ZAMBIA

JOINT SECTOR REVIEW ASSESSMENT
Advancing Mutual Accountability through Comprehensive, Inclusive, and Technically Robust Review and Dialogue
JOINT SECTOR REVIEW - AGRICULTURE
Advancing Mutual Accountability through Comprehensive, Inclusive, and Technically Robust Review and Dialogue and Establishing Partnerships and Mechanisms for Joint Sector Planning, Monitoring, and Evaluation

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Stephen Tembo, RuralNet Associates Ltd.
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ACRONYMS AND ABBREVIATIONS

AfDB  African Development Bank
Ag-SAG  Agriculture Sector Advisory Group
ASIP  Agricultural Sector Investment Programme
AUC  African Union Commission
AWPB  Annual Work Plan and Budget
CAADP  Comprehensive Africa Agriculture Development Programme
CEO  Camp Extension Officer
CP  Cooperating Partner
CSO  Civil Society Organization
DACO  District Agriculture Coordinator
DDCC  District Development Coordination Committee
DP  Development Partner
FISP  Farmer Input Support Programme
FRA  Food Reserve Agency
FSP  Food Security Pack
FTC  Farmer Training Centres
GDP  Gross Domestic Product
GoZ  Government of Zambia
GIZ  Deutsche Gesellschaft für Internationale Zusammenarbeit
          (German Technical Cooperation)
ha  hectare
IAPRI  Indaba Agriculture Policy Research Institute
IFAD  International Fund for Agricultural Development
ILUA  Integrated Land-use Assessment
JAR  Joint Annual Review
JSR  Joint Sector Review
kg  kilograms
KPI  Key Performance Indicator
LI  Low Income
M&E  Monitoring and Evaluation
MAL  Ministry of Agriculture and Livestock
MI  Middle Income
MT  metric ton
NAFSIP  National Agriculture and Food Security Investment Programme
NAIP  National Agriculture Investment Plan
NAP  National Agriculture Policy
NDP  National Development Plan
NEPAD  New Partnership for Africa’s Development
NGO  nongovernmental organization
NPCA  NEPAD Planning and Coordinating Agency
PDCC  Provincial Development Coordination Committee
PLARD  Programme for Luapula Agricultural and Rural Development
PSP  Platform for Social Protection
R&D  Research and Development
ReSAKSS  Regional Strategic Analysis and Knowledge Support System
RISDP  Regional Indicative Strategic Development Plan
SADC  Southern Africa Development Community
SAG  Sector Advisory Group
SSI  Semi-structured Interview
ToRs  Terms of Reference
TWG  Technical Working Group
USAID  United States Agency for International Development
EXECUTIVE SUMMARY

Introduction and Background

The recommitment in the 2014 Malabo Declaration by African Heads of State and Government of Africa to strengthen mutual accountability to actions and results aims to improve country policy processes through the promotion of evidence-based agricultural policy planning and implementation by way of peer reviews, dialogue, benchmarking, and the adoption of best practices. Agricultural Joint Sector Reviews (JSR) constitute the means to operationalize the mutual accountability framework and support the implementation of the Comprehensive Africa Agriculture Development Programme (CAADP) Results Framework at the country level. The implementation of the JSR review process allows state and nonstate stakeholders to hold each other accountable in fulfilling pledges and commitments stipulated in the CAADP Compact, National Agriculture and Food Security Investment Programme, and related cooperation agreements. The JSR process serves as a management and policy support tool for inclusive stakeholder planning, programming, budget preparation and execution, monitoring and evaluation, and overall development of the agriculture sector. It facilitates a broad spectrum of stakeholders to gain insights into and influence over sector policies and priorities. The current JSR focuses on policy and the review of (i) institutions, (ii) progress toward sector results and outcomes, and (iii) the status and quality of the JSR process in Zambia. The 2015 Zambian Agriculture sector JSR process relied mainly on qualitative methods for gathering necessary data. This included an extensive literature review and engagements with agriculture sector stakeholders, field visits to three provinces, and internal and external reviews of the JSR report. The main findings in each section of this assessment are summarized below.

Status and Quality of the Joint Sector Review Process

Initial JSRs in the agriculture sector were conducted under the Agriculture Sector Investment Programme (ASIP), which was implemented between 1996 and 2000. Since the phasing out of ASIP in 2001, Zambia had not carried out a comprehensive JSR. Recent JSR processes in the agriculture sector involved (i) the processes of the Agriculture Sector Advisory Group and (ii) special stakeholder meetings called by the Minister of Agriculture and Livestock. The implementation of the CAADP processes (particularly the development of the CAADP Compact and National Agriculture Investment Programme (NAIP)) revived those of the JSR. The 2015 JSR assessment combines initiatives from the Ministry of Agriculture and Livestock (MAL) and its partners, as well as the Africa-wide JSR assessment processes of the African Union Commission/New Partnership for Africa’s Development and the Regional Strategic Analysis and Knowledge Support System.

The reduced frequency of JSRs in the recent past, as stated above, does not support efforts to strengthen mutual accountability, and it is essential that government and partners revive the process in the agriculture sector, exemplified by those of the CAADP Compact and NAIP. Furthermore, lessons drawn from the current assessment will provide a baseline for future JSR assessments in Zambia.

Policy Review

The review of existing agriculture sector policies indicates that those that are foremost were developed prior to the establishment of NAIP. Within the CAADP mutual accountability framework, impro-
Institutional Review

The formulation and implementation of Zambia’s NAIP was based on agriculture sector-wide institutional engagements (state and nonstate). Although institutional structures exist, especially those at the state level, further efforts are necessary to strengthen some, for instance, in terms of funding and staffing capacities. Furthermore, structures at the institutional level require capacity strengthening to actively implement, monitor, and evaluate the NAIP. Despite the drive to promote agricultural growth to be led by the private sector in the country, substantial support will be essential, particularly in view of the Government of Zambia’s (GoZ) long history of control over various activities in the agriculture sector. The review showed that coordination within government institutions is poor and requires substantial attention. In general, coordination becomes increasingly weak as it transcends from the national to the grassroots (community) level. Coordination at the subnational levels is especially vulnerable when activities are implemented in the absence of local government consultation. In addition, various nonstate actors tend to exacerbate the issue by communicating mixed messages to farmers. Despite the fact that there are many nonstate actors that participate in the formulation of agricultural policies and programs, their involvement in the implementation process is weak.

Review of Key Financial and Nonfinancial Commitments

Zambia’s NAIP is in its second year of implementation since it was launched in May 2013. Commitments made by the GoZ cover the following areas: funding of the NAIP investment program; facilitation of an enabling environment through the enactment and implementation of appropriate policies and; effective coordination of NAIP activities by strengthening the capacity of institutions through training, qualified staff, appropriate equipment and other facilities. Zambia’s total budget allocation to agriculture increased by 73 percent in 2014 compared to the previous year. Despite this, the levels between 2011 and 2014 averaged only 6 percent and falls short of the CAADP target of at least 10 percent of the annual national budget. Moreover, it is essential to ensure that budget commitments are disbursed appropriately and are directed as planned, since this is an area that appears deficient. Since nonstate actors (i.e., farmers and the private sector) have made commitments of 14 percent and 7 percent of the total NAIP budget, respectively, toward NAIP implementation, it is essential that engagement between the GoZ and nonstate actors be strengthened, especially with the private sector, and that there is more coordination with civil society. The commitment to the NAIP of US$675.7 million over the implementation period (2014-18) by these Cooperating Partners is mainly financial by nature. Between 2012 and 2014, expenditure by Cooperating Partners increased by 67 percent, from US$46.51 million in 2012 to US$77.79 million in 2014.
Agriculture Sector Performance Baselines

The assessment of the Zambian agriculture sector was divided into an aggregate and a subsector analysis. The aggregate assessment focused on performance indicators at the national level, based on the CAADP Results Framework, while the subsector analysis focused on the performance of the crops, livestock, and fisheries sectors. Despite Zambia having exceeded the CAADP annual agriculture sector growth target of 6 percent over the review period, the rate declined from 2010 to 2014. Zambia’s agriculture budget allocation has been less than the CAADP target of at least 10 percent of the national budget. Efforts should be made to improve the amount and to prioritize agriculture sector funding for key programs and the drivers of growth identified in the NAIP. Conversely, the country’s agriculture trade balance performed well. In efforts to diversify the country away from mining, it is important to continue supporting growth in the agriculture sector.

The indicator relating to arable land with irrigation equipment, which was 4.59 percent in 2011, continues to lag behind the target of 7 percent that is reflected in the Regional Indicative Strategic Development Plan of the Southern Africa Development Community. Furthermore, the results for land and labor productivity shows that current levels are significantly low compared to the regional levels stated in the Plan. More effort is necessary to improve productivity in the various agriculture subsectors.

In the absence of detailed and disaggregated subsector data, available data indicate varied performance within each subsector. For instance, the crop subsector has experienced a substantial reduction in production levels between 2011 and 2014. While Zambia has been a net exporter of maize in the region over the past years, its overall production trends have decreased in recent years. It can be argued that adverse weather conditions have contributed to the decline, in which case more effort should be placed in addressing climate change adaptation in the agriculture sector. The livestock subsector needs continued support to sustain production growth and agriculture diversification. Overall, the performance of the subsector has been encouraging in the period under review. Similarly, the fisheries subsector has experienced positive developments in terms of sustainability and improvement, although it needs to strengthen the enforcement of regulations to ensure sustainability.

Main Conclusions and Recommendations

Continued effort to improve mutual accountability is essential through sustained JSRs. The 2015 JSR provides a baseline, as well as a platform from which lessons can be learned for future JSRs.

The disbursement of adequate resources is critical to achieving desired agricultural development outcomes, despite the fact that the current policy mix is adequate to steer agricultural growth through value chain development.

Coordination among government institutions needs urgent attention so that it is strengthened at all levels, including down to the community level, where it is weaker than at the national level.

Several indicators have reflected a positive performance during the period under review. Zambia has exceeded the CAADP agricultural growth rate of 6 percent; there has been an improvement in the level of funding following the onset of NAIP implementation; and the livestock and fisheries subsectors have demonstrated considerable improvement. The indicators that call for concern, however, are the hunger index and the level of irrigation development, among others.
It is critical to improve knowledge management, monitoring, and evaluation. Since the NAIP was launched in May 2013, almost all nine District Agriculture Coordinators visited had neither received the NAIP document nor any other government clarification of strategies and policies.

While there was some appreciation shown toward the Farmer Input Support Programme and Food Reserve Agency by various stakeholders at the subnational level, the general feeling was that of dissatisfaction, with a call to restructure the two programs.

The common cross-cutting issues are climate change, the environment, and gender. There was consensus among stakeholders at the subnational level, particularly community members, about the notable change in climatic conditions evidenced by the delay and inadequacy of rainfall and the drying of water bodies. In terms of gender, considerable attempts have been made to ensure the gender mainstreaming of various development initiatives. Nevertheless, much more needs to be done to improve the participation of women and men.
1. INTRODUCTION AND BACKGROUND

1.1. Background

African Heads of State and Government resolved to further strengthen the *2003 Maputo Declaration through the 2014 Malabo Declaration* by agreeing to accelerate agricultural growth and transformation for shared prosperity and improved livelihoods. In addition to the spending and growth targets of the Comprehensive Africa Agriculture Development Programme (CAADP), African Heads of State and Government agreed to further areas of commitment, including an end to hunger and halving poverty by 2025, tripling intra-African trade in agricultural commodities and services by 2025, enhancing resilience in livelihoods, and strengthening mutual accountability to actions and results (AUC 2003; 2014).

The African Union Commission (AUC), New Partnership for Africa’s Development’s (NEPAD) Planning and Coordinating Agency (NPCA), regional economic communities, country stakeholders, and Development Partners (DP) view the improvement of country policy processes as critical to ensure successful implementation of CAADP processes and National Agriculture and Food Security Investment Plans (NAFSP). (ReSAKSS 2015). The recommitment in the 2014 Malabo Declaration to strengthen mutual accountability to actions and results aims to improve country policy processes through promoting evidence-based agricultural policy planning and implementation processes through peer review, dialogue, benchmarking, and the adoption of best practices. The CAADP Mutual Accountability Framework, adopted by the AUC and NEPAD sets out the principles for mutual review, and the CAADP Results Framework guides the priority areas and the definition of performance indicators for tracking targets in the Malabo Declaration. The priorities are contained in the post-Malabo implementation strategy and roadmap, adopted by Heads of State and Government in January 2015 in Addis Ababa, Ethiopia.

Agricultural Joint Sector Reviews (JSRs) are one way of operationalizing the mutual accountability framework and they support the implementation of the CAADP Results Framework at the country level. The JSRs provide a platform for collective review of the effectiveness of policies and institutions in the agriculture sector, including the extent to which intended results and outcomes in the sector are realized. The implementation of the JSR review process allows state and nonstate stakeholders to hold each other accountable with respect to fulfilling pledges and commitments stipulated in the CAADP compacts, NAFSPs, and related cooperation agreements. The JSR process serves as a management and policy support tool for inclusive stakeholder planning, programming, budget preparation, including the execution, monitoring and evaluation, and overall development of the agriculture sector. It facilitates a broad spectrum of stakeholders to gain insights into and influence over the policies and priorities of the sector (ReSAKSS 2015).

The first JSR/Joint Annual Review (JAR) of Zambia’s Agriculture Sector was undertaken approximately 20 years ago, under the Agriculture Sector Investment Programme (ASIP), which was implemented over the period 1995-2000 (World Bank 1995). The 1995 JSR formed the baseline assessment. This was followed by successive annual JARs. Each annual JAR culminated in a consultative sector review meeting involving more than 300 stakeholders (GoZ 2010). The objectives of these meetings included:

- Discussing progress in the sector’s key performance indicators, based on the previous year;
- Assessing the extent to which donor alignment had been achieved;
- Assessing the extent to which budgetary and nonbudgetary commitments had been realized;
1.1.1. Summary of the National Agriculture Investment Plan

The formulation process of the NAIP drew from the rich and wide stakeholder consultations that preceded the implementation of the country’s major development strategies and frameworks. In addition, the nearly two-year stakeholder consultation that preceded the formulation of the Zambia CAADP Compact, signed in January 2011, proved to be valuable for the design of the NAIP (GoZ 2011a).

The NAIP was officially launched by Zambia’s Vice-President in May 2013, following a nearly one-year successful stakeholder consultation and formulation process. The NAIP is to be implemented over a five-year period, from 2014 to 2018. As noted above, the NAIP draws its overall objective from the 2012 NAP. The overall objective of the NAIP is “to facilitate and support the development of a sustainable, dynamic, diversified and a competitive agriculture sector that assures food security at household and national levels and maximizes the sector’s contribution to GDP” (GoZ 2012).

The NAIP seeks to realize its overall objective through the implementation of four main programs:

Sustainable Natural Resources Management

1. Agricultural Production and Productivity Improvement (livestock, crops, and aquaculture)

2. Market Access and Services Development

3. Food and Nutrition Security and Disaster Risk Management

The four programs are to be implemented while strengthening two major support services: (i) knowledge support services (i.e., research, extension, seed, agriculture education, and training) and (ii) institutional strengthening (i.e., policy dialogue, planning monitoring and evaluation (M&E), financial management and procurement, and human resource management). All four programs, and the efforts to strengthen the two support services, are designed to streamline development on key cross-cutting issues, including gender, the environment, decentralization, and other sector policies and ongoing plans.

Once sufficiently implemented, the four programs, support services, and cross-cutting issues are expected to improve the five main impact indicators summarized in Table 1.1. For this improvement to
occur, the agricultural annual growth rate is expected to be at least 6 percent, triggered by an annual allocation to agriculture of not less than 10 percent of the national budget of the GoZ.

**TABLE 1: THE ZAMBIAN NATIONAL AGRICULTURE INVESTMENT PLAN: IMPACT INDICATORS**

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<tr>
<td>Rural poverty headcount (%)</td>
<td>77</td>
<td>50</td>
</tr>
<tr>
<td>Agricultural exports as a percentage of nontraditional exports</td>
<td>41</td>
<td>55</td>
</tr>
<tr>
<td>Prevalence of chronic malnutrition in children under 5 years old (%)</td>
<td>45</td>
<td>30</td>
</tr>
<tr>
<td>Soil erosion rate (ton/hectare/year)</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Cereals production (millions tons)*</td>
<td>3.3</td>
<td>6.0</td>
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*Source: CSO and MAL (various years).*

*It would have been more useful to present yield levels, as they are a better measure of efficient resource utilization.*

**1.1.2. Objectives of the Joint Sector Review Assessment**

The main objectives of the 2015 Zambian Agriculture sector JSR are threefold:

- To evaluate the policy and institutional environment of the implementation of the Zambian NAIP;
- To examine the progress made toward achieving key target outcomes and thus create a baseline for future reviews; and
- To assess the adequacy of the existing process to effectively carry out a comprehensive and robust review in the future and identify actions needed to remedy any potential weaknesses.

The focus of this JSR is on establishing partnerships and mechanisms for Joint Sector Planning and Monitoring and Evaluation. It is not intended to provide comprehensive analysis of the sector performance, given the limited scope and coverage; rather, it is the future JSRs that are expected to be more detailed and have greater depth and coverage. For instance, the consultations at the subnational level were only undertaken in nine districts out of the more than 100 districts (including the new ones); hence; the conclusions are only indicative.

**1.2. Analytical Approaches**

The 2015 Zambian Agriculture sector JSR process predominantly relied on qualitative methods for gathering required data. This included extensive literature review targeting the country’s main development strategy frameworks including key agriculture sector policies (e.g., Draft National Agriculture Policy); the National Development Plans (i.e., Fifth National Development Plan, 2006-2010; Sixth Natio-
nal Development Plan, W 2011-2015; Revised Sixth National Development Plan, 2013-2016); and the NAIP, among others. Other important documents from the region and elsewhere dealing with similar reviews were also consulted and aimed at learning lessons.

In addition to the literature review, the most knowledgeable stakeholders were engaged from each one of the following major categories: government officials; Cooperating Partners; the private sector; civil society organizations (CSO), and; representatives of farmers’ organizations. Stakeholder consultations were carried out at four levels; national, provincial, district, and community, primarily through semi-structured interviews (SSI), key informant interviews, focus group discussions, and special meetings. The subnational stakeholder consultation (provincial, district, and community) took place May 25-30, 2015. Three provinces representative of the main agro-ecological zones in the country were targeted: Eastern Province, Southern Province and Muchinga. In each province, three districts were consulted (Table 1.2). The three districts were selected based on whether they were high, medium, or poor performing. Performance was defined largely in relation to the following three criteria: production, productivity, and number of development programs/projects/initiatives in the district.

### TABLE 1.2: PROVINCES AND DISTRICTS TARGETED FOR SUBNATIONAL STAKEHOLDER CONSULTATIONS

<table>
<thead>
<tr>
<th>Province</th>
<th>District Performance Level</th>
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<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Eastern</td>
<td>Petauke</td>
</tr>
<tr>
<td>Muchinga</td>
<td>Mpika</td>
</tr>
<tr>
<td>Southern</td>
<td>Kalomo</td>
</tr>
</tbody>
</table>

*Source: Constructed from submissions from the Monitoring and Evaluation Technical Working Group.*
Figure 1.1 below summarizes the approach followed to conduct the 2015 Zambian Agriculture sector JSR.

FIGURE 1.1: APPROACH FOLLOWED IN CONDUCTING THE JOINT SECTOR REVIEW

- All important policy and development documents at country level were consulted.
- Similar documents on agricultural sector reviews at the regional level were consulted, as well as documents from other countries, in order to learn lessons.
- Development of national level checklists.
- Compilation of government stakeholders’ checklists (Ministry of Agriculture and Livestock).
- Compilation of private sector and other nonstate actors’ checklist, farmers.
- Data collection at national, provincial, district, and community levels.
- Validation of qualitative findings at provincial and national levels.
- Data analysis and interpretation, and report writing.
- Monitoring and Evaluation Technical Working Group (Ministry of Agriculture and Livestock and Cooperating Partners)
- Agricultural Sector wider stakeholder validation workshop
- Revision and finalization of the JSR report


Several consultative meetings were held with key stakeholders to refine and consolidate the findings. The following are the key ones:

- The M&E Technical Working Group (TWG) of the MAL met in June following the subnational stakeholder consultations to verify and consolidate key findings. The meeting was attended by government officials and Cooperating Partners who had been involved in subnational stakeholder consultations.
- The M&E TWG of the MAL met on July 16, 2015, to review the draft JSR report and comments were provided to further improve the document;
- The Cooperating Partners met on July 17, 2015, to review the draft JSR report. They provided further comments, written and oral, which were further incorporated into the document;
The M&E TWG, consisting of Cooperating Partners and government officials (including representation from the Ministry of Finance and MAL) met on August 11, 2015, for final comments prior to the presentation of the document to the MAL's senior management.

The MAL's senior management meeting on August 16, 2015, was chaired by one of the two Permanent Secretaries to again review the JSR report, with comments incorporated in the document.

1.3. Study Limitations

A number of limitations were encountered in conducting this JSR. While efforts had been made to gather as much data as possible to provide a credible JSR report, data was limited with regard to some of the NAIP indicators. Although these were based on the assumption of availability, it was ultimately assumed that either the data had not been obtained in the format proposed in the NAIP or it was not available altogether. The missing data related, in particular, to a deeper disaggregated subnational and subsector analysis of agriculture sector performance. To fill some of the gaps, data was obtained from other sources (e.g., ReSAKSS), including international databases. Nevertheless, data for subnational and subsector analyses remained a challenge, despite efforts to ensure that MAL departments would provide the data. The operationalization of MAL's M&E system is critical in addressing such data challenges.

A further obstacle was that due to time constraints, subnational stakeholder consultations were limited only to three provinces instead of 10, which would have covered approximately two-thirds of the country. Nevertheless, the selection was made in an effort to ensure coverage of the main agro-ecological regions of Zambia.

1.4. Report Structure

This report has seven major components, each of which is discussed in sequence with focus on key issues. The Annex provides further details of the JSR process. The main components of the report are:

- Status and quality of the review process
- Policy review
- Institutional review
- Review of key financial and nonfinancial commitments
- Agriculture sector performance
- Conclusions, lessons learned, and recommendations
2. STATUS AND QUALITY OF THE JOINT SECTOR REVIEW PROCESS IN ZAMBIA

2.1. Introduction

This section discusses the status and quality of the JSR process in Zambia, based on previous and current experiences. Specific issues discussed include the nature and extent of consultation in the process; key questions, areas, and sectors covered; principle decisions and commitments from previous JSR processes; and respective responsible actors. The section also discusses an action plan to bridge the gaps and achieve best practices in implementing JSR processes in the Zambian context.

2.2. Joint Sector Review Consultative Process in Zambia

As mentioned in Section 1.1, no comprehensive JSR has been carried out in the agriculture sector since the ASIP was phased out in 2001. During the 1996–2000 ASIP implementation period, information for the JSR was largely generated by the Institute for Economic and Social Research, a research wing of the University of Zambia. The institute was contracted by the MAL, with World Bank funding, to undertake an Annual Sector Performance Analysis. The analysis was comprehensive, was nationwide in coverage, applied various methods for data collection (quantitative and qualitative), and had an annual budget of US$0.5 million.

2.2.1. Institutionalized Joint Sector Review Processes

Previous and current processes—similar to the JSR process—have been carried out during the period 2005–15 in two forms. The first type consists of reviews under the auspices of the Agriculture Sector Advisory Group (Ag-SAG). The Sector Advisory Group (SAG) initiative was created by the GoZ more than a decade ago. SAGs bring together key stakeholders within a sector from major groups, including government, Cooperating Partners, the private sector, CSOs, and community group representatives. The roles of SAGs include:

- Reviewing sector performance
- Providing policy direction to sector stakeholders
- Providing technical and implementation advice
- Providing a forum for dialogue
- Serving as a coordination mechanism.

The SAGs are expected to meet on a quarterly basis to review sector progress for the previous quarter and plan for the forthcoming quarter. The Ag-SAG was most active during the design and development of CAADP processes, particularly the Zambia CAADP Compact and the NAIP. During the CAADP agenda programming process, particularly in relation to the development and finalization of the CAADP Compact and the NAIP, the Ag-SAG met quarterly, on average. Apart from engaging in policy reviews and providing guidance in identifying key focus areas for the CAADP-led development frameworks, the
Ag-SAG also provided direction on the packaging/formulation of interventions. Since the launch of the NAIP in May 2013, however, the Ag-SAG has met irregularly and is inclined to be demand driven (i.e., it meets only when there is a serious issue). For instance, the Ag-SAG did not meet during the entire year in 2014. Regular meetings should be revived in the tenets of strengthening mutual accountability in the sector within the Malabo Declaration.

The second type of JSR process that has taken place in the recent past (2005-15) relates to one that has been initiated by top government officials. Cases in point are the two recently held special stakeholder meetings called by the Minister of MAL in March and May 2015. The first meeting was jointly facilitated by the Indaba Agriculture Policy Research Institute (IAPRI) and the Agriculture Consultative Forum held on March 18, 2015, while the second meeting was facilitated by IAPRI alone and was held on May 22, 2015. The purpose of the first meeting was threefold:

• Assess the current status of key developments in the agriculture sector;

• Discuss selected key issues in the agriculture sector, including crop marketing, FISP, and agricultural diversification; and

• Develop recommendations for action.

The first review meeting discussed subsector-specific papers, presented by selected experts, including those from IAPRI, the cotton subsector, fisheries, and livestock. On the agenda were the current (2015) stocks of maize, crop insurance for small-scale farmers, marketing of maize, and options for diversification.

The second special stakeholder meeting primarily targeted the following issues:

• Briefing on the status of key issues and recommendations from the first meeting;

• Crop marketing modalities for the current (2014/15) season;

• Update on warehouse receipt systems;

• Status of conventional farmer input support; and

• Status of the e-vouchers under FISP.

2.2.2. Joint Sector Consultative Process: 2015

The 2015 JSR for Zambia involved a number of activities jointly undertaken by the major stakeholder categories in the agriculture sector. The process began in 2014, following a decision by national stakeholders to undertake a JAR in 2015. Having also conceived the idea of supporting the implementation of a JSR in Zambia in 2015, the African Union, NEPAD, and ReSAKSS held talks with the MAL, ‘the latter of which represented at this meeting other Zambian stakeholders. This meeting was held in order to streamline efforts and resources to produce a single agriculture sector review. Figure 2.1 summarizes the 2015 JSR/JAR consultative process in Zambia, as well as the main stakeholders involved at each stage.
FIGURE 2.1: STEPS FOR THE 2015 JOINT SECTOR REVIEW CONSULTATIVE PROCESS IN ZAMBIA, WITH STAKEHOLDERS INVOLVED

1. Develop roadmap for the JSR [Consultant]
2. Present roadmap to the M&E Coordination Group for comments [Consultant]
3. Approval of the 2015 JSR roadmap by the M&E Coordination Group [MAL, CPs, CSOs, PS]
4. Establish institutional setup for the JAR process and define roles [MAL, CPs, CSOs, PS]
5. Secretariat circulates the 2015 JSR ToRs to other stakeholders for input [MAL]
6. Secretariat finalizes ToRs for approval by the Steering Committee [MAL]
7. Mobilize human and financial resources for implementation of the ToRs [MAL]
8. Plan logistics for entire JSR process, including field visits, workshops, & meetings [MAL, CPs, CSOs, PS]
9. Constitute the JSR Technical Team [MAL, CPs, CSOs, PS]
10. Draft Inception Report and circulate it to stakeholders [Consultant, MAL]
11. Conduct field visits [MAL, CPs, CSOs, PS]
12. Synthesize and analyze data and write report [Consultant]
13. Conduct internal review of draft report [M&E TWG]
14. Incorporate comments [Consultant]
15. Validate report findings (through a workshop) [MAL, CPs, CSOs, PS]
16. Incorporate comments and disseminate the report [Consultant, MAL]

Source: Constructed from Roadmap Report (January 2015)

Note: CPs = Cooperating Partners; CSOs = civil society organizations; MAL = Ministry of Agriculture and Livestock; PS = private sector; ToRs = terms of reference; TWG = Technical Working Group.
2.3. Key Questions, Areas, and Sectors covered by Joint Sector Review Processes

The key questions and areas covered by previous and current JSR processes are summarized in Table 2.1. The second column summarizes issues arising from the terms of reference (ToR) developed by the African Union, NEPAD, and ReSAKSS for national agriculture sector JSRs, while the third column includes those developed by the Ministry of Agriculture and its partners.

**TABLE 2.1: KEY QUESTIONS, SOURCE OF KEY QUESTIONS, AND RESPECTIVE AREAS OF FOCUS**

<table>
<thead>
<tr>
<th>Category of indicator</th>
<th>Based on African Union, NEPAD, &amp; ReSAKSS</th>
<th>Based on Ministry of Agriculture and Livestock and Its Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabling environment</td>
<td>Status of policy implementation</td>
<td>• Progress in policy implementation (various)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Revision of Farmer Input Support Programme</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Revision of Food Reserve Agency funding and operations</td>
</tr>
<tr>
<td>Institutional landscape</td>
<td>Not included</td>
<td>• Extension officer-to-farmer ratio</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Rehabilitation of Agricultural training institutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Coordination mechanisms between parties operational at the district level</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>[none]</td>
<td>• Agriculture sector trade and contribution to gross domestic product</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Growth trends in trade and gross domestic product</td>
</tr>
<tr>
<td>Agriculture sector funding</td>
<td>Financial commitments by various stakeholders (government, nonstate actors, cooperating partners)</td>
<td>• Ministry of Agriculture and Livestock</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Nongovernment budget</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Share of government expenditure for agriculture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Composition of government budget</td>
</tr>
<tr>
<td></td>
<td>Nonfinancial commitments by various stakeholders</td>
<td>• Experts/technical assistance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Capacity building, including individual, organizational, and institutional</td>
</tr>
<tr>
<td>Agriculture sector production and productivity</td>
<td>Agriculture sector performance</td>
<td>• Crop, livestock, and fish production and productivity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use of farm inputs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Livestock disease occurrence</td>
</tr>
<tr>
<td>Aid coordination</td>
<td>Status and quality of review process</td>
<td>• JSR process is nationally owned and in conformity with the African Union/NEPAD framework</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Proportion of cooperating partners using a single sector plan and one Monitoring and Evaluation framework</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Trends in the number of separate Project Implementation Units and in their number mainstreamed within the structures of Ministry of Agriculture and Livestock</td>
</tr>
</tbody>
</table>


Note: NEPAD = New Partnership for Africa’s Development; ReSAKSS = Regional Strategic Analysis and Knowledge Support System.
2.4. Key Decisions and Commitments Arising from Joint Sector Review Processes and Responsible Actors

A summary of key decisions and progress on commitments emanating from the JSR processes held in March and May 2015 is presented in Table 2.2. The commitments relate to the two special stakeholder meetings called by the Minister of Agriculture and Livestock, as previously stated.

**TABLE 2.2: DECISIONS AND PROGRESS ON COMMITMENTS FROM JOINT SECTOR REVIEW PROCESSES, MARCH AND MAY 2015**

<table>
<thead>
<tr>
<th>Key Variable</th>
<th>Joint Sector Reviews during Agricultural Sector Investment Programme (Two Decades Ago)</th>
<th>Joint Sector Reviews in the Last Five Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>• Regularly took place at the end of every year</td>
<td>• The institutionalized Joint Sector Review (JSR) processes under the Agriculture Sector Advisory Group (Ag-SAG) took place three to four times a year and were driven by issues to be discussed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The JSRs initiated by senior government officials have tended to be irregular</td>
</tr>
<tr>
<td>Stakeholder participation</td>
<td>• Stakeholders came from various levels of policy and program design and implementation (i.e., national, provincial, district, and community)</td>
<td>• Stakeholders usually came from the national level with less than 10 from the subnational level</td>
</tr>
<tr>
<td></td>
<td>• Numbers attending JSR processes would reach approximately 300</td>
<td>• On average, the total number of participants would be approximately 70, representing various stakeholder groups</td>
</tr>
<tr>
<td>Coverage of issues</td>
<td>• Subcomponents/subsectors, as well as key issues, were covered. There was a total of 15 subprograms, including Extension; Research; Seed Control and Certification; Rural Finance; Farm Power and Mechanization; Policy and Planning, and; National Agriculture Information</td>
<td>• Selected issues were covered, as the review meetings have tended to be demand driven or have tended to respond to specific issues at hand. For instance, the Ag-SAG was most active during the formulation of the Comprehensive Africa Agriculture Development Programme Compact and the National Agriculture Investment Plan (NAIP). However, the review meetings of March 18 and May 22, 2015, were called by the Minister of Agriculture to discuss current issues affecting the agriculture sector</td>
</tr>
<tr>
<td>Impact of the JSRs</td>
<td>• During the Agricultural Sector Investment Programme, JSRs resulted in the following:</td>
<td>• Selected issues were covered, as the review meetings have tended to be demand driven or have tended to respond to specific issues at hand. For instance, the Ag-SAG was most active during the formulation of the Comprehensive Africa Agriculture Development Programme Compact and the National Agriculture Investment Plan (NAIP). However, the review meetings of March 18 and May 22, 2015, were called by the Minister of Agriculture to discuss current issues affecting the agriculture sector</td>
</tr>
<tr>
<td></td>
<td>• There was stronger coordination, synergies and leveraging of resources;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The Annual Work Plans and Budgets were informed by JSR results;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Linked to the above, priority areas were clearly identified, to be focused on in the following year;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Scaling up of some sectoral policies was informed by JSRs (e.g., Conservation Agriculture</td>
<td></td>
</tr>
</tbody>
</table>
Key Variable | Joint Sector Reviews during Agricultural Sector Investment Programme (Two Decades Ago) | Joint Sector Reviews in the Last Five Years
--- | --- | ---
Key challenges | • Due to large numbers that would attend the JSRs, participation tended to be limited | • Inadequate frequency in holding JSRs have left unresolved a number of key issues affecting the agriculture sector
| • This would have been addressed by increasing the number of JSRs days from 2 to 3 so as to include breakaway groups | • The Department of Policy and Planning, together with partners, should develop a schedule to regularize JSR meetings

Source: Submissions from the Ministry of Agriculture and Livestock (various years).

### TABLE 2.3: SUMMARY OF KEY DECISIONS AND PROGRESS ON COMMITMENTS FROM OTHER JOINT SECTOR REVIEW PROCESSES AND THEIR RESPONSIBLE ACTORS

<table>
<thead>
<tr>
<th>Key Decisions and Commitments</th>
<th>Responsibility</th>
<th>Deadline for Implementation</th>
<th>Progress Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Sector Review meetings to be more regular</td>
<td>Permanent Secretary, Ministry of Agriculture and Livestock, through its Policy and Planning Department</td>
<td>End of May 2015</td>
<td>Amber</td>
</tr>
<tr>
<td>Allowing maize exports</td>
<td>Food Reserve Agency, following direction from Minister of Agriculture and Livestock</td>
<td>May 2015</td>
<td>Amber</td>
</tr>
<tr>
<td>Import ban on wheat and its products</td>
<td>Ministry of Agriculture of Livestock</td>
<td>May 2015</td>
<td>Amber</td>
</tr>
<tr>
<td>Operations of the Food Reserve Agency (FRA) to be restructured to focus on strategic food reserves.</td>
<td>Ministry of Agriculture of Livestock</td>
<td>May 2015</td>
<td>Amber</td>
</tr>
<tr>
<td>The Farmer Input Support Programme to be restructured. The e-voucher system to be promoted by government as a strategy to enhance diversification among others. Government has announced that the e-voucher will be piloted in 2015/2016 in 13 districts.</td>
<td>Ministry of Agriculture of Livestock</td>
<td>May 2015</td>
<td>Amber</td>
</tr>
</tbody>
</table>

Source: Joint Sector Review Meetings conducted in the past 5 years

Key:

- **Amber**: Commitment has been partly achieved, but additional attention is required
2.5. Main Gaps in the Joint Sector Review Process

Table 2.3 summarizes quality-related issues. It provides a comparison between the JSRs that used to take place approximately two decades ago with those that have taken place more recently (less than five years ago).

2.6. Action Plan to Bridge the Gaps and Achieve Best Practices in Implementing the Joint Sector Review Process

Table 2.4 summarizes the possible actions to bridge the identified gaps identified in Table 2.3 in the JSR process in Zambia.

**TABLE 2.4: SUMMARY OF KEY ACTIONS TO BRIDGE THE GAPS IN THE JOINT SECTOR REVIEW PROCESS AND READINESS TO IMPLEMENT**

<table>
<thead>
<tr>
<th>Action</th>
<th>Readiness Using Traffic Light Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Sector Reviews (JSR) to be conducted more regularly as a basis for the promotion of Mutual Accountability</td>
<td>Amber</td>
</tr>
<tr>
<td>JSRs to have greater coverage in terms of number of provinces and districts to be assessed</td>
<td>Amber</td>
</tr>
<tr>
<td>JSRs to have greater stakeholder coverage</td>
<td>Amber</td>
</tr>
<tr>
<td>Work toward increasing the impact of JSRs by ensuring implementation of recommendations that come from such reviews</td>
<td>Amber</td>
</tr>
</tbody>
</table>

*Source: Authors.*

**Key:**

- **Amber** Commitment has been partly achieved, but additional attention is required

2.7. Summary

The review of the status and quality of the JSR processes in the Zambian agriculture sector indicate that since the phasing out of the ASIP in 2001, there has been no comprehensive JSR assessment. Efforts initiated to undertake JSR processes in the recent past (2005–15) were in two forms: (i) the processes of the Ag-SAG and (ii) special stakeholder meetings called by the Minister of MAL. The 2015 JSR assessment combines initiatives from the MAL and partners, AUC/NEPAD, and ReSAKSS Africa-wide JSR assessment processes. The focus of the current JSR assessment is on policy and institutional reviews; review of progress toward sector results and outcomes; and review of the status and quality of the JSR processes in Zambia.

The implementation of the CAADP processes (particularly the development of the CAADP Compact and NAIP) revived the JSR processes. The reduced frequency in holding JSRs in the recent past, as discussed above, does not support efforts to strengthen mutual accountability. Efforts are needed by government and partners to resuscitate the JSR processes in the agriculture sector while learning from the development of the CAADP Compact and NAIP processes. Furthermore, lessons from the current assessment provide a baseline for future JSR assessments in the country.
3. POLICY REVIEW

3.1. Introduction

This section reviews the Zambian policy landscape, focusing on existing and emerging policies, gaps, and required adjustments to support the implementation of the NAIP. The focus areas include an inventory of existing and emerging policies; quality of agricultural policy planning and execution; consistency of the policy mix; alignment of emerging policies with the NAIP; policy implementation status; and adequacy of policy coverage.

3.2. Inventory of Existing and Emerging Policies

Zambia has 29 relevant existing legislative acts under its agriculture sector, most of which were developed before NAIP and continue to be relevant, covering various subsectors and issues in agriculture. The development of the NAIP and priority investment areas was informed by policies summarized in Figure 3.1, among other considerations. Policies formulated after NAIP include the draft National Agricultural Policy; Land Policy; Climate Change Strategy, and the Market Bill.

FIGURE 3.1: POLICIES THAT EXISTED BEFORE AND AFTER THE NATIONAL AGRICULTURE INVESTMENT PLAN

- Irrigation Policy
- National Agriculture Policy 2004-15
- Zambia National Agriculture Investment Plan (NAIP)
- National Agriculture Policy (Draft)

Source: GoZ (2013).

3.3. Quality of Agricultural Policy Planning and Execution

Within the CAADP mutual accountability framework, improved agricultural policy planning and execution should be based on promoting evidence-based agricultural policy planning and implementation processes through peer review, dialogue, benchmarking and the adoption of best practices. The most important outputs of the CAADP consultative process include the identification of key policy gaps associated with driving forward agricultural development in the country. As noted above, the implementation of CAADP processes has involved wide stakeholder consultation processes over a period of close to three years. The various steps undertaken in these processes relate to identifying policy gaps, statements, and programming, and are presented in Figure 3.2
Eight policy statements were developed following the four-stage process described in Figure 3.2:

The GoZ will develop and implement policies and programs that support increased productivity, sustainable land and water management, forestry, agro-forestry, crops, livestock and fisheries development, and climate change adaptation and mitigation;

- The GoZ will facilitate equitable access to land;
- The GoZ and the private sector will implement and adhere to predictable, rule-based market and trade policies and strengthen public-private coordination and dialogue;
- The GoZ, in consultation with stakeholders, will identify investment priorities in infrastructure development that support the agriculture sector, including crops, livestock, and fisheries;
- The GoZ will facilitate private sector scaling up of investments in production, input and output markets for crops, livestock, and fisheries;
- MAL will promote diversified extension messages to cater for all categories of farmers, including resource-poor households;
- The GoZ will explore social protection instruments in partnership with private sector and civil society, and;
- The GoZ commits itself to providing adequate resources in order to develop cost effective, demand-driven research and extension linkages that focus on public-private partnerships.
Table 3.1 summarizes the review of the quality of policy processes in Zambia. The quality of the policy processes was rated Green. The agricultural policy framework in place entailed a lengthy process of stakeholder consultations over nearly three years, involving various forums, the key one being the Ag-SAG meetings. During this period, SAG meetings were regular, taking place every quarter and sometimes every two months.

TABLE 3.1: QUALITY OF POLICY PROCESSES

<table>
<thead>
<tr>
<th>Policy Process</th>
<th>Quality of the Process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Identification of key issues facing agriculture in Zambia</strong>: This entailed undertaking an elaborate literature review of key development frameworks including national development plans; sector policies (in particular, Zambia’s National Agriculture Policy); agricultural development impact assessments, and review reports. The outputs included synthesized issues, gaps, and challenges.</td>
<td>Green</td>
</tr>
<tr>
<td><strong>Identification of existing policies and how they impact the identified issues</strong>: This included a mapping of all relevant policies, as well as legislation (numbering 29 under the Ministry of Agriculture and Livestock). The process also included engagement of other sectors whose mandate impacts the agriculture sector, ensuring that their policies were sufficiently reviewed. An analysis was undertaken on how the different policies impacted the agriculture sector in specific ways</td>
<td>Green</td>
</tr>
<tr>
<td><strong>Identification of key policy gaps</strong>: This immediately followed the identification of existing policies and how they impact the identified issues. Where such policies either negatively impacted the agriculture sector or had very minimal positive impacts, this became the basis for the analysis of policy gaps, their synthesis, and the formulation/consolidation of new policies.</td>
<td>Green</td>
</tr>
<tr>
<td><strong>Formulation of intervention areas</strong>: This process was linked or tailored to the agreed set of policies. It ensured that the interventions identified had the necessary supportive policy environment to ensure effective implementation.</td>
<td>Green</td>
</tr>
</tbody>
</table>

*Source: Constructed from Zambia’s National Agriculture Investment Plan.*

**Key:**
- **Green**: Commitment has been achieved to a reasonable degree

### 3.4. Consistency of Policy Mix

Policy mix, as defined in this JSR, relates to the existence of an appropriate policy package at each level of the agricultural value chain, needed to facilitate successful implementation of the NAIP and optimum performance of the entire agriculture sector. The GoZ has made considerable efforts in the past four years to enact legislation and policies that positively impact each level of the agricultural value chain (Figure 3.3). The implementation of legislation and policies varies across the various levels of the agricultural value chain. From Figure 3.3 it is clear that the production stage of the value chain has received the most attention.
Over the past years, the GoZ has implemented and facilitated various programs that target the entire agricultural value chain. Examples of such interventions include:

The Smallholder Enterprise and Market Programme, funded by the International Fund for Agricultural Development (IFAD), was phased out years ago; however, a number of interventions which the program promoted still exist, including the Small and Medium Enterprise S market information facility under the Zambia National Farmers’ Union.

• The Agricultural Development Support Project (ADSP), funded by the World Bank, has supported 30 private sector projects, targeting the key stages of the agricultural value chain. Again, while the project phased out a couple of years ago, a number of the interventions it supported remain in operation.

• The Smallholder Agribusiness Promotion Programme supported by IFAD is still running. Figure 3.3 provides further examples of policy mix interventions and initiatives across the various value chain stages.
3.5. Alignment of the National Agriculture Investment Plan to Emerging Policies

The NAIP is a tool for implementation of a number of existing and emerging policies. For instance, the NAP (2004-15) and the current draft NAP were heavily consulted and, hence, the NAIP and its programs and components were anchored in these policy documents. The NAIP vision and main objectives, for example, were directly obtained from the NAP and the draft NAP. The NAIP also has linkages with the emerging policy and strategy on climate change. A number of issues in the climate change strategy speak to Program I of the NAIP (i.e., sustainable natural resource management). Table 3.2 presents the linkage between the NAIP focus areas and proposed policy statements highlighted above.

### TABLE 3.2: LINKAGE BETWEEN NATIONAL AGRICULTURE INVESTMENT PLAN FOCUS AREAS AND PROPOSED POLICY STATEMENTS

<table>
<thead>
<tr>
<th>NAIP Intervention Area</th>
<th>Policy Statement</th>
</tr>
</thead>
</table>
| Sustainable Natural Resource Management | • Government will develop and implement policies and programs that support increased productivity, sustainable land and water management, forestry, agroforestry, crops, livestock and fisheries development, and climate change adaptation and mitigation  
  • Government will facilitate equitable access to land |
| Agricultural Production and Productivity Improvement (livestock, crops and aquaculture) | • Government will develop and implement policies and programs that support increased productivity, sustainable land and water management, forestry, agroforestry, crops, livestock and fisheries development, and climate change adaptation and mitigation  
  • MAL will promote diversified extension messages to cater for all categories of farmers, including resource-poor households  
  • Government commits itself to providing adequate resources in order to develop cost effective, demand-driven research and extension linkages focusing on public-private partnerships |
| Market Access and Services Development | • Government and the private sector will implement and adhere to predictable, rule-based market and trade policies and strengthen public-private coordination and dialogue  
  • Government, in consultation with other stakeholders, will identify investment priorities in infrastructure development that support the agriculture sector, including crops, livestock, and fisheries  
  • Government will facilitate private sector scaling up investments in production, input and output markets for crops, livestock and fisheries |
| Food and Nutrition Security and Disaster Risk Management | • Government will explore social protection instruments in partnership with private sector and civil society  
  • Government will develop and implement policies and programs that support increased productivity, sustainable land and water management, forestry, agroforestry, crops, livestock and fisheries development, and climate change adaptation and mitigation |

*Source: Construction from the National Agriculture Investment Plan and other sources (various years).*

1Note that there a number of policy statements, in terms of their linkage, overlap the NAIP key focus areas. As a matter of fact, there are synergies across all key NAIP focus areas.
3.6. Policy Implementation Status

Progress in the implementation of the eight policy statements during the past four years, summarized in the Zambia CAADP Compact, has been noted in a number of areas, although in most cases it has been slow. The sections below discuss progress made in the implementation of each of the eight policy statements in sequence.

3.6.1 Development and Implementation of Policies and Programs

**Policy Statement #1:** Government will develop and implement policies and programmes that support increased productivity, sustainable land and water management, forestry, agro-forestry, crops, livestock and fisheries development, climate change adaptation and mitigation

A number of initiatives have been promoted by the GoZ in the past four years toward the realization of this policy statement. A selection of these initiatives is highlighted below:1

- The GoZ, together with partners, has facilitated the development of farm blocks in each province whose purpose is to encourage private sector investment to small-scale farmers through an out-grower arrangement. In a number of these farm blocks, various infrastructures have been constructed by the GoZ and its partners, including access roads, water points, and electricity.

- The GoZ and its partners have promoted irrigation development for small-scale farmers through financial support from IFAD.

- The livestock subsector has seen considerable investment and interventions, including enforcement of the Animal Health Act (2010), which makes the dipping of animals compulsory. In this regard, the GoZ has developed Guidelines for the Running and Management of Communal Dip Tanks/Spray Race (GoZ 2014). In addition, the Livestock Infrastructure Support Project was launched in 2014, targeting the Muchinga and Northern provinces. These provinces are among those with the highest potential for livestock production.

- With support from the Food and Agriculture Organization of the United Nations, the GoZ is finalizing the implementation of the Integrated Land Use Assessment (since 2013), which seeks to update the earlier forestry inventories (2005-08). This is a vital assessment that is fundamental to providing the status of the country’s natural resources as noted below. The “purpose of the ILUA is to assess forestry and other related resources and land use practices, to provide up-to-date qualitative and quantitative information on the state, use, management and trends of these resources...” (ILUA 2005-08).

The GoZ needs to do more in supporting the development of appropriate technologies (in all subsectors (i.e., fishery, livestock, crops) that will significantly increase smallholder productivity and production in the context of changing climatic conditions. This implies that support for research and technology development activities should be one of the top priority areas in terms funding. Although the budget allocation to the Research Department in 2014 increased by more than 800 percent over the previous year (see Chapter 5), the general trend over the past four years (2011-14) was that of poor funding to research. Furthermore, less than 50 percent of the 2014 budget was actually disbursed.

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1 Programs are supported by a number of Cooperating Partners, including the African Development Bank, Food and
3.6.2. Access to Land

Policy Statement #2: Government will facilitate equitable access to land

As many as 54 percent of smallholder farmers state that there is no land in their village that is without a claim by someone, while 64 percent of these farmers (i.e., 900,000 rural households) own less than 2 hectares (ha) of land (IAPRI, 2015). Although Zambia has a low population density of 5 ha per person, a vast part of the country is not serviced with education, health, and other social facilities. There is also poor road infrastructure and no electricity and other necessary infrastructures. Area under cultivation by the majority (73 percent) of smallholder farmers is relatively small (less than 2 ha). A vast majority (83 percent) of these farmers who cultivate less than 2 ha live in poverty (i.e., less than US$2 dollars a day). Addressing rural poverty in Zambia calls for an increase in productivity per unit area with a view to optimizing resource utilization. It also calls for an increase in the size of land smallholder farmers can cultivate in order to have considerable returns. According to research evidence, increasing land access and cultivation for smallholder farmers from 2-3 ha per household would lead to an increase in crop sales that would result in a decrease in poverty among smallholders from 83 percent to 48 percent (IAPRI, 2015).

During the period under review (2011-14), social amenities (i.e., school and health facilities, as well as roads as noted above) have improved. The GoZ has been promoting increased land accessibility by vulnerable groups, particularly women. For example, 30 percent of plots in government resettlement schemes have been given to women (MAL, 2015). Notwithstanding these notable improvements, more needs to be done. For instance, access to the titling of farmland still remains highly centralized, making it difficult for smallholder farming households to gain title to the land which they would then use to access credit facilities to enhance their production levels.

3.6.3. Market and Trade Policies

Policy Statement #3: Government and the private sector will implement and adhere to predictable, rule-based market and trade policies and strengthen public-private coordination and dialogue

Notable positive interventions by the GoZ relating to market issues have taken place in the period 2011-14—as noted in Section 3.4—such as improved market facilities. The marketing of various agricultural products, in general, has improved over the past four years. For instance, consumers are able to access a number of products, which used to be seasonal, throughout the year such as green maize, tomatoes, and traditional vegetables and fruits. Small livestock meat products, such as goat and “village chicken”, are sold in a number of supermarkets and urban shops.

Zambia is well positioned as a net exporter of maize in the region, and hence should manage its maize stocks vis-à-vis export bans in a way that reflects what is on the ground. Consequently, the GoZ should manage maize export bans in such a way that they are rule-based and predictable.
3.6.4. Infrastructure Investment Priorities

*Policy Statement #4: Government in consultation with other stakeholders will identify investment priorities in infrastructure development that support the agriculture sector including crops, livestock and fisheries*

Road construction under the Link Zambia 8,000 Project has considerably gathered momentum in the period 2011-14. This is expected to positively impact agricultural production and productivity, given the improved accessibility to markets and the relative ease with which inputs will be delivered to farming areas, as well as produce to markets. The following are cases in point in terms of road improvement:

- Mbalâ–Nakonde road (completed);
- Chinsali–Chama road (will link Muchinga Province to Eastern Province);
- The bottom road from Siavonga to Sinazongwe district;
- Other roads linking provinces more directly, such as Southern and Lusaka through Chiawa, Lusaka and Central through the Kasisi road, among others; and
- Various roads opening up and linking to farm blocks across the country.

Communication towers (i.e., radio, television, mobile phone) have been erected across the country, positively impacting on communication in various forms. Irrigation infrastructure has also been constructed. For instance, the GoZ—in partnership with African Development Bank (AfDB) and the Finnish Development Cooperation Agency under the Small-Scale Irrigation Project—has developed three new irrigation schemes (i.e., Sinazongwe, Nzenga, and Nega Nega). The total area of the three schemes is approximately 785 ha, benefiting 500 small-scale farmers. A total of 120 ha has been planted with sugar in Nega Nega. Livestock infrastructure is being targeted for development, particularly in Muchinga and the Northern provinces under the AfDB-funded Livestock Infrastructure Support Project.

Other infrastructure development initiatives being implemented through the support of various partners include the World Bank’s Irrigation Development and Support Project, Livestock Development and Animal Health Project, and Agriculture Productivity Program for Southern Africa, as well as the Technical Cooperation on the Community-Based Smallholder Irrigation offered by the Japan International Cooperation Agency.

Aquaculture development has been notable in the past three or so years, with the Copperbelt Energy Company promoting the establishment of fish ponds and big firms diversifying into fish farming, including Savannah Streams Ltd., Yalelo, and Lake Harvest Zambia Ltd. Through government request, the Asian Development Bank has begun to support fish farming (i.e., cage farming that will yield 0.5 tons of fish per harvest). The GoZ, in partnership with the Finnish Development Cooperation Agency, is supporting aquaculture development in Luapula province under the second Programme for Luapula Agricultural and Rural Development (PLARD II). PLARD II has facilitated the piloting of cage culture in the fisheries of Luapula province, as well as the development of environmental project briefs for new sites to expand cage culture in the province.

Another example is the two stages of the Strengthening Climate Resilience (PPCR) project (Phase I and Phase II) in the Zambesi and Kafue river basins, funded by the World Bank and African Development Bank, respectively. Phase I (2010-13) was meant to help the GoZ design the Strategic Programme for...
Climate Resilience, while Phase II (2013-19) focuses on implementation and targets the improvement of the adaptive capacity of vulnerable populations, investments in climate-resilient infrastructure, and programmatic support (OPM, 2014).

Notwithstanding the above highlighted improvements, the GoZ should further encourage the private sector to invest in infrastructure development to positively impact on agriculture transformation. Implementation of appropriate incentives will go a long way in attracting the private sector to invest in agriculture-related infrastructure.

Other programs under implementation and supported by various partners include are the Climate Smart Agriculture project (European Union); adaptation strategies to climate variability and climate change in agro-ecological zone regions I and II; Performance Enhancement Programme (European Union); Rural Extension Service Capacity Advancement Project (Japan International Cooperation Agency); Agriculture Productivity and Market Enhancement Project (AfDB), Programme for Luapula Agriculture and Rural Development (Finnish Development Cooperation Agency), Smallholder Productivity Promotion Programme (IFAD); and Smallholder Agribusiness Promotion Programme (IFAD).

3.6.5. Private Sector Investment in Production and Markets

*Policy Statement #5*: Government will facilitate private sector scaling up investments in production, input and output markets for crops, livestock and fisheries

Progress in government facilitation of the private sector to scale up investments in input and output markets has been slow in the past four years. The GoZ has continued to involve itself in input and output markets through FISP and FRA. In one of the years (2013), however, it did manage to abide by its promise of procuring what the country needed for its strategic reserves. This shows that with greater determination, the GoZ will be able to confine its activities through FRA to focus on strategic food reserves.

The decision made by the GoZ in June 2015 to pilot the e-voucher system in the 2015/2016 agricultural season in a bid to restructure FISP is welcome. It is expected to potentially increase private sector participation in input distribution and marketing, as long as its implementation is based on the best practice.

3.6.6. Diversified Extension

*Policy Statement #6*: MAL will promote diversified extension messages to cater for all categories of farmers including resource poor households

During the past four years, the GoZ has made considerable improvement in creating positions for extension staff which is now at 80 percent. The effective delivery of these services, however, has been hampered by logistical constraints that include inadequate transport and operational costs. According to subnational stakeholder consultations, in 2014 the nine districts visited received between 19 percent and 33 percent of the total budget, which was inadequate to support operational and other related costs. As a coping strategy, extension staff resorted to focusing on field days, demonstration plots, and conducting sessions at Farmer Training Centres (GoZ 2014).
Frontline extension staff would benefit from sufficient skills and knowledge in critical areas such as marketing, farming as a business, and climate change related issues. This would equip them to provide the required technical skills and knowledge to smallholder farmers.

3.6.7. Social Protection Instruments

*Policy Statement #7: Government will explore social protection instruments in partnership with private sector and civil society*

Valuable progress has been made in the past four years to promote the Social Cash Transfer program. For instance, from only one district involved in social cash transfers as a pilot prior to 2011, the number grew to 19 districts by 2013 and to 51 in 2014. In terms of beneficiaries, they have grown from 60,000 before 2011 to the current 140,000.

The Expanded Food Security Pack (funded by the Norwegian Agency for Development Cooperation) under the Ministry of Community Development, Mother and Child Health requires restructuring to make it a more effective social protection tool. In its current state, it is beset with targeting challenges, and the quantity of the inputs in the pack is insufficient to bring about the desired improvement in the socio-economic conditions of beneficiaries.

3.6.8. Research and Extension Linkages

*Policy Statement #8: Government commits itself to providing adequate resources in order to develop cost effective, demand-driven research and extension linkages focusing on public-private partnerships*

Research and development (R&D) and technology dissemination is one of the major drivers of agriculture-led economic development, with the smallholder farmer as the key player. From 2011 to 2013, research funding was inadequate, which led to the insufficient development and dissemination of the required level of technology to support smallholder productivity and production. Some progress has been made, however, in filling the staff establishment, with an extension department now estimated at 80 percent (MAL 2015). The staff situation at the camp level, however, remains a challenge, as noted from subnational consultations highlighted below.

As previously noted, the budget allocation for R&D improved in 2014 by more than 800 percent over the previous year, although the actual disbursement was low (less than 50 percent). The GoZ should continue allocating adequate funding to R&D, as well as improve actual disbursements.
Stakeholders consulted at the subnational level expressed various views regarding policy issues. These are summarized in Box 3.1.

**BOX 3.1: SUBNATIONAL LEVEL FINDINGS ON DISSEMINATION OF POLICIES/PLANS, FARMER INPUT SUPPORT PROGRAMME, AND FOOD RESERVE AGENCY**

Subnational level stakeholder perceptions were solicited on the performance of the Farmer Input Support Programme (FISP) and Food Reserve Agency (FRA). The administration of FISP presents a number of benefits and disadvantages to the targeted communities. On the positive side, a number of farmers in the provinces visited felt that FISP and FRA had been beneficial, citing the following as cases in point: FISP had stabilized their household food security and income levels to the extent that some of them had been able to acquire important assets such as goats, bicycles, and improved housing, and they had been able to buy additional fertilizer; and FISP had enabled them to send their children to school. In Katete, farmers felt that the FRA guarantees a market for smallholder farmers and acts as a bank for them.

Nevertheless, significant concerns were raised about FISP by stakeholders (especially farmers and private sector agro dealers) from at least seven of the nine districts visited. It was felt that (i) targeting was poor, leading to a considerable proportion of FISP inputs going to people who did not deserve it; (ii) FISP has worked against diversification on account of its emphasis on maize and, in practice, other crops and commodities are given little or no space; (iii) the program is a big drain to government resources and should be dropped; (iv) farmers complained about receiving fertilizer bags that had been torn and were underweight (in some cases by as much as 15 kilograms); (v) farmers would be given one or two bags of fertilizer less than what they had paid for (i.e., four bags).

There were general complaints across the nine districts regarding how the FRA had crowded out the private sector with respect to participation in maize marketing. The FRA’s handling of the maize marketing itself was marred by a number of challenges.

Challenges relating to knowledge management and dissemination were also noted. In the three provinces (Eastern, Muchinga, and Southern) and the nine districts visited (Petauke and Katete Nyimba in Eastern Province; Mpika, Isoka, and Nakonde in Muchinga Province; and Kalomo, Monze, and Livingstone in Southern Province), unawareness and little knowledge about the National Agriculture Investment Plan (NAIP), Draft National Agriculture Policy and other development strategies, such as the Revised Sixth National Development Plan, were widespread. Awareness was extremely low or totally absent by the five stakeholder categories at the three levels (provincial, district, and community), and all of them had not received the NAIP document. Ideally, the NAIP document should have been disseminated and popularized between May 2013 (following its official launch) and December 2013 in readiness for its implementation in January 2014. This is a fundamental knowledge management and dissemination gap.
Table 3.3 provides a summary picture of the extent to which the eight policy statements have been implemented.

**TABLE 3.3: STATUS OF DEVELOPMENT AND IMPLEMENTATION OF VARIOUS POLICY STATEMENTS**

<table>
<thead>
<tr>
<th>Policy Process</th>
<th>Quality of the Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government will develop and implement policies and programs that support increased productivity, sustainable land and water management, forestry, agroforestry, crops, livestock and fisheries development, and climate change adaptation and mitigation</td>
<td>Amber</td>
</tr>
<tr>
<td>Government will facilitate equitable access to land¹</td>
<td>Amber</td>
</tr>
<tr>
<td>Government and the private sector will implement and adhere to predictable, rule-based market and trade policies and strengthen public-private coordination and dialogue²</td>
<td>Amber</td>
</tr>
<tr>
<td>Government, in consultation with other stakeholders, will identify investment priorities in infrastructure development that support the agriculture sector, including crops, livestock, and fisheries</td>
<td>Green</td>
</tr>
<tr>
<td>Government, in consultation with other stakeholders, will identify investment priorities in infrastructure development that support the agriculture sector, including crops, livestock, and fisheries</td>
<td>Amber</td>
</tr>
<tr>
<td>Government will facilitate the private sector to scale up investments in production, as well as input and output markets for crops, livestock, and fisheries</td>
<td>Amber</td>
</tr>
<tr>
<td>Ministry of Agriculture and Livestock will promote diversified extension messages to cater for all categories of farmers, including resource-poor households</td>
<td>Amber</td>
</tr>
<tr>
<td>Government will explore social protection instruments in partnership with private sector and civil society</td>
<td>Amber</td>
</tr>
<tr>
<td>Government commits itself to provide adequate resources in order to develop cost effective, demand-driven research and extension linkages that focus on public-private partnerships</td>
<td>Amber</td>
</tr>
</tbody>
</table>

*Source: Zambia Comprehensive Africa Agriculture Development Programme Compact.*

¹A number of issues is already being attended to, including land audit and promotion of land ownership by women, among other initiatives.

²Key government sectors have established a public-private partnership desk, following a government directive.

**Key:**

- **Green** Commitment has been achieved to a reasonable degree
- **Amber** Commitment has been partly achieved, but additional attention is required
3.7. Adequacy of Policy Coverage

The current draft agriculture policy framework, if finalized and enacted, will go a long way in improving the performance of the agriculture sector. For instance, a considerable proportion of the crop marketing challenges are as a result of the non-enactment and operationalization of the market bill. This has resulted in a situation where a number of market interventions that could have easily been taken up by the private sector are still pending. The private sector will not actively participate in the grain market for fear of government policy inconsistence which would impose on them various risks, as already alluded to above.

The policy coverage needs further improvement in order to position the agriculture sector to spearhead wealth creation that leads to significant reduction in poverty levels in line with the 2014 Malabo Declaration. Some of the policy gaps calling for attention relate to agriculture finance for smallholder farmers, as well as those policies that would promote the private sector to heighten its service provision and delivery to them. This could take the form of incentives such as tax rebates for those private sector institutions that provide the strategic services to small-scale farmers that would make a significant impact on their level of productivity and production, thus leading to an agricultural transformation that would substantially reduce Zambia’s high rural poverty rate.

3.8. Summary

The GoZ has made considerable progress in the past four years toward improving the policy environment as well as undertaking various programs that support smallholder farmers. Apart from several programs that have been under implementation for smallholder crop value chains, the GoZ has taken an important step to restructure the FISP through the e-voucher system, as stipulated in the NAIP (2014-18). This will encourage entrepreneurship and private sector involvement in input distribution at the subnational and grassroots levels. The GoZ’s drive toward diversification will also be accelerated, given that the restructured FISP package will involve other inputs, including those for livestock and fisheries production as documented by the NAIP. The recent directive by the GoZ to farmers to sell their maize to the private sector is another important policy direction. Implicitly, this is a restructuring of the FRA, as well, where the agency will now be confined to dealing with strategic reserves.

With the bold steps that the GoZ has taken toward the improvement of the agriculture policy environment, it should be encouraged to stick to these positive policy directions and go beyond, toward the enactment of the market bill and the NAP. These two will consolidate and create an enabling agricultural policy environment that will be supportive of the restructuring efforts toward FISP and FRA that the GoZ has already taken. In addition, these policies are critical to positively and significantly ensure that smallholder farmers become active participants in transformational agriculture growth, to result in the kind of wealth creation that would substantially reduce the high rural poverty rate.

Table 3.4 summarizes the ratings of policy dimensions in Zambia. While the quality of policy planning has been of high standard and consultative in nature among key stakeholder categories, the area of execution needs further improvement.
## TABLE 3.4: SUMMARY OF IMPLEMENTATION OF POLICY DIMENSIONS IN ZAMBIA

<table>
<thead>
<tr>
<th>Policy Dimensions</th>
<th>Traffic Light Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of policy planning and execution</td>
<td>Amber</td>
</tr>
<tr>
<td>Consistency of policy mix</td>
<td>Amber</td>
</tr>
<tr>
<td>Alignment of the National Agriculture Investment Plan with policies</td>
<td>Green</td>
</tr>
<tr>
<td>Policy implementation status</td>
<td>Amber</td>
</tr>
<tr>
<td>Adequacy of policy coverage</td>
<td>Amber</td>
</tr>
</tbody>
</table>

*Source: Authors’ construction*

**Key:**
- **Green**: Commitment has been achieved to a reasonable degree
- **Amber**: Commitment has been partly achieved, but additional attention is required
4. INSTITUTIONAL REVIEW

4.1. Introduction

This section reviews the institutional landscape of Zambia’s agriculture sector. The specific focus areas of the section include the institutional landscape of the NAIP; review of the coordination within government institutions among DPs; participation of nonstate actors in agricultural policy and program formulation and implementation; institutional alignment with the NAIP and institutional gaps; and the institutional implementation capacity.

4.2. Institutional Landscape of the National Agriculture Investment Plan

The overall implementation responsibility of the NAIP lies with the MAL. The MAL focuses on creating an enabling environment for agricultural development and economic growth to be led by the private sector. In addition, the MAL is meant to ensure linkages and synergies with other relevant government ministries and institutions (covering all relevant sectors) for effective implementation of its mandate. The MAL uses the Ag-SAG to engage other stakeholders on key issues affecting the sector, as well as report progress on the implementation of its mandate. At the subnational level, the existing structures are:

- Provincial Agriculture and Environment Subcommittee of the Provincial Development and Coordination Committee;
- District Agriculture and Environment Subcommittee of the District Development and Coordination Committee; and
- Camp Agriculture Committee.

In line with the liberalization policy, the private sector is meant to drive the development and growth of the agriculture sector along with civil society and farmers’ organizations (including small-, medium-, and large-scale farmers). Other partnerships that are critical to the implementation of the NAIP include:

- CPs
- Financial institutions
- Input suppliers
- Agro-industry
- Traders
- Regional Economic Communities (e.g., Common Market for Eastern and Southern Africa and Southern Africa Development Community (SADC)).
Table 4.1 below highlights key institutions involved in the formulation of the NAIP.

**TABLE 4.1: A SELECTION OF KEY INSTITUTIONS INVOLVED IN THE FORMULATION OF THE NATIONAL AGRICULTURE INVESTMENT PLAN ¹**

<table>
<thead>
<tr>
<th>Category of institution</th>
<th>Formulation of National Agriculture Investment Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>• Ministry of Agriculture and Livestock</td>
</tr>
<tr>
<td></td>
<td>• Ministry of Finance</td>
</tr>
<tr>
<td></td>
<td>• Ministry of Lands</td>
</tr>
<tr>
<td></td>
<td>• Ministry of Commerce and Industry</td>
</tr>
<tr>
<td></td>
<td>• Ministry of Local Government and Housing</td>
</tr>
<tr>
<td>Cooperating Partners</td>
<td>• European Union</td>
</tr>
<tr>
<td></td>
<td>• World Bank</td>
</tr>
<tr>
<td></td>
<td>• African Development Bank</td>
</tr>
<tr>
<td></td>
<td>• United States Agency for International Development</td>
</tr>
<tr>
<td></td>
<td>• Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td></td>
<td>• Finnish Development Cooperation Agency</td>
</tr>
<tr>
<td></td>
<td>• Government of Sweden (SIDA)</td>
</tr>
<tr>
<td></td>
<td>• International Fund for Agricultural Development</td>
</tr>
<tr>
<td></td>
<td>• UK Department for International Development</td>
</tr>
<tr>
<td></td>
<td>• Japanese International Cooperation Agency</td>
</tr>
<tr>
<td></td>
<td>• German Federal Enterprise for International Cooperation (GIZ)</td>
</tr>
<tr>
<td></td>
<td>• World Food Programme</td>
</tr>
<tr>
<td>Private sector</td>
<td>• Seed Co</td>
</tr>
<tr>
<td></td>
<td>• Omnia Fertilizer Zambia Ltd.</td>
</tr>
<tr>
<td></td>
<td>• ATS Agrochemicals</td>
</tr>
<tr>
<td></td>
<td>• Afrigri Corporation Ltd.</td>
</tr>
<tr>
<td></td>
<td>• Millers Association of Zambia</td>
</tr>
<tr>
<td></td>
<td>• Grain Traders Association of Zambia</td>
</tr>
<tr>
<td></td>
<td>• Cotton Association of Zambia</td>
</tr>
<tr>
<td>Nongovernmental organizations</td>
<td>• Programme Against Malnutrition</td>
</tr>
<tr>
<td></td>
<td>• Conservation Farming Unit</td>
</tr>
<tr>
<td></td>
<td>• Catholic Relief Service</td>
</tr>
<tr>
<td></td>
<td>• Civil Society for Poverty Reduction</td>
</tr>
<tr>
<td>Farmer/community-based institutions</td>
<td>• Zambia National Farmers’ Union</td>
</tr>
<tr>
<td></td>
<td>• National Association for Peasant and Small Scale Farmers of Zambia</td>
</tr>
<tr>
<td></td>
<td>• Zambia Cooperative Federation</td>
</tr>
<tr>
<td></td>
<td>• Agriculture Consultative Forum</td>
</tr>
<tr>
<td>Research/Academia</td>
<td>• Indaba Agriculture Policy Research Institute</td>
</tr>
<tr>
<td></td>
<td>• University of Zambia</td>
</tr>
</tbody>
</table>

*Source: National Agriculture Investment Plan*

¹ Note that it was not possible to establish all institutions involved in the implementation of the NAIP. Furthermore, the list of those who participated in the formulation of the program is not exhaustive.
4.2.1. Stakeholder Roles

Roles of selected major stakeholders with regard to the implementation of the NAIP are discussed below.

Central Government: The central government’s facilitating functions through the MAL are meant to include:

- Strategic planning
- Oversight
- Policy formulation
- Capacity building of private sector and CSOs
- Enforcement of legislation
- Regulation and inspection
- Provision of basic agricultural and rural infrastructure
- Financing of the control of pests and diseases of national economic importance
- Sector coordination
- Overall monitoring and evaluation.

Local Governments: Local governments (at the provincial and district levels) are meant to offer program investors the incentives to identify ventures that are socially and environmentally sustainable. The incentives relate to an enhanced private sector driven agricultural development agenda within judicial boundaries as a “win/win” for communities and local governments, as well as the investor. Local governments are to negotiate terms and conditions for concessions or contracts for the management of infrastructures, including investments modelled after Built, Own Operate and Transfer (BOOT). They are to ensure the availability of socially and environmentally feasible sites for resource development and use within their districts or provinces.

Private Sector: The private sector is meant to take an influential role in driving the agriculture sector development agenda. In this regard, the GoZ and the other stakeholders see a major role for the private sector in NAIP Investment programs. The private sector, however, has yet to be adequately engaged in adopting its strategic position.

Communities: Communities, community groups, or community-based institutions are meant to participate in the negotiation of investment terms, conditions, and concessions to ensure that community concerns are addressed. They are encouraged to participate in the regular monitoring and oversight of investments to ensure compliance with community interests. The Participatory Monitoring and Evaluation exercise, which was tested and proven during implementation of the Zambia Social Investment Fund, should be applied by communities in order to track the progress and impact of various interventions within community boundaries. Communities provide the services and labor force required by local investments and they generally take advantage of acquiring the new skills introduced by investors. Community contribution to various infrastructure projects includes labor and building materials. In some cases, monetary contributions are also made.
Box 4.1 highlights the issues that emerge from subnational level stakeholder consultations relating to the institutional landscape.

**Box 4.1: Subnational Level Findings on Institutional Landscape**

Stakeholder views were solicited regarding extension services and the use of farmer training centers/agriculture training institutes. Grassroots structures were also discussed. Two key findings were noted.

On the positive side, farmers in the nine districts visited (to a lesser extent, those in Muchinga province) reported receiving technical messages that they found valuable on the following: (i) conservation agriculture; (ii) diversification; and (iii) improved farming practices. From interactions with farmers, it was clear that they value these messages from extension staff.

A number of issues on the negative side were also noted. First, in the nine districts visited, there was poor extension-farmer ratio cited, up to 1:3000 in the case of the Camp Extension Officers (CEO)/Farmer ratio, compared to the recommended 1:400. The situation was worse with regard to the Veterinary Assistant/farmer ratio, which rose to 1:6000. In one of the districts visited, farmers cited that they see a CEO twice a year on average. In a bid to mitigate the negative effects of the low extension/farmer ratio, CEOs have used demonstration plots, field days, and have conducted farmer training sessions at Farmers’ Training Centres (FTCs), given the potential of these approaches to reach many farmers. One farmer group that was consulted complained of the inadequate skills and knowledge of Veterinary Assistants and cited the need to retrain them.

Second, in the districts visited, FTCs were in a state of disrepair. Nevertheless, they were being used by the Ministry of Agriculture and Livestock, the private sector (input dealers), and nongovernmental organizations to engage farmers and disseminate extension messages. With better planning and a more deliberate effort, the potential for using FTCs is high. One possible avenue to raise funds to rehabilitate FTCs—cited by stakeholders in at least three districts—is to charge the private sector and nongovernmental organizations for the use of the FTCs. In addition, once sufficiently rehabilitated, they could be an alternative for accommodation to the public, a practice that already exists in a number of districts.

Lastly, there is concern relating to the operations of the Community Agriculture Committee. Farmer groups/associations are charged K 400 without any clear explanation on how this money is used. Most of these committees are run by CEOs and farmers feel cheated, frustrated, and are wondering why nothing has been done about it by the higher authorities. The same committees charge farmers K 20 for fertilizer transportation.
4.3. Coordination

The general scenario regarding coordination is that it is stronger at the national level, particularly among the MAL, Cooperating Partners, the private sector, and NGOs, although weaker as it moves away to the grassroots/community level.

4.3.1. Coordination within Government Institutions

Coordination within government institutions has been a challenge where it has involved only government officials. There are no clear forums designed specifically for this purpose and this has been a notable gap. The only forum is in the context of an overall view relating to NDPs, led by the Ministry of Finance, as well as initiatives that are spearheaded by the Cabinet. Often, when other government institutions are called for specific meetings, they rarely present themselves. In terms of coordination involving other stakeholders (i.e., nonstate), there are well-defined forums at different levels for the purpose, as discussed below. The most important coordinating institution at the national level is the Ag-SAG, which meets quarterly (except for the whole of 2014). Other Ag-SAG functions include policy formulation and the provision of advisory services. Cooperating partners have their own forum to foster coordination and this includes those who provide support to the agriculture sector. Meetings are held on a monthly basis and relate to the review of key sector issues. At the provincial level, the Provincial Agriculture Coordination Office coordinates major agricultural activities. The Provincial Development Coordination Committee provides the overall coordination and the monitoring and evaluation of cross-sector development initiatives.

The District Agriculture Coordination Office brings together key agricultural-related activities at the district level. Similar to the provincial level, there is a District Development and Coordination Committee that provides overall coordination of activities across sectors, including those of the agriculture sector. While these structures exist at the various levels mentioned, in practice they do not always function to expectation on account of inadequate funding.

4.3.2. Coordination among Development Partners

Coordination among DPs is well defined and has been efficient. The DPs take turns to chair and coordinate DP activities in the sector. They hold monthly meetings to discuss various issues of affecting the agriculture sector, occasionally engaging with the GoZ on issues of concern. DPs have developed a donor matrix that not only provides useful information on their respective financial commitments, but also facilitates the alignment of DP work to national policies and programs. The donor matrix is updated regularly to ensure the capture of the latest donor developments.
4.3.3 Coordination among Subnational Level Actors

Findings at the subnational level regarding coordination are summarized in Box 4.2.

**BOX 4.2: SUBNATIONAL LEVEL FINDINGS ON COORDINATION**

Stakeholder consultations at the subnational level in the nine districts that were visited reported poor coordination at the district and community levels. This ranged from extension messages delivered to the farmers to interventions. For example, in two districts, the District Agriculture Coordination Offices (DACO) are unaware of some of the projects operating in their respective district. In other cases, a number of interventions, supported by Cooperating Partners, were not captured (e.g., World Food Programme). District officials expressed the concern that nongovernment organizations implement activities without engaging and consulting with authorities at the district and community levels.

In one district, agro-input suppliers were reported to be training farmers in (i) conservation farming; crop protection; (ii) farming as a business; (iii) safety precaution on chemical handling, and; (iv) profitability of farming and record keeping. These activities, however, were not coordinated through the DACO and they were unclear. In addition, other districts reported that farmers were sometimes confused, given that interventions in their communities were undertaken by different actors.

Nevertheless, there are more encouraging developments that are now starting to emerge. The Agriculture and Environment Subcommittees of the Provincial Development Coordination Committee (PDCC) and District Development Coordination Committee (DDCC) that are assumedly responsible for aid coordination within the sector and they meet frequently. Nonetheless, it appears they are not so since in one district, the coordination of aid was actually undertaken by the Agriculture and Environment Subcommittee of DACO. Nongovernment organizations and operating in the agriculture sector are required to attend and submit reports highlighting progress and key implementation issues.

Eastern Province districts reported considerable improvement in aid coordination on account of Feed the Future, which has strong links with the DACO, had scheduled regular meetings chaired by the DACO, and discussed various issues relating to agriculture performance.

4.4. Participation by Nonstate Actors in Policy and Program Formulation

Participation by nonstate actors in agricultural policy and program formulation has been largely at the national level and within the context of the Ag-SAG. For instance, nonstate actors actively participated in the formulation of the NAP and NAIP. As previously mentioned, the Ag SAG—among its other functions—provides policy direction and guidance to the sector. Its composition consists of a considerable proportion of nonstate actors that includes NGOs, the private sector, and representatives of farmers’ organizations.
4.5. Participation by Nonstate Actors in Policy and Program Implementation

Not all nonstate actors who have participated in policy and program formulation have been involved in the process of implementation. For instance, Cooperating Partners have rarely been involved, given their advisory capacity. Moreover, those nonstate actors who have actively participated in the past have scaled down their involvement. While a few, however, have engaged in policy and program formulation (e.g., NAP and NAIP), they have not adequately aligned their interventions to the national development frameworks they have been party to in terms of formulation. NGOs have tended to participate the most in policy and program implementation processes on account of their strategic position to interact at the community level, having been involved, to a large extent, in community mobilization and from time to time, dealt with advocacy issues.

4.6. Alignment of National Agriculture Investment Plan with Institutional Landscape and the Existing Gaps

The design and implementation of the NAIP have taken place at the national, provincial, district, and community levels as intended, given that the plan is designed to strengthen existing country development frameworks and institutional structures. Institutional gaps observed are those linked to policy legislation instruments that are more efficiently operationalized and have yet to be enacted, such as the Market Bill. Other evident gaps relate to the low level of performance by some institutions, such as Provincial Development Coordination Committee and District Development and Coordination Committees that do not always meet due to logistical challenges.

4.7. Institutional Implementation Capacity

The institutional implementation capacity of the NAIP has not always been at the required level on account of insufficient funding, resulting in inadequate performance by a number of institutions. In some cases, low staff levels have proved a challenge. The MAL Policy and Planning Department, which, among other things, is expected to undertake the day-to-day coordination activities of the NAIP at a practical level, is severely under-staffed. This leads to over-stretched capacity, making it difficult for the department to operate effectively.

4.8. Summary

The implementation of the NAIP is adequately set up institutionally, since it is anchored within already existing structures. Nevertheless, these need strengthening if they are to fulfil their mandates, and they depend on adequate funding to do so. Coordination among government institutions was also below expectation and has been characterized by either the absence of appropriate mechanisms or where they exist they have been weak and dysfunctional. While nonstate actors are shown to have actively participated in policy and program formulation, their involvement in the implementation process is shown as weak. Of the issues discussed above, the best performance has been on behalf of the DPs.

- It is essential that the GoZ does more to provide effective coordination at all levels by:
- Putting in place procedures and mechanisms to ensure that DPs see the value of including government development frameworks as a basis for their interventions;
- Insisting on “one set of extension messages regarding all agriculture thematic areas, scientifically proven and evidence based” to be delivered to farmers, with the GoZ being the custodian of such messages; and

- Strengthening and operationalizing existing coordination mechanisms such as District Development Coordination Committees and their respective committees on agriculture and Community Agriculture Committees.

Table 4.2 summarizes the ratings of institutional dimensions in Zambia.

**TABLE 4.2: SUMMARY OF RATINGS OF INSTITUTIONAL DIMENSIONS IN ZAMBIA**

<table>
<thead>
<tr>
<th>Policy Dimensions</th>
<th>Traffic Light Rating</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination within government institutions</td>
<td>Amber</td>
<td></td>
</tr>
<tr>
<td>Participation of nonstate actors in policy and program formulation</td>
<td>Amber</td>
<td></td>
</tr>
<tr>
<td>Participation of nonstate actors in policy and program implementation</td>
<td>Amber</td>
<td></td>
</tr>
<tr>
<td>Alignment of National Agriculture Investment Plan with institutions</td>
<td>Amber</td>
<td></td>
</tr>
<tr>
<td>Institutional implementation capacity</td>
<td>Amber</td>
<td></td>
</tr>
<tr>
<td>Coordination among Development Partners</td>
<td>Amber</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Authors’ construction*

**Key:**

- **Amber** Commitment has been partly achieved, but additional attention is required
5. REVIEW OF KEY FINANCIAL AND NONFINANCIAL COMMITMENTS

5.1. Introduction

This section reviews the financial and nonfinancial commitments made by various stakeholders in the agriculture sector (i.e., government, Cooperating Partners, the private sector, civil society, and farmers). The commitments reviewed include budgetary allocation; financial and capacity-building support; investment and equipment; and organizational commitments. The realization of these commitments is crucial to providing the basis for the achievement of the overall impact results of the NAIP in terms of the reduction in rural poverty, increasing agricultural exports, reducing chronic malnutrition in children under five years of age, reducing soil erosion, and increasing cereal production. These impact results are linked to those of the NAIP’s individual program as established in the Investment Plan (i.e., Sustainable Natural Resource Management; Agriculture Production and Productivity Improvement; Market Access and Services Development, Food And Nutrition Security and Disaster Risk Management).

5.2. Key Financial and Nonfinancial Commitments by Government

5.2.1. Inventory of Government Budget and Other Financial Commitments

The GoZ is in its second year of implementing the NAIP (2014–18), which was launched in May 2013. The key government commitments within the context of the Investment Plan are threefold: (i) funding of investment programs, (ii) facilitating an enabling environment through the enactment and implementation of appropriate policies, and (iii) effective coordination of NAIP activities by ensuring the strengthening of appropriate institutions through training, qualified staff, appropriate equipment and other facilities (e.g., office and other forms of accommodation), among others.

A review of Table 5.1 indicates that in 2014, there was a total increase in GoZ budgetary allocation of 73 percent compared to the previous year. In four years (2011–14), the proportion of the national budget allocated to the agriculture sector was highest in 2014 (i.e., 7.2 percent compared to 5.8 percent in 2013 and 6 percent in 2011 (IAPRI, 2013). While figures for the disbursement and spend of this allocation were unavailable, it nonetheless shows a positive development toward Zambia’s achievement of the CAADP recommendation of a minimum 10 percent allocation of the annual national budget to agriculture.

Another positive budget outcome in 2014, representing the NAIP’s first year of implementation, is the increase in the Social Cash Transfer program allocation of 176 percent compared to the previous year. This is in line with Programme 5(i.e., Food and Nutrition Security and Disaster Risk Management) which, among others, seeks to cushion vulnerable smallholders in its bid to address the high rural poverty rate. Compared to 2013, there were also increase in the allocation for the rehabilitation of major feeder roads by 140 percent, in an effort to improve access to rural markets; and R&D by nearly 830 percent, representing 11 percent of the total 2014 agricultural budget (IAPRI, 2013). These outcomes are encouraging since R&D, for decades, has been seriously underfunded despite the fact that it is one of the most critical components for driving agricultural development, directly impacting smallholder productivity and production.
Despite the positive outcomes mentioned above, there are a number of challenges that include:

- The continued high allocation of budgetary resources to the FISP and FRA, in the absence of a clearly defined roadmap of how to implement the FISP through the e-voucher system. The two account for nearly half (52 percent) of the 2014 agriculture budget.

- The private sector should be further encouraged to participate in grain marketing, following the directive to farmers to sell this year’s maize harvest to the private sector. As previously stated, this can take place through tax rebates to effectively increase the necessary operational funds.

The total budget allocation for the NAIP for its five-year implementation is approximately US$2.7 million to which the GoZ and its Cooperating Partners are expected to contribute approximately US$2.1 million, or 78.4 percent (Table 5.2). The total NAIP allocation for 2014 alone was approximately US$488,000. According to available figures, out of this, 38 percent (US$185,000 was disbursed). This translates into 6 percent of the GoZ/Cooperating Partners NAIP budget of approximately US$ 2.1 million for the entire period, disbursed as of end of 2014.

**TABLE 5.1: ZAMBIA BUDGETARY EXPENDITURE IN ABSOLUTE TERMS, 2013 AND 2014**

<table>
<thead>
<tr>
<th>Main Budget Lines</th>
<th>2013 Allocations (millions of Zambian kwacha)</th>
<th>2014 Allocations (millions of Zambian kwacha)</th>
<th>Increase on Year-on-Year (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Emoluments</td>
<td>262</td>
<td>379</td>
<td>45</td>
</tr>
<tr>
<td>Recurrent Departmental Charges</td>
<td>162</td>
<td>275</td>
<td>70</td>
</tr>
<tr>
<td>Grants and Other Payments</td>
<td>11</td>
<td>91</td>
<td>727</td>
</tr>
<tr>
<td>Poverty Reduction Programmes/ Highly Indebted Poor Countries Initiative</td>
<td>861</td>
<td>1,575</td>
<td>83</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>94</td>
<td>377</td>
<td>301</td>
</tr>
<tr>
<td>Agricultural Show</td>
<td>6</td>
<td>4</td>
<td>-33</td>
</tr>
<tr>
<td>Agricultural Development Programmes</td>
<td>298</td>
<td>330</td>
<td>11</td>
</tr>
<tr>
<td>Arrears</td>
<td>55</td>
<td>0.77</td>
<td>-99</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,749</strong></td>
<td><strong>3,032</strong></td>
<td><strong>73</strong></td>
</tr>
</tbody>
</table>

*Source: Zambian Agriculture Sector Budget Analysis (IAPRI 2014).*
<table>
<thead>
<tr>
<th>National Agricultural Investment Plan Program Area or Subarea</th>
<th>Time-frame</th>
<th>Expenditure Estimate or Commitment (thousands U.S. dollars)</th>
<th>Progress (up to 2015)</th>
<th>Commitment Gap/ Excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop Production and Productivity</td>
<td>2014-18</td>
<td>668.50</td>
<td>Less than 10% was disbursed in 2014</td>
<td>In 2014, total expenditure was less than of half what was budgeted</td>
</tr>
<tr>
<td>Livestock Production and Productivity</td>
<td>2014-18</td>
<td>277.73</td>
<td>Less than 10% was disbursed in 2014</td>
<td>In 2014, total expenditure was less than half of what was budgeted</td>
</tr>
<tr>
<td>Aquaculture Production and Productivity</td>
<td>2014-18</td>
<td>40.43</td>
<td>Less than 10% was disbursed in 2014</td>
<td>In 2014, total expenditure was less than half of what was budgeted</td>
</tr>
<tr>
<td>Market Access and Services Development</td>
<td>2014-18</td>
<td>201.65</td>
<td>Less than 10% was disbursed in 2014</td>
<td>In 2014, total expenditure was less than half of what was budgeted</td>
</tr>
<tr>
<td>Food And Nutrition Security and Disaster Management</td>
<td>2014-18</td>
<td>517.33</td>
<td>Less than 10% was disbursed in 2014</td>
<td>In 2014, total expenditure was less than half of what was budgeted</td>
</tr>
<tr>
<td>Sustainable Natural Resources Management</td>
<td>2014-18</td>
<td>220.15</td>
<td>Less than 10% was disbursed in 2014</td>
<td>In 2014, total expenditure was less than half of what was budgeted</td>
</tr>
<tr>
<td>Knowledge Support Systems</td>
<td>2014-18</td>
<td>199.51</td>
<td>Less than 10% was disbursed in 2014</td>
<td>In 2014, total expenditure was less than half of what was budgeted</td>
</tr>
<tr>
<td>Institutional Strengthening</td>
<td>2014-18</td>
<td>15.57</td>
<td>Less than 10% was disbursed in 2014</td>
<td>In 2014, total expenditure was less than half of what was budgeted</td>
</tr>
<tr>
<td>Total</td>
<td>2014-18</td>
<td>2,141,000</td>
<td>Out of the 2014 budget of approximately US$488,000, 38% (or approximately US$185,000 was disbursed in 2014) which is 8.6% of the approximate total of US$2.1 million.</td>
<td>In 2014, total expenditure was less than half of what was budgeted.</td>
</tr>
</tbody>
</table>

Source: Goz 2013; Ministry of Finance 2012-14.
5.2.2. Inventory of Government Institutional and Capacity Development Commitments

Of the policy statements dealt with in Section 3, four were particularly significant in terms of the need to establish or strengthen appropriate institutional structures to facilitate effective implementation. The four policy statements under discussion are:

The GoZ will facilitate equitable access to land;

- MAL will promote diversified extension messages to cater for all categories of farmers, including resource-poor households;

- The GoZ explore social protection instruments in partnership with private sector and civil society; and

- The GoZ will provide adequate resources in order to develop cost-effective, demand-driven research and extension linkages that focus on public-private partnerships.

5.3. Commitments by Nonstate Actors

The major nonstate actors that financially committed to the NAIP are farmers and the private sector, whereas CSOs did not. The proportions of the US$2.7 million NAIP budget for the entire implementation period to be met by farmers and the private sector were 14 percent (approximately US$391,600) and 7 percent (approximately US$197,700), respectively. This indicates that the private sector has not been fully brought on board with respect to supporting the NAIP. A major challenge has been the nonexistence of a suitable platform whereby the GoZ can adequately engage the private sector. Figures on what has actually been spent to date by farmers and the private sector were unavailable.

According to the Zambia CAADP Compact (2011) NGOs committed themselves to the implementation of the NAIP by engaging in specific activities (with CSOs having a comparative advantage), including interventions related to Social Protection and Disaster Risk Management. So far, the GoZ has been working in partnership with community groups and NGOs to establish the Social Cash Transfer program. For instance, the Platform for Social Protection has implemented some aspects of the Social Cash Transfer program in terms of capturing and transferring beneficiary grievances to the GoZ.

5.4. Commitments by Development Partners

5.4.1. Inventory of Each Development Partner’s Nonfinancial Commitments

Within the framework of the CAADP, and particularly the NAIP, there were no specific nonfinancial commitments by Cooperating Partners. Most of the interventions supported by Cooperating Partners, however, include capacity building, capacity enhancement, and technical assistance nonfinancial commitments.
5.4.2. Inventory of Each Development Partner’s Financial Commitments

There are 12 Cooperating Partners actively supporting the agriculture sector in Zambia (see Table 5.3 footnote). Of these, six are multilateral agencies and half are bilateral institutions. They support the NAIP with US$675,000 (Table 5.3).

TABLE 5.3: SUMMARY OF DEVELOPMENT PARTNERS’ FINANCIAL COMMITMENTS TO THE NATIONAL AGRICULTURE INVESTMENT PLAN

<table>
<thead>
<tr>
<th>Project/Program</th>
<th>Development Partner(s)</th>
<th>Status</th>
<th>Dates</th>
<th>Total Budget (thousands of U.S. dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Natural Resource Management</td>
<td>The major Cooperative</td>
<td>Ongoing</td>
<td>2014-2018</td>
<td>60.7</td>
</tr>
<tr>
<td>Agricultural Production and Productivity Improvement</td>
<td>Partners supporting the agriculture sector¹</td>
<td>Ongoing</td>
<td>2014-2018</td>
<td>334.2</td>
</tr>
<tr>
<td>Market Access and Services Development</td>
<td>As above</td>
<td>Ongoing</td>
<td>2014-2018</td>
<td>100.3</td>
</tr>
<tr>
<td>Food and Nutrition Security and Disaster Risk Management</td>
<td>As above</td>
<td>Ongoing</td>
<td>2014-2018</td>
<td>53.1</td>
</tr>
<tr>
<td>Knowledge Support Systems</td>
<td>As above</td>
<td>Ongoing</td>
<td>2014-2018</td>
<td>107.3</td>
</tr>
<tr>
<td>Institutional Strengthening</td>
<td>As above</td>
<td>Ongoing</td>
<td>2014-2018</td>
<td>20.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>675.5</strong></td>
</tr>
</tbody>
</table>


Total expenditure by Cooperating Partners on agriculture in the period 2012-2014 rose from US$46.5 million to US$90.52 million, an increase of over 94.6 percent. Multilateral support had a more dramatic increase in the same period, rising by more than 1,300 percent from US$3.4 million in 2012 to US$48.97 million in 2014 (Table 5.4).

**TABLE 5.4: COOPERATING PARTNERS’ AGRICULTURE EXPENDITURE, 2012-14**

<table>
<thead>
<tr>
<th>Multilateral Cooperating Partners</th>
<th>Year</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2013</td>
<td>2014</td>
</tr>
<tr>
<td>African Development Bank</td>
<td>0.98</td>
<td>0.26</td>
<td>9.86</td>
</tr>
<tr>
<td>European Union</td>
<td>0</td>
<td>11.4</td>
<td>4.5</td>
</tr>
<tr>
<td>World Bank</td>
<td>2.4</td>
<td>13.9</td>
<td>18.08</td>
</tr>
<tr>
<td>Food and Agriculture Organization of the United Nations</td>
<td>0</td>
<td>0</td>
<td>4.2</td>
</tr>
<tr>
<td>United Nations Development Programme</td>
<td>0.02</td>
<td>0.17</td>
<td>0.02</td>
</tr>
<tr>
<td>World Food Programme</td>
<td>0</td>
<td>0</td>
<td>10.52</td>
</tr>
<tr>
<td>International Fund for Agricultural Development</td>
<td></td>
<td></td>
<td>1.66</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>3.4</td>
<td>25.73</td>
<td>48.97</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bilateral Cooperating Partners</th>
<th>Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Finnish Development Cooperation Agency</td>
<td>4.5</td>
<td>11.7</td>
</tr>
<tr>
<td>German Federal Enterprise for International Cooperation</td>
<td>13.09</td>
<td>0.68</td>
</tr>
<tr>
<td>International Development Ireland</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Japan International Cooperation Agency</td>
<td>0.06</td>
<td>3.18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multilateral Cooperating Partners</th>
<th>Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Norwegian Agency for Development Cooperation</td>
<td>2.67</td>
<td>6.33</td>
</tr>
<tr>
<td>Swedish International Development Cooperation Agency</td>
<td>10.07</td>
<td>4.2</td>
</tr>
<tr>
<td>UK Department for International Development</td>
<td>1.5</td>
<td>3.17</td>
</tr>
<tr>
<td>United States Agency for International Development</td>
<td>11.22</td>
<td>4.75</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>43.11</td>
<td>34.01</td>
</tr>
<tr>
<td>Grand Total</td>
<td>46.51</td>
<td>59.74</td>
</tr>
</tbody>
</table>

*Source: Ministry of Finance.*
A comparison of agricultural expenditure by multilateral Cooperating Partners on the one hand and bilateral Cooperating Partners on the other is presented in Figure 5.1. Overall, bilateral agencies reduced total expenditure on agriculture in the period under review from US$43.11 million in 2012 to US$34.01 million the following year. The figure improved in 2014 to US$41 million from that of the previous year. At the same time, expenditure by multilateral donors increased in the same period, as indicated.

The difference in the expenditure patterns between multilateral and bilateral Cooperating Partners may be attributed to the lower middle-income status attained by Zambia nearly six years ago. This has prompted a number of bilateral donors to either realign their support or remove themselves in preference to more needy countries. However, bilateral donors perceive this as an improvement in Zambia’s economic situation, whereby it is now able to borrow and repay loans.

**FIGURE 5.1: COOPERATING PARTNERS’ EXPENDITURE PATTERNS: BILATERALS VERSUS MULTILATERALS, 2012–14**

![Bar chart showing CP expenditure in million US dollars for 2012, 2013, and 2014 for multilaterals and bilaterals.](chart.png)

*Source: Ministry of Finance.*

*Note: CP – Cooperating Partner.*

Figure 5.2 presents total agriculture expenditure by Cooperating Partners as a percentage of their expenditure on all sectors in the period 2012-14. The figure shows an upward trend in terms of the proportion compared to total Cooperating Partner expenditure on all sectors, from 5.6 percent in 2012 to 19.7 percent in 2013, reducing to 16.8 percent in 2014. This positive trend suggests that these partners continue to consider agriculture as significant to the country’s economic development, thereby contributing significantly to poverty reduction—a positive accomplishment of Cooperative Partner funding.
Stakeholders at the subnational level were consulted regarding budget disbursements of the GoZ and nonstate actors, particularly government officials and NGO projects, with farmers being questioned about their accessibility to credit. Major findings are discussed in Box 5.1.

**BOX 5.1: SUBNATIONAL LEVEL PERCEPTIONS ON KEY FINANCIAL AND NONFINANCIAL COMMITMENTS**

Disbursements by the District Agriculture Coordinator Office in the districts visited in 2014 ranged between 20 percent and 37 percent, with disbursements to agricultural training institutions less than 20 percent. NGOs apparently received 100 percent of their budget. Stakeholders in one of the districts expounded on the financial challenges that face small-scale farmers as follows: (i) access to finance is exceedingly expensive (e.g., National Savings and Credit Bank), with high interest rates and transaction costs being an issue; (ii) the District Agriculture Coordinator Office is not in a position to provide financing; (iii) farmers are not well informed on how to complete application forms to enable them access funding (e.g., Matching Grant facility of the Smallholder Agribusiness Promotion Programme); (iv) Information on affordable financing is not easily available to farmers (e.g., Matching Grant facility of the Smallholder Agribusiness Promotion Programme), and; (v) technical details required to access financing are often not user-friendly for farmers.

The majority of farmers consulted in indicated that there were inadequate credit facilities available to them. Nonetheless, a considerable proportion (at least 20 percent) of those consulted had managed to obtain some credit in 2014. The most common credit facilities were from cotton firms (particularly in Eastern Province), as well as from the Zambia National Farmers’ Union under the Lima Credit Scheme (Southern Province). Nevertheless, the 30 farmers who gained credit from the Lima Credit Scheme (25 male and 5 female) in Monze were discouraged, citing the late delivery of inputs by the Zambia National Farmers’ Union. This affected yields and, consequently, the farmers have been unable to pay the loan back. In Kalomo, however, the 50 farmers who obtained credit from the same scheme had not complaints.
Despite the challenges highlighted above regarding financing, farmer groups are beginning, themselves, to address some of the funding challenges that they face, as demonstrated in Box 5.2.

**BOX 5.2: SOLUTIONS BY FARMERS TO RESOLVE FUNDING CHALLENGES**

In one district that was visited, farmers are able now to contribute toward their needs through a cooperative that offers grants, an aspect of their culture. In addition, it is not uncommon in this district for farmers to contribute toward infrastructure projects that benefit them. For instance, one cooperative raised K 12,000 (approximately US$1,700) toward the construction of a cooperative office block and a conference center. Moreover, some cooperatives have been successful in providing soft loans to members, as reflected by one that has 22 fully paid members and pays membership dividends.

### 5.5. Summary

Zambia’s NAIP is in its second year of implementation since it was launched in May 2013. Commitments made by the GoZ cover its financing and creation of an enabling policy environment to facilitate implementation. The GoZ has made positive strides toward achieving its financial commitments, evidenced by the improvement in the agriculture sector allocation in 2013. Total disbursements in 2014 were 38 percent, based on Ministry of Finance data. The GoZ has also made some progress toward facilitating an effective NAIP implementation. Efforts to address the restructure of FISP and FRA have been undertaken. Commitments by Cooperating Partners have been mainly financial in nature and target the NAIP financing gap. While Cooperating Partners have further committed by more than 11.6 percent, there are no data to establish the proportion of the disbursed by Cooperating Partners in 2014.

Table 5.5 summarizes the ratings of commitment honors by the various actors in the agriculture sector.

**TABLE 5.5: SUMMARY OF RATINGS OF COMMITMENT HONORS BY VARIOUS ACTORS**

<table>
<thead>
<tr>
<th>Area of Commitment</th>
<th>Traffic Light Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government financial commitments</td>
<td>Amber</td>
</tr>
<tr>
<td>Government nonfinancial commitments</td>
<td>Amber</td>
</tr>
<tr>
<td>Nonstate actors financial/nonfinancial commitments</td>
<td>Amber</td>
</tr>
<tr>
<td>Development partner financial commitments</td>
<td>Amber</td>
</tr>
<tr>
<td>Development partner nonfinancial commitments</td>
<td>Amber</td>
</tr>
</tbody>
</table>

Key:

- **Amber** Commitment has been partly achieved, but additional attention is required
6. AGRICULTURE SECTOR PERFORMANCE

6.1. Introduction

This section assesses the performance of Zambia’s agriculture sector during the period under review. The performance of the agriculture sector, in the context of the 2015 JSR, should have been assessed using the five main Impact Indicators and the program and component targets as some of the main parameters. These were presented in the NAIP. The five impact indicators relate to poverty reduction; agriculture exports as a percentage of nontraditional exports; chronic malnutrition among children under five years old; annual soil erosion rate; and cereals production. Since the implementation of the NAIP commenced only in 2014, however, it is unrealistic to expect any changes in Key Performance Indicators (KPI) at impact and outcome levels. Future JSRs are expected to deal with higher level indicators, particularly at the outcome level. In this regard, the focus of the current review as it relates to the NAIP is mainly at the output level and, in some cases, at the activity stage (i.e., where data is available).

Ideally, output targets from the Annual Work Plan and Budget (AWPB) for 2014 should have been the key focus for the review. The AWPB should have been developed from the NAIP and should have had clear priorities and justifications for each output target. The Annual Plan should have also highlighted the main activities required to produce each output target, as well as the respective budget figures for each main activity (and the summation of activity budgets should have given output budgets). Going forward, future JSRs should be based on annual output targets from AWBPs, with clear priority outputs and their respective main targets and budgets.

Given that the CAADP-related processes in the country began several years ago, for some KPIs efforts have been made to assess performance covering the period 2011-14. This section focuses on two aspects: (i) a brief overview of selected general KPIs covering the period 2011-14, and (b) a subsector review of fisheries, livestock, and crops whose depth depends on availability of data. The subsector review is an attempt to highlight some aspects of the performance of the NAIP in 2014, as well as those of selected subsector elements in the period 2011-14.

Views of stakeholders at the subnational level on the performance of the sector were also solicited. The main themes that were questioned in this regard included crop production and productivity, animal production and productivity, fish production and productivity, use of farming inputs, livestock disease occurrence, and cross-cutting issues. The main concerns that emerged were negligible and do not cover all these subthemes. This is not surprising, given the challenge to measure production and productivity. The findings are presented in the relevant section.

6.2. Structure of the Zambian Agriculture Sector

The Zambian agriculture sector is divided into three main segments: commercial, emerging, and subsistence, with three clear subsectors which are crops, livestock, and fisheries. Subsistence farmers constitute the largest proportion, accounting for more than 75 percent (numbering approximately 1.2 million households). These are the main focus of the NAIP. The main food crops grown are maize (predominantly produced by small scale farmers—at least 90 percent of them); cassava (consumed by approximately 30 percent of the country’s population of around 15 million); beans, and groundnuts.

The main cash crops are maize (for small scale farmers who grow the crop for cash and food); cotton (predominantly produced by small scale farmers); wheat (exclusively produced by large commercial farmers using irrigation) and sugarcane (mainly produced on large estates).
Cattle, goats, sheep, and chickens are the main livestock reared. The vast majority of farmers (at least 70 percent) rear village chickens (Goz 2013). The proportion of farmers rearing goats is increasing. Fish farming (aquaculture) is also gaining momentum among small-scale farmers, although at a slower pace than livestock farming.

### 6.3. Performance of the Agriculture Sector in Zambia

#### 6.3.1. Comprehensive Africa Agriculture Development Programme: Targets for Agricultural Development

According to the Maputo Declaration, African countries’ agriculture sector should grow by at least 6 percent if the sector is to position itself as a driver of economic development. Figure 6.1 below presents Zambia’s agriculture growth during the period 2010-14. In the period under review, the sector has been growing by more than 6 percent annually, albeit at a declining trend. The decline in the sector’s annual growth may be attributed to a number of factors, including the slowing down in the production levels of cotton, which had been a major cash crop for smallholder farmers for nearly three decades, late delivery of farming inputs (under the FISP) and, in some years, poor rainfall.

**FIGURE 6.1: ZAMBIA’S AGRICULTURAL GROSS DOMESTIC PRODUCT GROWTH RATE, 2010–14**

(% change in constant 1994 Zambian kwacha)

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>6.6</td>
</tr>
<tr>
<td>2011</td>
<td>7.7</td>
</tr>
<tr>
<td>2012</td>
<td>7.2</td>
</tr>
<tr>
<td>2014</td>
<td>6.5</td>
</tr>
</tbody>
</table>

*Source: Zambia Central Statistics Office (various years).*

African Heads of State and Government agreed on allocating at least 10 percent of the total national budget to agriculture to achieve the agricultural growth rate target of 6 percent. Figure 6.2 illustrates that in the past four years (2011-14), Zambia came closest to meeting the 10 percent CAADP target only in 2014 (at 7.1 percent). The lowest portion was in 2013 at 5.4 percent. The country needs to do more toward meeting the CAADP spending target. This should be accompanied by quality financing, targeting the major drivers of agricultural transformation and growth, as presented in the NAIP.

---

This includes agriculture, forestry, and fisheries.
Access to irrigation by farmers is crucially important to stabilizing productivity and production in the country, given the negative impacts brought about by climatic changes which have resulted in shortened rainy seasons, as well as reduced rainfall amounts. While the country has one of the highest irrigation potentials in the region, irrigation remains nevertheless underdeveloped, particularly among small-scale farmers on account of its high investment cost. The results indicate that the country has approximately 4.5 percent of arable land with irrigation equipment, indicating that Zambia still lags behind the target of 7 percent set by the SADC Regional Indicative Strategic Development Plan (Figure 6.3).

FIGURE 6.2: AGRICULTURE SHARE OF TOTAL NATIONAL BUDGET IN ZAMBIA, 2000–14

Access to irrigation by farmers is crucially important to stabilizing productivity and production in the country, given the negative impacts brought about by climatic changes which have resulted in shortened rainy seasons, as well as reduced rainfall amounts. While the country has one of the highest irrigation potentials in the region, irrigation remains nevertheless underdeveloped, particularly among small-scale farmers on account of its high investment cost. The results indicate that the country has approximately 4.5 percent of arable land with irrigation equipment, indicating that Zambia still lags behind the target of 7 percent set by the SADC Regional Indicative Strategic Development Plan (Figure 6.3).

FIGURE 6.3: PERCENTAGE OF ARABLE LAND IN ZAMBIA WITH IRRIGATION EQUIPMENT, 2009–13

Access to irrigation by farmers is crucially important to stabilizing productivity and production in the country, given the negative impacts brought about by climatic changes which have resulted in shortened rainy seasons, as well as reduced rainfall amounts. While the country has one of the highest irrigation potentials in the region, irrigation remains nevertheless underdeveloped, particularly among small-scale farmers on account of its high investment cost. The results indicate that the country has approximately 4.5 percent of arable land with irrigation equipment, indicating that Zambia still lags behind the target of 7 percent set by the SADC Regional Indicative Strategic Development Plan (Figure 6.3).

**Note:** SADC = Southern Africa Development Community; SA = South Africa; LI = Low Income; MI = Middle Income; RISDP = Regional Indicative Strategic Development Plan.
6.3.2. Land and Labor Productivity

Land productivity in the country has been, in general, significantly low, averaging US$50/ha/year in the period 2010-12, for which data was available. During the same period, the corresponding value for the SADC region was US$303 (Figure 4). Comparing Zambia to other SADC middle-income countries, the corresponding value is even higher (US$530/ha/year). It is worth noting, however, that land productivity in 2012 more than doubled compared to what it was in the previous year (2011). This is a positive development. There are a number of reasons that could explain the generally low land productivity in the country. The major one relates to poor farming practices, including late planting on account of late delivery of inputs as noted above. The other reason is that although use of improved seed has gone up, only 30 percent of small-scale farmers do access such seed.

FIGURE 6.4: LAND PRODUCTIVITY IN ZAMBIA, 2010–12

![Graph showing land productivity in Zambia, SADC, SADC-excl. SA, SADC-LI, and SADC-MI for 2010, 2011, and 2012.](source: FAO (2014).)

Notes: Ha = hectare; Yr = year; SADC = Southern Africa Development Community; SA = South Africa; LI = Low Income; MI = Middle Income.

Labor productivity in Zambia for the review period 2011-13 has been low compared to regional performance. Figure 6.5 indicates that the amount of money generated per worker per annum averaged US$361 compared to the corresponding SADC value of US$1,614. The amount decreased from US$379 in 2012 to US$341 the following year (2013) (Figure 6.5). During the same period, SADC labor productivity increased from US$1,582 per worker per year, to US$1,725, the reason for which decline is not clear.
6.3.3. Agricultural Trade Performance

In the period 2010-12, Zambia experienced a positive trade balance in all the years in terms of exported and imported agricultural products. The trade balance increased from US$247,227 to US$952,186 in the same period, an increase of close to 400 percent (Table 6.1 and Figure 6.6). Between the period under review, exports increased 2.6 times, from US$495,000 to US$1,309,000. This increase was partly on account of continued government emphasis on diversification away from mining to nontraditional economic activities. During the same period, imports decreased 0.5 times.

### TABLE 6.1: ZAMBIA’S AGRICULTURAL TRADE BALANCE, 2010–13

<table>
<thead>
<tr>
<th>Crop Product Imports and Exports</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Exports</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All agricultural products</td>
<td>495</td>
<td>759</td>
<td>1,309</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Imports</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All agricultural products</td>
<td>246</td>
<td>357</td>
<td>466</td>
<td>-</td>
</tr>
<tr>
<td><strong>Trade Balance</strong></td>
<td>249</td>
<td>402</td>
<td>843</td>
<td>-</td>
</tr>
</tbody>
</table>

*Source: Zambia Central Statistical Office.*
### 6.3.4. Development Results

For the past four years, total gross domestic product (GDP) has experienced reasonable growth. Most of the growth has come from sectors such as services and construction (which, in some years, experienced growth of more than 20 percent). Agriculture sector growth has not been impressive, however, as noted in Figure 6.7. Manufacturing GDP was also not encouraging in the period under review (Figure 6.7), in spite of its potential to create wealth for smallholders through value addition. One of the contributing factors to the low performance in manufacturing is inadequate appropriate technology at the cottage industry/farmer level. Where such processing technology has been in existence, it has been out of reach of the majority of farmers because it has been too expensive to access, given the underdevelopment of financing institutions and, consequently, credit facilities.
Growth of annual GDP in Zambia in the period 2011-13 has been one of the strongest in the SADC region (Figure 6.8). Despite this GDP growth, it remains insufficient to positively contribute to improving the socio-economic well-being of the country’s vulnerable population, as evidenced by the persisting high poverty levels.

**FIGURE 6.7: COMPOSITION OF ZAMBIA’S TOTAL GROSS DOMESTIC PRODUCT, 2011–14**

![Graph showing the composition of Zambia's total GDP from 2011 to 2014.](image)

Source: ReSAKSS (2014).

Notes: LCU = official exchange rate; GDP = gross domestic product.

**FIGURE 6.8: GROWTH OF ANNUAL GROSS DOMESTIC PRODUCT IN ZAMBIA, 2011–13**

![Bar chart showing the growth of annual GDP in Zambia from 2011 to 2013.](image)

Source: ReSAKSS (2014).

Notes: SADC = Southern Africa Development Community; SA = South Africa; LI = Low Income; MI = Middle Income.
Zambia has one of the highest global hunger indices, far higher than that of the SADC region (Figure 6.9). The hunger index was just under 26.3 in 2000, slightly declining in 2005 and 2013 to 25.3 and 24.1, respectively. The SADC corresponding figures in the same periods are 19.9, 17.8, and 16.3.

**FIGURE 6.9: GLOBAL HUNGER INDEX IN ZAMBIA AND THE SOUTHERN AFRICA DEVELOPMENT COMMUNITY REGION, 2000–13**

![Graph showing the Global Hunger Index in Zambia and the SADC region from 2000 to 2013.](image)

**Source:** ReSAKSS (2014).

**Notes:** SADC = Southern Africa Development Community; SA = South Africa; LI = Low Income; MI = Middle Income.

Cereal production in the country, despite being at least double that of the SADC region, has been declining between 2011 and 2013 (Figure 6.10). The high cereal production in the period under review over that of the region may be attributed to a general improvement in smallholder farmer accessibility to farm inputs, particularly maize seed and fertilizer through the FISP. There has also been a growing percentage of farmers using improved seed varieties as well as farming practices. Wheat production (although undertaken by commercial farmers) has also been on the increase, as more farmers have gone into irrigated wheat production. There is need, however, for the country to ensure that production levels are sustained over time.

**FIGURE 6.10: CEREAL PRODUCTION PER CAPITA IN ZAMBIA, 2011–13**

![Graph showing the cereal production per capita in Zambia from 2011 to 2013.](image)

**Source:** ReSAKSS (2014).

**Notes:** Kg = kilogram; SADC = Southern Africa Development Community; SA = South Africa; LI = Low Income; MI = Middle Income.
6.4. Analysis of Subsector Performance

6.4.1. Crops

The production levels of various crops in the seasons 2013/14 and 2014/15 are presented in Table 6.2. The results show that maize for seed and Irish potatoes reported the largest increases in production—116 percent and 36 percent, respectively. Seven of the 12 crops reviewed, however, registered reductions in production levels between the two seasons. The crops that had the largest reduction are rice (-49 percent), sorghum (-30 percent), and Bambara nuts (-26 percent). The generally poor performance in the period under review may be attributed to a dry spell that occurred during a critical period of crop development.

TABLE 6.2: CROP PRODUCTION IN ZAMBIA FOR THE 2013/14 AND 2014/15 SEASONS
(in metric tons)

<table>
<thead>
<tr>
<th>Crop</th>
<th>2013/14</th>
<th>2014/15</th>
<th>percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>3,350,671</td>
<td>2,618,221</td>
<td>-22</td>
</tr>
<tr>
<td>Maize</td>
<td>28,968</td>
<td>62,579</td>
<td>116</td>
</tr>
<tr>
<td>Sorghum</td>
<td>11,557</td>
<td>8,123</td>
<td>-30</td>
</tr>
<tr>
<td>Rice</td>
<td>49,640</td>
<td>25,514</td>
<td>-49</td>
</tr>
<tr>
<td>Millet</td>
<td>30,504</td>
<td>31,967</td>
<td>5</td>
</tr>
<tr>
<td>Sunflower</td>
<td>34,264</td>
<td>34,967</td>
<td>2</td>
</tr>
<tr>
<td>Groundnuts</td>
<td>143,591</td>
<td>111,429</td>
<td>-22</td>
</tr>
<tr>
<td>Soy bean</td>
<td>214,179</td>
<td>226,323</td>
<td>6</td>
</tr>
<tr>
<td>Cotton</td>
<td>120,314</td>
<td>103,889</td>
<td>-14</td>
</tr>
<tr>
<td>Irish potatoes</td>
<td>33,833</td>
<td>45,902</td>
<td>36</td>
</tr>
<tr>
<td>Mixed beans</td>
<td>61,749</td>
<td>50,398</td>
<td>-18</td>
</tr>
<tr>
<td>Bambara nuts</td>
<td>7,140</td>
<td>5,281</td>
<td>-26</td>
</tr>
</tbody>
</table>

Source: Policy and Planning Department, Ministry of Agriculture and Livestock (MAL 2015).

* This is expected production based on the 2015 crop forecast data

The country’s performance in total cereal yields (maize, rice, sorghum, and wheat) in the period 2011-13 is presented in Figure 6.11. In 2011 and 2012, the country’s cereal productivity per ha was higher than that of the SADC target (2,000 T)/ha, at 2,731 and 2,693 thousands MT/ha respectively for each year. In 2013, productivity fell far below the SADC target, as well as that of SADC, in general. The reason for this dramatic reduction is not very clear.
Zambia’s maize yield trends in the three years for which data was available (2011-13) is similar to that for cereal yields (Figure 6.12). This is not surprising, given that the crop is by far the most important cereal staple relative to the other cereals. The same discussion on cereal yields applies in this section in many respects.
Findings at the subnational level on some aspects of the performance of the crops subsector are highlighted in Box 6.1.

**BOX 6.1: SUBNATIONAL LEVEL PERCEPTIONS ON ASPECTS OF THE CROPS SUBSECTOR PERFORMANCE**

There has been a general increase in the productivity and the production of a number of crops, including maize, cowpeas, and sorghum (especially in Southern Province). This was cited in virtually all the districts visited. For instance, in one district, the production of maize has almost doubled over the past few years, from 1.5 metric ton to 2.9 metric tons per hectare, citing “training and the adoption of new technologies...” as the main drivers of the increase.

Another driver of increased smallholder productivity and production is improvement in the use of fertilizer and improved seed in crop production. For instance, farmers in one of the districts explained that some of them use, on average, 8 X 50 kilogram bags of fertilizer and 4 x 20 kilogram bags of improved seed. This agrees with findings from other studies that show a general improvement in the use of fertilizer and improved seed by up to 40 percent of smallholder farmers, on average. Farmers supported by PROFIT+ demonstrated greater responsiveness in the use of improved seed and fertilizer. For instance, the proportion of PROFIT+ supported farmers who used improved maize seed was as high as 82 percent, while the proportion of those who used improved tomato and onion seed was even higher, at 87 percent and 94 percent, respectively. Nevertheless, the proportion of farmers supported by PROFIT+, who used fertilizer on maize, was 78 percent.

1 Farmers were not able to provide details in terms of seeding rate per crop per hectare; rather, the amount of fertilizer is what was used for all crops grown and the seed cited is what was procured for all crops.

Source: PROFIT+ ACDI/VOCA Outcome Survey (May 2015).

### 6.4.2. Livestock

The livestock subsector experienced substantial growth during 2011 and 2012 compared to the SADC target of 4 percent (Figure 6.13). For instance, livestock production in Zambia grew by 68 percent in 2011 (six times the growth in the SADC, which was 10 percent during the same year). This was against the negative growth recorded in the previous year (2010) of -3.37 percent while in the SADC, it was at 3.34 percent. Other drivers to the drastic increase in livestock production in the last decade include government interventions aimed at distributing improved “he goats” to farmers; cattle restocking; improved disease control in cattle through construction of dip tanks; and interventions (including development of disease control zones) aimed at controlling various diseases. In addition, there has been a significant improvement in the production of broiler chickens, as well as eggs. A number of entrepreneurs have procured hatcheries. Furthermore, a considerable number of these entrepreneurs have begun to raise the point of laying chickens. The net effect of these efforts has been a considerable increase in livestock production.
Table 6.3 presents livestock statistics in Zambia for cattle, goats, sheep, pigs, and poultry between 2011 and 2014. The livestock numbers show that for these categories, the country has experienced growth in the livestock subsector. The livestock categories that registered the largest growth in numbers over the review period include poultry, pigs, and goats, with increases of 86 percent, 84 percent, and 71 percent, respectively. In the same period, cattle numbers only increased by 13 percent while sheep increased by 26 percent.

**TABLE 6.3: NUMBER OF LIVESTOCK BY CATEGORY, 2011-14**
(in thousands)

<table>
<thead>
<tr>
<th>Livestock category</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>3,838</td>
<td>3,932</td>
<td>4,027</td>
<td>4,319</td>
</tr>
<tr>
<td>Goats</td>
<td>2,068</td>
<td>1,840</td>
<td>3,023</td>
<td>3,539</td>
</tr>
<tr>
<td>Sheep</td>
<td>91</td>
<td>95</td>
<td>101</td>
<td>115</td>
</tr>
<tr>
<td>Pigs</td>
<td>833</td>
<td>910</td>
<td>1,099</td>
<td>1,533</td>
</tr>
<tr>
<td>Poultry</td>
<td>78,586</td>
<td>86,745</td>
<td>122,605</td>
<td>146,055</td>
</tr>
</tbody>
</table>

*Source: Department of Agriculture and Livestock (MAL 2015).*
For several decades (since political independence in 1964), agriculture in Zambia has been synonymous with crop production and, in the past three decades, it has been synonymous with maize production. This has affected support and the performance of other subsectors, such as aquaculture and livestock. This trend has changed however, and livestock production has increasingly received recognition by the GoZ and attention by farmers for a number of reasons:

Small ruminants (particularly goats) and village chickens have proved to be useful assets that can be easily converted into cash when small-scale farmers are in need of money for education, health, and food, among others (based on reports from the subnational stakeholder consultations conducted for this JSR assessment).

- About six years ago, livestock had its own ministry in a bid to promote its productivity and production, before it was reverted back to crops and other subsectors in 2011. The livestock ministry promoted a culture of diversification into livestock and this has since gained momentum.

- There has been a general reduction in diseases on account of better management arising from livestock extension (based on reports from the subnational stakeholder consultations conducted for this JSR assessment).

Trends in the production of livestock products (milk, eggs, hides, beef, pork, and poultry) are presented in Table 6.4. Between 2011 and 2014, the livestock products that registered the highest increase in production include eggs, milk, and beef, which increased by 60 percent, 51 percent, and 27 percent, respectively. Poultry products recorded negative a growth of 28 percent in the same period.

### TABLE 6.4: LIVESTOCK PRODUCTS PRODUCED IN ZAMBIA, 2011–14

(in thousands)

<table>
<thead>
<tr>
<th>Livestock Product</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk (metric ton (MT))</td>
<td>306,000</td>
<td>370,000</td>
<td>452,000</td>
<td>463,020</td>
</tr>
<tr>
<td>Eggs (millions)</td>
<td>429,000</td>
<td>529,547</td>
<td>630,112</td>
<td>686,388</td>
</tr>
<tr>
<td>Hides (numbers)</td>
<td>245,987</td>
<td>278,219</td>
<td>289,025</td>
<td>303,174</td>
</tr>
<tr>
<td>Beef (MT)</td>
<td>25,875</td>
<td>29,376</td>
<td>30,474</td>
<td>32,913</td>
</tr>
<tr>
<td>Pork (MT)</td>
<td>328,752</td>
<td>332,039</td>
<td>383,379</td>
<td>408,751</td>
</tr>
<tr>
<td>Poultry (MT)</td>
<td>5,274</td>
<td>1,580</td>
<td>3,409</td>
<td>3,818</td>
</tr>
</tbody>
</table>

*Source: Ministry of Agriculture and Livestock (2015).*
Box 6.2 highlights some aspects that relate to the performance of the livestock subsector from the subnational level.

**BOX 6.2: SUBNATIONAL LEVEL PERCEPTIONS ON SOME ASPECTS OF THE LIVESTOCK SUBSECTOR**

Common livestock diseases, such as foot and mouth and East Coast fever (theileriosis) have continued to break out, albeit at a reduced level due to the general improvement in the control of livestock diseases. For instance, farmers in one of the Southern Province districts visited explained that foot and mouth disease had not broken out in the past five years in their community.

### 6.4.3. Fisheries

#### 6.4.3.1 Aquaculture

Since 2011, a number of positive developments have taken place in aquaculture which have resulted in the doubling of fish production in the fisheries subsector, from 10,291 MT in 2011 to 20,297 MT in 2013, although in 2014, production declined compared to the previous year (DoF 2015). The increase in production has been triggered by a number of interventions, the key ones being the following:

- Seventeen government fish farms have been rehabilitated across seven provinces (Copperbelt, Eastern, Muchinga, Northern, North-Western, Central, and Southern);

- Eight hatcheries have been established in eight districts (Solwezi, Kaoma, Misamfu Kasama (Misamfu); Kitwe (Mwekera); Chilanga, Mansa (Fiyongoli); and Chipata), while two community fingerling production centres have been established in Nakonde and Kasempa (Mpungu);

- The GoZ signed a Memorandum of Understanding with the Chilubi Island Community, which has resulted in an aquaculture joint venture on Lake Bangweulu; and

- The Citizens Economic Empowerment Commission started financing fish farmers in Northern and Luapula Provinces, who are engaged in fish farming and use earthen ponds and cages in the basins of Lake Tanganyika and Lake Mweru.

The planned establishment of four aqua-parks will further impact on fish production in a positive manner. The aqua-parks have been earmarked for development in Rufunsa, Kasempa (Mpungu), Mungwi, and Chipepo. The first three will be based on land, while the one in Chipepo will be established on a lake. Preliminary development works have begun in Chipepo, while feasibility studies are to take place soon in the other three areas.

Currently, Zambia has a total of 12,010 fish farmers who produce an estimated 2,954 MT (latest estimates) (Table 6.5). North-Western Province has the largest number of fish farmers (2,915) followed by Northern (2,436), while Southern Province and Lusaka have the least, at 207 and 282, respectively (Table 6.5).
In terms of total production by province, the Northern and North-Western Provinces have the highest actual production of fish, at 797.04 MT and 668.3 MT, respectively, and the Southern Province the lowest production at 23.62 MT. Analysis of productivity per farmer/year, however, indicates that the provinces of Lusaka and Copperbelt have the highest average annual fish production per farmer, at 78,400 kilograms (kg) and 39,700 kg, respectively, while the provinces of Muchinga and Eastern have the lowest at 1,900 kg and 8,700 kg (Figure 6.14). The higher average annual fish production by fish farmers in Lusaka and Copperbelt than the rest of the country may be attributed to easier accessibility to extension services, given their urban locations.

**TABLE 6.5: NUMBER OF FISHERS, ACTIVE FACILITIES, FACILITY AREAS, AND ESTIMATED ANNUAL PRODUCTION BY PROVINCE**

<table>
<thead>
<tr>
<th>Province</th>
<th>Number of Fish Farmers</th>
<th>Number of Active Facilities</th>
<th>Facility Area (square meters)</th>
<th>Estimated Production (metric tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lusaka</td>
<td>282</td>
<td>646</td>
<td>328,128</td>
<td>221.49</td>
</tr>
<tr>
<td>Central</td>
<td>1,018</td>
<td>1,578</td>
<td>470,144</td>
<td>317.35</td>
</tr>
<tr>
<td>Copperbelt</td>
<td>1,203</td>
<td>2,732</td>
<td>706,866</td>
<td>477.13</td>
</tr>
<tr>
<td>Northern</td>
<td>2,436</td>
<td>4,940</td>
<td>1,180,794</td>
<td>797.04</td>
</tr>
<tr>
<td>Luapula</td>
<td>485</td>
<td>1,761</td>
<td>262,273</td>
<td>177.03</td>
</tr>
<tr>
<td>Muchinga</td>
<td>1,573</td>
<td>2,265</td>
<td>44,055</td>
<td>29.74</td>
</tr>
<tr>
<td>Southern</td>
<td>207</td>
<td>225</td>
<td>34,987</td>
<td>23.62</td>
</tr>
<tr>
<td>Western</td>
<td>358</td>
<td>506</td>
<td>159,854</td>
<td>107.9</td>
</tr>
<tr>
<td>North-Western</td>
<td>2,915</td>
<td>4,538</td>
<td>990,075</td>
<td>668.3</td>
</tr>
<tr>
<td>Eastern</td>
<td>1,533</td>
<td>1,368</td>
<td>199,200</td>
<td>134.46</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12,010</strong></td>
<td><strong>20,559</strong></td>
<td><strong>4,376,376</strong></td>
<td><strong>2,954.05</strong></td>
</tr>
</tbody>
</table>

*Source: Department of Fisheries (MAL 2015).*

In terms of total production by province, the Northern and North-Western Provinces have the highest actual production of fish, at 797.04 MT and 668.3 MT, respectively, and the Southern Province the lowest production at 23.62 MT. Analysis of productivity per farmer/year, however, indicates that the provinces of Lusaka and Copperbelt have the highest average annual fish production per farmer, at 78,400 kilograms (kg) and 39,700 kg, respectively, while the provinces of Muchinga and Eastern have the lowest at 1,900 kg and 8,700 kg (Figure 6.14). The higher average annual fish production by fish farmers in Lusaka and Copperbelt than the rest of the country may be attributed to easier accessibility to extension services, given their urban locations.

**FIGURE 6.14: AVERAGE FISH PRODUCTION PER FARMER BY PROVINCE**

*Source: Department of Fisheries (MAL 2015).*
### 6.4.3.2 In-Shore Fisheries

From 2011 to 2014, annual in-land fish catches increased by 17 percent, from 69.364 MT in 2011 to 80.826 MT in 2014 (Figure 6.15). Table 6.6 presents an analysis of in-shore fish catch by water body, based on 2014 production figures. The results show that in 2014, Lake Mweru had the highest production (15.536 MT), followed by Bangweulu fishery (15.332 MT). Luapula Province had the largest in-shore fish production in 2014, averaging 45 percent of the total national production of 80.8 MT.

#### FIGURE 6.15: TOTAL IN-SHORE FISH CATCH, 2011-14

(in metric tons)

![Bar chart showing total in-shore fish catch from 2011 to 2014](chart.png)

**Source:** Department of Fisheries Department (MAL 2015).

#### TABLE 6.6: IN-SHORE FISH CATCH BY WATER BODY, 2011–14 (IN METRIC TONS)

(in thousands)

<table>
<thead>
<tr>
<th>Water Body</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangweulu</td>
<td>12,573</td>
<td>13,471</td>
<td>12,298</td>
<td>15,332</td>
</tr>
<tr>
<td>M/Luapula</td>
<td>11,942</td>
<td>13,35</td>
<td>12,187</td>
<td>15,536</td>
</tr>
<tr>
<td>M/Wantipa</td>
<td>4,058</td>
<td>3,742</td>
<td>3,416</td>
<td>5,007</td>
</tr>
<tr>
<td>L. Tanganyika</td>
<td>15,953</td>
<td>16,341</td>
<td>10,31</td>
<td>13,806</td>
</tr>
<tr>
<td>Kafue</td>
<td>4,248</td>
<td>4,321</td>
<td>3,945</td>
<td>4,241</td>
</tr>
<tr>
<td>L. Kariba</td>
<td>9,454</td>
<td>16,261</td>
<td>19,42</td>
<td>10,592</td>
</tr>
<tr>
<td>Lukanga</td>
<td>1,007</td>
<td>3,086</td>
<td>3,545</td>
<td>3,811</td>
</tr>
<tr>
<td>U/Zambezi</td>
<td>5,594</td>
<td>5,742</td>
<td>5,242</td>
<td>7,714</td>
</tr>
<tr>
<td>Lusiwashi</td>
<td>1,985</td>
<td>1,314</td>
<td>1,2</td>
<td>833</td>
</tr>
<tr>
<td>L/Zambezi</td>
<td>426</td>
<td>486</td>
<td>443</td>
<td>476</td>
</tr>
<tr>
<td>Itzhi-tezhi</td>
<td>2,124</td>
<td>2,524</td>
<td>2,304</td>
<td>2,033</td>
</tr>
<tr>
<td>Chambeshi</td>
<td>ND</td>
<td>ND</td>
<td>879</td>
<td>945</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>69,364</td>
<td>80,638</td>
<td>75,187</td>
<td>80,826</td>
</tr>
</tbody>
</table>

**Source:** Fisheries Department (MAL 2015).
Recent fishery frame surveys reported that the increase in fish catches over the period under review is attributed to a general increase in the country’s population. In addition, the frame surveys revealed that a considerable population has joined the fish industry for a number of reasons. The main reason reported was that fishing was considered a coping strategy against harsh economic conditions and lack of opportunities for many in the country. This has resulted in the growth in the fishing population, as well as the number of fishing villages, boats, and gear.

Unfortunately, illegal fishing continues to grow, as evidenced by an increase in the use of illegal fishing gear and fishing methods. This has been triggered by increased competition for fish resources. According to the Department of Fisheries, compliance levels to the Fisheries Act have continued to deteriorate among the artisanal and commercial fisheries. For instance, in 2013, the compliance level among the Kapenta Fisheries on Lake Kariba was 19 percent, dropping to 18 percent in 2014 (MAL 2014).

Key developments in the in-shore fishery catch between 2011 and 2014 include the following:

- Promotion of stakeholder participation in fisheries management through the development of fishery-specific management plans in the Kafue Flats, Lake Mweru, and Lake Bangweulu in Luapula Province, in partnership with Cooperating Partners (PLARD II and Fish II Programme of the African, Caribbean, and countries);

- Fish landing freezing/storage facilities have been developed in four districts (Mpongwe, Itezhi tezhi, Sinazongwe, and Gwembe);

- Construction of fish processing (drying slabs) and storage infrastructure on Lake Mweru in Luapula Province to support the production of Chisense, and;

- Financing of local fish stock enhancement programs by the GoZ on the three lakes in Luapula Province (Mweru, Mweru-Wantipa, and Bangweulu) for the purpose of increasing fish production in the three lakes.
6.5. Cross-Cutting Issues

Cross-cutting issues were dealt with as part of stakeholder consultations at the subnational level. A number of cross-cutting issues were discussed, namely, gender, environment, climate change, and capacity building (training related). Training has been dealt with in some way in the earlier sections of this component of the report; hence, gender, environment, and climate change are dealt with in this section and key findings are presented in Box 6.3. HIV and AIDS did not come out as expected.

BOX 6.3: KEY PERCEPTIONS ON CROSS-CUTTING ISSUES AT THE SUBNATIONAL LEVEL

With regard to gender, male and female beneficiary concerns were common across various parameters, including those who received inputs, credit facilities, and leadership of community-level committees as cases in point. With respect to beneficiaries of the FISP, the figures were not available, except that male and female farmers were said to be recipients. In terms of leadership of committees, on average, up to 30 percent were female. Access to credit from the Zambia National Farmers’ Union Lima Credit Scheme tended to favor men more so than women. For instance, in one of the communities visited, of the 30 who were given a loan in 2014, only 5 were women, translating to a female: male ratio of 1:5.

In terms of environment and climate change, farmers reported changing climatic conditions, particularly as they relate to the delay in the on-set of rain. This was the case in the nine districts visited. One community group noted that the rainfall last year was particularly late, and that after it had begun to rain, there were some floods in some parts of the province while in other parts, drought conditions occurred. Reporting on changes brought about by changing climatic conditions, one community stated that when they were asked whether they were involved in fish farming and to what extent, their response was:

“We are not involved in any fish farming because we have no water any more. The water bodies that we used to have are no more; hence we are stuck...”

Mitigation measures used by farmers to deal with changes in climatic conditions include conservation agriculture (e.g., pot-holing, planting short-to medium-term maturing crop varieties) and keeping small ruminants, especially goats, which are more drought tolerant since they need less water, are browsers, and are more resistant to disease.

6.6. Summary

The assessment of the Zambian agriculture sector was divided into aggregate and subsector analysis. The aggregate assessment focused on performance indicators at the national level within the CAADP Results Framework, while an analysis of the subsector level focused on performance of the crop, livestock, and fisheries sectors. Despite Zambia having exceeded the CAADP annual agriculture sector growth target of 6 percent over the review period, the rate of growth of the sector has been declining from 2010 to 2014. In terms of budget allocation to agriculture, Zambia’s allocation has been less than the CAADP target of at least 10 percent of total national budget. Efforts should be made to improve the amount and prioritization of agriculture sector funding targeting key programs and drivers of growth identified in the NAIP. Another area where Zambia performed well is the agricultural trade balance. Supporting continued growth in the agriculture sector is essential as part of efforts to diversify the country away from mining.
The indicators that require considerable attention include the 4.59 percent in 2011 of arable land with irrigation equipment, which indicates that the country is continues to lag behind the SADC Regional Indicative Strategic Development Plan target of 7 percent. In addition, the results for land and labor productivity show that current levels in the country are exceedingly low compared to the SADC regional levels. More efforts are required to improve productivity in the various subsectors in agriculture.

Despite the lack of detailed disaggregated subsector data, what was available indicated varied performance within each subsector. For instance, the crop subsector experienced substantial reductions in production levels between 2011 and 2014. Zambia has been a net exporter of maize in the region over the past years. Overall production trends, however, have been decreasing in recent years. Adverse weather conditions have been argued to have contributed to the declines in production levels, indicating that further efforts should be made in addressing issues of adaptation in the agriculture sector. In the livestock subsector, there is a need for continued support to sustain the growth in production and diversification of the agriculture sector to livestock. Overall, the performance of the subsector has been encouraging in the period under review. In parallel with the livestock subsector, the positive developments that have been experienced in the fisheries subsector should be sustained and improved. Furthermore, the fisheries subsector requires improvements in the enforcement of regulations to ensure sustainability of the subsector.

Table 6.7 summarizes the rating of agriculture sector performance in Zambia.

### TABLE 6.7: SUMMARY RATING OF AGRICULTURE SECTOR PERFORMANCE IN ZAMBIA

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Traffic Light Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture growth rate</td>
<td>Amber</td>
</tr>
<tr>
<td>Agricultural budget as a percentage of the total budget</td>
<td>Amber</td>
</tr>
<tr>
<td>Growth of annual gross domestic product</td>
<td>Amber</td>
</tr>
<tr>
<td>Per capita gross domestic product growth</td>
<td>Amber</td>
</tr>
<tr>
<td>Zambia Hunger Index against Global Index</td>
<td>Red</td>
</tr>
<tr>
<td>Maize yields</td>
<td>Amber</td>
</tr>
<tr>
<td>Cereal yields</td>
<td>Amber</td>
</tr>
<tr>
<td>Proportion of land under irrigation</td>
<td>Red</td>
</tr>
<tr>
<td>Livestock production (annual growth)</td>
<td>Amber</td>
</tr>
<tr>
<td>Land productivity</td>
<td>Red</td>
</tr>
<tr>
<td>Labor productivity</td>
<td>Red</td>
</tr>
<tr>
<td>Agriculture trade performance</td>
<td>Amber</td>
</tr>
<tr>
<td>Agriculture trade balance</td>
<td>Amber</td>
</tr>
<tr>
<td>Per capita cereal production</td>
<td>Green</td>
</tr>
</tbody>
</table>

Source: Author.

Note: Red = Poor/Does not exist; Amber = Progress made; Green = Good/Exists.
7. CONCLUSIONS, LESSONS LEARNED, AND RECOMMENDATIONS

The 2015 agriculture JSR process for Zambia resulted in the following major conclusions, lessons, and recommendations.

- JSR processes strengthen partnerships and serve as a management and policy support tool for inclusive stakeholder planning, program, budget preparation and execution, monitoring and evaluation, and overall development of the agriculture sector, thus facilitating a broad spectrum of stakeholders to gain insights into and influence over the policies and priorities of the sector.

- Zambia should improve its efforts to strengthen mutual accountability in the agriculture sector through resuscitation and implementation the joint agriculture review. They should be consistent with JSR processes in the agriculture sector; and draw from lessons learned from the 2015 JSR processes, as well as those from the development of the CAADP Compact and NAIP.

- Lessons from the current assessment provide the foundation for future JSR assessments in the agriculture sector.

- Zambia’s policy and program formulation processes involve sector-wide engagements with stakeholders; however, more should be done to widely engage stakeholders in agricultural policy and program implementation, monitoring and evaluation (particularly the private sector), farmers, and CSOs.

- There is, in general, a good mix of agricultural policy that provides an enabling environment for the implementation of the NAIP, as well as growth of the entire agriculture sector value chain.

- The challenge for the MAL and its partners is to ensure that the resources and support structures committed to the implementation of policy making and the NAIP priority intervention areas are achieved in order to drive the growth of the agriculture sector.

- Although institutional structures exist for the implementation of the NAIP, especially state structures, further efforts are required to strengthen relevant institutions through training, provision of qualified staff, and provision of appropriate equipment and other facilities—particularly at the local level—among others.

- The active involvement of the private sector in the agriculture sector requires further attention to build on current initiatives to promote private sector-led agricultural growth in Zambia.

- Coordination within government institutions requires substantial attention at the national and local levels.

- The MAL should implement its Monitoring and Evaluation System to provide evidence-based support to agricultural policy and program formulation, as well as monitoring and evaluation.

- The indicators that had data showed mixed results in terms of performance of the sector:
  - The country has exceeded the CAADP 6 percent agricultural growth target; however, this has been declining in recent years. More should be done to ensure that growth translates into an improvement in the welfare of Zambian farmers.
  - Despite improvements in agriculture sector funding in recent years, the levels continue to fall short of the CAADP target of at least 10 percent of total national budget. There is also a call to ensure that budgeted commitments are actually disbursed and implemented as planned—an area that remains lacking.
• The crop subsector experienced substantial reductions in production levels between 2011 and 2014.

• The livestock subsector has improved in recent years, and efforts are required to improve on the performance and sustain the growth in production and diversification of the agriculture sector to livestock.

• The fisheries subsector also reported increasing growth in recent years; however, enforcement of regulations need to be strengthened to ensure sustainability of the subsector.
REFERENCES

ACDI/VOCA and PROFIT+. 2015. Outcome Survey.


CSO and MAL (Central Statistics Office and Ministry of Agriculture and Livestock). Various years.


______. 2010.


______. 2014. Guidelines for the Running and Management of Communal Dip Tanks/Spray Race

______. 2014. Mutual Accountability, Donor Alignment, Coordination and Effectiveness, CAADP 10 Years on. Ministry of Agriculture and Livestock.


______. 2014. Office of the Prime Minister.


______. 2015. Department of Fisheries.


______. 2015.


______. 2015.

ReSAKSS. 2014. CAADP Core Indicator Database, IFPRI. Washington, DC: International Food Policy Research Institute


Government Republic of Zambia, Ministry of Agriculture and Livestock, Mutual Accountability, Donor Alignment, Coordination and Effectiveness, CAADP 10 Years on, February 2014.

Government Republic of Zambia, Ministry of Agriculture and Livestock, Stocktaking: Changes in Zambian Agriculture Resulting from Implementation of CAADP Approaches, 10 years on, February 2014.
## APPENDIX A: STRENGTHENING MUTUAL ACCOUNTABILITY THROUGH AGRICULTURE JOINT SECTOR REVIEWS – THE 2015 PROCESS IN ZAMBIA

### TABLE A.1: SUMMARY OF STAKEHOLDERS’ VIEWS ON KEY ASPECTS OF THE JOINT SECTOR REVIEW PROCESS

<table>
<thead>
<tr>
<th>N°</th>
<th>Joint Sector Review Building Blocks</th>
<th>Purpose/Tasks: Best Practices</th>
<th>What is the current practice in the country?</th>
<th>How does the current practice differ from best practice?</th>
<th>What actions are needed to achieve best practice?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Set up a Joint Sector Review (JSR) Steering Committee (SC)</td>
<td>SC provides strategic direction for the establishment and operation of the JSR. It is usually chaired by the Ministry of Agriculture and Livestock (MAL) and includes as members leading donors and three to four other representatives of key stakeholder groups.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Set up a Joint Sector Review (JSR) Steering Committee (SC)</td>
<td>Secretariat coordinates activities and operations of the JSR and SC. It can be made up of core staff from MAL’s Planning and Monitoring and Evaluation Unit.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Develop terms of reference (TOR) for the JSR</td>
<td>TORs should 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, follow-up and implementation of actions, among others. TORs may also need to be developed for consultants hired to conduct JSR studies.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mobilize resources</td>
<td>Human and financial resources need to be mobilized to support JSR operations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Have SC/Secretariat invite a broad and inclusive group of state and nonstate actors/stakeholders to participate in the JSR (with clear objectives, expected outcomes, and roles of different actors)</td>
<td>A key aspect of the JSR is that it allows a broad group of state and nonstate stakeholders to influence overall policies and priorities of the sector by assessing how well they have implemented their commitments, stipulated in the Comprehensive Africa Agriculture Development Programme (CAADP) Compact, National Agriculture and Food Security Investment Plan, and related cooperation agreements, such as under the New Alliance for Food Security and Nutrition.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>Joint Sector Review Building Blocks</td>
<td>Purpose/Tasks: Best Practices</td>
<td>What is the current practice in the country?</td>
<td>How does the current practice differ from best practice?</td>
<td>What actions are needed to achieve best practice?</td>
</tr>
<tr>
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<td>--------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Assess existing agricultural policy dialogue and review processes, along with data quality and analytical capacities</td>
<td>An assessment of existing agricultural policy dialogue and review processes, data quality, and analytical capacities and tools and networks, well as existing knowledge systems is key to identifying existing gaps and developing ways to fill these gaps and enhance capacities, tools, and processes through the JSR.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>Commission JSR studies</td>
<td>Consultants may need to be hired and supervised by the SC to conduct JSR studies. Consultants may come from think tanks, universities, or private companies, and should work closely with staff from the MAL Planning Unit, and the JSR SC and Secretariat.</td>
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<tr>
<td>8</td>
<td>Establish a JSR Team</td>
<td>A team made up of a multistakeholder group (state and nonstate actors) with technical expertise should review and comment on various JSR studies and reports and ensures outputs of reviews are implemented.</td>
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<tr>
<td>9</td>
<td>Prepare a JSR report</td>
<td>A report should be prepared, 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.</td>
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<tr>
<td>10</td>
<td>Conduct a JSR meeting</td>
<td>A one- to two-day meeting, using various formats (e.g., plenary, small groups, field visit) will allow stakeholders to discuss and 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 Memoire.</td>
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<tr>
<td>11</td>
<td>Follow up on JSR meeting actions</td>
<td>The implementation of recommendations and decisions of the JSR meeting (embodied in the JSR Aide Memoire) needs to be closely monitored. 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.</td>
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</tbody>
</table>
As many countries continue to set up the JSR, it is essential to share lessons learned, best practices, and experiences to further strengthen country JSRs. Such forums as the CAADP Partnership Programme and the Annual Conference of the Regional Strategic Analysis and Knowledge Support System provide an opportunity toward this end.

### TABLE A.2: LIST OF KEY PEOPLE INTERVIEWED

<table>
<thead>
<tr>
<th>Stakeholder Group/Organization</th>
<th>Key Informants</th>
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</thead>
<tbody>
<tr>
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</tbody>
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### TABLE A.3: TOTAL STAKEHOLDERS INTERVIEWED BY GROUP

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Number Interviewed</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

| Total             |                    |
### Table A.4: Zambia Baseline for Agricultural Performance

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Source of Target</th>
<th>Baseline from Source Document</th>
<th>End Target (2010-2013; for cross-country comparison)</th>
<th>Suggested Baseline Period</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public agriculture expenditure</td>
<td>CAADP 2010</td>
<td>K'Million 2010 1,968</td>
<td>2010 1,247</td>
<td>2010 1,354.60</td>
<td>K'Million 2010 1,733.11</td>
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<tr>
<td>Total public expenditure</td>
<td>CAADP 2010</td>
<td>K'Million 2010 17,331</td>
<td>2010 20,467</td>
<td>2010 20,537.36</td>
<td>K'Million 2010 20,537.36</td>
</tr>
<tr>
<td>Public agriculture budget</td>
<td>CAADP 2010</td>
<td>K'Million 2010 1,354.60</td>
<td>2010 1,354.60</td>
<td>2010 1,354.60</td>
<td>K'Million 2010 1,354.60</td>
</tr>
<tr>
<td>Public agriculture expenditure (of total expenditure)</td>
<td>CAADP 2010</td>
<td>% 2010 8.10</td>
<td>2010 8.10</td>
<td>2010 8.10</td>
<td>% 2010 8.10</td>
</tr>
<tr>
<td>Share of cultivated area irrigated (%)</td>
<td>CAADP 2010</td>
<td>% 2010 50</td>
<td>2010 50</td>
<td>2010 50</td>
<td>% 2010 50</td>
</tr>
<tr>
<td>Agriculture value added (Constant 2005 U.S. dollars)</td>
<td>CAADP 2010</td>
<td>$'Million 2010 1,112.7</td>
<td>2010 1,112.7</td>
<td>2010 1,112.7</td>
<td>$'Million 2010 1,112.7</td>
</tr>
<tr>
<td>Agriculture value added (% of GDP)*</td>
<td>CAADP 2010</td>
<td>% 2010 10.5</td>
<td>2010 10.5</td>
<td>2010 10.5</td>
<td>% 2010 10.5</td>
</tr>
<tr>
<td>Per capita GDP growth rate (%)</td>
<td>CAADP 2010</td>
<td>% 2010 7.02</td>
<td>2010 7.02</td>
<td>2010 7.02</td>
<td>% 2010 7.02</td>
</tr>
<tr>
<td>Prevalence of undernourishment (% of population)</td>
<td>CAADP 2010</td>
<td>% 2010 51</td>
<td>2010 51</td>
<td>2010 51</td>
<td>% 2010 51</td>
</tr>
<tr>
<td>Agriculture GDP growth rate (%)</td>
<td>CAADP 2010</td>
<td>% 2010 6.5</td>
<td>2010 6.5</td>
<td>2010 6.5</td>
<td>% 2010 6.5</td>
</tr>
</tbody>
</table>
REFERENCES


