



JOBS DIAGNOSTIC ZAMBIA

Volume 2: Policy Framework



© 2017 International Bank for Reconstruction and Development / The World Bank.

1818 H Street NW, Washington, DC 20433, USA.

Telephone: 202-473-1000; Internet: www.worldbank.org.

Some rights reserved

This work is a product of the staff of The World Bank with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank, its Board of Executive Directors, or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Nothing herein shall constitute or be considered to be a limitation upon or waiver of the privileges and immunities of The World Bank, all of which are specifically reserved.

Rights and Permissions



This work is available under the Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO) <http://creativecommons.org/licenses/by/3.0/igo>. Under the Creative Commons Attribution license, you are free to copy, distribute, transmit, and adapt this work, including for commercial purposes, under the following conditions:

Attribution—Please cite the work as follows: Sudha Bala Krishnan, Dino Merotto, Teresa Peterburs, David Ian Walker. 2017. “Zambia Jobs Diagnostic: Volume 2 - Policy Framework.” World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO.

Translations—If you create a translation of this work, please add the following disclaimer along with the attribution: *This translation was not created by The World Bank and should not be considered an official World Bank translation. The World Bank shall not be liable for any content or error in this translation.*

Adaptations—If you create an adaptation of this work, please add the following disclaimer along with the attribution: *This is an adaptation of an original work by The World Bank. Views and opinions expressed in the adaptation are the sole responsibility of the author or authors of the adaptation and are not endorsed by The World Bank.*

Third-party content—The World Bank does not necessarily own each component of the content contained within the work. The World Bank therefore does not warrant that the use of any third-party-owned individual component or part contained in the work will not infringe on the rights of those third parties. The risk of claims resulting from such infringement rests solely with you. If you wish to re-use a component of the work, it is your responsibility to determine whether permission is needed for that re-use and to obtain permission from the copyright owner. Examples of components can include, but are not limited to, tables, figures, or images.

All queries on rights and licenses should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2625; e-mail: pubrights@worldbank.org.

Images: © World Bank. Further permission required for reuse.

ACKNOWLEDGMENTS

This report summarizes the two reports – *Zambia: Jobs Diagnostic* and *Zambia: Jobs in Value Chains* – prepared by a core team in the Jobs Group of the World Bank Group (WBG), including Sudha Bala Krishnan (Task Team Leader), Dino Merotto (Lead Economist), Ian Walker (Lead Economist), Teresa Peterburs (Consultant), and Vanya Pasheva (Consultant).

A full list of colleagues who contributed to this analysis would be too extensive to cite, but the team would like to thank the following in particular for their excellent insights and support. This report benefitted from analysis conducted by the WBG Jobs Group’s Jobs Diagnostic team: Michael Weber (Senior Economist), Reyes Aterido (Economist), and consultants Carly Petracco, David de Padua, Perihan Saygin, and Therese Norman. The team received advice and guidance on the value chain analysis from Thomas Farole (Lead Economist) and Maria Laura Sanchez Puerta (Senior Economist). The reports benefitted from overall guidance of David A. Robalino (Manager, Jobs Group), Alvaro Gonzalez (Principal Economist), and Mary C. Hallward-Driemeier (Senior Economic Advisor, Trade and Competitiveness). The team is particularly grateful for support from Ina-Marlene Ruthenberg (Country Manager, Zambia).

The reports also benefitted from discussions and consultations in Zambia with government officials, private sector representatives, civil society, and development partners. The team expresses thanks to the Private Sector Development, Industrialisation, and Job Creation Office under Cabinet Office, Secretary to Cabinet, Ministry of Finance, Ministry of Labour and Social Security, and Ministry of National Planning and Development for their collaboration at different stages of the underlying reports. The team is grateful to Litia Simbangala and the staff of the National Accounts Division and Central Statistics Office in Zambia for generously providing the data used in the Zambia Jobs Diagnostic. The team is also grateful to Caesar Cheelo and Shebo Nalishobo from the Zambia Institute for Policy Analysis and Research for their excellent contributions. Supporting data collection and analysis work on value chains was undertaken by Global Development Solutions, LLC.

The peer reviewers reports summarized here are: Gregory Smith (Senior Economist, Macroeconomics and Fiscal Management), Brian Mtonya (Senior Private Sector Specialist, Trade and Competitiveness), Zano Mataruka (Senior Investment Officer, International Finance Corporation), and Tugba Gurcanlar (Senior Private Sector Specialist, Trade and Competitiveness).

This work has benefitted from earlier work conducted by different Global Practices in the World Bank and Let’s Work Partners, a global partnership of donors supporting more and better private sector jobs. The team expresses deep thanks to colleagues in the Let’s Work Partnership in Zambia for regular feedback and advice on these works, particularly Henry Sichembe (Program Coordinator, Let’s Work Partnership in Zambia).

The Let’s Work program in Zambia is made possible through a grant from the World Bank’s Jobs Umbrella Trust Fund, which is supported by the Department for International Development/UK AID, and the Governments of Norway, Germany, and Austria; the Austrian Development Agency; and the Swedish International Development Cooperation Agency.

Let’s Work is a global partnership that unites organizations dedicated to providing effective solutions to the global jobs crisis by harnessing the potential of the private sector to help create more and better jobs that are inclusive. Let’s Work partners include the African Development Bank Group (AfDB), Asian Development Bank Group (ADB), Austrian Federal Ministry of Finance (BMF), Department for International Development (DfID), European Investment Bank (EIB), European Development Finance Institutions (EDFIs), Inter-American Development Bank (IADB), International Labor Organization (ILO), International Youth Foundation (IYF), Islamic Corporation for Development of Private Sector (ICD), Ministry of Foreign Affairs of Netherlands, Overseas Development Institute (ODI), Private Infrastructure Development Group (PIDG), Swiss Secretariat for Economic Affairs (SECO), World Bank Group (WBG), and World Business Council for Sustainable Development (WBCSD).



CONTENTS

ABBREVIATIONS	iv
OVERVIEW	1
I. ECONOMIC GROWTH AND JOBS	2
II. THE WORKFORCE	5
III. LABOR DEMAND IN THE FORMAL SECTOR	8
IV. A POLICY FRAMEWORK FOR JOBS IN ZAMBIA	14
Pillar 1: Developing macroeconomic and regulatory policies with jobs in mind	14
Pillar 2: Strengthening labor regulations and skills development programs	17
Pillar 3. Sectoral and regional policies to increase labor demand.....	18
BIBLIOGRAPHY	21



ABBREVIATIONS

FAO	Food and Agriculture Organization
FISP.....	Farmer input subsidy program
GDP.....	Gross domestic product
IFC.....	International Finance Corporation
ILO.....	International Labour Organization
LCF.....	Large commercial farm
LCU	Local currency unit
LCMS.....	Living conditions monitoring survey
LFS.....	Labor force survey
MT.....	Metric ton
PAZ.....	Poultry Association of Zambia
SME.....	Small and medium enterprise
SSA.....	Sub-Saharan Africa
SSF	Small-scale farmer
TVET	Technical and vocational education and training
UN.....	United Nations
VC	Value chain
WDI.....	World Development Indicator



OVERVIEW

Jobs need to be at the heart of economic development policies in Zambia. Recognizing the role of jobs in making Zambia a more equal middle-income country, the Government of Zambia has prioritized job creation in its Vision 2030 and National Strategy on Job Creation and Industrialization by setting a goal to create one million jobs in key sectors over the next five years. While Zambia's economy was growing rapidly between 2000 and 2014, employment growth did not keep up, and the poverty rate hardly declined. Jobs have been created, but mainly in low-productivity activities such as in the informal sector. Structural transformations have started with labor moving out of rural areas and agriculture, into Lusaka, and into wage employment. Most Zambians remain farmers, and labor productivity growth came not from within agriculture, but from shifts out of the sector and into services and, to a lesser extent, into industry. Consequently, there are widening gaps in labor market outcomes and earnings across Zambia, between formal and informal workers, between rural and urban workers, between regions in the country, and between unskilled and skilled workers. With a rapidly growing workforce and declining dependency ratios, demography will move in Zambia's favor over the next two generations. However, this will be an asset only if Zambia's economy can generate faster growth of jobs with higher productivity, particularly in smallholder agriculture, and into secondary towns as more young people enter the workforce. This report has three main objectives. First, it outlines the main challenges to Zambia's jobs agenda at the macro, household, and firm levels. Second, it takes a closer look at jobs at a sectoral level, with a focus on agribusiness value chains that illustrates the potential for job creation in high-potential sectors. Lastly, it presents a set of policies that may be prioritized by policymakers as part of implementing a jobs strategy through creating more formal sector jobs, improving the quality of informal sector jobs, and connecting vulnerable population groups to jobs.

I. ECONOMIC GROWTH AND JOBS

Despite sustained growth leading up to 2015, Zambia was unable to significantly improve the number and distribution of jobs, or the lives of the rural poor. Since the early 2000s, a copper-driven boom and a private sector investment response to the better business environment led to rapid economic growth. While the economy was severely affected by the triple shocks of 2015 and 2016, which were copper downturn, poor harvest, and power shortages, there are signs of recovery in 2017. However, despite the sustained growth leading up to 2015, the number and distribution of jobs did not change in a meaningful way (see Figure 1), and thus, the poverty rate hardly declined during the period of growth; absolute poverty remains very high, especially in rural areas (see Figure 2). Indeed, although structural transformations have started with labor moving out of rural areas and agriculture into Lusaka and into wage employment, most workers are still own-account smallholder farmers, and off-farm jobs have been created mainly in low-productivity activities, often in the informal service sector.

Zambia's impressive economic growth has delivered less impressive jobs outcomes. The economy grew by an annual average of 7.3 percent between 2000 and 2014, and per capita GDP grew by 4.3 percent. At the same time, employment grew by only 2.81 percent per year. The implied employment elasticity of growth for the period of just 0.28 is significantly lower than the 0.49 estimated elasticity for comparable lower-middle-income countries. As Figure 3 shows, virtually all growth in value added per worker was due to productivity growth, as opposed to gains in employment or participation, or due to Zambia's demographic advantage.

However, this labor productivity growth came not from within sectors, but from employment shifts across sectors, specifically the movement of workers out of agriculture and into services and industry. Of the 4.35 percent annual growth in value added per worker in Zambia between 2000 and 2014, 3.6 percent came from the shift of employment out of agriculture and into services and to a lesser extent, to industry.

Figure 1
GDP versus employment growth, World Development Indicator (WDI) and International Labour Organization (ILO) estimates

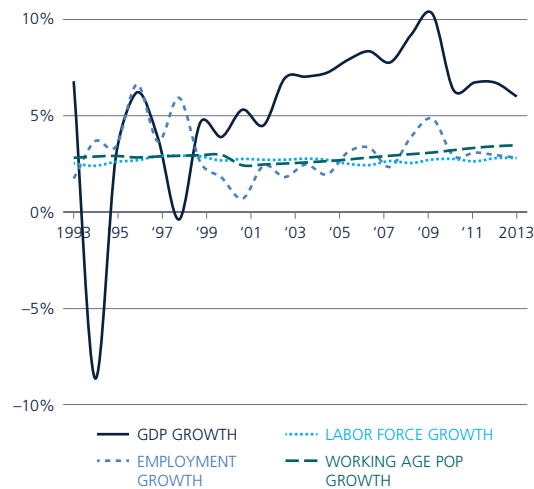


Figure 2
Growth since 2003 has been rapid but unequal

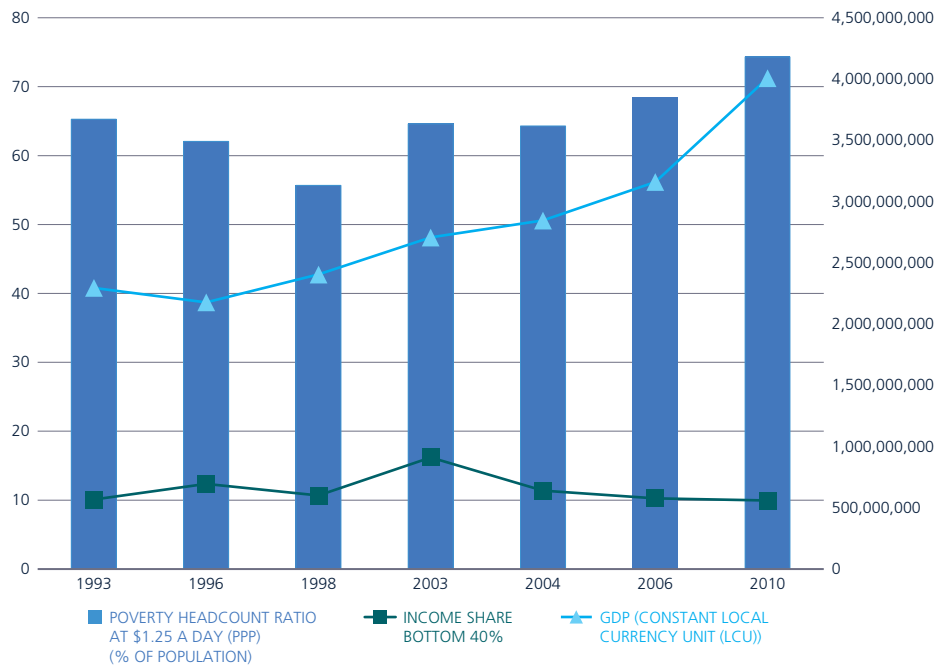


Figure 3
Decomposition of growth in per capita value added, Zambia 2000–2014

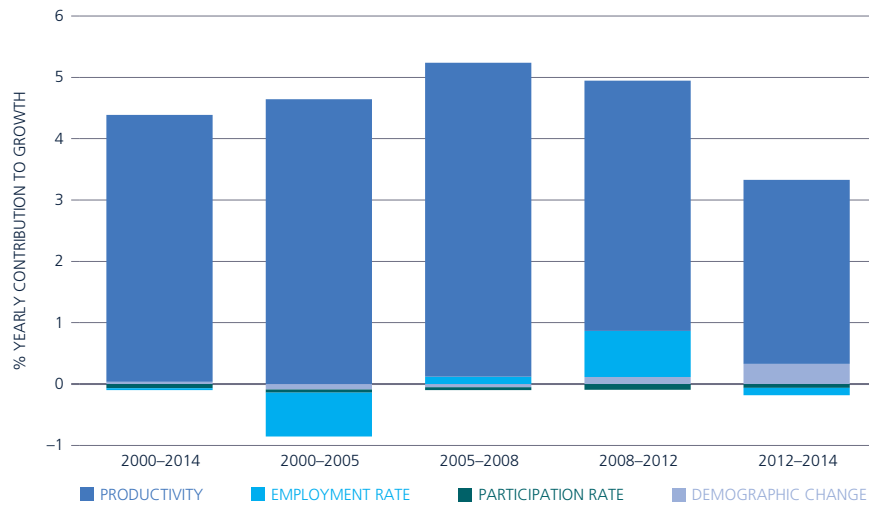


Figure 4

Contribution of within sector changes in value added per worker and inter-sectoral shifts to the absolute change in value added per capita, Zambia 2000–2014

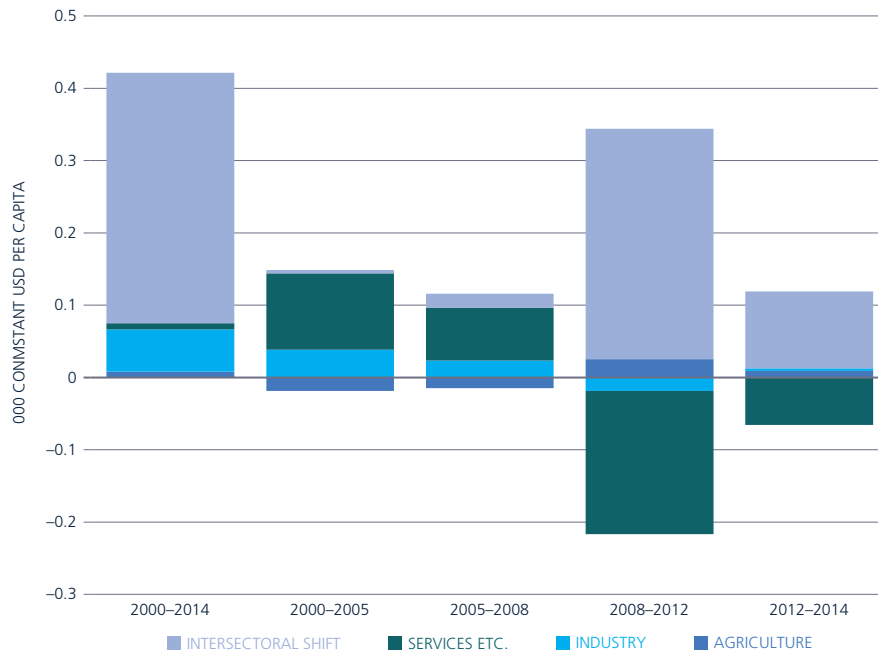


Figure 4 shows the decomposition of inter-sectoral shifts and within sector changes in value added per worker, and highlights that over 80 percent of the gains are associated with the shift from agriculture to services over the period 2000–2014. Throughout the period, labor productivity in agriculture and services was nearly stagnant.

At the heart of Zambia’s challenge to reduce poverty with economic growth seems to be the low productivity of agriculture for the majority of poor Zambians, who are farmers – but it may also present an opportunity. Sixty percent of Zambians, and up to 80 percent outside the main cities, work in agriculture where value added per worker has remained flat since 2000. Scant capitalization and insufficient market linkages to commercial buyers often keep smallholders operating under capacity and under the economies of scale needed to improve productivity, as documented in the mapping of the poultry and aquaculture value chains (see Box 1 on poultry and Box 2 on aquaculture). However, commercial farming and agro-processing in Zambia have been expanding in recent times, and agro-based goods account for almost half of non-copper exports. To reach a large enough number of poor Zambians, especially women, a job-rich and inclusive growth path will need to be designed around agro-value chains and expanded cross-border export trade in these products.

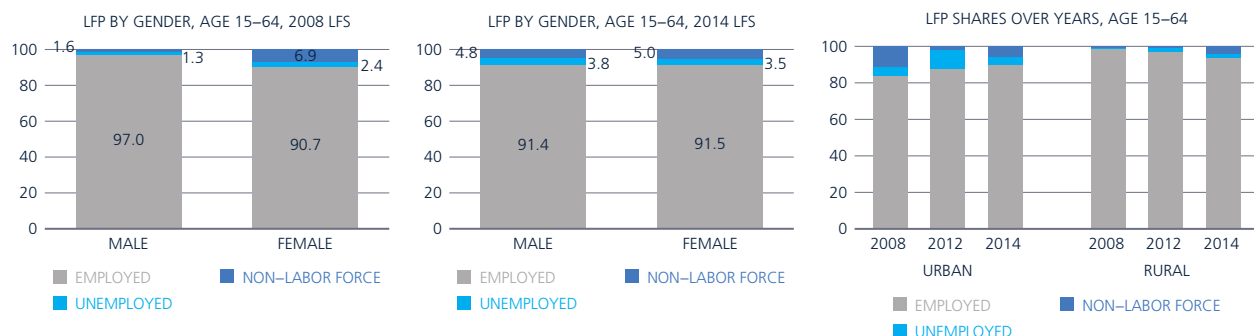
II. THE WORKFORCE

Zambia remains one of Africa’s youngest countries by median age. Over the next two generations, demography will move in Zambia’s favor as the dependency ratio falls. But this fall in dependency will be an asset only if Zambia’s economy can generate faster growth of jobs with higher productivity. According to the UN’s mid-range population projections, at least 375,000 young people on average will enter the workforce each year to 2030. Between 2030 and 2050, this average number doubles to 747,000 jobs per year,¹ just to keep the present-day rates of labor force participation and employment fixed.

Labor force participation is generally high in Zambia. It seems to be falling in rural areas but rising in urban areas. High labor force participation is common in low- and lower-middle-income countries, where poorer people cannot afford not to work. The 2014 Labor Force Survey (LFS) puts the share of employed females and males even at about 91 percent (see Figure 5). The share of those in Zambia who were not in the labor force who were living in rural areas increased from about 9 percent in 2008 to about 40 percent in 2014. Labor force participation in aggregate has declined slightly since 2008, and may be due to a decline in participation in rural areas. In contrast, the share of working age people in the labor force in urban areas seems to have improved between 2008 and 2014.

Whereas informal is normal for workers in Zambia, in common with other countries in Southern Africa, the formal sector is quite well represented in the jobs landscape, and formality has been increasing. Figure 6 (left side) uses data from the 2010 Living Conditions Monitoring Survey (LCMS) to show the breakdown of employment. In 2010, the data suggest that only 17 percent of Zambian employment was in waged work, and of this, only 13 percent was formal, and just 7 percent was private and formal; 6 percent, roughly half of the formal waged workers, were public sector workers. On the right side of Figure 6, the 2008 and 2012 labor force surveys help assess changes in the share of employment, classifying workers as rural or urban, and formal or informal.² However, formal employment in rural agriculture increased, and employment in

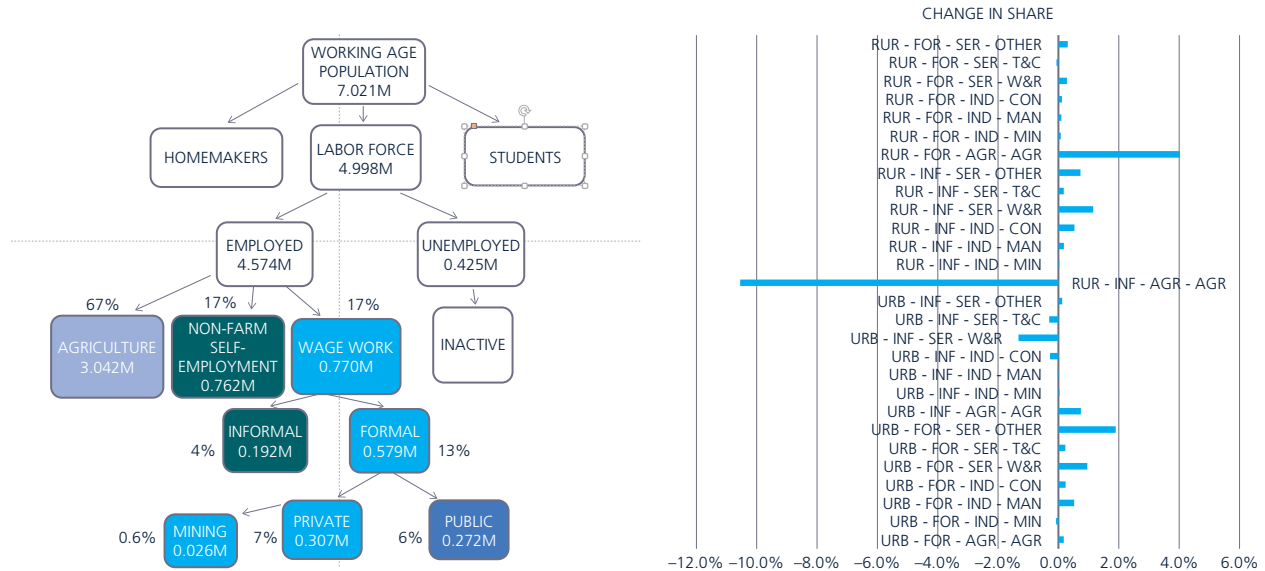
Figure 5
Labor force participation (LFP) in Zambia, 2008 and 2014



¹ The increased rate of growth of the labor force is due to the larger population rather than due to a fertility boost. In fact, population growth is expected to be slower in the 2030–2050 period as secondary schooling improvements, health advances, and higher prosperity lead to lower fertility.

² The formality definition depends on whether the worker has a contract or receives overtime or social security benefits.

Figure 6
The composition of formal and informal work in Zambia (2010 and 2008–12)



Source: Authors' calculations and "Zambia's Jobs Challenge: Realities on the Ground" WB (2013) chapter 2, Using LCMS 2010. Percentages are of employed (4.574 M). For example, formal wage work is 13 percent of all employed.

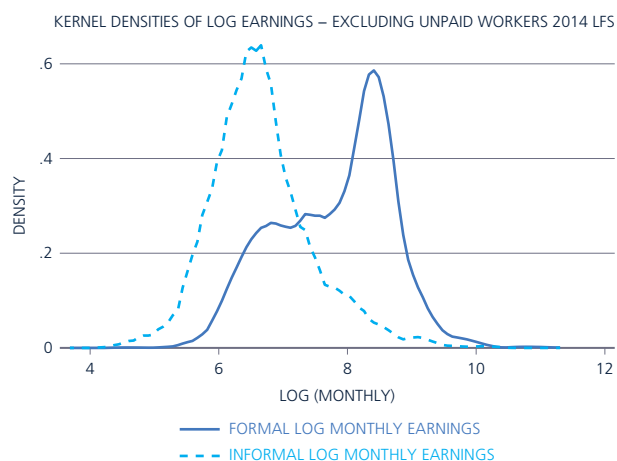
urban agriculture, both formal and informal, increased its collective share of employment by 1 percent. Rural informal and formal wholesale and retail employment, and rural informal construction and other services also increased in employment share as rural agriculture's share fell. Within urban areas, formal employment in manufacturing, construction, wholesale and retail, and other services increased. The net effect was an increase in formal and urban jobs relative to rural and informal jobs.

Underemployment seems to be increasing as new young workers enter the workforce, especially in rural areas, for both women and men, and particularly increasing in urban service sectors that are the driver of a lot of the new job creation. Many of the new jobs created have been in self-employment and household-based unpaid work in the informal sector. The share of workers aged 15–64 in agriculture fell from 71 percent in 2008 to just 33 percent in 2014, according to the Labor Force Surveys. The share in services rose from 21 to 36 percent, whereas the share in industry remained at 7 percent³. There have been healthy signs of increases in the shares of both formal and waged jobs in Zambia. The share of working age people who were waged employees rose from 17 to 29 percent between the 2008 and 2014 Labor Force Surveys, with private sector waged work rising from 12 to 21 percent. The share of self-employed non-agricultural workers rose from 11 to 28 percent, while the share of self-employed in agriculture fell from 31 to 18 percent. However, the bulk of the new jobs in urban-based services are in the informal sector. The average number of hours worked by an informal service worker in urban areas fell as more and more young people moved to towns and cities, leading to underemployment, especially for youth.

Skills development is the key to ensuring poorer people benefit from economic growth. Skills are fetching a premium on the labor market, and those without skills are less likely to get better jobs, and more likely to be inactive. Young people appear to be staying in school longer and are more inclined to be working and in school, rather than just in school. Gender does not matter as much as experience for the decision to work, but it is a strong determinant of the type of work a person is able to get, and of their earnings in the job.

³ The 2014 LFS in Zambia has a high share of respondents missing in employment type and sector share, and weights differ between the 2008 LFS (based on the 2002 census) and the 2012 LFS (based on 2010 population census), so comparisons over time between 2008 and 2012 are only approximations.

Figure 7
Earnings gap between formal and informal jobs



At the same time, the public sector is absorbing more skilled people and pays more, which makes competition for skilled workers high. The public sector and professions have absorbed university graduates in the 2008–12 period, and roughly half of formal waged workers were public sector workers at around 6 out of 13 percent formal employment. The public sector appears to be paying higher wages than the private sector for similar education, location, gender, and experience. This wage disparity could encourage youth to pursue university degrees and wait for these jobs, aggravating an already significant skills gap in the private sector.

Widening gaps in productivity and in earnings contribute to the rising inequality in Zambia. Earnings gaps in Zambia have widened, between formal and informal workers (see Figure 7), between rural and urban workers, between regions in the country, and between unskilled and skilled workers. A similar duality is observed in the poultry sector between smallholders and commercial farms (see Box 1), where most small Zambian farmers do not benefit from productivity and earnings growth related to commercial market access. Women earn around 20 percent less than men, and 13 percent less after adjusting for selection into particular types of work, but the gender wage gap seems to be narrowing slightly over time. Gaps also widened between public sector workers and the private sector, as the government granted quite generous pay raises. These dualistic trends go some way to explaining why, despite globally high GDP growth, Zambia has done much less well in reducing poverty than several African countries that have grown more slowly.

Zambia also faces jobs challenges and opportunities to include women and the bottom 40 percent of poor Zambians in the growth process. Most of the poor in Zambia are farmers, and the least mobile workers have been found to be women. To be inclusive, a jobs strategy for Zambia would need to promote higher productivity jobs in the places where the poor, and especially where poor women, live. Spatial analysis shows clusters of dense poverty in the east and north; our data on agribusiness firm creation suggest high potential for wage job growth and improved smallholder linkages in the same places. Within agriculture, high-growth-potential value chains that link to agro-processing firms, as well as to feed-producing small-scale farmers upstream could help create jobs, including for youth and low-skilled workers. Examples of such value chains include beef and dairy, which have the potential for creating as many as a hundred thousand formal jobs. This impact is estimated to be in addition to increasing productivity for the more than 300,000 farmers who own cattle and creating incremental demand for the hundreds of thousands smallholders along the cattle feed value chain.⁴ The current study by the Let's Work Partnership focused on complementary livestock sectors—poultry and aquaculture—which similarly have the potential to create jobs along the entire value chain by increasing demand for smallholder production of feed inputs, expanding linkages between outgrowers and commercial farms for rearing, and creating formal employment in processing and distribution (see Box 1 and Box 2).

⁴ World Bank, 2011. "What Would it Take for Zambia's Beef and Dairy Industries to achieve their Potential?" Washington DC: World Bank.

III. LABOR DEMAND IN THE FORMAL SECTOR

Whereas most **Zambian firms are informal, young, and small, most employment among establishments is in larger, formal, and slightly older firms.** Sixty-eight percent of firms in the 2012 Economic Census were reported as informal, and only 32 percent were formal (see Figure 8). However, formal firms were much larger on average, accounting for 72 percent of employment. Large firms with over 100 employees represent less than 2 percent of firms, but account for almost half (47 percent) of jobs in establishments.

There are large and foreign firms of all ages across most sectors, mixed in with plenty of smaller and informal firms and self-employed workers. This not only sends the message that Zambia is open for business, but also allows potential scope to connect large and small-scale firms in value chains in specific locations. The size and age structure of establishments is relatively healthy, and the country has a good track record in attracting foreign investment and relatively high formality in employment, in common with other Southern African economies.

The following findings warrant further analysis, however, and could have implications for a jobs strategy for Zambia:

1. Micro firm survival seems low, and yet smaller firms, while having lower output per worker, seem to have value added per worker that is similar to larger firms (see Figure 9). Yet, adjusting for location and industry fixed effects, regression results confirm that relative to small, young, and domestic private firms, older, foreign, public, and exporting firms are more productive, with foreign firms much more so. At the same time, the differences in value added per worker across sectors remain large (see Figure 10).
2. Whereas entry and foreign investment in the manufacturing sector have been buoyant, manufacturing productivity, or output per worker, shows up in regressions controlling for other characteristics to be lower than in other sectors.
3. This suggests possible dual economy features may be at work, and/or that Zambia’s economy may be lacking in spillovers or selection, i.e., that inefficient firms can coexist with efficient firms in the same sectors. The evidence for a lack of selection does not seem to be borne out by the findings on entry and firm growth with age – both of which would suggest that firms face incentives through competition and entry to innovate and expand with age.

Figure 8
Most firms are informal, but most employment is in formal firms

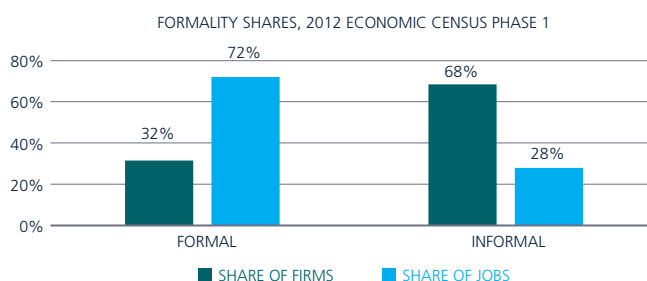


Figure 9
Value added per worker is similar across firm sizes

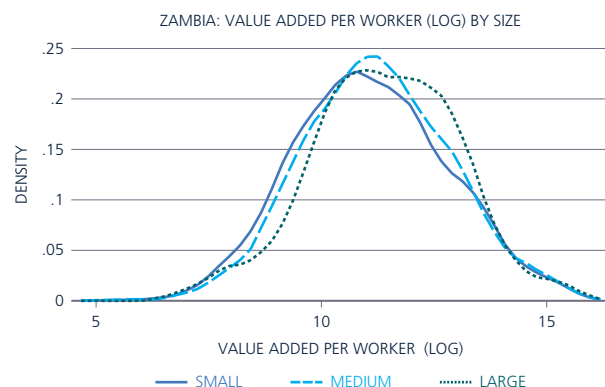
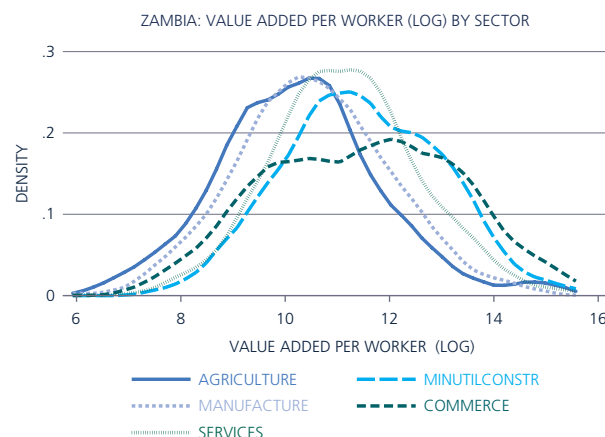


Figure 10
Differences in value added per worker are large across sectors



4. Productivity among the largest firms with 50 staff or more is lower than for small young entrants after adjusting for other factors. Firms with market power and sales are less productive, and perhaps most troubling, manufacturing appears to be the least productive sector in terms of value added per worker, after controlling for other fixed effects. Like value added per worker, output per worker is also negatively associated with average size of the firm, suggesting that on average, firms do not enjoy economies of scale.
5. The distribution of labor productivity across mining, manufacturing, and commerce is bimodal in Zambia, pointing to either asymmetric costs, unfair competition, or most likely, dualism in these sectors. This is also observed in agriculture sub-sectors, between large farms and smallholders, as in the case of poultry (see Box 1).

Spatially, two-thirds of all firms and all jobs in establishments are in Copperbelt and Lusaka alone.

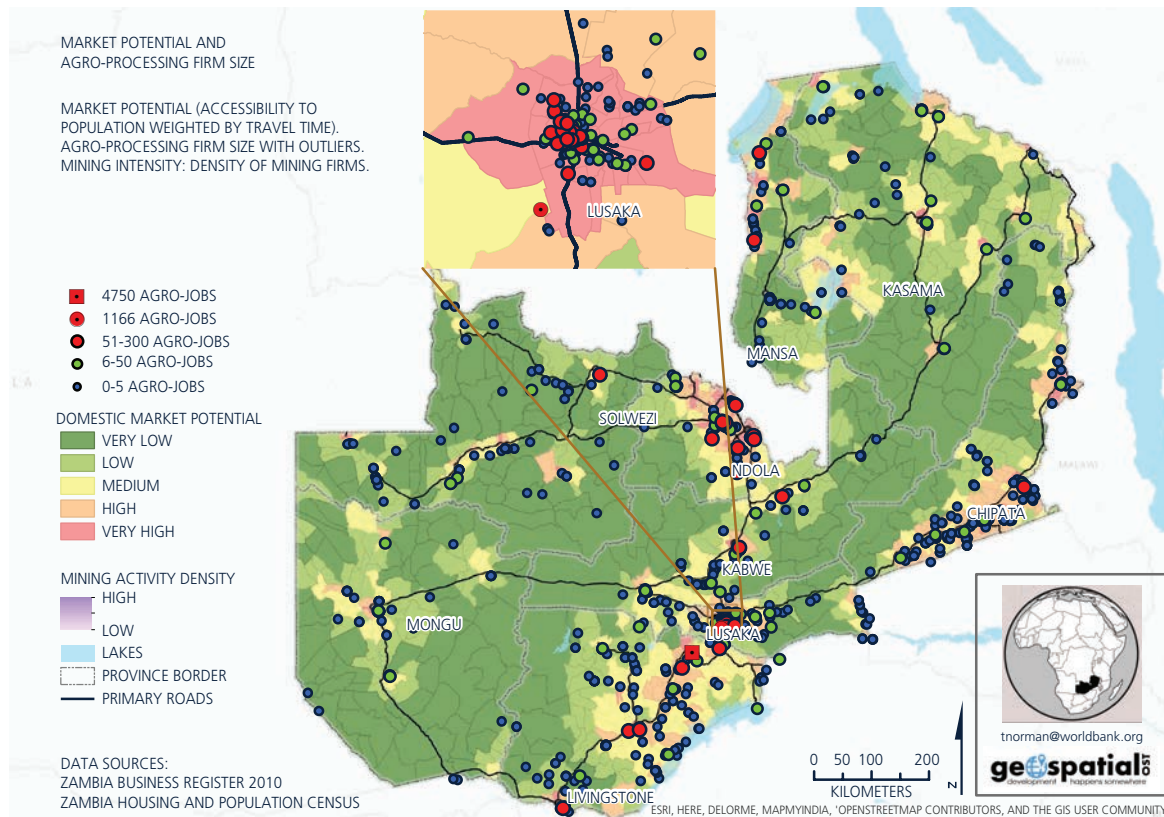
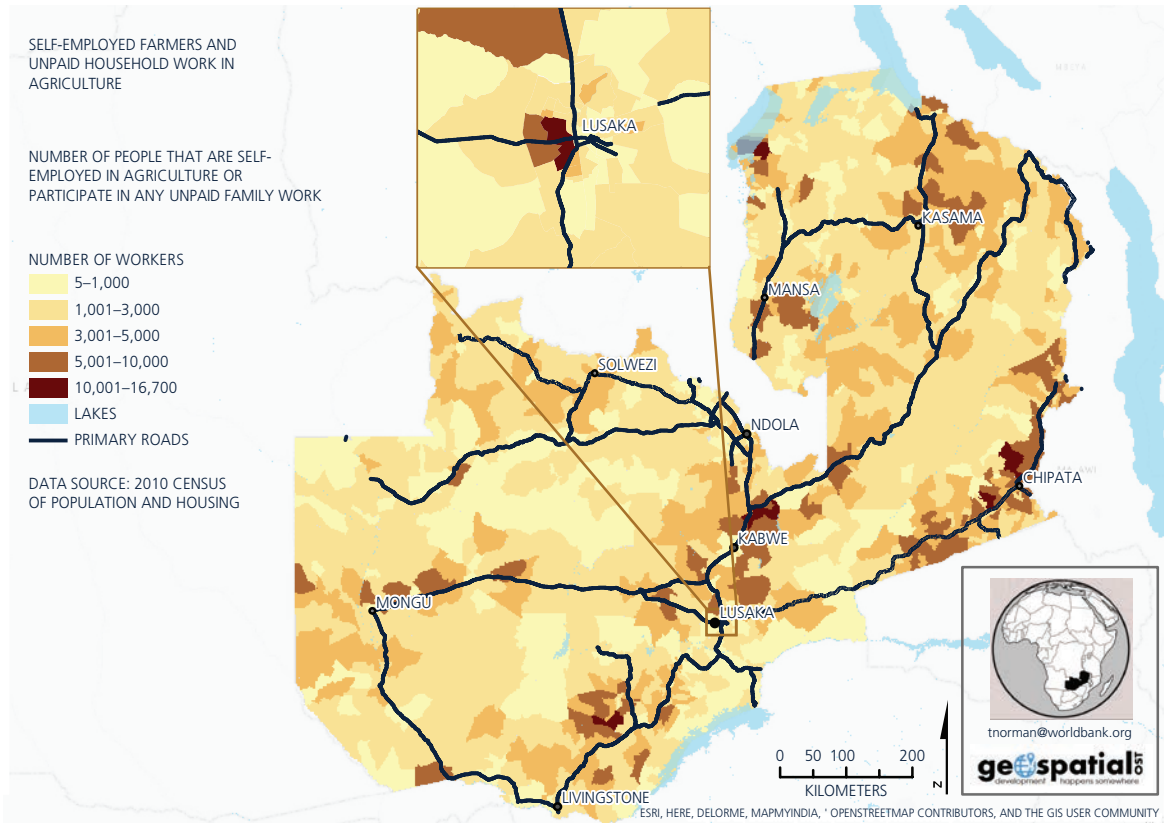
Adding the Southern and Central regions, this rises to over 80 percent of firms and jobs in establishments concentrated in the central corridor of the country – meaning many poor people and small and medium enterprises (SMEs) are within reach of the value chains of successful formal sector firms. Firms and jobs are concentrated in services, although a significant share of jobs in Zambia, particularly within larger firms, are in traded goods sectors such as agriculture, mining, and manufacturing, and in particular, in commercial agriculture and agro-processing. Most of the good formal sector waged jobs, and most of the jobs in new formal sector firms, are in Lusaka and the central road corridor from Copperbelt to Lusaka. This is an area of high crop potential, is densely populated, has good access to markets by road, and also has a high poverty density. A jobs strategy for Zambia should investigate the potential to develop more jobs with higher productivity in the densely populated and poor regions of the Eastern and Northern Provinces. Growth in agro-processing could bolster a jobs strategy in Zambia, because agro-firms co-locate with high poverty density, which is closely correlated with high concentrations of self-employed and unpaid family workers in agriculture. Figure 11 illustrates this potential: the top panel maps self-employed and unpaid workers who closely track the areas with highest poverty density, while the bottom panel shows the distribution of agro-processing firms and highlights the areas of highest agro-processing market potential.

The challenge is to overcome the persistent duality between low-productivity smallholder agriculture, where the majority of Zambians, particularly poor Zambians, work, and high-productivity modern agribusiness firms.

Small-scale producers and modern commercial operations operate in parallel, with smallholders typically using backward production systems with scant capitalization. The poultry sector is a good example (see Box 1). Small-scale farmers (SSFs) make up 90 percent of growers and account for 65 percent of production.⁵ According to the Poultry Association of Zambia (PAZ), there are almost 35,000 small-scale and over 180 large commercial broiler farms in Zambia.

⁵ In Zambia, smallholders are defined as cultivating up to 20 hectares [ha] of land. The category of smallholder is the sum total of small-scale farmers [SSFs], defined as cultivating less than five ha of land, and emergent farmers, defined as cultivating 5–20 ha.

Figure 11
 Self-employed farmers and unpaid agricultural workers, who closely track Zambia's poverty density map, are co-located with firms and market opportunities in agro-processing



BOX 1: JOBS IN THE POULTRY VALUE CHAIN

Demand for poultry, the main source of meat in Zambia, is expected to continue to increase, creating job opportunities that could provide livelihoods for the rural poor, youth, and women. Yet the poultry value chain (VC) exhibits the dichotomy between a traditional and a modern production and marketing system. In the traditional production system, small-scale farmers (SSFs) raise birds and sell them with little value addition to individual customers on the live market. The process is labor-intensive and relatively unproductive, which leaves many farmers with meager incomes. In the modern production system, large commercial farms (LCFs) optimize margins through economies of scale, up-to-date technologies, and high-yield farming practices. Unlike SSFs, the linkages between LCFs and processors allow the large producers to add value to their products, which are sold to large off-takers and on the large informal export market.

From a jobs perspective, there is a need to examine how SSFs can benefit as the sector modernizes. It is estimated that the broiler VC currently provides approximately 31,000 jobs, of which over 25,000 are in the traditional model and over 5,000 in the modern model. In the traditional production model dominated by SSFs, most jobs are on broiler farms. In contrast, the lion's share of jobs in the modern production model is not in rearing birds but in feed production, since productivity on broiler farms is significantly higher. The development of the sector with good, or productive, jobs for SSFs will hinge on expansion of feed production linked to the supply chains of LCFs that will rear and process the bulk of broiler chickens.

Two scenarios for job creation by 2022 highlight the jobs potential of the broiler VC, assuming natural population growth and increasing per capita consumption. In the first scenario, which assumes constant market shares between the traditional and the modern production system, the broiler VC could create an additional 16,000 jobs. Over 80 percent of these jobs would be located in the traditional production model, primarily as low-skill employment on small broiler farms. In a second scenario, where all additional demand is captured by LCFs of the modern sector, the VC has the potential to create 8,500 additional jobs in the modern production model. Many of these additional jobs would be created on maize and soy producing farms through backward linkages to the feed sector. Almost one-third of the additional jobs are created on large broiler farms and may be considered better quality employment in the formal sector. Since the relatively unproductive traditional model is unlikely to sustain competition with more industrialized production, a shift toward the modern production model, as showcased in the second scenario, is expected.

Figure 12
Scenario 1 – Job creation potential in broiler production at current market shares

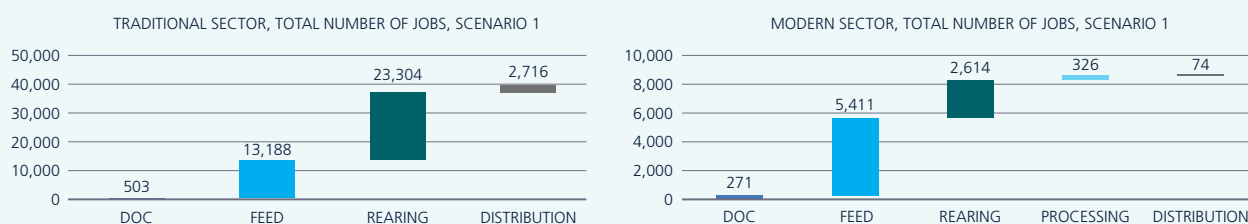
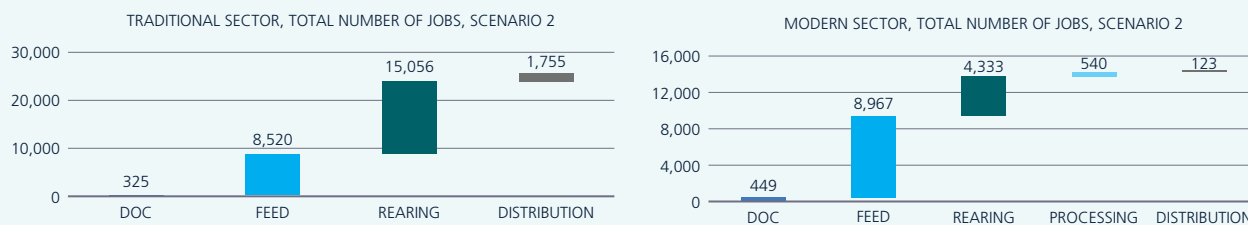


Figure 13
Scenario 2 – Job creation potential where all additional growth is captured by LCFs



It is important to adopt job-friendly policies that will support the integration of smallholder farms in this increasingly industrializing sector in terms of broiler and feed production. Promoting outgrower and aggregator strategies in broiler production is one way to realize this, as smallholders receive the training and capital necessary to integrate into the supply chains of larger farms. Another priority policy area to support agricultural production is improving electricity access and investing in alternative power sources, as frequent load shedding reduces productivity on small farms that cannot afford generators. Reducing exchange rate volatility is also needed to stabilize input costs, particularly of feed premixes and additives that are imported, which will help SSFs better plan their investments and production cycles. Further, more efficient agricultural policies can reduce distortion on the maize market and thus lower the costs of stock feed production.

While large commercial farms (LCFs) make use of technologies to optimize lighting and rearing cycles, SSFs tend to operate a traditional production model that requires little technology and capital equipment. They sell live chickens to local markets at whatever age they can find a buyer for them. In the meantime, they have to go on feeding them, so they often end up selling at a loss. In contrast, commercial firms have a production model that optimizes margins by butchering the birds at the right age and selling frozen meat to supermarkets. This requires good quality feed, well-built chicken sheds, abattoirs, pack houses with flash freezers, and purchase agreements with anchor buyers. These are relatively large farms of 25,000 or more birds per cycle and can work on tight margins. Another variant of duality between smallholders and commercial agribusiness is found in the beef industry, where Zambeef purchases calves as inputs from small farmers, but uneven market power leads to low returns for the smallholders and the value added is concentrated higher up the value chain, specifically in more sophisticated fattening, butchering and marketing operations. Zambia’s aquaculture sector, in contrast, highlights a greater role for jobs among SSFs in production, in line with anticipated per capita consumption growth and import substitution potential (see Box 2).

BOX 2: JOBS IN THE AQUACULTURE VALUE CHAIN

The aquaculture sector has a large demand gap that is currently filled by imports, despite Zambia’s abundance of water resources. Fish is a popular staple and the second most affordable animal protein source after poultry. Production of fish, mostly tilapia, from aquaculture, i.e., farmed in floating cages or in purpose built ponds, is largely for the domestic market. It is estimated that there is unmet demand of over 77,000 metric tons (MT) per year.¹ Trends in import data reinforce this finding, as the trade statistics show a more than 15-fold increase in fish imports to Zambia over the last 10 years. Yet production and competitiveness in the sector are constrained by raw material costs. High feed prices and insufficient supply of fingerlings, or juvenile fish, are resulting in poor quality and productivity among SSFs.

Expanding the Zambian aquaculture VC holds potential to promote job creation, particularly among small-scale fish farmers. The estimated number of jobs in the sector is approximately 13,000, which are primarily on-farm jobs and often low-skilled. Due to the relatively large number of small aquaculture farms and relatively lower efficiency compared to the one LCF located in Lusaka, SSFs provide the bulk of the jobs in rearing fish. SSFs sell about 80 percent of their production to individual customers or collectors in local markets, i.e., farm-gate sales, in the absence of linkages with large buyers, such as processors. Two job growth scenarios showcase the potential for additional job creation in the sector. In the first scenario, it is assumed that increasing urbanization and a rising middle class will lead to a 25 percent increase in per capita consumption of fish. In combination with continuous population growth at current rates, this could lead to a total of almost 22,000 jobs by 2022, of which 8,600 would be new jobs. In the second scenario, if Zambia could increase domestic production to substitute 30 percent of current import volumes, an additional 13,000 jobs could be created. In both cases, the vast majority of these jobs would continue to be on-farm and low-skilled, and thus provide job opportunities for vulnerable groups with little skills or formal training.

Figure 14
Scenario 1 – Total Number of Jobs by 2022

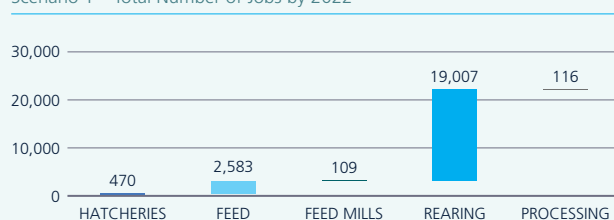
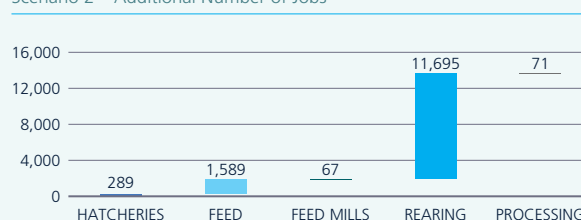


Figure 15
Scenario 2 – Additional Number of Jobs



Source: Adapted from Jobs in Value Chain Survey responses and data from the Ministry of Fisheries and Livestock.

Strengthening the input supply chain, expanding extension services, and improving access to capital are main priorities to unlock growth in the aquaculture VC. The input supply chain, especially for feed and fingerlings, needs to be strengthened to improve the quality and volumes produced by SSFs. Additional investments in hatcheries can help meet demand for high-quality fingerlings. Expanding extension services for SSFs to learn feeding and farming best practices can support greater yields and profitability. SSFs could benefit from greater financial access through funding strategies, contingent upon participation in training programs and use of quality fingerlings from formally registered hatcheries. For collectors and traders, many of whom are women and informal, the need is for working capital to expand activities in rural areas that are challenging to reach.



IV. A POLICY FRAMEWORK FOR JOBS IN ZAMBIA

The Zambia Jobs Diagnostic makes it clear that achieving the World Bank's Twin Goals of eradicating extreme poverty and boosting shared prosperity will require more, good jobs that vulnerable Zambians can access.⁶ This conclusion is reinforced by the World Bank's forthcoming Zambia Systematic Country Diagnostic,⁷ which discusses the constraints to reducing poverty and inequality, and identifies potential pathways for achieving progress toward the Twin Goals. It is also consistent with the objectives set out in the Government of Zambia's jobs- and employment-focused policies and programs.⁸

Responding to the request of the government, this section outlines a suggested framework for a possible Jobs Action Plan, focused on three complementary objectives:

- Objective 1: Create more formal sector jobs;
- Objective 2: Improve the productivity and earnings of informal jobs, such as those in smallholder farming; and
- Objective 3: Connect vulnerable groups, such as women and youth, to better jobs.

Table 1 presents suggested elements for a possible Jobs Action Plan in matrix format, showing how three broad types of interventions can help with these objectives. These include policy fundamentals, including both macro-economic and regulatory policies; labor supply and labor market policies, including education, training, and skills policies; and interventions to improve labor market efficiency and the quality of jobs matches, such as labor market services and the rules governing formality; and sectoral and regional policies to increase labor demand by facilitating the growth of labor-intensive businesses.

⁶ In 2013, the World Bank Group adopted two new goals to guide its work: ending extreme poverty and boosting shared prosperity. More specifically, the goals are to reduce extreme poverty in the world to less than 3 percent by 2030, and to foster income growth of the bottom 40 percent of the population in each country. *Source:* World Bank Group. 2015. *A Measured Approach to Ending Poverty and Boosting Shared Prosperity: Concepts, Data, and the Twin Goals. Policy Research Report.* Washington, DC: World Bank.

⁷ World Bank Group. 2017, forthcoming. *Zambia Systematic Country Diagnostic.* Washington DC: World Bank.

⁸ Government of Zambia. 2013. *Strategy Paper on Industrialisation and Job Creation through Foreign and Local Investment;* Government of Zambia. 2005. *National Employment and Labour Market Policy;* Government of Zambia. 2017. *Seventh National Development Plan.*

Table 1
A Jobs Action Plan matrix for Zambia

Objectives →	Objective 1: Job Creation Create more formal sector jobs	Objective 2: Job Quality Improve the productivity of informal jobs	Objective 3: Job Access Connect vulnerable groups (women and youth) to jobs
Policies ↓			
Pillar 1: Macroeconomic and regulatory policies (fundamentals)	<ol style="list-style-type: none"> 1. Strengthen monetary and fiscal policy to mitigate effect of copper price fluctuations on job creation 2. Keep jobs in mind when choosing tax instruments 3. Re-think jobs in the public sector to maximize service coverage and quality while avoiding crowding out effects in the skilled labor market, e.g., through indirect service provision 4. Improve product market regulation to increase competition and reduce entry costs for new firms 5. Improve electricity regulation to strengthen supply and ensure affordable tariffs 		
Pillar 2: Strengthening labor supply and skills policies (supply)	<ol style="list-style-type: none"> 1. Expand education access with quality, especially for low income households and girls 2. Improve the quality and market-relevance of Technical and Vocational Education and Training (TVET) programs to address the needs of sectors with high jobs potential, linking service providers' payments to trainees' job placement and offering matching grants for in-firm training programs 		
	<ol style="list-style-type: none"> 3. Design labor regulations to encourage the growth of formal jobs 	<ol style="list-style-type: none"> 1. Train smallholder farmers for value chain inclusion, such as small animal husbandry, horticulture, and animal feed, especially women and youth 2. Entrepreneurship development training for women and youth 3. Construction sector training for youth: green building technology, site safety, and worker protection 	
Pillar 3: Sectoral and regional policies to create jobs (demand)	<ol style="list-style-type: none"> 1. Define priority sectors with high jobs potential (e.g., agribusiness, tourism, light manufacturing) in regions with high poverty density (center and east, outside Lusaka and Copperbelt) 2. Promote infrastructure development (using both public investments and PPPs, as appropriate) in irrigation, electricity and access roads 3. Promote secondary town development including planning provision for industrial facilities 4. Re-design subsidy policies to promote jobs-rich transformations, while protecting the poorest 		

PILLAR 1: DEVELOPING MACROECONOMIC AND REGULATORY POLICIES WITH JOBS IN MIND

The first pillar of a possible Jobs Action Plan for Zambia would focus on macroeconomic and regulatory policies. These are the fundamentals that governments need to get right to create a solid basis for jobs-intensive growth. In Zambia, based on the analysis of the Jobs Diagnostic and other complementary studies, including the World Bank's Zambia Economic Briefs and studies by ZIPAR⁹, five issues stand out as possible priorities.

1. **Strengthen monetary and fiscal policy to mitigate the effect of copper price fluctuations on the investment climate and job creation.**¹⁰ In recent years, as is well known, terms of trade shifts linked to

⁹ Smith, G. 2016. *Zambia Economic Brief: Beating the Slowdown - Making every Kwacha count*. Washington, D.C.: World Bank Group; Smith, G.; Davies, F.; Chinzara, Z. 2016. *Beating the Slowdown in Zambia: Reducing Fiscal Vulnerabilities for Economic Recovery*. Washington, D.C.: World Bank Group; World Bank. 2013. *Zambia Economic Brief: Zambia's Jobs Challenge - Realities on the Ground*. Washington, D.C.; World Bank Group; World Bank. 2008. *What Are the Constraints to Inclusive Growth in Zambia?* Washington, D.C.; World Bank Group; World Bank. 2016. *Zambia Economic Brief: Raising Revenue for Economic Recovery*. Washington, D.C.: World Bank Group; ZIPAR [2016]. *Flagship Project: More and Better Jobs*. Lusaka: Zambia Institute for Policy Analysis and Research [ZIPAR]; ZIPAR [2016]. *In the eye of a storm: the impact of the economic slowdown on the labour market in Zambia*. "More and Better Jobs" Discussion Paper No. 1, Lusaka: ZIPAR; Randolph, G. and Jain, D. [2016] *Promoting job-rich urbanisation in Zambia*. ZIPAR "More and Better Jobs" Policy Paper No. 2, Lusaka: ZIPAR.

¹⁰ Smith, Gregory; Davies, Fiona; Chinzara, Zivanemoyo. 2016. *Beating the Slowdown in Zambia: Reducing Fiscal Vulnerabilities for Economic Recovery*. World Bank, Washington, DC.

copper prices have been a dominant factor in economic management. While copper prices were high, the government allowed the exchange rate to appreciate and took advantage of the situation to expand relatively expensive, non-concessional borrowing, partly to finance expanded subsidy programs. When the copper price fell, it had to deal with rapid exchange rate depreciation and a debt management crisis, triggering the need for fiscal tightening and increased interest rates. The country also faced escalating domestic currency import prices for fuel and electricity. These combined with lower hydropower supply due to drought that, in turn, generated pressure for temporary subsidies to cushion firms against escalating costs, further exacerbating the fiscal problems. Such macro-fiscal instability is damaging to investors' confidence as it generates uncertainty about parameters affecting price competitiveness and the availability of foreign exchange to purchase imported inputs. A better alternative would have been to adopt a medium-term vision through a counter-cyclical policy, by building up fiscal and foreign exchange buffers during the phase of high copper prices. Such buffers would help to ameliorate exchange rate fluctuations and strengthen Zambia's macro-fiscal resilience in the face of a future fall in copper prices. More stable macroeconomic fundamentals would strengthen investors' confidence and stimulate job-creating investments, especially in industries that rely on tradeable inputs, such as the imported animal feed premixes and additives that are needed for animal husbandry value chains.

2. **Keep jobs in mind when choosing tax instruments**¹¹. There is an urgent need to reinforce government revenue in Zambia, in part to correct the debt overhang that was generated by the pro-cyclical borrowing strategy during the up-tick of the commodity price cycle, in part, to finance infrastructure investments, such as roads, electricity, and irrigation, that are needed to improve jobs outcomes in high-potential sectors and regions (see Pillar 3). But from the point of view of jobs, all taxes are not equal. Some taxes, such as personal income taxes and payroll taxes, tend to increase the price of labor and can discourage job creation and formalization. Other taxes, such as corporate income taxes, can make capital more expensive and discourage the capital investment needed to create jobs and increase productivity. From a jobs perspective, the best tax instruments to use are those which widen the tax base, are neutral to trade, don't impact directly on labor and capital costs, and don't distort factor markets, such as value-added taxes (VATs), road tolls, and property taxes. A gradual shift toward greater reliance on such instruments would be positive for the future of job-creating investments and for the formalization of economic activity, which, in turn, would help to enhance productivity growth and job quality by improving firms' access to capital resources and scale economies.
3. **Re-think jobs in the public sector to maximize service coverage and quality while avoiding crowding out effects in the skilled labor market by increasing the use of indirect service delivery mechanisms.** Zambia has large deficits of services such as education and health that will need to expand to improve the quality of human capital. Given the large externalities linked to the consumption of those services and other market failures, such as capital constraints that limit poor households' investments in the human capital of their children, the private sector will under-supply these services. The government will need to play an active role in financing their expansion. However, while it is tempting for politicians to see the creation of more public sector jobs as a way to help resolve the jobs crisis, it is also important to bear in mind the possible negative effect on jobs in the private sector. This matters, because it will be impossible to resolve Zambia's jobs crisis without strong private sector growth. The Zambian public sector is already absorbing a large and increasing share of the country's skilled labor: almost 60 percent of Zambians with post-secondary education now work in the public sector, much more than for any other educational group. In recent years, the relative earnings of skilled public sector workers have risen; they now earn 10 percent more on average than those with similar education levels in the private sector, compared with 23 percent less 10 years ago, and they enjoy greater job security. This trend is a source of concern for private firms that need to recruit well-educated professionals to take on leadership roles, because many graduates will prefer to queue to get a more lucrative public sector position. The public sector also pays considerable wage premiums for low-skilled labor, compared with earnings in the private sector, which contributes to fiscal pressure and reduces the service levels that are attainable within the available budgets in key areas such as education and health. Coherent and fair public sector remuneration policies, which take into account reasonable private market comparators, are needed to reduce such risks. The government could also explore alternative

¹¹ World Bank. 2016. *Zambia Economic Brief: Raising Revenue for Economic Recovery*. Washington, D.C.: World Bank Group.

strategies to expand public services at a sustainable fiscal cost while ensuring service quality, such as well-regulated indirect service provision through community-based entities and where appropriate, private contractors. At the same time, the government should work to ensure that public sector workers deliver public services more efficiently, by tackling absenteeism and creating stronger accountability for service quality and results.

4. **Improve product market regulation to increase competition and reduce entry costs for new firms.** As shown in the Jobs Diagnostic, compared with other countries in the region, Zambia has a relatively good investment climate and a track record of attracting foreign investment¹². Nevertheless, in addition to the problems of macroeconomic instability noted above, other important weaknesses persist, including product-specific import and export bans; non-tariff barriers to trade, including long queues at border crossings; and apparent collusion between insider firms in markets such as grains, input markets, and fertilizer procurement.¹³ Such weaknesses usually favor incumbents and create barriers to entry for dynamic new firms that could generate additional jobs. Zambia should continue to work on an agenda of regulatory reforms to strengthen competition, innovation, and firm productivity growth, and to expand opportunities for diversification into sectors with good job creation potential such as light manufacturing, tourism, and agriculture.
5. **Improve electricity regulation to strengthen supply and ensure affordable tariffs.** For many value chains with high jobs potential, electricity is a key infrastructure service. In recent years, Zambia has experienced severe power cuts linked to a prolonged drought, high dependence on hydroelectric systems, and the high cost of importing power, exacerbated by exchange rate depreciation. As a result, Zambia's Doing Business ranking on getting electricity fell from 109th to 153rd out of 190 countries. Reforms are urgently required to provide incentives to expand generation capacity so Zambia can avoid unpredictable fluctuations in power supply and reduce the negative fiscal effects of periodic recurrence to expensive power imports. This would include establishing a fair rule for the pass-through of long run marginal costs to consumer tariffs.

PILLAR 2: STRENGTHENING LABOR REGULATIONS AND SKILLS DEVELOPMENT PROGRAMS

The second pillar of a possible Jobs Action Plan for Zambia would focus on policies to improve the quality of the labor supply and achieve better market matches between the available stock of workers and the demands of firms. Relevant policies include education, skills training, and the rules that govern employment in the formal sector. Priority action areas identified by the Let's Work program include the following:

1. **Expand education access with quality, especially for low-income households and for girls.** The Jobs Diagnostic shows that education is the most important determinant of labor force participation and that there are significant skill premiums for better-educated workers in the private sector. These high returns to education suggest that a shortage of skilled workers might be a binding constraint for Zambia's economy. Firms' frequent use of foreign skilled workers is further evidence of a shortage of well-trained nationals, since bringing in an expat worker is usually far more expensive than using local hires. Poor households and girls are the most affected by the lack of access to secondary and tertiary education. Two-thirds of those in secondary education are from the top and richest two quintiles. Children from the bottom 50 percent make up only 7 percent of college enrollment and almost nil at the university level. Poor rural girls face particularly severe challenges in education access. There are also systematic problems of low completion rates and poor learning outcomes across the public education system. The obvious policy response is to re-double efforts to increase the coverage and quality of secondary education – especially in poor rural areas, using delivery mechanisms that reinforce provider accountability for service quality. As well as ensuring that students learn what they are supposed to, the other dimension of education quality is ensuring a match between what is taught and what the economy needs workers to know. This is especially important in post-secondary education, where vocational skills are taught. There is a need to shift university programs toward producing professionals who can meet the needs of private firms instead of focusing primarily on the requirements of the public sector.

¹² Zambia's 2017 Doing Business ranking was 98th out of 190 countries; 20th out of 52 lower-middle-income countries and 7th out of 48 economies in Sub-Saharan Africa.

¹³ World Bank. 2014. *The Republic of Zambia: Diagnostic Trade Integration Study (DTIS)*. Washington, D.C.; World Bank Group.

2. **Improve the quality and market-relevance of Technical and Vocational Education and Training (TVET) programs by linking service providers' payments to trainees' job placement and offering matching grants for in-firm training programs.** Zambia's TVET programs of non-university tertiary training need to be better-g geared to the market's needs. They should support upskilling and skill training for economic diversification into agribusiness, tourism, and construction, which can provide opportunities for large numbers of young people to engage in off- and non-farm work in rural and urban areas alike. Priority should be given to developing missing skills in the regional labor markets identified as having high jobs development potential (see Pillar 3). Given the prevalence of informal work in Zambia, TVET should not be focused only on training workers to take up formal wage jobs. As shown by the value chain studies supported by the Let's Work Partnership, Zambia has high potential to improve the productivity and earnings of smallholder farmers who remain self-employed, but develop commercial linkages in activities such as chicken and fish production, which also generate increased demand for the grains used in animal fodder. Training smallholders in modern production techniques will be a critical part of this transformation. Delivery mechanisms for these services should ensure the market relevance of the skills being taught, by linking payments for service providers to job placements. Matching grants could be used to encourage firms to set up in-house training programs linked to business expansion plans. For those workers who aspire to develop their own businesses, many of them young and many of them women, it is also important to offer entrepreneurship training. Another priority should be the training of construction workers in green techniques that maximize the use of indigenous materials, reducing costs. There is also a need for promotional campaigns around site safety and workers' rights in the construction industry, where many young men work in informal, precarious arrangements.
3. **Design labor regulations to encourage the growth of formal jobs.** Labor norms are needed to clarify societal expectations about what constitutes fair treatment in the workplace and to protect workers from the consequences of asymmetric information between employers and workers about the value of their work. There is no right answer to what precise levels of benefits should exist, but the government and social partners involved in the negotiation of labor norms should aim to strike a balance between protecting workers in the formal sector and the promotion of new formal sector jobs.¹⁴ This is often a controversial field, and Zambia is no exception. The Zambia Federation of Employers regularly states that over-protective labor regulations create a disincentive for firms to hire workers in the formal sector. However, data from the World Bank Enterprise Surveys suggest that labor norms in Zambia are broadly in line with regional comparators. For example, the minimum wage in Zambia is 87 percent of the per-capita Gross National Income, which is similar to the regional average of 70 percent reported for Sub-Saharan Africa (SSA), although considerably above the global average of 48 percent. Nevertheless, it remains important to take into account trends in productivity when considering adjustments to the minimum wage. Average severance pay in Zambia is the equivalent of 87 weeks' pay, compared with the SSA average of 26 weeks, but few Zambian workers qualify for that benefit. Overall, only 6 percent of the Zambian employers interviewed in the Enterprise Survey identified labor rules as a major constraint to doing business, which is half the average of 12 percent reported for SSA. However, policy makers should bear in mind that this might reflect the lack of enforcement. Where evasion is easy, firms are less likely to complain about labor norms, but they might still avoid expanding employment to levels where evasion would become more difficult, especially if their productivity is too low to cover the cost of complying with the regulations. According to International Labour Organization (ILO) data, only 10.5 percent of the Zambian labor force contributes to a pension plan, compared with the SSA average of 8.4 percent. If policymakers seek to increase the proportion of jobs in formal sector wage employment, they should consider options to reduce the cost of complying with labor regulations. In this context, it would make sense to consider alternative financing arrangements for social insurance. When social insurance such as pensions is financed by payroll retentions, it increases the tax wedge between the total cost of labor and take-home pay, which can reduce incentives to create or take formal jobs. For work-

¹⁴ Kuddo, A., D. Robalino and M. Weber [2016]. *Balancing regulations to promote jobs – from employment contracts to unemployment benefits*. World Bank Group, Washington D.C.

ers on low earnings, high retentions for social insurance and taxation can create an incentive in favor of informality. Similarly, for small businesses considering expanding and formalizing their activities, such costs can be a significant disincentive. Special arrangements for small companies and low-income workers, such as low-tax bands and simple, consolidated payments, can make a big difference to formalization.¹⁵

PILLAR 3. SECTORAL AND REGIONAL POLICIES TO INCREASE LABOR DEMAND

To achieve rapid improvements in jobs outcomes, Zambia will need to go beyond improving economic policy fundamentals and strengthening labor market, education, and training institutions. There is also a need to work directly on the demand side to remove constraints to job-creating investments. This calls for publicly financed programs to release the productive potential of different sectors and regions of Zambia by correcting the market failures that discourage firms from creating jobs. The market failures that affect job creation in Zambia, as in other SSA countries, include divergences between the market costs and economic opportunity costs of inputs, including labor, in situations of high unemployment, and input costs with indirect tax elements. They also include capital constraints that limit access to capital for small firms without a track record or lacking assets that can be placed in guarantee for loans; coordination failures that make it hard for producers to combine forces to set up shared infrastructure, such as irrigation strategies or pack houses; and spillover effects such as the gains for copycat firms that benefit from the discovery costs incurred by innovators. Of particular importance are social externalities: benefits that accrue to society in general and not just to the investor and workers in a given firm. Some examples of relevant externalities include the increase in future growth potential that comes from young people getting work opportunities, leading to on-the-job learning; the benefits to society from reduced delinquency among youth who get jobs opportunities; and social benefits from increased investments in children's human capital that comes from women getting jobs and incomes. All these market failures can reduce the private rate of return on investments and/or increase the social rate of return of an investment, relative to the private return. There are many potential points of entry for public policies to correct market failures and shift jobs outcomes closer to the social optimum, but it isn't feasible to work on all of them at once. Rather, the government should analyze potential interventions to determine which are likely to be the most cost-effective, in terms of generating the maximum possible of better jobs outcomes with the available public funds. The following paragraphs suggest some possible priorities for points of entry in Zambia, based on the findings of the Jobs Diagnostic and the Let's Work Partnership's value chain studies.

1. **Priority sectors and regions.** Most manufacturing and services are presently geographically concentrated the Lusaka and Copperbelt regions. But there are large concentrations of poor Zambians outside of these regions, especially in the center and east of the country¹⁶. Policymakers should consider strategies to accelerate job creation in those regions, especially by developing sectors which are relatively labor-intensive and those with low capital-labor ratios. Some productive sectors that would appear to have good potential for expansion in those regions include agribusiness value chains, tourism, and light industry.
2. **Agribusiness value chains.** Improving jobs outcomes for poor Zambians doesn't necessary mean moving them out of agriculture. There's high potential to generate better jobs for excluded rural populations by linking them to modern, capitalized farming businesses that supply urban markets. With abundant land resources, a very low population density, and land borders with eight neighboring countries, Zambia has high potential to supply the regional market in the urban centers of Zambia, Congo, Zimbabwe and Malawi — Lusaka, Copperbelt, Lumumbashi, Harare, and Lilongwe. The analysis of firms' dynamics in the Jobs Diagnostic showed that Zambia already has commercial farms with higher labor productivity than many manufacturing and mining companies. In an appropriate macroeconomic and trade-facilitation setting (see Pillar 1), such companies would have the potential be internationally competitive, so there is scope to develop agro-processing for export and to

¹⁵ For a detailed discussion of the economic interactions between social insurance systems and jobs outcomes, see: Ribe, H; Robalino, D.; Walker, I. 2012. *From Right to Reality: Incentives, Labor Markets, and the Challenge of Universal Social Protection in Latin America and the Caribbean*. Washington, DC: World Bank.

¹⁶ Spatial analysis for the Jobs Diagnostic shows that poverty density is highest in these regions, even though poverty rates are higher in the less densely populated north and west.

compete with imports in the Zambian market. As shown by the Let's Work case studies of the chicken and fish value chains, strategies to increase output might include connecting smallholder farmers through aggregation strategies for grains and for higher value meat, dairy, and horticulture value chains that can feed into supermarkets both for domestic consumption and into exports.

3. **Infrastructure development.** To develop Zambia's jobs potential, investments are needed in electricity, roads, irrigation, and logistics. The prevalence of rain-fed agriculture is a major source of low productivity and of seasonal underemployment in rural areas because farming is limited to the rainy season. The Food and Agriculture Organization (FAO) and International Finance Corporation (IFC) estimate that only 30 percent of irrigable land is irrigated, and less than five percent of all arable land is irrigated. Expanding irrigation is a clear priority, both through large-scale operations and through small-scale systems that open up options of commercial farming for smallholders. Other priorities include expanding the electricity grid, which also requires resolving the regulatory policy problems mentioned in Pillar 1; and giving greater priority in roads sector policy to improving access roads in sectors with high productive potential and large concentrations of poor people.¹⁷
4. **Secondary town development.** To avoid further metropolitan congestion, much of the expansion of agro-processing and other forms of light manufacturing could be concentrated in secondary towns that are located between the farming areas and the destination markets. Secondary town development has been shown to produce positive spinoffs for farmer incomes in the surrounding rural areas. Planners should consider options to create appropriate spaces for such firms, with the necessary infrastructure linkages.
5. **Re-design subsidy policies to promote jobs-rich transformations.** If Zambia wants to promote a jobs-rich transformation in agriculture, it should reconsider the present set of policies for support to grain farmers, especially the Farmer Input Subsidy Program (FISP). As well as being relatively regressive and favoring less-poor farmers, FISP tends to prop up the existing structure of low-productivity agriculture. It would be better to focus public support on the expansion of higher value-added farming of diversified products for both agriculture and animal husbandry, which tend to be much more jobs-intensive and have higher income-elasticity of demand. This could be done by offering capital subsidies to support producers that are prepared to take the risk of moving into those products and generating better jobs for poor Zambians. Similar policies could be developed to support jobs-intensive investments in other high potential sectors, such as tourism and light manufacturing, and in SME companies, in general, in the priority regions¹⁸. At the same time, the government should consider developing a stronger program of targeted social transfers for the extreme poor in regions with more limited short-term possibilities for productive inclusion.

¹⁷ In line with these priorities, the World Bank Group is supporting projects on rural roads and irrigation development and the African Development Bank is providing support to the government in the electricity sector.

¹⁸ The World Bank finds that small firms [less than 20 employees] have the largest shares of job creation, and highest sales growth and employment growth, even after controlling for firm age. Large firms, however, have higher productivity growth. Conditional on size, young firms are the fastest growing and large mature firms have the largest employment shares but small young firms have higher job creation rates. However, while small firms employ a large share of workers and create most jobs in developing economies, their contribution to productivity growth is not as high as that of large firms. Source: Ayyagari, M; Demircuc-Kunt, A; Maksimovic, V. 2011. *Small vs. young firms across the world: contribution to employment, job creation, and growth*. Policy Research working paper; no. WPS 5631. Washington, DC: World Bank.

BIBLIOGRAPHY

- Ayyagari, M.; A. Demircuc-Kunt; and V. Maksimovic, 2011. "Small vs. Young Firms Across the World: Contribution to Employment, Job Creation, and Growth." Policy Research Working Paper; No. WPS 5631. Washington, DC: World Bank.
- Government of Zambia, 2013. "Strategy Paper on Industrialisation and Job Creation through Foreign and Local Investment."
- Government of Zambia, 2015. "National Employment and Labour Market Policy."
- Government of Zambia, 2017. "Seventh National Development Plan."
- Government of Zambia, Ministry of Fisheries and Livestock. Survey responses and data.
- Kuddo, A.; D. Robalino; and M. Weber, 2016. "Balancing Regulations to Promote Jobs – From Employment Contracts to Unemployment Benefits." Washington, DC: World Bank.
- Randolph, G., and D. Jain, 2016. More and Better Jobs Policy Paper No. 1. Lusaka: Zambia Institute for Policy Analysis and Research (ZIPAR).
- Ribe, H.; D. Robalino; and I. Walker, 2012. "From Right to Reality: Incentives, Labor Markets, and the Challenge of Universal Social Protection in Latin America and the Caribbean." Washington, DC: World Bank.
- Smith, G., 2016. "Zambia Economic Brief: Beating the Slowdown - Making Every Kwacha Count." Washington, DC: World Bank.
- Smith, Gregory; Fiona Davies; and Zivanemoyo Chinzara, 2016. "Beating the Slowdown in Zambia: Reducing Fiscal Vulnerabilities for Economic Recovery." Washington, DC: World Bank.
- World Bank, 2008. "Zambia Economic Brief: Zambia's Jobs Challenge - Realities on the Ground." Washington, DC: World Bank.
- World Bank, 2011. "What Would it Take for Zambia's Beef and Dairy Industries to achieve their Potential?" Washington DC: World Bank.
- World Bank, 2013. "Zambia's Jobs Challenge: Realities on the Ground," Chapter 2. Washington, DC: World Bank.
- World Bank, 2014. "The Republic of Zambia: Diagnostic Trade Integration Study (DTIS)." Washington, DC: World Bank.
- World Bank, 2015. "A Measured Approach to Ending Poverty and Boosting Shared Prosperity: Concepts, Data, and the Twin Goals." Policy Research Report. Washington, DC: World Bank.
- World Bank, 2016. "What Are the Constraints to Inclusive Growth in Zambia?" Washington, DC: World Bank.
- World Bank, 2016. "Zambia Economic Brief: Raising Revenue for Economic Recovery." Washington, DC: World Bank.
- World Bank, 2017, forthcoming. "Zambia Systematic Country Diagnostic." Washington, DC: World Bank.
- Zambia Institute for Policy Analysis and Research (ZIPAR), 2016. "Promoting Job-Rich Urbanisation in Zambia." More and Better Jobs Policy Paper No. 2. Lusaka: ZIPAR.
- Zambia Institute for Policy Analysis and Research (ZIPAR), 2016. "Flagship Project: More and Better Jobs." Lusaka: ZIPAR.



Address: 1776 G St NW, Washington, DC 20006

Website: <http://www.worldbank.org/en/topic/jobsanddevelopment>

Twitter: @WBG_Jobs

Blog: <http://blogs.worldbank.org/jobs>