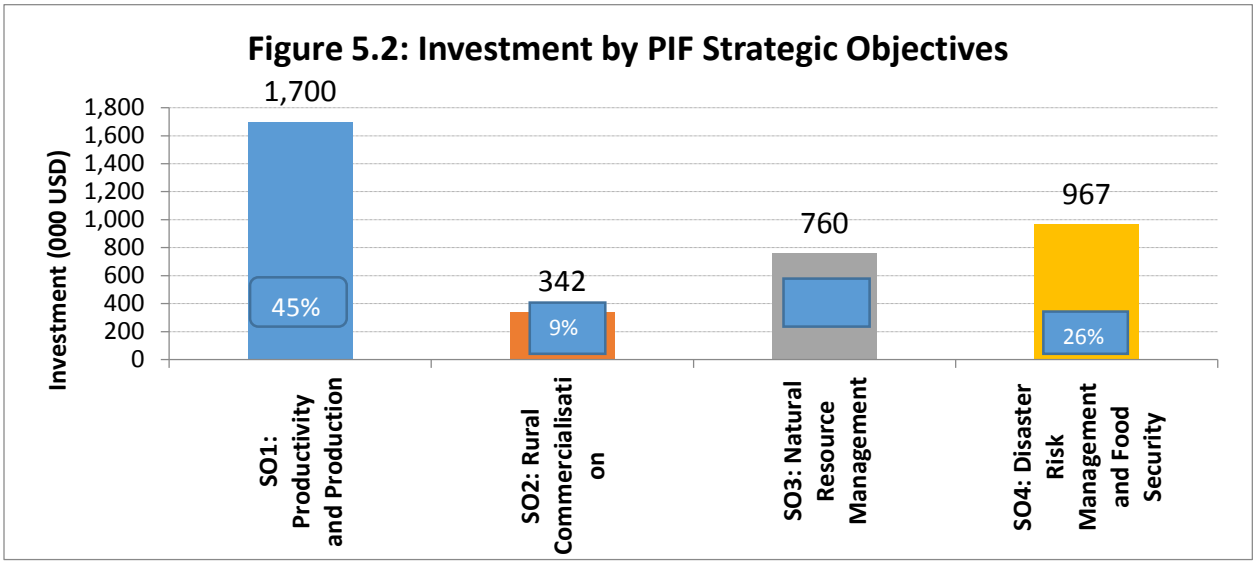


Source: RED&FS Secretariat 2014.

5.4.2. Agricultural Sector Investment by PIF Strategic Objectives

Figure 5.2 depicts investment in the agricultural sector by PIF strategic objectives (that is, SO 1 to SO 4) according to their importance. Productivity and Production Improvement, Agricultural Commercialization, Sustainable Land Management, and Disaster Risk Management and Food Security accounted respectively for 45 percent, 9.1 percent, 20.1 percent, and 25.7 percent of committed investments during 2010–2014.

FIGURE 5.2: INVESTMENT BY PIF STRATEGIC OBJECTIVES



Source: RED&FS 2013.

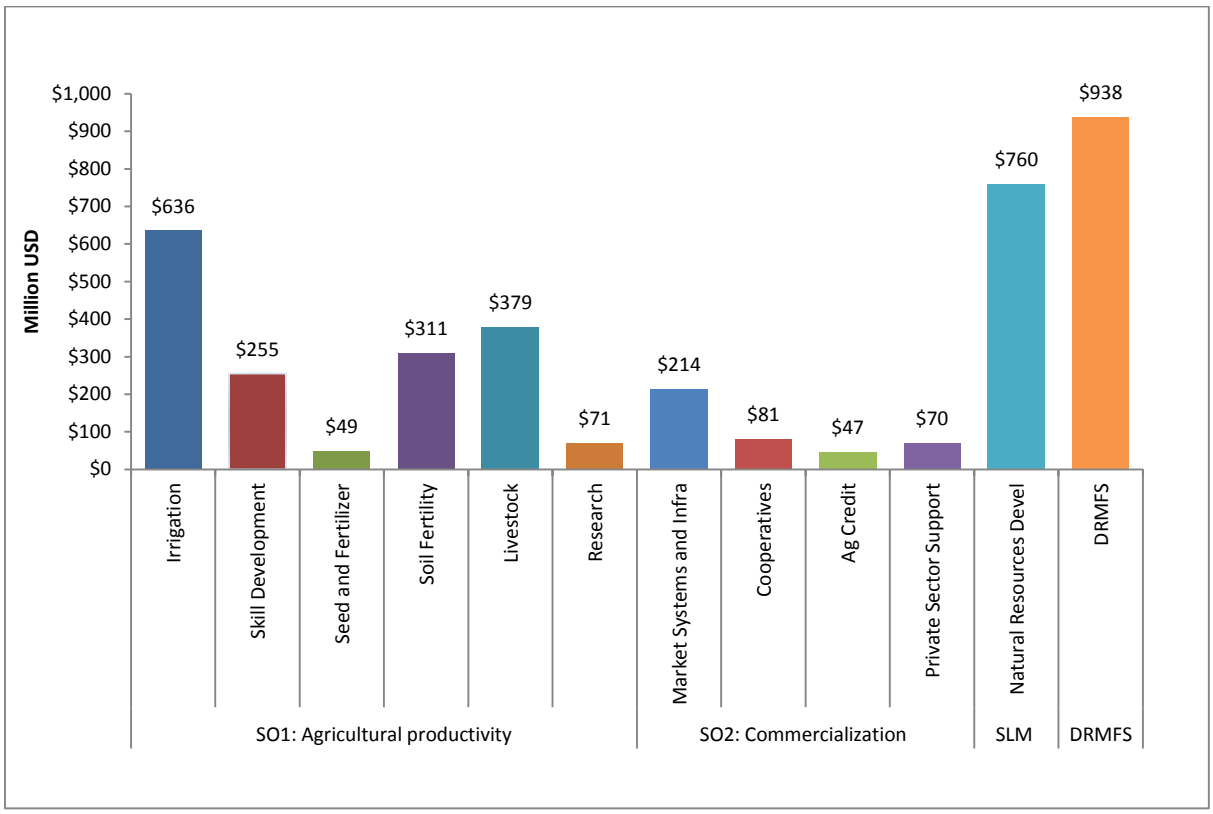
5.4.3. Agricultural Sector Investments by PIF Priority Investment Areas

Figure 5.3 shows the distribution of investments committed to the agricultural sector by PIF priority investment areas. Investments in DRMFS, SLM, and irrigation account for 24.6, 19.9, and 16.7 percent, respectively. These three core investments accounted for 61.2 percent of the total. Investments in livestock, soil fertility, skill development, and marketing system development and infrastructure account for the second-largest batch of investments.

Figure 5.3 shows investment in subcomponents of SO 1 and SO 2 (that is, productivity improvement and commercialization). A considerable share of finance is directed to irrigation projects, consistent with the PIF prioritization. This is followed by investment in livestock sector development, soil fertility improvement, skill development, and market system and infrastructure development.

Realization of agreed-upon investments in flagship programs requires timely disbursement of funds committed by both government and development partners. However, securing funding remains a formidable challenge. The total budget over the 10-year PIF program period (2010–2020) was estimated at US$15.0 billion. The government was expected to contribute 60 percent, and development partners were expected to raise the rest. Of this, about US$3.8 billion had already been committed to finance existing programs and projects by both the government and donors. This constitutes about 26.7 percent of the total planned budget. To meet the funding target, US$11.6 billion will be required during the second half of the PIF period (2015/2016–2020). Given the track record, securing this level of funding will remain a core challenge for implementation of the PIF initiatives.

FIGURE 5.3: AGRICULTURAL INVESTMENT BY PIF PRIORITY INVESTMENT AREAS (MILLION US$)



Source: RED&FS 2013.

5.4.4. Sources of Financing

The major sources of funding for the agricultural growth, SLM, and DMRFS programs for the period 2010–2014 are depicted in Table 5.3. Due to lack of data, the separate contribution of individual funding sources could not be established. Table 5.3 indicates the contribution of the core set of development partners for each flagship program since its inception.

The Agricultural Growth Program is mostly supported by a multi-donor fund, which accounts for 38.3 percent, followed by the United States Agency for International Development (USAID), the Embassy of the Netherlands, Canadian International Development Agency, and United Kingdom Department for International Development (DFID), which contributed 13.4 percent, 11.5 percent, 11.0 percent, 8.2 percent of the funding, respectively. The rest of the donors contributed between 0.5 percent and 4 percent of the total program funds. The SLM program is also largely supported by the multi-donor fund, followed by the Ministry of Agriculture (MoA), the World Food Programme (WFP), and DFID. Similarly, DRMFS is highly dependent on the Multi-Donor Trust Fund, which accounts for 85.8 percent of total funding. The financing mechanism through the Multi-Donor Trust Fund has been successful because of the institutional arrangement coordinated by RED&FS and its Secretariat. The existence of the Secretariat has been recognized as a key factor contributing to the success of the RED&FS structure.

Contributions by regional governments, the private sector, nongovernmental organizations (NGOs), civil society organizations, and farmers' associations could not be established due to unavailability of data. A strengthened monitoring and evaluation (M&E) system is imperative for tracking the contributions by different actors.

TABLE 5.3: MAJOR SOURCES OF FINANCE FOR AGRICULTURAL GROWTH AND DISASTER RISK MANAGEMENT AND FOOD SECURITY PROGRAMS

Sources of Funds	Number of Projects	Amount ('000 US$)	% Share
Agricultural Growth			
Spanish Agency for International Cooperation and Development	5	1,722	2
Canadian International Development Agency	11	9,696	11
United Kingdom Department for International Development	2	7,191	8.2
Embassy of the Netherlands	8	10,130	11.5
European Union	4	3,454	3.9
German Development Cooperation	3	515	0.6
Italian Development Cooperation	3	944	1.1
Japan International Cooperation Agency	3	1,398	1.6
Ministry of Agriculture	1	2,127	2.4
Multi-Donor Trust Fund		33,717	38.3
Norway Agency for Development Cooperation 02	1	684	0.8
United Nations Development Programme	1	1,603	1.8
United States Agency for International Development	9	11,819	13.4
World Bank	1	3,000	3.4
Total		**87,999**	**100**
Sustainable Land Management Programs			
United Kingdom Department for International Development	1	45,000	6.6
Embassy of the Netherlands	3	29,600	4.3
European Union	5	36,785	5.4
Finland Development Cooperation 04	1	15,744	2.3
Japan International Cooperation Agency	3	11,770	1.7
KfW	2	31,180	4.6
Ministry of Agriculture	2	68,300	10
Multi-Donor Trust Fund		194,525	28.4
United States Agency for International Development	3	15,079	2.2
World Bank	1	175,000	25.6
World Food Programme	1	61,365	9
Total		**684,347**	**100**
Disaster Risk Management and Food Security			
Spanish Agency for International Cooperation and Development	2	6,084	0.3
Canadian International Development Agency	2	52,135	2.2
United Kingdom Department for International Development	2	64,004	2.7
Embassy of the Netherlands	1	5,500	0.2
European Union	3	7,957	0.3
German Development Cooperation	1	5,400	0.2

Sources of Funds	Number of Projects	Amount ('000 US$)	% Share
Japan International Cooperation Agency	1	14,166	0.6
KfW	1	8,050	0.3
Multi-Donor Trust Fund		2,011,700	85.8
United Nations Development Programme	1	9,096	0.4
United States Agency for International Development	3	54,800	2.3
World Bank	1	106,000	4.5
Total		**2,344,892**	**100**

Source: RED&FS Secretariat 2014.

5.4.5. Delays in Disbursement and Absorption Capacity

Although considerable success has been recorded in generating resources for implementing the envisaged PIF programs, and while many development partners show commitment to providing the resources committed, the funds have not been realized on schedule. This has led to a considerable amount of funds remaining unused by their expiration date (see Table 5.4). The situation has been attributed to delays in disbursement by donors and by the low absorption capacity of the programs.

TABLE 5.4: EXPIRED FUNDS FOR RURAL ECONOMIC DEVELOPMENT & FOOD SECURITY SECTOR WORKING GROUP SECTORS

Donor	Name	Expiration Date	Total Value
Disaster Risk Management and Food Security Sector			
Spanish Agency for International Cooperation and Development 04	Food Security Somali Region	2013/05/15	2,706,000
European Union 62	Drought Recovery and Resilience Partnership Project in Borana	2013/10/25	3,060,987
European Union 61	Enhancing Food Security Stability and Resilience	2013/10/25	4,000,000
Total			**9,766,987**
Agricultural Sector			
Italian Development Cooperation 01	Crop Diversification and Marketing Development Project	2012/06/30	4,000,000
European Union 14	Bamboo project	2013/02/28	2,045,871
United States Agency for International Development 02	Ethiopian Sustainable Tourism Alliance	2013/06/07	5,500,000
United States Agency for International Development 10	Pastoralist Livelihood Initiatives	2013/06/30	16,279,751
Canadian International Development Agency 02	Improving the Productivity and Market Success of Ethiopian Farmers	2013/07/31	18,218,902
United States Agency for International Development 18	Exploiting the Potential of Potato and Sweet Potato	2013/09/23	5,000,000
European Union 60	Rebuilding Livelihoods and Promoting Resiliency of Drought Affected Areas of Somali Regional State	2013/10/25	3,000,000
United States Agency for International Development 46	FHI Development 360 LLC	2013/09/30	7,000,000

Donor	Name	Expiration Date	Total Value
Total			**61,044,524**
Sustainable Land Management Sector			
German Development Cooperation 03	Enhancing Small-Scale Irrigation Project	2012/10/30	3,500,000
Canadian International Development Agency 05	Sustainable Water Harvesting and Institutional Strengthening in Amhara	2013/06/30	15,686,705
Finland Development Cooperation 01	Water Supply, Sanitation, and Hygiene Project in BSG	2013/06/30	15,075,000
United States Agency for International Development 07	Ethiopia Strengthening Land Administration Program	2013/07/21	5,000,000
Spanish Agency for International Cooperation and Development 14	Access to Food Security through Promotion and Diversification of Agricultural Production and Efficient Use of the Water Resources in Gode	2013/08/01	948,818
Total			**40,210,523**

Source: RED&FS 2014.

5.5. Public Spending on Agriculture

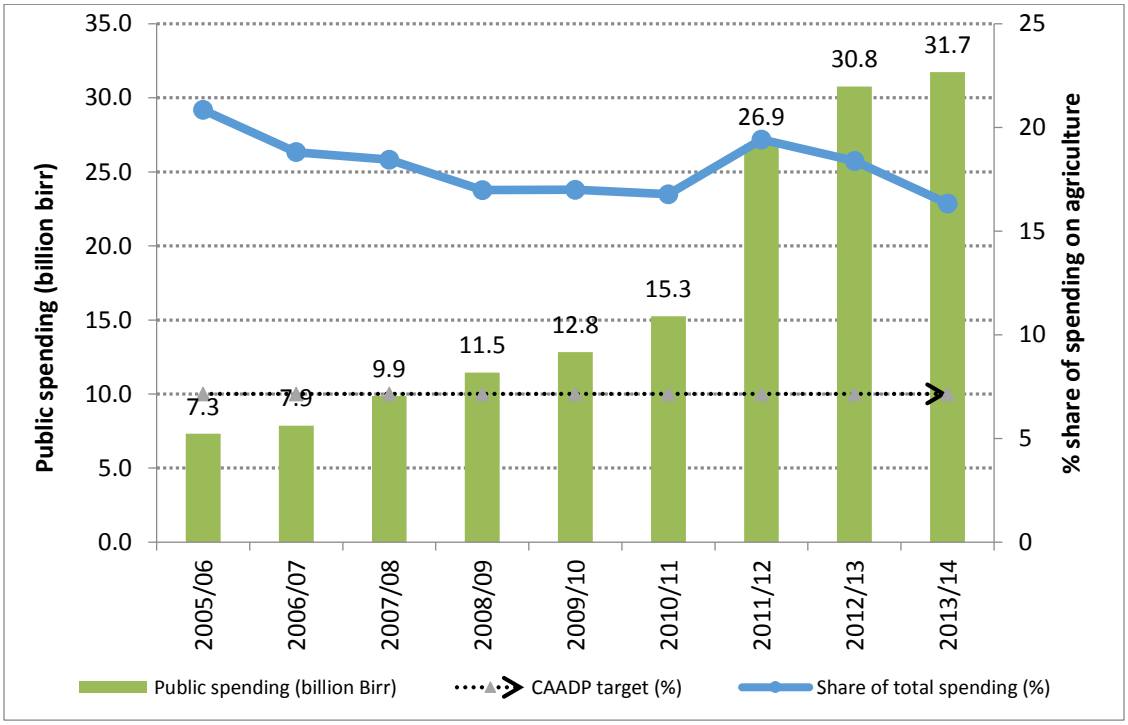
The Ethiopian government has shown a determination to promote sustainable, broad-based, agricultural sector production and productivity. It consistently increased public spending on agriculture from 7.3 billion birr in 2005/2006 to 31.7 billion birr in 2013/2014. The public budget for agriculture grew by 334 percent during this period (Figure 5.4). Public spending on agriculture as a share of total government expenditure averaged 18 percent over the same period. In the last eight years, out of total spending by the federal government, 71 percent was directed to capital investments, and the remaining 29 percent allocated to recurrent expenditure. This is laudable, as it implies that more attention is accorded to financing investment projects on agriculture, instead of recurrent expenses. A breakdown of spending by RED&FS sectors, strategic objectives, or priority investment areas is not available.

In Ethiopia, each of the nine regional governments, together with their partners (NGOs, farmers' groups, private sector, etc.) generate and spend a considerable amount of resources on agriculture, which in aggregate may be even more than that of the federal government. However, due to a lack of information and data, their commitments and expenditures are not incorporated in this report. Hence, it is difficult to ascertain the total government commitment and actual investment in the agricultural sector.

As stated by Diao et al. (2013), for many countries, achieving the CAADP targets will require an increase not only in the level of agricultural spending, but also in the spending's efficiency. It is expected that more inclusive, evidence-based policy planning and implementation processes should lead to better development outcomes, and thus greater policy and investment efficiency. One of the indicators of improved sector policy and accountability is whether expenditure and programs in the agricultural sectors are achieving the desired development outcomes.

The elasticity of agricultural sector growth for public expenditure for agriculture, or the extent to which a given change in public expenditure translates into a change in agricultural sector growth, can be used as a proxy for effective agricultural sector policy. The more effective public policies overcome obstacles to generate growth when they are able to translate public-sector investments directly into a higher growth rate and leverage private-sector investment for even faster growth. Addressing the question of efficiency requires a deeper analysis that is beyond the scope of the current report.

FIGURE 5.4: FEDERAL GOVERNMENT SPENDING ON AGRICULTURE (BILLION BIRR), AND SHARE OF AGRICULTURE PUBLIC SPENDING COMPARED WITH TOTAL PUBLIC SPENDING (%)



Source: Ministry of Finance and Economic Development, 2013/2014.

In summary, the following gaps exist in meeting financial commitments to PIF:

- **Low spending:** The total spending on flagship programs is below the planned amounts for the first five years of PIF. Besides, some of the development partners were not able to disburse the funds that they committed.
- **Implementation delays:** The flagship projects have attracted considerable funding commitments from government and development partners. However, capacity limitations in the implementing agencies at the federal and regional levels, as well as delays in procurement and flow of funds, have resulted in significant implementation delays and slow utilization of funds. Clearly, the pace of implementation will need to accelerate if the flagship program's targets, and hence PIF's targets, are to be achieved.
- **Sustainability of fund generation and spending**: It is not clearly known how much each partner (government, development partners, and others) has committed to invest in each of the program areas and what amounts of actual disbursement have been made over time. A robust M&E system and a mutual accountability framework are required to transparently track commitments and investments.
- **Lack of alignment in planned versus actual spending:** The Agricultural Growth Program received much attention at the planning stage, and was expected to receive the largest share of investment funding. In terms of actual spending, this seems not to have been the case, as the lion's share of funding has been directed to DRMFS. However, some of the investments under DRMFS and other sectors may easily be classified as Agricultural Growth investments. A deeper analysis is needed to confirm the actual distribution of investments among the RED&FS sectors.

- **Lack of data:** It is difficult to estimate the amount of funding committed by government, development partners, regional governments, and nonstate actors to the PIF programs. Again, this calls for a strengthened M&E system.

5.6. The New Alliance for Food Security and Nutrition

5.6.1. Introduction

The New Alliance for Food Security and Nutrition was launched in 2012 under the United States Group of Eight (G8) Presidency as a joint initiative among African leaders, the private sector, and donors to accelerate responsible investment in African agriculture and to lift 50 million people out of poverty by 2022. The New Alliance aims to catalyze private-sector investment through country investment plans, and thereby support CAADP as the guiding framework for agricultural transformation in Africa.

A number of partner countries have been working closely with the Grow Africa partnership; they were convened by the African Union Commission, the New Partnership for Africa's Development Agency, and the World Economic Forum toward implementation of the New Alliance, with the shared goal of mobilizing private-sector investment in line with national agricultural strategies and CAADP plans. Ethiopia is one of seven beneficiary countries of the program (others are Burkina Faso, Ghana, Malawi, Mozambique, Senegal, and Tanzania).

The program under the New Alliance in Ethiopia hinges on four key objectives: (1) increase private-sector participation in seed development, multiplication, and distribution; (2) increase the private sector's ability to access markets by reducing barriers to competitiveness and increasing the transparency of requirements; (3) strengthen land-use rights to stimulate investment in agriculture; and (4) increase the availability of credit to the agricultural sector. The section below reviews progress against the stated objectives.

5.6.2. Overall Summary of Progress and Key Challenges

The Ethiopian government launched implementation of the New Alliance Cooperation Framework in May 2012, and has registered progress in some of the 15 policy commitments by taking considerable action on a number of them, and completing one of them on the agreed schedule. However, little or no progress has been registered against some of the policy commitments (Table 5.5). Selected multinational and local companies that are part of the New Alliance agreement have made good progress on their investment commitments. Similarly, development partners are following through with most of their disbursement commitments, albeit with some delays.

A Private-Sector Development Task Force (PSDTF) under the Agricultural Growth Pillar of RED&FS was given responsibility for monitoring implementation of the New Alliance in Ethiopia. The PSDTF was launched on February 22, 2013, and has had its inaugural meeting. The PSDTF is a multistakeholder body with key stakeholders from the Ethiopian government, development partners, international organizations, agricultural associations, chambers of commerce, and selected private-sector companies. It is co-chaired by MoA, USAID, and DFID. The PSDTF held its second meeting on April 17, 2013, during which stakeholders prepared draft work plans for 8 of the 15 policy commitments. Table 5.5 summarizes the progress made in the implementation of the policy commitments, while Table 5.6 summarizes the financial commitments by donors and the progress made against those commitments.

TABLE 5.5: SUMMARY OF PROGRESS TOWARD IMPLEMENTING NEW ALLIANCE POLICY COMMITMENTS

Policy Commitment	Target Completion Date	Progress to May 2014	Implementation Status: May 2012 to May 2014
1. Ratify seed proclamation.	06/12	The draft seed proclamation was developed in 2012 by the Ministry of Agriculture's (MoA's) Agricultural Inputs Marketing Directorate, the Agriculture Transformation Agency (ATA), Ethiopia Seed Enterprise and nonstate actors including, Pioneer DuPont and Ethiopian Seed Association. The Ethiopian government passed the Seeds Proclamation in January 2013 and it was released in the National Gazette in May 2013.	
2. Establish protocols to identify regulatory/ administrative changes as necessary and encourage private sector investment.	12/12	The MoA has drafted the seed regulations, validated in a workshop with all key stakeholders. Following a review by senior policymakers, the regulations will be submitted to the Council of Ministers for approval. The Seed System Development Strategy, 2013–2017, has also been developed through a participatory process led by the ATA. The strategy has recently been submitted for approval to the Council of Ministers.	
3. Establish a one-window service that assists agricultural investors,	04/13	Following a recent proclamation amendment, the Ethiopian Investment Agency has established a "one-window service" for all investors, providing 28 steps of the registration process in-house. The ATA Public-Private Partnership Unit is focused on improving the process for agricultural investors. The Ethiopian Revenues and Customs Authority and Ministry of Trade (MoT) have signed an agreement with the Investment Climate Facility for Africa to establish an electronic single-window system to reduce export, import, and transit procedures.	
4. Publish and disseminate business licensing procedures through local radio, Internet, and newspapers.	04/13	MoT's Registration and Licensing Directorate publicizes business registration, licensing, and renewal procedures using noticeboards. The Directorate is an intended beneficiary of the electronic single window that will develop online facilities for business registration, licensing, and renewal. It is also planning to expand its Addis Ababa office to relieve congestion and produce brochures in Amharic and English to help investors.	
5. Implement policy measures, as necessary, that secure ownership and crop-trading rights for commercial farms.	12/13	No progress to report at this time.	
6. Commit not to impose export quotas on commercial farm output and processed goods.	09/12	Following the 2008 food price crisis, the government imposed an export on all cereals, including maize. This was lifted in 2010 and reintroduced in 2011. The government is currently reviewing the lifting of the cereal export ban. The government has removed quotas on commercial farm exports of raw cotton. There are no export quotas on finished products— textiles and leather—as Ethiopia has adopted an export-led development strategy based on manufactured/processed goods.	
7. Refine, as necessary, policies regarding agrochemical importation that ensure consistent application of regulations to private-sector distributors and commercial farms; and to generic and brand-name chemicals.	07/13	Ethiopia regulates the importation of agrochemicals in the interest of public and environmental health. Once licensed, imported agrochemicals are retailed by small-, medium-, and large-scale traders. Ethiopia has required agrochemicals to be e transported by licensed traders. This regulation has now been relaxed, and some importers—including foreign investors—are authorized by the Ethiopian Shipping Lines and Logistics Enterprise and the Ethiopian Revenues and Customs Authority to use their transporters of choice.	

Policy Commitment	Target Completion Date	Progress to May 2014	Implementation Status: May 2012 to May 2014
8. Refine, as necessary, the regulatory framework to stimulate private-sector engagement in livestock production, value-chain development of animal products. and health quality input delivery.	07/13	The government has enacted two proclamations on marketing of live animals, hides, and skins. Developed by MoT and Industry in association with private-sector stakeholders, the proclamations are pending approval by the Council of Ministers. The livestock sector is currently carrying out a study on the development and implementation of an Animal Identification and Traceability System.	
9. Support an independent study of the impact to date of the Ethiopia Commodity Exchange (ECX).	07/13	The International Food Policy Research Institute's Ethiopia Strategy Support Program /ESSP has been contracted to carry out the study in a phased approach that will start with a review of the coffee sector. New York University is also undertaking a comparative review of domestic and international coffee prices supported by ECX.	
10. Extend land certification to all rural landholders, initially focusing on Agricultural Growth Program *woredas.*	07/15	"First-level" landholding certificates have been issued to 98 percent of rural households in the four regions of Amhara, Oromiya, SNNPR, and Tigray. In 2014, second-level landholding certification was started in eight *woredas* in each of these regions. The Rural Land Administration and Utilization Directorate is being strengthened, and a Land Administration Task Force was established in the State Ministry for Sustainable Land Management.	
11. Refine land law, if necessary, to encourage long-term land leasing, and strengthen contract enforcement for commercial farms.	12/13	The government issued a federal proclamation on land administration (456/2005), which the Amhara, Oromiya, SNNPR, and the Tigray regions have used to develop regional proclamations. Gambella and Somali regions also issued regional land laws in 2014.	
12. Develop and share a land-use planning framework for highland regions and lowland regions of Gambella and Benishangul Gumuz, that will result in sustainable land use.		A Land Use Case Team has been established in the Land Administration and Utilization Directorate, State Ministry for Sustainable Land Management.	
13. Further develop and implement guidelines of corporate responsibility for land tenure and responsible agricultural investment.		In 2011, the government adopted the Social and Environmental Code of Practice for Agricultural Investment. However, the government has not yet adopted the Food and Agriculture Organization's guidelines.	
14. Enable financial institutions to support smallholder farmers and agribusiness (e.g., warehouse receipts, outgrower contracts, machinery leasing).	12/13	Banks, including New Alliance Letter of Intent signatories, are required to purchase Treasury bonds to the value of 27 percent of all loans, resulting in liquidity challenges. Some banks have entered into cofinancing arrangements with development partners, in order to ease lending requirements for smallholder farmers and agroprocessing initiatives.	
15. Strengthen the credit bureau system to improve access to financial information.	12/12	The National Bank of Ethiopia established a computerized Credit Bureau System to support the Credit Reference Bureau, which helps member banks provide, update, and correct credit	
			3

Source: Tufts University 2014.

Legend:

- Target achieved or surpassed or on track
- Some progress and more effort required
- Not on track or deteriorated
- No data

As indicated in Table 5.5 above, there has been good progress in 5 of the 15 commitments of the New Alliance agreement; there has been some progress on 7 commitments (46.7 percent); and little or no progress has been registered in 3 (20 percent) of the commitments. The PSDTF needs to identify the bottlenecks hindering progress, so as to accelerate implementation to fulfill these policy commitments.

The PSDTF also reviews the financial commitments by development partners in the New Alliance Cooperation Framework. The last annual review, conducted in June 2014, is summarized in Table 5.6.

TABLE 5.6: NEW ALLIANCE FINANCIAL COMMITMENTS AND PROGRESS BY G8 COUNTRIES AND THE EUROPEAN UNION BY APRIL 2014

G-8 Partner	Total G-8 Commitments 2012–2015	Projected Disbursement 2012–2014	Disbursement to April 2014	Percent Disbursed against Committed to April 2014
Canada (million CDN)	98	75	52.4	70
France (million EUR)	100	40.0	1.0	2.5
Germany (million EUR)	66	65.8	41.2	62
Italy (million EUR)	52	13.95	1.7	9
Japan (million JPY)	88	44	117.5	267
Russia (million US$)	51			
United Kingdom (million GBP)	281	178		
United States (million US$)	458*	463	376.2	81
European Union (million EUR)	321	245	199	62
Total	**1'365**			

Source: Adapted from Tufts University 2014.

Legend:

- Target achieved or surpassed or on track
- Some progress and more effort required
- Not on track or deteriorated
- No data

5.6.3. Private-Sector Investment Intentions and Progress

In line with the New Alliance framework, a large number of international and local companies signed the New Alliance Cooperation Framework or Letter of Intent (LoI) in May 2012. They also signed memoranda of understanding (MoU) with the Ethiopian government and other key partners. The extent of progress in meeting private-sector commitments is depicted in Table 5.7 at the end of this section.

Of the 16 companies that signed LoIs for Ethiopia, most reported steady progress with their investments in 2013. Working in partnership with the government and farmers' associations, a number of these companies have projects that are poised for operational scale-up. Heineken and Diageo are both engaging growing numbers of farmer cooperatives in a significant boost in the quality and quantity of barley production. GUTS Agro Industry has secured an off-taker in the WFP to which it will supply processed chickpeas as a supplementary food. Yara invested in a potash project, while the Agriculture Transformation Agency (ATA) has carried out soil analysis and developed a framework for fertilizer blending across the country (Grow Africa 2013).

The Grow Africa report (2013) notes that government agencies actively improved the enabling environment in Ethiopia for agricultural sector investment. Direct seed marketing was launched, allowing private seed companies to create parallel channels of distribution and marketing. This in turn enabled a greater number of farmers to access seed. Access to finance improved through input credit schemes, and a Rural Finance Strategy was developed with support from the Prime Minister's Office for the implementation of the Rural Financial Services Program. The Ethiopian Investment Agency also moved closer to its goal of becoming a one-stop shop for investors. Another case in point is the completion by Dupont of a new storage warehouse and seed-conditioning plant, which alongside the new multipartner Advanced Maize Seed Adoption Program should help further boost smallholder production.

Despite some promising achievements, investment flows remain too slow to be truly transformative. Only a fraction of smallholders are yet benefitting. The risks and costs of engagement in agriculture are still too high for farmers, small and medium enterprises, larger businesses, and investors to be globally competitive.

Of the 16 companies, a few did not advance plans as well as hoped. These expressed frustration that—as their investments were not directly aligned to ATA priorities—they did not receive the support needed to forge partnerships and overcome constraints. Constructively, the ATA recognized this high demand for support to companies and has accordingly established a dedicated Public–Private Partnerships Management Unit within the ATA to fill this gap.

In a ranking exercise made by Grow Africa (2013) to assess the ease of doing business in Ethiopia compared with 189 other countries, the Ethiopian companies on average stood overall 125th; in starting a business, 166th; in getting credit, 109th; in protecting investors, 157th; in trading across borders, 166th; and in enforcing contracts, 44th. In general, there are clear indications that more needs to be done.

TABLE 5.7: PRIVATE-SECTOR INVESTMENT INTENTIONS AND PROGRESS

Name	Goal	Progress to May 2014
1. Heineken	• Increase the agricultural production capacity of rural households, and limit the dependence on imported malt barley. **Agreement:** On February 28, 2013, Heineken signed a memorandum of understanding (MOU) with the Agriculture Transformation Agency (ATA) and the Ethiopian Institute of Agricultural Research to source 20,000 metric tons (mt) of malt barley locally over the next four years, make 5,000 mt of wheat available for household consumption produced by 20,000 farming families, and bring 10,000 hectares (ha) of land under improved management practices.	• Government, nongovernmental organization, and local microfinance partners identified; partnership agreements created. • High-yielding barley varieties introduced, tested, and registered by the Ethiopian authorities. • Multiplication of new Heineken seed varieties underway, including on-farm demonstrations. • Around 1,600 farmers reached with initial training and support in the form of finance and inputs. • Cooperative and nucleus farmer outgrower models established.
2. Swiss Re	• Develop micro-insurance solutions for agricultural risks by investing in-kind to support development of sustainable agri-risk management markets, with a view to assisting farmers to secure production risk coverage, access finance, and engage in higher income-generating activities. **Agreement:** Can increase the risk transfer capacity by a factor of 3 within 5 years	• Partnerships forged with donors, businesses, and governments for advancement of agri-risk transfer markets through International Finance Corporation-funded projects. • Held local trainings and awareness-raising events. At pan-African level, 300,000 smallholders reached.
3. DuPont	• Contribute to increasing the productivity and sustainability of smallholders by: o investing in a new seed warehouse/conditioning plant; o co-developing a rapid soil information system for farmers; and o partnering to improve smallholder maize productivity through increased hybrid adoption. **Agreement**: It is expected to help 35,000 smallholder maize farmers; increase their productivity by up to 50%, reduce post-harvest losses by 30%, and increase incomes from maize operations by 20%. Agreed to invest more than $1 million over the next 3 years.	• New seed warehouse/conditioning plant completed and operational. • Soil-testing program canceled, as no longer a priority for the government. • Multipartner Advanced Maize Seed Adoption Program launched, steering committee formed, manager hired, 320 lead farmers identified, 20 farmer agro-dealers selected and trained, and 775 people (including extension workers and farmers) trained. • Conducted multiple field visits to align stakeholders, and worked with partners to scale up to reach 75,000 smallholders.
4. AGCO	• Contribute to capacity building, knowledge transfer on the agronomic system, and the intensification of agricultural and farming mechanization by: o establishing a demonstration farm and training center, together with global and local partners, aimed at large- to small-scale farmers, agricultural students and local schoolchildren; o providing infrastructure and technical support with mechanization, storage, and livestock systems, including after-sales services for commercial smallholders, and emerging and large-scale farmers; and o offering finance solutions and developing leasing models for tractor supply to small-scale farmers with little working capital.	• Conducted several field trips. • Collaborating with the *Kulumsa* Technical Training Center (with German Ministry of Agriculture and the Ethiopian government as partners). • Conducted meetings and discussions with ATA, United States Agency for International Development (USAID), and other institutions on joint initiatives. • Exploring farm projects with domestic partners.

Name	Goal	Progress to May 2014
5. Diageo	• Contribute to developing and implementing a scalable barley value-chain project with a potential to scale up sourcing (from 6,000 smallholders) to 20, 000 mt per year by 2016 for local use and export. **Agreement**: Signed an MOU with Oromia Regional Agricultural Bureau, ATA, and Farm Africa, focusing initially on the sustainable cultivation of malting barley. Diageo Meta Abo Brewery in Ethiopia will prefinance inputs for farmers to source 1,000 mt of malting barley in the first year.	• Cooperatives advanced the implementation of a scalable barley value-chai project in Sebeta. • Conducted market research, field visits, and regional coordination workshop. • Scaled up operations by nearly 50% to reach around 1,100 smallholders, sourcing from around 550 ha using improved technologies during the second year of the pilot program. Plans exist to scale up to reach 6,000–8,000 smallholders in 2014. • Completed strategic alignment for the next 5 years; committed to invest US$1.5 million (2012–2016); aiming to attract additional processing and off take investments, partners, and funding.
6. GUTS Agro Industry	• Foster the development of local farmers and supply partners by: o expanding food-processing operations into baby foods, iodized salt, and corn-soy blends; o integrating further up the value chain in chickpeas; and o increasing local sourcing of maize, soybeans, and chickpeas by 40,000–50,000 mt.	• Reached 10,000 smallholders through three cooperative unions. • Signed an MOU with the World Food Programme (WFP) for production of chickpea-based, ready-to-use supplementary food for a project that involved the WFP country office in Ethiopia, the Ethiopian government, USAID, and the Petroleum Equipment Supply Engineering Co. (PESEco). • Signed a grant agreement with USAID (Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance) for production of chickpea-based product.
7. Hilina Enriched Foods	• Help improve the daily income and nutritional status of smallholders by: o expanding agreements with smallholders who (through cooperative unions) supply chickpeas, unshelled and shelled peanuts, and soybeans; o introducing commercially viable, nutritionally rich products; o developing industry/university links to make improved technologies available to farmers; and o increasing local sourcing of cereals and legumes from 32,500 mt to 50,000 mt by 2015.	• Construction of a National Agrifood Laboratory almost complete. This laboratory will fill the research and development gap, address quality issues to enable improved products to meet international standards, and fetch better prices for smallholder farmers. • Expanding operations in agroprocessing and exploring regional trade opportunities.
8. .Jain Irrigation	• In line with national 2015 poverty reduction targets, contribute to developing irrigation and enabling infrastructure by: o developing an integrated agricultural cluster in an area identified as suitable; and o adopting modern technology in irrigation, agronomic practices, harvesting, supply-chain management, and produce processing.	• Currently partnering with METEC Metals and fabrication industry to produce irrigation technology and scale up initiatives for developing irrigation and infrastructure.
9. Mullege	• Scale up coffee operations and catalyze investment in other value chains by: o increasing local sourcing of coffee, oilseeds, and pulses; o extending partnerships with local/international companies; and o directly impacting 90,000 smallholders by 2015.	• Made an initial investment of more than US$2 million on the project, with plans to raise this to $5 million in the next 3 years. • Expanded the processing area (for product drying and seedling preparation), and constructed living quarters for additional workforce.

Name	Goal	Progress to May 2014
10. Netafim	• Contribute to advancing irrigation systems for smallholders by: o piloting a household irrigation system, targeting 40,000–50,000 smallholders over 5 years; o introducing large-scale drip irrigation projects in chickpea and/or sugarcane, in partnership with other companies working along the value chain; and o exploring three export-oriented projects in cooperation with local company partners in the coffee and banana value chains.	• Completed pilot project in household irrigation based on Family Drip Irrigation System. • Collaborating with local partners on export-oriented projects, mainly in sugarcane, coffee, and banana value chains.
11. Omega Farms	• Contribute to adoption of enhanced chickpea-growing methods by: o sharing improved chickpea production trial results with interested smallholders; o expanding commercial chickpea farm activities that create linkages with smallholder outgrowers; and o exploring opportunities to partner with other investors to integrate chickpea into processing activities (e.g., a plant to produce chickpea powder and hummus).	• Committed to exploring opportunities to partner with other investors to integrate chickpeas into processing activities.
12. Syngenta	• Launch productivity partnerships providing advice, knowledge transfer, and solutions to farmers by: o developing at least one value-chain partnership; o partnering with at least one large-scale farm to support development of specific crops; o bringing in new technology, such as seed varieties; and o investing in farmer training.	• Expanding partnership with Fair Planet to commercialize vegetable seeds and train smallholders; conducted several field visits. • Value-chain partnership on chickpeas canceled due to low priority for ATA. • Conducted initial trials for tomato, and planning to improve market connectivity in 2014; demonstrated 600% yield increases compared with Ethiopian average. • Partnering with several large-scale farms (Saudi Star, SMP, Karaturi, Ruchi, and Jittu) to provide know-how, genetics, and inputs, reaching 9, 300 ha. • Reached 44,000 smallholders through improved biotechnologies.
13. United Phosphorus (UPL)/ Advanta	• Contribute to improving the productivity and income of small and marginal farmers of interest crops (corn, sorghum, sunflower, canola, rice, cotton, forages, legumes, and vegetables) through technology transfer via on-farm training schools (3,000 trainees planned in first year), and by acting as key input and knowledge partner to large farms.	• Partnering with the International Fertilizer Development Center. • Conducting large-scale demonstrations of new sorghum seed technologies, which are better yielders and would improve productivity and farm incomes.
14. Yara	• Build plant nutrition knowledge and co-develop national fertilizer market by: o developing an integrated approach to horticulture and coffee value-chain initiatives; o creating a tailored agronomic package (of people, tools, and services) to support national priorities; o fast-tracking a business investment program to link trade and distributor models aligned to specific crops; and o providing technical support to plant nutrition development capacity.	• Invested more than US$60 million to date in developing a potash project in Dallol. • Undertook technical missions in consultation with the ATA and other stakeholders, especially in the coffee and horticulture sectors. • Supported introduction of water-soluble technology for horticulture. • Contributed to the government's National Fertilizer Blending Program as a discussion partner; continuing to sell commodities under the national tender system. • Supported a national soil survey through soil sample analysis in coordination with the ATA.

Name	Goal	Progress to May 2014
15. Bank of Abyssinia	• Contribute (along with Zemen Bank) to improved financial inclusion and mechanization of agribusinesses by targeting lending facilities to agricultural equipment suppliers and leasing companies, in order to enable farmers to acquire necessary equipment and enhance farming yields.	No progress.
16. Zemen Bank	• Contribute (along with the Bank of Abyssinia) to improved financial inclusion and mechanization of agribusinesses by targeting lending facilities to agricultural equipment suppliers and leasing companies, in order to enable farmers to acquire necessary equipment and enhance farming yields.	No progress.

Note: The assessment in this section reveals that there is a need to improve data collection, management, analysis, and reporting to track progress on financial and nonfinancial commitments by all stakeholders in Ethiopia's agricultural sector. There are also multiple initiatives, programs, and projects being implemented in the country. However, there is no consolidated reporting system, and efforts must be made to bring these initiatives under one comprehensive reporting system.

6. AGRICULTURAL SECTOR PERFORMANCE

6.1. Introduction

The Agricultural Sector Policy and Investment Framework (PIF) operationalizes the pledges the Ethiopian government made when it signed the Ethiopia Comprehensive African Agricultural Development Programme (CAADP) Compact in August 2009 with its development partners and other stakeholders. In the compact, the government and its development partners pledged to invest in 41 new and existing programs, while the government also pledged to take policy measures aimed at developing and strengthening institutions. PIF relates the investments and policy measures that are planned with four strategic objectives. It provides the strategy for prioritizing and planning the investments envisaged to transform Ethiopia's agriculture during 2010–2020 (MoA 2010[3]).

Currently, the major policy framework in Ethiopia is the five-year Growth and Transformation Plan (GTP) covering the 2010/2011–2014/2015 Ethiopian fiscal years (EFYs).[4] Accordingly, sector-specific policy and investment frameworks, such as PIF, derive from GTP. Among others, PIF lists the outputs and outcomes thought most likely to be influenced if investments and policy measures are undertaken as planned. Progress toward achieving each strategic objective is proposed to be measured through annual changes in selected output and outcome indicators.[5] In other words, changes in the indicators gauge the extent to which the investments and policy changes had the intended effects on outputs and outcomes thought most likely to be influenced. The indicators, which mostly derive from the Agriculture and Rural Development section and several other sections of the GTP Policy Matrix (MoFED 2010b), are listed, discussed, and targeted as annual changes provided in PIF.

A hurdle that runs across monitoring and evaluation (M&E) in general is the proper definition of performance indicators amenable to measurement. What is even more problematic is finding reliable and timely data on the indicators. This is particularly important in the current and the last sections of this report, both of which are data-intensive. While it is indicated that the PIF M&E system will use the Agricultural and Rural Development Database that was being developed when PIF was launched, there was no such database when this report was prepared.[6] Given that the database that the M&E system was meant to use is unavailable, other data sources were used, mostly Ethiopian government publications. We provide as an annex to the section an inventory of the data sources, as well as the methodology followed in using the data. As one might expect, not all of the indicators are well represented by variables in the data. As a result, the remaining indicators are represented by proxy variables. Moreover, we were unable to find variables representing 8 of the 41 indicators, which we list in Table A.6.

This section has two objectives. As its title indicates, an important objective of the section is establishing baseline values for the indicators using data for 2010/2011–2012/2013 EFYs. The baselines serve as a reference base for future joint sector reviews and assessment of progress during the next decade of CAADP. The second objective is assessing performance in key indicators during the 2010/2011–2012/2013 EFYs, the period in which PIF was

[3] Official documents of the Government of Ethiopia are referenced by the ministry or agency publishing the documents.

[4] GTP is laid out in two policy documents of the Government of Ethiopia: Growth and Transformation Plan 2010/2011–2014/2015 Volume I: Main Text and Volume II: Policy Matrix (MoFED 2010a and MoFED 2010b, respectively).

[5] The authors of this report make the distinction between output and outcome or impact indicators. The Monitoring and Evaluation section and Annex 1 of PIF (MoA 2010, pp. 32–36), which we use to derive Table A.6 in this report, classify the entire set of output and outcome indicators as *outcome* indicators. In contrast, Table 2 of the GTP Policy Matrix (MoFED 2010b, pp. 5–8), the main document from which PIF derives, categorizes the same set of indicators as *output* indicators.

[6] In addition to capturing expenditure details, which mainly are input indicators, the database was planned to include indicators on outputs and outcomes generated under each program and subprogram at different levels of government.

operational. For this purpose, we select 16 indicators from the four Strategic Objectives (SOs).[7] The Ministry of Agriculture (MoA) suggested that 10 of the 16 indicators are key (MoA 2013, p. 5), which minimizes the number of indicators to simplify the M&E process. We add six more indicators that we deem are also key to the MoA list.

The remainder of this section is divided into four subsections that discuss performance in the key output and outcome indicators in SOs 1 through 4. The main objective of this section, which is providing baseline values, is captured in the appendix in Table A.6. The table first provides a complete list of the 41 indicators and their measuring units, almost in the same way as they are stated in PIF. Then the table provides average annual change in the indicators targeted for achievement during 2010/2011–2019/2020. Included in the table are variables selected from data to represent/proxy the indicators and average annual change in the variables during 2010/2011–2012/2013. Table A.6 also provides two alternative baseline values of the variables (2010/2011–2012/2013 average and value in the most recent year data were available), and indicates the sources from which we derive the data on variables.

6.2. SO 1: Achieving a Sustainable Increase in Agricultural Productivity and Production

SO 1, the first priority of the Ethiopian government for the agricultural sector, is aimed at increasing productivity and production as a prerequisite for food security and agriculture-led industrialization. Gains in productivity are expected to be attained by closing the large gap in productivity between leading farmers and the majority of farmers with far lower productivity. Investment platforms targeted at achieving SO 1 are mainly the Agricultural Growth Program, the Participatory Small-scale Irrigation Development Program, and the Rural Financial Intermediation Program. The investments are expected to influence six outputs or outcomes; changes in the latter of which are gauged through the eight indicators listed in Table A.6.[8][9]

PIF indicates that during 2010–2020, food crop and livestock production and productivity are targeted to grow annually by at least 8 percent and by 4 percent, respectively. Table 6.1 provides alternative baseline values and performance measures of food crop output and land and labor productivity. One set uses volume of output, while the other uses real value of output. Given the importance of grains in Ethiopian food crop production, we also provide baseline values and growth rates of grains output, yields, and labor productivity.[10]

[7] The discussion on performance in the indicators includes only 15 of the 33 indicators, to provide the reader with a focused and succinct discussion of key indicators that capture the essence of each strategic objective. Moreover, the reader can glance at the performance of the remaining indicators Table A.6.

[8] To be precise, PIF lists seven indicators under SO 1. We divide one of the indicators "Amount of improved seed and fertilizer utilized: total and per hectare" into "Total" and "Per hectare" parts, not only because the latter components are distinct, but also because the annual growth rate targets of the components given in MoFED (2010b) differ.

[9] The outcomes or outputs in SO 1, as well as in other strategic objectives, are only slightly broader than the indicators, with one or more indicators representing an output or outcome. We refer the reader to PIF for accurate descriptions of outputs or outcomes (MoA 2010).

[10] Grains accounted for 90 percent of total cultivated area and crop output during 2010–2012.

TABLE 6.1: PERFORMANCE IN AND BASELINE VALUE OF KEY INDICATORS OF STRATEGIC OBJECTIVE (SO) 1: TO ACHIEVE A SUSTAINABLE INCREASE IN AGRICULTURAL PRODUCTIVITY AND PRODUCTION

Key Output and Outcome Indicators Showing Progress toward SO 1‡	Target Growth (%)	Baseline Variable‡‡	Average Annual Change in 2010–2012 (%)	Baseline (2010–2012 average)
Increase in crop and livestock production levels	8	Total crop output (in million metric tons [MMT])	9.4	27.6
		Total grain crops output (in MMT)	8.6	21.8
		Gross value of crop production (2005 million United States dollars [US$])	6.8	5,802
		Gross value of livestock production (2005 million US$)	7.2	1,813
Increase in total value productivity (value outputs/value inputs) per crop and livestock unit	4	Yields in all crops (quintals/hectare)	7.7	20.5
		Yields in grain crops (quintals/ha)	6.2	18.0
		Agriculture value added per hectare (2005 US$)	3.4	216.4
		All crops-output per holder in quintals	3.8	18.4
		Grains-output per holder (in quintals)	3.4	16.0
		Agriculture value added per worker (2005 US$)	2.7	239
Increase in farming households using improved agricultural inputs and practices	6	Households using fertilizer s (millions)	23.9	9.9
		Improved seeds using households (millions)	26.6	2.5
		Pesticides using households (millions)	11.5	3.9
		Number of extension service beneficiaries (millions)	34.9	10.4
Increase in per-hectare improved seed and fertilizer use	12	Fertilizer (kilograms/hectare)	13.4	41.8
		Improved seeds (kilograms/hectare)	23.2	2.6

Sources: ‡ Ministry of Agriculture (2010); ‡‡ authors' computation using CSA (2010 to 2013), MoFED (2012 and 2013), and MoA (2013); and data from World Bank (WDI) and UN-FAO (FAOSTAT) web sites (accessed March 20, 2014). Data sources of specific variables as indicated in Appendix Table 6.1.

Output and productivity growth during 2010–2012, implied by quantity-based measures, are higher. At the same time, those implied by real value-based measures are lower relative to the targeted annual growth in agricultural output of 8 percent and productivity growth of 4 percent in the PIF.[11] The exception to the latter is labor productivity, which grew at rates lower than targeted, according to both quantity- and value-based measures. Moreover, performance in real values of livestock production, which averaged 7.2 percent during 2010–2012, was slightly lower than the targeted growth. The fact that growth rates obtained using the real value of output and productivity are lower relative to corresponding growth rates obtained using the quantity of output across the board may imply a lower rate of growth in high-value crop output and productivity relative to low-value crops. The data appear to corroborate the latter suggestion, whereby the proportion of high-value crops grew only marginally during the period (see Table A.6).

PIF envisages that growth in productivity is to be achieved by enabling an increasing number of farmers to use modern inputs and production practices. The rate of growth in the number of households using agricultural inputs and practices, and the application rates of modern inputs among households using the inputs, are the indicators we

[11] Consistent with PIF, in the discussions below we often refer the respective Ethiopian fiscal years of 2009/2010, 2010/2011, 2011/2012, and 2012/2013 as 2009, 2010, 2011, and 2012 for brevity.

selected to encapsulate the progress made toward the goal of agricultural transformation. Average annual growth in the number of households using improved agricultural inputs and practices, such as fertilizer, improved seeds, pesticides, and extension services, was about two-to-six times the 6 percent annual growth targeted in PIF. Moreover, average annual growth in total and per-hectare fertilizer and improved seeds use were higher than growth rate targets.

In summary, overall performance during 2010/2011–2012/2013 in key input use and volume of output and productivity indicators under SO 1 was higher than the targeted growth. Performance in the real value of output and yields was about 85 percent of the targeted growth. Moreover, growth in livestock production and labor productivity was slightly lower than targeted. Performance in indicators under SO 1, other than those highlighted above, was superior relative to targeted growth.

6.3. SO 2: Accelerating Agricultural Commercialization and Agro-Industrial Development

Investments under SO 2 are intended to build on the achievements of SO 1, and are targeted at helping farmers to graduate from subsistence to semi-subsistence and semi-commercial farming. Major investments targeted at achieving SO 2 were planned to be made through the Rural Financial Intermediation Program and the Agricultural Marketing Improvement Program. Of the 15 indicators under SO 2, data were unavailable for four. Table 6.2 provides information on five key indicators we selected to encapsulate SO 2, out of which data were unavailable on *value addition for agricultural commodities (through agroprocessing in rural areas)*.

TABLE 6.2: PERFORMANCE IN AND BASELINE VALUE OF KEY INDICATORS OF STRATEGIC OBJECTIVE (SO) 2: TO ACCELERATE AGRICULTURAL COMMERCIALIZATION AND AGRO-INDUSTRIAL DEVELOPMENT

Key Output and Outcome Indicators Showing Progress toward SO 2‡	Target Growth (%)	Baseline Variable‡‡	Average Annual Change in 2010–2012 (%)	Baseline (2010–2012 average)[12]
Annual level of agribusiness investment	12	Investment in agriculture, hunting, and forestry (in billion birr)	51.7	42.2
Rural household (HH) income, consumption, and expenditure level	8	HH final consumption expenditure per capita (constant 2005 US$)	4	190
		Rural population under income poverty (%)	–4.8	29.5
		Rural population under food poverty (%)	3.5	36.2
Agricultural export earnings as a % of value added in agricultural sector	10	Agricultural exports out of value added in agriculture (%)	53.2	21.7
Rural HHs linked to financial service providers	10	Number of HHs using credit services (in millions)	2.0	3.3
Value addition for agricultural commodities	5			

[12] Due to high variability in some unknown factor, we decided to use an average value as baseline, rather than using a 1-year value. This average baseline could serve as a reference base for future joint sector reviews and assessment of progress during the next decade of CAADP. For more elaborated version, please refer to Tables 6.1-6.4 is included as Table A.6.

Sources: ‡ Ministry of Agriculture Ethiopia (2010); ‡‡ authors' computations using publications of MoFED (2012 and 2013) and the Ethiopian Investment Agency (2013); and data downloaded from World Bank and FAO web sites on March 20, 2014. Data sources of specific variables, as indicated in Table A.6.

Total investment in agriculture, hunting, and forestry is used as a baseline value for the PIF indicator *level of agribusiness investment.* Although average annual growth of investment in agriculture, hunting, and forestry is higher than three times the targeted growth rate, 2010/2011–2011/2012 was the only fiscal year during which positive growth rate was registered. Growth in the share of agricultural exports out of value added in agriculture averaged 53 percent during the period— five times higher than the targeted annual growth. We use the number of farm households that used credit services as a proxy for the PIF indicator *rural households linked to financial service providers*. If the variable is a good proxy of the indicator, its performance was lower than targeted.

Data specific to the PIF indicator *rural household income, consumption, and expenditure levels*, were unavailable. We proxied the indicator using three variables: real value of household final consumption expenditure per capita, rural population under income poverty, and rural population under food poverty. Annual growth in nationwide household final consumption averaged 4 percent during 2010/11–2012/13. Although directly incomparable with growth in income, consumption, and expenditure, the rural income poverty declined at an average annual rate of about 5 percent. Rural food poverty declined at an average annual rate of 1.6 percent between 2004/2005 (the only fiscal year prior to 2010/2011 for which data were available on the variable), and 2010/2011. However, rural food poverty increased by 8.6 percent between 2010/2011 and 2011/2012. The latter implies rural food poverty on average increased during 2010/2011–2011/2012.

Among the four key indicators discussed above, performance was superior relative to targeted growth in two, while growth was lower in the remaining indicators. Among the remaining 10 indicators for SO 2, data were unavailable on four. Performance was superior relative to targeted growth in three of the remaining six indicators, while it was lower in three others (Table A.6).

6.4. SO 3: Reducing Degradation and Improving the Productivity of Natural Resources

Investments under SO 3 are intended to play a major role in the effort to conserve and use natural resources sustainably and productively. The investments intended to achieve SO 3 are mainly made through the Sustainable Land Management Program and the Community-based Integrated Natural Resources Management Project. Of the 10 indicators under SO 3, data were unavailable on 2. Table 6.3 provides information on the four key output indicators of SO 3 that we selected.

The PIF indicator *arable land irrigated* is targeted to increase by at 8 percent annually. According to the Central Statistical Agency, annual growth in irrigated agricultural area operated by smallholder households averaged about 5 percent during 2010–2012. However, MoA (2013) indicates that growth in land covered with modern small-scale irrigation, which may include nonsmallholder modern agriculture, grew at an average annual rate higher than 13 times the targeted growth. In particular, irrigated area grew by 260 percent between 2011 and 2012. Annual growth in area of degraded land that has been rehabilitated averaged 48 percent, which is 16 times higher than the targeted growth of 3 percent.

The total number of households with first- and second-level land certification was about 3.0 and 0.21 million, respectively in 2012. Performance in this indicator is to be compared with 80 percent of the total number of farming households to which the government plans to issue first- and second-level land certification at the end of the PIF period. The number of households provided with first- and second-level land ownership averaged 1.1 and 0.05

million, respectively, during 2010/2011-2012/2013. Among the 10 key indicators selected in MoA (2013), mechanisms are in place to support climate change adaptation and mitigation. This support is represented by the number of sectoral and regional climate change adaptation plans that have been prepared. PIF is not specific about annual growth in the number of climate change adaptation plans targeted for preparation, and the data were too sparse to reasonably gauge performance during 2010/2011–2012/2013.

TABLE 6.3: PERFORMANCE IN AND BASELINE VALUE OF KEY INDICATORS OF STRATEGIC OBJECTIVE (SO) 3: TO REDUCE DEGRADATION AND IMPROVE PRODUCTIVITY OF NATURAL RESOURCES

Key Output and Outcome Indicators Showing Progress toward SO 3‡	Target Growth (%)	Baseline Variable‡‡	Average Annual Change in 2010–2012 (%)	Baseline (2010–2012 average)
Increase in arable land irrigated	8	Agricultural area irrigated (000 hectares)	4.8	167
		Area covered with modern small-scale irrigation (000 hectares)	107	2,589
Degraded land rehabilitated	3	Area of land rehabilitated (000 hectares)	48.4	6.5
Rural households (HHs) issued with first- and second-level certificates	80 % (of total HHs)	First-level land ownership certification (in millions)	_	1.1
		Second-level land ownership certification (in millions)	_	0.05
Mechanisms in place to support climate change adaptation and mitigation	Not stated	Number of sectoral and regional climate change adaptation plans	_	21

Sources: ‡ Ministry of Agriculture of (2010); ‡‡ authors' computations using publications of CSA (2010 to 2014), MoFED (2012 and 2013), and MoA (2013). Data sources of specific variables, as indicated in Table A.6.

6.5. SO 4: Achieving Universal Food Security and Protecting Vulnerable Households from Natural Disasters

Investments in programs under SO 4, mainly in the Poverty Safety Net Program, are intended to help rural households that will need special support to achieve food security and to protect them against shocks, principally droughts. PIF lists five outcomes and nine indicators to gauge progress toward SO 4. Table 6.4 provides performance in three key indicators intended to encapsulate the progress made toward achieving SO 4.

PIF is explicit that the key to achieving SO 4 is increasing the number of beneficiaries who graduate from the safety net programs. The number of beneficiaries is targeted to grow by 15 percent annually. During the four years of 2009/2010 through 2012/2013, respectively, about 730,000, 152,000, 227,000, and 206,000 households graduated from safety net programs. Accordingly, the number of safety net graduates declined between 2009/2010 and 2010/2011 by 79 percent. It increased by 49 percent and declined by 9 percent, respectively, during the two years that followed. As a consequence, the number of farmers who graduated from safety net programs declined in an average year during 2010/11–2012/13.

Among PIF indicators without specific targets is *timeliness and adequacy of emergency response for vulnerable groups*. The variable we propose to represent the indicator is the regional-level emergency contingency budget, which increased throughout the period, and whose annual growth averaged 2 percent. Another PIF indicator, *annual reduction in stunted and underweight children in rural areas,* is represented using statistics on child malnutrition prevalence-stunting and child malnutrition prevalence-wasting. Besides not being specific to rural areas, these two variables are available only for 2009–2010 and 2010/2011, during which both declined. However,

the data on the variables are too sparse to gauge performance during the period. We provide the baseline values of the variables in the last column of Table 6.4.

TABLE 6.4: PERFORMANCE IN AND BASELINE VALUE OF KEY INDICATORS OF STRATEGIC OBJECTIVE (SO) 4: TO ACHIEVE UNIVERSAL FOOD SECURITY AND PROTECT VULNERABLE HOUSEHOLDS FROM NATURAL DISASTERS

Key Output and Outcome Indicators Showing Progress toward SO 4‡	Target Growth (%)	Baseline Variable‡‡	Average Annual Change in 2010–2012 (%)	Baseline (2010–2012 average)
Increase in households graduating from the Productive Safety Net Program and other safety net programs	15	Farmers who graduated from safety net programs (000)	–13.1	195
Timeliness and adequacy of emergency response for vulnerable groups improved	NS	Regional-level emergency contingency budget (million birr)	2	121
Annual reduction in stunted and underweight children in rural areas	3	Child malnutrition prevalence-stunting (%)	_	108
		Child malnutrition prevalence-wasting (%)	_	44

Sources: ‡ Ministry of Agriculture (2010); ‡‡ authors' computations using publications of MoFED (2012 and 2013) and MoA (2013). Data sources of specific variables, as indicated in Table A.6.

7. CONCLUSIONS AND RECOMMENDATIONS

7.1. Synthesis of Joint Sector Review (JSR) Findings

7.1.1. Sector Performance

The Agricultural Sector Policy and Investment Framework (PIF) has proved effective in defining Ethiopia's sectoral investment priorities, mobilizing resources, and harmonizing efforts among the principal actors. It operationalizes the pledges the Ethiopian government made when signing the Ethiopia Comprehensive African Agricultural Development Programme (CAADP) Compact and the New Alliance for Food Security and Nutrition Agreement with its development partners. PIF indicates that investments and policy measures are targeted at achieving one or more of the four strategic objectives aligned with the four pillars of CAADP. Investments made and policy measures taken are expected to contribute toward achieving the strategic objectives by positively influencing outputs and outcomes associated with each strategic objective. PIF also provides the targeted annual changes in measurable indicators to gauge the effect of investments and policy changes.

The successes of PIF could not be realized without a high level of political and financial commitment from the very beginning. There has been consistent high-level political support in Ethiopia for the CAADP process, from initiation to design and implementation. CAADP support in Ethiopia begins with the Prime Minister and includes all of the Ministry of Agriculture's (MoA's) most senior decisionmakers. Ethiopia has made CAADP a national priority, which has been a significant contributing factor to the program's rapid and impressive implementation progress.

The Ethiopian government allocates 16–17 percent of its total budget to agriculture, and provides a majority of the financing required to implement PIF (reportedly 60–70 percent of the total estimated cost). This sends a clear signal about the government's strong commitment to PIF, and has attracted the support of development partners.

Ethiopia's clearly defined and consistent set of policies, laws, and regulations toward ensuring food security and eradicating poverty are articulated in the Agricultural Development-Led Industrialization Strategy, PIF, and Growth and Transformation Plan. There has been strong commitment from the highest government echelons to transforming agriculture, and sensitization to its importance at all levels. Investments in expanding physical infrastructure connecting major producing and consuming centers have increased the share of the commodity price going to producers by increasing competition and reducing marketing margins. Ethiopia has also invested in institutional and human capacity building. Furthermore, efforts to enhance the skills of public- and private-sector actors have been commendable, including providing important agricultural extension services by assigning about 63,000 development agents graduating from technical and vocational education and training to promote improved agricultural practices; establishing the Farmers' Training Center; enhancing access to agricultural credit; and building institutions, like the Ethiopian Commodity Exchange and the Agricultural Transformation Agency.

Overall, the agricultural sector's performance during 2009/2010–2012/2013 has been good. Under the strategic objective of *achieving a sustainable increase in agricultural productivity and production,* performance was superior relative to the targeted growth rate. The exceptions to this are the lower growth rates in livestock production and labor productivity. Moreover, value-based growth rates in agricultural output and yields were lower than targeted.

Performance in indicators under the strategic objective of *accelerating agricultural commercialization and agroindustrial development* was lower than targeted in 5 of the 10 indicators for which data were available. Performance was superior relative to target for the five others.

Of the eight indicators under the strategic objective of *reducing degradation and improving productivity of natural resources,* the data were insufficient to gauge performance during 2009/2010–2012/2013 for four indicators. Performance was superior relative to targeted growth in the variables representing three of the indicators for which data were available.

PIF indicates that the main thrust of the strategic objective of *achieving universal food security and protecting vulnerable households from natural disasters* is encapsulated in the indicator *annual increase in the number of households graduating from the Productive Safety Net Program [PSNP] and other safety net programs.* The number of households that graduated from PSNP declined from year to year during 2009/2010–2012/2013. Although data were insufficient to compute average annual changes, the variables representing the indicator *number and percentage of households experiencing food gaps of three months or more reduced* trended down. Contrary to targeted changes, food aid imports increased, and food reserve stocks stagnated. Consistent with targeted growth, domestic food aid purchases increased.

7.1.2. Required Actions for Improvement

While significant progress exists in formulation of policy, implementation of sector policies and plans, and achievement of the agricultural sector objectives, a number of constraints remain and need to be addressed:

1. Although progress in increasing productivity has been substantial, it is still low compared with the potential.[13]
2. High dependency on rain-fed farming and inadequate access to irrigation technologies leave the sector vulnerable to weather-related shocks.
3. Securing sufficient funds for all flagship programs remains a formidable challenge, along with a slow rate of disbursement under some of the existing flagship programs.
4. Capacity limitation at all levels of government limits the speed of PIF implementation.
5. Agricultural markets are still not competitive, and implementation of policies to address this problem needs to be prioritized.
6. Although reliable data are not available, private-sector investment in agriculture, especially in food production, is far below the potential.

7.2. Synthesis of Findings of JSR Practice

7.2.1. Quality of the JSR Process

CAADP's guiding principles require planning, implementation, and review processes to be inclusive and participatory. These involve a wide range of stakeholders, including the private sector and civil society organizations (CSOs). The following have been observed:

- The Ethiopian government mobilized all core actors to participate in stock-taking analyses from 2008 to the second annual review in June 2013. Substantive participation by nonstate actors remains a challenge, however.

[13] Potential production level refers to the maximum achievable level, given the country's resource base. For instance, current national average maize yield per hectare is 2.7, while the world average yield per hectare is 5 metric tons. This is true for most of the other major cereals.

- There is a shared accountability system, whereby the government and donors work together toward implementation of agreed-upon strategic objectives. Involvement of nonstate actors in the mutual accountability framework is weak, and needs to be strengthened to enhance the quality of the process.
- The government has committed its resources and deployed officials to engage in the routine implementation of PIF.
- The government organizes a Broad Platform semi-annually, to communicate the agricultural development agenda and CAADP developments to nongovernmental organizations (NGOs) and CSOs. Enabling these nonstate actors to engage meaningfully would add value to PIF implementation.

7.2.2. Actions to Improve the JSR Process

- Address the capacity limitations at all levels of government and nonstate actors that affect the speed of PIF implementation.
- Increase the private sector's representation in PIF implementation and progress reviews. This sector is not yet playing a significant role in the Rural Economic Development & Food Security (RED&FS) policy development process, even though a Private Sector Working Group has been established.
- Increase the nonstate actors' and the CSOs' representation in the RED&FS structure.
- Strengthen data systems at the project, program, initiative, and sector levels. It is difficult to estimate the amount of funding committed to the PIF program by government, development partners, regional governments, and NGOs (that is, a consolidated current rate of investment on PIF priority areas cannot be established). This is largely due to the nonexistence of comprehensive data on commitments, disbursements, and performance of the sector. It also for the development of a comprehensive sector monitoring and evaluation (M&E) system so that all initiatives.

Tables A.7A and A.7B present details of actions to be taken by specific stakeholder groups to strengthen the JSR process in Ethiopia.

7.2.3. Recommendations

1. Strengthen capacity in various government departments, especially the Planning and Programming Directorate.
2. Facilitate nonstate actors' ability to organize and promote their participation in the implementation and progress review of agricultural sector plans, and establish more inclusive multistakeholder platforms.
3. Carry out studies to understand the barriers to private-sector participation and investment in the agricultural sector.
4. Strengthen resource mobilization for effective implementation of PIF.
5. Strengthen sector M&E systems to comprehensively report on all initiatives, and support knowledge generation and dissemination to promote evidence-based decisionmaking in line with CAADP principles.
6. Update the New Alliance Cooperation Framework to clarify policy commitments, and identify barriers to completion of commitments (policy, financial disbursement, and investments); update due dates; and add or remove commitments, and expand them through 2016. To create greater and broader ownership, the framework should be endorsed by the REDF&S Sector Working Group, and a more inclusive New Alliance stakeholder group.
7. Institute a redesign process to revisit policy and investment commitments, and invite and include new partners and develop new milestone maps and timelines.

REFERENCES

Ashburner, J.; and Kienzle, J. 2011. *Investment in Agricultural Mechanization in Africa: Conclusions and Recommendations of a Round Table Meeting of Experts*. Agricultural and Food Engineering Technical Report. Rome, Italy: Food and Agriculture Organization of the United Nations.

Agricultural Transformation Agency. 2013. "Ethiopia: G-8 New Alliance 2013 Country-Level Progress Review." Draft April 24, 2013.

Badiane, O.; Odjo, S.; and Ulimwengu, J. 2011. *Emerging Policies and Partnerships under CAADP: Implications for Long Term Growth, Food Security, and Poverty Reduction*. IFPRI Discussion Paper 01145, December 2011. Washington, DC, USA: International Food Policy Research Institute.

Callihan, D.; and Worako, T.K. 2012. *CAADP Ethiopia Implementation and Management Case Study*. USAID/Africa Leadership Training and Capacity Building Program, September 2012. Washington, DC, USA.

Christiaensen, L.; and Alderman, H. 2011 "Child Malnutrition in Ethiopia: Can Maternal Knowledge Augment the Role of Income?" *Economic Development and Cultural Change* (52(2):287–312.

CSA (Central Statistical Agency). Various years. *Agricultural Sample Survey—Report on Area and Production of Major Crops (Private Peasant Holdings, Meher Season). 2009 to 2013.* Addis Ababa, Ethiopia: Federal Democratic Republic of Ethiopia.

———. Various years. *Agricultural Sample Survey—Report on Farm Management Practices (Private Peasant Holdings, Meher Season). 2010 to 2013*. Addis Ababa, Ethiopia: Federal Democratic Republic of Ethiopia.

de Janvry, A.; Sadoulet, Elisabeth; Solomon, P; and Renos, V. 2010. "Protecting Vulnerable Children from Uninsured Risks: Adapting Conditional Cash Transfer Programs to Provide Broader Safety Nets." *Wellbeing and Social Policy* 6(1).

Diao, X.; Kennedy, A.; Badiane, O.; Frances, C.; Doresh, P.; Ecker, O.; Hagos, H. G.; Heady, D.; Mabiso, A.; Makombe, T.; Malek, M.; and Schmidt, E. 2013. *Evidence for Key Policies on African Agricultural Growth*. IFPRI Discussion Paper 01242. Washington, DC, USA: International Food Policy Research Institute.

Diao, X.; Kennedy, A.; Mabiso, A.; and Pradesh, A. 2012. *Analysis of Tanzania's Maize Export Ban Policy. A General Equilibrium Approach*. Washington, DC USA: USAID-Tanzania.

Diao, X.; Hazell, P.; and Thurlow, J. 2010. "The Role of Agriculture in African Development." *World Development* 38(10):1375–1383. doi:10.1016/j.worlddev.2009.06.011.

Diao, X.; Thurlow, J.; Benin, S.; and Fan, S. 2012. *Strategies and Priorities for African Agriculture: Economywide Perspectives from Country Studies*. IFPRI Issues Brief 73. Washington, DC, USA: International Food Policy Research Institute.

FDRE (Federal Democratic Republic of Ethiopia). 1994. The Constitution of the Federal Democratic Republic of Ethiopia. Addis Ababa, Ethiopia: FDRE.

FDRE (Federal Democratic Republic of Ethiopia), Council of Ministers. 2004. Guidelines for policy formulation and approval processes in Ethiopia endorsed by Council of Ministers. Addis Ababa, Ethiopia: FDRE.

PIF Financing by Government and Development Partners. Unpublished Assessment. Addis Ababa, Ethiopia: FDRE.

Food and Agricultural Organization of the United Nations. 2014. Web link: http: //faostat3.fao.org/faostat-gateway/go/to/home/E. Data accessed on 24 March 2014.

Grow Africa. 2013. *Agricultural Partnerships Take Root across Africa.* 2nd Annual Report on Private-Sector Investment in Support of Country-led Transformations in African Agriculture 2013–2014.

IMF (International Monetary Fund). 2013. *Country Report for the Federal Democratic Republic of Ethiopia.* Report No. 13/303, October 2013. Washington, DC, USA: IMF.

Kaufmann, D.; Kraay, A.; and Zoido-Lobaton, P. 2000. "Governance Matters: From Measurement to Action." *Finance and Development* 37(2). Washington, DC, USA: International Monetary Fund.

Knack, S. (ed.). 2003. *Democracy, Governance and Growth.* Ann Arbor, MI: The University of Michigan Press.

MoA (Ministry of Agriculture). 2012. First Annual Review: Agricultural Policy and Investment Framework (PIF) Implementation. Addis Ababa, Ethiopia: Federal Democratic Republic of Ethiopia.

———. 2013. Ethiopia's Agricultural Sector Policy and Investment Framework (PIF) 2010-2020. Second Annual PIF Review. Addis Ababa, Ethiopia: Federal Democratic Republic of Ethiopia.

MoFED (Ministry of Finance and Economic Development). 2010a. *Growth and Transformation Plan (2010/11–2014/15), Volume I—Main Text.* Addis Ababa, Ethiopia: Federal Democratic Republic of Ethiopia.

———. 2010b. *Growth and Transformation Plan (2010/11–2014/15). Volume II—Policy Matrix.* Addis Ababa, Ethiopia: Federal Democratic Republic of Ethiopia.

———. 2012. *Growth and Transformation Plan (2010/11–2014/15): Annual Progress Report for F.Y. (2010/11).* Addis Ababa, Ethiopia: Federal Democratic Republic of Ethiopia.

———. 2013. *GTP Annual Performance Report—EFY 2005.* Addis Ababa, Ethiopia: Federal Democratic Republic of Ethiopia———. 2014. *Summary of All Licensed Investment Projects by Year, Sector and Status for 1992–2013.* G.C. Ethiopian Investment Agency, Addis Ababa, Ethiopia: Federal Democratic Republic of Ethiopia.

Mogues T.; and Benin, S. 2012. *Public Expenditure for Agriculture and Rural Development in Africa.* Abingdon, Oxon; New York: Routledge.

NEPAD (New Partnership for Africa's Development). 2011. *NEPAD Agency 2011 Annual Report.* NEPAD Coordinating Agency. Johannesburg, South Africa: NEPAD.

NPC (National Planning Commission). 2014. *Annual Progress Report on Growth and Transportation Plan.* April 03, 2014. Addis Ababa, Ethiopia: NPC.

Tufts University. 2014. *New Alliance for Food Security and Nutrition Annual Progress Report 2013–2014.* Boston, MA, USA.

USAID (United States Agency for International Development). 2013. *Institutional Architecture for Food Security Policy Change: Ethiopia*. Africa Lead and the Enabling Agricultural Trade Project. Washington, DC, USA: USAID.

World Bank. 2012a. *World Development Indicators*. The World Bank. Accessed Nov. 7 2012.

World Bank. 2012b. *Mid Term Review of the CAADP Multi-Donor Trust Fund*. April 2012. http://www.nepad.org/system/files/CAADP%20MDTF%20MTR%20Workshop%20Outcomes%20042712%20FINAL.pdf

World Bank. 2014. *World Development Indicators.* Web link: http://data.worldbank.org/. Data accessed on 24 March 2014.

World Food Programme. 2014. *Food Aid Imports*. Web link: www.wfp.org/fais/. Data accessed on 23 March 2014.

APPENDIX: AGRICULTURAL PERFORMANCE BASELINE INDICATORS, AND METHODOLOGY AND DATA USED

TABLE A.1: STRENGTHENING MUTUAL ACCOUNTABILITY THROUGH COUNTRY-LEVEL AGRICULTURE JOINT SECTOR REVIEW IN ETHIOPIA

No.	JSR Building Blocks	Purpose/Tasks: Best Practices	Current Practice in Ethiopia	How Current Practice Differs from the Best Practice	Actions Required to Achieve Best Practice
1.	Set Up a Joint Sector Review (JSR) Steering Committee (SC).	SC provides strategic direction for the establishment and operation of the JSR. It is usually made up of 2 co-chairs from the Ministry of Agriculture and a leading donor agency and 3–4 other representatives of key stakeholder groups.	Rural Economic Development and Food Security (RED&FS) Executive Committee chaired by Minister of Agriculture and co-chaired by the World Bank, and the U.S. Agency for International Development (USAID) is the SC. Joint review is done annually.	All flagship programs (Agricultural Growth, Sustainable Land Management, and Food Security programs) have their own technical committees chaired by respective state minister and co-chaired by donor representative.	Continue current practice, but provide more linkage to the Strategic Analysis and Knowledge Support System (SAKSS).
2.	Establish a JSR Secretariat.	Secretariat coordinates activities and operations of the JSR and JSR SC. It can be made up of core staff from the Planning & Monitoring & Evaluation (M$E) Unit of the Ministry of Agriculture (MoA).	The RED&FS Secretariat coordinates the review process. The Secretariat has two core staff and works closely with the planning department of the MoA.	The current practice mirrors the best practice, although understaffing is a major problem.	Improve staffing of the Secretariat.
3.	Develop Terms of Reference (ToR) for the JSR.	ToR to lay out JSR objectives, state and nonstate stakeholders and their roles, roles of the SC and Secretariat, operating principles, structure and frequency of JSR meetings, and follow-up and implementation of actions, etc. ToR may also need to be developed by consultants hired to conduct JSR studies.	RED&FS has clear ToRs developed to guide its activities. ToRs for consultants are also normally developed for any assignments relating to JSR.	No deviations from the best practice.	Update the ToRs to account for emerging issues, like livestock, gender, and nutrition.
4.	Mobilize resources.	Mobilize resources (human and financial) to support operations of the JSR.	Resource requirements are identified in the Policy and Investment Framework (PIF), which also specifies government and donor commitments. Donor resources are pooled under the Multi-Trust Fund (MTF) and released to programs to fill resource gaps.	Resources mobilized are inadequate and donors are slow in meeting their commitments.	Increase resources and improve speed of disbursement and the absorption capacity of the programs. Strengthen analysis and M&E capacity of Planning and Programming Directorate (PPD).

No.	JSR Building Blocks	Purpose/Tasks: Best Practices	Current Practice in Ethiopia	How Current Practice Differs from the Best Practice	Actions Required to Achieve Best Practice
6.	Assess any existing agricultural policy dialogue and review processes, data quality, and analytical capacities.	An assessment of any existing agricultural policy dialogue and review processes, data quality, analytical capacities, tools and networks, and any existing knowledge systems is key to identifying any gaps and coming up with ways to fill gaps and enhance capacities, tools, and processes through the JSR.	Periodic reviews of PIF to identify policy bottlenecks and recommend solutions.	While there are no major deviations from the best practice, detailed assessments of all flagship programs are not carried out.	Improve data systems to enable access of requisite data for improved, reliable, and objective reviews. Strengthen analytical capacity at the different levels.
7.	Commission JSR Studies.*	Consultants may need to be hired and supervised by the SC to conduct JSR studies. Consultants can come from think tanks, universities, or private companies, and should work closely with staff from the Planning Unit, and the JSR SC and Secretariat.	So far, commissioned PIF studies by consultants hired by the government and development partners.	No deviations.	Maintain current practice.
8.	Establish JSR Review Team.*	Team made up of a multistakeholder group (state and nonstate actors) with technical expertise to review and comment on various JSR studies and reports and ensure outputs of reviews are implemented.	PIF Review Task Team is already established.	There is conformity with the best practice.	Improve the resources of the review task team, and strengthen its staffing.
9.	Prepare JSR Report.*	Prepare evidence based on relevant high-quality studies and reports on the JSR content areas. To be an effective mutual accountability process, the JSR Report will need to be grounded in high-quality data and analysis, as well as transparency and inclusive stakeholder participation.	Review reports are produced at both regional (local government) and federal government levels for all the flagship programs.	No deviation from the best practice, but use of quality data is a challenge.	Improved the quality of data on which analyses are based.
10.	Conduct JSR Meeting.*	Organize meeting over 1–3 days, using various formats (plenary, small groups, field visit, etc.) to allow stakeholders to discuss/verify the evidence and recommendations presented in the JSR Report. This can be done at different levels (national and subnational). The process should assist in identifying sector priorities and policies and specific actions for the different stakeholders to put in place. These would be captured in a JSR Aide Memoir.	Annual PIF review meetings take 1–2 days.	Conforms to the best practice, although not all stakeholders are effectively represented.	Enhance involvement of nonstate actors in the meetings. Incorporate field visits in the review meeting agenda.
11.	Follow up on JSR Meeting Actions.	Closely monitor and ensure implementation of recommendations and decisions of the JSR meeting (embodied in the JSR Aide Memoir). Groups that meet more regularly, such as the Agriculture Sector Working Group, can help with follow-up and monitoring. The monitoring forms the basis of the next JSR cycle.	Each technical committee prepares annual action plans based on the review results. The plans are reviewed quarterly. The executive committee meets quarterly.	There is no deviation from the best practice, but more resources are needed for the follow-up meetings.	Allocate more resources for the follow-up meetings.

No.	JSR Building Blocks	Purpose/Tasks: Best Practices	Current Practice in Ethiopia	How Current Practice Differs from the Best Practice	Actions Required to Achieve Best Practice
12.	Share JSR experiences with other countries.	As many countries are still setting up JSR, it is essential to share lessons learned, best practices, and experiences to further strengthen country JSRs. Forums, such as the CAADP Partnership Platform and Regional SAKSS Annual Conference, provide an opportunity to do this.	No experiences have been shared with other countries although the African Union Commission is normally invited to the review meetings.	Critical lessons from other countries' experiences are completely lacking.	Establish modalities for sharing experiences with other countries.

*The JSR process, and in particular these steps, should incorporate all five JSR Content Areas:
a. Development results: e.g., income growth, poverty and hunger reduction, food and nutrition security.
b. Agricultural sector growth targets—e.g., CAADP 6 percent target.
c. Financial and nonfinancial commitments by government, donors, private sector—e.g., CAADP 10 percent target.
d. Policies, programs, institutions, and implementation processes.
e. Impact pathways and risk management.

TABLE A.2: PRODUCTION AND PRODUCTIVITY GROWTH

Indicators	Source	1996	2013	Total Growth Compared with 1996	Average Annual Growth
1. Total cereals production (million tons)	CSA	8.6	25	191%	11%
2. Average cereal productivity (ton/hectare)	CSA	1.3	2.5	92%	5%
3. Land under cereal cultivation (million hectare)	CSA	6.7	10.81	49%	3%
4. Agricultural gross domestic produce (Ag GDP) at constant price (billion Birr)[14]	MoFED	54.1	238.4	341%	19%
5. Share of AgGDP of total (%)	MoFED	52.1	42.8		

Source: MOA and ATP 2009/2010.
Note: CSA = Central Statistical Agency; MoFED = Ministry of Finance and Economic Development.

TABLE A.3: TARGETS FOR CULTIVATED LAND FOR CROPS (SMALLHOLDERS)

Indicators	Base Year (2009/2010) (000 hectares)	Goal (000 hectares)				
		2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
1. Land covered by major food crops						
1.1. Cereals	9,180	9,272	9,364	9,458	9,553	9,648
1.2. Pulses	1,328	1,368	1,416	1,473	1,539	1,616
1.3. Oil crops	745	775	806	838	872	906
Major food crops subtotal	**11,253**	**11,415**	**11,586**	**11,769**	**11,964**	**12,170**
2. Root crops	403	408	412	416	420	424
3. Vegetables and fruits	153	176	202	236	286	358

[14] 2003 is considered as the base year.

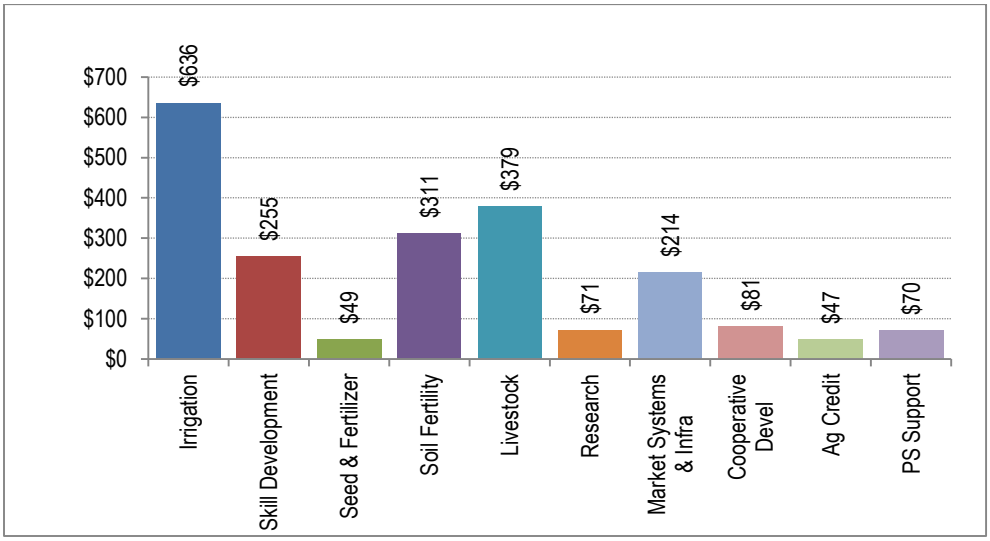
Source: MoA and ATP 2009/2010.

TABLE A.4: CROP PRODUCTION PLAN (SMALLHOLDER HIGH-CASE SCENARIO)

Indicators	Base Year (2009/2010) (000 tons)	Goal (000 tons)				
		2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
1. Major food crops production						
1.1. Cereals	15,534	18,544	22,473	26,482	31,525	35,698
1.2. Pulses	1,898	1,833	2,053	2,283	2,555	2,828
1.3. Oil crops	644	713	798	893	994	1,070
Major food crops subtotal	**18,076**	**21,090**	**25,324**	**29,658**	**35,074**	**39,596**
2. Root crops	1,781	2,020	2,283	2,583	2,923	3,307
3. Vegetables and fruits	1,282	1,688	2,222	2,974	4,130	5,918

Source: MoA and ATP 2009/2010.

FIGURE A.1: INVESTMENT IN PRODUCTIVITY IMPROVEMENT AND COMMERCIALIZATION



Source: RED&FS 2013.

TABLE A.5: TOTAL PUBLIC EXPENDITURES AND AGRICULTURAL EXPENDITURES (INCLUDES NRM)

Expenditures	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Total public expenditures											
Recurrent	13,235	14,543	16,182	19,269	24,859	30,474	34,935	40,046	55,852	68,146	82,690
Capital	8,244.4	13,599.6	18,915.7	22,566.7	28,652.5	36,973.9	40,573.4	50,859.5	82,442	99,196.5	111,653.5
Total	21,479	28,142	35,098	41,836	53,511	67,448	75,509	90,905	138,294	167,343	194,344
Agricultural expenditures											
Recurrent	912	1,225	1,585	1,769	2,443	2,583	2,146	2,225	3,394	4,056	5,261

Recurrent (NRM)							577	802	1,095	1,750	2,103
Capital	1,932	2,861	3,739	4,044	4,819	5,497	5,772	7,169	10,110	9,950	9,956
Capital (NRM)	610	1,170.4	1,991.6	2,055.8	2,607.5	3,372.4	4,334.1	5,055.5	12,255.5	15,005.3	14,409.9
Total	**3,454**	**5,257**	**7,316**	**7,868**	**9,869**	**11,452**	**12,830**	**15,251**	**26,854**	**30,762**	**31,730**

Source: MoFED 2012, 2013.

TABLE A.6: OUTPUT AND IMPACT INDICATORS OF THE AGRICULTURAL SECTOR POLICY AND INVESTMENT PLAN, TARGETED ANNUAL GROWTH RATES IN INDICATORS, PERFORMANCE DURING 2009/2010–2012/2013 FISCAL YEARS IN VARIABLES REPRESENTING INDICATORS, AND BASELINE VALUES

Output and Impact Indicators in the PIF and Their Targeted Annual Growth Rate‡			Variables Representing Indicators, Performance during 2010–2012, Baseline Values, and Data Sources‡‡				
Strategic Objective (SO) and Milestone Output and Impact Indicators Showing Progress Toward SOs	Unit	Target Growth (%)[C]	Baseline Variable	Average Annual Change 2010–2012 (%)	Baseline Values: 2010–2012 Average	Baseline Values: Most Recent Year	Data Source
Strategic Objective 1: To achieve a sustainable increase in agricultural productivity and production							
Increase in crop and livestock production levels (OC)	Quantity or real value	8	Total crop output (in Mmt)	9.4	27.6	29.7	CSA
			Total grain crops output (in Mmt)	8.6	21.8	23.1	CSA
			Total cereals crops output (in Mmt)	8.2	18.7	19.7	CSA
			Gross value of crop production (constant 2005 million USD)	6.8	5,802	6,061	FAO
			Cash crops output (in Mmt) [F]	9.7	2.5	2.6	CSA
			Gross value of livestock production (constant 2005 million USD)	7.2	1,813	1,784	FAO
Increase in total value productivity (value outputs/value inputs) per crop and livestock unit (OC)	Output per input	4	Yields in all crops (quintals/ha)	7.7	20.5	22.0	CSA
			Yields in grain crops (quintals/ha)	6.2	18.0	18.8	CSA
			Yields in cereal crops (quintals/ha)	6.8	19.5	20.5	CSA
			Agriculture value added per ha (constant 2005 USD) [b]	3.4	216.4	219.8	WDI
			All crops—output per holder (in quintals) [G]	3.8	18.4	19.2	CSA
			Grains—output per holder (in quintals) [G]	3.4	16.0	16.4	CSA
			Cereals—output per holder (in quintals) [G]	3.4	14.3	14.5	CSA
			Agriculture value added per worker (constant 2005 USD)	2.7	239	242	WDI
Post-harvest losses by key commodity reduced (OC)	Quantity	3					
Increase in farming HHs using improved agricultural inputs and practices (OP)	Number	6	Households using fertilizer (millions) [a]	23.0	9.9	11.3	CSA
			Improved seeds-using households (millions) [a]	26.6	2.5	2.8	CSA

Output and Impact Indicators in the PIF and Their Targeted Annual Growth Rate‡			Variables Representing Indicators, Performance during 2010–2012, Baseline Values, and Data Sources‡‡				
Strategic Objective (SO) and Milestone Output and Impact Indicators Showing Progress Toward SOs	Unit	Target Growth (%)[C]	Baseline Variable	Average Annual Change 2010–2012 (%)	Baseline Values		Data Source
					2010–2012 Average	Most Recent Year	
			Pesticides-using households (millions) [a]	11.5	3.9	4.4	CSA
			Number of extension service beneficiaries (millions)	34.9	10.4	11.7	MoFED
Total improved seed and fertilizer utilized increased (OP)[E]	Quantity	15	Total fertilizer used (000 mt) [a]	16.5	572	624	CSA
			Total improved seeds used (000 mt) [a]	26.5	35.8	34.2	CSA
Per hectare improved seed and fertilizer utilized increased (OP)[E]	Quantity/ hectare	12	Fertilizer (kg/ha) [a]	13.4	41.8	44.7	CSA
			Improved seeds (kg/ha) [a]	23.2	2.6	2.5	CSA
Number of new agricultural technologies generated, tested, and released increased (OP)[E]	Number	15	Cumulative number of technology output in crop research	92.9	117	181	MoA
			Cumulative number of technology output in livestock research [g]	–	22	22	MoA
Reduction in staple food requirements imported (OP)	Quantity	NS	Grains imports (million mt)[b]	–8.5	2.02	1.86	FAO
Strategic Objective 2: To accelerate agricultural commercialization and agro-industrial development							
Annual level of agribusiness investment (OP)	Value	12	Investment in agriculture, hunting, and forestry (in billion birr)	51.7	42.2	11.5	EIA
Rural household income, consumption, and expenditure levels (OC)	Value	8	HH final consumption expenditure per capita (const. 2005 USD)	4	190	194	WDI
			Rural population under income poverty (%) [b]	–4.8	29.5	28.6	MoFED
			Rural population under food poverty (%) [b]	3.5	36.2	37.7	MoFED
Agricultural production entering market channels (OP)	Quantity	10	Total crop output sold (in Mmt) [a]	14.5	6.6	7.6	CSA
			Proportion of livestock output sold (%) [a]	1.4	29.4	27.9	CSA
Percentage of agricultural production used for subsistence (OC)	Percent	10	Proportion of crop output consumed (%) [a]	0.0	62.4	62.7	CSA
			Proportion of livestock output consumed (%) [a]	–8.1	52.9	52.9	CSA
Share of high value products in total agricultural production (OP)	Percent	5	Proportion of high value crops out of total crop output (%)	0.3	9.2	8.8	CSA
Amount of local agricultural raw materials used by the industrial sector (OP)	Quantity	10	Industrial crops production in (000 mt)[a]	–0.5	623	602	CSA
Quantity of agricultural inputs supplied through commercial channels (OP)	Quantity	5	Number HHs that bought fertilizer from private sources (in millions) [a]	17.2	3.9	4.4	CSA

Output and Impact Indicators in the PIF and Their Targeted Annual Growth Rate‡			Variables Representing Indicators, Performance during 2010–2012, Baseline Values, and Data Sources‡‡				
Strategic Objective (SO) and Milestone Output and Impact Indicators Showing Progress Toward SOs	Unit	Target Growth (%)[c]	Baseline Variable	Average Annual Change 2010–2012 (%)	Baseline Values		Data Source
					2010–2012 Average	Most Recent Year	
Number of active agrodealers and cooperatives (OP)	Number	5					
Rural HHs linked to financial service providers (OC)	Number	10	Number HHs using credit services (in millions) [a]	2.0	3.3	3.4	CSA
Agricultural export earnings as a percentage of value added in the agricultural sector (OP)	Percent	10	Agricultural exports out of value added in agriculture (%) [b]	53.2	21.7	26.7	FAO
Value addition for agricultural commodities	Value	5					
Improvement in "ease of doing business" in the agricultural sector (OP)	Index	10	Ease of doing business index (1 = most business-friendly) [c]	–	125	125	WDI
			Cost of business start-up procedures (% of GNI per capita)	–20	172	135	WDI
Reduction in input and output supply chain costs (OC)	Value	5					
Number and membership of rural cooperatives (OP)	Number	10					
Rural communities with minimum acceptable access to rural roads, water, energy, and markets (OC)	Percent	8	Average time taken to all-weather road (hours) [b]	–11.3	3.2	2.9	MoFED
			Areas further than 5 km from all-weather roads (%) [b]	–6.2	59.1	56.3	MoFED
			Proportion of rural HHs with access to potable water (%) [b]	9.2	52.1	55.2	MoFED
			Electricity coverage (%) [b]	8.8	47.0	48.5	MoFED
Number of rural labor force employed in rural nonfarm enterprises (OC)	Number	5					
Strategic Objective 3: To reduce degradation and improve productivity of natural resources							
Increase of arable land irrigated (OP)	Area	8	Agricultural area irrigated (000 ha) [a]	4.8	167	152	CSA
			Area of land covered with modern small-scale irrigation (000 ha)	107	2,589	5,242	MoA
Increase of total precipitation conserved (OP)	Quantity	5					
Increase in crop yield per unit of water used (OC)	Yield/m^3	5	Water productivity (in constant 2005 USD GDP/m^3 freshwater) [f]	–	3.9	3.9	WDI
Increase in area under improved land management, including forest coverage (OP)	Area	8	Forest area (000 ha) [b]	–1.1	12.2	12.2	FAO

Output and Impact Indicators in the PIF and Their Targeted Annual Growth Rate‡			Variables Representing Indicators, Performance during 2010–2012, Baseline Values, and Data Sources‡‡				
Strategic Objective (SO) and Milestone Output and Impact Indicators Showing Progress Toward SOs	Unit	Target Growth (%)[c]	Baseline Variable	Average Annual Change 2010–2012 (%)	Baseline Values		Data Source
					2010–2012 Average	Most Recent Year	
Degraded land rehabilitated per annum increased (OP)	Area	3	Area of land rehabilitated (000 ha)	48.4	6.5	10.0	MoFED
Increase in normalized difference vegetation index (NDVI) (OP)	NDVI	5					
Change in agro-biodiversity index (OP)	ABDI	3	GEF benefits index for biodiversity (0 = no biodiversity to 100 = maximum biodiversity) [d]	–	8.4		WDI
			Number of samples collected (in thousands) [b]	15.5	16.4	19.4	MoFED
			Number of sample multiplied and distributed [b]	35.1	3,193	3,973	MoFED
			Number of samples character analysis conducted [b]	125.2	3,208	4,349	MoFED
			Number of samples protected (in thousands) [b]	4.5	68.8	72.8	MoFED
			Number of samples disseminated (in thousands) [b]	90.7	21.6	30.7	MoFED
Increase in soil organic carbon level (OP)	Quantity	3	Average carbon content in the topsoil as a % in weight (%) [d]	–	0.9	0.9	FAO
Rural HHs issued with first- and second-level certificates (OP)	Percent	80% (of all HHs)	First-level land ownership certification (in millions)	–	1.1	1.2	MoA
			Second-level land ownership certification (in millions)	–	0.05	0.1	MoA
Mechanisms in place to support climate change adaptation and mitigation (OP)	NA	NS	Number of national climate adaptation manuals prepared [e]	–	1	1	MoA
			Number of sectoral and regional climate change adaptation plans [e]	–	21	21	MoFED
			Number of climate change resilient infrastructures [e]	–	3	3	MoFED
			Number of projects to decrease vulnerability of wetlands, lakes, and river banks [e]	–	7	11	MoFED
			Woreda-level projects to build climate-resilient green economy [e]	–	40	40	MoFED
Strategic Objective 4: To achieve universal food security and protect vulnerable households from natural disasters							
Number and percentage of HHs experiencing food gaps of three months or more reduced (OC)	Number	NS	Persons supported in food items (millions) [g]	–	3.7	3.7	MoA
			HHs that benefited from voluntary resettlement program (000) [g]	–	1.9	1.9	MoA

Output and Impact Indicators in the PIF and Their Targeted Annual Growth Rate‡			Variables Representing Indicators, Performance during 2010–2012, Baseline Values, and Data Sources‡‡				
Strategic Objective (SO) and Milestone Output and Impact Indicators Showing Progress Toward SOs	Unit	Target Growth (%)[c]	Baseline Variable	Average Annual Change 2010–2012 (%)	Baseline Values		Data Source
					2010–2012 Average	Most Recent Year	
Increase in HHs graduating from PSNP and other safety net programs annually (OC)	Number	15	Farmers who graduated from safety net program (000)	–13.1	195	206	MoA
Decline in food aid imports (OP)	Quantity	NS	Emergency and project or program food aid (000 mt)	5.4	735	625	FAIS
Increase of food reserve stock (OP)	Quantity	20	Food stock (000 mt) [g]	–	405	405	MoA
Increase in domestic procurement of food aid supplies (OP)	Quantity	20	Emergency and project food aid locally purchased (000 mt)	–	821	821	FAIS
Number of vulnerable HHs receiving transfers to cover basic consumption needs reduced (OC)	Number	NS	Food-insecure HHs that benefited from family-level credit package (000) [g]	34	126	60.5	MoA
Timeliness and adequacy of emergency response for vulnerable groups improved (OP)	NA	NS	Regional-level emergency contingency budget (million birr)	2	121	122	MoA
			Number of *woredas* with disaster-prevention profile [g]	30	23	26	MoFED
Timeliness and adequacy of emergency response for vulnerable groups improved (OP)	NA	NS	Regional-level emergency contingency budget (million birr)	2	121	122	MoA
Annual reduction in stunted and underweight children in rural areas (OC)	Percent	3	Child malnutrition prevalence-stunting (%) [e]	–	108	108	MoA
			Child malnutrition prevalence-wasting (%) [e]	–	44	44	MoFED
Number of HHs receiving emergency assistance (OC)	Number	NS	Number of people supported in nonfood items (millions)	–	10	10	MoFED

Sources:

‡ Ministry of Agriculture of Government of Ethiopia (2010).

‡‡ Computations using publications of CSA (2010 to 2014), MoFED (2012 and 2013), MoA (2013), Ethiopian Investment Agency (2013), and data downloaded from the World Bank, UN-FAO, and UN-World Food Programme Food Aid Information System web sites. Data sources of specific variables as indicated in Tables 6.1 through 6.4.

Notes:

- CSA = Central Statistical Agency; EIA = Ethiopia Investment Agency; FAIS = Food Aid Information System; FAO = Food and Agriculture Organization of the United Nations; GDP = gross domestic product; GEF = Global Environment Facility; GNI = gross national income; ha = hectare; HHs = households; kg = kilograms; km = kilometers; m^3 = cubic meters; MoA = Ministry of Agriculture; MoFED = Ministry of Finance and Economic Development; mt = metric ton; Mmt = million metric tons; NS = not stated; OC = outcome; OP = output; PSNP = Productive Safety Net Program; USD = United States dollars; WDI = World Development Indicators.

* Baseline values of variables with superscripts "a," "b," "c', "d," "e" "f" and "g" under "2010–2012 average" and/or "most recent year" differ from values column headings indicate due to data unavailability. Accordingly, the "2010–2012 average" of variables with superscript "a" is computed using data for 2010 and 2012. The "2010–2012 average" value of those with superscript "b"

is computed using data for 2010 and 2011 and thus the "most recent year" value pertains to 2011. The "2010–2012 average" of the variable with superscript "c'" is computed using data for 2011 and 2012. The only year during 2009–2012 data for variables with superscripts "d," "e," "f," and "g" available was 2009, 2010, 2011, and 2012, respectively. As a result, both the "2010–2012 average" and "most recent year" pertain to values of the variables in the respective years.

* Targets computed from MoFED's Growth and Transformation Plan policy matrix (2010).
* Cash crops output includes production of oilseeds, vegetables, fruits, chat, and coffee.
* Labor productivity is computed by dividing total output by the number of farm holders.

TABLE A.7A: GOVERNMENT, PRIVATE SECTOR, AND CSO PLANS OF ACTION AND SUPPORT NEEDED[15]

No.	Action Points	How to do it?	Who is responsible?	What support is needed?	Time Frame
Action plan developed by the government					
1	Strengthening capacity of PPD (M&E, planning and policy analysis, data management)	Fulfill required staff capacity for: • Standard M&E system in PPD • Policy Analysis Unit • Data Management Unit • Experience of other countries • Systems for strong PPD	MoA (PPD, RED&FS, ATA) and donors	• Resource and institutional support	June 2015
2	Improving inclusiveness (PS, CSOs, CSA, academia, etc.)	• Identify potential members and include them in platform • Private-sector and farmer organizations: find their apex body and involve them in the platform	RED&FS	• Resource for organizing fora • Participatory consultative fora	June 2014
3	Strengthening knowledge management and sharing	• Establish SAKSS node • Establish evidence generation and knowledge management systems • Map existing initiatives	RED &FS and PPD, ATA	• Resources and institutional support	June 2015
4	Improving data management system (collection, compiling, and use)	• Improve technical capacity for data management at all levels • Data sharing protocols with CSA • Data base at PPD • Sharing data/relationship • Grassroots data collection systems strengthen existing initiatives on ICT-based data collection, institutional survey by ATA	PPD, ATA and CSA, RED &FS	• Experience sharing, stakeholders mapping	July 2015
5	Harmonization of flagship programs	• Organize fora and identify the elements for harmonization	RED&FS and donors	• Resources and experiences of countries	December 2014

[15]This plan of action developed at the end of the two-day JSR Consultation Workshop was designed to improve future performance.

No.	Action Points	How to do it?	Who is responsible?	What support is needed?	Time Frame
Action plan developed by representatives of the private sector					
1	Strengthening capacity of PPD (M&E, planning and policy analysis, data mgt.)				
2	Improving inclusiveness (PS, CSOs, CSA, academia, etc.)	Increase the involvement of the private sector in technical committees and JSR meetings	RED&FS and private sector		Continuous
3	Strengthening knowledge management and sharing	Engage the private sector in data provision and analysis, knowledge production, and system development	RED&FS and private sector		
4	Improving data management system (collection, compiling, and use)	Same as above	Private sector		
5	Improve resource mobilization and use	Contribution from the private sector in terms of human and material resources	RED&FS and private sector		Continuous
6	Harmonization of flagship programs				
Action plan developed by representatives of civil society organizations					
1	Improve engagement with CSOs	Representation: • CSOs to appoint representatives on rotation • Using existing CSO network structures and federal forums • Drawing lessons from other ministries (MoFED, MoA, etc.)	The Secretariat and CSOs	• Consultations, meetings among CSOs • Financial support	

Note: ATA = Agriculture Transformation Agency; CSA = Central Statistical Agency; CSOs = civil society organizations; ICT = information and communications technology; JSR = joint sector review; M&E = monitoring and evaluation; MoA = Ministry of Agriculture; MoFED = Ministry of Finance and Economic Development; PPD = Planning and Programming Directorate; PS = private sector; RED&FS = Rural Economic Development & Food Security; SAKSS = Strategic Analysis and Knowledge Support System.

TABLE A.7B: DEVELOPMENT PARTNER PLAN OF ACTION AND SUPPORT NEEDED[16]

No.	JSR Building Blocks	Current Practice	Differ from BPs	What Actions Needed
1	Set up Joint Sector Review (JSR) Steering Committee	Rural Economic Development & Food Security RED&FS Executive Committee leads all activities	Not inclusive. No nongovernmental organizations, academic research, private sector	Expand Executive Committee to include 3–4 additional members
2	JSR Secretariat	Currently Planning and Programming Directorate (PPD)	PPD lacks capacity	Institutionalize within PPD
3	Terms of reference for JSR	Currently developed		
4	Resources	Various fund resources available		Coordination and harmonization of human resources
5	Invite a broad and inclusive group	Not done	Only federal Ministry of Agriculture and development partners	Broaden consultation and participation
6	Access existing policy, etc.	Need more engagement from Central Statistical Agency (CSA)	Lacks coherence	CSA should be on Executive Committee
7	Commission studies	Hire consultants		PPD needs capacity to conduct ongoing studies and assessments
8	JSR Review Team	Similar	Similar	Needs broader peer review process
9	JSR report	Similar	Similar	
10	JSR meeting	Similar	Very insular and exclusive, with limited invitation	Broaden participation
11	Follow up	Follow-up actions incorporated into action plans		Should be constant monitoring and review by PPD
12	Share experience	Not well done	Not systematic	Knowledge management needs strengthening

[16]This plan of action developed at the end of the two-day JSR Consultation Workshop was designed to improve future performance.

TABLE A.8: LIST OF PLANNED FOLLOW-UP ACTION ITEMS

No.	Action item	Responsible	Timeline
1.	Engaging nonstate actors, specifically the private sector and civil society organizations in the Rural Economic Development & Food Security Sector Working Group (RED&FS SWG) process	RED&FS SWG	Commencing Mid-May 2014
2.	Mainstreaming and operationalizing nutrition into the Agricultural Sector Policy and Investment Framework	RED&FS SWG	Commencing January 2015
3.	Strengthening the Planning and Programming Directorate by establishing a Strategic Analysis and Knowledge Support System node	RED&FS SWG	Commencing July 2014
4.	Following up on implementation of the New Alliance Cooperation Framework For Food Security & Nutrition	Private Sector Task Force under Agricultural Growth Technical Committee	Commencing June 2014

TABLE A.9: IDENTIFIED SUPPORT NEEDS FOR THE REGIONAL STRATEGIC ANALYSIS AND KNOWLEDGE SUPPORT SYSTEM OR CONSULTATION GROUP MEMBERS

No.	Types of Support	To Whom	Responsible
1.	Providing updated information on the Rural Economic Development & Food Security Sector (RED&FS) and the Agricultural Sector Policy and Investment Framework process	Civil society organizations (CSOs) and the private sector	RED&FS Sector Working Group (SWG)
2.	Increasing the level of participation in the RED&FS process	CSOs and the private sector	RED&FS SWG
3.	Establishing Strategic Analysis and Knowledge Support System nodes	Planning and Programming Directorate (PPD) of the Ministry of Agriculture	Regional Strategic Analysis and Knowledge Support System and Planning and Programming Directorate

ANNEX ON METHODOLOGY AND DATA USED

We use the following four steps to measure agricultural sector performance targeted in the Agricultural Sector Policy and Investment Framework (PIF), which is discussed in Section 6 of this report.

1. Identify variables that well represent or are close proxies of the output and outcome indicators in PIF. Some of the indicators in PIF are broad, in the sense that they comprise more than a single component. Without weights to apply to different components of such indicators—which would enable us to compute a single indicator or index—we use multiple variables to measure performance during 2010–2012, as well as to provide baseline values for future use. For instance, three variables are used to measure performance in the first indicator of Strategic Objective (SO) 1: *Production of food, cash crops, and livestock*, which incorporates three items or components.
2. Collect second-hand data for variables selected in Step 1 for all Ethiopian fiscal years (EFYs) after 2009/2010, which is taken as the baseline year in both the Growth and Transformation Plan and PIF.
3. Compute annual change in the variables for the three EFYs between 2009/2010 and 2012/2013. The discussions in the main text compare average annual changes in the variables with PIF growth rate targets, to gauge performance in the indicators represented by the variables during 2009/2010–2012/2013.
4. Provide baseline values of the variables to be used for gauging future performance in the indicators. The baseline values we provide in this part are in levels, so that performance in the indicator at a given year in the future is gauged by taking the percentage change between the baseline value and the value in that year of the variable, both of which are in levels.

In carrying out the methodology above, we mainly use data derived from publications of three ministries/authorities of the Ethiopian government: annual publications in various years and volumes of the Central Statistical Authority of Ethiopia, the Ministry of Finance and Economic Development, and the Ministry of Agricultural and Rural Development. In cases where local data are unavailable or where it is necessary to complement local sources with alternatives from international data sources, we use the World Development Indicators from the World Bank and the Food and Agriculture Organization of the United Nations database, FAOSTAT.[17]

We were unable to find data on eight indicators under three SOs:

- Of the eight indicators of SO 1, data were unavailable for *post-harvest losses by key commodity*.
- Of the 15 indicators of SO 2, data were unavailable for: (1) *number of active agro-dealers and cooperatives*, (2) *value addition for agricultural commodities (through agro-processing in rural areas*), (3) *input and output supply chain costs*, (4) *number and membership in rural cooperatives,* and (5) *rural labor force employed in rural nonfarm enterprises*.
- Of the 10 indicators of SO 3, we were unable to find data on *total precipitation conserved* and *normalized difference vegetation index*.
- Data were available on variables representing all nine indicators of SO 4.

[17] We also use data from the Ethiopian Investment Agency (EIA 2013) on investments in agriculture, and from the United Nations World Food Programme's Food Aid Information System (FAIS 2014) on imported and locally purchased food aid.

The Ethiopia Joint Sector Review Assessment Report was facilitated by the International Food Policy Research Institute (IFPRI) and coordinated by the Regional Strategic Analysis and Knowledge Support System - East and Central Africa (www.resakss.org). It was prepared by a national team under the leadership of the Ministry of Agriculture, Planning and Programming Directorate, with the participation of national experts, including Tadesse Kuma Worako as the lead consultant.

ReSAKSS
Regional Strategic Analysis and Knowledge Support System
Facilitated by IFPRI