

Document of  
The World Bank

**FOR OFFICIAL USE ONLY**

Report No: PAD1880

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 29.2 MILLION  
(US\$40 MILLION EQUIVALENT)

TO THE

REPUBLIC OF ZAMBIA

FOR A

ZAMBIA AGRIBUSINESS AND TRADE PROJECT

November 23, 2016

Trade and Competitiveness Global Practice  
Africa Region

<p>This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.</p>
--

## CURRENCY EQUIVALENTS

Exchange Rate Effective October 31, 2016

Currency Unit = Zambian Kwacha (k)  
9.7009 = US\$1  
US\$1 = SDR 0.72788150

## FISCAL YEAR

January 1 – December 31

## ABBREVIATIONS AND ACRONYMS

ADSP	Agricultural Development Support Project
AFTFM	Africa Region Financial Management Unit
BDS	Business Development Service
BoZ	Bank of Zambia
BRRA	Business Regulatory Review Agency
CPPC	Competition and Consumer Protection Commission
CPS)	Country Partnership Strategy
CQS	Selection Based on the Consultants Qualifications
DA	Designated Account
DFID	U.K. Department for International Development
DLI	Disbursement-linked Indicator
DTIS	Diagnostic Trade Integration Study
EDP	Enterprise Development Project
EEP	Eligible Expenditure Program
EFA	Economic and Financial Analysis
ERR	Economic Rate of Return
ESMF	Environmental and Social Management Framework
ESMP	Environment and Social Impact Management Plan
FM	Financial Management
FTE	Full-time Equivalent
GDP	Gross Domestic Product
GFSI	Global Food Safety Initiative
GRS	Grievance Redress Service
IA	Implementing Agency
IC	Individual Consultant
IFR	Interim Financial Report
ILO	International Labor Organization
IPR	Independent Post Review
JD	Jobs Diagnostic
KPI	Key Performance Indicator
LCS	Least-Cost Selection
LWP	Let's Work Partnership

M&E	Monitoring and Evaluation
MCTI	Ministry of Commerce, Trade, and Industry
MG	Matching Grants
MGS	Matching Grant Scheme
MIS	Management Information System
MTR	Midterm Review
NCB	National Competitive Bidding
NPV	Net Present Value
NQI	National Quality Infrastructure
NQIP	National Quality Infrastructure Plan
NQP	National Quality Policy
PA	Productive Alliance
PAZ	Productive Alliances in Zambia
PDO	Project Development Objective
PEP-Z	Private Enterprise Program Zambia
PIM	Project Implementation Manual
PMP	Pest Management Plan
PO	Producer Organization
PPA	Public Procurement Act
PPR	Procurement Post Review
P-RAMS	Procurement Risk Assessment Management System
QBS	Quality-Based Selection
QCBS	Quality and Cost-Based Selection
RAP	Resettlement Action Plan
RIA	Regulatory Impact Assessment
RPF	Resettlement Policy Framework
SME	Small and Medium Enterprise
SSS	Single-Source Selection
TA	Technical Assistance
ToR	Terms of Reference
PIU	Project Implementation Unit
USAID	United States Agency for International Development
VC	Value Chain
ZPPA	Zambia Public Procurement Authority

Regional Vice President:	Makhtar Diop
Acting Country Director:	Ina Ruthenberg
Senior Global Practice Director:	Anabel Gonzalez
Practice Manager:	David Bridgman
Task Team Leader:	Brian Mtonya, Tugba Gurcanlar

**ZAMBIA**  
**Zambia Agribusiness and Trade Project**

**TABLE OF CONTENTS**

	<b>Page</b>
<b>I. STRATEGIC CONTEXT .....</b>	<b>1</b>
A. Country Context.....	1
B. Sectoral and Institutional Context.....	2
C. Higher Level Objectives to which the Project Contributes .....	9
<b>II. PROJECT DEVELOPMENT OBJECTIVES .....</b>	<b>9</b>
A. PDO.....	9
B. Project Beneficiaries .....	9
C. PDO Level Results Indicators.....	10
<b>III. PROJECT DESCRIPTION .....</b>	<b>11</b>
A. Project Components .....	11
B. Project Financing .....	21
C. Project Cost and Financing .....	21
D. Lessons Learned and Reflected in the Project Design.....	22
<b>IV. IMPLEMENTATION .....</b>	<b>25</b>
A. Institutional and Implementation Arrangements .....	25
B. Results Monitoring and Evaluation .....	25
C. Sustainability.....	27
<b>V. KEY RISKS .....</b>	<b>28</b>
A. Risk Ratings Summary Table .....	28
B. Overall Risk Rating and Explanation of Key Risks.....	28
<b>VI. APPRAISAL SUMMARY .....</b>	<b>29</b>
A. Economic and Financial Analysis.....	29
B. Technical.....	31
C. Financial Management.....	32
D. Procurement .....	32
E. Social (including Safeguards) .....	33

F. Environment (including Safeguards) .....	34
G. World Bank Grievance Redress .....	35
<b>Annex 1: Results Framework and Monitoring .....</b>	<b>36</b>
<b>Annex 2: Detailed Project Description.....</b>	<b>44</b>
<b>Annex 3: Implementation Arrangements .....</b>	<b>64</b>
<b>Annex 4: Implementation Support Plan .....</b>	<b>78</b>
<b>Annex 5: Results from PA Programs in Latin America.....</b>	<b>80</b>
<b>Annex 6: Economic and Financial Analysis .....</b>	<b>82</b>
<b>Annex 7: Summary of Let’s Work Partnership Results .....</b>	<b>92</b>

**PAD DATA SHEET***Zambia**Zambia Agribusiness and Trade Project (P156492)***PROJECT APPRAISAL DOCUMENT***AFRICA**GTC 13*

Report No.: PAD1880

Basic Information			
Project ID P156492		EA Category B - Partial Assessment	Team Leader(s) Brian G. Mtonya, Tugba Gurcanlar
Lending Instrument Investment Project Financing		Fragile and/or Capacity Constraints [ ]	
		Financial Intermediaries [ ]	
		Series of Projects [ ]	
Project Implementation Start Date 16-Dec-2016		Project Implementation End Date 30-Jun-2022	
Expected Effectiveness Date 15-Mar-2017		Expected Closing Date 30-Jun-2022	
Joint IFC No			
Practice Manager/Manager	Senior Global Practice Director	Acting Country Director	Regional Vice President
David Bridgman	Anabel Gonzalez	Ina-Marlene E. Ruthenberg	Makhtar Diop
Borrower: Ministry of Finance			
Responsible Agency: Ministry of Commerce, Trade and Industry			
Contact: Kayula Siame		Title: Ms.	
Telephone No.: 260211223617		Email: kayula2013@gmail.com	
Project Financing Data(in USD Million)			
[ ]	Loan	[ ]	IDA Grant
[ X ]	Credit	[ ]	Grant
[ ]		[ ]	Guarantee
[ ]		[ ]	Other
Total Project Cost:		40.00	Total Bank Financing: 40.00
Financing Gap:		0.00	

Financing Source			Amount			
BORROWER/RECIPIENT			0.00			
International Development Association (IDA)			40.00			
Total			40.00			
Expected Disbursements (in USD Million)						
Fiscal Year	2017	2018	2019	2020	2021	2022
Annual	6.00	8.10	9.00	8.00	8.60	0.30
Cumulative	6.00	14.10	23.10	31.10	39.70	40.00
Institutional Data						
Practice Area (Lead)						
Trade & Competitiveness						
Contributing Practice Areas						
Agriculture, Energy & Extractives, Finance & Markets, Jobs						
Proposed Development Objective(s)						
The development objective of the proposed project is to contribute to increased market linkages and firm growth in agribusiness.						
Components						
Component Name				Cost (USD Millions)		
Component 1: Market Linkages in Agribusiness.				28.40		
Component 2: Strengthening the Regulatory and Institutional Framework for Agribusiness and Trade.				7.90		
Component 3: Project Management and Monitoring and Evaluation				3.70		
Systematic Operations Risk- Rating Tool (SORT)						
Risk Category					Rating	
1. Political and Governance					Moderate	
2. Macroeconomic					High	
3. Sector Strategies and Policies					Moderate	
4. Technical Design of Project or Program					Substantial	
5. Institutional Capacity for Implementation and Sustainability					Substantial	
6. Fiduciary					Moderate	
7. Environment and Social					Moderate	
8. Stakeholders					Substantial	
OVERALL					Substantial	

Compliance			
<b>Policy</b>			
Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [ X ]	
Does the project require any waivers of Bank policies?	Yes [ ]	No [ X ]	
Have these been approved by Bank management?	Yes [ ]	No [ ]	
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [ X ]	
Does the project meet the Regional criteria for readiness for implementation?	Yes [ X ]	No [ ]	
<b>Safeguard Policies Triggered by the Project</b>	<b>Yes</b>	<b>No</b>	
Environmental Assessment OP/BP 4.01	<b>X</b>		
Natural Habitats OP/BP 4.04		<b>X</b>	
Forests OP/BP 4.36		<b>X</b>	
Pest Management OP 4.09	<b>X</b>		
Physical Cultural Resources OP/BP 4.11		<b>X</b>	
Indigenous Peoples OP/BP 4.10		<b>X</b>	
Involuntary Resettlement OP/BP 4.12	<b>X</b>		
Safety of Dams OP/BP 4.37		<b>X</b>	
Projects on International Waterways OP/BP 7.50		<b>X</b>	
Projects in Disputed Areas OP/BP 7.60		<b>X</b>	
<b>Legal Covenants</b>			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Selection of Producer Organisation and SME Under Part 1 of Project	<b>X</b>		CONTINUOUS
<b>Description of Covenant</b>			
For purposes of carrying out Productive Alliance Subproject under Part 1(a)(i) and Agribusiness Subproject under Part 1(b)(ii), the Recipient shall select a PO and SME, as the case may be, and a Subproject, in accordance with the criteria, conditions and procedures set out in the Project Implementation Manual and enter into a Subproject Agreement with the PO and SME.			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Plan of Action for continued use of the Royalty Payments beyond Closing Date		31-Mar-2020	
<b>Description of Covenant</b>			
The Recipient shall collect Royalty Payment from each SME and use the Royalty Payments to provide Matching Grants and Business Development Services to SMEs; and within 36 months from the Effective Date, discuss and agree with the Association on a plan of action for the continued use of the Royalty Payments beyond the Closing Date.			

Name	Recurrent	Due Date	Frequency
Engagement of an independent DLI verification agent		30-Jun-2017	
<b>Description of Covenant</b>			
For purpose of the DLI-linked disbursement under Part 2(a), the Recipient shall engage not later than 3 months from the Effective Date, an independent verification agent, under terms of reference, qualifications and experience satisfactory to the Association.			
Name	Recurrent	Due Date	Frequency
Establishment of a Project Implementation Unit		01-May-2017	
<b>Description of Covenant</b>			
Within one (1) month from the Effective Date, the Recipient shall establish, and thereafter maintain throughout Project implementation, a Project Implementation Unit within MCTI, with terms of reference, staffing (with qualifications, experience, and terms of reference satisfactory to the Association) and other resources satisfactory to the Association and responsible for overseeing day-to-day implementation of Project activities, including fiduciary management, monitoring and evaluation, and reporting.			
Name	Recurrent	Due Date	Frequency
Establishment of Project Steering Committee		30-Jun-2017	
<b>Description of Covenant</b>			
Within three (3) months from the Effective Date, the Recipient shall establish, and thereafter maintain throughout Project implementation, a Project Steering Committee with composition and terms of reference satisfactory to the Association and with adequate resources to carry out its responsibilities under the Project, including to: (a) oversee overall implementation of the Project; (b) provide policy guidance for Project implementation; (c) ensure inter-agency coordination for Project implementation; and (d) review and approve annual work plans and budgets.			
Name	Recurrent	Due Date	Frequency
Establishment of Technical Working Group		30-Jun-2017	
<b>Description of Covenant</b>			
Within three (3) months from the Effective Date, the Recipient shall establish, and thereafter maintain throughout Project implementation, a Technical Working Group, with composition and terms of reference satisfactory to the Association and with adequate resources to carry out its responsibilities under the Project, including to oversee the technical aspects of Project implementation.			
<b>Conditions</b>			
Source Of Fund	Name	Type	
IDA	Adoption of a Project Implementation Manual	Effectiveness	
<b>Description of Condition</b>			
Recipient has adopted a Project Implementation Manual acceptable to the Association			
Source Of Fund	Name	Type	

IDA	Withdrawal Condition 1(a) - Withdrawals of payments under DLI 1.1 and 2.1	Disbursement		
<b>Description of Condition</b>				
No withdrawal shall be made for payments under DLIs 1.1 and 2.1 made prior to the date of this FA except that withdrawals up to an aggregate amount not to exceed SDR 440,000 may be made for payments made prior to this date but on or after February 15, 2016 for Payments for EEPs under Category (3) and provided that the conditions set forth in 1 (b) are satisfied.				
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>		
IDA	Withdrawal Condition 1(b) - Withdrawals under category (3)	Disbursement		
<b>Description of Condition</b>				
No withdrawal shall be made under Category (3), unless and until the Recipient has furnished evidence satisfactory to IDA that: (i) Payments for Eligible Expenditures Program have been made in accordance, and in compliance, in the Borrowers laws and regulations and the PIM; and (ii) the DLIs in the Annex to Schedule 2 for which payment is requested have been met and verified in line with PIM				
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>		
IDA	Withdrawal Condition 2- Maximum amounts for payments under Category (3)	Disbursement		
<b>Description of Condition</b>				
Notwithstanding the provisions of Part A of Section I, payments under Category (3) shall not exceed the maximum amounts allocated to the respective DLI(s) as provided in the Annex to Schedule 2.				
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>		
IDA	Withdrawal Condition 3- Failure to achieve or partial achievement of DLIs	Disbursement		
<b>Description of Condition</b>				
If IDA determines any DLI(s) have not been achieved or are partially achieved, it may: (a) withhold in whole or part the amount allocated to such DLI(s); (b) disburse in whole or part the amount allocated at any later time when such DLI(s) are met; and/or (c) reallocate in whole or in part any amount of the Financing allocated to such DLI(s) to other DLI(s) under Category (3) or other categories				
<b>Source Of Fund</b>	<b>Name</b>	<b>Type</b>		
IDA	Withdrawal Condition 4 - Reimbursement of payments for ineligible EEPs	Disbursement		
<b>Description of Condition</b>				
If IDA determines that any portion of the amounts disbursed by the Recipient under Category (3) was made for reimbursement of expenditures that are not eligible under the Payments for Eligible Expenditures Program or not in compliance with the provisions of paragraphs 1(b) and 2 of Section IV.B of Schedule 2, the Recipient shall promptly refund any such amount to IDA				
<b>Team Composition</b>				
<b>Bank Staff</b>				
<b>Name</b>	<b>Role</b>	<b>Title</b>	<b>Specialization</b>	<b>Unit</b>
Brian G. Mtonya	Team Leader	Senior Private	Trade and	GTC13

	(ADM Responsible)	Sector Specialist	Competiveness Specialist	
Tugba Gurcanlar	Team Leader	Senior Private Sector Specialist	Trade and Competiveness Specialist	GTC13
Wedex Ilunga	Procurement Specialist (ADM Responsible)	Senior Procurement Specialist	Procurement	GGO01
Lingson Chikoti	Financial Management Specialist	Consultant	Financial Management	GGO13
Alex Mwanakasale	Team Member	Sr Agricultural Spec.	Agriculture Specialist	GFA13
Ankur Huria	Team Member	Senior Private Sector Specialist	Trade Logistics	GTCTC
Barbara Weber	Team Member	Senior Operations Officer	Operations	GTC07
Chiluba Mercy Munoni	Team Member	Consultant	Operations	AFMZM
Chris Parel	Team Member	Consultant	DLI Consultant	GTCDR
Chrissie Kamwendo	Team Member	Senior Operations Officer	Operations	AFMZM
David Tuchsneider	Team Member	Senior Rural Development Specialist	Productive Alliance Specialist	GFA04
Dino Leonardo Merotto	Team Member	Lead Economist	Jobs	GPSJB
Eddie Spencer Keturakis	Team Member	Senior Private Sector Specialist	Agribusiness Specialist	GTCCS
Ellen Olafsen	Team Member	Senior Private Sector Specialist	Entrepreneuership	GTCID
Gebisa Katambo Nyirenda Chisanga	Team Member	Team Assistant	Team Assistant	CAFZM
Gregory Smith	Team Member	Senior Economist	Economist	GMF13
Henry Sichembe	Team Member	Consultant	Agribusiness	GPSJB
John C. Keyser	Team Member	Consultant	Agriculture Trade specialist	GTC13
John Gabriel Goddard	Team Member	Lead Economist	Economist	GTC13
Justin Runji	Team Member	Sr Transport. Spec.	Infrastructure/Transport Specialist	GTI07
Loraine Ronchi	Team Member	Lead Economist	Agribusiness Lead	GTCCS
Maiada Mahmoud Abdel Fattah Kassem	Team Member	Finance Officer	Finance Officer	WFALA

Majbritt Fiil-Flynn	Safeguards Specialist	Consultant	Social Safeguards Specialist	GSU07
Margaret Png	Team Member	Lead Counsel	Lawyer	LEGAM
Mukayi Tinotenda Musarurwa	Team Member	Consultant	NQI Consultant	GTC13
Mwansa Lukwesa	Safeguards Specialist	Environmental Specialist	Environmental Specialist	GEN01
Nermeen Abdel Latif	Team Member	Results Measurement Specialist	Results Measurement	CBCD3
Paula F. Lytle	Safeguards Specialist	Senior Social Development Specialist	Social Safeguards	GSU07
Peter Nuamah	Team Member	Senior Private Sector Specialist	Investment Climate reforms	GTCA2
Puja Guha	Team Member	Consultant	Operations	GTC04
Roy Parizat	Team Member	Senior Economist	Economist	GFAGE
Sudha Bala Krishnan	Team Member	Results Measurement Specialist	Results Measurement Specialist	GSPJB
Tanangachi Ngwira	Team Member	Analyst	Operations	GTC07
Tania Priscilla Begazo Gomez	Team Member	Senior Economist	Competition Specialist	GTCTC
Wilhelmus Gerardus Janssen	Team Member	Lead Agriculture Economist	Agriculture Economist	GFA13
Zano Mataruka	Team Member	Senior Investment Officer	IFC Investment	CMGA6
Zhihua Zeng	Team Member	Senior Economist	SEZ Design and Policy	GTC01

#### Extended Team

Name	Title	Office Phone	Location

#### Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Zambia	Western	Western Province	X		
Zambia	Southern	Southern Province	X		
Zambia	North-Western	North-Western Province	X		

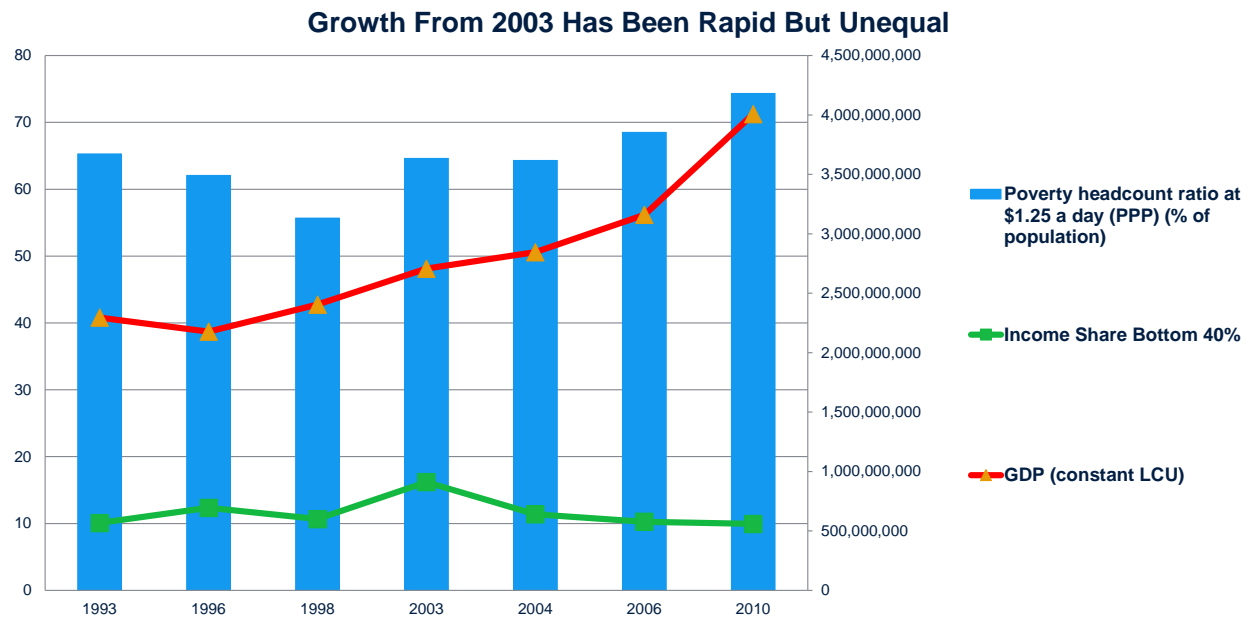
Zambia	Northern	Northern Province	<b>X</b>		
Zambia	Lusaka	Lusaka Province	<b>X</b>		
Zambia	Luapula	Luapula Province	<b>X</b>		
Zambia	Eastern	Eastern Province	<b>X</b>		
Zambia	Copperbelt	Copperbelt Province	<b>X</b>		
Zambia	Central	Central Province	<b>X</b>		
Zambia	Muchinga	Muchinga Province	<b>X</b>		
<b>Consultants (Will be disclosed in the Monthly Operational Summary)</b>					
Consultants Required ?    Consultants will be required					

## I. STRATEGIC CONTEXT

### Country Context

1. **Zambia is a lower-middle-income country with close to 16 million inhabitants, a gross domestic product (GDP) estimated at US\$27.07 billion in 2014, and per capita income of approximately US\$1,721.** Over the past two decades, Zambia has made significant socioeconomic progress. A relatively stable macroeconomic environment and improved macroeconomic policies since the mid-1990s were further supported by improved copper prices in the 2000s, resulting in an average annual growth of about 7.5 percent between 2007 and 2014. The Government consolidated macroeconomic stability and successfully navigated the shocks connected with the 2008 global economic and financial crises. However, economic challenges have returned as copper prices have fallen 52 percent since their peak in 2011.
2. **The Zambian economy has deteriorated considerably since 2015 as global copper prices fell to 2009 levels.** The drop in the copper price was also a key driver of the 2015 depreciation of the Zambian kwacha against the U.S. dollar and consequent inflation of above 20 percent (year-on-year). In addition to the global head winds, Zambia experienced domestic pressures in the form of (a) repeat fiscal deficits (reducing confidence in the economy); (b) a poor 2014–2015 harvest; and (c) a power crisis with outages equal to half of the peak demand. In 2016, power deficits and copper price concerns flattened mining production and employment growth as firms reacted to tougher global conditions. Given these challenges, GDP growth dropped to an estimated 3.2 percent in 2015 and is expected to remain at a similar level in 2016. Prospects for the Zambian economy will improve over the medium term, with GDP growth returning to roughly 5 percent to 6 percent by 2018.
3. **Economic growth has not been inclusive and poverty in Zambia is widespread, with 61.2 percent of the population estimated to be living below the national poverty line (US\$1.90 per day purchasing power parity terms).** Rural poverty, at 74 percent, is more than double the urban poverty of 35 percent. Sustained growth and continued political stability have produced only modest improvements in livelihoods. The effect of economic growth on overall poverty reduction has been small, as much of the benefits of growth have accrued to those already above the poverty line. Growth has been primarily driven by mining, construction, and financial services and did too little to create jobs and expand opportunities beyond the relatively small labor force already employed in these industries. Fast growth in real GDP value added is not reducing poverty, and the income share of the bottom 40 percent fell between 2003 and 2010.

**Figure 1. Unequal Growth**

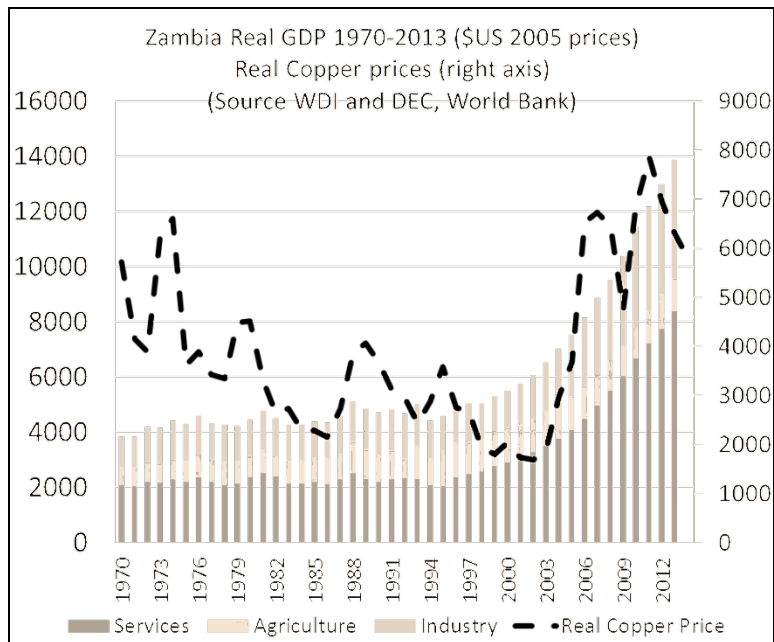


4. **Following presidential, parliamentary, and local government elections in August, 2016, the incumbent president, Edgar Lungu was reelected with a 50.3 percent majority.** After an unsuccessful petition by the main opposition party to the constitutional court contesting the outcome of the election, the president was inaugurated in September 2016 marking another peaceful transition in Zambia’s democracy. The new Government has indicated that it will engage with the International Monetary Fund to agree on a program to address the current economic challenges.

#### **A. Sectoral and Institutional Context**

5. **Zambia needs to diversify its sources of growth to sustain GDP growth, as well as to create employment for its fast growing, urban, and youthful population.** Zambia’s performance in job creation and poverty reduction have not been commensurate with its economic growth—employment is estimated to have grown annually by only 3.1 percent on average in 2004–2014, less than half of its GDP growth. Despite a recent spike in non-copper merchandise exports, its economy remains overly dependent on copper and concentrated in urban sectors. Although mining accounts for 77 percent of total exports, this industry only employs 1.7 percent of the total labor force (8.3 percent of total formal sector jobs). Overall, labor participation rates are falling while youth unemployment is rising.

**Figure 2. Zambia Real GDP 1970–2013**



Source: Let's Work, Zambia, World Bank Jobs Group, 2016.

6. **Zambia could enjoy a demographic dividend if the economy can generate more and better jobs, increase incomes, and accelerate structural transformation.** Recent jobs analyses show that Zambia created higher productivity—better jobs on average, with a significant share of the productivity gains occurring through reallocation across sectors, or structural change, as labor moved out of low-value agriculture and into services and industry (including construction)—where productivity is much higher. However, these have been limited.

**Table 1. Projections of Zambia's Working Age Population (in millions)**

	Population	Working Age Population
2015	16.212	8.297
2030	25.313	13.917
2050	42.975	25.124

Source: Let's Work, Zambia, World Bank Jobs Group, 2016.

7. **To be more inclusive, growth needs to raise the productivity and returns to work for the bottom 40 percent, most of whom are employed in the agricultural sector and small and medium enterprises (SMEs).** Most Zambians, most poor Zambians, and most Zambian women are still farmers, but, agriculture is characterized by low levels of productivity and high levels of informality. Nearly 57 percent of Zambian farmers cultivate less than 2 ha and another 30 percent cultivate less than 5 ha. Productivity is low (30 percent to 50 percent of global averages for most crops) because of inadequate and expensive inputs (40 percent higher than China for agribusiness [World Bank 2013]<sup>1</sup>), poor extension services, and overall lack of access to technology and better farming techniques.

<sup>1</sup> Dinh, H., V. Palmade, V. Chandra, and F. Cossar. 2013. *Light Manufacturing in Africa: Targeted Policies to Enhance Private Investment and Create Jobs*. Washington, DC: World Bank.

8. **Despite the high levels of employment of women in agriculture, a recent World Bank Report notes that women in Sub-Saharan Africa derive comparatively weaker commercial benefits from agriculture compared to men (World Bank 2015)<sup>2</sup>.** As noted in the report, “their plots of land tend to be smaller, their crops less remunerative, and their access to land, inputs, and finance far more restricted and precarious than men’s.”

**Figure 3. Employment across Sectors over Years**



Source: Let’s Work, Zambia, World Bank Jobs Group, 2016.

9. **A number of market and government failures impact agribusinesses, SMEs, and farmers in Zambia, including coordination failures, information asymmetries, capital market inefficiencies, policy distortions, and deficiencies in infrastructure.** This project makes critical investments to partially address these constraints. Farmers and SMEs do not often have the benefit of a confirmed market for their produce at the time of production (for example, through forward contracts, preferential procurement, and so on) as can be the case for their large-scale counterparts (Technoserve 2011)<sup>3</sup>. For example, large-scale buyers across various product categories find it difficult to source from the smallholders because of a lack of coordination among these groups, among other things. Zambeef, the largest company in Zambia, has raised the high transaction cost associated with sending numerous vehicles into the floodplains to seek out cattle owners as one of the most impending constraints to doing business on both sides. Limited access and availability of credit also places a severe constraint on farmers and agribusinesses. During the agricultural season 2010–2011, only about 13 percent of Zambian farmers obtained credit for agricultural purposes. There is minimal penetration of credit from commercial banks into the agricultural sector. (Lubungu and Mofya-Mukuka 2012)<sup>4</sup>. The high cost of finance, along with policy distortions and uncertainty, further constrain productivity growth and commercial agriculture. Two-thirds of the population has no access to finance, making it a challenge across sectors. For SMEs, commercial interest rates went over 35 percent this year, prohibitively high, especially in comparison to the average interest rate SMEs in processing industries report paying in countries like China (5 percent), and Ethiopia (10 percent)

<sup>2</sup> World Bank. 2015. *Linking Women with Agribusiness in Zambia: Corporate Social Responsibility, Creating Shared Value, and Human Rights Approaches*.

<sup>3</sup> Technoserve. 2011. *Southern Africa Soy Roadmap - Zambia Value Chain Analysis*.

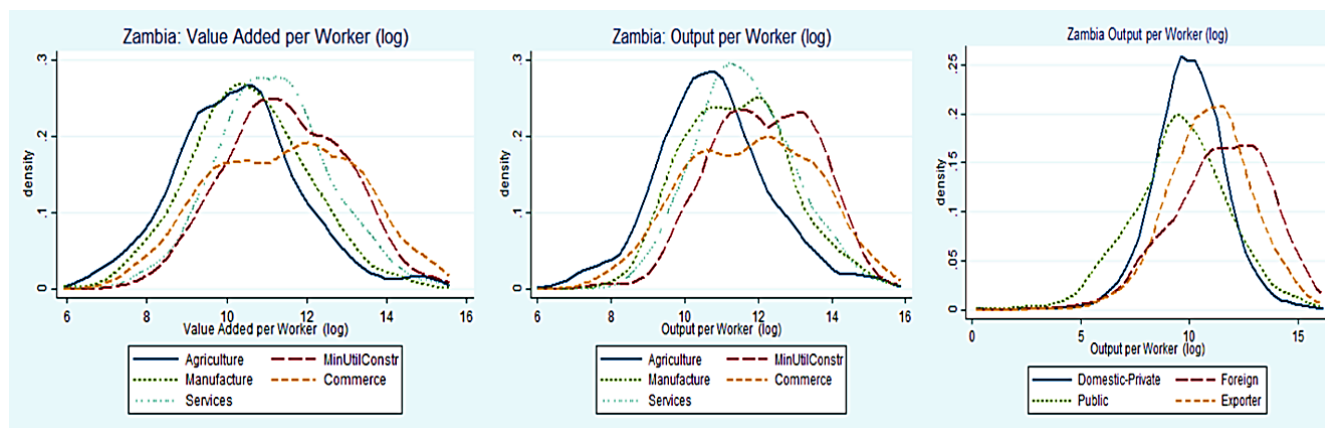
<sup>4</sup> Lubungu, M., and R. Mofya-Mukuka. 2012. *The Status of the Smallholder Livestock Sector in Zambia*. IAPRI.

(Fafchamps and Quinn 2011)<sup>5</sup>. Most rural households are largely reliant on informal providers for finance.

10. **More effective policies, institutions, and support programs in agribusiness and trade could be instrumental in achieving both broad-based growth and economic diversification in Zambia.** Recent evidence from poverty assessments (Ethiopia, Rwanda, and Uganda among others) point to the key role played by increasing labor incomes among the poor in reducing poverty. These assessments show that in countries where poverty is predominantly rural, agricultural productivity growth has been the main driver of poverty reduction. Taking advantage and exploiting spillovers from agricultural growth through complementary drivers such as nonfarm employment as well as transfers and other safety nets is also important. Proximity and connectivity to markets (domestic, regional, and international) can reduce costs, both for inputs and reaching customers, improving margins on each yield and further contributing to rural poverty reduction. However, just because the workers are productive and the markets are connected, does not mean that investment or jobs will come with it. To a certain extent, the investment climate, the sum of rules, regulations, policies, and procedures that businesses must navigate to operate legally, and the overall market transparency influence the decision to make a job creating investment.

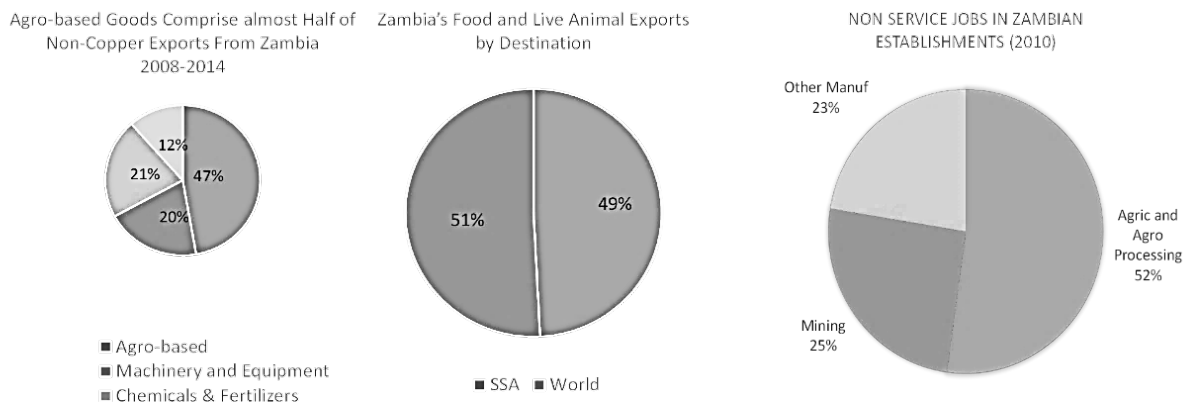
11. **In Zambia, commercial farming offers productivity gains commensurate with other sectors, as do exports by foreign investors.** Compared with many African countries, Zambia already has a relatively well-developed agribusiness industry with over 400,000 smallholder households linked to agribusiness firms through vertically integrated out-grower programs primarily for cotton and to a lesser extent, sugar, tobacco, and soybeans. Entrepreneurs are also investing in agro-processing.

**Figure 4. Productivity across Sectors**



<sup>5</sup> Fafchamps, Marcel, and Simon Quinn. 2011. "Results from a Qualitative Survey." Background paper (Light Manufacturing in Africa Study). <http://econ.worldbank.org/africamanufacturing>. World Bank, Washington, DC.

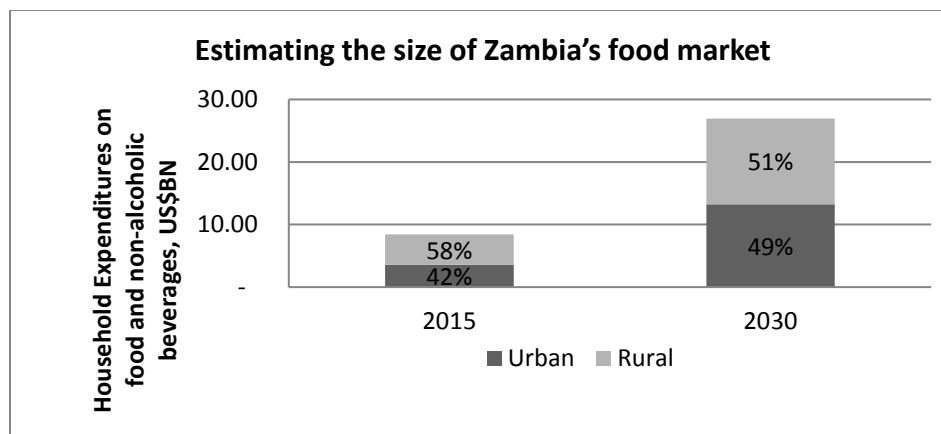
**Figure 5. Share of Agribusiness in Exports**



Source: Let's Work, Zambia, World Bank Jobs Group, 2016.

12. **Moreover, the regional and urban demand for food has been strong and is estimated to grow exponentially.** With steady rising of incomes, food demand per capita is also expected to rise, especially in urban households. At the same time, the growing middle class in Zambia is experiencing a change in diet, away from basic staples and grains toward higher value healthier foods (for example, fruits, vegetables, meat, and dairy products). This is expected to increase the demand and growth in value added beef, dairy, and poultry, as well as horticulture. Based on the income growth, urbanization, and population growth trends, food demand in Zambia could grow more than threefold in the next 15 years, to over US\$25 billion. Recent estimates show that demand for some product categories such as poultry, tripled only between 2012 and 2015 (from 3 kg per capita to 9 kg per capita).<sup>6</sup> However, imports are now much more expensive, and retailers are eager to buy locally in a wide range of categories, as long as quality standards and quantity requirements can be reliably met by local producers, both farmers and downstream agribusinesses. While there are a few examples in Zambia of smallholders meeting those requirements for effective market linkages, many are constrained by a lack of organization, business acumen, and poor knowledge of market opportunities and requirements.

**Figure 6. Size of the Zambian Food Market, 2015 and 2030**



Source: Staff estimates based on GDP growth and data from World Bank's International Comparison Program 2011.

<sup>6</sup> South African Poultry Association. 2015. <http://www.sapoultry.co.za/pdf-statistics/zambia-country-report.pdf>. FAOSTAT and "Zambia Country Report."

13. **To take advantage of the growth in agribusiness markets, supporting agribusiness SMEs will also be important.**<sup>7</sup> For developing countries, overall, over 90 percent of firms outside the agriculture sector are SMEs. As such, they produce a major part of GDP. In Morocco, 93 percent of industrial firms are SMEs which account for over 30 percent of production, investment, employment, and exports. In Ghana, SMEs contribute over 70 percent of GDP and represent over 90 percent of Ghanaian businesses, along with a major portion of employment (Abor and Quartey 2010).<sup>8</sup>

*Assessment of Regulatory and Institutional Framework for Agribusiness and Trade*

14. **A predictable and business-enabling regulatory and institutional framework is a necessary requirement for agribusiness and trade to succeed in Zambia.** Fostering competition, transparency, and efficiency in the business environment and trade facilitation is key to attracting both domestic and foreign investment in agribusiness. Recent assessments as part of the Diagnostic Trade Integration Study (DTIS) (2014) and Country Partnership Strategy (CPS) (2015) have found that policy inconsistencies, excessive and overlapping regulatory burden, policy enabled entry barriers in input markets, and a lack of strong regulatory and institutional infrastructure for investments hurt Zambia's growth prospects and productivity growth in nontraditional markets.

15. **Various markets along agribusiness value chains in Zambia underperform because of inadequate competition.** Research conducted for the 2014 Zambia DTIS, value chain analyses, the World Bank Group's work with the Competition and Consumer Protection Commission (CCPC) and investigations by the CCPC itself have identified various competition issues in key markets for agribusiness. Inadequate competition stems either from anticompetitive conduct of businesses or from policies, regulations, and rules that constrain market forces. To that end, recent studies have identified policies, regulations, and government decisions that inadvertently reinforce dominance in certain markets (for example, import and export bans, non-

---

<sup>7</sup> A large body of work supports the impact of providing assistance to SMEs and their potential for job creation. A well-performing SME sector provides employment creation, generates higher production volumes, and introduces innovation and entrepreneurship skills to the economy (Mahembe 2011). According to Clover and Darroch (2005), in South Africa, 80 percent of businesses are SMEs and encompass 56 percent of private sector employment and 40 percent of GDP (Biljon 2012). Kongolo (2010) attests that SMEs in South Africa represent over 90 percent of formal businesses, close to 60 percent of employment, and contribute to over half of GDP.

Source: Ngek, and Smith. "Will Promoting More Typical SME Start-ups Increase Job Creation in South Africa?" *African Journal of Business Management*. <http://www.academicjournals.org/journal/AJBM/article-full-text-pdf/BF2C2CF20305>.

Mahembe, E. 2011. "Literature Review on Small and Medium Enterprises' Access to Credit and Support in South Africa." National Credit Regulator (NCR).

Clover, T. A., M. A. G. Darroch. 2005. "Owner's Perception of Factors that Constrain the Survival and Growth of Small, Medium and Micro Agribusinesses in KwaZulu-Natal, South Africa." *Agrekon* 44 (2):238–263.

Biljon, G. 2012. "R400 Million Venture Fund Launched to Benefit High Impact Entrepreneurs." Business Partners Limited. <http://www.businesspartners.co.za/forum/topics/r400-million-venturefund-launched-to-benefit-high-impact-entrepr>. Accessed October 24, 2012.

Kongolo, M. 2010. "Job Creation Versus Job Shedding and the Role of SMEs in Economic Development." *Afr. J. Bus. Manage* 4 (11):2288–2295.

<sup>8</sup> Abor, and Quartey. 2010. "Growing the Global Economy through SMEs." The Edinburgh Group.

[http://www.edinburgh-group.org/media/2776/edinburgh\\_group\\_research\\_-\\_growing\\_the\\_global\\_economy\\_through\\_smes.pdf](http://www.edinburgh-group.org/media/2776/edinburgh_group_research_-_growing_the_global_economy_through_smes.pdf).

tariff barriers), facilitate collusion or restrict the ability of firms to compete on prices, quality, and other product dimensions (for example, influence on prices of certain crops, influence on the structure of fertilizer market), and allow for wide discretion on enforcement and discrimination. These show that subsectors across all value chains have been affected by these input markets (fertilizers and feed costs), industrial crops (abuse of dominance in sugar and cotton), food crops (alleged collusion among maize millers), and transport and logistics (alleged collusion between service providers). Further details pertaining to each sector are provided in annex 2.

16. **In Zambia, an overarching strategy to tackle anticompetitive practices and improve the quality of market regulations along agribusiness value chains is necessary to provide an environment where sustainable investments can take place.** Stronger institutional capacity to regulate markets properly could help eliminate or constrain government interventions that distort market signals and affect sustainable sector growth. This will include support to the competition agency (CCPC) to continue to identify and address competition issues in key markets and to the Business Regulatory Review Agency (BRRA) to integrate competition principles in the assessment of laws and regulations in relevant sectors.

17. **As noted in the 2015 Performance and Learning Review of the Zambia CPS, policy uncertainty and inconsistency have reduced business confidence.** Further, it was noted that public private dialogue is limited. The business environment has been characterized by new policies and regulations (that are termed Statutory Instruments) being introduced with little consideration of their potential impact on the private sector and markets.

18. **It was against this background that the Government of Zambia enacted the Business Regulatory Act No. 3 of 2014. The act introduces a set of principles, procedures, and minimum requirements for the introduction of regulatory measures.** The ultimate objective of the act is to improve the quality of regulation and lessen the regulatory burden on businesses. The BRRA has been established as part of Private Sector Development Reforms under the Business Regulatory Act. While the BRRA was established in 2015, its capacity is currently inadequate to fulfill its mandate and its systems and procedures are still in the process of being established.

19. **In addition to regulatory and competition issues, the high cost of trade is a key barrier to competitiveness.** The cost of exporting agricultural and manufacturing products from Zambia to key markets (China, Germany, Japan, and the United States) are consistently higher than those for neighbors such as Malawi, Mozambique Tanzania, South Africa, Namibia, or Botswana. While some relative higher costs may be inevitable due to Zambia's landlocked nature, there is consensus among public and private stakeholders that a National Logistics Strategy can help reduce costs and maximize the impact of public investments/regulations in infrastructure and logistics. Good trade logistics is also crucial for any supply chain where costs matter—agribusiness commodities can be particularly affected when inefficiencies and delays lead to high costs, especially for perishable and refrigerated goods. A medium-scale horticulture exporter interviewed for this project reported losing as much as 10 percent of the export volumes to spoilage during transport, while many food retailers claim being restricted by accessibility when sourcing locally.

20. **As Zambia is integrating into regional and global value chains, there is greater priority to ensure that Zambian firms, especially in agribusiness, meet higher quality and food safety standards.** With a growing middle class and expansion of, mostly, South African retail supermarket chains, higher standards are increasingly demanded by various segments of the domestic market. In response to these trends and following the recommendations of recent DTISs, the Zambia National Quality Policy (NQP) and its related implementation plan were launched in 2011 and outlined the Government of Zambia's policy direction and guidelines in supporting the three pillars of the National Quality Infrastructure (NQI) that is, Metrology, Standards, and Accreditation.

#### **B. Higher Level Objectives to which the Project Contributes**

21. **The proposed project receives its guidance from the Government's Vision 2030, summarized as 'a better Zambia for all',** and is in line with the World Bank's CPS 2013, which aims to contribute to poverty reduction and support Zambia's transition to a prosperous middle-income country. It is also aligned with the Ministry of Agriculture's National Agricultural Investment Plan and the National Agricultural Policy (2012–2020). The proposed project also recognizes concurrent urgencies to, on one hand, diversify sources of growth, while, on the other, tackle poverty in Zambia, as highlighted by both the Government and the CPS. In line with the Government's Sixth National Development Plan, the project aims to support a number of 'reforms and measures aimed at reducing the levels of unemployment while facilitating private sector participation in job creation'. More specifically, the project is in line with CPS objective one: reducing poverty and vulnerability, where the World Bank Group supports areas such as research, extension, irrigation, rural roads, and agribusiness development to help unlock the potential of the agricultural sector, as well as CPS objective two: improving competitiveness and infrastructure for growth and employment. Under this objective, the World Bank Group is providing support to enhance the enabling environment for private sector development and regional integration through trade.

## **II. PROJECT DEVELOPMENT OBJECTIVES**

#### **A. PDO**

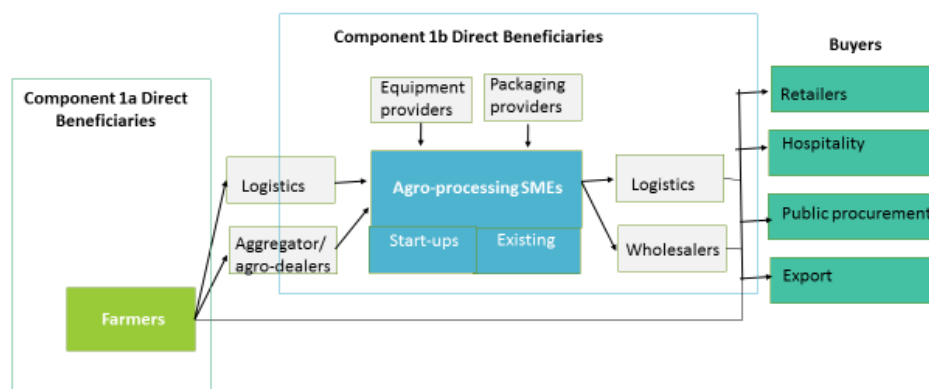
22. **The development objective of the proposed project is to contribute to increased market linkages and firm growth in agribusiness.**

#### **B. Project Beneficiaries**

23. **Direct beneficiaries of the project are expected to be producers (emerging and poor farmers) and SMEs in the agribusiness sector.** More specifically, the direct beneficiaries in Component 1 will be the participating farmers in producer organizations (POs), POs themselves, firms and their workers participating in Productive Alliances (PAs), MarketConnect and the Business Linkage Fund, and the communities affected by the last mile connective/public infrastructure. Firms across the economy will benefit from Component 2 with support to ease business regulation and barriers to entry and competition, as well as improved NQI. The following institutions will also directly benefit from project support in capacity building: BRRA,

CCPC, Zambia Development Agency, Zambia Bureau of Standards, and relevant agencies in the Ministries of Agriculture and Ministry of Fisheries and Livestock.

**Figure 7. Project Beneficiaries in Component 1**



### C. PDO Level Results Indicators

24. **The success in achieving the PDO will be monitored by the following indicators:**

- (a) Producer organizations that meet commercialization agreement or business plan specifications, and SMEs that meet buyer specifications (among beneficiaries as a percentage) (of which female);
- (b) Increase (additional) in average value of gross sales of beneficiary SMEs and of producer groups, (percentages)<sup>9</sup> (of which female);

25. These PDO indicators will be supported by the following project-level intermediate indicators to further monitor the project's progress with regard to market linkages, firm growth, and overall inclusive growth:

- (a) Private sector capital mobilized (amount in U.S. dollars)
- (b) Increase (additional) in agribusiness exports as a percentage of average sales value (percentage) (among beneficiaries)
- (c) Annual Project Beneficiary Survey (citizen engagement)

26. **The project aims to contribute to increasing sources of growth in the Zambian economy in an inclusive way** by enhancing the capacity of the producer groups and agribusiness SMEs supported by the project to increase their productivity, quality and scale, thereby increasing their sales (and therefore income) and ability to develop better and more sustainable commercial links with buyers (formal domestic and regional markets) and allowing them to

<sup>9</sup> Sales of products and activities supported by the project, over and above an average increase registered by a representative sample of the beneficiary group (to be established by baseline surveys when beneficiaries are identified).

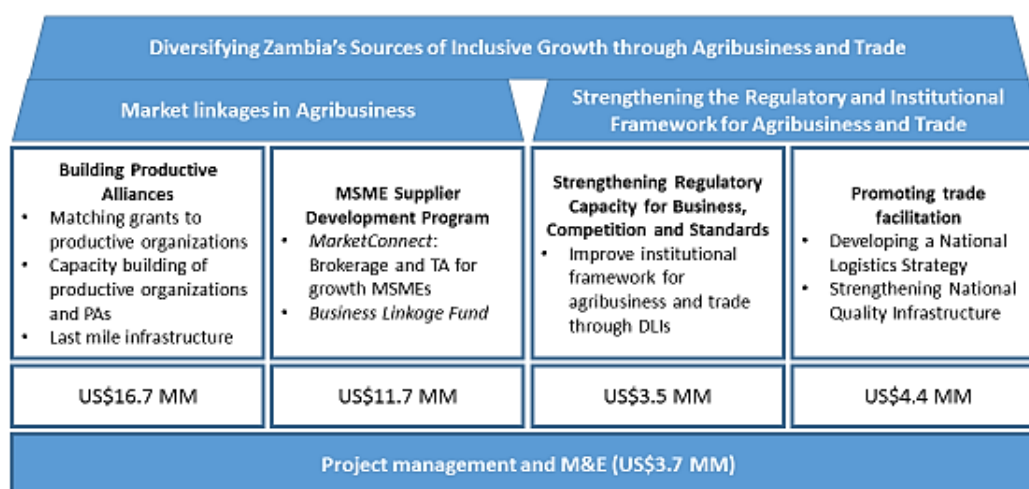
expand businesses and add employment in higher rates than otherwise. As the project aims for the beneficiary groups to provide counterpart investments (through matching grants [MGs] in Subcomponents 1a and 1b), it also expects to mobilize private sector capital directly as a result of these interventions, over and beyond the indirect, and possibly much larger, impact that increased productivity and scale will have on private sector investments at the end of the project cycle. Additionally, as the project has a special emphasis on standards, certifications, food safety, and links to regional large buyers, both bottom up (through Component 1) and top down (through Component 2), project beneficiaries are expected to increase average percentage of sales as exports in a modest way over and beyond current rates. Finally, ‘better jobs’ is a very important higher objective that the project is emphasizing to achieve inclusive growth in Zambia, and therefore the project will monitor job creation among beneficiary SMEs and producer groups during its implementation and after its close through targeted impact evaluations.

### III. PROJECT DESCRIPTION

#### A. Project Components

27. **The project will comprise three components;** (a) Market Linkages in Agribusiness; (b) Strengthening the Regulatory and Institutional Framework for Agribusiness and Trade; and (c) Project Management and Monitoring and Evaluation.

Figure 8. Overview of the Project



#### Component 1. Market Linkages in Agribusiness (US\$28.4 million – SDR 20.7 million)

28. **This component aims to develop market linkages in agribusiness, focusing on two sets of beneficiaries: ‘emerging and poor farmers’<sup>10</sup> and growth-oriented agribusiness SMEs.** Project interventions will have particular emphasis on improving the ability of emerging farmers and agribusiness SMEs to sustainably and commercially link into larger markets by structuring support around offtake opportunities that the private sector themselves identify as

<sup>10</sup> In Zambia, ‘emerging farmers’ refer to those who are classified as poor based on their annual income. However, they are commercially inclined with marketable surpluses and achieve high rates of success in extension programs.

high potential.<sup>11</sup> A linkages approach increases income, productivity, and employment growth for all those economic actors involved in the value chains where they engage and are directly and indirectly affected by the project activities.

29. **Specifically, Component 1 aims to proactively enable larger buyers to purchase from Zambian firms and farmers at the quality, quantity, and consistency they need.** This offers stable demand—and thus income for farmers and SMEs—and promotes upgrading of farm and SME activities, hence positioning them for further growth in formal markets domestically and potentially regionally and internationally. At the Project Implementation Unit (PIU) level, the project aims to build strong linkages with market intelligence on the opportunities and challenges identified under the two subcomponents.

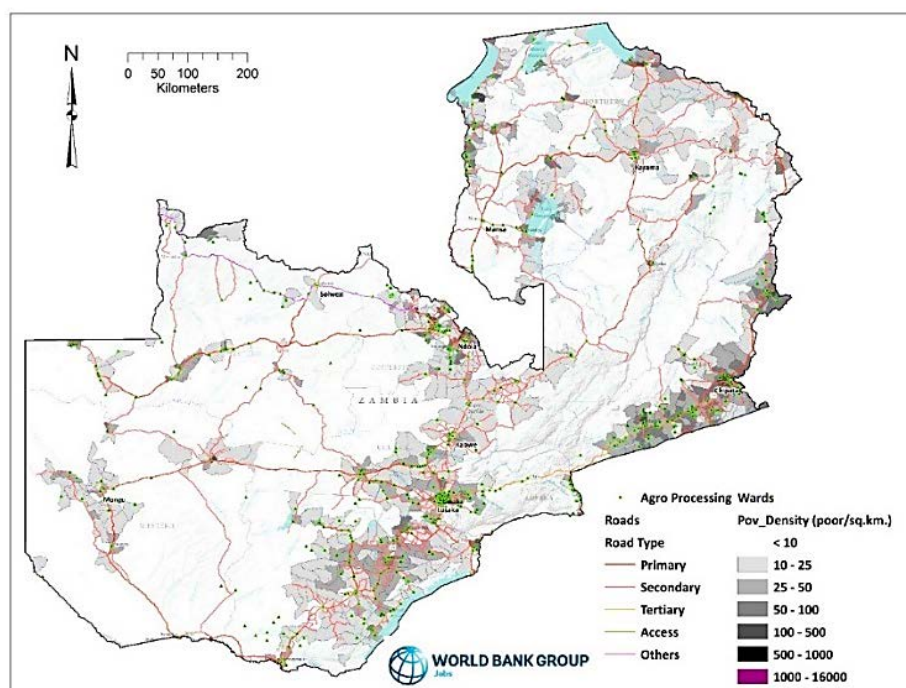
30. The rationale for these interventions are based on the assessments that have been emerging from reports such as the Linking Women with Agribusiness in Zambia (World Bank 2015), the recent macro and micro analyses underpinning the jobs prospects in Zambia (see annex 7), assessments of firm activity and poverty density in the country (see figure 9 and annex 7), Zambia micro, small, and medium enterprise survey and mapping of existing business development services (BDSs) conducted as part of project preparation (see annex 2), and the current and forecasted market demand for agribusiness goods in Zambia and the region (see figure 6).

31. **The Zambia Agribusiness and Trade Project is a national endeavor that aims to support relevant actors of the economy across the country.** Component 1 activities will be open for participation to eligible producers and SMEs from around the country. However, the project's outreach activities and initial target areas will cover the regions that have both high poverty density and agro-processing activities, as shown in figure 9, and start with Lusaka, Kabwe, Ndola, Livingstone, and Chipata, and surrounding areas. Thus, the project will initially focus on areas with already developed infrastructure and market access to build early successes, with any infrastructure investments occurring later in the project time line.

---

<sup>11</sup> Avoiding the pre-selection of specific value chains allows the private sector (farmer and SME) input into the identification of the best business opportunities, builds their capacity to do so, and avoids having the project limit itself to 'pick winners' and thereby potentially excludes opportunities for successful linkages. The most successful PAs projects in the Latin America and the Caribbean adopt precisely this value chain agnostic approach.

**Figure 9. Overlay of Poverty Density and Agro-processing Activity in Zambia**



### **Subcomponent 1a. Building Productive Alliances in Zambia (US\$16.7 million)**

32. The objective of this subcomponent is to support small-scale, emerging farmers<sup>12</sup> integrate into value chains by improving their capacity to finance and execute productivity enhancing investments and respond to the requirements of the main end-markets and major buyers. To do so, it will implement the high impact ‘Productive Alliances’ (PAs) model (see annex 5 for more details), which successfully established sustainable commercial linkages for smallholders in Latin America over the last 16 years in 21 World Bank Group projects.<sup>13</sup> Project support to PAs will be complemented by ‘last mile’ infrastructure investments in targeted areas.

<sup>12</sup> Defined by the project as those farmers who cultivate less than 5 ha of land and/or own less than US\$50,000 worth of total assets, or a minimum amount of livestock. The project is corroborating with the Ministries of Agriculture, Fisheries, and Livestock to adopt separate and appropriate thresholds for different product categories.

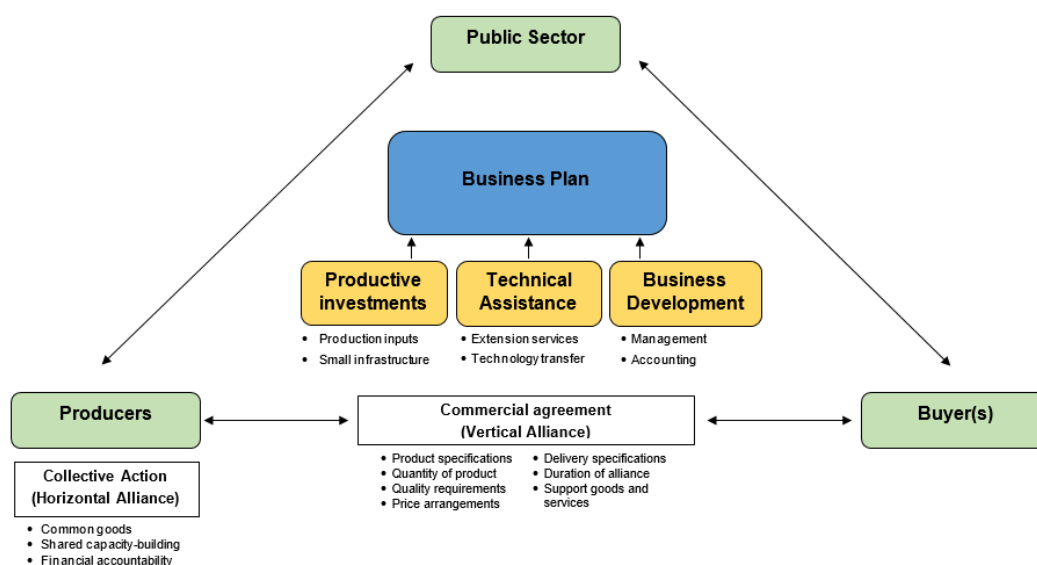
<sup>13</sup> The PA approach strengthens the linkage between producers, buyers, and the public sector through the provision of the core inputs productive investments, technical assistance (TA), and business development. It promotes the horizontal alliance among smallholder producers to coordinate production and sell collectively. Furthermore, it incentivizes a vertical alliance between producers and at least one buyer regarding the provision of a good in a specific value chain through a commercial agreement, with the public sector playing the role of the convener who brings all parties together. The PA approach was introduced during the early 2000s in Latin America, a region in

33. This subcomponent will include (a) matching grant investments in Productive Organizations (POs) (approximately US\$9.7 million); (b) facilitation of and capacity building in POs and PAs (approximately US\$3 million); and (c) last mile public good infrastructure to unlock more POs and PAs (approximately US\$4 million).

34. It will address the following constraints: (a) inefficiencies along targeted value chains due to inadequate integration of actors, information asymmetries, and coordination failures among stakeholders; (b) limited reliable access to quality raw material in key value chains to support secondary (value addition) sector expansion; (c) limited rural connections to markets, (d) limited knowledge of product specifications required by buyers (particularly sanitary, quality, and technical standards), and modern farming practices; and (e) limited access to finance in agricultural value chains, thereby increasing their incomes, productivity and commercial viability, and prospects for employment generation.

35. **A PA is based on a commercial agreement between a project supported PO and a commercial off-taker.**

Figure 10. Stakeholders in Productive Alliances in Zambia (PAZ)



36. **Through this combination of grant financing and provision of technical support, the project will facilitate the evolution of productive partnerships between aggregated farmers and anchor enterprises.** Better integration of relationships between producers and off-takers will be mutually beneficial. POs will receive TA to improve production and management of their organizations, grant funding to invest in technical and infrastructure enhancements, and support to access commercial loan finance. Off-takers will benefit from improved and consistent volumes and quality of supplies received. The PAs will assist in improving economic benefits

which the World Bank has provided approximately US\$1 billion in financing to support 21 projects in ten countries by 2015.

derived from crop yields, rural accessibility and post-harvest gains, processing facilities, better organized value chains, and access to new markets.

37. **The project will finance the costs related to the subprojects of the PAs, through MGs to the POs that cover up to 70 percent of the total subproject costs.** The POs can match the remaining 30 percent of the total cost of the subproject through a mix of own resources and commercial loans, but will need to cover at least 15 percent of the cost through their own resources (cash in most cases). The MGs will be provided through a competitive allocation to the winning business plans coproduced by the POs, buyers (PA), and the brokerage services financed by the project. The business plans will be evaluated and selected by an independent group and selected based on their technical and financial feasibility, in line with the terms and conditions further detailed in the Project Implementation Manual (PIM).

38. The Government's financial incentives to POs are capped at US\$3,000 per producer family,<sup>14</sup> based on the typical costs a subproject will incur and the current income per capita in Zambia. Any partnership is expected to include at least 10 emerging farmer households, and at least 90 percent of these need to fulfill the requirements of an emerging, poor farmer definition of the project, which will be based on hectares under cultivation (or amount of livestock), total assets, and annual income where available. The POs will be allowed to include a medium-scale farmer as a leader/organizer, where appropriate, in line with best practice in places like Colombia and Vietnam. The operational manual will specify more details of the incentive mechanism. The financial incentive can be used for investment expenditures, operational costs, TA, and certifications. The objective is to have over 180 PAZ partnerships in operation by Year 5, having reached approximately 4,500 farmer households. Annex 2 also provides further details on the implementation arrangements of the PAZ, as well as the guiding principles of this subcomponent.

39. **Finally, the subcomponent will include an infrastructure envelope that will invest in 'last mile' public good infrastructure to enable the creation of more PAs (separate from the direct investments in PAs through MGs).** This investment envelope will focus on those small-scale access, basic or rehabilitative infrastructure whose cost will be prohibitively high for PAs, whose benefits will exceed those to the PAs, and reach broader surrounding rural communities, and finally, those that push otherwise infeasible PAs over the sustainability and profitability line—as such this subcomponent is aimed as an enabler to the PAs but will be managed separately. The types of investments will include short link roads, spot improvements, market structures, rehabilitation of minor crossings and access roads, and community-based small-scale energy or water solutions. They will be capped at US\$200,000 (although the average investment is expected to be in the US\$10,000 to US\$20,000 range) per subproject, and will need to fall under the pre-defined list of investments disclosed a priori by the project's safeguards. The selection will be based on their alignment with existing or potential PAs and their economic rate of return (ERR), and the details of the selection criteria, procurement arrangements, and monitoring and evaluation (M&E) will be included in the operational manual. This activity is designed and will be implemented together with the World Bank's transport team. It will also coordinate closely with the forthcoming World Bank Improved Rural Connectivity Project.

---

<sup>14</sup> Each producer family is allowed to participate in one-subproject through the lifetime of the project.

### **Subcomponent 1b. SME Supplier Development Program (US\$11.7 million)**

40. **The objective of this subcomponent is to promote agribusiness SMEs’ sustainable integration into value chains with established end-markets and large buyers**, by supporting their ability to invest in productivity enhancing know-how and meet buyer requirements. The subcomponent activities will focus on helping the beneficiary SMEs improve their commercial viability, financial position, and operational efficiency, thereby increasing their productivity, and prospects for increased investments and employment generation. Similarly, to the PAs, the SME Supplier Development Program also aims to create improved market-driven business relationships between off-takers and SME suppliers where off-takers benefit from improved and consistent volumes and quality of supply, and the SMEs benefit from higher productivity and access to new markets.

41. The project will invest in MarketConnect (US\$6 million) and Business Linkage Fund (US\$5.7 million) (financing arm of MarketConnect), both of which will be managed by a consortium of service providers through a management contract—over five years. MarketConnect is expected to reach a total of 300 SMEs. Of these 300, 140 SMEs are also expected to participate in the Business Linkage Fund. These programs are designed based on the lessons and positive results achieved by preceding SME support programs funded and implemented by the U.K. Department for International Development (DFID) and United States Agency for International Development (USAID) (discussed in annex 2).

42. Subcomponent 1b specifically includes the development of (a) a royalty bearing brokerage and TA service offering to growth oriented SMEs (MarketConnect), (b) a Business Linkage Fund, which will extend royalty bearing MGs in the range of US\$10,000 to US\$100,000 to agribusiness SMEs. TA to the PIU and its implementing partners to execute this component will be provided by InfoDev, leveraging InfoDev’s experience in agribusiness entrepreneurship promotion.

43. **MarketConnect will provide tailored technical support, as well as MGs (through the Business Linkage Fund), to support the ‘upgrade’ of agribusiness SMEs and improve market linkages with end-buyers.** MarketConnect will be responsible for this custom tailored technical support, as well as managing the Business Linkage Fund. Its key value added will be (a) its relationships with buyers and the know-how of their requirements, terms, and conditions; (b) a core staff with the ability to do a 360° diagnostic of the SMEs along with problem solving and coaching around specific business challenges uncovered;<sup>15</sup> and (c) a strong network of specialized providers who can be brought in for unique technical challenges. The service will be

---

<sup>15</sup> Based on recent analysis by McKenzie (2015).

provided based on a royalty model, whereby the entrepreneurs pay back a percentage of their growth in sales.<sup>16</sup>

44. **SMEs will be eligible to participate in MarketConnect based on their commitment to growth and financial and technical feasibility of their business.** Key selection criteria will include (a) an assessment of SMEs' current operational, financial, and market positions; (b) the assessment of potential demand for their products taking into account different market segments, cyclic nature, and substitutes; (c) market competitiveness based on differentiation, cost, and/or focus; (d) the identification of viable interventions for advancing the growth of the business; and (e) and financial and technical viability of their businesses. The percentage of additional increase in sales that will be paid back into MarketConnect will be determined based on the SMEs' total assets, previous three-year average turnover, and the level assistance and MG received from MarketConnect and through the Business Linkage Fund. The details of the eligibility criteria and the royalty structure will be elaborated in the PIM. The payments collected under this royalty model will incur to a dedicated revolving fund, within the Ministry of Commerce, with the purpose of sustaining the program beyond the lifetime of the project. The project aims to finalize arrangements of this sustainability model during the midterm review (MTR) based on the performance of this fund.

45. **The Business Linkage Fund will extend royalty bearing MGs in the range of US\$10,000 to US\$100,000 to about 140 MarketConnect agribusiness SMEs** (with 30 percent to 50 percent private matching investments based on firm size)<sup>17</sup> for the purpose of 'upgrading'—and increasing the bankability of—the company as part of an expansion strategy. The grants will cover financing in three areas: (a) upgrading to meet standards requirements, (b) financing for one-time fixed investment (equipment) to improve quality and/or productivity, and (c) alternative energy solutions. The financing will be competitive, will only be made available to SMEs that meet the eligibility criteria for MarketConnect, and that have a clear, expressed demand from an off-taker, and a clear action plan for upgrading.

## **Component 2. Strengthening the Regulatory and Institutional Framework for Agribusiness and Trade (US\$7.9 million – SDR 5.8 million)**

46. **The objective of this component is to strengthen the regulatory and institutional framework for agribusiness and trade to assist the development of market linkages in agribusiness.** Subcomponent 2a: Strengthening Capacity for Business Regulation, Competition, and National Quality Infrastructure—as they relate to agribusiness and trade (US\$3.5 million)—will disburse project funds against the achievement of disbursement-linked indicators (DLIs); while Subcomponent 2b: Promoting Trade Facilitation (US\$4.4 million) will be disbursed using regular project financing for TA and investments.

---

<sup>16</sup> Royalty models in SME support programs are in use in India, Costa Rica, and South Africa, where SMEs supported by these programs pay back 4 percent to 10 percent of increase in sales as royalty. Funds collected under this service will go into a revolving fund, and contribute toward the future sustainability of MarketConnect.

<sup>17</sup> Micro-size agribusinesses are determined as those with less than US\$70,000 average turnover in the preceding three years; and agribusiness SMEs are determined as those with more than US\$70,000 average turnover in the preceding three years—based on the definitions of the 2011 Business Census. The ceiling for a medium-size firm was established as US\$10 million in annual turnover in the same census.

**Subcomponent 2a. Strengthening Capacity for Business Regulation, Competition, and National Quality Infrastructure (US\$3.5 million).**

47. **The objective of this subcomponent is to strengthen the regulatory and institutional framework for agribusiness and trade through use of DLIs** to underpin, reinforce, and support ongoing reforms in the following areas: (a) improving institutional capacity for the BRRA and ensuring the implementation of the Business Regulatory Review Act; (b) strengthening institutional capacity of CCPC to focus on specific agribusiness and trade issues; and (c) strengthening the capacity of the NQI System, and especially the implementation of the related Statutory Instrument that streamlines the roles and responsibilities of the line agencies. Disbursements will be made based on achievement of agreed indicators. Verification of the achievement of each DLI will be carried out by an independent verification agent, mostly likely an institution such as the Zambia Institute of Policy Analysis and Research or a recognized university. Disbursements will be made under Eligible Expenditure Programs (EEPs) against agreed DLIs. More specifically, the Government payment of salaries of select agencies (that is, eligible expenditures incurred) will be financed and disbursement will be triggered by the achievement of the said DLIs.

**Table 2. Summary of DLIs**

DLIs	Indicative Date of Achievement				
	December 2016 (Retro)	December 2017	December 2018	December 2019	December 2020
<b><i>DLI 1: Business Regulatory Review Act Implementation and Agency Support Enhanced</i></b>					
<b>DLI#1.1:</b> Annual budget for the financing of the action plan, and policy and capacity updates required to implement the Business Regulatory Review Act is included in 2017 government budget and approved by parliament	US\$100,000				
<b>DLI#1.2:</b> A time bound fully costed three-year Action Plan completed for Regulatory Impact Assessments with targets is completed and approved by BRRA Board		US\$100,000			
<b>DLI #1.3:</b> Annual budget for the financing of the action plan, and policy and capacity updates required to implement the Business Regulatory Review Act is included in 2018 government budget and approved by parliament		US\$100,000			
<b>DLI#1.4:</b> Annual budget for the financing of the action plan, and policy and capacity updates required to implement the Business Regulatory Review Act is included in 2019 government budget and approved by parliament			US\$100,000		
<b>DLI#1.5:</b> One round of Regulatory Impact Assessments completed by BRRA and approved by BRRA		US\$100,000			

Board					
<b>DLI#1.6:</b> An additional round of Regulatory Impact Assessments completed by BRRA and approved by BRRA Board			US\$100,000		
<b>Total: US\$600,000</b>	<b>US\$100,000</b>	<b>US\$300,000</b>	<b>US\$200,000</b>		
<b><i>DLI2: Competition and Consumer Protection Act Implementation and Commission Support Strengthened</i></b>					
<b>DLI#2.1:</b> An action plan for review of competition issues for a subset of agribusiness value chains completed and approved by CCPC Board	US\$500,000				
<b>DLI#2.2:</b> Annual report on defined agreements between CCPC and other public and private sector bodies on the adoption of recommendations from the competition review of key and prioritized agribusiness value chains approved by CCPC Board		US\$250,000			
<b>DLI#2.3:</b> Annual report on defined agreements between CCPC and other public and private sector bodies on the adoption of recommendations from the competition review of key and prioritized agribusiness value chains approved by CCPC Board			US\$250,000		
<b>Total: US\$1,000,000</b>	<b>US\$500,000</b>	<b>US\$250,000</b>	<b>US\$250,000</b>		
<b><i>DLI3: National Quality Infrastructure Policy Implementation Improved</i></b>					
<b>DLI#3.1:</b> Action plan on standardization and quality assurance support to agribusiness micro, small, and medium enterprises approved by the Board of the Bureau of Standards		US\$300,000			
<b>DLI#3.2:</b> Four bills on metrology, standards, and compulsory standards approved by parliament		US\$300,000			
<b>DLI#3.3:</b> Organizational structures for the new NQI agencies are developed by MCTI and approved by parliament		US\$300,000			
<b>DLI#3.4:</b> Budgets of the new NQI agencies are included in the government budget and approved by parliament			US\$1,000,000		
<b>Total US\$1,900,000</b>		<b>US\$900,000</b>	<b>US\$1,000,000</b>		
<b>Annual DLI disbursements</b>	<b>US\$600,000</b>	<b>US\$1,450,000</b>	<b>US\$1,450,000</b>		

Note: MCTI = Ministry of Commerce, Trade, and Industry.

48. **Subcomponent 2a (i). Improving Institutional Capacity for the Business Regulatory Review Agency.** This subcomponent will focus on improving institutional capacity of the BRRA. This subcomponent of the project will support activities to ensure that regulatory frameworks serve legitimate purposes and do not unnecessarily burden enterprises or increase

the cost of doing business. This will be achieved through the incorporation of Regulatory Impact Assessments (RIAs) in the policy and legislative making process relating to agribusiness and trade. The overall objective of this support is to have a fully functional RIA system, a thriving private sector, and an inclusive, efficient, transparent, and predictable regulatory process for Zambia. This will be achieved by incentivizing the Government (through appropriate DLIs) to provide the necessary budget to the BRRA and through verifiable implementation of RIAs. The World Bank will provide necessary TA through the project and other related programs (including the ongoing support from the International Finance Corporation Advisory Services). The business facilitation and engagement function, which was previously implemented through the Zambia Development Agency's One Stop Shop, will continue to be supported by the World Bank Group's ongoing Zambia Investment Climate II Program.

**49. Subcomponent 2a (ii). Strengthening Institutional Capacity of Competition and Consumer Protection Commission.** This subcomponent will, in partnership with the Zambia Investment Climate II Program, build capacity in CCPC to advance research, advocacy, and enforcement functions with a focus on markets linked to agribusiness value chains. Support to the competition commission will focus on the following activities: (a) building a core team of experts at the CCPC that can lead and supervise economic and legal analyses of regulations in key sectors for agribusiness and trade; (b) market assessments to identify competition issues in agribusiness and trade and propose actions to address them;<sup>18</sup> and (c) advocacy in the implementation of policy recommendations across public and private stakeholders. This activity will be carried out in coordination with the BRRA. The World Bank team has been providing TA to CCPC and will continue to provide agribusiness focused assistance under the project. The introduction of DLI's will provide additional incentives to the Government to meet agreed indicators and reinforce reform process on competition issues.

**50. Subcomponent 2a (iii). Strengthening the Capacity of the National Quality Infrastructure System.** The objective of this subcomponent is to support activities that will improve the institutional efficiency and effectiveness of the NQI relating to agribusiness and trade that has been brought about by the reengineering of the NQI and technical regulation regime. Specific and relevant DLIs will be used to support and underpin this process. This will be achieved through (a) reorganizing and redefining the functions and powers of the Zambia Bureau of Standards in line with the NQI policy and NQP implementation plan (and related parliamentary approvals); (b) assisting in implementing the recommendations of the National Quality Infrastructure Plan (NQIP) for separation of voluntary standards from that of the development and administration of compulsory standards; (c) implementing an integrated national metrology system for Zambia that eliminates current fragmentation, gaps, and overlaps; and (d) strengthening the development and implementation of technical regulations for all ministries and agencies in Zambia. This subcomponent will strengthen and provide the necessary capacity-building and institutional support for the investments in equipment and infrastructure that will be provided under subcomponent 2b (ii) to be effective and have the necessary impact on the development and implementation of the NQP and NQIP relating to agribusiness. The World Bank will work closely with key technical partners such as United Nations Development Organization (UNDO) to provide the necessary TA to complement the use of DLIs.

---

<sup>18</sup> The following markets will be covered: agriculture inputs (for example, animal feed and fertilizers) and other inputs (for example, road cargo transport and logistics services).

## **Subcomponent 2b. Promoting Trade Facilitation (US\$4.4 million)**

51. **The objective of this subcomponent to promote trade facilitation through (i) developing a National Logistics Strategy and (ii) supporting the implementation of the National Quality Infrastructure.**

52. **Subcomponent 2b (i) Developing a National Logistics Strategy (US\$0.8 million).** The objective of this subcomponent is to facilitate the development of a National Logistics Strategy. This will require the setting up of an intergovernmental coordination mechanism through a National Logistics Committee housed in the Ministry of Transport as the mandate of such a committee cuts across mandates of numerous ministries and agencies in the country. The high-level National Logistics Committee will act as a coordinating and oversight body. Key activities to be implemented will be (a) support to the National Logistics Committee; (b) defining and setting up key performance indicators (KPIs); and (c) development of the National Logistics Strategy. Pre-feasibility analyses will also be conducted for up to three potential projects identified through the strategy.

53. **Subcomponent 2b (ii) Supporting the Implementation of the National Quality Infrastructure (US\$3.6 million).** The objective of this subcomponent is to strengthen the NQI by (a) constructing a regional laboratory of the Zambia Bureau of Standards and provision of laboratory equipment to expand its services; (b) scaling up of the Zambia Global Food Safety Initiative (GFSI) Program to provide recognized training, consulting, and auditing services in food safety management systems; and (c) supporting the annual national standards award competition for large companies and SMEs to encourage excellence in standards.

54. **Component 3: Project Management and Monitoring and Evaluation (US\$3.7 million).** This will finance the activities of the PIU. The PIU will oversee the implementation of project activities, fiduciary management, M&E, and reporting. In addition, the project will be implemented in such a way that it will be possible to carry out an impact evaluation to assess the additionality of the project. The continuous M&E of the implementation of policies and key programs will be a critical role of the PIU and therefore a strong emphasis will be placed on capacity building.

## **B. Project Financing**

55. **Lending instrument.** The proposed Investment Project Financing (IPF) will be a US\$40 million IDA credit implemented over five years.

## **C. Project Cost and Financing**

56. Project costs and associated financing are outlined in table 3.

**Table 3. Project Cost by Component**

<b>Project Components</b>	<b>Project Cost (US\$, millions)</b>	<b>IBRD or IDA Financing (US\$, millions)</b>	<b>% Financing</b>
<b>Component 1. Market Linkages in Agribusiness</b>	<b>28.4</b>	<b>28.4</b>	<b>100</b>
<b>Subcomponent 1a.</b> Building Productive Alliances in Zambia	<b>16.7</b>	<b>16.7</b>	<b>100</b>
<b>Subcomponent 1b.</b> SME Supplier Development Program	<b>11.7</b>	<b>11.7</b>	<b>100</b>
<b>Component 2. Strengthening the Regulatory and Institutional Framework for Agribusiness and Trade.</b>	<b>7.9</b>	<b>7.9</b>	<b>100</b>
<b>Subcomponent 2a.</b> Strengthening Capacity for Business Regulation, Competition, and National Quality Infrastructure	<b>3.5</b>	<b>3.5</b>	<b>100</b>
<b>Subcomponent 2b.</b> Promoting Trade Facilitation (US\$3.8 million)	<b>4.4</b>	<b>4.4</b>	<b>100</b>
<b>Component 3. Project Management and Monitoring and Evaluation</b>	<b>3.7</b>	<b>3.7</b>	<b>100</b>
<b>Total project costs</b>	<b>40.0</b>	<b>40.0</b>	<b>100</b>
<b>Total financing required</b>	<b>40.0</b>	<b>40.0</b>	<b>100</b>

#### **D. Lessons Learned and Reflected in the Project Design**

57. **The project design has incorporated recommendations** from the recent DTIS (2014), ongoing assessments from the Investment Climate Program, lessons from agricultural lending projects in Zambia and projects in Latin America and the Caribbean that rolled out the PA model, the Programmatic Poverty Analysis (2015), and the Independent Evaluation Group's recent evaluation of World Bank programs in Zambia. Specifically, the team has built upon a Jobs Diagnostic tool developed by the Jobs group using data from the 2008 and 2012 Zambia censuses and labor force surveys.

58. **This project is designed in alignment with the World Bank Group SME Action Plan** (World Bank 2016) and leverages lessons from successful and failed SME supplier development programs under Innovation & Entrepreneurship's current research on SME supplier development programs in agribusiness. The project will work closely and build on existing initiatives in this space such as Private Enterprise Program Zambia (PEP-Z), AgDevco (funded by DFID), and Musika (funded by USAID and Sweden). All three programs have been consulted during the design of the project components.

59. **For Component 2, the project will leverage lessons and experiences of similar national logistics strategies**, most recently carried out in Rwanda. These will help to kick-start implementation by developing feasibility assessments and financing models to coordinate and crowd in investments to maximize impact. Additionally, the project design leverages geospatial work carried out by the World Bank to help increase logistical and investment climate efficiency.

60. The project will also leverage key insights from ongoing projects in the Zambia portfolio. These include lessons on mitigating issues that have slowed down disbursements for projects in the portfolio and delayed project effectiveness.

#### *Lessons Learned from Zambia Agriculture Development Support Project*

61. **Based on lessons from a number of recent IPFs focused on agriculture and private sector development in Zambia, this project design has emphasized a number of features.** First, the project's design addresses capacity limitations upfront under Component 2 to ensure implementation success. In particular, when projects include 'innovative' activities, time needs to be set aside upfront for raising awareness among all potential project participants, that is, implementers and beneficiaries. This time has been incorporated into project preparation but also regular stakeholder engagement and capacity support will play a continual role in project implementation. The project has also applied for a project preparation advance to increase implementation readiness at the time of effectiveness.

62. **This project ensures a clear link between producers and markets**—which is critical in a project that seeks to increase commercialization in agriculture. Smallholder farmers should not be looked at in isolation in such projects but must be viewed with respect to their role in value chains to generate win-win partnerships. Channeling funds through industry organizations, agribusinesses, and farmer organizations in viable value chains/commodities worked well in ultimately reaching smallholder farmers, mobilizing them, building their capacity, and helping to integrate them into the value chains. This project is especially informed with the experience in Latin America of the PAs model, where significant impact has been shown in farmer incomes, commercial viability, and poverty reduction.

63. **This project will support government capacity under Component 2** which will help foster private sector trust in the Government to support project implementation. Under the project, good collaboration between the government/public institutions and the private sector is key. In the case of the Agricultural Development Support Project (ADSP), all public and private sector entities worked closely and realized the benefits of cooperation.

64. Lessons from the ADSP also demonstrate the importance of incorporating regular M&E into this project design. As such, regular M&E will play an important role in the project throughout implementation. This will also play a critical role in learning from the project after completion. This will also enable the team to monitor broader social impacts of the project and enable further learning after the end of implementation.

#### *Lessons Learned from the Zambia Livestock and Animal Health Project*

65. Under Component 2 of the Livestock and Animal Health Project, an MG Facility was set up to enhance the productivity of small-scale livestock producers and livestock industry stakeholders in targeted areas.

66. **A number of important lessons have been learned on the design of MGs.** These lessons include (a) the need for providing technical support for implementation of activities to complement the MGs provided. In this regard, under the Agribusiness and Trade Project, under the PAs subcomponent, TA will be provided through a 'broker' to work with producer groups in

addition to the MG. Under the SME Supplier Development Program, in addition to providing MGs under the Business Linkage Fund, MarketConnect will (a) have core staff with the ability to do a 360° diagnostic of the SMEs along with problem solving and coaching around specific business challenges uncovered; (b) need effective and efficient reporting on use of funds to ensure that grants were used efficiently and for the intended purpose. Under the PAs subcomponent of the Agribusiness and Trade Project, the MG will be disbursed in tranches and its use closely monitored by the PIU. Under the SME Supplier Development Program, the team is considering embedding MarketConnect staff in beneficiary SMEs to monitor proper use of grant funding, an approach that has worked very well in a similar program under PEP-Z, a DFID-funded program.

*Lessons Learned from the Zambia Enterprise Development Project*

67. **The Zambia Enterprise Development Project (EDP) offers valuable lessons for operations containing lines of credit, matching grant schemes (MGSs), and TA** which have been incorporated into this project. The Zambia EDP also provides good guidance for country directors, resident representatives, and task team leaders on how similar operations can be designed and managed.

68. Flexibility and being opportunistic in implementation was key to the success of this project which has been incorporated into the project's implementation arrangements. The project adapted to the changing country environment. For example, when it was realized that the revolving fund for the EDP was robust to provide term finance to the agriculture value chains, the project did a course correction and reallocated the funds from the Supply Chain Credit Facility to other project priorities.

69. **Lessons for MGS operations.** The EDP's MGS component clearly shows that such schemes, when designed for mainstream businesses, are very much dependent on the size of the existing corporate sector. In the absence of deeper formal private sectors, MGS type of instruments benefit only a handful of firms. As such, the project has made a very detailed analysis of potential beneficiaries before launching any MGS type initiative.

70. **Lessons from TA components.** The EDP's TA component demonstrates that necessary TA must be included to support the project's objectives and implementation. As such, this has been incorporated into the project design in Component 2.

71. **Lessons related to project design and supervision.** The EDP demonstrates that modular project design with clear identification of operational responsibilities eases implementation. Modularity essentially localizes problems during implementation and prevents a contagion of problems across the entire project. The EDP also highlights the need for close supervision of credit line operations. The country director, sector manager, resident representative, and the task team leader should act in unison in a mutually supporting manner to reach the original objectives.

## IV. IMPLEMENTATION

### A. Institutional and Implementation Arrangements

72. **The project will be implemented by the Ministry of Commerce, Trade, and Industry (MCTI) and the ministry will establish a PIU within the ministry, but will recruit its staff competitively from the market for the purpose of this project.** The PIU will include a project manager, agribusiness specialist, financial management (FM) specialist, procurement specialist, transport/infrastructure specialist, M&E specialist, and communications specialist. A safeguards specialist will also be recruited on a full-time or retainer basis. The Ministry of Agriculture, Livestock and Fisheries, National Planning, Local Government and Housing, and Finance have played critical roles in the project's design process and have agreed to play technical and coordinative leadership roles in the various subcomponents' implementation where they oversee the relevant national agendas.

73. **A Project Steering Committee chaired by the permanent secretary for commerce, trade and industry will be set up to** (a) oversee overall implementation of the project; (b) provide policy guidance to the project; (c) ensure interagency coordination of the project; and (d) review and approve annual work plans and budgets. The project manager shall serve as the secretary of the project Steering Committee.

74. **A Technical Working Group will be set up to ensure technical implementation of the project** (while the project Steering Committee will be responsible for general policy and guidance) and will be chaired by the project focal point who will be the director of planning and information in the MCTI. The PIU will serve as secretariat to the Technical Working Group.

75. In addition, the Provincial PAs Advisory Committees will be set up to enhance outreach, ensure local-level ownership, and provide guidance and feedback for project implementation. These will include members of local businesses such as Chambers of Commerce, and Zambia National Farmers Union, members of local leadership, and representatives from the Ministries of Agriculture, Livestock and Fisheries, and Provincial Planning Office. A member from the private sector will chair the committee. A provincial facilitator will be appointed by the MCTI in each province where the project is active. This facilitator will be from the provincial cooperatives department of the MCTI or recruited from the market where such staff are not present or appropriate.

76. Detailed implementation arrangements are outlined in annex 3 and will be also elaborated in detail in the PIM.

### B. Results Monitoring and Evaluation

77. **The project will provide institutional support to help the PIU develop and implement a strong M&E system and framework** to gather the data needed for the KPIs for the PDO and intermediate indicators.

78. The PDO indicators include the key outcomes documenting the expected results with regard to increased investments, firm and income growth, and employment. These indicators are designed to capture the incremental, project related changes among direct beneficiaries, and

therefore baseline values are currently set at 0. However, they will be revised once the beneficiaries are identified based on the average performance of the preceding three years. In addition, a number of intermediate indicators will be used to track periodic progress toward achieving the PDO (as listed in annex 1).

**79. Annex 1 includes a complete list of indicators for Components 1 and 2 along with the planned frequency and responsibility for data collection.** The M&E system will feature a Management Information System (MIS), spot checks, evaluations, and beneficiary assessments to gather accurate data on the indicators. Specifically, the MIS will be used for recording all information related to project activities, including (a) basic information on POs, (b) details on business plans and the PAs, (c) subproject information, such as physical and financial progress, (d) FM data from which Statement of Expenditures will be provided to the World Bank, and (e) project management information for progress reports to be submitted semiannually.

**80. The PIU will be responsible for the M&E system, including progress reporting of KPIs in accordance with World Bank requirements.** The system will draw upon consultants who accompany project implementation and provide information for the project's M&E plan, which will be funded by Component 3. A priority of the project is to ensure that these consultants will be well trained and supervised to ensure consistency in data collection and particularly when facilitating participatory financial evaluations with PO members. The PIU, with World Bank support, will be responsible for periodically analyzing results data as part of the project's communication strategy with key stakeholders, including the POs, commercial actors, participating financial institutions, and so on. In addition, the PIU will be responsible for supporting the baseline survey, midterm evaluation, and project impact evaluation.

**81. In addition to regular project monitoring, an impact evaluation will analyze the extent to which the observed results can be attributed to the programs conducted** as part of Component 1, that is, the PAs and the SME Supplier Development Program. Particular emphasis will be placed on project sustainability and project effects that go beyond the scope of what can be measured at the project level, such as indirect job creation effects through value chain development and induced job creation through higher incomes in the project areas. Moreover, the quality of newly created jobs will be examined, in particular, with regard to worker productivity, working conditions, earnings, and sustainability of jobs created. The evaluation will include a treatment and a control group with baseline data collection, comprising businesses and producers that were not exposed to the project's supported activities. Designed as a tracer study, the evaluation will consist of surveys with both groups on multiple occasions after the completion of the program, which will allow for a full difference-in-difference approach. This allows analyses of businesses performance over time, which is instructive regarding the program's sustainability.

**82. Citizen engagement will be measured through beneficiary assessments,** which will include (a) focus groups with a participatory analysis methodology; (b) semi-structured interviews with producer households, PO leaders, and buyers; and (c) life stories of producer household families. The relevance of project activities related to the producer alliances, BDS, grants, and so on under Component 1 will be assessed with regard to capacity, market access, productivity, and incomes. Staff surveys among regulatory agencies under Component 2 will be

conducted to assess relevance and satisfaction of capacity-building activities for job performance.

**83. Broad citizen engagement was involved in the design and preparation of the project** with a number of farmer organizations including the Zambia National Farmers Union, Dairy Association of Zambia, Poultry Association of Zambia, Aquaculture Association of Zambia, Agribusiness Forum, Zambia Export Growers Association, as well as private sector associations such as Zambia Association of Manufacturers, Zambia Chambers of Small Scale Business Association, as well as nongovernmental organizations such as Musika, Stichting Nederlandse Vrijwilligers (Netherlands Development Organization, SNV), and AgDevCo. To ensure continued citizen engagement in the project, a full-time communications specialist will be engaged in the PIU and a comprehensive communications strategy will be developed and implemented by the client during the duration of the project to ensure proper coordination, dissemination, and stakeholder feedback.

84. The project's M&E system will include an explicit focus on disaggregating results for KPIs wherever possible by gender and youth.

### **C. Sustainability**

**85. In its Vision 2030, the Government of Zambia has emphasized its commitment to shared prosperity**, with particular emphasis on the agribusiness sector as underscored in the Ministry of Agriculture's National Agricultural Investment Plan and the National Agricultural Policy (2012–2020). The project is fully anchored within this strategy and the Government has expressed its strong support for the project itself and is continuing to invest in the agricultural sector after the project closes. Further, the reforms supported under Component 2 will have a lasting impact on businesses in Zambia, especially those in the agribusiness sector. Because this component is structured around specific DLIs, this project ensures a more sustainable impact on the Zambian economy as the regulatory, legal, and business environment changes will continue to improve the overall health of SMEs around the country.

**86. The support provided to POs under Subcomponent 1a will improve the overall capacity of the POs** and their membership that will continue to have an impact after the project closes. Additionally, the last mile infrastructure investments financed under Subcomponent 1a will have a sustained impact on market access for rural communities well beyond the life of the project.

**87. The royalties generated from MarketConnect and the Business Linkage Fund under Subcomponent 1b will go into a revolving fund within the Ministry of Commerce that will serve to sustain the program** beyond the lifetime of the project. The support provided to SMEs under this subcomponent should also have a lasting impact, as these SMEs are able to access and partake in wider agribusiness value chains, especially those with export potential.

88. Government institutions to be supported by the project will continue operating after the project closes. These institutions include the BRRA, the CCPC, and the NQI, along with other relevant authorities. While the implementation arrangements under this project will be

established only for its duration, this project will support capacity building within key government agencies.

## V. KEY RISKS

### A. Risk Ratings Summary Table

Risk Category	Rating
1. Political and Governance	Moderate
2. Macroeconomic	High
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Moderate
7. Environment and Social	Moderate
8. Stakeholders	Substantial
<b>OVERALL</b>	Substantial

### B. Overall Risk Rating and Explanation of Key Risks

89. **The overall risk is substantial.** *Macroeconomic risk is rated as high*– the Zambian economy has deteriorated since August 2015 when global copper prices fell to 2009 levels, which lead to depreciation of the Zambian Kwacha against the United States Dollar, consequent inflation of above 20 percent, as well as protracted fiscal deficits. Going forward however, prospects for the Zambian economy are expected to improve over the medium-term and the Government has engaged with the IMF on a possible financial program to address the current macroeconomic imbalances. This stated engagement with the IMF will assist to mitigate the high macroeconomic risk rating. *Technical design risk of the project is rated as substantial* due to mainly two innovative subcomponents, the Productive Alliances model which, though proven and successfully implemented in World Bank projects in Latin America over the past 19 years by connecting poor farmers to lucrative markets, is new to the Africa region. Secondly, the use of Disbursement linked Indicators (DLIs) in an Investment Project Financing (IPF) instrument, though not new to the Africa region and Zambia in particular, has never been used in a Trade and Competitiveness Global Practice IPF lending operation in Zambia before. To mitigate this risk, a rigorous proof of concept of the Productive Alliances approach was conducted at the identification and appraisal stage with key stakeholders to establish demand, capacity and feasibility. In addition, it was found that elements of the model are already being successfully implemented in Zambia. On DLIs, key lessons learned such as having a limited and focused set of DLIs and early engagement of an independent verification agent have been incorporated into project design based on experiences from an existing IPF lending operation in the Health Sector in Zambia which utilizes DLIs. Lastly, *risk related to the institutional capacity for implementation and sustainability is rated substantial* as this is the implementing agency’s first World Bank Project. In order to mitigate this risk and build implementation readiness the project has been using a Project Preparation Advance. *Stakeholder risk is also rated substantial* given

the Project's emphasis on 'emerging farmers' and 'growth-oriented SMEs' as direct beneficiaries, and their inherent capacity constraints. During preparation the Project has involved a wide range of stakeholders in consultations and design, and has emphasized governance, planning, and brokerage/facilitation in each Project component in order to minimize implementation delays and mitigate stakeholder risks.

90. All key stakeholders have been closely involved in project preparation and design to ensure that there is greater coordination and ownership from the start of the project.

## **VI. APPRAISAL SUMMARY**

### **A. Economic and Financial Analysis**

91. The project has two major components aiming to support competitiveness and job creation in the agricultural sector in Zambia. The economic analysis of this project is built as a financial analysis with the estimated difference in cash flows to beneficiaries (smallholders, medium and large commercial farms, and SMEs, including new jobs created) accounted for as cash flows to the project. The costs and benefits that are expected to accrue from Subcomponents 1a (PAs) and 1b (SME Supplier Development Program) have been estimated and the net present value (NPV) and the ERR for the investments in these components were calculated. Details on these calculations are provided in annex 6.

92. The economic analysis of Component 2 (Strengthening the Regulatory and Institutional Framework for Agribusiness and Trade) presents a special challenge because of the indirect relationship between the business environment reforms supported under the project and the stream of benefits that these are expected to trigger. In light of this, a literature review has been provided on the positive effects of business environment reform on business creation, SME development, and growth.

93. Overall, the project's NPV is estimated at US\$7.8 million at a 12 percent discount rate,<sup>19</sup> with a 20 percent ERR. The data and the assumptions are based on field research that estimates the impact of similar programs on agricultural SMEs growth and productivity rates and changes in wages. Further details on these are provided in annex 6.

94. Subcomponent 1a aims at supporting POs in Zambia to support farmers across a number of value chains. This will help increase the strength of such associations and the farmers that are part of these organizations.

95. The number of beneficiaries of Subcomponent 1a is estimated at 180 POs and 4,500 farmers through these organizations, along with 6,300 beneficiaries of the infrastructure investments. The ERR of this subcomponent is expected to be 22.3 percent and the NPV is expected to be about US\$5.9 million with a discount rate of 12 percent.

96. Subcomponent 1b will provide financing to address key knowledge and capital constraints in agribusiness through financing of materials and training provisions through a matching facility. As a result, agricultural SMEs will be able to expand and improve their

---

<sup>19</sup> Discount rate is based on the risk-adjusted opportunity cost of capital for World Bank financing in Zambia.

businesses and link into larger markets. The increased revenues will also increase the number of formal and informal jobs in both sectors.

97. The number of beneficiaries of Subcomponent 1b is estimated at 300 SME training recipients and 140 SME grant recipients. The ERR of this subcomponent is expected to be 17.2 percent and the NPV is expected to be about US\$1.9 million with a discount rate of 12 percent.

98. Component 2 will support investments to support the business environment in Zambia, including trade facilitation and public-private dialogue. As a result of the investments under this component, the number of investment projects in Zambia is expected to increase, channeling both money and jobs into the local economy.

99. Activities under Component 2 are expected to result in improvements in the business environment notably in areas dealing with trade facilitation, investment promotion, public-private dialogue, and investment climate, thereby having a positive effect on business creation, SME development, and growth, a relationship also established and supported in previous empirical studies (listed in annex 6).

#### *Rationale for Public Intervention*

100. Private capital for investment in Zambia does not provide adequate financing for local agricultural businesses, particularly for proof-of-concept investments with high economic, financial, and social returns, but accompanied by high levels of risk, uncertainty, and initial investments. Additionally, the existing provisions for consulting services and financing of agricultural SMEs are minimal, emphasizing the need for public investment.

#### *World Bank's Value Added*

101. The World Bank's added value is substantial, encompassing its experience in the country, technical expertise, coordination support, and channeling global knowledge. The World Bank's value added in low-income states is acknowledged to be substantial. For this project, this will include direct technical expertise through intensive supervision; support for the coordination required, through a World Bank team that incorporates members from all relevant sectors; and the channeling of global knowledge through connections to World Bank teams and counterparts working on similar projects (past or present) in other low-income states.

#### *Contribution of Economic and Financial Analysis (EFA) to Project Design*

102. Initial development of the EFA occurred alongside with project design before the Quality Enhancement Review in July 2016. Information provided from the EFA has been used to refine details of the project design such as M&E targets and their associated timing, the number of target beneficiaries within the agribusiness sector, and the split between different value chains and sizes of SMEs.

#### *Actions during Implementation to Revisit EFA at Midterm*

103. At midterm, the project team will use current M&E data to evaluate the impact to date of the project. These actuals will be used to calculate an updated interim rate of return and NPV.

Given that most of the impact associated with the project will be visible in the years after closing, the interim ERR and NPV will most likely be negative; however, these values can be used to evaluate the quality of the original predictions during project design.

104. Additionally, the EFA will be updated to reflect the realities of the project at midterm. This includes updating the expected ERR and NPV going forward, based on the actual data available and using this information to qualify and assess potential changes to the project budget allocations and/or design. Such changes could include any restructuring, allocation of budget to different components, order and timing of disbursements related to the different components to maximize expected impact, and so on.

#### *Impact of the Project on the Borrower's Financial Situation*

105. This project will help develop local companies in the agriculture sector, which will eventually help support government tax revenues. A financial analysis on anticipated cost recovery for the Government of Zambia has been included as part of this EFA.

#### *Financial Analysis on Anticipated Cost Recovery and Sustainability for the Concessional Financing Facility (CFF)*

106. A financial analysis on the Government of Zambia's ability to recover the cost associated with this loan has been developed as part of this economic analysis. Based on this analysis, the 35-year government ERR ranges from 10 percent to 600 percent depending upon the exact loan terms. These terms are determined during negotiations procedures with the Government and represent a wide range of potential terms for each loan recipient. The financial analysis conducted here will be used to inform the loan terms for the Government of Zambia, and this analysis will be updated at project midterm along with the economic analysis.

### **B. Technical**

107. The investments in agribusiness under this project are well supported by a number of economic development studies. Investments in the agriculture sector alone are said to generate significant multiplier effects, estimated to be between 1.3 and 1.5 in Sub-Saharan Africa and Latin America, and between 1.6 to 1.8 in Asia (USAID 2014)<sup>20</sup>. However, agro-processing activities have an even larger impact by creating a demand-pull for upstream raw materials, input provision, veterinary services, production/harvest equipment, and aggregation/wholesale/sorters/graders, as well as for professional support services such as financial services, third-party certifications, packaging, storage/warehousing, and logistics services (see figure 11). This creates opportunities for income growth and value generation across the value chain, from production to distribution and sales (Austin 1982<sup>21</sup>; da Silva 2006<sup>22</sup>).

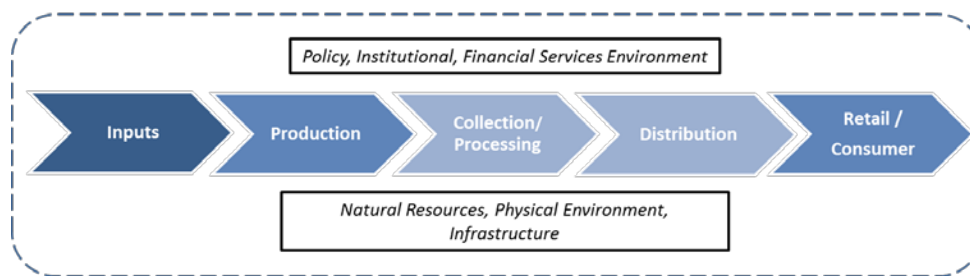
---

<sup>20</sup> United States Agency for International Development (USAID). 2014. "Agricultural Transformation in Sub-Saharan Africa and the Role of the Multiplier: A Literature Review." [http://pdf.usaid.gov/pdf\\_docs/PBAAC413.pdf](http://pdf.usaid.gov/pdf_docs/PBAAC413.pdf).

<sup>21</sup> Austin Associates. 1982. *Using Value Chain Approaches in Agribusiness and Agriculture in Sub-Saharan Africa*. Technoserve. <http://www.technoserve.org/files/downloads/vcguidenov12-2007.pdf>.

<sup>22</sup> Da Silva, C. 2007. "Improving Small Farmers' Access to Finance: The Pros and Cons of Contract Farming." Presentation at the Asia International Conference.

**Figure 11. Agricultural Value Chain**



## **C. Financial Management**

### **FM Assessment**

108. An FM assessment was conducted for the MCTI, which will be the main IA for the proposed Agribusiness and Trade Project. It was conducted by the FM specialist in June 2016. Its objective was to determine whether the MCTI has acceptable and adequate FM arrangements to (a) ensure reliability of financial reporting, (b) ensure effectiveness and efficiency of operations, and (iii) comply with legal covenants, laws, and guidelines. The assessment concluded that the FM arrangements in place meet the World Bank's minimum requirements under OP/BP 10.00 and therefore are adequate to provide, with reasonable assurance, accurate and timely information on the status of the project. The overall FM risk rating of the project is Substantial because (a) neither the accounting nor the internal audit staff of the MCTI have experience in implementing World Bank-financed projects and (b) the MCTI's accounting department is inadequately staffed. However, this risk rating is expected to be reduced to Moderate after the risk mitigation measures have been taken. Therefore, it is recommended that training of both accounting and audit staff is conducted on a regular basis. In addition, a PIM that includes FM procedures will be prepared before project effectiveness.

## **D. Procurement**

109. A Procurement Risk Assessment Management System (P-RAMS) was carried out in February 2016 for the MCTI, the main IA for the proposed project. The objective of the assessment was to determine or identify procurement risks during project preparation and implementation stages and monitor them throughout the project cycle. In doing so, the assessment has determined the procurement capacity of the IA and has identified risk factors that need to be addressed during project implementation. An 18 month Procurement Plan has been agreed with the Recipient and approved by the Bank.

110. The overall procurement risk for the project is Moderate. It is assumed that the residual risk after implementing the risk mitigation measures will be Low. The main risks areas identified as part of the assessment are:

- (a) **Internal manuals and clarity of the procurement process.** The assessed risk is Substantial. This is because the MCTI has not implemented a World Bank-funded project before, and there is a possibility that agency staff may face challenges to

apply procurement processes correctly and consistently. In addition, the ministry does not have an internal manual which clarifies internal procurement processes. Therefore, it is assumed that IA staff may face challenges to apply procurement process correctly and consistently as with the first risk area.

- (b) **Contract management and administration.** The assessed risk is Substantial. Issues identified are that contract/contract amendments may generally not be processed on time and are subject to long reviews and clearances often leading to bid validity expiry and pulling out of lower priced bidders, invoices from vendors generally not paid within the contractual terms and time can lead to higher priced bids. This leads to the risk that contract prices may be generally higher than should be the case, including to cover legal risks. This may also discourage competition and/or delays of closing of the contracts.

111. The mitigation measures for (a) include the development of a simple manual for procurement as part of the Project Implementation Manual which is a key effectiveness condition for the project. Further, training in basic procurement under World Bank-funded projects will also be also provided for managerial, technical, and procurement staff even ahead of effectiveness by the Bank, which regularly holds such training for project staff; and for (b) measures will include (i) reviewing the causes for recurrent amendments and cost overruns and developing suitable corrections to planning, estimates, lack of proper designs, and so on and (ii) establishing a system to monitor and expedite contract modifications or change orders. These will be included as part of the terms of reference (ToR) for procurement audits. Based on these mitigation measures, the overall procurement risk was lowered from substantial to moderate.

112. Procurement will be supervised as part of the normal implementation support mission twice a year and at least once a year through Procurement Post Review (PPR) Audits.

113. The procurement procedure to be followed for National Competitive Bidding (NCB) will be the open international bidding procedure set forth in the Public Procurement Act (PPA), 2008, Act. No.12 of 2008, as amended by the PPA (Amendment), 2011, Act No. 15 of 2011, and the Public Procurement Regulations, 2011, Statutory Instrument No. 63 of 2011; provided, however, that this procedure is subject to the provisions of Section I and Paragraphs 3.3 and 3.4 of Section III, and Appendix 1 of the 'Guidelines for Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated January 2011, revised in July 2014. Selection of consultants under the project will be carried out based on the provisions of the 'Guidelines Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated January 2011 and revised in July 2014. Information on the procedures for procurement of works, goods, and non-consultant services and selection of consultants have been further elaborated in the procurement plans.

#### **E. Social (including Safeguards)**

114. The eligible project beneficiaries in the PAs component are low-income emerging farmers who will receive MG support to engage in commercial activities. The MGs are expected to be in the US\$1,000 to US\$3,000 range per farmer household. The socioeconomic

characterization of beneficiaries will be part of the application process and will be used to track the success of investments. Applications for MGs require social management plans and annual reporting on social impact.

115. The overall social impact is expected to be positive in nature. Potential adverse social impacts of project components are expected to be small scale and site specific. It is not anticipated that the project will lead to significant land acquisition or significant restrictions of access to sources of livelihood. However, given that the project is expected to include investments in critical market and common use infrastructure the World Bank policy OP/BP 4.12 on Involuntary Resettlement was triggered. The exact sites are not known at this time, but construction activities may require land acquisition or temporary relocation of traders currently occupying the sites while market points are built. The Resettlement Policy Framework (RPF) was prepared for the project and disclosed in-country and at the World Bank InfoShop on October 6, 2016. All project activities will be screened in accordance with the RPF and the Environmental and Social Management Framework (ESMF) to prevent adverse impacts. In the event the screening identifies people at project sites who will be physically or economically displaced because of project or subproject activities, a Resettlement Action Plan (RAP) will be prepared in accordance with the requirements of OP/BP 4.12 before commencement of any relocation activity. The RAP will be cleared by the World Bank, consulted upon, and disclosed. When repercussions are minor (that is, affected people are not physically displaced and less than 10 percent of their productive assets are lost) or the number of affected people is less than 200, an abbreviated RAP will be prepared.

#### *Climate Change Screening*

116. The National Climate and Disaster Screening Report identifies the associated sectors that are likely to be affected in the project such as agriculture and trade and industry. Climate and geophysical hazards are considered to be high for agriculture and low for trade and industry. These risks will be mainly evident in the low rainfall areas that lie in the southern regions of Zambia. The key drivers for climate risks, currently and in future, are high temperatures, drought, high precipitation levels, and associated floods. The project's physical investments are likely to involve some small infrastructure works to build or upgrade market points and associated auxiliary structures in the agribusiness value chain. Thus, adaptation will be promoted as one of the key design principles for the scope of planned activities, but will not require freestanding, broad analytical, or planning efforts. Mitigation efforts are targeted at reducing greenhouse gas emissions by reducing the project footprint in the value chain by creating facilities and support services in close proximity.

### **F. Environment (including Safeguards)**

117. OP/BP 4.01 on Environmental Assessment has been triggered and, overall, the project has an environmental Category B rating. The policy has been triggered notwithstanding the project's major focus being on TA aimed at promoting an environment for entrepreneurship and investment and facilitating national and regional trade. The project is likely to involve some infrastructure works to build or upgrade small markets in selected agro-economic zones across Zambia.

118. Because the exact locations and site-specific details of the activities and scope of works are yet to be identified, the relevant safeguards instrument is an ESMF. The ESMF was prepared for the project and disclosed in-country and at the World Bank InfoShop on October 18, 2016. The ESMF provides detailed step-by-step processes for identification and screening of critical environment and social risks; procedures for evaluation of the significance of environmental risks and impacts; development of site-specific mitigation and monitoring plans when subproject details are identified; and institutional arrangement for safeguards implementation and capacity-building measures. The ESMF provides for screening the subproject at the national level for an Environmental Impact Assessment and associated Environment and Social Management Plan (ESMP) that will present mitigation measures to address the potential environmental and social impacts of the project at the subproject level, once the activities' locations and scopes have been identified. The ESMP for subprojects that are deemed too small, will require that a generic ESMP be developed to guide on best practices during construction works and management of waste.

119. OP 4.09 on Pest Management has been triggered. The policy has been triggered as the project may involve investment activities that will require the procurement of farming inputs such as fertilizers, pesticides, and fungicides to support the agriculture sector. This will require that a Pest Management Plan (PMP) be developed. Because there will not be significant pest management issues on the project, the PMP will form part of the ESMF and the ESMP.

#### **G. World Bank Grievance Redress**

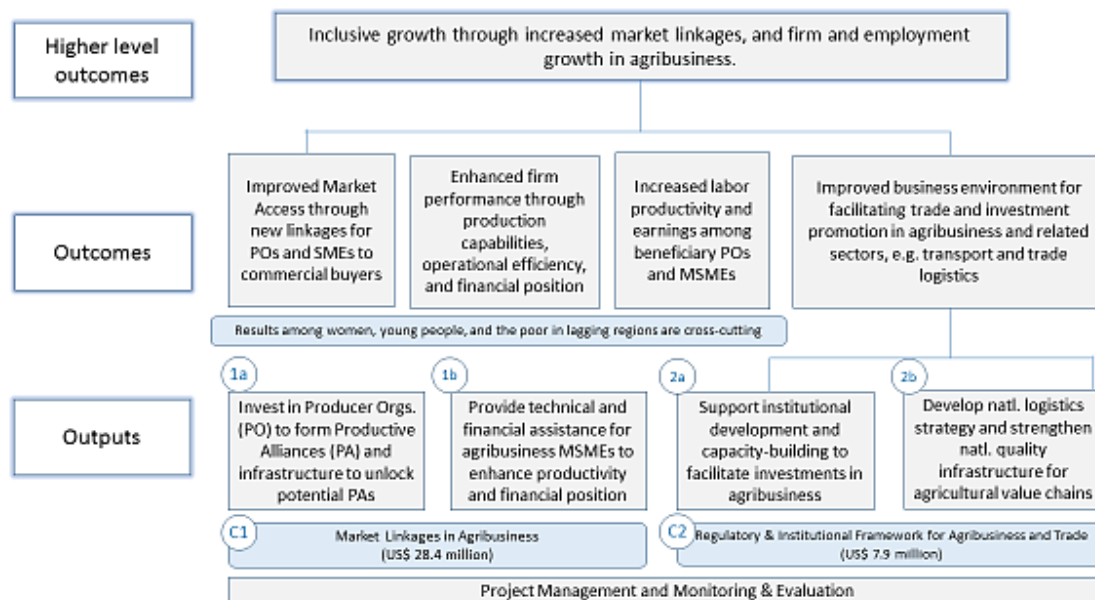
120. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org).

## Annex 1a: Summary Results Chain

### ZAMBIA: Agribusiness and Trade Project (P156492)

1. This annex presents (a) the summary results chain for the project (detailed presentation under Project Description); (b) PDO indicators; (c) intermediate results indicators; and (d) indicator descriptions (for b and c). Complete descriptions of the DLIs with verification protocols are presented in Annex 2.

**Figure 1.1. Summary Results Chain**



\* Employment refers to jobs through a more, better, and inclusive perspective – meaning job creation through wage work and self-employment/entrepreneurship, worker productivity increases towards greater earnings / livelihoods, and job access for women, young people, and the bottom 40% of the population.

*Note:* While Components 1 and 2 are the focus of the Results Framework and Monitoring, the project notes that the measures of success for the cross-cutting Project Management and Monitoring and Evaluation component will include (a) baseline surveys completed; (b) MIS in place and operational; (c) participatory M&E system integrated into the MIS; (d) annual operations plans successfully executed; (e) satisfactory technical and financial audits; (f) timely preparation of semiannual reports; and (g) compliance with project operational manual, including safeguard and anticorruption policies.

## Annex 1b: Results Framework and Monitoring - ZAMBIA: Agribusiness and Trade Project (P156492)

### PDO Statement

The development objective of the proposed project is to contribute to increased market linkages and firm growth in agribusiness.

<b>Project Development Objective Indicators</b>							
Indicator Name		Cumulative Target Values					
	Base	YR1	YR2	YR3	YR4	YR5	End Target
Market linkages - beneficiaries that meet commercialization agreement or business plan/(buyer) specifications (percentage)							
- Producer groups that meet commercialization agreement/business plan specifications	0	0	0	50	60	65	65
- SMEs that meet buyer requirements (by gender)	0	0	20	50	60	70	70
Increase (additional) in average value of gross sales							
- Of producer groups (percentage) (by gender)	0	0	0	10	10	12	12
- Of beneficiary SMEs (percentage) (by gender)	0	0	5	10	12	13	14
<b>Intermediate Results Indicators (core and jobs)</b>							
Indicator Name		Cumulative Target Values					
	Base	YR1	YR2	YR3	YR4	YR5	End Target
<b>Cross-cutting intermediate indicators for components 1a and 1b</b>							
Direct project beneficiaries from PAs and SMEs (Number) – (Core)	0	—	—	—	—	—	30,000
Female beneficiaries (Percentage – Sub-Type: Supplemental) (Core)							13,000
Private sector capital mobilized (Amount in U.S. dollars – [Core])	0	—	—	2,000,0000	3,000,000	3,000,000	5,000,000
Increase (additional) in agribusiness exports as a percentage of average sales value of beneficiaries – PA and SMEs (Percentage)	0	0	0	2	2	4	4
Annual Project Beneficiary Survey among producer households and SMEs (citizen engagement)	0	1	1	1	1	1	1
<b>Subcomponent 1a. Building Productive Alliances in Zambia</b>							
Number of producer households that benefit from the alliances (by gender)	0	50	250	1,500	2,500	3,000	4,000
Buyers who fulfill their obligations under the	0	0	0	70	70	70	70

commercialization agreement or business plan (of PA) (percentage)							
Productive alliance subprojects implemented (number)	—	0	20	50	150	180	180
Number of public good infrastructure subprojects implemented	0	—	—	10	25	35	35
<b>Subcomponent 1b. SME Supplier Development Program</b>							
Number of beneficiary SMEs that receive support from MarketConnect (by gender)	0		35	100	200	220	250
Number of beneficiary SMEs that receive matching grants (by gender)	0		25	50	100	120	140
Increase in average output per worker among SME beneficiaries (percentage)	0	0	0	4	5	6	7
Share of beneficiary SMEs that receive new commercial credit (percentage)	0	—	—	—	20	—	30
<b>Component 2. Strengthening Regulatory and Institutional Framework for Agribusiness and Trade</b>							
Staff trained in regulatory agencies (by gender)	0	—	—	—	—	—	40
Share of staff in regulatory agencies who confirm that the training was effective (percentage)	0	0	0	85	85	85	85
Share of SME beneficiaries and producer groups supported to attain food safety standards (percentage)	0	—	—	30	40	50	50
Number of NQI bills submitted for parliament approval (list)	0	—	3	4	4	4	4
<i>The project will also monitor 'better jobs' results in addition to its PDO and intermediate indicators</i>							
Net full-time equivalent (FTE) jobs created among beneficiary SMEs (number) (of which female)	0	—	—	—	—	—	3,500
Net full-time equivalent (FTE) jobs created among beneficiaries – female (Number)							1,200

### Description of Indicators

<b>Project Development Objective Indicators</b>				
Indicator Name	Description (indicator definition and so on)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Producer organizations that meet commercialization agreement or business plan specifications, and SMEs that meet buyer specifications (among beneficiaries as a percentage)	Percentage of producers and SMEs (among beneficiaries) who achieve the specifications described in the commercialization agreement or business plan or by buyers/total number of producer groups/SMEs benefited from PAs/MarketConnect) x 100	Annual	Systematic monitoring, subproject completion reports, MIS	PIU

Increase (additional) in average value of gross sales of beneficiaries (Percentage)	<p>The indicator will measure the increase over and above the average increase in the value of sales registered by a sample among beneficiary firms and producer groups, with attribution to Subcomponents 1a and 1b.</p> <p>The component expects to support additional 14% increase in gross sales for SMEs supported by the project at the end of the project, and 12% increase of gross sales for beneficiary producer groups.</p>	Annual	Beneficiary survey	PIU
---	--	--------	--------------------	-----

Intermediate Results Indicators				
Indicator Name	Description (indicator definition and so on)	Frequency	Data Source / Methodology	Responsibility for Data Collection
<b>Cross-cutting intermediate indicators for components 1a and 1b</b>				
Direct project beneficiaries from PAs and SMEs (Number) – (Core)	<p>Direct beneficiaries are people or groups who directly derive benefits from an intervention (that is, children who benefit from an immunization program; families that have a new piped water connection).</p> <p>The project expects to reach 4,000 farmer households (through PAs in Subcomponent 1a—out of approximately 200,000 emerging poor farmer households), and 300 SMEs (through MarketConnect in Subcomponent 1b), and 5,000 people in rural communities through small-scale connective public good infrastructure (through Subcomponent 1a). Based on the average number of persons in a producer household (6), and employees in SMEs (20), the project expects to reach at least about 30,000 direct beneficiaries.</p> <p>Please note that this indicator requires supplemental information. Supplemental Value: Female beneficiaries (percentage). Based on the assessment and definition of direct project beneficiaries, specifically what proportion of the direct project beneficiaries are female. This indicator is calculated as a percentage.</p>	Every six months	Project progress report monitoring; estimate of total number of individuals directly impacted by project (that is, producer households, buyers, SMEs, people with improved access to rural infrastructure, project-trained staff)	PIU
Private sector capital mobilized	This core indicator tracks the amount of direct financing (in the form of equity and/or debt) mobilized by private entities, using private funding, to finance investments within an IBRD/IDA operation or investments (PE, GE, RE, SF, and GU) directly linked to that operation. In this project, this	Yearly	Beneficiary survey	PIU

	indicator captures the counterpart financing required by the beneficiary producer groups and SMEs.			
Increase (additional) in agribusiness exports as a percentage of average value of sales of beneficiaries – PA and SMEs (Percentage)	The percentage increase of exports over and above the average value of exports in the total sales among all beneficiaries.	Every six months	Beneficiary survey	PIU
Annual Project Beneficiary Survey among producer households and SMEs (citizen engagement)	Use of the Project Beneficiary Survey among producer households and SMEs to measure citizen engagement	Annual	Beneficiary survey	PIU
<b>Subcomponent 1a. Building Productive Alliances in Zambia</b>				
Number of producer households that benefit from the alliances	The number of producer households supported by members of alliances supported by the project.	Every six months	Beneficiary survey	PIU
Buyers who fulfill their obligations under the commercialization agreement or business plan (of PA) (percentage)	Number of buyers who meet the terms described in the commercialization agreement or business plan / number of buyers involved in all PAs x 100.	Annual	Systematic monitoring, subproject completion reports, MIS	PIU
Productive alliance subprojects implemented (number)	Approved subprojects technically and financially executed, and administratively closed	Annual	MIS	PIU
Number of public good infrastructure subprojects implemented	The number of investments for various infrastructure investments needed for agricultural products to reach markets. These could include roads, warehouses, bridges, and so on	Every six months	Project implementation progress report	PIU
<b>Subcomponent 1b. SME Supplier Development Program</b>				
Number of beneficiary SMEs that receive support from MarketConnect	In Subcomponent 1b, the number of micro and SMEs that receive assistance under the MarketConnect program.	Annual	Project implementation progress report	PIU
Number of beneficiary SMEs that receive matching grants	In Subcomponent 1b, the number of micro and SMEs that receive financial assistance (either royalty baring or matching grants, based on firm size) under the Business Linkage Fund.	Annual	Project implementation progress report	PIU
Increase in average output per worker	Labor productivity, defined as output or value added per worker, reflects	Yearly	Beneficiary	PIU

among SME beneficiaries (percentage)	the effectiveness and efficiency of labor in the production and sale of the output. The indicator will measure average output per worker as a proxy for labor productivity, per hour, or labor productivity per person employed (if hourly data not available).		survey	
Share of beneficiary SMEs that receive new commercial credit (percentage)	In Component 1, the share of SMEs benefitting from TA and/or financial assistance that mobilize access to new commercial credit, based on regular market terms for agricultural financing.	Annual	Project implementation progress report	PIU
<b>Component 2. Strengthening Regulatory and Institutional Framework for Agribusiness and Trade</b>				
Staff trained in regulatory agencies	Number of government workers in regulatory agencies trained by the project. (BRRA, CCPC, ZABs, Zambia Development Authority)	Every six months	Project implementation progress report	PIU
Share of staff in regulatory agencies who confirm that the training was effective (percentage)	Percentage of workers in regulatory agencies who attended project-financed training and who respond that they are satisfied or highly satisfied with relevance for job function.	Every six months	Project implementation progress report	PIU
Share of SME beneficiaries and producer groups supported to attain food safety standards	In Subcomponent 1b, the share of SMEs benefitting from TA and/or financial assistance specifically to meet and adhere to food safety standard requirements.	Annual	Project implementation progress report	PIU
Number of NQI bills submitted for parliament approval (list)	Measures the number of NQI bills submitted for parliament approval	Annual	Project implementation progress report	PIU
<i>The project will also monitor 'better jobs' results in addition to its PDO and intermediate indicators</i>				
Net full-time equivalent (FTE) jobs created among beneficiary SMEs (number) (of which female)	<p>Net number of new FTE employees working for enterprises financed or supported by the Project by the end of the reporting period. In calculating the number of FTE jobs, part-time jobs should be converted to FTE jobs on a pro rata basis, based on local definition (for example, if the standard working week equals 40 hours, a 20 hour per week job would be equal to 0.5 FTE job). Seasonal or short-term jobs should be prorated based on the time worked throughout the reporting period (for example, a full-time position for three months at any point during the reporting period would be equal to a 0.25 FTE job).</p> <p>Based on the assessment and definition of net FTE jobs, specify what percentage</p>	Yearly	Beneficiary survey	PIU

	of the jobs are held by women.			
<b>Monitoring</b>				
Number of new regulations/amendments/codes drafted or contributed to the drafting	Defined according to DLI-linked plans under Component 1.	Yearly	Project implementation progress report	PIU
Number of regulations/amendments/codes enacted or government policies adopted	Defined according to DLI-linked plans under Component 1.	Yearly	Project implementation progress report	PIU

## Annex 2: Detailed Project Description

### ZAMBIA: Agribusiness and Trade Project

Components	Project Activities	Estimated Project Financing	Constraints Addressed
Component 1: Market Linkages in Agribusiness	US\$28.4 million		
Subcomponent 1a: Building Productive Alliances in Zambia (PAZ)	US\$16.7 million		Lack of access to affordable finance Poor know-how and technical skills Limited scale Coordination failures across value chains Information asymmetries between suppliers and buyers High transaction costs
	Matching grant investments in POs	US\$9.7 million	
	Facilitation of and capacity building in POs and PAs	US\$3 million	
	Last mile public good infrastructure to unlock more POs and	US\$4 million	
Subcomponent 1b: SME Supplier Development Program	US\$11.7 million		
	MarketConnect	US\$6 million	Lack of access to affordable finance Information asymmetries between suppliers and buyers High transaction costs Lack of access to specialized technical expertise Lack of adequate mid-level management training Poor liquidity in financial markets
	Business Linkage Fund	US\$5.7 million	
Component 2: Strengthening the Regulatory and Institutional Framework for Agribusiness and Trade			
Subcomponent 2a: Strengthening Capacity for Business Regulation, Competition, and National Quality Infrastructure	US\$3.5 million		Entry barriers and distortions in major agricultural markets  Policy inconsistencies and unpredictability that increase transactions costs and lower confidence among investors
	Improving institutional capacity for the BRRA	US\$0.6 million	
	Strengthening institutional capacity of CCPC	US\$1.0 million	Inadequate legal framework for investment promotion
	Strengthening the capacity of the NQI System	US\$1.9 million	
Subcomponent 2b: Promoting Trade Facilitation	US\$4.4 million		High costs of trade facilitation and the requirement to maximize the economic impact of national logistic investments Poor institutional and physical infrastructure to support NQI
	Developing a National Logistics Strategy	US\$0.8 million	
	Supporting the implementation of the National Quality Infrastructure	US\$3.6 million	

<b>Component 3: Project Management and Monitoring and Evaluation</b>		US\$3.7 million	
<b>Total project cost</b>		US\$40 million	

### **Component 1. Market Linkages in Agribusiness (US\$28.4 million)**

2. **This component focuses on the development of market linkages in agribusiness, focusing on two sets of beneficiaries: emerging poor farmers and agribusiness SMEs.** Project interventions will have particular emphasis on improving the ability of emerging farmers and agribusiness SMEs to sustainably link into larger markets and thereby increase income, productivity, and employment growth for all those economic actors involved in the relevant value chains and directly or indirectly affected by the project activities.

3. The Zambia Agribusiness and Trade Project is a national project that aims to support all relevant actors of the economy across the country. Component 1 activities will be open for participation to all eligible producers and SMEs from around the country. However, the project's outreach activities and initial target areas will cover the regions that have both high poverty density and agro-processing activities, as shown in figure 9 of this document, and start with Lusaka, Kabwe, Ndola, Livingstone, and Chipata.

#### **Subcomponent 1a. Building Productive Alliances in Zambia (US\$16.7 million)**

4. The objective of this subcomponent is to support small-scale, emerging farmers<sup>23</sup> integrate into value chains by improving their capacity to finance and execute productivity enhancing investments and respond to the requirements of the main end-markets and major buyers. This approach is informed by the 'PAs' model which has been successfully implemented in Latin America over the last 16 years in 21 World Bank projects. The available impact evaluations from these have shown positive and significant improvement in incomes and commercial viability of the POs supported by the projects.

5. It will finance three specific groups of activities to make PAs successful in Zambia: (a) MG investments in (POs (approximately US\$9.7 million); (b) facilitation of and capacity building in POs and PAs (approximately US\$3 million); and (c) last mile public good infrastructure to unlock more POs and PAs (approximately US\$4 million).

6. This component aims at improving value creation in the agricultural sector, across multiple relevant value chains, through the implementation of PA arrangements. The project will seek to facilitate the 'matching' of relatively organized and creditworthy anchor enterprises (off-takers) with aggregated groups of producers (including smallholder associations and producer cooperatives).

7. Through a combination of grant financing and provision of technical support, the project will facilitate the evolution of productive partnerships between aggregated farmers and anchor enterprises. Better integration of relationships between producers and off-takers will be mutually

---

<sup>23</sup> Defined by the project as those farmers who cultivate less than 5 ha of land and/or own less than US\$50,000 worth of total assets.

beneficial. POs will receive TA to improve production and management of their organizations, grant funding to invest in infrastructure enhancements, and support to access commercial loan finance. Off-takers will benefit from improved and consistent volumes and quality of supplies received. The PAs will assist in improving economic benefits derived from crop yields, rural accessibility and post-harvest gains, processing facilities, better organized value chains, and access to new markets.

### *Principles of PAs Approach*

8. The following principles underpin this strategy and form the foundation for the proposed project:

- (a) **Productivity and profitability.** Achieving permanent improvements in rural income and well-being will require increased productivity for both agricultural and nonagricultural activities. Rural producers must adopt new technologies and access greater market intelligence to more efficiently use available resources, thereby ensuring the profitability and competitiveness of their production. Productivity gains are essential not only in nontraditional production, but also, in light of the emerging global food crisis, in basic staples. As such, the agricultural sector faces significant challenges from trading partners and needs to improve productivity and modify the composition of its basket of products to realize its comparative advantage.
- (b) **Associations.** The small farmer, acting alone, is unable to effectively compete in a market dominated by intermediaries with asymmetric bargaining power and information. Conversely, participation in a 'value chain' can provide stable, reliable, and more remunerative market access. Through their participation in value chains, organized rural producers will be able to benefit from (i) collective bargaining power in negotiating with other actors in the chain; (ii) greater technology uptake; and (iii) reduced individual risks through risk spreading/sharing/transfer. The proposed project promotes small farmer participation in associations, seeking to incorporate them into PAs. A PA is the mechanism through which producers with potential can participate in value chains that will help them improve their productivity by giving them better and more equitable access to markets, technologies, and organizations. A business plan is the instrument upon which a PA will be evaluated and supported. Producer associations can be existing, or new, with producers coming together to participate in and benefit from the PAs approach.
- (c) **Demand.** The proposed project must respond to market demand. There must be a market for the activities to be funded, which will be satisfied by the respective PA.
- (d) **Business management.** Traditional, low-productivity agriculture requires a transformation toward more modern, commercial agriculture that creates jobs and growth potential. A culture of formally established businesses with contractual obligations will be fostered under the project, within which producers with potential will assume business responsibilities. In this context, the business plan is the crucial instrument.

- (e) **Shared risk and benefits.** At present, small-scale producers assume the typical risks of farming, as well as the risk of not selling their product, or selling it without recovering costs. PAs provide a way for the different actors of a value chain to share both the production risks and associated revenues.
- (f) **Equity.** The project targets small farmers with production potential and therefore, with potential for creating jobs. Equity among partners in the value chains will be promoted through alliances, so that organized producers can effectively negotiate a more equitable share of the profits.

### *The Business Plan*

9. The PA approach involves three core agents: (a) a group of smallholder producers, (b) one or more buyers, and (c) the public sector. The producers will be united in a PO—which could be an existing cooperative or association registered under their respective legal codes or a new PO that will be registered under the Societies or Cooperatives Act to be eligible to participate in PAZ; the buyers can be active at different levels of a value chain in either commercial or institutional markets; and the public sector agent will be represented by the MCTI, through the project PIU. These three agents are connected through a business proposition or ‘business plan’, which describes the capital and service needs of the producers and proposes improvements that will allow them to upgrade their production capacities and skills to strengthen their linkage with the markets, that is, the buyers. The realization of this business plan within a PA project will be supported through three core inputs and/or activities directed toward the producer needs: (a) productive investments, (b) TA, and (c) business development.

- **Productive investments** include the provision of machinery and equipment, infrastructure (on-farm or off-farm), and production inputs (for example, seeds, fertilizer, veterinary supplies) for the producers.
- **TA** entails the delivery of extension services, technology transfers, and specialized assistance on technical matters related to production, processing, and environmental aspects, as well as market studies.
- **Business development** focuses on strengthening producers’ business development capacities in management, accounting, business administration, and marketing skills. PA projects vary in the emphasis on each of these core inputs, but all use support goods and services to enhance the fulfilment of a business plan.

### *Operating Modalities and Project Structuring*

10. **MGs.** The project will finance the costs related to the subprojects of the PAs, through MGs to the POs that cover up to 70 percent of the total subproject costs. The POs can match the remaining 30 percent of the total cost of the subproject through a mix of own resources and commercial loans, but will need to cover at least 15 percent of the cost through their own resources. The MGs will be provided through a competitive allocation to the winning business plans coproduced by the POs, buyers (PA), and the brokerage services financed by the project. The business plans will be evaluated and selected by an independent group and selected based on

their technical and financial feasibility, in line with the terms and conditions further detailed in the PIM.

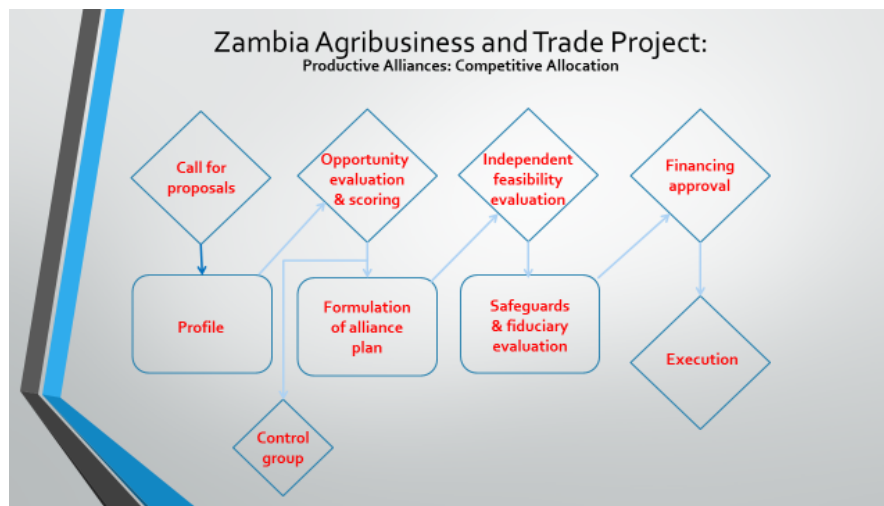
11. Productive investment refers to investments in infrastructure, including, but not limited to, processing plants, warehouses, fixed capital, equipment, buildings, machinery, technology, inputs, fertilizers, pesticides, fungicides, farm infrastructure, and TA and training, among others. The funds received from the public sector are in the form of grants and cannot be used to purchase land or to repay existing debts, that is, they must be used to support new investments.

12. **Brokerage services.** A firm, or a combination of firms and consultants, will be contracted to act as in a brokerage function and to support delivery of the product alliances and support disbursement of funds. These will be performance-based contracts. These providers will raise awareness of the program and facilitate linkages between producer associations and off-takers. Producers will be informed about the program and given encouragement to participate whether it is an existing association or whether it is an association that is newly formed for the purpose of entering a PA. Producer associations will be provided with business support to prepare their business plans and liaise with off-takers to agree on contractual terms and conditions. The project may rely on an institutional contractor who has the fiduciary responsibility to subcontract TA and assist in procurement related matters with producer associations.

13. **Selection of PAs.** A selection panel will review business cases received relating to PAs to determine their suitability for inclusion in the program. Selection will be based upon a range of criteria:

- (a) Technical feasibility (for example, production capacity and quality)
- (b) Financially viability (for example, financial sustainability beyond duration of project support)
- (c) Market linkage strength (for example, quality of market analysis, identification of TA needs, participation in marketing events)
- (d) Alliance partners' capacity (for example, quality of production planning, quality control, identification of production bottlenecks)
- (e) Social aspects (for example, potential for job creation, belonging to a disadvantaged group)
- (f) Environmental sustainability (for example, promotion of improved or climate-efficient production practices) of the proposed subproject

**Figure2.1. Implementation Flow of PAZ**



14. The Government’s financial incentives to POs are capped at US\$3,000 per producer family,<sup>24</sup> based on the typical costs a subproject would incur and the current income per capita in Zambia. Any partnership is expected to include at least 10 emerging farmer households, and at least 90 percent of these need to fulfill the requirements of an emerging, poor farmer definition of the project, which will be based on hectares under cultivation, total assets, and annual income where available. The POs will be allowed to include a medium-scale farmer as a leader/organizer, where appropriate, in line with best practice in places like Colombia and Vietnam. The operational manual will specify more details of the incentive mechanism. The financial incentive can be used for investment expenditures, operational costs, and TA and certifications. The objective is to have over 180 PAZ partnerships in operation by Year 5, having reached approximately 4,500 farmer households..

15. Finally, the subcomponent will include an infrastructure envelope that will invest in ‘last mile’ access or market infrastructure to enable the creation of more PAs (separate from the direct investments in PAs through MGs). This investment envelop will focus on those small-scale access, market or rehabilitative infrastructure whose cost will be prohibitively high for PAs, whose benefits would exceed those to the PAs and reach broader surrounding rural communities, and finally, those that push otherwise infeasible PAs over the sustainability and profitability line—as such this subcomponent is aimed as an enabler to the PAs. The types of investments will include short link roads, spot improvements, rehabilitation of minor crossings and access roads, and community-based small-scale energy solutions. They will be capped at US\$200,000per subproject, and will need to fall under the pre-defined list of investments disclosed a priori by the project’s safeguards. The selection will be based on their alignment with existing or potential PAs and their ERR, and the details of the selection criteria will be included in the operational manual.

16. This activity is designed together with the World Bank’s Transport Unit and the Rural Accessibility and Mobility Program and informed by the experience and results of the recently closed Community Transport Infrastructure Project, which with a similar envelop, helped 5,300

<sup>24</sup> Each producer family is allowed to participate in one subproject through the lifetime of the project.

rural people have access to all season roads and rehabilitated 23 small bridges and 197 km of roads.<sup>25</sup> The implementation of this subcomponent will be coordinated with the Transport Unit and the implementation of the forthcoming Zambia Improved Rural Connectivity Project, through the Ministry of Local Government and Housing, as well as the Road Department Agency. The project will build capacity in the Ministry of Local Government and Housing, in partnership with the World Bank's Transport Unit, to ensure that the requisite capacity to execute these last mile investments is in place and there is ownership by the Government so that these structures will be included in the national infrastructure registry and maintenance costs could be reflected in annual budgets.

### **Subcomponent 1b. SME Supplier Development Program (US\$11.7 million)**

17. The objective of this subcomponent is to support agribusiness entrepreneurship and sustainable SME integration into value chains with established end-markets and large buyers, by supporting their ability to invest in productivity enhancing know-how and requirements to meet buyers' product specifications. The subcomponent activities will focus on helping agribusiness SMEs improve their commercial viability, financial position, and operational efficiency, thereby increasing their productivity and prospects for increased investments and employment generation.

18. The project will invest in MarketConnect (US\$6 million) and the Business Linkage Fund (US\$5.7 million) (financing arm of MarketConnect), both of which will be managed by a consortium of service providers through a management contract—over five years. MarketConnect is expected to reach a total of 300 SMEs. Of these 300 SMEs, 140 are also expected to participate in the Business Linkage Fund. These programs are designed based on the lessons and positive results achieved by preceding SME support programs funded and implemented by DFID and USAID.

19. Subcomponent 1b specifically includes the development of (a) a royalty bearing brokerage and TA service offering to growth oriented SMEs (MarketConnect), and (b) a Business Linkage Fund, which will extend royalty bearing MGs in the range of US\$10,000 to US\$100,000 to agribusiness SMEs. TA to the PIU and its implementing partners to execute this component will be provided by infoDev, leveraging infoDev's experience in agribusiness entrepreneurship promotion

20. MarketConnect will provide tailored assistance to growth oriented agribusiness SMEs, preparing them to supply corporate and public buyers at a larger scale. Key value added of MarketConnect will be (a) its relationships with buyers and the know-how of their requirements, terms, and conditions; (b) a core staff with the ability to do a 360° diagnostic of the SMEs along with problem solving and coaching around specific business challenges that are uncovered;<sup>26</sup> and (c) a strong network of specialized providers who can be brought in for unique technical challenges. The service will be provided based on a royalty model, whereby the entrepreneurs

---

<sup>25</sup> *Community Transport Infrastructure Project Completion Report*, Rural Accessibility and Mobility Program, Ministry of Local Government and Housing, March 2, 2016.

<sup>26</sup> Based on recent analysis by McKenzie (2015).

pay back a percentage of their growth in sales.<sup>27</sup> SMEs will be eligible to participate in MarketConnect based on their commitment for growth and financial and technical feasibility of their business. Key selection criteria will include (a) an assessment of SMEs' connection with established buyers; (b) potential competitiveness of their products (based on the comparisons with existing competitors and substitutes and demand forecasts); and (c) financial and technical viability of their businesses. The percentage of increase in sales that will be paid back into MarketConnect will be determined based on the SMEs total assets, the preceding three years' average turnover, and the level of assistance received from MarketConnect. The details of the eligibility criteria and the royalty structure will be further elaborated in the PIM.

21. The Business Linkage Fund will extend royalty bearing MGs in the range of US\$10,000 to US\$100,000 to agribusiness SMEs (with 30 percent to 50 percent private matching investments based on firm size)<sup>28</sup> for the purpose of 'upgrading'—and increasing the bankability of—the company as part of an expansion strategy. The grants will cover financing in three areas: (a) upgrading to meet standards requirements, (b) financing for one-time fixed investment (equipment) to improve quality and/or productivity, and (c) alternative energy solutions. The financing will be competitive and will only be made available to SMEs that meet the eligibility criteria for MarketConnect, have a clear, expressed demand from an off-taker, and have a clear action plan for upgrading.

#### *Background on the SME Landscape in Zambia*

22. The 2012 Business Census of Zambia has shown that there are over 6,500 SMEs in the agribusiness processing and service sectors with over 36,000 people employed. The average annual turnover for the micro firms in food processing could be as low as US\$70,000 (which account for 94 percent of the sample, with as few as 2 employees in food manufacturing and 21 on average in beverage manufacturing); however, most medium- and small-scale agribusiness firms had an annual turnover in excess of US\$500,000 and 20–200 employees during this time. As depicted in figure 2.2, the census data showed a concentration of food and beverage manufacturing firms in greater Lusaka, the Copperbelt, the Great East Road, and in Kasama and Mansa, and the new entrants<sup>29</sup> to the industry displayed roughly the same geographical pattern.

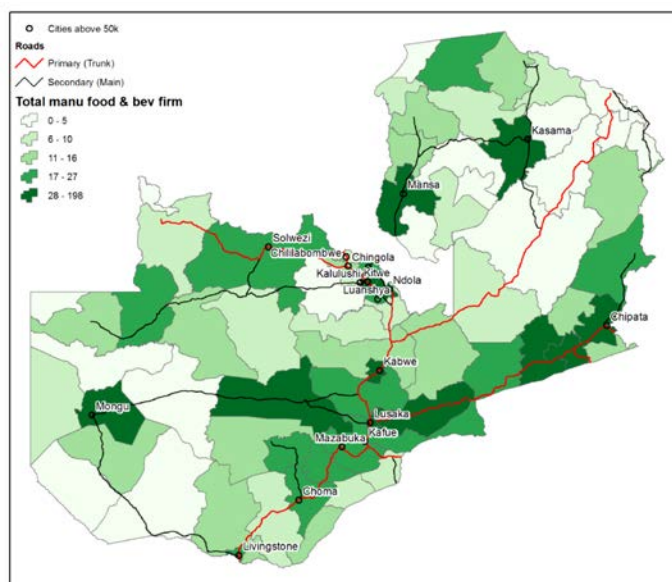
---

<sup>27</sup> Royalty models in SME support programs are in use in India, Costa Rica, and South Africa, where SMEs supported by these programs pay back 4 percent to 10 percent of increase in sales as royalty.

<sup>28</sup> Micro-size agribusinesses are determined as those with less than US\$70,000 average turnover in the preceding three years; and agribusiness SMEs are determined as those with more than US\$70,000 average turnover in the preceding three years—based on the definitions of the 2011 Business Census. The ceiling for a medium-size firm was established as US\$10 million in annual turnover in the same census.

<sup>29</sup> 'New entrants' are here defined as firms that registered three or less than three years ago.

**Figure 2.2. Concentration of Food and Beverage Manufacturing Firms in Zambia, and the Spatial Analysis of New Entrants**



23. The Zambian SMEs primarily sell in domestic markets. However, the recent analysis from DTIS (2014) has also shown that there is considerable churning at the firm level among exporters, too. Data on firm-level transactions from the Central Statistics Office reveal that for any 100 exporters in a given year, 50 have not exported in the previous year and 41 exit in the following year. Nearly 65 percent of firm-level export spells last no longer than one year. At the level of products, for any 100 exported products in a given year, 37 have not been exported in the previous year and 31 will not be exported in the following year. This dynamism in export attempts point to the entrepreneurial spirit of the Zambian businesses, as well as the problems with ‘export survival’. Again, this analysis shows that larger export flows, multi-product firms, and agricultural exports to the regional partners are significantly more stable than to those to non-partner countries.

24. In preparation for this project, a targeted survey was conducted on agribusiness SMEs in the Zambian markets to specifically ascertain both the key constraints and growth prospects for this group. In this sample of 50 firms, 30 percent had less than US\$250,000 revenue last year, 97 percent had less than US\$10 million,<sup>30</sup> and 91 percent of the respondents sold entirely to the domestic markets.<sup>31</sup> These are in line with the SME parameters used by the Government of Zambia as part of the 2012 business survey.

25. While SMEs in Zambia have a hard time surviving in export markets and sustaining growth, there remain important growth opportunities in agribusiness both in the domestic and regional markets. As evidenced by interviews with all the major retailers in the country, all are expanding rapidly, and demand for food products from neighboring countries shows no sign of slowing. Interviews with the three large retailers have revealed that all had plans to grow their

<sup>30</sup> This is in line with the definition used by the Government of Zambia in the 2010 Business Census, which have determined US\$20 million as the ceiling for annual turnover for a medium-size firm.

<sup>31</sup> Let's Work Zambia. 2015.

stores by 30 percent to 100 percent across Zambia only within the next two years, as well as expanding their reach geographically (that is, the largest retail store is growing from 34 mega stores to 42 within the next 18 months). Moreover, new retailers, such as a large retailer from Botswana, are entering the market. All of these, as well as other buyers from the hospitality industry are looking to procure more from the local businesses and report facing short supply by 30 percent to 50 percent at any given time on many products that could be sourced locally. Therefore, all of this, as well as the regional demand for food represent a significant market opportunity for existing Zambian food and beverage companies along with new entrants.

26. However, to take advantage of the strong demand for food and beverages, agribusiness SMEs require tailored technical support, as well as financial support to invest in one-time upgrades that increase productivity and SMEs' ability to meet buyers' standards. In the survey, 90 percent of the SMEs—which all currently serve the formal supply chains in Zambia—expressed a demand for BDSs that would help them address these deficiencies, and out of that 94 percent expressed willingness to pay for the same. The services in highest demand were 'raising finance', 'strategic planning', 'market research', 'operation/technical support', and 'packaging services'.<sup>32</sup>

27. One important challenge is that local service providers lack the capacity to provide high-quality, tailored BDSs to these SMEs. A common refrain from Zambian firms is that the BDSs that currently exist in the market are 'too generic' and usually most suited for subsistence entrepreneurs. The experience of DFID—through PEP-Z—also reflects this: in their recent MTR, the team noted that 'the BDS sector was weaker (both on skills and breadth of services offered)' than they had expected at the design of the program, and they therefore had to hire their own advisors rather than using local providers. Kukula Capital—which is the only investor in the US\$100,000 to US\$500,000 range—also had to bring professionals from abroad to 'spend a few months in the company assisting with management or technical aspects'.<sup>33</sup>

---

<sup>32</sup> Studies have explored the impact of 'support services' on SMEs' sales, workers' wages, and technology adoption rates and found results that suggested positive improvements can be achieved. Sarder, et al. (1997) study "The Importance of Support Services to Small Enterprises in Bangladesh" found that such support results in a 5 percent to 16 percent increase in employment, sales, and productivity. In a similar vein, Tan and Lopez-Acevedo (2005) examine the impact of SME programs in Mexico using panel firm data and discovered that 9 percent to 14 percent improvement in training and 9 percent improvement in technology absorption have been achieved. Various SME programs—Business Advisory Services, Technology Development, Credit, Supplier Development (1992–2000) in Chile demonstrated similar results. Lopez-Acevedo and Tan (2010), "Impact Evaluation of SME Programs in Latin America and Caribbean" showed an 8 percent increase in wages and 9 percent increase in productivity as a result of these programs.

Lopez-Acevedo, and Tan. 2010. *Impact Evaluation of SME Programs in Latin America and Caribbean*. Washington, DC: World Bank.

Tan, and Lopez-Acevedo. 2005. *Evaluating Training Programs for Small and Medium Enterprises: Lessons from Mexico*. Policy Research Working Paper 3760 World Bank, Washington, DC.

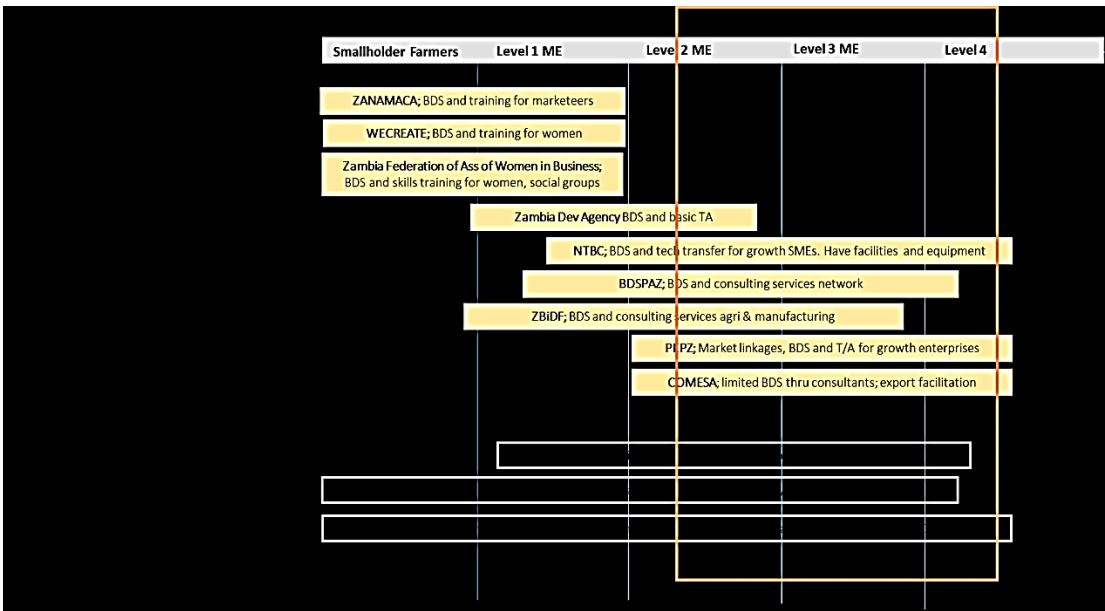
<sup>33</sup> Although studies comparing different types of trainings are scarce, the available ones suggest that the type of training offered matters and that different types of training can produce very different results. One of the few examples of studies comparing different business training programs was performed with micro finance clients in the Dominican Republic (Drexler et al. 2014). The authors tested two types of training: one was a standard accounting training, similar to the International Labor Organization (ILO) or Freedom from Hunger training programs offered in many countries, and the other was a rule of thumb training that provided simple routines designed to improve financial decision making. While the standard accounting training did not have an impact on financial practices or revenues, the rule of thumb training had positive impacts on the use of business practices and on sales. When they

28. The programs run by donors and nongovernmental organizations, namely PEP-Z, Musika, and the Agribusiness Incubation Trust are exceptions in the landscape of TA providers for SMEs in Zambia. These are generally market-driven and offer some level of tailored services in agribusiness, albeit at a limited scale. In interviews with these providers, all expressed that there is significant opportunity and demand in this sector that the ongoing services provided by these and others did not yet meet. These could therefore potentially form a set of ‘anchor’ partners for Subcomponent 1b (see further discussion under ‘Implementation Arrangements’).

*Background on the Current BDSs in Zambia*

29. An overview of the organizations providing various forms of business support services to agribusiness SMEs in Zambia is included in figure 2.3.

**Figure 2.3. Organizations Providing Business Support Services**



30. In the area of access to finance, there is currently only one provider of non-collateral based finance in the range required by the SMEs, namely Kukula Capital; and there are three banks—First National Bank, Zanaco, and to some extent Stanbic—which have a wide range of collateral-based debt products, but currently face a cost of capital at 30 percent, which makes their loan products cost prohibitive to SMEs. That said, all four are potentially strong partners for the project. Relating to the need for TA, these financiers felt that most often ‘the SMEs do not have anything you can do due diligence on’. One of the key outputs of the TA provision should thus be to ensure that the SMEs applying for finance have their records in order and have a sound FM approach.

---

examined the results disaggregated by the entrepreneur’s level of education, they found that the standard accounting training actually lowered the business sales of less educated entrepreneurs during bad months, especially for those using fewer business practices before the training. This work clearly suggested that different types of training curriculum can be more effective for different profiles of entrepreneurs.  
Drexler, Alejandro, Greg Fischer, and Antoinette Schoar. 2014. “Keeping It Simple: Financial Literacy and Rules of Thumb.” *American Economic Journal: Applied Economics* 6 (2).

### *Payment Model and Sustainability*

31. To ensure sustainability, MarketConnect will operate long term through a royalty model based on the payment of a percentage of growth leveraged through the support process. In this approach, baseline turnover is calculated before commencement of a set of support activities that are carried out by both the firm and MarketConnect—in all cases, these agreements are contractual. The selection of a royalty model ensures mission alignment and is a very hard measure of success as ‘no growth = no income = no value addition’. Typically 4 percent to 10 percent of growth in turnover is payable annually but may be deferred should additional growth capital investment be required. This does not preclude MarketConnect from engaging in managing SME development initiatives for other entities on a fee payment basis nor in fee paying training and consultancy so long as these are within mandate, experience, and staff availability and expertise.

### **Component 2. Strengthening the Regulatory and Institutional Framework for Agribusiness and Trade (US\$7.9 million)**

32. **The objective of this component is to strengthen the regulatory and institutional framework for agribusiness and trade to assist the development of market linkages in agribusiness.** Subcomponent 2a: Strengthening Capacity for Business Regulation, Competition, and National Quality Infrastructure—as they relate to agribusiness and trade (US\$3.5 million) — will disburse project funds against the achievement of DLIs; while Subcomponent 2b: Promoting Trade Facilitation (US\$4.4 million) will be disbursed using regular project financing for TA and investments.

### **Subcomponent 2a. Strengthening Capacity for Business Regulation, Competition, and National Quality Infrastructure (US\$3.5 million).**

33. The objective of this subcomponent is to strengthen the regulatory and institutional framework for agribusiness and trade through use of DLIs to underpin and support reforms in the following areas: (a) enhancing capacity for the BRRA and ensuring the implementation of the Business Regulatory Review Act; (b) strengthening the capacity of CCPC to focus on specific agribusiness and trade issues; and (c) strengthening the capacity of the NQI System, especially the implementation of the related Statutory Instrument that streamlines the roles and responsibilities of the line agencies. Disbursements will be made on EEPs based on achievement of agreed indicators. Verification of the achievement of each DLI will be carried out by an independent verification agent, mostly likely an institution such as the Zambia Institute of Policy Analysis and Research or a recognized university.

**Box 2.1. DLIs and Results: Why use DLIs?**

DLIs have been used by the World Bank in a number of countries for over 50 years. The approach uses the client's institutions and systems, building capacity and linking disbursements to achievement of results. In the case of the Agribusiness and Trade Project, the DLI approach will be specifically used under Subcomponent 2a: Strengthening Capacity for Business Regulation, Competition, and National Quality Infrastructure to link DLIs to key results and indicators established for measuring those results.

As a guiding principle, the DLIs need to be tangible, transparent, and verifiable. Key features for defining DLIs include (a) agreeing on DLIs including defining success measures, means of verification, and delivery schedules; (b) defining the price of each indicator and payment modalities; and (c) defining eligible expenditures that will be verified for payment.

This DLI subcomponent of the project will strengthen the regulatory and institutional framework for agribusiness and trade necessary for Component 1 to be effective and provide the necessary capacity-building and institutional support for the investments in equipment and infrastructure that will be provided under Subcomponent 2b to be effective and have the necessary impact on the development and implementation of the NQP and NQIP.

**Table 2.1. Summary of DLI**

DLIs	Indicative Date of Achievement				
	December 2016 (Retro)	December 2017	December 2018	December 2019	December 2020
<b><i>DLI 1: Business Regulatory Review Act Implementation and Agency Support Enhanced</i></b>					
<b>DLI#1.1:</b> Annual budget for the financing of the action plan, and policy and capacity updates required to implement the Business Regulatory Review Act is included in 2017 government budget and approved by parliament	US\$100,000				
<b>DLI#1.2:</b> A time bound fully costed three-year Action Plan completed for Regulatory Impact Assessments with targets is completed and approved by BRR Board		US\$100,000			
<b>DLI#1.3:</b> Annual budget for the financing of the action plan, and policy and capacity updates required to implement the Business Regulatory Review Act is included in 2018 government budget and approved by parliament		US\$100,000			
<b>DLI#1.4:</b> Annual budget for the financing of the action plan, and policy and capacity updates required to implement the Business Regulatory Review Act is included in 2019 government budget and approved by parliament			US\$100,000		
<b>DLI#1.5:</b> One round of Regulatory Impact Assessments completed by BRR and approved by BRR Board		US\$100,000			
<b>DLI#1.6:</b> An additional round of Regulatory Impact Assessments completed by BRR and approved by			US\$100,000		

BRRRA Board					
<b>Total: US\$600,000</b>	<b>US\$100,000</b>	<b>US\$300,000</b>	<b>US\$200,000</b>		
<b><i>DLI2: Competition and Consumer Protection Act Implementation and Commission Support Strengthened</i></b>					
<b>DLI#2.1:</b> An action plan for review of competition issues for a subset of agribusiness value chains completed and approved by CCPC Board	US\$500,000				
<b>DLI#2.2:</b> Annual report on defined agreements between CCPC and other public and private sector bodies on the adoption of recommendations from the competition review of key and prioritized agribusiness value chains approved by CCPC Board		US\$250,000			
<b>DLI#2.3:</b> Annual report on defined agreements between CCPC and other public and private sector bodies on the adoption of recommendations from the competition review of key and prioritized agribusiness value chains approved by CCPC Board			US\$250,000		
<b>Total: US\$1,000,000</b>	<b>US\$500,000</b>	<b>US\$250,000</b>	<b>US\$250,000</b>		
<b><i>DLI3: National Quality Infrastructure Policy Implementation Improved</i></b>					
<b>DLI#3.1:</b> Action plan on standardization and quality assurance support to agribusiness micro, small, and medium enterprises approved by the Board of the Bureau of Standards		US\$300,000			
<b>DLI#3.2:</b> Four bills on metrology, standards, and compulsory standards approved by parliament		US\$300,000			
<b>DLI#3.3:</b> Organizational structures for the new NQI agencies are developed by MCTI and approved by parliament		US\$300,000			
<b>DLI#3.4:</b> Budgets of the new NQI agencies are included in the government budget and approved by parliament			US\$1,000,000		
<b>Total US\$1,900,000</b>		<b>US\$900,000</b>	<b>US\$1,000,000</b>		
<b>Annual DLI Disbursements</b>	<b>US\$600,000</b>	<b>US\$1,450,000</b>	<b>US\$1,450,000</b>		

34. **Subcomponent 2a (i): Improving Institutional Capacity for the Business Regulatory Review Agency.** This subcomponent will focus on improving institutional capacity of the BRRRA. The BRRRA has two core programs, (a) regulatory affairs and (b) business facilitation and engagement. This subcomponent of the project will support activities under the new regulatory affairs program which is focused on ensuring that regulatory frameworks serve legitimate purposes and do not unnecessarily burden enterprises or increase the cost of doing business. This will be achieved through incorporation of RIAs in the policy and legislative making process. The overall objective of this support is to have a fully functional RIA system, a thriving private sector, and an inclusive regulatory process for Zambia. The business facilitation and engagement function, which was previously implemented through the Zambia Development Agency's One Stop Shop, will continue to be supported by the World Bank Group's ongoing Zambia Investment Climate II Program.

35. **Subcomponent 2a (ii): Strengthening Capacity of Competition and Consumer Protection Commission.** This subcomponent will, in partnership with the Zambia Investment Climate II Program build capacity in CCPC to advance research, advocacy, and enforcement functions with a focus on markets linked to agribusiness value chains. Support to the competition commission will focus on the following activities: (a) building a core team of experts at the CCPC (at least one economist and one lawyer) that can lead and supervise economic and legal analyses of market functioning and market regulations in key sectors for agribusiness; (b) carrying out market assessments to identify competition issues and propose actions to address them. The following markets will be covered: agriculture inputs (for example, animal feed and fertilizers) and other inputs (for example, road cargo transport and logistics services); (c) conducting analysis of current regulations and rules in specific sectors to propose alternatives that are less restrictive to competition and estimate potential reform gains. The following topics will be covered: non-tariff barriers (for example, mandatory vitamin A fortification of sugar, import quotas, and import license allocation). This activity will be carried out in coordination with BRRA; (d) advocating for the implementation of the recommendations derived from the market and regulatory assessments through interaction with government officials, business associations, individual firms and civil society; and (e) raising awareness to increase compliance of firms and business associations along agribusiness value chains with the competition law. Compliance efforts will focus on cartels and other agreements between competitors to fix prices or divide markets and abuses of dominant firms to foreclose markets.

36. Market and competition policy assessments will identify barriers to competition in markets that affect agribusiness value chains and have spillover effects across the economy, including freight. These studies will inform CCPC's actions and the efforts to increase quality of market regulations in the agribusiness, transport, and logistics sectors. Advocacy efforts aim at increasing compliance with the law and adoption of competition principles in government interventions for the benefit of consumers, farmers, new investors, and SMEs.

**Table 2.2. Competition Issues in Key Markets for Agribusiness in Zambia— Analyses and Estimates from CCPC**

	<b>Product</b>	<b>Examples of Competition Issues</b>
<b>Input markets</b>	Fertilizers	1. Cartel in public procurement of fertilizer for the Fertilizer Input Support Programme facilitated by procurement practices (estimated US\$20 million in overcharges) 2. Issues with registration and imports that increase cost of entry 3. Distortions in the fertilizer market created by the Fertilizer Input Support Programme
	Seeds	4. Restricted access to seeds by individual farmers and by firms interested in seed reproduction that locks in farmers in out-grower contracts (for example, cotton)
	Feed	5. Complaints about feed costs and access to feed 6. Export and import restrictions on feed 7. Issues related to import costs of chemical/pharma inputs for feed production
<b>Industrial crops/products</b>	Sugar	8. Abuse of dominance case against Illovo (Zambia Sugar) currently under investigation by CCPC. A 20% decline in sugar prices and subsequent increase in disposable income will lift about 5,000 people out of poverty and benefit the urban poor to a greater extent. 9. Entry costs raised by vitamin A fortification requirement, although enriched sugar is not the best way to deliver vitamin A given the sugar consumption patterns in Zambia

	Cotton	10. Collusion among ginners to set cotton prices (This case has been handled and a cease and desist order has been issued.) 11. Issues with inadequate regulation of ginner entry that exacerbate free riding on contract farming 12. Issues with transparency of contract farming agreement, including mechanism to set prices. Currently the farmers bear all the price risk. 13. Lack of a system to share information on out-grower contracts and credit default facilitate free riding 14. Need of a stronger institutional framework to regulate the sector
	Edible oil (soy, palm)	15. Import ban to protect local industry caused shortages and prices increased by more than 20% 16. Import restrictions on edible oil in place (import licenses are controlled)
	Timber	17. Abuse of dominance by Zambia Forestry and Forest Industries Corporation (only supplier of pine and eucalyptus roundwood) who excluded small saw millers from the market and contracted only with three large saw millers.
<b>Food crops</b>	Maize	18. Distortions created by the Food Reserve Agency minimum prices and subsidies for millers on mealie-meal 19. Imports and export bans on maize 20. Alleged collusion between maize millers
<b>Transport and logistics</b>	Domestic road freight	21. Alleged collusion between service providers 22. There is a need to assess the relevance of logistics operators to identify potential competition constraints.

Source: CCPC, World Bank Group (2015), stakeholders interviews, Vilakazi (2016) in World Bank Group-Organization for Economic Cooperation and Development (2016 forthcoming).

World Bank. 2015. *Linking Women with Agribusiness in Zambia: Corporate Social Responsibility, Creating Shared Value, and Human Rights Approaches*.

Vilakazi, Lineo. 2016. World Bank and OECD Joint Working Paper.

**37. Subcomponent 2a (iii): Strengthening the Capacity of the National Quality Infrastructure System.** The objective of this subcomponent is to support activities that will improve the institutional efficiency and effectiveness of the NQI that has been brought about by the reengineering of the NQI and technical regulation regime. This will be achieved through (a) reorganizing and redefining the functions and powers of the Zambia Bureau of Standards in line with the NQI policy and NQP implementation plan; (b) assisting in implementing the recommendations of the NQIP for separation of voluntary standards from that of the development and administration of compulsory standards; (c) implementing an integrated national metrology system for Zambia that eliminates current fragmentation, gaps, and overlaps; and (d) strengthening the development and implementation of technical regulations for all ministries and agencies in Zambia. This subcomponent will strengthen and provide the necessary capacity-building and institutional support for the investments in equipment and infrastructure that will be provided under Subcomponent 2b (ii) to be effective and have the necessary impact on the development and implementation of the NQP and NQIP.

**Table 2.3. Summary of DLIs with Protocols**

DLIs	Indicative Date of Achievement				
	December 2016 (Retro)	December 2017	December 2018	December 2019	December 2020
<b><i>DLI 1: Business Regulatory Review Act Implementation and Agency Support Enhanced</i></b>					
<b>DLI#1.1:</b> Annual budget for the financing of the action plan, and policy and capacity updates required to implement the Business Regulatory Review Act is included in 2017 government budget and approved by parliament	X				
<b>Protocol:</b> The budget requirements for act implementation will be documented for 2017 using 2016 budget of the agency as baseline based on Budget Yellow book as published by Ministry of Finance.					
<b>DLI#1.2:</b> A time bound fully costed three-year Action Plan completed for Regulatory Impact Assessments with targets is completed and approved by BRRB Board		X			
<b>Protocol:</b> An Action Plan will mean a fully costed, time bound Action Plan document with targets and dates for delivery and accountabilities. The Action Plan will be proposed by December 15, 2016 and formally approved by the CCPC board and minuted accordingly. The Action Plan will identify priority sectors for RIAs and specify timing of activities. Note that each review will include specific recommendations and these will preferably be advanced in an Action Plan format as described above.					
<b>DLI#1.3:</b> Annual budget for the financing of the action plan, and policy and capacity updates required to implement the Business Regulatory Review Act is included in 2018 government budget and approved by parliament		X			
<b>Protocol:</b> The budget requirements for act implementation will be documented for each year in the Budget Yellow Book according to the staffing and work program envisioned for the period in question. The BRRB 2016 budget as contained in the 2016 Yellow Book will be used as a baseline.					
<b>DLI# 1.4:</b> Annual budget for the financing of the action plan, and policy and capacity updates required to implement the Business Regulatory Review Act is included in 2019 government budget and approved by parliament			X		
<b>Protocol:</b> The budget requirements for act implementation will be documented for each year in the Budget Yellow Book according to the staffing and work program envisioned for the period in question. The BRRB 2016 budget as contained in the 2016 Yellow Book will be used as a baseline.					
<b>DLI#1.5:</b> One round of Regulatory Impact Assessments completed by BRRB and approved by BRRB Board		X			
<b>Protocol:</b> A RIA round will be defined by programmed RIA undertaken in a period and completed according to a schedule agreed by December 31 of each year. The scheduling of RIAs in each round will be approved by January, 31 of each year and resources will be ensured so that these can be carried out. By the end of Year 2 there would have been two such RIA rounds completed (including those done in Year 1) meaning that the number of specific RIAs in each round would have been completed, submitted to the BRRB Board, and approved by it.					
<b>DLI#1.6:</b> An additional round of			X		

Regulatory Impact Assessments completed by BRRA and approved by BRRA Board					
<b>Protocol:</b> A RIA round will be defined by programmed RIA undertaken in a period and completed according to a schedule agreed by December 31 of each year. The scheduling of RIAs in each round will be approved by January, 31 of each year and resources will be ensured so that these can be carried out. By the end of Year 2 there would have been two such RIA rounds completed (including those done in Year 1) meaning that the number of specific RIAs in each round would have been completed, submitted to the BRRA Board, and approved by it.					
<b>Total: US\$600,000</b>	<b>US\$100,000</b>	<b>US\$300,000</b>	<b>US\$200,000</b>		
<b><i>DLI2: Competition and Consumer Protection Act Implementation and Commission Support Strengthened</i></b>					
<b>DLI#2.1:</b> An action plan for review of competition issues for a subset of agribusiness value chains completed and approved by CCPC Board	X				
<b>Protocol:</b> An Action Plan will mean a fully costed, time bound Action Plan document with targets and dates for delivery and accountabilities. The Action Plan will be proposed by December 15, 2016 and formally approved by the CCPC board and minuted accordingly. The Action Plan will identify agribusiness value chains to be evaluated, an indication of who will be conducting the evaluation and specify timing of activities. Note that each review will include specific recommendations for improving competition and these will preferably be advanced in an Action Plan format as described above.					
<b>DLI#2.2:</b> Annual report on defined agreements between CCPC and other public and private sector bodies on the adoption of recommendations from the competition review of key and prioritized agribusiness value chains approved by CCPC Board		X			
<b>Protocol:</b> At the end of each year, a rigorous assessment of progress in implementing Value Chain Review recommendations will be undertaken with emphasis on identifying and overcoming impediments. The review will be prepared by November 1 and approved by December 1 of each year. This will be a 'rolling' Annual Report such that every review and its attendant recommendations will be included since the inception of the program. The purpose of the review is to identify priority actions to be undertaken by public and private sector bodies and to facilitate this happening through CCPC actions and interventions.					
<b>DLI#2.3:</b> Annual report on defined agreements between CCPC and other public and private sector bodies on the adoption of recommendations from the competition review of key and prioritized agribusiness value chains approved by CCPC Board			X		
<b>Protocol:</b> At the end of each year, a rigorous assessment of progress in implementing Value Chain Review recommendations will be undertaken with emphasis on identifying and overcoming impediments. The review will be prepared by November 1 and approved by December 1 of each year. This will be a 'rolling' Annual Report such that every review and its attendant recommendations will be included since the inception of the program. The purpose of the review is to identify priority actions to be undertaken by public and private sector bodies and to facilitate this happening through CCPC actions and interventions.					
<b>Total: US\$1,000,000</b>	<b>US\$500,000</b>	<b>US\$250,000</b>	<b>US\$250,000</b>		
<b><i>DLI3: National Quality Infrastructure Policy Implementation Improved</i></b>					
<b>DLI#3.1:</b> Action plan on standardization and quality assurance support to agribusiness micro, small, and medium enterprises approved by the Board of the Bureau of Standards		X			
<b>Protocol:</b> The Action Plan will be time bound, fully costed with concrete targets and dates for their achievement and					

accountabilities. It is expected that where cross ministerial or cross agency collaboration is required, stakeholder agreement to the Action Plan will be obtained. At the end of each fiscal year, an Annual Report will be prepared by the MCTI addressing progress made and impediments to be overcome and the Action Plan may be reconfigured at that time.					
<b>DLI#3.2:</b> Four bills on metrology, standards, and compulsory standards approved by parliament		X			
<b>Protocol:</b> Separate bills on metrology, standards, and compulsory standards will be submitted to and passed by parliament. The approval will be signified by publication in the Official Gazette.					
<b>DLI#3.3:</b> Organizational structures for the new NQI Agencies are developed by MCTI and approved by parliament		X			
<b>Protocol:</b> The new organization and agencies required for implementation of the bills mentioned above will be identified and structured including their location in an organogram, reporting, ToR, work programming, and evolution of staffing and corresponding budgeting needs through a 'needs analysis' carried out by the MCTI and approved by the minister of Commerce, Trade and Industry. A time bound, fully costed Action Plan with concrete targets and accountabilities will be developed to guide implementation up to and including a fully operational organizational structure.					
<b>DLI#3.4:</b> Budgets of the new NQI agencies are included in the government budget and approved by parliament			X		
<b>Protocol:</b> By the end of the second year of the project, the budgets for the NQI agencies established according to the DLI targets above will be submitted as part of the normal budget process. The amount of the budgets requested will be justified according to the needs of the organization/agencies as set out in the Action Plan for implementation set out above.					
<b>Total US\$ 1,900,000</b>		<b>US\$900,000</b>	<b>US\$1,000,000</b>		
<b>Annual DLI disbursements</b>	<b>US\$600,000</b>	<b>US\$1,450,000</b>	<b>US\$1,450,000</b>		

### **Subcomponent 2b: Promoting Trade Facilitation (US\$4.4 million).**

38. The objective of this subcomponent to promote trade facilitation through (a) developing a National Logistics Strategy and (b) supporting the implementation of the National Quality Infrastructure.

#### **Subcomponent 2b (i): Developing a National Logistics Strategy (US\$0.8 million)**

39. The objective of this subcomponent is to facilitate the development of a National Logistics Strategy. This will require the setting up of an intergovernmental coordination mechanism through a National Logistics Committee housed in the Ministry of Transport as the mandate of such a committee cuts across the mandates of numerous ministries and agencies in the country. The high-level National Logistics Committee will act as a coordinating and oversight body and a Logistics Strategy Implementation Office will also be established. Key activities to be implemented will be (a) support to the national logistics committee and implementation office; (b) defining and setting up KPIs; and (c) development of the National Logistics Strategy. Feasibility analysis will also be conducted for up to three potential projects identified through the strategy.

#### **Subcomponent 2b (ii): Supporting the Implementation of the National Quality Infrastructure (US\$3.6 million)**

40. The objective of this subcomponent is to strengthen the NQI by (a) constructing a regional office of the Zambia Bureau of Standards and provision of laboratory equipment to expand its services; (b) scaling up of the Zambia GFSI Program to provide recognized training, consulting, and auditing services in food safety management systems; and (c) supporting the annual national standards award competition for large companies and SMEs to encourage excellence in standards.

**Component 3: Project Management and Monitoring and Evaluation (US\$3.7 million).**

41. This will finance the activities of the PIU. The PIU will oversee the implementation of project activities, fiduciary management, M&E, and reporting. In addition, the project will be designed in such a way that it would be possible to carry out an impact evaluation to assess the additionality of the project. The continuous M&E of the implementation of policies and key programs will be a critical role of the PIU and therefore a strong emphasis will be placed on capacity building.

### **Annex 3: Implementation Arrangements**

#### **ZAMBIA: Agribusiness and Trade Project**

##### **Project Institutional and Implementation Arrangements**

42. The project will be implemented by the MCTI, which will establish a PIU within the ministry but with staff recruited competitively from the market. The PIU will include a project manager, agribusiness specialist, FM specialist, procurement specialist, transport/infrastructure specialist, M&E specialist, and communications specialist. A safeguards specialist will also be recruited on a full-time or retainer basis.

43. A Project Steering Committee chaired by the permanent secretary for Commerce, Trade, and Industry will be set up to (a) oversee overall implementation of the project; (b) provide policy guidance to the project; (c) ensure interagency coordination of the project; and (d) review and approve annual work plans and budgets. The project manager shall serve as the secretary of the Project Steering Committee.

44. The Project Steering Committee will be composed of, among others, the permanent secretary of the MCTI (chairperson), the permanent secretary of the Ministry of Finance, the permanent secretary of the Ministry of National Planning, the permanent secretary of the Ministry of Agriculture, the permanent secretary of the Ministry of Livestock Development and Fisheries, the director general of Zambia Development Agency, the chief executive officer of Industrial Development Corporation, the executive director of the Zambia National Farmers Union, the chief executive officer of Zambia Association of Manufacturers, the chief executive officer of Zambia Chamber of Small and Medium Business Associations, the executive director of Indaba Agricultural Policy Research Institute, and executive director of Bankers Association of Zambia.

45. A Technical Working Group will be set up to ensure technical implementation of the project and will be chaired by the project focal point who will be the director of planning and information in the MCTI. All beneficiary institutions will be members of the Technical Working Group. The PIU will serve as a secretariat to the Technical Working Group.

46. A Provincial PAs Advisory Committee will be set up in each province where the project is active (initially in five provinces) whose function will be to enhance outreach, ensure local-level ownership, and provide guidance and feedback for project implementation. These will include members of local businesses such as Chambers of Commerce and the Zambia National Farmers Union members of local leadership, and representatives from the Ministries of Agriculture and Livestock and Fisheries. The committee will be chaired by a member from the private sector. A provincial facilitator will be appointed by the MCTI in each province where the project is active. This facilitator will be from the Provincial Cooperatives Department of the MCTI or recruited from the market, where such staff are not present or appropriate.

##### ***Project Administration Mechanisms***

47. The project will be implemented as discussed under each subcomponent.

### **Subcomponent 1a: Building Productive Alliances in Zambia**

48. A firm or a combination of firms and consultants, will be contracted by the PIU to perform a ‘brokerage function’ and to support delivery of the product alliances and support disbursement of funds. These providers will raise awareness of the program and facilitate linkages between producer associations and off-takers. Producers will be informed about the program and encouraged to participate either in an existing association or in an association formed for the purpose of entering a PA. Producer associations will be provided with business support to prepare their business plans and liaise with off-takers to agree on contractual terms and conditions. The project may rely on an institutional contractor who has the fiduciary responsibility to subcontract TA and assist producer associations in procurement-related matters. A selection panel will review business cases received relating to PAs to determine their suitability for inclusion in the program. Selection will be based upon a range of criteria:

- (a) Technical feasibility (for example, production capacity and quality)
- (b) Financial viability (for example, financial sustainability beyond duration of project support)
- (c) Market linkage strength (for example, quality of market analysis, identification of TA needs, participation in marketing events)
- (d) Alliance partners’ capacity (for example, quality of production planning, quality control, identification of production bottlenecks)
- (e) Social aspects (for example, potential for job creation, belonging to a disadvantaged group)
- (f) Environmental sustainability (for example, promotion of improved or climate-efficient production practices of the proposed subproject)

More implementation details will be provided in the PIM.

### **Subcomponent 1b: SME Supplier Development Program**

49. The project design process identified that there are currently a handful of local organizations that could be scaled up to manage and implement MarketConnect and the Business Linkage Fund concurrently. Therefore, the implementation will be put out for bid. To ensure proper governance and focus, the program will be governed by a board of directors, the majority of directors being business leaders. The board also includes representation of government bodies and a technology and/or skill development institution. The composition will allow for a fusion of the strong business focus that the entity must have and policy and educational/innovation inputs needed for development. The board will report to the PIU. Its role will be to oversee the governance, strategic direction, and progress toward achievement of the M&E targets and to provide guidance to the program management team.

## **Component 2: Strengthening the Regulatory and Institutional Framework for Agribusiness and Trade**

50. The PIU will be responsible for reporting the achievements of the DLIs and EEPs to the World Bank. An independent verification entity will be contracted by the PIU. The PIU will work with staff of Zambia Development Authority, BRRA, CCPC, and NQI institutions as well as the MCTI to develop appropriate ToRs and other technical inputs for the implementation of the component.

### **Financial Management, Disbursements, and Procurement**

#### ***Financial Management***

51. In June 2016, an FM assessment was carried out by the World Bank of the MCTI, which will host the proposed project. The assessment was done in accordance with the Financial Management Manual for World Bank-Financed Investment Operations, issued by the Financial Management Sector Board on March 1, 2010, and the Operations Risk Assessment Framework Financial Management Draft Interim Guidance Note issued by the Africa Region Financial Management Unit (AFTFM) on September 30, 2010. The objective of the FM assessments was to determine whether the ministry's FM arrangement (a) was capable of correctly and completely recording all transactions and balances relating to the project; (b) would facilitate the preparation of regular, accurate, reliable, and timely financial statements; (c) would safeguard the project's entity assets; and (d) would be subject to auditing arrangements acceptable to the World Bank. The financial management (FM) assessment was carried out in accordance with the Bank Directive: Financial Management Manual For World Bank Investment Project Financing Operations issued February 4, 2015 and effective from March 1, 2010; and the Bank Guidance: Financial Management in World Bank Investment Project Financing Operations Issued and Effective February 24, 2015.

52. The conclusion of the assessment was that the FM arrangements in place in the implementing ministry meet the World Bank's minimum requirements under OP/BP 10.00 and are, therefore, with reasonable assurance, adequate to provide accurate and timely information on the status of the project as required by the World Bank. The overall FM risk rating of the project is Substantial because both the accounting and internal audit staff of the MCTI have no experience in implementing World Bank-financed projects. However, this risk rating is expected to be reduced to Moderate after the risk mitigation measures have been taken. Therefore, it is recommended that training of both accounting and audit staff is conducted on a regular basis. It is also recommended that a PIM, including FM procedures, is prepared before project effectiveness.

#### ***Budgeting Arrangements***

53. Budget preparation and monitoring will follow national procedures, full details of which will be documented in the PIM.

#### ***Staffing***

54. The MCTI is inadequately staffed with only one qualified accountant, the acting principal accountant. The acting principal accountant is assisted by two accountants and two assistant accountants, who have no experience with World Bank project accounting. Therefore, the MCTI will recruit a qualified and experienced project accountant, who will report to the principal accountant. The project accountant will be responsible for the accounting functions of the project. Both the accountants and internal auditors, including existing staff and the new project accountant, will need training on World Bank FM and disbursement procedures throughout the life of the project.

#### *Financial Management Manuals*

55. The project will develop, by effectiveness, an FM procedures manual as part of the PIM that will document the accounting policies and procedures to be used for the project.

#### *Information Systems*

56. The MCTI is connected to the country's Integrated Financial Management Information System, but the project module is not currently functional. Therefore, the project will use manual systems to prepare the project accounts until the project module is revived.

#### *Accounting Basis*

57. The project will use cash basis accounting in line with International Public Sector Accounting Standards.

#### *Internal Auditing*

58. The MCTI has a functional internal audit unit with three staff members. There is also an audit committee that is active and meets regularly, and the project will rely on both the internal audit unit and the audit committee of the MCTI for internal audit functions.

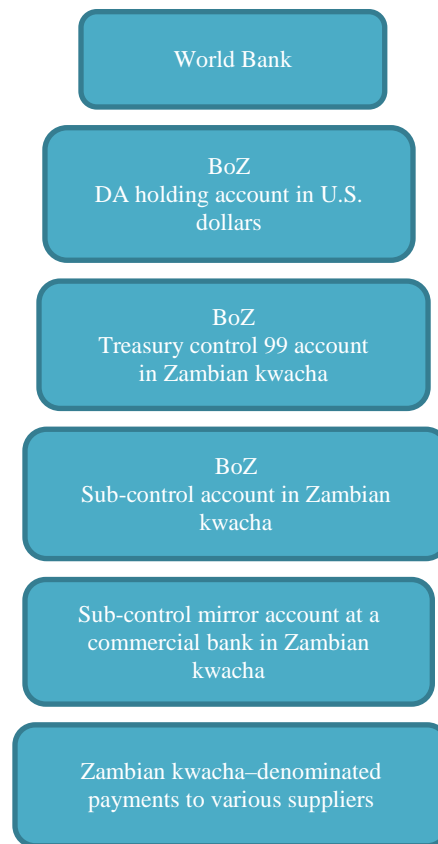
#### *Internal Control Systems*

59. The project will rely on a financial procedures manual that will be developed as part of the PIM. The module will document the policies and procedures that are specific to World Bank-financed projects and will identify expenditures that are eligible for financing under these projects.

#### *Funds Flow and Disbursement Arrangements*

60. The project will use a system under which funds will flow from the World Bank to a designated account (DA) or a holding account denominated in U.S. dollars at the Bank of Zambia (BoZ) (details to be documented in the PIM). The MCTI will open a DA and an operational account in Zambian kwacha at the BoZ as well as mirror accounts at a suitable commercial bank for making payments in the local currency.

**Figure 3.1. Flow of Funds**



#### *Risks in the Funds Flow Process*

61. The projects in the Zambian portfolio using the Country System have been facing delays in the transfer of funds from the DA held at the BoZ to the project accounts held by the implementing entities, and this is likely to affect this project too. This issue is being followed up by the Country Management Unit with the Ministry of Finance to ensure that it is resolved.

#### *Disbursement Arrangements*

62. The project will use two disbursement methods: (a) DLIs under Subcomponent 2a to be addressed in the PIM; interim financial reports (IFRs) for the DLI category will use the reimbursable method and verification will be done annually with the verification process due within six months of the close of the project fiscal year; and (b) the transaction-based method of disbursements (Statements of Expenditure) under Components 1, 2b, and 3. Other methods of disbursing to be used in the project will include reimbursements, direct payments, and use of special commitments (such as letters of credit). Further details are provided in the Disbursement Letter.

63. **DLIs method under Subcomponent 2a.** In the first year, the MCTI will receive DLI-zero grants as reflected in the DLI Matrices (table 2). At the end of each year (Year 2–5), the MCTI will prepare a report justifying the corresponding value of each DLI as agreed with the World Bank in the DLI matrices. This report will be supported by a financial report on the EEPs

from the Ministry of Finance based on the audited financial statement. It was agreed with the Government that EEPs would be comprised of salaries of the BRAA, CCPC and National Quality Infrastructure agencies in the Government's budget. This financial report will be audited (audited financial statements take up to nine months to conclude). The PIU through an independent verifier will verify the legitimacy of the report and whether the targets have been met by comparing the report to actual results on the ground. Payments of amounts allocated to achieved DLIs will be made against the lesser of (a) actual EEPs spent and (b) the allocated amounts to the DLIs met and verified satisfactorily to the association, any difference between disbursed amount and allocated amounts to such achieved DLIs, if any, will be carried forward as reflected in the Disbursement Letter.

### *Financial Reporting Arrangements*

64. The project will submit quarterly IFRs, the format of which was agreed with the World Bank at the negotiations stage, within 45 days of the end of each calendar quarter.

65. The project will prepare annual accounts within three months after the end of the financial year in accordance with accounting standards acceptable to the World Bank. The project will also be responsible for ensuring that the reports are audited and submitted to the World Bank within six months of the end of the financial year.

### *Auditing Arrangements*

66. The project's financial statements will be audited by the Office of the Auditor General, the supreme audit institution in Zambia, which may contract acceptable private audit firms to conduct the audits on their behalf. All audits should be carried out in accordance with International Standards on Auditing and according to the ToR for audits of the project. Audit reports together with management letters should be submitted to the World Bank within six months after the close of the year. Audit reports will be publically disclosed by the World Bank in accordance with the World Bank's disclosure policy. The audit will be financed by the project as part of its operating costs.

**Table 3.1. FM Action Plan**

	<b>Action</b>	<b>Date due by</b>	<b>Responsible</b>
1	Train accountants and internal auditors in the World Bank's FM and disbursement procedures	Continuously during the life of the project	World Bank
2	Develop a PIM, including FM and procurement procedures	Effectiveness condition	MCTI

### *Implementation Support Plan*

67. The World Bank will conduct regular FM supervision of the project as part of its implementation support missions for the project. Quarterly on-site supervision will be carried out until capacity is built. Other forms of supervision will include desk reviews of IFRs and audit reports.

## ***Procurement***

68. The World Bank carried out P-RAMS of the MCTI on February 25, 2016 for the proposed project. The procurement risk for the project is Moderate. Once the identified risks have been mitigated, the residual risk is expected to be reduced to Low.

69. **Procurement manual.** The procurement arrangements to be used under the project will be elaborated in the MCTI Procurement Manual or the PIM. These arrangements include the packaging of procurement, the assignment of clear responsibilities and accountability for procurement, record keeping, and the frequency and scope of prior and post reviews. The manual should outline the legal and institutional arrangements for carrying out procurement within the MCTI using its own institutional arrangements, controls, and quality checks with no reviews or approvals by the Zambia Public Procurement Authority (ZPPA) as is the case following decentralization of procurement in January 2013. The procurement for the project will take into account the provisions of the PPA No. 12 of 2008 as revised in 2012 and the provisions of the Public Procurement Regulations of 2011. These provisions affect all procurement that will be undertaken using national procurement procedures such as NCB. The manual outlines the identified risks and risk mitigation actions that will increase accountability, economy, efficiency, and transparency in procurement. It covers the legal and regulatory framework, the roles and responsibilities of the institutions and staff involved in procurement, internal and external controls and quality assurance checks or systems, approval systems and accountability, and the contracts register. The manual spells out the roles and responsibilities of various players in contract management based not only on government regulations but also on the requirements for the prior review of IDA contracts.

70. **Procurement decentralization.** Since January 1, 2013, all procuring entities in Zambia have been carrying out their own procurement with no involvement by the ZPPA in reviewing bidding documents, bid evaluations, or contract award recommendations. The exception is for procurement by Single-Source Selection (SSS) or Direct Contracting, which still requires review and clearance by the ZPPA. As of January 2015, the ZPPA has transformed itself fully into a regulatory and oversight body for public procurement in Zambia with a new institutional arrangement and staff structure.

71. **Procurement risk mitigation measures.** Based on the P-RAMS, the main risks and proposed risk mitigation measures are shown in table 3.2.

**Table 3.2. Summary Assessment of Capacity, Risk, and Mitigation - Action Plan**

Issues	Risks	Mitigation Measures	By When
1. Contract management and administration	<b>Risk rating: Substantial</b> There are no systems for contract management and administration within MCTI	For every contract, the MCTI should appoint a contract manager in line with the Zambia PPA No. 12 of 2008. This will be an ongoing action. Establish a contract management system, and train responsible staff in contract management	Within first three months of project implementation
(a) Complaints system	<b>Risk rating: Moderate</b> As with other government agencies, there is no system for review of procurement decisions and resolution of complaints	Establish administrative complaints review process by approving authority	Within first six months from project effectiveness
(b) Internal manual and clarity of the procurement process	<b>Risk rating: Substantial</b> The MCTI does not have an internal manual and clarity of the procurement process beyond provisions of the PPA and its regulations	The MCTI may need to prepare a procurement manual going beyond the PPA and its regulations	Within first three months of project implementation
2. Code of ethics and conduct	<b>Risk rating: Low</b> The MCTI does not have a code of ethics and conduct for staff and there is no anticorruption system in place to combat bad behaviors going beyond provisions of the anticorruption provisions and the fraud and corruption provisions of the PPA and its regulations	The MCTI as with other public entities may need to include codes of ethics and conduct in the procurement manual. The ZPPA has produced a Code of Ethics which once accepted and disseminated will be used	Within the first year of project implementation

*Procurement Post Reviews and Independent Post Reviews by the World Bank*

72. Based on the assessed agency implementation risk for procurement, which is Moderate, the World Bank will carry out PPRs or Independent Post Reviews (IPRs) on a sample of 10 percent of all contracts in the procurement plan that have not been subject to prior review by the World Bank. Based on a continuing assessment of risk, the sample size will be reduced as risk mitigation measures are successfully implemented. High risk will represent a sample size of 20 percent, substantial risk will represent a sample size of 15 percent, moderate risk 10 percent, and low risk 5 percent. The World Bank will inform the MCTI of the outcomes of the PPR/IPR exercise, which also will result in revisions to the prior review and NCB thresholds. The review thresholds are shown in table 3.3.

**Table 3.3. Prior Review and Procurement Method Thresholds**

<b>Expenditure Category</b>	<b>Procurement Method</b>	<b>Contract Value Threshold For use of Method (US\$)</b>	<b>Contracts Subject to Prior Review (US\$)</b>
<b>1. Works</b>	ICB(works/supply and installation)	≥10,000,000	All contracts
	NCB	≥200,000 to <10,000,000	As in procurement plan
	Shopping	<200,000	None
	Force account	All values	All contracts
	Direct Contracting	All values	All contracts
	Community participation procedures that have been found acceptable to the Association	All values	None
<b>2. Goods</b>	ICB	≥2,000,000	All contracts
	NCB	≥100,000 <2,000,000	As in procurement plan
	Shopping	<200,000 (motor vehicles only)	None
	Shopping	<100,000 000 (rest not motor vehicles)	None
	Direct Contracting	All values	All contracts
	Procurement from United Nations agencies	All values	None
	<i>Note 1:</i> Contracts with a cost estimate below US\$200,000 for motor vehicles only may be procured on basis of Shopping procurement method		
<b>3. Consulting Services</b>			
<b>3.1 Consulting Firms</b>	QCBS, QBS	≥200,000	All contracts
	CQS, LCS, QBS, FBS	<200,000	As in procurement plan
	SSS	All values	All contracts
<b>3.2 Individual Consultants (ICs)</b>	Competitive selection	≥100,000	All contracts
	IC SSS	All values	All contracts

*Note:* CQS = Selection based on the Consultants' Qualifications; LCS = Least-Cost Selection; QBS = Quality-Based Selection; QCBS = Quality-and Cost-Based Selection; FBS = Selection under a Fixed Budget; ICB = International Competitive Bidding.

73. The Government will prepare community participation procedures acceptable to the Association. These will be contained in the PIM. Using ToR acceptable to the World Bank, the Government will engage consultants to carry out technical and procurement audits on a sample basis at least once a year. The audits will help determine compliance and technical quality to the agreed procedures and standards for projects implemented under community participation.

74. **Applicable legal and regulatory framework for NCB.** The procurement procedure to be followed for NCB will be the open international bidding procedure set forth in the PPA, 2008, Act. No. 12 of 2008, as amended by the PPA (Amendment), 2011, Act No. 15 of 2011, and the Public Procurement Regulations, 2011, Statutory Instrument No. 63 of 2011; provided, however, that this procedure is subject to the provisions of Section I and Paragraphs 3.3 and 3.4 of Section III, and Appendix 1 of the 'Guidelines for Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated

January 2011, revised in July, 2014 (hereafter referred to as the Procurement Guidelines) and the additional provisions in the following paragraphs.

75. **Eligibility.** Eligibility to participate in a procurement process and to be awarded an IDA-financed contract will be as defined under Section I of the Procurement Guidelines. Accordingly, no bidder or potential bidder will be declared ineligible for contracts financed by IDA for reasons other than those provided in Section I of the Procurement Guidelines. No restriction based on the nationality of bidders and/or the origin of goods shall apply, and foreign bidders will be allowed to participate in NCB with no restrictive conditions such as, but not limited to, mandatory partnering or subcontracting with national entities.

76. **Domestic preference.** No margins of preference of any sort will be applied in the bid evaluation.

77. **Bidding documents.** Procuring entities must use bidding documents acceptable to IDA.

78. **Bid validity.** An extension of bid validity, if justified by exceptional circumstances, may be requested in accordance with Appendix 1 of the Procurement Guidelines. A corresponding extension of any bid guarantee will be required in all cases of extension of bid validity. A bidder may refuse a request for the extension of bid validity without forfeiting its bid guarantee.

79. **Qualification.** The qualification criteria will be clearly specified in the bidding documents. All criteria so specified, and only such specified criteria, will be used to determine whether a bidder is qualified. Qualification will be assessed on a 'pass or fail' basis, and merit points will not be used. The assessment will be based entirely on the bidder's or prospective bidder's capability and resources to effectively perform the contract, taking into account objective and measurable factors, including the contractor's (a) relevant general and specific experience; (b) satisfactory past performance; (c) successful completion of similar contracts over a given period; (d) financial position; and, where relevant, (e) construction capability and/or manufacturing facilities.

80. Prequalification procedures and documents acceptable to IDA must be used for large, complex, and/or specialized works. The information that was used to prequalify bidders, including their current commitments, will be verified at the time the contract is awarded, along with the bidder's capability with respect to personnel and equipment. Where pre-qualification is not used, the qualification of the successful bidder will be verified after being recommended for the contract using the qualification criteria stated in the bidding documents.

81. **Bid evaluation.** All bid evaluation criteria other than price must be quantifiable in monetary terms. Merit points will not be used, and no minimum point or percentage value will be assigned to the evaluation criteria or significance of price in the bid evaluation. No negotiations will be permitted.

82. **Guarantees.** Guarantees must be in the format specified in the bidding documents, must be valid for the period specified in the bidding documents, and must be submitted when and as specified in the bidding documents.

83. **Cost estimates.** Detailed cost estimates will be confidential and will not be disclosed to prospective bidders. No bids will be rejected on the basis of comparison with the cost estimates without IDA's prior written concurrence.

84. **Rejection of bids and rebidding.** No bid will be rejected solely because it falls outside a predetermined price range or exceeds the estimated cost. All bids (or the sole bid if only one bid is received) will not be rejected, the procurement process will not be cancelled, and new bids will not be solicited without IDA's prior written concurrence.

85. **Fraud and corruption.** In accordance with the Procurement Guidelines, each bidding document and contract will include provisions stating IDA's policy to sanction firms or individuals found to have engaged in fraud and corruption as set forth in the Procurement Guidelines ("Anti-Corruption Guidelines" means the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and revised in January 2011 and as of July 1, 2016.)

86. **Inspection and audit rights.** In accordance with the Procurement Guidelines, each bidding document and contract will include provisions stating IDA's policy with respect to the inspection and audit of accounts, records, and other documents relating to the submission of bids and contract performance.

#### *Procurement Plan*

87. An 18 month procurement plan has been prepared according to the World Bank's 'Template for A Summarized Procurement Plan' and approved by the Bank. It will be updated as required at least once a year throughout the life of the project.

#### *Procurement Arrangements*

88. **Good and works.** The particular methods that may be used for the procurement of goods and works are as follows:

- **International Competitive Bidding.** Except as otherwise provided in the next paragraph, goods and works will be procured on the basis of ICB.
- **Other methods of procurement of goods and works.** The following list specifies the other methods of procurement that may be used to procure goods and works. The procurement plan specifies the circumstances under which these methods may be used.
  - NCB
  - Shopping
  - Direct Contracting

### *Schedule for Goods and Works*

89. **Procurement of goods.** Goods to be procured under the project are likely to include vehicles, information technology equipment, office equipment, laboratory equipment, office furniture, and irrigation equipment. The procurement will be done using the World Bank's standard bidding documents for all ICB contracts. NCB documents, in accordance with Zambia's procurement regulations and with the exceptions listed above, may be used for contracts estimated to cost less than US\$2,000,000 equivalent per contract. Small-value goods estimated to cost less than US\$100,000 per contract may be procured under the Shopping procedures based on comparing price quotations obtained from a minimum of three suppliers to ensure competitive prices, as this is an appropriate method for procuring readily available off-the-shelf goods. Contracts with a cost estimate below US\$200,000 for motor vehicles only may be procured on basis of Shopping procurement method

### *Consulting Services*

90. The particular methods to be used in the procurement for consulting services are as follows:

- **QCBS.** Except as otherwise provided in the paragraph below, consultants' services shall be procured on the basis of QCBS.
- **Other methods for procuring consultants' services.** The following selection methods may also be used to procure consultants' services. The procurement plan will specify the circumstances under which these methods may be used:
  - QBS
  - CQS
  - LCS
  - SSS for firms
  - ICs
  - SSS for IC

### *Schedule for Consulting Services*

91. **Selection of consulting services.** Selection of consultants under the project will be carried out based on the provisions of the 'Guidelines Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated January 2011 and revised in July 2014. The consulting services that are likely to be needed under the project include those for design, supervision, dispute resolution, the environmental assessments and safeguard study, and the financial, procurement, and technical audits. These contracting needs are identified and included in the procurement plan and contractors will be selected on the basis of methods that have been included in the approved procurement plan. These methods are also

listed above. Short lists of consultants for services that are estimated to cost less than US\$200,000 equivalent per contract may be comprised entirely of national consultants in accordance with the provisions of Paragraph 2.7 of the World Bank's Consultant Guidelines. Engineering and contract management contracts with cost estimates of less than US\$300,000 may be comprised entirely of national consultants in accordance with the provisions of Paragraph 2.7 of the Consultant Guidelines. The procurement plan indicates the contracts using CQS that may not have short lists comprised entirely of national firms. The ToR for all consultancy contracts, as well as all SSSs, irrespective of the contract value, will be subject to prior review by the World Bank.

### ***Environmental and Social (including Safeguards)***

92. Based on the project screening, the project was assigned environmental Category B. The project screening identified that infrastructure works to build or upgrade small markets in selected agro-economic zones across Zambia is likely to have minimal environmental impacts and can be classified as an activity of low risk. Because project locations and design of the proposed activities have not been decided before project appraisal, the PIU will develop an ESMF to provide the screening mechanism, identify potential impacts, and provide guidance for developing subproject Environmental Impact Assessment and generic ESMPs for activities that will be deemed too small to trigger an environmental assessment. The proposed activities trigger a number of safeguards policies as summarized in table 3.4.

**Table 3.4. Safeguards Policies Triggered by the Project**

<b>Safeguard Policies</b>	<b>Triggered</b>	<b>Explanation</b>
Environmental Assessment OP/BP 4.01	Yes	The safeguards policy on Environmental Assessment is triggered notwithstanding the project being mainly TA. The project is likely to involve some infrastructure works to build or upgrade small markets in selected agro-economic zones across Zambia. The TA will focus on promoting an environment for entrepreneurship and investment and facilitating national and regional trade. The component on supporting job creation and growth in agribusiness is likely to involve some small infrastructure works to build or upgrade markets points and associated auxiliary structures in the agribusiness value chain. This will require that the following safeguards instruments be prepared, namely, an ESMF for the project before appraisal and subsequently site-specific ESMP's will be prepared as needed during implementation. The ESMP will guide on the best practices for waste management and any other safeguards concerns that will be identified.
Natural Habitats OP/BP 4.04	No	The World Bank policy on Natural Habitats is not triggered as the proposed market points will have a small footprint and will not have significant ecological impacts on any natural habitat.
Forests OP/BP 4.36	No	The policy on Forests is not triggered as the proposed market points that are likely to be constructed will have a small footprint and the possible forest cover or vegetation losses will be negligible.
Pest Management OP 4.09	Yes	The policy on Pest Management is triggered as it is likely to involve investment activities that will require the procurement of farming inputs such as fertilizers, pesticides, and fungicides to support the agriculture sector. This will require that a PMP be developed. Because there will not be significant pest management issues on the project, the PMP will form part of the ESMF and the ESMP.

Physical Cultural Resources OP/BP 4.11	No	The policy on Physical Culture Resources is not triggered as the construction of market points will cover a small footprint and the unearthing of physical culture resources is highly unlikely. As a precautionary measure, the ESMP will provide ways to manage chance finds.
Indigenous Peoples OP/BP 4.10	No	The policy is not triggered as the geographical areas in consideration are not likely to have indigenous people as defined by the World Bank policy.
Involuntary Resettlement OP/BP 4.12	Yes	Component 1 includes investments in critical market and common use infrastructure. While the exact sites are not known at this time, such construction activities may require land acquisition or require temporary relocation of traders currently occupying the sites while market points are built. An RPF will need to be prepared, and, as necessary, site-specific abbreviated RAPs should be prepared during implementation. The project also proposes to address agribusiness on a policy level, and such policies may have implications for land tenure. Matters related to land tenure will be addressed in RPFs and abbreviated RAPs.
Safety of Dams OP/BP 4.37	No	The policy is not triggered as it will not involve the construction or maintenance of dams as defined by the World Bank policy.
Projects on International Waterways OP/BP 7.50	No	The policy is not triggered as it will not involve financing activities or subprojects lying within riparian areas of international waterways.
Projects in Disputed Areas OP/BP 7.60	No	The policy is not triggered as it will not finance any activities in disputed areas or territories.

## **Annex 4: Implementation Support Plan**

### **ZAMBIA: Agribusiness and Trade Project**

#### **Strategy and Approach for Implementation Support**

93. The strategy and approach for implementation support is in line with the risk profile of the project as identified in the Systematic Operations Risk-Rating Tool (SORT). The Implementation Support Plan will be reviewed annually to ensure flexibility and efficiency.

94. While the MCTI will be the main IA, supervision will be carried out jointly with key implementing partners such as the Ministry of Agriculture, Ministry of Livestock and Fisheries, and Ministry of National Planning. This being the main IA's first World Bank project, significant resources will be allocated during the first year of implementation to put into place a robust institutional structure and capacity, especially for ensuring proper planning, setting up, and implementation of the DLI process as well as a fully functional PIU.

95. While World Bank implementation support will be held at least twice a year, the frequency of support will be increased during the first year to ensure adequate support by the World Bank team. The implementation support team will include the following members: (a) the task team leader(s); (b) an agribusiness specialist; (c) an entrepreneurship specialist; (d) a competition policy specialist; (e) a DLI specialist; (f) an NQI specialist; (g) a results measurement/M&E specialist; (h) an FM specialist; and (i) a procurement specialist. Other skills will be drawn upon as and when the need arises.

96. **Fiduciary oversight.** The World Bank will ensure adherence to all necessary fiduciary requirements according to the Financing Agreement through the availability of procurement and FM staff, both of whom are based in the Zambia country office.

97. **FM.** The World Bank will provide support in the development of the PIM and conduct regular review of financial reports, internal audits, and audits of the Office of the Auditor General or its designated private firms. FM support will also be provided for the DLI process including oversight in verification and related support. The country-based FM specialist will also be available for guidance and training in FM-related matters.

98. **Procurement.** The World Bank will provide support in assisting PIU and IA staff in all procurement matters including support and advice in the development of the procurement section of the PIM. The procurement specialist based in the country office will also provide regular guidance and training as required.

#### **Implementation Support Plan**

99. Intensive implementation support will be provided during the project. Detailed time line and skills required from the World Bank team are outlined below.

**Table 4.1. Implementation Support Plan**

<b>Time</b>	<b>Focus</b>	<b>Skills Needed</b>	<b>Resource Estimate (in staff weeks)</b>	<b>Partner Role</b>
First 12 months	Technical and operational support in trade and competitiveness, DLI implementation, and overall implementation	Private sector specialist	10	Partners: DFID, AfDB, European Union, industry associations  Role: Knowledge sharing, implementation coordination
	Technical support in agribusiness	Agribusiness specialist	8	
	Technical support in investment policy and promotion	Investment policy and promotion specialist	8	
	Technical support in business regulation	Business regulation specialist	8	
	Technical support in competition policy	Competition policy specialist	8	
	Technical support in entrepreneurship	Entrepreneurship specialist	8	
	Technical support in NQI	NQI specialist	8	
	Technical support in DLI implementation	DLI specialist	8	
	FM support	FM specialist	5	
	Procurement support	Procurement specialist	5	
	Social and environmental support	Social and environmental specialist	5	
12–36 months	Same as above for ongoing implementation support and MTR	Same as above	Same as above	
36–60 months	Same as above	Same as above	Same as above	

*Note:* AfDB = African Development Bank.

## Annex 5: Results from PA Programs in Latin America

**Table 5.1. Results from PA Programs in Latin America**

Project	Alliances/ Subprojects (Appraisal Target)	Alliances/Sub projects (Completion)	Direct Household Beneficiaries (Appraisal Target)	Direct Household Beneficiaries (Completion)	Sample	Average Financial Internal Rate of Return* (%)	Average Financial Internal Rate of Return** (%)	Amount at Completion (in US\$, millions)	Of Which IBRD/IDA (in US\$, millions)
Bolivia Rural Alliances Project (PAR I)	675	768	33,700	28,527	535 alliances	49	35	79.74	IDA - 59.94
Brazil Alto Solimoes	50	26	3,500	3,252	26 subprojects	14***	n.a.	2.4	—
Brazil Pará	200	41	36,000	3,148	10 subprojects	n.a.	n.a.	—	—
Brazil Sergipe	n.a.	247	n.a.	10,800	23 subprojects	39	n.a.	—	—
Colombia PAAP I	100	136	10,000	11,714	23 alliances	23	19	30	IBRD - 22.00
Colombia PAAP II	300	725	25,500	42,552	56 alliances	29	27	346 ( IBRD - 30)	IBRD - 30.00
Guatemala PDER	200	174	30,000	18,115	39 alliances	20	17	45	IBRD - 29.14
Panama PRORURAL	6,014	130	5,000	4,577	12 alliances	11	n.a.	46.90	IBRD - 39.40

*Note:* \*Includes only direct costs; \*\*Includes direct and indirect costs (i.e., proposal preparation, technical assistance, project management and monitoring);

\*\*\*EFA not clear on which costs were included in analysis, but it is assumed only direct costs.

**Table 5.2. Results from PA Programs in Latin America**

<b>Project</b>	<b>Description</b>	<b>Key Findings</b>
Bolivia Rural Alliances Project (PAR I)	Test a model to improve accessibility to markets for poor rural producers in selected pilot areas by (a) promoting strategic PAs between different economic actors at the local level, (b) empowering rural producers through the development of self-managed grass-root organizations, (c) increasing access to productive assets and technology, and (d) promoting more effective, responsive, and accountable service organizations at the local level	(a) 60% higher sales volume marketed per rural productive unit compared to start-of-project baseline  (b) 29% to 39% higher sales volume for project beneficiary POs than control group
Brazil Alto Solimoes	Multisectoral operations, in which PAs constitute only one of several project components	At least 15% increase in household income of 1,800 households
Brazil Pará	Multisectoral operations, in which PAs constitute only one of several project components	30% or higher increase in household income for 43% of treatment group, compared to 35% in the control group
Brazil Sergipe	Multisectoral operations, in which PAs constitute only one of several project components	Average increase of US\$986 per household from productive subprojects
Colombia PAAP I	The main intervention mechanism consisted of MGs for participating smallholder POs to cofinance productive investments, complemented by TA, supervision, and training for the productive partners.	US\$280 increase in annual incremental beneficiary household net income
Colombia PAAP II	Demand-driven partnership schemes with the commercial private sector through increasing rural competitiveness and building up rural entrepreneurship in poor rural communities in a sustainable manner	COP 572 billion in sales value generated
Guatemala PDER	The PDO was to (a) improve the competitiveness of rural productive supply chains with strong indigenous participation and (b) strengthen the institutional capacity of the public entities participating in the program for the adoption of a territorial management model with indigenous participation.	(a) US\$16.31 million increase of total sales of rural productive supply chain alliances  (b) 20% increase in sales for alliances that had received collective productive investments compared to alliances that had received only TA and other investments
Panama PRORURAL	Contribute to increased productivity among organized rural small-scale producers, through their participation in PAs, while ensuring the sustainable use of natural resources and the conservation of globally important biodiversity	(a) 22.3% increase in sales receipts by beneficiary producers  (b) 80% increase in net revenues of beneficiary POs  (c) 69% average incremental increase in profits per producer per year from US\$698 to US\$1,180

## **Annex 6: Economic and Financial Analysis**

100. The project aims to contribute to increased private sector investments, firm growth, and job creation by targeting key constraints in the agribusiness sector. This will enable higher incomes for entrepreneurs in addition to agro-processing jobs. The project comprises two mutually reinforcing components: (a) Market Linkages in Agribusiness and (b) Strengthening the Regulatory and Institutional Framework for Agribusiness and Trade.

101. The economic analysis of this project is built as a financial analysis with the estimated difference in cash flows to beneficiaries (smallholders, medium and large commercial farms, and SMEs, including new jobs created) accounted for as cash flows to the project. In Subcomponent 1a, the project will support POs, and in Subcomponent 1b, the project will support agricultural SME development. Under Component 2, the project will support structural business environment reforms to reduce the administrative burden on existing and future businesses. This analysis estimates the costs and benefits that are expected to accrue from these investments, including calculating the NPV and the ERR for these subcomponents. These valuations are constructed through scenario-based analyses with sensitivity testing.

102. The economic analysis of Component 2 (Strengthening the Regulatory and Institutional Framework for Agribusiness and Trade) presents a special challenge because of the indirect relationship between the business environment reforms supported under the project and the stream of benefits that these reforms are expected to trigger. In the absence of commonly accepted methodologies for economic analysis for these types of investments, such projects are based on cost-effectiveness and more general analytical work on the effects of business environment reforms on private sector growth and entrepreneurship. As such, the economic analysis of this component is based on its value as a channel for investment promotion and SME growth. A qualitative analysis has been included for Component 2 to provide further support for these investments, based on the literature discussing the impact of business environment reform on competitiveness and firm entry.

103. The total investment under Component 1 is estimated to result in an NPV of US\$7.8 million at the discount rate of 12 percent<sup>34</sup> and an ERR of 20.4 percent<sup>35</sup> with the base case scenario. Different assumptions and detailed data from multiple sources are used for the analysis of specific components. Correspondingly, each component includes its own sensitivity analysis.

104. The estimated NPV and ERR reflect the value for money of the investments under these components. These investments are expected to generate increases in income for beneficiaries that exceed the NPV of the project investment. The opportunity cost of World Bank funds is estimated at 10 percent to 12 percent. Because the ERR exceeds this percentage, the value of the project activities outweighs the opportunity cost of using these funds for other investments in this or a similar country.

---

<sup>34</sup> Discount rate is based on the risk-adjusted opportunity cost of capital for World Bank financing in Zambia.

<sup>35</sup> Valuation calculations are given over a 15-year period.

## Subcomponent 1a: Building Productive Alliances in Zambia

105. This subcomponent aims at supporting POs in Zambia to support farmers across a number of value chains. This will help increase the strength of such associations and the farmers that are part of these organizations. Additionally, this subcomponent includes investment in last-mile infrastructure that will help address limited rural connections to markets. Local residents will each benefit from the reduction in costs associated with transport. The project is investing a total of US\$16.7 million in this subcomponent as well as US\$1.4 million in project management costs.

106. In the economic analysis of this subcomponent, the ERR is expected to be 22.3 percent. The NPV is expected to be about US\$5.9 million, at a discount rate of 12 percent. Improvements in association and farmer income (beneficiaries of this subcomponent) outweigh the cost of investments under this subcomponent. The sensitivity results of this subcomponent and the underlying assumptions are summed up in the following paragraph.

### 107. Assumptions

- (a) The technical data on revenues, costs, annual growth rates, and average wage are taken from World Bank studies conducted on value chains and jobs in Zambia, data gathered and validated by discussions with local experts (both private sector and government) during the identification and pre-appraisal, and benchmarking against comparator countries. In many cases, these numbers were adjusted to arrive at more conservative estimates for the subcomponent ERR.
- (b) The total number of beneficiaries is estimated at 180 POs and 4,500 farmers, along with 6,300 beneficiaries of the infrastructure investments.
- (c) In the base case scenario, the analysis assumes a revenue growth additionality of 10 percent for farmers for the first five years of program impact and then returns to a steady-state growth rate of 3–5 percent. POs are estimated to grow by 10 percent over the first two years. Infrastructure beneficiaries are estimated to grow at an additional 3 percent over the first year. These assumptions have been tested according to the sensitivity analysis given in box 6.1.

**Table 6.1. Economic Analysis of Subcomponent 1a**

NPV (at 12% discount rate)	US\$3,883,111
ERR	19.0%

## Assumptions - Subcomponent 1a

**Table 6.2. Beneficiaries**

Total number of farm beneficiaries	4500
Total number of associations	180
Total infra beneficiaries	6300

**Table 6.3. Percentage of Farm Beneficiaries**

Percentage smallholder	90%
Percentage medium	10%

**Table 6.4. POs**

Average number of members	25
Average income	US\$30,000
Annual income growth (without the project)	3%
Annual income growth additionality with the project	10%
Number of years growth increases due to the project	2

**Table 6.5. Farm Assumptions**

<b>Farm Assumptions</b>	<b>Micro/Small</b>	<b>Medium</b>
Average number of employees	5	20
Average revenue	US\$3,000	US\$30,000
Percentage costs	75%	75%
Average value added	US\$750	US\$7,500
Annual growth (without the project)	1%	1%
Annual growth increase due to the project (Years 2–5)	10%	10%
Number of years growth increases due to the project	5	5
Percentage formal	—	100%
Corporate tax rate	—	30%
Personal income tax rate	—	10%
Average salary (skilled)	—	US\$900
Average salary (unskilled)	US\$200	US\$300
Annual growth in wages (skilled)	—	0%
Annual growth in wages (unskilled)	0%	0%
Jobs created per US\$ increase in revenue (skilled)	—	0.0001
Jobs created per US\$ increase in revenue (unskilled)	0.0002	0.0002

**Table 6.6. Infrastructure Beneficiaries**

Average household size	5
Average revenue	US\$3,000
Percentage costs	75%
Average value added	US\$750
Annual growth (without the project)	1%
Annual growth increase due to the project	3%
Number of years growth increases due to the project	1

108. The sensitivity analysis shows that Subcomponent 1a's ERR with an 8 percent additionality to farmer income is 17 percent. By contrast, a 12 percent additionality to farmer

income is 27 percent with everything else held constant. The results of the sensitivity analysis are given in box 6.1.

**Box 6.1. Sensitivity Analysis**

1. Reduction in the assumed additionality to farmer income from the assumed 10 percent to 8 percent
  - Reduces ERR to 17 percent
2. Increase in the assumed additionality to farmer income from the assumed 10 percent to 12 percent
  - Increases ERR to 27 percent
3. Reduction in the estimated number of farm beneficiaries from 4,500 to 4,000
  - Reduces ERR to 20 percent
4. Increase in the estimated number of farm beneficiaries from 4,500 to 5,000
  - Increases ERR to 25 percent
5. Reduction in the estimated number of infrastructure beneficiaries from 6,300 to 5,300
  - Reduces ERR by 0.2–22.1 percent
6. Increase in the estimated number of farm beneficiaries from 6,300 to 7,300
  - Increases ERR by 0.2–22.5 percent

109. The major impact of this subcomponent comes from the income created by each new and expanded business and the monetized value of the jobs created. The change in these affects the economic analysis and the returns of the project.

110. The sensitivity analysis shows the robustness of the model and assumptions (modifying the value of the assumptions only slightly affects the estimated ERR). An outline of the more detailed analysis that will be conducted before implementation is provided below, along with support from the broader literature for the impact of similar infrastructure investments.

111. A detailed economic analysis will be carried out as part of the preparation of the detailed design of all transport investments. For the road investment program, a global approach will be used with support from an international consultant to identify the investments more likely to boost local growth. Then, for each section of road identified, a specific economic analysis will be produced, based on direct benefits resulting from savings in transport costs (vehicle operating costs and time savings) combined with the number of people affected by the investment (current road usage and number of people living within 2 km). The NPV, at a 15 percent discount rate, and the ERR will be examined for each road investment envisaged. Roads with an internal rate of return below a hurdle rate of 15 percent will not be financed by the project. Roads under consideration will be ranked by NPV-to-cost ratios, with cost adjustments based on security risks, economic importance, connectivity, traffic volumes, and access to social and economic centers to determine the best investment candidates. This detailed economic analysis will be available within 12 months from project effectiveness.

112. A number of studies also provide conceptual support for the transport infrastructure investments under this project. Smallholders living along the rehabilitated road corridors will have improved access to markets, helping improve local livelihoods.

113. Dorosh et al. (2010)<sup>36</sup> find that agricultural production is highly correlated with proximity (as measured by travel time) to urban markets. Likewise, adoption of high-productive/high-input technology is negatively correlated with travel time to urban centers. There is therefore substantial scope for increasing agricultural production in Sub-Saharan Africa, particularly in more remote areas. Total crop production relative to potential production is 45 percent for areas within four hours' travel time from a city of 100,000 people. By contrast, it is just 5 percent for areas more than eight hours away. Low population densities and long travel times to urban centers sharply constrain production. Reducing transport costs and travel times to these areas will expand the feasible market size for these regions.

114. Diao et al. (2003)<sup>37</sup> explore the implications of improving market access on agricultural income gains in Africa. They find that over a 12-year period real agricultural income gains are twice as high with total factor productivity growth in transport. Similarly, an International Food Policy Research Institute model simulating the effects of market access and transport improvements, along with improvements in productivity, finds that better market access significantly increases smallholder farmers' income growth to 1.4 percent annually instead of 0.3–0.4 percent average growth currently observed in low-income Africa.

115. Details on the criteria that will be used to evaluate potential road investments are as follows.

#### *Identification and Selection*

116. The surveying process for candidate road investments will be conducted during the 12 months following project effectiveness. This surveying process involves rigorous economic cost-benefit analysis using HDM4 or similar software and each road investment will be ranked according to NPV-to-cost ratios. The minimum criteria for selection of a road investment will be an NPV above the 15 percent hurdle rate.

117. The costs calculated for each investment will be based on traffic patterns, vehicle characteristics, time value, maintenance costs, and so on. Additionally, the costs will be multiplied by a factor to account for the differing security risks in each area, because this can add to the costs.

118. Further, they must meet the following criteria:

- (a) Economic importance. A road (or bridge) is located in a district that has a high potential for cash crop cultivation or serves areas with natural resources.
- (b) Ensure connectivity to the existing road network. The identified road (or bridge) has upward connectivity to higher-level roads within Zambia's overall road network. If

---

<sup>36</sup> Dorosh, Paul, Hyoung-Gun Wang, Liang You, and Emily Schmidt. 2010. "Crop Production and Road Connectivity in Sub-Saharan Africa: A Spatial Analysis." Working Paper Series 5385, World Bank, Washington, DC.

<sup>37</sup> Diao, Xinshen (with E. Diaz-Bonilla and S. Robinson). "Poor Countries Would Gain from Open Agricultural Markets: A Technical Note." In *Agriculture in the Global Economy: Hunger 2003*. 13th Annual Report on the State of World Hunger. Washington, DC: Bread for the World.

the road only connects a village to another village that is not connected further to some part of the road network, it will be disqualified.

- (c) Minimum traffic volume. All candidate road investments must have a minimum traffic volume of at least 300 vehicles per day to ensure they reach sufficient population to justify the investment.

119. The list of candidate roads selected for prioritization will be subject to the following criteria to establish their priority level and rank them based on their score.

- (a) Population served. Number of people living within 2–2.5 km on either side of the candidate road
- (b) Access to social centers. Number of schools and health centers to which the road provides access
- (c) Access to economic opportunities. The number of facilities that provide opportunities for employment and other forms of income generation such as major markets and townships, administration centers, mines, factories, or commercial farms
- (d) Current level of accessibility. This criterion evaluates how accessible the area being served by the road is to the network or how passable the road is at present. Worse conditions will receive a higher score.
- (e) Traffic volume. The higher the annual average daily traffic using the road, measured in motorized vehicles per day, the higher the score.

**Table 6.7. Candidate Road Selection Criteria**

S. No.	Criteria	Weight	Description	Score
1	Population served	30	5,000 or more	30
			3,000–5,000	25
			1,000–3,000	20
			< 1,000	10
2	Access to social centers	20	5 or more	20
			1–4	10
			0	0
3	Access to economic opportunities	30	4 or more	30
			3	20
			1–2	10
			None	0
4	Current level of accessibility	10	Bad, poor, or none	10
			Limited or fair	5
			Good	0
5	Traffic volume (motorized vehicles per day)	10	500 or more	10
			400–500	5
			300–400	0
<b>Total score</b>		<b>100</b>		

## Subcomponent 1b. SME Supplier Development Program

120. This subcomponent will provide financing to address key knowledge and capital constraints in agribusiness through financing of materials and training provisions through a matching facility. As a result, agricultural SMEs will be able to expand and improve their businesses and link to larger markets. The increased revenues will also increase the number of formal and informal jobs in both sectors. The project is investing a total of US\$11.7 million in this subcomponent along with US\$1 million in project management costs disbursed over five years.

121. The particular channels through which this subcomponent affects SMEs are documented in detail in annex 2. In the economic analysis of this subcomponent, the ERR is expected to be 17.2 percent. The NPV is expected to be about US\$1.9 million at a discount rate of 12 percent. The positive valuation indicates that the returns on investment for this subcomponent exceed the returns that could otherwise be earned by investing in a project in the country. Hence, the additional SME revenue and the monetized value of the jobs created outweigh the cost of investments under this subcomponent.

122. Assumptions:

- (a) The technical data on revenues, costs, and average wage are taken from World Bank studies conducted on value chains and jobs in Zambia, data gathered during the identification and pre-appraisal missions, and benchmarking provided by comparator country estimates. In many cases, these numbers were adjusted to arrive at more conservative estimates.
- (b) The total number of beneficiaries is estimated at 300 SME training recipients and 140 SME grant recipients, with some overlap. This has been validated by local experts in the agriculture sector and the implementation of a similar program in Tanzania.
- (c) In the base case scenario, the analysis assumes a revenue growth additionality of 6 percent for SMEs receiving grants for the first two years of program impact and then returns to a steady-state growth rate of 3–5 percent. For SMEs receiving training, the additionality is estimated at 4 percent. These assumptions have been tested according to the sensitivity analysis given in box 6.2.

**Table 6.8. Economic Analysis of Subcomponent 1b**

NPV (at 12% discount rate)	US\$1,898,297
ERR	17.2%

### Assumptions - Subcomponent 1b

**Table 6.9. SME recipients**

Total number of SME grant recipients	140
Total number of SME training recipients	300

**Table 6.10. Percentage of SMEs**

Percentage micro/small	77%
Percentage medium	23%

**Table 6.11. Farm Assumptions**

SMEs	Micro/Small	Medium
Average number of employees	5	20
Average revenue	US\$50,000	US\$75,000
Percentage costs	80%	80%
Average value added	US\$10,000	US\$15,000
Annual growth (without the project)	2%	3%
Annual growth increase due to the project (training recipients)	4%	4%
Annual growth increase due to the project (grant recipients)	6%	6%
Number of years growth increases due to the project	2	2
Percentage formal	1	100%
Tax rate	0	20%
Average salary (skilled)	—	US\$10,000
Average salary (unskilled)	US\$3,500	US\$5,000
Annual growth in wages (skilled)	—	4%
Annual growth in wages (unskilled)	4%	4%
Jobs created per US\$ increase in revenue (skilled)	—	0.0001
Jobs created per US\$ increase in revenue (unskilled)	0.0002	0.0002

123. The sensitivity analysis shows that Subcomponent 1b's ERR with only 4 percent revenue additionality will reduce the ERR to 7 percent. In contrast, an 8 percent revenue additionality will increase the subcomponent's ERR to 26 percent with everything else held constant. The results of the sensitivity analysis are given in box 6.2.

#### **Box 6.2. Sensitivity Analysis with Different Scenarios**

- Reduction in additional revenue growth to 4 percent
  - Reduces ERR to 7 percent
- Increase in additional revenue growth to 8 percent
  - Increases ERR to 26 percent
- Reduction in the number of grant recipient SMEs from 140 to 100
  - Reduces ERR to 12 percent
- Reduction in the number of training recipient SMEs from 300 to 200
  - Reduces ERR to 14 percent

124. The major impact of this subcomponent comes from improved income to SMEs and wages paid for jobs created as beneficiaries of the project. The change in these affects the economic analysis and the returns of the project.

## **Component 2: Strengthening the Regulatory and Institutional Framework for Agribusiness and Trade**

125. This component will focus on three priority areas of the business environment: (a) fostering transparency, competition, and efficiency in the business environment; (b) trade facilitation; and (c) supporting public private dialogue. The project is investing a total of US\$7.9 million in this component disbursed over five years.

126. To provide further support for investments under this component, the relationship between the characteristics of the business regulatory environment and the performance of firms has also been documented (Djankov et al 2002,<sup>38</sup> Botero et al 2004,<sup>39</sup> Acemoglu and Johnson 2005,<sup>40</sup> Klapper and Richmond 2011,<sup>41</sup> and Kaufmann et al 2006)<sup>42</sup> but most of these works are nonexperimental and hence face problems of endogeneity.

127. A recent study finds that barriers to starting a business are negatively and significantly correlated with business density and entry rates. Fewer procedures are associated with a greater number of registered firms and higher entry rates (Klapper and Richmond 2011).<sup>43</sup> A similar relationship can also be found with the cost of starting a business. It is estimated that for every 10 percent decrease in entry costs, density and the entry rate increase by about 1 percent.<sup>44</sup> Simpler entry encourages the creation of new companies. Easier start-up is also correlated with higher productivity among existing firms. A study that analyzes data in 157 countries finds that a reduction in entry costs raises output per worker by an estimated 29 percent (Barseghyan L, 2008).<sup>45</sup> These targeted interventions are a key portion of the business environment reforms supported under the project.

128. The 2008 World Bank Group Entrepreneurship Survey includes new data on the impact of modernization of business registries on business creation. It gathers extensive data on the functioning and structure of business registries in 71 countries from the registrar of companies, as well as complementing data on the number of total and newly registered businesses in over

---

<sup>38</sup> Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2002. "The Regulation of Entry." *The Quarterly Journal of Economics* Oxford Journals.

<sup>39</sup> Botero, Juan, Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2004. "The Regulation of Labor." *Quarterly Journal of Economics*, Oxford Journals.

<sup>40</sup> Acemoglu, Daron, and Simon Johnson. 2005. "Unbundling Institutions." *Journal of Political Economy* 113 (5): 949–995.

<sup>41</sup> Klapper, Leora, and Christine Richmond. 2011. "Patterns of Business Creation, Survival and Growth: Evidence from Africa." *Labour Economics* 18 (S1): S32–S44.

<sup>42</sup> Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2006. "Governance Matters V: Aggregate and Individual Governance Indicators for 1996–2005." Policy Research Working Paper Series 4012, World Bank, Washington, DC.

<sup>43</sup> Klapper, Leora, and Christine Richmond. 2011. "Patterns of Business Creation, Survival and Growth: Evidence from Africa." *Labour Economics* 18 (S1): S32–S44.

<sup>44</sup> *ibid*

<sup>45</sup> Barseghyan, L. 2008. "Entry Costs and Cross-Country Differences in Productivity and Output." *Journal of Economic Growth* 13.

100 countries. This new empirical evidence suggests that greater ease in starting a business and better governance are associated with increased entrepreneurial activity. After controlling for economic development (GDP per capita), higher entrepreneurial activity is significantly associated with cheaper, more efficient business registration procedures (as measured by the Doing Business 2009 'Starting a Business' indicators) and better governance (as measured by Kaufmann et al. 2006)<sup>46</sup>.

129. Similar research also highlights the importance of trade and investor facilitation for costs and ability to export. Delays in getting goods back and forth through the customs, as well as the overall unpredictability of transport times, constrain firms from participating in time-sensitive production, which is often important for manufacturing and agribusiness industries. Nordas (2005)<sup>47</sup> finds that an additional day required for exporting is equivalent to being 70 km farther away from the trade partner. Similar calculations suggest that if time to export can be reduced by 1 percent, exports on average could increase by more than 1.5 percent.

130. The data also show a positive and significant relationship between economic and financial development and entrepreneurship. The log of GDP per capita and domestic credit to the private sector (as a percentage of GDP) are both positively and significantly correlated with entry rates and business density. This suggests that greater business opportunities and better access to finance are related to a more robust private sector (Klapper et al. 2008),<sup>48</sup> lending further credence to the capacity building around access to finance investments supported by the project.

---

<sup>46</sup> Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2006. "Governance Matters V: Aggregate and Individual Governance Indicators for 1996–2005." Policy Research Working Paper Series 4012, World Bank, Washington, DC.

<sup>47</sup> Nordas, Hildegunn, Enrico Pinali, and Massimo Grosso. 2006. "Logistics and Time as a Trade Barrier." OECD Trade Policy Working Paper 35.

<sup>48</sup> Klapper, Leora, and Christine Richmond. 2011. "Patterns of Business Creation, Survival and Growth: Evidence from Africa." *Labour Economics* 18 (S1): S32–S44.

## **Annex 7: Summary of Let's Work Partnership Results**

131. The Let's Work Partnership (LWP) is a global alliance of donors to promote more, better, and inclusive jobs through leveraging the role of the private sector. It is financed through a Multi-Donor Trust Fund administered by the World Bank Group. The motivation for the LWP came from the International Finance Corporation Jobs Study and the World Development Report on Jobs, both produced in 2013. At a country level, the LWP works with partners in the private sector, development agencies, and the Government. The Zambia Country Pilot is one of six country pilots being carried out worldwide to develop and test the approach.

132. The Zambia Country Pilot includes a Jobs Diagnostic (JD) and Jobs in Value Chains analysis specific to Zambia, which are summarized in the following paragraphs. The JD brings together a comprehensive analysis of the jobs situation, the future jobs challenges, and opportunities, and the priority constraints that need to be removed for better jobs outcomes. To do this, the JD combines micro-level data analysis of households and firms with aggregate data analysis at macro and meso levels, to derive a comprehensive profile of job opportunities and challenges. At a more granular level, the Jobs in Value Chain analysis seeks to understand the potential to leverage more, better, inclusive jobs in key sectors that can span from high-skilled, formal employment in globally competitive lead firms to quality, sustainable earning opportunities for low-skilled self-employed or smallholders through higher value added activities. This requires understanding the challenges and opportunities for not just strengthening and deepening the domestic value chain, but increasingly for integrating into global value chains.

### **Key Findings of the JD**

133. Zambia remains one of Africa's youngest countries by median age, and demography will move in the country's favor as dependency falls—but only if the economy creates more and more productive jobs. At least 375,000 jobs are needed on average each year until 2030; between 2030 and 2050, this estimate doubles to 747,000 jobs per year, just to keep labor force participation and unemployment fixed. During the recent period of rapid economic growth (2000–2014), employment rose by only 130,000 per year on average, a growth rate of 3.1 percent, while real GDP averaged 7.5 percent.<sup>49</sup> With annual real GDP value added growth greatly exceeding job growth over the past decade, Zambia created 'better jobs' on average with higher productivity gains occurring through a 'structural change' where labor moved out of agriculture into services and industry—where productivity is much higher. Although growth over this period has been rapid, it has also been unequal, with poverty headcounts increasing along with GDP. To be more inclusive, growth needs to raise the productivity and returns to work for the bottom 40 percent of the population.

134. The structural change in Zambia is coupled with two other significant economic transformations: jobs in Zambia became more urbanized and more formalized in the high growth period. The urban share of the population in Zambia's main city, Lusaka, and in other urban centers is higher, and the population of the main city is expanding faster than other developing countries in Sub-Saharan Africa. Employment rates increased in urban areas between 2008 and 2014 but seem to have fallen in rural areas—a larger share of the working age population that is

---

<sup>49</sup> ILO estimates for annual growth in employment and real GDP.

out of the labor force is in rural areas. The increased share of adults in urban areas, and of children in rural areas, may signal internal migration for jobs. Given the current economic slowdown due to lower world copper prices and slower global and regional growth, maintaining Zambia's growth trends may depend on rural transformation and jobs in secondary towns. Agricultural productivity growth can play a key role in this rural transformation and in firing up the rural economy.

135. Most Zambians, most poor Zambians, and most Zambian women are still farmers, although across the population the services and industry sectors have continued to increase their share of employment. Underemployment seems to be increasing as new young workers enter the workforce, especially in rural areas, for both women and men, and particularly rising in urban service sectors, which are the driver of a lot of the new job creation. Whereas employment rates are high, labor force participation seems to be falling slightly, both for males and females, for young people, and especially in rural areas. The decline in participation seems to be steepest for those with low skills in rural areas, suggesting that the labor market is becoming more demanding of skills. Compared to other African countries, Zambian jobs are in relatively large and formal firms. This means there are already lead firms in most sectors, suggesting that a job strategy designed around supply chains of large leading firms may be feasible. This also suggests that enabling linkages between farmer groups and SMEs into key agricultural value chains can help raise productivity, income, and waged employment in the agriculture sector (including agro-processed products). Commercial farming offers productivity gains commensurate with the industry and services sectors. Agro-based products were half of Zambia's non-mining exports from 2008 to 2014, and of these, about half of food and live animal exports are to other parts of Sub-Saharan Africa. This demonstrates the importance of regional trade in food for both economic diversification and jobs.

136. Spatially, two-thirds of all firms and all jobs in establishments are in Copperbelt and Lusaka alone; adding the Southern and Central Regions, this rises to over 80 percent of firms and jobs in establishments that are concentrated in one corridor running through the center of the country—meaning many poor people and SMEs are within reach of the value chains of successful formal sector firms. Based on further analysis of agro-processing wards, commercial farming and livestock and agro-processing industries have a strong potential to reach high concentrations of poor Zambians. Non-agro-based manufacturing firms are especially concentrated in the main cities and towns and along road corridors, while agro-processing firms are more diversely located in two areas of high poverty density: the Central Corridor and the Eastern Province. Developing agro-processing supply chains should have a disproportionately high impact on poverty reduction in these areas through formal job creation, increased farm incomes and demand for farm products, and backward linkages to input providers. Agro-based products can also help diversify exports away from copper and can help Zambia capitalize on proximity to markets over its many borders.

137. In Zambia, education is becoming more important for labor force participation and employment, even more so than age and gender. It seems that young people are staying longer in school and are more inclined to be working and in school than just in school. At the same time, occupations seem to have become more skill intensive—leaving those with lower levels of education mostly in 'elementary occupations'. The public sector and professions have absorbed university graduates in the 2008–2012 period and appears to be paying higher wages than the

private sector for similar education, location, gender, and experience—encouraging youth to pursue university degrees and wait for these jobs, aggravating an already significant skill gap in the private sector. Young people, in particular, seem to be leaving agriculture but are also more likely to be out of the labor force.

138. Further, the regional pattern of employment and labor force participation masks wide differences in the quality of jobs. Most poor people cannot afford not to work, unless supported by a wage earner with a reliable formal sector job. With over 80 percent of the working poor in farming, the key to prosperity remains mobility out of agriculture, particularly as, except for commerce, all sectors have higher returns compared to agriculture with varying premiums. Highest premiums are found to be in public utilities, public administration, and mining.

### **Key Findings of the Jobs in Value Chain Analysis**

139. A key aspect of supporting Zambia’s own Job Creation and Industrialization Strategy is understanding value chain opportunities, challenges, and dynamics. The aim is to identify interventions designed to support job creation and earnings enhancement in value chains, with a particular focus on integrating SMEs into competitive value chains—that is, more jobs, better jobs, and more inclusive jobs. To prepare the ground for the in-depth value chain surveys and identify the specific areas of additionality of the LWP in Zambia, the team has conducted a stocktaking of what is currently known about job-related programs and recommendations in high-potential sectors. The analysis is based on a review of the World Bank Group and LWP studies as well as other available data and publications, emphasizing the FY2005–FY2015 period for maximum relevance and validated through input from operational teams. The Jobs in Value Chain survey analysis of specific subsectors selected for deep-dive studies builds on the findings from this work.

140. For the agriculture analysis, the LWP reviewed the ten main agricultural<sup>50</sup> subsectors accounting for over two-thirds of agricultural output and assessed them along three dimensions that enhance job opportunities—competitiveness potential, impact on target groups, and readiness and change potential—with the aim of identifying job-related opportunities and information gaps. Dairy, aquaculture, poultry, and soy stood out as high-potential sectors for a job dividend, based on the available evidence, combined with consultations with field teams. In addition to high job potential, these sectors present opportunities to improve productivity and ease constraints along the value chain.

141. Preliminary analysis carried out in consultation with private and public sector stakeholders in June 2016 within the poultry and aquaculture sectors highlights that backward linkages to the animal feed industry can create better, inclusive jobs for smallholders. In particular, specific measures cited from the ongoing analysis include targeted training programs for industry workers (66 percent of feed mills having noted worker skills as a major obstacle to growth); mechanisms for available financing for producers (extended to all input sectors—for example, fingerlings production for aquaculture); increased demand through new investments in formal livestock farming activities to build a stronger animal feed user base; and outreach to

---

<sup>50</sup> Poultry, aquaculture, soy, dairy, beef, leather, maize, groundnut, cotton, and sugar.

improve on-farm management techniques (for example, proper use of quality feed) to increase capacity utilization/productivity.

### *Poultry Value Chain*

142. The LWP findings demonstrate the potential of the poultry sector as a source of inclusive jobs. Within this sector, substantial job growth is associated with feed producer backward linkages. The job creation forecast given in table 7.1 shows the potential for direct/indirect employment by geographic region.<sup>51</sup>

**Table 7.1. Poultry Value Chain – Job Creation Forecast**

	Year	Direct jobs	Indirect/ induced jobs	Est. total jobs	High skill	Low skill	Seasonal/ Temp (FTE)
Broilers Copperbelt	2016	12,656	6,075	18,731	5,920	4,578	2,158
	2022	14,422	6,922	21,344	6,746	5,216	2,459
	2028	16,433	7,888	24,321	7,687	5,944	2,802
	2015 avg wage (ZMW/year):				16,133	7,380	2,947
Broilers Lusaka	2016	10,788	5,178	15,966	4,361	5,221	1,205
	2022	14,211	6,821	21,032	5,745	6,878	1,588
	2028	18,720	8,986	27,705	7,568	9,061	2,091
	2015 avg wage (ZMW/year):				18,554	8,462	3,908
Layers Copperbelt	2016	6,215	2,983	9,198	2,013	3,560	642
	2022	7,082	3,399	10,481	2,293	4,056	732
	2028	8,069	3,873	11,943	2,613	4,622	834
	2015 avg wage (ZMW/year):				18,647	8,273	4,462
Layers Lusaka	2016	2,142	1,028	3,170	721	1,212	209
	2022	2,821	1,354	4,176	950	1,596	275
	2028	3,717	1,784	5,501	1,252	2,102	363
	2015 avg wage (ZMW/year):				19,350	7,680	3,511

143. The increased use of feed has considerable job creation potential given increases in production that will come with population growth. Additionally, the sector can take advantage of a weak Zambian kwacha by exporting to neighboring countries through formal markets, thus stimulating farm production and employment.

### *Aquaculture Value Chain*

144. The LWP findings show a limited job creation potential through small-scale fisheries aquaculture; however, there are substantial job growth opportunities through backward linkages to feed producers. With estimated population growth, table 7.2 shows job projections resulting from expected increase in production (excluding exports).

<sup>51</sup> Job projections based on expected population growth and domestic demand only; exports not accounted for due to substantial informal trade.

**Table 7.2. Job Creation across the Value Chain in a Population Growth Plus Employment Multiplier Scenario (Where Consumption = 12 kg/capita/annum)**

	Year	Direct jobs	Indirect jobs	Est. total jobs	High skill	Low skill	Seasonal/ Temp (FTE)
North Western	2016	2,651	1,060	3,711	114	1,389	1,145
	2022	3,139	1,256	4,395	135	1,645	1,356
	2028	3,718	1,487	5,205	160	1,948	1,606
Lusaka	2016	805	322	1,126	33	456	315
	2022	1,060	424	1,484	43	601	415
	2028	1,396	558	1,955	57	792	547

Source: Global Development Solutions, LLC.

145. Strong job growth potential can be seen from a backward linkage into the feed sector. The reason for this is the high employment multiplier associated with feed production in Sub-Saharan Africa. Based on data from the South African feed industry, the employment multiplier is 10, meaning that for every direct job created at the feed mill, an additional nine indirect jobs are created. Preliminary findings of the aquaculture analysis demonstrate a need to improve on-farm management techniques to link to the feed supply potential for this value chain. Improving technical skills at feed mills could help improve productivity and reduce the cost of production and improve quality.

## Recommendations

146. Going forward, the LWP plans to further analyze the potential for targeting reforms aimed at improving formal firm growth, productivity among informal firms, and competition policies; encouraging open borders and food exports regionally, especially higher value added products and proteins (livestock, fish, dairy), to nearby urban centers; linking the impressive gains in formal sector agro-processing to small farmers and informal traders, particularly women, through building POs' capacity to engage in out-grower schemes (animal feed, livestock, dairy, and horticulture) and take advantage of domestic and regional buyers with demonstrated interest in local sourcing; and assessing actions, where relevant, to correct the underlying causes of low manufacturing productivity through targeted investments in a logistics strategy, including transport and information and communication technology infrastructure, storage facilities, warehouse receipts, and other measures aimed at strengthening market linkages, firm opportunities and capacities, SME suppliers, and supply chain development.