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JOBS DIAGNOSTIC MOZAMBIQUE

Ulrich Lachler and Federica Ricaldi

Volume 2: Jobs Strategy Policy Note

LET'S WORK
A global partnership to create **more & better** private sector jobs

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This report is a product of the Mozambique Let's Work Country Pilot and is based on a review of the findings and recommendations from recent work carried out under the Let's Work Partnership (LWP) program, including the Mozambique Jobs Diagnostic (2018), the value chain studies of Mozambique's cashews, cassava, and forestry subsectors (2019), and the ongoing work through the Mozambique Agricultural Aggregator Pilot (MAAP) project. It also incorporates preliminary findings of related work by other World Bank teams, including the Mozambique Systematic Country Diagnostic (2016), the draft Mozambique Rural Income Diagnostics (2019), the Country Private Sector Diagnostic (forthcoming), the Mozambique Country Economic Memorandum (forthcoming), and the Private Sector Strategy for Mozambique's Agrarian Transformation (2019), and it takes account of relevant work done outside the World Bank, especially research carried out under United Nations University World Institute for Development Economics Research (UNU-WIDER) auspices.

The LWP program is a global alliance of development partners and private sector agents which supports private sector development in sectors with the potential to create more good jobs—especially for the poorest households and excluded groups—through analytical work, policy dialogue, and pilot operations. This work is financed by the Jobs Multi Donor Trust Fund. The partners of LWP include the African Development Bank (AfDB), Asian Development Bank (ADB), Austrian Federal Ministry of Finance (BMF), Department for International Development (DFID), European Investment Bank (EIB), European Development Finance Institutions (EDFIs), InterAmerican Development Bank (IADB), International Labour Organization (ILO), International Youth Foundation (IYF), Islamic Corporation for the Development of the 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).

PREFACE

This report was prepared during 2019 and early 2020 and therefore does not address the shocks experienced by Mozambique's economy and its people beginning in March 2020 as a result of COVID-19.

The COVID-19 pandemic is having dire effects on the health of populations worldwide, while also severely disrupting day-to-day economic activity everywhere. The global nature of the crisis and the imposition of mobility restrictions to limit contagion have resulted in work stoppages, self-quarantining at home, and return migration in most economies. This impact is not only wide—affecting most countries, most sectors, most households—but also very deep. A large share of workers and households have experienced income loss and temporary or permanent job separation.

In Mozambique, the outbreak has already unleashed an economic crisis that is spreading rapidly throughout the financial and real sectors of the economy, while posing a health threat (of unknown scope) to societies and people. What began as a severe supply-side shock for labor markets has become a joint supply and demand crisis, and this interaction risks deepening the crisis and delaying recovery. Global and local supply chains have broken down, even in industries where demand remains strong. Many firms that have managed to continue operations have scaled back production. The uncertain length and depth of the crisis discourages firms from investing or hiring. All these effects are serious, especially when aggregated across economies.

Mozambique has a high debt risk profile and practically no fiscal space to maneuver. The International Monetary Fund (IMF) approved a disbursement of US$309 million under the Rapid Credit Facility (RCF) to help Mozambique meet urgent balance of payment and fiscal needs stemming from the COVID-19 pandemic and had already agreed to suspend debt servicing until October 2020. Even so, the fiscal burden remains high and is having a strong impact on the private sector, limiting the investment capacity, operations, and resilience of micro, small, and medium enterprises (MSMEs). With record low oil prices and a challenging global context, important investors are postponing some of their investments in Mozambique's gas projects (likely for one year), which will further exacerbate the country's fiscal difficulties.

Some population groups are likely to be hit harder than others. Many manufacturing sector workers have been laid off as factories suspend production. With the closure of most retail outlets (with some food-related exceptions), retail workers in both large and small establishments have been forced out of work. Cash-strapped small and medium enterprises (SMEs) struggle to pay their employees. A majority of self-employed and informally employed workers lack access to social insurance protections and are facing income losses. This includes household enterprises and informal businesses for which consumer demand has dried up. It includes small-scale agriculture producers who cannot get their goods to market. It includes input providers of goods and services along supply chains. It includes migrant workers no longer able to work or send remittances home to their families.

Beyond the immediate urgency of limiting the impact of the pandemic and preserving macroeconomic stability, Mozambique will soon enough also need to refocus attention on its medium-term spending and policy priorities in areas such as improving health care, modernizing the education sector, and investing in infrastructure to develop competitive integrated value chains, particularly in the agriculture sector, with the ultimate objective of developing human capabilities, deepening rural development, and strengthening food security. That is where we expect this report to remain relevant. It provides concrete recommendations on how to defend the significant development gains achieved in recent years. Looking beyond the crisis, when the economy enters the recovery phase, it will be crucial to identify opportunities to address the many remaining challenges highlighted in this note.

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ABBREVIATIONS

ADB	Asian Development Bank
AfDB	African Development Bank
ANE	Administraçao Nacional de Estradas (National Road Administration)
BMF	Austrian Federal Ministry of Finance
BOM	Banco Central de Moçambique (Central Bank of Mozambique)
CCT	Conditional Cash Transfer
CFAPAR	Country Financial Accountability and Procurement Assessment Report
CGIAR	Consultative Group on International Agricultural Research
CPSD	Country Private Sector Diagnostic
CSR	Comprehensive Seed Regulation
CTA	Confederação das Associações Económicas de Moçambique (Confederation of Economic Associations of Mozambique)
DFID	Department for International Development (UK)
DINAS	National Directorate of Agriculture and Forestry
EDF	European Development Finance Institution
EDM	lectricidade de Moçambique (Mozambique's Public Electricity Utility)
EGS	Early Generation Seeds
EIB	European Investment Bank
EIB	European Investment Bank
ENSSB2	National Basic Social Security Strategy
EU	European Union
FAO	Food and Agriculture Organization (of the UN)
FDI	Foreign Direct Investment
GBV	Gender-based Violence
GDP	Gross Domestic Product
GIZ	German Agency for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit)
HE	Household Enterprise
IADB	InterAmerican Development Bank
ICD	Islamic Corporation for the Development of the Private Sector
ICT	Information and Communication Technology
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFDC	International Fertilizer Development Center
IIAM	Instituto de Investigação Agrária de Moçambique (Institute for Agricultural Research)
ILO	International Labour Organization
IMF	International Monetary Fund
INAS	Instituto Nacional da Acção Social (Institute of Social Action)
IFPELAC	Instituto de Formação Profissional e Estudos Laborais Alberto Cassimo (Natianal Institute for Technical and Vocational Training)

INEFP	Instituto Nacional de Emprego e Formação Profissional (Mozambican Employment and Vocational Training Institute)
IPEME	Instituto para a Promoção das Pequenas e Médias Empresas (Institute for the Promotion of Micro, Small, and Medium Enterprises)
IPM	Integrated Pest Management
IPP	Independent Power Producer
IPS	Industrial Policy and Strategy
ISPC	Simplified Tax for Small Producers
IVA	Value Added Tax
IYF	International Youth Foundation
LCP	Local Content Policy
LNG	Liquid Natural Gas
LWP	Let's Work Program
MAAP	Mozambique Agricultural Aggregator Pilot
MAGTAP	Mining and Gas Technical Assistance Program
MASA	Ministério da Agricultura e Segurança Alimentar (Ministry of Agriculture and Food Security, merged with MITADER into MADER in 2020)
MINEDH	Ministério da Educação e Desenvolvimento Humano (Ministry of Education and Human Development)
MEF	Ministério da Economia e Finanças (Ministry of Economy and Finance)
MGCAS	Ministério do Género, Criança e Acção Social (Ministry of Gender, Children, and Social Action)
MHPE	Hydrocarbon Processing Engineering
MIC	Ministry of Industry and Trade
MIS	Market Information System
MISAU	Ministério da Saúde (Ministry of Health)
MITADER	Ministério da Terra, Ambiente e Desenvolvimento Rural (Ministry of Land, Environment, and Rural Development, merged with MASA into MADER in 2020)
MITESS	Ministério do Trabalho e Segurança Social (Ministry of Labor and Social Security)
MPE	Petroleum Engineering
MSMEs	Micro, Small, and Medium Enterprises
MTEF	Medium-term expenditure framework
NGO	Nongovernmental Organization
O&G	Oil and Gas
ODI	Overseas Development Institute
OPSO	Office of the Private Sector Ombudsman
PASP	Productive Social Safety Net Program
PEDSA	Plano Estrategico do Desenvolvimento do Sector Agrario (Strategic Plan for Development of the Agricultural Sector)
PFCS	Program for Strengthening of the Seed Chain
PFM	Public Financial Management
PIDG	Private Infrastructure Development Group
PPA	Power Purchase Agreement
PPP	Public-Private Partnership
PRONEA	National Agricultural Extension Program
RF	Fundo de Estradas (Road Fund)
SCD	Systematic Country Diagnostic
SECO	Swiss Secretariat for Economic Affairs
SES	Socio-emotional Skills
SNIP	Sistema Nacional de Investimento Público (Public Investment Management System)

SOEs	State-owned Enterprise
STEM	Science, Technology, Engineering, and Mathematics
TVET	Technical and Vocational Education and Training
UEM	University Eduardo Mondlane
UIS	UNESCO Institute of Statistics
UNU-WIDER	United Nations University World Institute for Development Economics Research
WBCSD	World Business Council for Sustainable Development
WBG	World Bank Group
WHO	World Health Organization

1. EXECUTIVE SUMMARY

Mozambique is about to face two transformative opportunities for accelerating the pace of poverty reduction. One of these is given by the prospect of major resource inflows from the extraction of liquid natural gas (LNG) and other minerals. The discovery of large offshore gas reserves earlier this decade prompted massive foreign direct investments (FDIs) that are projected to raise exports and fiscal revenues significantly by the mid-2020s. The other major opportunity is given by the prospect of a significant demographic dividend. Mozambique is in the early stages of demographic transition and so its working-age population will be expanding more quickly than heretofore, causing the dependency ratio to decline.[1] This creates an opportunity for achieving faster poverty reduction, as the proportion of nonworking claimants on the incomes generated by the working population declines.[2]

To take advantage of these transformative opportunities, however, Mozambican policy makers will have to overcome several important challenges. In particular, it is important to note that for most of the last two decades, Mozambique has been growing at a much faster rate than most other Sub-Saharan African countries, but its poverty reduction performance has not been appreciably faster.[3] More importantly, inequalities rose, as the wealthier segments of the population gained from economic growth at a higher pace, especially in urban areas. With a Gini coefficient at 0.54 in 2014, Mozambique remains among the most unequal countries in Sub-Saharan Africa.[4] Mozambique's non-inclusive pattern of growth has bypassed much of the population in the lower reaches of the income distribution. If Mozambique is to proceed along the same development pattern as before, the resumption of growth is unlikely to translate into significantly faster poverty reduction. So, the challenge facing policy makers is to make sure that the growth process generated through the extractives sector is rendered more inclusive. Similarly, the opportunity to reduce poverty on account of the demographic dividend can only be realized if Mozambique succeeds in generating enough additional jobs to employ the faster inflow of new workers into the labor force and in raising labor productivity. Otherwise, the inflow of more workers would merely result in more unemployment or lower earnings.

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[1] Mozambique's working-age population is projected to grow from 51.2 percent of the total population in 2014 to 55.1 percent in 2030, while the dependency ratio—defined as the persons ages under 15 years and over 65 years, divided by working-age population (persons ages between 15 and 64 years)—is projected to decline from 95.5 in 2014 to 81.6 in 2030.

[2] In the Mozambique Jobs Diagnostic (2018), demographic trends such as fertility and death rates are treated as exogenous developments and the focus is on economic and social programs which are treated as policy variables. So, the 'demographic dividend' refers to the gain (or loss) in per-capita incomes that would accrue to Mozambicans with the adoption of alternative economic policies under the same demographic context. A different approach, taken in World Bank (2016b), treats certain demographic variables (for example, fertility rates) as policy variables. In this latter case, the demographic dividend refers to the gains (or loss) in per-capita incomes from the adoption of alternative demographic or population polices under the same economic context.

[3] In the two decades from 1997 until the advent of the 'hidden debt crisis' in 2016, Mozambique's annual per-capita gross domestic product (GDP) growth averaged 4.9 percent, while low-income countries and Sub-Saharan African countries only averaged 2.0 percent and 1.8 percent, respectively. Meanwhile, Mozambique's poverty headcount ratio (at US$1.90 per day) declined by an average rate of 1.4 percent per year over this period, compared to annual average declines of 1.7 percent and 1.6 percent in the other two country groupings (World Bank, World Development Indicators).

[4] Gini index, World Bank estimates, World Development Indicators.

To meet these two challenges, it will be necessary to accelerate Mozambique's structural transformation, both in sectoral and job quality terms. As noted in the Mozambique Jobs Diagnostic (2018), the key to poverty reduction is better-paying jobs and better remuneration, which in turn mainly depends on raising labor productivity. Broadly speaking, increases in labor productivity can take place in two ways. One is through greater investments and innovations that lead to higher capital-labor ratios and faster total factor productivity growth, rendering workers more productive in the activities where they are currently employed. The other way is through the redeployment of workers from activities exhibiting low productivity toward activities with higher productivity [5]. From a sectoral perspective, this largely involves the redeployment of labor from agriculture, which traditionally exhibits the lowest labor productivity levels, to the more productive industry and services sectors. Such a shift raises the overall average labor productivity and helps equalize marginal labor productivities across sectors, thereby tending to make growth more inclusive. Accelerating the structural transformation also involves reforms in agriculture—the activity that currently employs the most labor in Mozambique—to raise labor productivity within that sector. That is, the structural transformation requires, both the creation of new (and better) jobs in the industry and services sectors (including agribusiness) and improvements in the productivity of existing jobs in agriculture.

F**rom a jobs perspective, accelerating the structural transformation involves the movement of labor out of 'poor' jobs that pay very little into 'good' jobs that can lift families out of poverty.** Mozambique's employment statistics distinguish between three broad job categories: (a) nonagricultural, wage-based employment, both in the private and public sectors; (b) agriculture-based employment (which mostly comprises smallholder farmers and unpaid family members, together with workers in fishing and forestry activities); and (c) informal self-employment in nonfarm activities (either rural or urban). Under this classification, nonagricultural, wage-based jobs are most closely associated with the formal, technologically more advanced, modern sectors of the economy and are the most highly remunerated. These are considered the 'good' jobs that most workers aspire to. In contrast, agricultural employment mostly captures the traditional, poorly capitalized economic activities, while the nonfarm self-employment category—also referred to as household enterprise (HE) activities—mostly captures the underemployed laborers who have migrated out of agriculture with few assets and limited skills and taken up informal work in the industry and services sectors. These last two categories constitute the less desirable, 'poor' jobs.

Since the end of its civil war in the early 1990s, Mozambique has made progress in transforming itself into a more modern economy. In particular, the share of the total labor force employed in agriculture steadily declined from 87 percent in 1996 to 71 percent in 2014, with corresponding increases in the employment shares of the industry and especially services sectors. From a jobs perspective, similar progress has been made, as the total number of workers employed in wage-based, formal sector jobs doubled between 2003 and 2014 from 255,000 to 525,000. (This represents an increase in the proportion of wage-based jobs from 10.6 percent to 16.3 percent of total employment.) These trends are encouraging and point in the right direction, but with 500,000 workers entering the labor force every year, Mozambique will have to accelerate this transition process to take advantage of the opportunities presented by the prospective boom in LNG exports and the upcoming demographic dividend to drastically reduce domestic poverty. As the experience of several comparator countries has shown, this may be a difficult, but not impossible, target to aim for (see Box 1).

[5] The first of these ways is referred to as 'within-sector' productivity growth and the second one as 'between-sector' productivity growth.

BOX 1: A NOTE ON COUNTRY COMPARATORS FOR MOZAMBIQUE

The agenda of actions laid out in this Jobs Strategy Policy Note to accelerate Mozambique's structural transition in both sectoral and jobs quality terms is quite ambitious. Before embarking on such an agenda, it is useful to question the realism of that strategy by asking whether there are any other developing countries that started out with similar conditions as Mozambique exhibits today and succeeded in making substantial inroads in shifting the sectoral composition of their workforce toward industry and services and into wage-based jobs, both of which are closely associated with improvements in job quality. In this regard, two countries stand out as potential comparators for benchmarking progress in advancing the structural transition: Cambodia and Vietnam.

Key structural indicators for Mozambique and Comaparator Countires

	Agriculture Share Employment (%)			Industry Share of Employment (%)			Services Share of Enployement (%)		
	1991	2019	Difference	1991	2019	Difference	1991	2019	Difference
Mozambique	84.2	70.3	-13.9	2.5	8.5	6.0	13.3	21.2	7.9
Cambodia	78.8	32.3	-46.5	6.5	29.0	22.5	14.6	38.7	24.1
Vietnam	70.7	37.4	-33.3	10.1	27.6	17.5	19.2	35.0	15.8
	Share of Wage-Based Employement (%)			GDP/capita (const. US$)			%Change in Share of		
	1991	2019	Difference	1994	2019	%Change	Non-Ag Jobs	Wage Jobs	Difference
Mozambique	7.3	14.4	7.1	218	587	169%	13.9	7.1	6.8
Cambodia	10.6	49.6	39.0	321	1,269	295%	46.6	39.0	7.6
Vietnam	15	43.9	28.5	594	2,082	284%	33.3	28.5	4.8

Source: World Bank, World Development Indicators

The Cambodian and Vietnamese economies of the early 1990s share several structural characteristics with today's Mozambican economy: they had a similarly high concentration of total employment in agriculture (around 75 percent), low urbanization rates (<30 percent), low shares of wage-based employment (<15 percent), and very low levels of per-capita incomes (<US$600). Furthermore, these economies had also emerged from prolonged internal conflicts, share a coastal geography and had begun to experience fast GDP growth. One notable difference, however, is that neither Cambodia nor Vietnam is rich in mineral resources, in contrast to Mozambique. In fact, our review of the World Bank Jobs Group database revealed that none of the countries characterized as mineral rich and starting out with high agricultural employment shares belonged to the group of countries characterized by rapid structural change and poverty reduction.

In the last three decades, Cambodia and Vietnam experienced major jobs transitions reflected in major declines in agriculture's share of employment and equally significant increases in the proportion of wage-based employment. In Cambodia, 39.0 of the 46.6 percentage point increase in the share of nonagricultural jobs consisted of wage-based jobs and only 7.6 percentage points (or 16 percent of the total increase) consisted of less desirable, informal sector jobs (see the table above). In the case of Vietnam, only 14 percent of the total increase in nonagricultural jobs consisted of informal sector jobs. By comparison, in Mozambique close to one-half of the nonagricultural employment generated since the early 1990s consisted of informal sector jobs that are only marginally better than the agricultural jobs they replaced.

Three Takeaways from This Country Comparison

- The experiences of Cambodia and Vietnam suggest that it is not unrealistic to consider strategies targeting the attainment of waged employment shares on the order of 50 percent within three decades.
- The sectoral transition of employment out of agriculture appears to be a necessary, but not sufficient, condition for achieving job quality improvements. As discussed above, Cambodia and Vietnam were able to transform around 85 percent of the new jobs generated outside agriculture into wage-based jobs, while Mozambique has so far only succeeded in transforming 50 percent.

Agriculture-based mineral-rich countries face special obstacles in accelerating their structural transitions, possibly on account of particular governance and 'Dutch disease' challenges.

Policy makers will need to prepare for short- and medium-term setbacks in the jobs transition process on account of the COVID-19 pandemic. At the time of the preparation of this note, an evolving crisis linked to the COVID-19 pandemic is unfolding with catastrophic consequences for the Mozambican economy. Combining elements of a supply and a demand shock, the outbreak has already hit workers and firms hard, spreading rapidly throughout the financial sector and the real economy, while posing a health threat of unknown scope. Domestic supplies of certain goods have been disrupted by the closing of borders, while export-oriented sectors like agribusiness, fisheries, and coal have been disrupted by lower demand and declining international commodity prices. Some sectors, such as tourism and travel, have completely shut down, and others (including personal services, financial services, construction, transport, and real estate) are operating at a fraction of capacity. The recent decline in oil prices to record low levels has rendered the global context even more challenging, leading important investors in Mozambique to postpone some of their investments in LNG projects, which will further exacerbate Mozambique's fiscal vulnerability. Notwithstanding its significance, this note does not address the effects of the evolving COVID-19 pandemic-related crisis but rather focuses on the main structural constraints that have hampered so far the jobs transition process in Mozambique and that are likely to retake the center stage in the development dialogue once the pandemic is under control.

1.1 BASIC ELEMENTS OF A JOBS STRATEGY FOR MOZAMBIQUE

How can policy makers accelerate Mozambique's structural transformation in both sectoral (moving from agriculture to manufacturing and services) and job quality terms (moving from HEs and unpaid labor to wage-based jobs)? Regarding the sectoral transformation, it is important to recognize that simply shifting unproductive smallholders into unproductive urban service jobs does not represent an effective structural transformation. To be effective, other factors need to accompany this process, such as agricultural productivity-raising technological change. Only then can the shift of employment away from agriculture take place without a decline in agricultural output and rising food prices that are certain to trigger urban wage pressures. Higher agricultural productivity also helps consolidate the structural transition by keeping aggregate rural incomes stable and preventing a fall in rural demand for nonagricultural products as well as by reducing the prices of raw materials used in nonagricultural activities. Another important factor needed for an effective structural transition is the absence or correction of market failures in credit markets, input markets, and the provision of public goods (for example, extension services and rural infrastructure). If left uncorrected, these market failures could undermine the sector structural transition.

Regarding the job quality transformation, it is important to recognize that a simple shift from informal to wage-based employment by itself does not constitute a meaningful improvement in job quality. To be meaningful, such a shift also needs to be accompanied by a less uncertain, more accountable, and more transparent employment relationship, possibly including social insurance benefits. While a successful sectoral transition from agriculture to non-agriculture largely depends on developments across markets and sectors, a successful job transition has more to do with factors affecting the functioning of the labor market, including information asymmetries and policy failures introduced by labor market regulations. Though designed to protect workers, these regulations often only succeed in discouraging formal employment.

Although the ultimate objective is to achieve a successful transition to nonagricultural, wage-based employment, there is still considerable room for improving overall productivity and job quality in the informal and agricultural sectors. In fact, as emphasized in the preceding discussion, such improvements are crucially important for achieving that ultimate transition objective. The other main message from the preceding discussion is that the public sector also has a key role to play in promoting a successful structural transition by eliminating market failures, correcting policy failures, and addressing externalities that could stand in the way of the job transition.

Some direct approaches to job creation through, for example, expansion of the ranks of the civil service or an open-ended subsidization of commercially nonviable activities, generally do not work in bringing about a lasting transformation because they cannot be sustained. These approaches can even end up impeding the structural transition, instead of promoting it, especially when scarce public resources are used to subsidize a small subset of well-paid workers in highly capitalized activities, while the rest of the labor force remains trapped in low-productivity jobs. Engaging the private sector as the main driver of job creation in the context of a market economy would appear to offer a more promising approach for promoting faster structural transition. However, this approach is also unlikely to succeed in the absence of government interventions that address and remove market and policy failures.

Jobs externalities are a particularly important source of market failure influencing jobs outcomes, which has not been given enough attention in the past. In labor-abundant, low-income countries, where young, poorer workers underemployed in low-productivity capital-scarce jobs are getting restless, and where the modern sector is emergent but small, specific interventions may be needed to hasten the pace of economic transformation.[6] As the Commission on Growth and Development (2008) noted, if one excess field hand leaves a farm to work in an export factory, the farm loses almost nothing. If that worker were to add one cent to the economy in his/her new factory job, society would gain. The problem is that an export factory cannot tempt new workers to migrate from the fields for one cent. The cost to the factory of hiring workers from the fields is therefore greater than the opportunity cost of their labor in the fields. As a result, the social return to factory employment can be higher than the private return for a long time, until most of the underemployed low-productivity workers are absorbed into the modern sector. Where demand for labor is low, this 'jobs externality' can take a long time to correct—even where product markets, business climates, capital markets, and labor mobility are all working well and even where wages in the modern sector are flexible and in line with labor productivity. In this context, one-off policies or subsidies could play a useful role in improving human capital, reducing search, monitoring, and training costs incurred by firms when including new smallholders in industrial value chains, thereby reducing, among other, the risks of expanding into new areas. They can also help push firms and jobs to a higher-level equilibrium that will be commercially sustainable without the need for ongoing subsidy. The key is that all subsidies of this type need to be transparent, subject to effectiveness evaluations, and have a clear exit strategy if not of a one-off nature.

Two overarching challenges facing heavily resource-dependent economies such as Mozambique are how to maintain a sound macroeconomic framework in the face of rapid export growth in the extractives sector and how to introduce sound financial management and expenditure planning practices into the public sector. While meeting these two challenges is not enough to ensure a faster structural transition, a failure to meet either challenge is certain to impede a smooth transition. On the macroeconomic side, a rapid growth of extractives' exports sets in motion 'Dutch disease' pressures that are bound to raise the real exchange rate in Mozambique. This threatens to throttle the production of all other tradable goods, particularly the agriculture sector, which employs the majority of the population and whose prosperity is crucially important for facilitating the structural transformation of the economy.[7] The rapid growth in resource exports is also likely to result in a sudden public revenue increase that is likely to overwhelm the government's public sector and financial management institutions, opening the doors to resource misallocations and misappropriations, unless these institutions are strengthened on time. The danger posed by these two growth constraints is evident from Mozambique's recent experience with

[6] See Diao, McMillan, and Rodrik 2017. The same is also true beyond jobs externalities for market failures that can lead countries into a series of low-level equilibria from the standpoint of employment. See, for example, Barrett, Carter, and Chavas 2019.

[7] See Mozambique Jobs Diagnostic (2018, Box 2), for a summary of the dangers of the Dutch disease. The real exchange rate referred to here is the price of non-tradable goods relative to the price of tradable goods. As has been variously noted, agriculture in Mozambique is fundamentally a business that produces tradable goods (that is, crops and livestock) from non-tradable inputs (that is, land and labor). In that context, an appreciating real exchange rate means that agricultural producers face a profitability squeeze as their output prices remain constant or fall while their input prices rise. This is also true of other domestic producers of tradable goods but is particularly pronounced in Mozambican agriculture because virtually all its inputs are non-tradable.

the disappointing economic outcomes that followed the earlier investment surge (2009–2013) prompted by new gas discoveries[8] and the 'hidden debt' scandal that surfaced in 2016.

1.2 OUTLINE OF THE JOBS STRATEGY POLICY NOTE

This Jobs Strategy Policy Note proposes a set of policies and programmatic actions considered important for accelerating the jobs transformation in Mozambique. These proposed actions are based on a review of the findings and recommendations from recent works carried out under the Let's Work Partnership (LWP) program, including the Mozambique Jobs Diagnostic (2018), the value chain studies of Mozambique's cashews, cassava, and forestry subsectors (2019), and ongoing work through the Mozambique Agricultural Aggregator Pilot (MAAP) project. It also incorporates preliminary findings of related work by other World Bank teams, including the Mozambique Systematic Country Diagnostic (SCD) (2016), the draft Mozambique Rural Income Diagnostics (2019), the Country Private Sector Diagnostic (forthcoming), the Mozambique Country Economic Memorandum (forthcoming), and the Private Sector Strategy for Mozambique's Agrarian Transformation (2019), and it takes account of relevant work done outside the World Bank, especially research carried out under United Nations University World Institute for Development Economics Research (UNU-WIDER) auspices. The note is primarily a synthesis of this other work but with a jobs focus and from a jobs perspective, and it is meant to reflect the advice of the LWP partners, rather than a consensus position agreed with the Government of Mozambique.[9]

The next section (Chapter II) outlines the analytical context that underlies the strategic pillars of the Mozambique Jobs Strategy. Based on those pillars, Chapter III proposes a sequenced, results-, and action-oriented strategic plan designed to improve jobs outcomes in Mozambique. The strategic plan distinguishes between actions to be taken in the short and medium term and identifies the relevant stakeholders whose support will be needed for the successful implementation of the recommended policies. A policy matrix that summarizes the elements contained in the strategic plan is presented in Annex A. It proposes a list of priority jobs outcomes, the actions needed to achieve each of the desired jobs outcomes, and the milestones with which to measure progress toward achieving them in the short and medium term. It is possible that the COVID-19 crisis will prevent many of these measures to be implemented in the short term or hamper their effectiveness. However, it is likely that these measures will still be relevant when the crisis is over and should not be considered ineffective even in times of shifting priorities toward more urgent disaster relief measures.

[8] See Roe 2018.

[9] This note is also intended to inform forthcoming sector work and operations, with a focus on employment generation, such as the new Extractive and Inclusive Development Project, under preparation.

2. MOZAMBIQUE'S KEY JOBS CHALLENGES

The Mozambique Jobs Diagnostic (2018) concludes by focusing attention on two broad jobs outcomes that are needed to achieve a faster jobs transformation in the context of an extractives resource-driven economic model and to capture the demographic dividend of an expanding population. These are (a) generating more wage-based jobs in the formal sector and (b) raising labor productivity in smallholder agriculture and nonfarm self-employment.[10] Meanwhile, to render these outcomes sustainable and more inclusive, it is necessary to avoid the emergence of human capital constraints and prevent the most vulnerable groups from being bypassed by the growth process.

Generating more formal sector jobs. As in other countries, the creation of wage-based jobs in the modern formal sector represents the most promising pathway toward sustained growth and poverty reduction in Mozambique. Given that jobs are mostly demand constrained in this sector,[11] at least in the short and medium term, efforts to boost wage-based job growth need to focus on increasing the demand for labor in the modern sector. Mozambique's capacity to expand public employment is limited by fiscal considerations, so the main source of increased demand for wage-based labor has to be through expansions in the size and number of private sector firms. Broadly stated, this calls for economywide policies that improve the business climate and reduce the cost of doing business with the aim of accelerating private sector development. It may also require policy interventions to correct for market failures in the provision of public goods/infrastructure, finance, and regulatory gaps that result in anti-competitive behavior in highly concentrated industries and distortions that impede an efficient functioning of the formal labor market.

Limiting the emergence of human capital constraints. On the supply side of the formal job market, Mozambique exhibits among the weakest human capital indicators in international competitiveness comparisons. Close to 40 percent of the formal enterprises in Mozambique have foreigners as managers or professionals. On average, firms wait nine weeks to fill in managerial positions and five weeks for technicians. In addition, only 20 percent of formal enterprises have formal training programs for their permanent, full-time employees. In some sectors, such as construction, industry, or oil and gas (O&G), the shortage of specialized (managerial and technical) skills has been identified as an impediment to the expansion of wage-based jobs. It is surprising, therefore, that the lack of human capital has not ranked higher as an obstacle to business growth in recent enterprise surveys. Over time, however, human capital is likely to become an increasingly binding constraint on wage-based jobs creation as well as entrepreneurship development and will require measures to promote greater human capital development

[10] The conceptual framework underlying this analysis views Mozambique's economy as a dual labor market comprising a relatively small, modern, wage-based, technologically sophisticated, formal sector exhibiting high productivity levels and commensurately high earnings, coexisting opposite a largely agrarian, traditional, poorly capitalized, low-tech, informal sector with low productivity and low earnings. In the modern sector, jobs are demand constrained, meaning that the level of employment adjusts to equate the marginal product of labor in that sector to an exogenously determined formal sector wage. In the traditional sector, which represents the employer of last resort, the supply of labor creates its own demand, meaning that the price of labor adjusts until it equals the marginal product of labor when all residual workers who cannot find work in the formal sector are absorbed into the traditional sector.

[11] The notion that the binding constraint on wage-based job creation in Mozambique mainly lies on the demand side, rather than on the supply side, is supported by recent enterprise surveys that generally do not rank the absence of human capital high as a binding obstacle to enterprise growth, as well as by interviews with secondary school graduates, most of whom aspire to wage jobs in the private sector but cannot find jobs there. Furthermore, the Mozambique Jobs Diagnostic (2018, 27) reports that even though the share of secondary school leavers in private wage employment has been expanding, the share of 21- to 30-year-olds

with secondary education in the nonfarm self-employed (HE) sector has expanded even faster, as has unemployment of secondary school leavers. This suggests that there is a much larger supply of labor for entry-level private enterprise wage jobs than there is demand in Mozambique.

[12] Source: World Bank 2020.

[13] Source: World Bank 2019.

and skills upgrading to meet the requirements of modern sector employment. Given the long gestation period for human capital development, such measures will have to be taken with sufficient anticipation, before the absence of human capital becomes a binding constraint. This is particularly important for some advanced specialized technical skills in the O&G sector, for example. The current formal education system in Mozambique does not prepare enough educated youth in specialized engineering for the O&G sector, which is seen as a gap by the foreign companies starting to invest in Mozambique, and that have to resort to foreign labor for their most specialized positions. Other skills programs such as life skills and entrepreneurship mindset programs are less common although there is international evidence of positive impacts.

Raising labor productivity in smallholder farming and HEs. Even though wage-based job creation offers the best pathway to sustained poverty reduction, there are limits to the speed with which the modern sector can expand. With the rapid growth of the labor force and the currently small share of wage employment, most Mozambicans will continue to work in household farms and nonfarm self-employment or HEs for the foreseeable future. Simulations in Jones and Tarp (2012) suggest that even if the number of nonfarm wage jobs increases at double the rate of growth of the labor force through 2050, the number of people working in nonwage jobs will still double over this period. These are the most vulnerable members of the labor force, and their problem is not a lack of jobs but rather the poor quality of their jobs, as reflected in low productivity and low earnings. This calls for a strategy to raise the productivity of smallholder farmers and self-employed workers in the informal nonfarm sector. The challenge, however, is to implement measures that raise productivity in the traditional sector without creating disincentives that undermine growth of the formal sector.

Connecting vulnerable people to jobs. To ensure more inclusive growth, Mozambique also needs to pay more attention to regional, sectoral, and gender-focused initiatives to accelerate jobs transitions in high-potential labor-intensive industries. While Mozambique has made progress in its job transformation process, most of that has been concentrated in the capital city and the surrounding province (this is also reflected in the great disparity of poverty indicators across regions), and women have benefitted disproportionally less than men. Such regional employment concentration can lead to widening spatial inequalities and call for strong measures to develop secondary cities and economic links to rural areas. Efforts are also needed to include more women in the jobs transformation process. Underemployment in Mozambique is highest among rural women, who are also more likely to be engaged in smallholder agriculture than men. Women are poorly represented in nonagricultural jobs, partly because they are also the least educated. Another group in danger of becoming increasingly marginalized from the jobs transformation process is urban youth. They exhibit an extremely high unemployment rate (21 percent), compared to a national average rate of 2.9 percent. A more inclusive jobs transformation for women and urban youth will require, among others, appropriate education, change in social norms and stereotypes around gender roles and training interventions (for women), and a better jobs matching mechanism coupled with soft skills improvements for urban youth.

[14] Adhvaryu et al. 2017

[15] In 2014, agricultural employment plus nonfarm self-employment accounted for the lion’s share (83 percent) of total employmen

3. A JOBS STRATEGY FOR MOZAMBIQUE

The Jobs Strategy proposed for Mozambique rests on five pillars defined by the broad jobs' challenges outlined in the preceding chapter, together with the overarching challenge of maintaining a stable macroeconomic and governance framework. The first pillar, directed at the 'overarching' challenge, focuses on avoiding 'Dutch disease' disruptions in the face of rapid resource-based revenue inflows and on strengthening the public sector's financial and expenditure management capacity so that these revenues become used in an efficient and equitable manner. The second strategic pillar focuses on boosting job creation in the formal sector, primarily through actions that raise the demand for wage-based labor in the short and medium term. The third pillar focuses on boosting job productivity in the traditional sectors of the economy, which will continue to occupy a majority of the population in the foreseeable future. The fourth pillar focuses on ensuring adequate human capital and skills development to meet the increased demand for labor in the formal sector in the medium and long term. (This pillar represents the supply-side counterpart for the second pillar.) The fifth pillar focuses on fostering greater job inclusiveness. The main constraints inhibiting progress under each of these pillars, together with the actions proposed to remove those constraints, are presented next.

3.1 STRATEGIC PILLAR 1: STRENGTHENING MACROECONOMIC AND PUBLIC SECTOR MANAGEMENT

While the prospect of massive revenue inflows from the extraction of natural gas and other minerals offers a potentially transformative opportunity for Mozambique, it also presents pitfalls that could undermine the development process. The main potential pitfalls to watch out for in Mozambique are (a) the onset of a massive real exchange rate appreciation in the absence of sterilization measures and fiscal discipline, that is, 'Dutch disease'; (b) fiscal destabilization inducezMozambique is still experiencing first-hand the consequences of a loss of macroeconomic discipline and fiscal resource misallocation, which culminated in the economic crisis of 2016[17]. In the run up to the crisis, public spending had been growing at unsustainable rates, especially current spending on public sector salaries and loss-making state-owned enterprises (SOEs). By 2015, the primary fiscal deficit had reached 6 percent of GDP, while global commodity prices were declining and foreign aid inflows became less concessional, undermining the sustainability of the government's expansionary fiscal stance. The publicly

[16] This problem is best addressed with a mix of fiscal, exchange rate, and structural policies outlined, for example, in Brahmbatt, Canuto, and Vostrocknutova (2010) and Barnett and Ossowski (2002), which require adequate preparation and implementation discipline.

[17] Between 2000 and 2015, Mozambique's real GDP grew at an average annual rate of almost 8 percent; since the crisis erupted, real GDP growth has fallen to less than half that amount, 3.3 percent over 2016–2019, barely keeping even with population growth.

guaranteed external debt ratio, which had been growing rapidly since 2012, suddenly jumped to over 100 percent of GDP, following the disclosure of 'hidden' debts acquired during 2009–2014 for previously unknown public sector companies. These factors contributed to a massive loss of business confidence and precipitated the debt crisis. Corrective measures were taken since then and the government made important strides toward fiscal consolidation in 2018, but two major cyclones and a growing civil service wage bill undermined the consolidation process in 2019, while the ongoing COVID-19 pandemic is adding new fiscal pressures that will maintain Mozambique's debt burden at elevated levels. In sum, Mozambique's short- and medium-term fiscal outlook remains challenging.

The disclosure of 'hidden' public sector debts highlighted the need to strengthen governance and, particularly, its public financial management (PFM) systems, if Mozambique is to avoid the resource curse. As noted in the Mozambique SCD (2016), experience from other countries shows that strong public institutions and participatory decision-making systems are critical for effectively managing resource revenues and minimizing adverse macroeconomic effects. Enhancing the institutional framework for resource revenue management, in turn, requires significant PFM reforms. Well-designed PFM systems are critical to (a) ensure transparency in the extractive industries, (b) promote sound budget processes and expenditure accountability, and (c) strengthen financial management procedures to address the unique characteristics of resource revenues.

Although Mozambique has made progress in PFM reform, there are significant gaps between policy design and implementation. Areas that require particular attention in this regard include improvements in the presentation of resource revenues in budget documentation, stronger medium-term forecasting capabilities, debt and fiscal risk management, and more comprehensive reporting.

To ensure that resource revenues are effectively transformed into physical capital, Mozambique will also need to further strengthen its public investment management system (SNIP). As noted in the SCD (2016), the quality of Mozambique's public investment management processes is rated somewhat below the regional average. The Government of Mozambique has been leading a program to strengthen the public investment management framework with support from the World Bank. Recent reforms include creating and adopting methodologies for standardized and qualified appraisal and evaluation of investment projects. These efforts culminated in the launch of the national public investment system in 2019, which includes a digital platform that serves as the repository of all information on public investments in Mozambique. In 2020, the government passed specific public investment management regulations, which require public sector projects to be pre-appraised for social and economic impact and climate resilience before being financed. However, the effective rollout of SNIP will need further support. In addition to social return calculations, the project prioritization process should also include job creation criteria in public investment decisions. Also important in this context is the need to strengthen medium-term fiscal planning, both to navigate through the current fiscal context and to establish the framework for judiciously managing the prospective boom in resource inflows. Improving these functions is becoming increasingly urgent as Mozambique allocates an increasingly large share of its income to public investment. Over the medium term, broader institutional issues such as limited competition for public contracts and inadequate contract management mechanisms will need to be addressed to further improve the quality of public works.

- Recommendation 1.1: Maintain macroeconomic stability through a program of fiscal consolidation and debt reduction, monitored with multilateral support. This program must include a strategy for avoiding or cushioning the impact of real exchange rate appreciation associated with the projected increase in O&G export revenues.

[18] The resource curse refers to the loss of public accountability that often occurs when resource inflows provide governments with independent sources of domestic financing that are not linked to taxation. More broadly, it also describes the paradox that natural resource-rich countries tend to have less economic growth, less democracy, and worse development outcomes than countries with fewer natural resources.

- Recommendation 1.2: Implement a program, with World Bank/donor support, to build public sector capacity in PFM, develop a medium-term expenditure framework (MTEF), and strengthen the Ministry of Finance's capacity to appraise, evaluate, and prioritize public investments within SNIP.

3.2 STRATEGIC PILLAR 2: BOOSTING JOB CREATION IN THE FORMAL SECTOR

A. IMPROVED ECONOMYWIDE COMPETITIVENESS

The industries that typically serve as entry points in the job transformation from a traditional to a modern economy generally represent the more labor-intensive segments of industrial or agricultural value chains. For these industries to succeed, labor costs need to be competitive. To be competitive, however, it is not enough for a country to exhibit lower wages than elsewhere. It will also depend on the quality of all the other factors of production that affect industry costs. These factors represent the physical, human, and institutional capital that are quantified in various international indicators, such as the global competitiveness indicators, Doing Business indicators, and enterprise surveys. In this context, Gelb et al. (2017) found that even though wages tend to be very low in Sub-Saharan African countries, their industrial labor costs are far higher than one would expect given the region's per-capita income, which raises concerns about the region's future as a manufacturing destination and its ability to move forward in the jobs transformation process.

Mozambique's lack of economywide competitiveness is evident from its poor scores in the Global Competitiveness Index, where it ranked 137 out of 141 countries in 2019, and in the World Bank's Doing Business indicators, where it ranked 138 out of 190 countries in 2020. It is also evident from the significant digital development gaps. Reflecting the issues highlighted under Pillar 1, poor macroeconomic management, weak public institutions, and governance shortcomings are frequently cited among the most prominent constraints on investor confidence. Indeed, corruption is cited as the top obstacle to business in the 2018 Enterprise Survey for Mozambique, independent of the firm size, and Mozambique ranks close to last in the category of macroeconomic stability in the Global Competitiveness Index.

While Mozambique's overall ranking on the Ease of Doing Business is close to the regional, Sub-Saharan African average (135 versus 140 in 2018), there are two subcategories of indicators where Mozambique's legal and regulatory framework is extremely poor compared to both worldwide and regional standards. One of these indicators refers to the "costs of starting a business". Mozambique ranks 176 in this category, compared to a Sub-Saharan African average rank of 120. Even though the number of procedures and time (number of days) required to start a new business are not terribly different from those reported in other Sub-Saharan African countries on average, they are more than twice as costly in Mozambique. Such costs

[19] See also Dihn et al. (2012), who analyzed the manufacturing costs of several African countries and compared them to the more efficient Asian producers. A common thread in all of these analyses was that even though the African countries exhibited the lowest wage costs by far, their comparative advantage was undermined by higher costs in all other relevant areas, namely labor skills, input costs, financing costs and logistics costs.

[20] The Global Competitiveness Index is based on a series of approximately 100 publicly available statistical indicators (classified under 12 pillars in 4 categories) believed to be closely associated with a country's level of productivity and long-term prosperity, while the Doing Business indicators are based on assessments by national and international experts of the soundness of a country's legal and regulatory environment as they apply to local firms.

[21] See World Bank. 2019c.

[22] In the 2018 Enterprise Survey, 16 percent of enterprises cited corruption as the top obstacle to business growth. This figure is over twice as high as the response of firms in other Sub-Saharan African countries

[23] In Mozambique, the cost of starting a new business, measured as a share of per-capita income, is 107 percent, compared to an average of 49 percent in the rest of Sub-Saharan Africa. This difference may reflect the presence of fixed costs in starting a firm, considering that Mozambique's average per-capita income in 2018 (US$527) was one-third of the Sub-Saharan African average (US$1,600)

inhibit the entry of new firms and limit the play of competitive pressures that prod private sector development. The other indicator refers to the costs of 'contract enforcement'. While the quality of judicial processes in Mozambique is slightly better than the average exhibited by other Sub-Saharan African countries, the costs associated with contract enforcement are significantly higher. On average, it takes about one-third longer to enforce a contract through the court system in Mozambique, and the process consumes over one-half of the claims value. Such high contracting costs represent a disincentive to investors, especially smaller firms, and tie into broader concerns about governance and corruption. Last, some restrictive sector regulations prevent entry, facilitate collusion, and discriminate among players in the market. A review of market and competition policies for the Mozambique Private Sector Country Diagnostic (CPSD) revealed many competition constraints, including the presence of SOEs in many key sectors and markets that could be served by the private sector; opaque and nontransparent public procurement processes; undue price controls for some goods; and the absence of an authority able to identify, sanction, and deter anticompetitive market behavior.

- Recommendation 2.A.1: Carry out a systematic review of Mozambique's Doing Business indicators and develop a business simplification plan with International Finance Corporation (IFC) support based on best-practice procedures applied in peer countries.

- Recommendation 2.A.2: Establish a Commission for Cross-Sectoral Business Reform, possibly through the government/Confederation of Economic Associations (CTA) platform, to review all laws/regulations that impede private sector competition and undermine profitability.

- Recommendation 2.A.3: Create a public-private sector Office of the Private Sector Ombudsman (OPSO) to review complaints of unreasonable targeting of companies about inspections, fines, taxes, and other actions.

- Recommendation 2.A.4 Ensure the creation of the Competition Authority, with assignment of public budget and appointment of officials for its board and technical staff to meet the demands of the competition mandate and create the accompanying legislation.

B. IMPROVED LABOR MARKET PERFORMANCE WITH STRENGTHENED SOCIAL PROTECTION

Mozambique's labor market regulations are among the least competitive in the world, with a ranking of 138 out of 140 countries in the 2018 Global Competitiveness Index. One of the most restrictive aspects of Mozambique's regulatory regime is the high minimum wage (estimated at 140 percent of the average value added per worker). Furthermore, the minimum wage is differentiated by sector and subsectors, rendering it administratively complex and vulnerable to wage discrimination. Mozambique also stands out against its Sub-Saharan African peers by the high level of severance payments which rise rapidly from 2.2 weeks' pay for workers with one year of tenure to 32 (65) weeks' pay for workers with 5 (10) years of tenure. As noted in the Mozambique Jobs Diagnostic (2018), overly protective labor market legislation—especially in minimum wages and severance pay—can hamper formal jobs growth as well as labor mobility.

At first sight, labor market regulations do not appear all that binding in Mozambique, given that the open unemployment rate is low and labor regulations rank near the bottom on the list of critical constraints mentioned in the enterprise surveys. This suggests that domestic firms may have learned to circumvent the labor market regulations, so that even though the regulations appear onerous on paper, they are less binding

[24] Source: World Bank 2020.

[25] It is estimated that Mozambique's overall ranking in the Doing Business indicators would jump by 22 places if all countrywide good practices were adopted across the board in Mozambique (see World Bank 2019f).

-Source: World Bank Group 2019.

-+ in practice. Another explanation is that domestic businesses have adapted to the shortage of skilled labor by adjusting their factor mix in production toward greater unskilled-labor intensity, which renders the scarcity of skilled labor less problematic (though it does call into question the firm's longer-run growth prospects in a technologically modernizing environment). It is also worth noting that even though the open unemployment rate is low by regional standards, the underemployment rate is not. Unemployment is particularly problematic for urban school graduates hoping to enter the formal wage-based sector, whose high unemployment rates may reflect hiring disincentives created by the restrictive labor regulations. Their relaxation, at least partially to permit probationary periods with longer-time horizons, could help reduce unemployment, especially among urban youth.

Another significant constraint currently facing firms refers to the hiring of foreign workers (as many operators have difficulties in finding qualified domestic labor) and hiring and dismissal of seasonal workers (which is of particular concern to firms in the agriculture sector). The rules governing these two labor regimes are generally considered too tight and inflexible. Administrative procedures are too cumbersome, particularly when hiring seasonal workers, as it often becomes difficult to resolve any administrative issues within the relatively short time frame of the employment period. Employers also face legal difficulties in dealing with workers with low performance. The rules for dealing with that issue are so strict that firms are fearful of being permanently stuck with nonperforming workers, which discourages formal employment. In December 2016, a new regulation (Decree 37/2016) related to the hiring of foreign citizens in Mozambique came into effect. The new rules introduce cumbersome procedures to justify the hiring and renewal of foreign nationals based on the current quota system. A new labor law is in the process of approval and submission to the parliament. It includes some changes on which there exists a public and private sector consensus but still leaves certain critical issues unaddressed and even aggravates others (an increase in the severance pay is being discussed, despite the already high level).

While there is no magical formula to determine the correct balance between promoting worker protection and the growth of formal jobs, it would be prudent for policy makers to maintain a close eye on the relationship between labor costs and labor productivity. It is similarly advisable to maintain a close eye on the tax structure as it relates to formal jobs when seeking to stimulate the demand for such jobs. Instead of relying on taxing jobs (such as payroll taxes), it would be better to replace these by more neutral instruments, such as sales or income taxes. Finally, it is also important to keep communications channels open at all times when contemplating significant policy changes. Recent labor law adjustments have led to fewer labor conflicts than in the past years. An important factor contributing to this outcome has proven to be the creation of consultative mechanisms for firms and labor representatives to jointly analyze and address any labor issues that come up in the normal course of business as well as to conduct discussions/ negotiations. Even though a number of key constraints still remain unresolved, this experience suggests that there is hope for achieving long-lasting labor market reform in a consensual manner.

- Recommendation 2.B.1: Prepare and implement legislation to extend the probationary period, during which severance pay stipulations do not apply, from the current 3 months to at least 6 months and preferably 12 months, to give employers better opportunities to assess worker quality, especially of recent graduates entering the labor market.

- Recommendation 2.B.2: Prepare a stepwise program (a) to unify and revise minimum wages in a way that combines a transparent formula to ensure that the minimum wage remains aligned with labor productivity, with a consultation process that takes the formula as an informed starting point and (b) to reduce the steep progression in severance payments per the number of years worked. Coordinate the implementation of this program with the implementation of a new workers' social protection system to be developed (see Recommendation 2.B.4).

- Recommendations 2.B.3: Continue discussions on the appropriate labor legislation for Mozambique through the established consultative mechanism, giving special attention to the regimes relevant for the hiring and dismissal of seasonal workers, the hiring of foreign workers, and looking to foster greater inclusiveness of women in the labor force.

As pointed out in a new World Bank white paper (2019) titled "Protecting All, Risk Sharing for a Diverse and Diversifying World of Work", the rapidly changing nature of work in countries at all income levels, including Mozambique, requires a dramatically new approach to social protection and labor policy that is better adapted to an increasingly diverse and fluid world of work. In developing countries, up to 80 percent of workers earn their living in the informal economy. Hence, traditional, employment-based social protection policies fail to provide effective protection from risk and uncertainty. Meanwhile, in richer countries, technological change is changing the nature of work, putting much greater emphasis on task diversity and flexibility, which is making long-term employment less common. As a result, the fixed employment-based models of social insurance and worker protection that are currently in place in the richer countries also fall short in providing adequate protection.

To address the labor market challenges emerging from the changing nature of work, the World Bank white paper proposes a three-pronged approach consisting of a guaranteed social minimum (with social assistance at its core), social insurance, and labor market regulations:

(a) The social minimum includes the set of social assistance programs that provide financial support to a large share of the population. A guiding principle for strengthening social assistance is progressive universalism. The aim of this approach is to expand coverage while giving priority to the poorest people.

(b) Social assistance should be complemented with insurance that does not fully depend on formal wage employment, that is, based on general tax financing, rather than payroll taxes or worker and employer contributions. An arrangement of this nature would provide basic universal coverage, subsidizing premiums for the poor and topping up social assistance. Mandatory earnings-based contributions would also be necessary and would apply, at least initially, only to formal workers. (A lighter mandate would attract greater compliance.) Additional insurance could be achieved through voluntary saving schemes 'nudged' by the state.

(c) Enhanced social assistance and insurance reduce the burden on labor regulation of having to deal with risk management. A key principle here is that rather than protecting workers from change, governments must now help them adapt to change and support job transitions. As people become better protected through enhanced social assistance and insurance systems, labor regulation could, where appropriate, be made more flexible to facilitate movement between jobs. For example, income support for the unemployed could be provided by unemployment benefits rather than by severance pay. Lower labor costs improve the adaptability of firms to the changing nature of work, while encouraging greater formal employment, especially of new entrants into the labor market and low-skill workers. Informal workers may also be better protected. However, a proper balance should be maintained between regulation and job creation. Complementary support for learning new skills as well as for the development of new arrangements for strengthening the voice of workers becomes more important.

BOX 2: MOZAMBIQUE'S SOCIAL PROTECTION RESPONSE TO COVID-19

In the context of the current COVID-19-related crisis, social protection revealed itself to be one of the most important areas in need of strengthening and expansion, to cope with the health and economic effects of the pandemic, which is particularly distressing for the poor. Quarantines, restrictions on gatherings, higher prices for and limited access to basic goods and food and increased medical costs will adversely affect the poor. Poor households will require social assistance to smooth consumption and compensate for higher costs and lost income to avoid falling further into poverty. Hence, almost all countries hit by COVID-19 have introduced or adapted social protection and jobs programs in response to the crisis. Social assistance (noncontributory transfers) is the most widely used instrument (particularly, cash transfers), followed by actions in social insurance and supply-side labor market interventions.a Also in Mozambique, social protection systems are adapting to respond to the COVID-19 crisis. The social protection sector will adapt both existing operational activities (enrollment and payments) and program implementation features to expand horizontally (population coverage) and vertically (benefit levels) to address the needs and restrictions of the crisis. Moreover, the social protection system aims to leverage its capacity by expanding its partnerships with organizations that are currently supporting social protection activities and by expanding the use of innovative digital payment processes. In particular, the team produced high-resolution satellite imagery urban poverty maps for the five largest cities in the country. The maps are able to show the geospatial location of the cells with high estimates of poverty and the ones with the highest number of families in the poorest quartiles. Maps will allow identifying enrollment entry points for program scale-up and support the preparation of the government operational plan. These actions can represent an opportunity to improve the social protection system and increase its coverage in the future as well, after COVID-19.
Note: a. Gentilini et al. 2010.

The Government of Mozambique has made important progress in advancing the social protection agenda through its National Basic Social Security Strategy (ENSSB2), which consists of three main safety net programs: (a) a social pension targeted to older, uninsured persons and disabled persons; (b) an emergency assistance program providing cash or in-kind support to households affected by natural catastrophes; and (c) a 'productive' social safety net program (PASP) for households with able bodied members. The PASP is the only safety net program targeting the working-age population and has two components: an income support and consumption-smoothing component, which is achieved through cash transfers to extreme poor households that participate in labor-intensive public works programs, and an 'activation' component which seeks to reintegrate vulnerable workers into the labor market through skill development, entrepreneurship courses, livelihood support programs, and employment services. While these programs aim in the right direction, much remains to be done before they can effectively protect the majority of the poor and vulnerable population. To begin with, these programs currently only cover about 23 percent of the target population, and a successful expansion of the social protection coverage will require developing an effective growth strategy, overcoming significant administrative and technical capacity constraints, and coming up with the adequate fiscal space to fund that expansion. Also, previous assessments of the PASP have revealed shortcomings in the design of its 'activation' component. The program was designed to target urban youth ages 15–24 years, but these only constitute a small proportion of beneficiaries. This has been attributed in part to the low generosity of benefits and the lack of skill transfer opportunities in the temporary jobs provided (mainly street cleaning), which renders the program unattractive for all but the most destitute households.

- Recommendation 2.B.4: Design and discuss through the established consultative system a strategy to strengthen and expand Mozambique's social protection system in exchange for reforms (for example, reduced severance payments and lower minimum wages) intended to raise labor market flexibility.

C. ACCELERATED MSME GROWTH AND DEVELOPED LINKS

Beyond the foreign-funded, export-oriented megaprojects, Mozambique's economy is small, rural based, and dominated by entrepreneurs operating at the lowest level of the micro, small, and medium enterprise (MSME) spectrum. The government's current Industrial Policy and Strategy (IPS) seeks to promote these enterprises by improving the business environment, increasing their capacity, improving access to financial services and markets, and strengthening monitoring and coordination mechanisms, with the overarching objective of taking advantage of the growth in demand arising from and around the extractives' industry projects for locally produced goods and services and in general to support them accessing bigger and new markets. To support the implementation of this strategy, the Mining and Gas Technical Assistance Program (MAGTAP) sponsored several studies to identify sectors that, in principle, offered opportunities for linking up with the extractives' industries and to identify the key barriers to small and medium enterprise (SME) development. The firms thus identified fell into two groups, with the first group comprising MSMEs offering services that require a higher level of management sophistication and include specialist geological, laboratory, and waste management services and logistics and transport maintenance services. While the management capabilities of this group were not yet considered advanced enough to qualify as 'certified suppliers' to the extractive industries, they nevertheless appeared close enough for targeted interventions to bring them to that point.

The second group of firms comprises MSMEs that offered a diverse set of goods and services, including goods and complementing services such as construction materials, campsite equipment, chemicals, and heating/air conditioning equipment. Mozambican companies offering these goods and services tended to be smaller and less sophisticated than the first group, including microenterprises offering anything from catering services to office consumables to accounting and financial services to specialized consulting services. This group would benefit most from basic, general enterprise development support coupled with other elements of skills development such as gender-focused interventions, soft skills development, localization and mentoring, heuristics, psychology. A recent metanalysis of training programs reports that trainings that incorporate these elements appear to deliver improvements over traditional training programs on average, although with considerable variation. Of course, this should be accompanied by policies discussed in the next chapter (such as easing access to credit and to public infrastructure) that focus on boosting job productivity in the traditional sectors.

To build links with the extractive industries (and in general to access new, bigger markets) and their various supply chains, therefore, a different set of policy interventions would be required for each group. Enterprises in the first group would need targeted supply-side support to reach the milestone of 'certified supplier' status. But the enterprises in the second group, which are much further from being able to supply directly to the operators, would benefit most from MSME support provided across all sectors in the areas of business management and especially alternatives to traditional classroom-based business training that aims to teach a broad range of basic business practices like accounting, marketing, human resource management, inventory management, and forward planning. These alternatives use psychology and heuristics, incorporate the role of gender, use peers or mentors, aim to customize practices to local context, or use more technical lean manufacturing approaches, all to help firms improve. The government's Institute for the Promotion of Micro, Small, and Medium Enterprises (IPEME) does not appear to have the knowledge and experience to provide the targeted, supply-side support needed to transform the relatively

[27] See Dietsche and Esteves 2018.

[28] Emerging evidence is provided on five approaches for improving the effectiveness of traditional training by incorporating gender, kaizen methods, localization and mentoring, heuristics, and psychology. Source: McKenzie 2020.

[29] Traditional training is showed to increase firms' profits and sales on average by 5 to 10 percent. McKenzie 2020.

[30] Source: McKenzie 2020.

more advanced enterprises into certified suppliers. For that to happen, the best bet would be to encourage the participation of the main operators in the extractives industry, possibly through efforts in developing local content capacity for future exploitation, instead of generating local content in the short term. As for the second group of relatively less developed firms, the policies and strategies with which past governments tried to support MSME development have not been particularly effective, especially with regard to the rural economy which employs the majority of Mozambicans. The emphasis here should perhaps be on greater experimentation with different basic enterprise support services, whether or not they relate to the extractives' sector.

- Recommendation 2.C.1: Identify the SMEs that show promise of achieving 'certified supplier' status in the O&G sector and negotiate a links program with the lead O&G companies to have them reach this status as well as support for certification through a dedicated program.

- Recommendation 2.C.2: Identify reforms and support needed to boost IPEMEs institutional capacity and focus its activities on providing basic support services (for example, basic management training, access to credit facilities, and coordination with nongovernmental organizations [NGOs]) to the smaller firms on the MSME spectrum.

The fast-growing mining sectors have largely been operating as independent enclaves within the Mozambican economy, with few backward and forward links to other domestic industries and services. This is widely regarded as a missed opportunity for accelerating the jobs transformation, motivating governments, in Mozambique as elsewhere, to seek to develop stronger links to the mining sector through various policies, including the incorporation of local content stipulations in the mining (and gas) exploration and production concessions negotiated with the mostly foreign operators. Because the mining industry is so capital intensive, its further expansion is not likely to have a major direct impact on jobs, but the indirect impact could be significant in the presence of sufficiently developed forward and backward links to other sectors.

The prospect of massive export revenues following the significant gas discoveries has already raised expectations of a windfall of resources, with investment flowing in the country right after the news, and has given rise to considerable expectations that the extractives' sector will contribute to Mozambique's economic and social development by means of locally procured goods and services. The volatility of these expectations has been revealed following the recent postponement of investment decisions of one of the main gas players. In fact, the start of production of LNG, expected for mid-2020s, is already being delayed due to the coronavirus pandemic. While Area 1's construction is progressing, the Rovuma LNG project was expected to get the go-ahead decision in the first half of 2020. However, it has been announced that Exxon Mobil is delaying the greenlighting of its US$30 billion LNG project in Mozambique, as the outbreak disrupts early works and a depressed gas market makes investors wary. Conflict in Cabo Delgado is also affecting the construction with staff of contractors already among those attacked.

The main reason for the absence of significant local procurement in these sectors so far, however, has been the lack of capacity of domestic firms to supply inputs at the required scale and quality demanded by the O&G industry. Access to finance is another important constraint for companies trying to obtain contracts

[31] In a worldwide sample of 48 countries analyzed by Tordo et al. (2013, 168–169), Mozambique exhibits among the least developed backward and forward links to the G&O sector. This suggests that there could be a potentially high payoff to developing those links.

[32] Source: World Bank 2020.

[33] As noted in Dietschke and Esteves (2018), "Beyond the foreign-funded, export-oriented mega-projects, Mozambique's economy is very small, rural-based and dominated by entrepreneurs operating the lowest level of the MSME spectrum.

with extractives, which might be able to secure banking finance against those future sales. However, there are important financing gaps on working capital and to upgrade technology when competing for contracts as well as access to finance issues for SMEs in general; the cost of debt is high, and equity products are almost nonexistent in Mozambique. IFC estimates point to an SME financing gap equivalent to 10 percent of GDP in 2017. A difficult macroeconomic environment, limited domestic resource mobilization, lack of credit information, limited availability of collateral, and limited access to credit risk-sharing facilities help explain this gap. Under those circumstances, local content policies (LCPs) may have little effect on procurement choices unless the capacity and access to finance of local firms increase sufficiently.

Newly emerging oil-producing countries tend to be particularly aggressive proponents of LCPs, which limits investors' choices, purchasing strategies, location decisions, and knowledge transfer. If the targeted domestic industry is very far from the international efficiency frontier, as is often the case with emerging producers, then the choice limitations created by the LCPs will come at a considerable cost. The O&G concessionaire will transform that higher cost into a lower bid price, so that it is ultimately the host country that pays for the loss of efficiency. In such cases, it would be advisable to focus less on generating local content and place more attention on developing the future capacity to generate local content through general and specific MSME support programs.

Once a country has decided to introduce LCPs in its arsenal of development policies, there are a number of broad lessons from the different country experiences to consider. These lessons draw attention to the importance of (a) defining the objectives of the LCP clearly and realistically, (b) estimating the costs and benefits of alternative LCPs before their adoption, and (c) maintaining good coordination among the government agencies involved in administering the LCPs, with clear institutional responsibilities for the oversight and monitoring of results.

For setting realistic objectives, it is advisable to begin with the application of local content regulations that are easy to follow and implement and rely more on seeking to encourage foreign investors to increase local content, rather than on penalties to enforce compliance. One simple place to start with in Mozambique is to remove information asymmetries and render more transparent the procurement procedures whereby O&G operators obtain their inputs (backward links).

- Recommendation 2.C.3: Create a Registry of Domestic Producers and Foreign Investors and develop procedures that require all public tender notices to be made available to the registered firms.

  For estimating the costs and benefits of alternative LCPs, it is important to recognize the trade-offs between the benefit of job creation and the cost of inefficiency. The greater the distance between domestic capacity and international standards, the more stringent is the trade-off. Applying this consideration to Mozambique, it would be least inefficient for LCPs to target backward linking industries that are least distant from the international efficiency frontier and that involve relatively unsophisticated skills that are readily available domestically. A demand analysis carried out for the CPSD in Mozambique, identified potential sectors and

[34] Source: World Bank 2020

[35] Source: IFC 2017.

[36] Tordo et al. 2013; Pereira, Mathews, and Trischmann 2019.

[37] Pereira, Mathews, and Trischmann (2019, 673) note that host governments and foreign companies usually share a strong long-term interest in increasing local content. While this may be driven by political aspirations on the part of governments, foreign companies see this as an opportunity for cutting costs in terms of expat staff, transport costs, and local procurement. To realize these common long-term interests, host governments would do better to focus on improving basic infrastructure and address trade/industry policy deficiencies to create the kind of business environment in which companies can thrive and are keen to invest, instead of imposing wide-ranging local content obligations by law or regulation that will burden foreign investors with an additional expense of doing business.

activities that can benefit from linkages with extractives, by comparing sectors that benefited in other countries and completing the information with key informant interviews in Mozambique. The analysis considered the sector's value (total US$ spent) in comparison with the local content potential (% spent with local firms) and potential for employment creation and value retention in the country. Offhand, the food system, encompassing the beverages industry, catering services, transport, storage, and other direct and indirect food-related services, might be a good candidate for this. Other indirect services with potential for local content exist (such as legal services, accounting, security services) although small for number of people involved and sector value .
In many developing countries, the food system employs the most people in both self and wage-based positions and will continue to do so for a long while. The food system extends beyond farm production to include activities along value chains, such as food processing, transportation, retailing, restaurants, and other services. In many countries, the off-farm aspect of the food system accounts for a large share of the economy's manufacturing and services sectors. While the employment share in farming tends to decline as per-capita incomes rise, the share in food manufacturing and services tends to increase. This is also reflected in a country's consumption patterns.

As countries become richer, the proportion of unprocessed, nonperishable foods declines, while the share of processed perishable foods increases sharply (see Tschirley et al. 2015). Therefore, any efforts to increase the number and inclusiveness of jobs will require particular attention to food system growth, beyond agricultural production. As a first step, it may be useful to target the food system needs that emerge directly from the O&G sector, as this will be initial focal point of economic growth. However, the projected growth in O&G sector employment is quite modest. The more important business opportunities for the food system will emerge as economic prosperity becomes more widespread and increasingly urban based. This will shift consumption demand toward protein-based calories, raising opportunities for small animal husbandry (for example, chickens and goats), and pricier horticulture products, as well as more highly processed foods that raises opportunities in manufacturing and ancillary services sectors.

- Recommendation 2.C.4: Expand Mozambican capacity and competitiveness in food production through the following actions:

  - o Conduct a study to ascertain food or catering requirements in the O&G sector.

  - o Assess the competitive advantage of the most efficient international producers capable of satisfying large enterprises and urban market consumers' requirements to establish the level of support that would be needed to sustain import substitution activities in the sector.

  - o Design a package of time-bound incentives (for example, through domestic preference margins that decline over time), in collaboration with the Ministry of Economy and Finance (MEF) and the Central Bank of Mozambique (BOM), for government approval.

- Recommendation 2.C.5: Conduct a study of the demand for different foods and ancillary services in response to the rapid income growth expected over the next two decades and develop a plan to facilitate the transition of Mozambique's food system in line with the projected evolution of consumption patterns.

[38] A good way of ascertaining the relative competitiveness of Mozambican industries would be to carry out a similar analytical exercise as those presented in Dinh et al. (2012) for various African countries, comparing the cost of production in the home country with the least-cost international supplier (for example, China) and identifying the main source of cost differences (that is, wages, inputs, land, financing, worker skills, and trade logistics).
[39]CPSD. World Bank. 2020.

3.3 STRATEGIC PILLAR 3: BOOSTING JOB PRODUCTIVITY IN THE TRADITIONAL SECTORS

Many of the constraints listed above as obstacles to private sector development and wage-based growth also inhibit to some extent the growth of labor productivity in the traditional sectors, which mainly comprise smallholder farmers as well as informal HEs. This is particularly true of the overarching constraint posed by an inadequate macroeconomic policy framework, given that the most important and immediate threat to productivity growth in the traditional sectors as well as to formal sector job growth is also posed by the possibility of a rapid appreciation of the real exchange rate in response to the projected rapid rise of foreign resource inflows in the absence of adequate sterilization measures. Such a development would rapidly reduce domestic production incentives, spell the economic ruin of smallholders seeking to transition from self-sufficient farming to more productive commercial farming activities, and have devastating consequences for the creation of rural jobs. Compared to the formal private sector, however, the smallholder and HE sectors are especially sensitive to the limitations posed by constraints on access to credit, public infrastructure, and agricultural inputs and services. These constraints and possible measures to remove them are discussed next.

A. EXPANDED ACCESS TO FINANCE

Mozambique's rank on the ease of getting credit (165) is considerably worse than the Sub-Saharan African average rank (113) in this subcategory. Among the key institutional shortcomings responsible for limiting the availability of credit in Mozambique are the weak legal rights of borrowers and lenders under the prevailing collateral and bankruptcy laws. The inability to access credit and other financial services, or to access them at a reasonable price, is mentioned as a major problem in surveys across all enterprises. However, it is a more binding constraint for SMEs that often cannot come up with the necessary collateral and that, together with smallholder farmers, also tend to have the most difficulties in obtaining land tenure rights. The difficulty in accessing credit puts SMEs at a greater disadvantage in competing with larger firms and serves as a barrier to market entry.
Commercial banks have expressed some interest in rural lending when backed by guarantees. But the commitment to provide agricultural loans remains low for anything other than what are considered fairly safe sectors: sugar, cotton, tobacco, and larger, well-capitalized agribusinesses. In light of this limited appetite for rural credit among the commercial banks, either because of inexperience with rural credit risks or other factors, a more promising venue to expand rural credit would be through the expansion of community-based savings and credit associations.

- Recommendation 3.A.1: Strengthen the capacity of community-based savings and credit associations through technical assistance and promote their expansion, especially those supported through programs financed by the International Fund for Agricultural Development (IFAD) that have demonstrated a positive impact on the development of smallholder rural activities. This action could be coordinated by the Ministry of Industry and Trade (MIC), in collaboration with the Ministry of Environment and Rural Development (MADER), IFAD, and other donors.

  While the collective savings and credit institutions have proven they can be effective in smoothing consumption streams of small urban and rural HEs, they have been less effective in getting agricultural production to take off. Meanwhile, public credit schemes to promote agricultural production have also not worked well, often with disastrous results. This is where private sector aggregation schemes offer an institutional solution to the problems that usually make it expensive to lend to smallholders. As discussed

[40] These are bulky products that require industrial processing in facilities that are limited in supply within reasonable proximity to farms. As a result, side selling does not work well (or at least not two seasons in a row) and therefore poses less of a credit risk.

in Section B below, such schemes enable smallholders to connect to agricultural value chains as suppliers to larger firms/producers that have already overcome the minimum-scale problems that constrain smallholders in agricultural processing and marketing activities. Those larger firms, which are in a better position than banks to evaluate the creditworthiness of smallholders, in turn, become the conduits for credit to smallholders as well as for technology and agricultural inputs and services, where smallholders face similar scale constraints that would otherwise limit their access (see the next section). In this context, 'aggregator' schemes provide the most promising pathway for boosting agricultural productivity growth in the traditional sectors.

In the longer run, it is likely that digital technology will make a huge difference in enabling access to loans by smallholder farmers, whether through aggregation schemes or other intermediaries. A local intermediary, "Mybucks", (formerly 'Opportunity Bank'), has teamed up with a mobile money provider, Bibi Money, to enable loans to contract farmers to buy agricultural inputs. Although it is not yet clear whether this initiative will succeed, mobile banking appears to show the most promise for smallholders to access credit in the future.

A good example of how digital technology is being successfully developed to support smallholders has been the Lima-Links market information system (MIS) in Zambia, which links smallholders to both input suppliers and commodity traders. Another example of interest is the various microfinance modalities being used by the companies supported by the ProEcon project of the German Agency for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit, GIZ). In addition to the more conventional forms of finance, there are a variety of other instruments, such as catalytic funds that are used to target certain geographic areas and/or subsectors.

- Recommendation 3.A.2: Review and assess the experiences with various nonconventional financing instruments applied in Mozambique and elsewhere, including (a) efforts to increase domestic access to finance through catalytic funds, matching grants, and targeted guarantee funds; (b) the Lima-Links system in Zambia; (c) the use of e-money applications; and (d) nonbank financing options that target the agricultural sector. Seek to expand the most promising of these nonconventional financing vehicles based on the lessons from this review.

  An important constraint for financial service providers is the limited awareness of their products and services. There is remarkably little knowledge of the financial products that are available and little effort has gone into disseminating this information. It would be useful to make this type of information regularly available to the many thousands of potential beneficiaries of agricultural finance and give product/service providers the opportunity to update information on their offerings, for which they are likely willing to pay to reach their potential clients. An annual guide/publication of this sort will quickly gain recognition and could become an essential reference guide for potential users and existing providers. It could also include an analytical section devoted to reviewing innovative financing initiatives that have been launched over the past 12 months. Such a guide would also be of interest to donors, the government, and researchers.

- Recommendation 3.A.3: Regularly prepare a publication, website, or radio program to promote awareness of the range of financial services available to different agricultural operators, from

[41] One of the few alternatives to this type of private sector aggregation scheme is the model used in Tanzania, which is based on medium-size farms linked to lots of small farms (World Bank 2019h).

[42] There are two hypotheses that explain why digital technology enables better smallholder inclusion in accessing credit: one hypothesis is that high-tech solutions like cell phones, searchable databases, and in some cases distributed registers (as in blockchain) allow creditors to overcome the high transaction costs of a high-tech central entity dealing with lots of small, dispersed, low-tech entities, making the marginal cost of adding an more smallholder to the network low. The other is that these tech solutions can identify/brand smallholders by their phone number, making them less anonymous and easier to include (and exclude if need be). Which of these two hypotheses turns out to be the more relevant is likely to determine which nonconventional financing instrument turns out most successful.

smallholders to large agribusinesses. This publication/radio program could be sponsored by the MIC in collaboration with the CTA, NGOs, and microfinance umbrella organizations.

B. EXPANDED ACCESS TO PRODUCTIVITY-ENHANCING AGRICULTURAL TECHNOLOGIES AND INPUTS

Additional limitations that contribute to the low productivity of smallholder farmers are shortcomings in agrarian practices and the limited access to improved technologies and agrarian inputs (especially fertilizers, improved seeds, and mechanization), poor access to market information, a lack of irrigation systems and mechanization, and uncertain land tenure rights. These factors largely explain why agricultural productivity in Mozambique lags far behind the levels observed in neighboring countries. Various policies can help overcome these limitations and help transition smallholders into more productive activities. These include giving attention to infrastructure investments aiming to provide better market access and a more even enforcement of land tenure arrangements, both of which are generally considered core responsibilities of the public sector. The other policy area for helping smallholders raise their productivity involves facilitating access to agricultural inputs and improving research and extension services to develop higher-value crops for smallholders. As with access to credit, smallholders are also constrained by limited access to these inputs and services, but unlike the provision of public infrastructure this is an area where the private sector could offer good solutions through aggregation schemes. The general strategic approach proposed in this jobs paper is to encourage such aggregation schemes for solving the problems of limited access to inputs and extension services, as well as to credit, and to focus more direct public sector involvement in this area to products or regions where there is insufficient private sector interest.

Connecting to agribusiness value chains. The most promising vehicle for permanently raising the productivity of smallholder farmers is by transitioning them into productive activities linked to larger producers in the modern economy (that is, agribusiness value chains) through contract-grower schemes. Contract-grower schemes, also known as 'aggregator' models, appear potentially useful for resolving some of the market and coordination failures inherent to smallholder agriculture and for achieving scale economies. Such market failures pose severe constraints on their access to credit and to agricultural inputs and services. Aggregator models exist in many variants; some are based on producer associations, others are promoted by anchor buyers, and, in other cases, intermediaries take the lead in creating links between farmers and purchasers. A common feature is that all modalities aim to facilitate the production of high-value crops and support the adoption of technologies that increase productivity and meet market standards. Opportunities for public-private partnerships (PPPs) to develop these programs are often best explored in partnership with NGOs, possibly in connection with performance-based subsidies. Recent experiences in Mozambique suggest that 'aggregator' models work more effectively for high-value crops with strong vertical coordination and less for food crops where the potential for side sales is high, though there have

[43] Smallholder producers (with average plot sizes of 1.5 ha) dominate the agriculture sector, accounting for 98 percent of all farms. Large farms, which represent the most technologically advanced segment of the agricultural economy, account for less than 1 percent of all farms and less than 3 percent of the cultivated land area. Source: IAI (Inquérito Agrário Integrado) 2012.

[44] While the expansion of transport infrastructure is essential for raising productivity among rural smallholders, expanding access to electricity is particularly important for HE development, which plays an important role in the livelihood diversification strategies of smallholder farmers.

[45] The low productivity level of most smallholders is generally the outcome of many constraints (that is, credit, inputs, machinery, and so on), rather than one overarching reason. In that context, single-focused interventions (such as fertilizer subsidies) are likely to be ineffective, because as soon as one of these constraints is eliminated, another becomes binding. This situation calls for an integrated approach, where all constraints are addressed simultaneously, which is the hallmark of a value chain development approach.

[46] In some countries, these value chains have been based on maize and sorghum (with right qualities for beer) and cassava (for industrial flour). The key point is that the aggregation relationship adds value and pays a premium to farmers over what they would get for the same items otherwise.

been some cases where the 'aggregator' model works for food crops as well, for example, when smallholder farmers are organized in strong associations with within-group control and accountability mechanisms.

Market information and economies of scale through aggregation systems. Two important constraints that prevent many smallholder farmers from shifting their production patterns from traditional consumption crops (that is, maize and cassava) to other higher paying crops are the absence of timely information on market prices of the other crops and the absence of economies of scale. Maize and cassava are good fallback crops when there is a lot of uncertainty about the prices and conditions associated with less familiar crops, since they can always be consumed if prices turn out too low for a profitable sale. Furthermore, rural markets are often dominated by a few, oligopolistic buyers (and distributors), which puts smallholder producers at a disadvantage when negotiating prices. These constraints can be overcome through the introduction of MISs, participation in farming association or cooperatives, and participation in aggregation systems with larger agricultural firms.

Two problems that have been holding back participation in aggregator schemes in Mozambique are (a) the slowness in value added tax (IVA) reimbursements and (b) side-selling by contracted outgrowers. The inability to receive timely IVA reimbursements arguably represents the foremost fiscal problem for all business operators, and the government is reviewing the IVA procedures and plans to introduce new measures to mitigate this problem. In agriculture, however, the problem is particularly acute. Even though agricultural goods are exempt from the IVA, regulations require that virtually all goods pay IVA on their transactions and that reimbursement is subsequently sought from the government tax authority. Even smallholders are expected to participate in this system, either as formally registered businesses or under the provisions of the Simplified Tax for Small Producers (ISPC). However, most of them remain in the informal economy, without taxpayer status or even the ability to provide commercial invoices or identification, which represents an added cost to the aggregator.

The problem of IVA reimbursements is a fairly straightforward regulatory issue that is within the purview of the government to solve, but side-selling represents a principal-agent problem in industrial organization that is much more difficult to correct and calls for idiosyncratic solutions that will vary for particular commodities and locations. 'Side-selling' refers to the diversion of contractually agreed produce or value chain-provided inputs or technology toward ends other than the intended value chain development once the producer finds it in his/her interests to renege on the contract. Side-selling by farmers spells the end of most aggregation schemes. Typical ways to address such principal-agent problems are through regular monitoring of the producer-buyer relationship, initial co-financing from the farmers to ensure a stronger buy-in, involvement of producer associations to exercise moral suasion, and involvement of NGOs that represent the interests of smallholders and wage labor when the aggregator contract is negotiated (see, for example, Christiaensen 2019). One problem contributing to the risk of side-selling is the high cost of contract enforcement generally in Mozambique's legal system (see Pillar 1, section B). Reducing these enforcement costs should improve the business environment in the formal sector but is less likely to make much difference in the context of smallholders operating in the informal sector. In that context, a more effective way to reduce the risk of side-selling is by designing the contractual relationship in ways that encourage a cooperative outcome over time. This requires, in turn, a careful diagnostic of the competitiveness and sustainability of the particular value chain to be supported.

- Recommendation 3.B.1: Implement an effective MIS by developing programs for community radio programs to provide price and other relevant information generated by trading companies, NGOs, farming associations, and the government, drawing on various national and international experiences with similar programs.

- Recommendation 3.B.2: Promote the modernization of the agriculture sector by enabling smallholders to link up with larger firms through aggregator arrangements. To accomplish this, begin by reviewing the aggregator experiences offered by the commercial farming sectors and the MAAP as well as the experiences with information and communication technology (ICT) products developed for smallholders (for example, to enable e-money payments).

- Recommendation 3.B.3: Develop a strategy to clear the backlog of IVA reimbursements and process future reimbursements in a more expedited manner. Meanwhile, simplify the tax registration system for smallholders to enable aggregator companies to deduct purchases in the calculation of the IVA.

  Public extension services. As noted above, private contract-grower or aggregator models have been more successful for some crops than for others and least so in the production of staple food crops. Considering that these are the mainstay of most smallholder farmers, raising their productivity will require looking beyond private sector solutions toward the public provision of services. Mozambique's recent experience in this area has not been encouraging, however; the proportion of farmers receiving public extension advice has varied over the last two decades (from an average of about 13 percent in 2002–2006 to 10 percent in 2017) but remained quite low overall. Extension services also vary across provinces; in 2017, only 4 percent of households in Maputo Province received extension services against 19 percent and 18 percent in Tete and Sofala, respectively. This represents a major shortcoming for any strategy seeking to raise agricultural productivity and crop yields. Extension services are particularly important for modernizing the agricultural sector because of their central role in complementing the use of other agricultural inputs.

  That is, the use of improved seeds, fertilizers, and agro-chemicals will not have nearly as much of an impact on raising agricultural yields in the absence of extension services as when farmers are assisted in the use of those inputs, be it through a public extension program or by partnering with a private agribusiness in an aggregation program. Recognizing the catalytic role of extension services, the government developed the National Agricultural Extension Program (PRONEA) in the mid-2000s, with the aim of increasing the implementation capacity of extension programs, to improve the producers' technical and managerial skills and provide extension at provincial and district levels to promote productivity, but the total coverage of all extension programs continued to decline over time. Key constraints that have contributed to this outcome are the absence of a demand-driven program to guide research priorities, lack of coordination with NGOs and private extension service providers, inadequate budget and staff for the government-provided services, and an absence of a master plan to coordinate the provision of extension services with the provision of other inputs.

- Recommendation 3.B.4: Strategically expand extension services with improved technologies in areas with good agricultural potential that are not being attended to by private agribusiness value chains by (a) strengthening research-extension links through clear agricultural research priorities attuned to the needs of smallholder farmers; (b) increasing the number of extension officials in the areas of agronomy, veterinary science, and aquaculture; (c) designing extension interventions (including in climate resiliency) for areas demonstrating the least progressive practices and agricultural potential; and (d) drawing up an annual Extension Master Plan involving all stakeholders.

Access to improved seeds, agrochemicals, and fertilizers. Ready access to improved seeds is critically important for the development of most agriculture value chains. Mozambique's legal framework and policy regime with regard to seeds, however, are inadequate for ensuring timely availability of high-quality seeds

[47] IAI 2017.

improved, appropriate varieties at affordable prices to smallholder farmers. As a consequence, the improved seed utilization rate in Mozambique is less than 10 percent for most key food crops, which is among the lowest in the region. This outcome is partly due to the widespread practice by farmers of using their own seeds saved from the last harvest or to rely on community-based, informal seed sources. Another reason for this outcome is that some donors continue to donate unimproved seed material to subsistence farmers, undermining private sector seed companies and agricultural productivity. (To counter these unwanted results, several donors (notably the Food and Agriculture Organization [FAO]) are supporting voucher schemes whereby smallholders can gain access to inputs sold by agro-dealers at an affordable price without introducing market distortions.) There is also an evident lack of breeders in Mozambique. Most, if not all, are employed by public entities such as the Institute for Agricultural Research (IIAM) and the Consultative Group on International Agricultural Research (CGIAR). Meanwhile, the local seed companies do not employ breeders and the foreign companies operating within the country rely on breeders based in other countries, such as South Africa. In addition to the small number of active breeders, breeding activities and the production of early generation seeds (EGS) from the public sector are constrained by (a) the lack of adequate facilities, particularly irrigation facilities, to permit off-season breeding activities; (b) limited seed processing facilities; (c) dispersed areas of production, making breeding activities expensive; (d) limited availability of land, particularly for maize isolation and rice rotation; and (e) lack of incentives for the breeders.

Mozambique's fertilizer consumption is one-fourth of the amounts consumed in the neighboring countries of Zambia and Malawi. The use of fertilizers in Mozambique is mainly confined to the cash crops, especially tobacco, sugar, and cotton and remains low among smallholder farmers, with the consequence that average yields on staple food crops (for example, maize, rice, and cassava) are extremely low. Fertilizer use is so low mainly because it is not readily available in rural areas and, when available, it is usually too expensive for the rural farmer. Fertilizer is so expensive due to (a) high transaction costs resulting from port inefficiencies (poor handling, bagging, stitching); (b) high road transport costs; (c) inefficient distribution systems and absence of competition among importers and wholesalers; (d) the absence of an approved fertilizer policy, which limits the government's capacity to enforce existing fertilizer regulations and standards; and (e) the involvement of multiple government institutions (MASA, MIC, and Port Authorities), which result in a cumbersome and therefore costly importing process.

[48] The main policies guiding the seed sector are the Program for Strengthening of the Seed Chain (PFCS), which is contained in the Strategic Plan for Development of the Agricultural Sector (PEDSA) and implemented through the Seed Division of the National Directorate of Agriculture and Forestry (DINAS) and Comprehensive Seed Regulation (CSR). Government Decree No. 12/2013 establishes the CSR, which was updated in 2013 and harmonized with SADC (Southern African Development Community) seed regulations on variety release and registration, seed quality control and certification, and seed import/export requirements. Some of the provisions in this Decree are not operational, however, for lack of implementing regulations, norms and procedures.

[49] Mabaya et al. 2017.

[50] The Ministry of Agriculture and Food Security (MASA); Ministry of Land, Environment, and Rural Development (MITADER); and the Ministry of Health (MISAU) are the institutions responsible for ensuring that agrochemical regulations are in line with the international standards defined by the FAO and World Health Organization (WHO) (Art 51) and are translated into the set of actions that will guarantee that pesticides are managed in a way that does not pose a threat to human, plant, and animal health and to the overall health of the environmental components. In addition, the regulation must comply with the World Bank operational policies for pest management.

[51] To reduce the cost of fertilizers, the government had agreed to eliminate the 2.5 percent tax on fertilizers imports, to control quality of fertilizers, and to regulate and promote greater competition among distributors. Also, to encourage greater fertilizer use by smallholder farmers, the Government of Mozambique implemented a pilot voucher-based fertilizer and seed subsidy program targeting 25,000 smallholder farmers in collaboration with the European Union (EU), the FAO, and the International Fertilizer Development Center (IFDC). The effectiveness and sustainability of these measures remain to be evalu

- Recommendation 3.B.5: To expand the availability and adoption of improved inputs, (a) promote the local production (mainly packaging/blending) of nationally available fertilizers, support integrated pest management (IPM) and the safe use of agricultural pesticides, and reinforce the local capacity to produce local animal vaccines for the main diseases; (b) develop, jointly with the private sector, appropriate input packages in accordance with targeted regions in coordination with the programmed expansion of extension services; (c) promote the expansion of community shops for improved inputs (fertilizers, seeds, and so on) by improving their competitiveness through, among others, the substitution of directly donated inputs by less distortive voucher schemes; (d) improve the effectiveness and efficiency of the machinery park program by organizing producers better; and (e) simplify bureaucratic procedures to gain access to irrigation, imported inputs, and fuel/electricity subsidies by farmers, especially smallholders.

C. EXPANDED ACCESS TO PUBLIC INFRASTRUCTURE

Mozambique is a sparsely populated country, which poses major challenges for public infrastructure development in seeking to achieve greater regional connectivity and access to markets. The limited scope and low quality of the road and rail network limit trade by reducing access to markets for farmers, domestic firms, and international investors. This problem is accentuated by burdensome bureaucratic procedures and a poor logistics environment.

The low electrification rate also constitutes a major constraint on private sector development, though more binding for small and medium-size firms than for the large ones, which are in a better position to overcome infrastructural constraints through private means.

Road transport. From an agriculture sector perspective, the most important infrastructural constraints are the lack of access to transport infrastructure (especially poor road quality, including poor operation and maintenance) and lack of irrigation. Road transport is the main transport mode in Mozambique, accounting for half of total freight traffic and 98 percent of passenger traffic in the country. Nevertheless, road density is low and the network has a few redundancies. The national transport network primarily connects natural resources, agricultural clusters, and landlocked countries to the west to ports in the east through six east-west corridors.

The connectivity between the southern and northern provinces is particularly low, with national highway EN1, which extends from north to south, providing the only link connecting the six east-west corridors. Consequently, disruptions of EN1 have a disproportionate impact on regional mobility (World Bank 2017).

Given resource constraints and extreme climate risk vulnerability, Mozambique faces a major challenge in balancing investments needed to maintain the primary road network with those needed to maintain and expand the secondary and tertiary networks, which primarily serve rural agricultural areas. Maintaining the primary road network in good condition largely benefits a major part of the national and regional traffic, including heavy mining transportation, while investing in rural road access and resilience directly supports agricultural production and, therefore, rural poverty reduction. While 85 percent of the primary road network is in good or fair condition, half of the non-primary roads are in poor condition, resulting in low rural access, particularly in the central and northern provinces. Currently, ANE allocates more than 65 percent of its annual budget to primary roads and only 10 percent to non-primary roads, although the latter account for 80 percent of the total network coverage.

- Recommendation 3.C.1: Identify the main transport routes that are in urgent need of rehabilitation (especially national roads network) and expand the rehabilitation, reconstruction, and upgrading of rural roads, with special emphasis on regions adversely affected by floods, droughts, and cyclones. Performance-based maintenance methods that involve the local communities to create

[52] Two government entities, the Road Fund (Fundo de Estradas, RF) and the National Road Administration (Administraçao Nacional de Estradas, ANE), are collectively responsible for managing all classified roads.

microenterprises and empower them to have a stake in their roads should be expanded. This will help bring large-scale employment and improve the quality of the road infrastructure.

Electricity access. The overall access to electricity has improved significantly over the last years. The Government of Mozambique has a goal to achieve universal access to electricity by 2030. While only 8 percent of the population had access to electricity in 2006, by 2018, the access rate jumped to 30 percent. In parallel, the government adopted a strategy to involve the private sector in financing, constructing, and operating new power plants under independent power producer (IPP) arrangements and long-term power purchase agreements (PPAs) with the state-owned Electricidade de Moçambique (EDM). EDM coinvests in some generation projects with the private sector and constructs transmission lines connecting the plants to the system. However, lack of access to electricity still constitutes a significant constraint for HEs and agricultural smallholders but has receded as a problem for large producers, as it has for large formal sector firms. Accordingly, the experiences with obtaining access to electricity and in dealing with the public electric utility company (EDM) have not been uniform across consumers. Some, especially the large farmers and firms, have no problems at all, while smallholders and small/medium enterprises experience major problems. A new electricity law is currently under preparation, with the aim of introducing new rules for energy consumption as well as providing incentives for farmers and agro-processing firms to use energy more efficiently. The main problems faced by users are the lack of transparency and flexibility in setting energy prices, along with a lack of timelines. The absence of clarity in EDM's price setting behavior represents a major source of uncertainty for farmers and producers and dampens investor confidence.

The recent introduction of a graduated price schedule linked to levels of energy consumption is also provoking great concern among agriculture operators.

- Recommendation 3.C.2: Review EDM's price setting behavior and publish clear guidelines for setting future prices.
  Water and irrigation systems. Due to its high dependence on hydrometeorological factors, the development of agriculture hinges greatly on access to irrigation. Despite the growing recognition of its importance, irrigation has not played a major role in expanding agricultural development during the last three decades. Close to half of the irrigated area is used for sugar cane production, and only 8.8 percent of smallholder farmers use some form of irrigation. The government defined and adopted an irrigation strategy in 2010 and has been implementing various irrigation policies since 1975. However, the country is still struggling to expand the area under irrigation for smallholder farmers for reasons that are not fully understood.

- Recommendation 3.C.3: Review and revise the government's national irrigation plan and the legal framework governing the management responsibilities by users of public irrigation systems, including the relevant legislation for PPPs in irrigation.

3.4 STRATEGIC PILLAR 4: ENSURING ADEQUATE HUMAN CAPITAL AND SKILLS DEVELOPMENT

Mozambique has an abundance of land and ample labor, but most of the labor force is poorly educated compared to that in other Sub-Saharan African countries. In the 2019 Global Competitiveness Index, the quality of human capital (health and education) is ranked next to last out of a sample of 140 countries. This is the legacy of a civil war that prevented the post-independence generation from attending school. But Mozambique is catching up to the rest of Sub-Saharan Africa. In 2010, less than one-half of the adult population was literate, but among youth the literacy rate was 78 percent, which is close to the Sub-Saharan African average. Rural education attainment is also improving but from a lower base. Furthermore, nearly 60 percent of Mozambique's young private sector workforce has received some post-primary education.

[53] Source: World Bank 2020.

This suggests that Mozambique is moving in the right direction in its human capital development. It will need to move even faster, however, considering education's critical role in enabling the jobs transformation. Successive Mozambican governments have named education as a priority sector in their poverty reduction and national development agenda. Accordingly, since 2008, Mozambican governments have been allocating a higher share of GDP to education than other comparator countries as well as channeling a higher share of total public spending to the education sector. About half of the total education budget is devoted to primary education, with the result that Mozambique outperforms the Sub-Saharan African and low-income country averages in primary enrollment rates. In terms of primary completion rates, however, Mozambique's primary completion rate of 48 percent falls far behind that exhibited by its comparators. Enrollment and attendance are particularly low among girls. While almost all girls in Mozambique enroll in the first year of primary school, more than half drop out by grade 5. The gender gap widens around age 15, since early marriage and increased household responsibilities are relevant drivers of dropout rates. The same is true of secondary enrollment and secondary completion, where Mozambique's current rates of around 18 percent and 22 percent are about one-half the rates observed in other Sub-Saharan African and low-income country averages. Children in Mozambique can only expect to complete 7.4 years of preprimary, primary, and secondary school by age 18. Progression rates to secondary education are very low; the gross enrollment ratio drops from 113 in primary to 36 in secondary.

A. STRENGTHENED SECONDARY SCHOOLING

The low secondary enrollment and completion rates observed in Mozambique are particularly worrisome because of the constraint they impose on the job transformation process. The Mozambique Jobs Diagnostic (2018) shows that education levels are highly correlated with the job type for both men and women, and while subsistence agriculture does not require much education, at least some education is required for all but the most physical labor wage jobs, including the management of HEs. Modern factory work, in particular, requires basic literacy and numeracy of the type normally acquired by completion of primary, and increasingly, the behavioral skills and more advanced cognitive skills acquired by completion of secondary are required to achieve global productivity and quality standards, even for light manufacturing production.

Key factors responsible for the low internal efficiency of schools, reflected in low completion rates, are widespread poverty, poor school management, and lack of adequate infrastructure. Even though education is supposed to be free in Mozambique, many students drop out prematurely because they cannot afford the exam fees, cost of uniforms, and school materials or because they have to provide family support. This is particularly true for girls: early pregnancy, child marriage, and gender-based violence (GBV) are the main factors linked to high dropout rates. Other reasons are poor school management, which contributes to high teacher absenteeism, and insufficient infrastructure, which leads to overcrowded facilities and means that many students often have long ways to travel, leading them to drop out. In the secondary school system, the quality of education is considered poor and too focused on social sciences instead of the science, technology, engineering, and mathematics (STEM) curriculum.

- Recommendation 4.A.1: Consider introducing a program of conditional cash transfers (CCTs) to help poor students defray the indirect costs of attending primary and secondary school and thereby

[54] Total annual spending on education since 2008 has averaged 6.3 percent in Mozambique, compared to a Sub-Saharan African average of 4.3 percent and a low-income country average of 3.9 percent.

[55] Since 2008, Mozambique has devoted 19.4 percent of total government spending to education, compared Sub-Saharan African and low-income country averages of 16.7 percent.

[56] UNESCO Institute of Statistics (UIS) Education Statistics. 2017. The gross enrollment ratio in secondary is even lower than the average for Sub-Saharan Africa (43).

discourage them from dropping out. To improve teacher performance, consider measures to promote greater community oversight of primary schools, greater central ministerial oversight of secondary schools, and more investment in teacher training.
The low internal efficiency of Mozambican schools limits the amount of human capital available in the future. In the short run, however, Mozambique also faces a supply-side labor constraint on account of unreasonably high reservation wages. Shortcomings in the schooling system have left graduating secondary students largely unacquainted with the job market, with the result that they have unrealistic wage aspirations, which results in extended job search time and ends up raising unemployment rates.

- Recommendation 4.A.2: To reduce search unemployment among urban youth, introduce work experience programs into the secondary school system to acquaint graduating students with the labor market and get them 'job ready'.

B. IMPROVED TVET SYSTEM AND GREATER INVESTMENT IN LIFE SKILLS

To exploit the upcoming opportunities to develop backward links to the O&G sector, it will be necessary to upskill Mozambique's labor force. The same is true of the agribusiness, tourism, and retail services sector, which also exhibit significant growth potential. There is currently a mismatch between the skills supplied by Mozambique's education system and the skills demanded by firms in the fast-growing sectors. While the proportion of students in public institutions enrolled in the sciences, engineering, agriculture, and health has increased from 18 percent to 26 percent over the last decade, this is insufficient to meet the country's evolving needs. In the private higher education institutions (which account for about 40 percent of total higher education enrollment), only 5 percent of students are enrolled in engineering and related disciplines.

Several barriers stand in the way to bringing about a different skill mix that is more appropriate for Mozambique's evolving development needs. One barrier has been the inability of Mozambique's technical and vocational education and training (TVET) system to develop enough workers with the appropriate skills to satisfy firms' needs. This is attributable in part to well-known deficiencies in the traditional, publicly delivered, supply-driven approaches that have been followed by the Mozambican Employment and Vocational Training Institute (INEFP) and now IFPELAC. In 2016, less than 1 percent of all students in the national education system were enrolled in the country's TVET institutions, as noted in the Mozambique SCD (2016). Furthermore, Mozambique's public spending on TVET—accounting for only 3.5 percent of the government's total education budget—is among the lowest in the Sub-Saharan African region. Given Mozambique's tight fiscal situation, this offers little room to maneuver in terms of public provision of TVET services and underscores the need to rely more on private sector delivery systems.

Mozambique has begun to implement a major reform program in the technical and vocational training system that will potentially address these failings. TVET experiences elsewhere have taught us that such programs are more likely to succeed when they are more strongly linked to firms' demand for skilled labor. A key issue here is to identify a training approach that involves practical training/internships in industry or the use of apprenticeship models in partnership with experienced firms (one way of testing that link is by targeting the placement of trainees in paid jobs as a test of market relevance). A more flexible labor code could also help stimulate training by allowing apprentices to pay part of the cost of training through lower wages. A probationary period before termination benefits come into effect offers a further way to improve vocational training (these last two proposals have already been discussed earlier).

Lack of specialized skills is a constraint for firms in Mozambique. Close to 40 percent of the enterprises in Mozambique with at least five workers have foreign workers as managers or professionals. This is especially the case for extractives, retail, and other services, where about half or more of the firms have foreigners in roles of management or mid-level professional roles. When hiring, larger firms are more likely to complain about the skills of the applicants. On average, firms wait almost nine weeks to fill in managerial positions and close to eight weeks for mid-level professional positions. In the construction sector, for example, the lack of specialized skills—both managerial and technical—are reported to be an important constraint. Most technical construction skills are learned on the job, but putting in place such a system requires management of apprentices and experienced workers. This is not an easy task for a medium-size business. A program of business services support in this sector, coupled with the provision of specialized training at middle and polytechnic levels through a number of training institutions supported by partnerships with the private sector, might be an effective approach.

Insofar as the extractive sector will remain a dominant driver of growth in the foreseeable future, the development of high technical skills in that sector will be key for preparing future generations to manage this sector (see Table 1). This is not the traditional TVET. Rather, university-level and other advanced technical skills in O&G engineering will be required. It will also require soft/general skills and basic business skills that are often underestimated but also play an important role in stimulating the productivity of workers and firms (see more on this below). These skills are nonexistent at the moment in Mozambique, which prevents the exploitation of local content generation opportunities through the extractive sector. Instead, policy makers will need to focus on encouraging the extractive companies to invest in the training of Mozambican workers, so that they may be in a position to take advantage of such opportunities in the future.

- Recommendation 4.B.1: To improve the development of skills and enable a faster jobs transformation, implement the reforms initiated in the technical and vocational training system so that it takes better advantage of private delivery mechanisms and becomes more responsive to firms' training needs.

- Recommendation 4.B.2: Develop a program of business services support through IFPELAC, in collaboration with foreign construction companies, to put in place an apprenticeship program and to develop subcontracting skills. Direct IFPELAC to team up with firms in the O&G sector to develop training programs geared toward developing Mozambique's supplier capacity to expand local content in the future.

TABLE 1

Expected Labor Demand in Main Gas Project Areas (Areas 1 and 4)

Categories	Year 1	Year 2	Year 3	Year 4	Year 5
Senior manager	160	400	740	500	220
Professionals	680	1,720	3,300	2,380	1,200
Supervisors	1,120	2,140	4,600	4,700	2,440
Specialized	3,460	7,300	15,820	14,920	7,620
Semi specialized	1,600	3,280	4,320	3,160	1,380
Basic specialized	3,120	4,720	2,920	2,520	400

[57] Source: World Bank 2019d.

[58] In 2019, for example, three courses were being implemented under the World Bank-supported University Eduardo Mondlane (UEM) Center of Excellence for Oil and Gas: (a) petroleum engineering (MPE); (b) hydrocarbon processing engineering (MHPE), and (c) the MSc in O&G economics and management initiated in 2018. The center is also supported by a few private firms such as Schlumberger, Sasol, and others. In addition, a batch of students was sent to complete their studies in O&G outside the country, and some of them already completed the studies. While progress in raising skill levels in the sector is evident, the number of workers with advanced skills is still far from sufficient to meet the demand, and opportunities for providing students with practical exposure remain scarce.

[59] That is, instead of seeking to capture local content now by setting local content targets for the procurement of local materials and services, Mozambique would be better off pursuing training targets to expand the capacity to supply such local materials and services in the future

Total labor	10,140	19,560	31,700	28,180	13,260
Mozambican labor demand	5,380	10,560	12,060	7,900	3,300
% Mozambican	53	54	38	28	25

Soft skills development. Employment trends in the more developed economies indicate that employers are increasingly valuing soft skills such as teamwork and collaboration and oral and written communications skills on par with the cognitive skills of problem-solving, analytical and quantitative skills, and other attributes typically emphasized in formal educational settings (Deming 2017). Referred to variously as 'social and emotional', 'socio-behavioral', or 'noncognitive', soft skills enable individuals to navigate interpersonal and social situations effectively, such as the labor market or school, and are amenable to change and development. They have been shown to be essential for success, among others, in education attainment, healthy behaviors, and labor market outcomes. Since these skills concern how people relate to others, perceive themselves, and manage their emotions, they influence all areas of life. Just like cognitive skills, they can also be developed and trained.

While there is a growing body of empirical research demonstrating that socioemotional skills could be critical determinants of success in the labor market and the job search process, less is known about how these skills can be cultivated (moreover, the available literature on socioemotional skills interventions has mostly focused on school-age populations in a developed country context). Two vocational training programs for unemployed youth in developing countries that emphasize soft skills development and might serve to guide the development of similar youth employment programs in Mozambique are the Juventud y Empleo (Youth and Employment) Program in the Dominican Republic and a Socio-Emotional Skills (SES) Training pilot in Turkey. Both programs have been subject to rigorous evaluations, yielding positive results. Participation in the Dominican Republic's program was shown to have a statistically significant long-run impact on the formality of employment for men (Ibarraran et al. 2015). Similarly, exposure to SES training in the Turkish pilot program had large positive and significant effects on job search behavior and take-up of job placement services. Along with a measurable increase in individual participants' growth mindset, the evaluation also found that the program broadened participants' perspectives on the labor market and leads them to make increased investments in their labor market future through job search efforts that are also likely to pay off for them in the longer run. Currently, a similar program is under implementation in Mozambique, under the Demographic Dividend Project focused on youth empowerment, education, and employment.

- Recommendation 4.B.3: Review the experience with youth training programs in other developing countries, especially in the area of soft skills development, with a view to incorporating key elements of those programs into the proposed work experience programs in secondary schools to get graduates job ready. In the face of skills shortages that constrain the development of backward and forward links in the fast-growing sectors, it is hard to argue in favor of limiting the movement of skilled workers. Local and foreign firms face a shortage of experienced and skilled labor such as accountants, engineers, mechanics, and managers as well as experienced, semiskilled labor in some trades, such as plumbing, welding, and electrical components, among others. Limitations on importing skilled labor that are meant to stimulate the creation of skilled Mozambicans can have the opposite effect of preventing the development of the

[60] Turkey's SES training consists of a single session of about 1.5 hours, delivered to groups of up to 15 newly registered jobseekers by a trained job vocational counselor. The Dominican Republic's Juventud y Empleo Program, which has been in place since 2001, focuses on unemployed youth ages 16–29 from disadvantaged areas and combines vocational trainings (150 hours) with soft skills training (75 hours) and a three-month internship.

[61] World Bank 2019i.

industries that might hire and train them, especially by hampering the development of new FDI-funded projects. Mozambique would also be advised to focus on regional and sectoral initiatives to accelerate jobs transitions in high-potential labor-intensive industries. Beyond improving the macroeconomic and business climate and the functioning of the labor market through regulation reform and training policies improvement, this is essential. These jobs transformations might be in agriculture, manufacturing, or services. But wherever they are, private investors will need to mobilize capital to equip the firms and create productive jobs.

3.5 STRATEGIC PILLAR 5: FOSTERING GREATER JOB INCLUSIVENESS

The preceding policy pillars focused on generating a greater demand and supply of 'good' jobs as well as improving the quality of 'bad' jobs. This pillar focuses on measures to include any vulnerable groups that have been excluded from participating in the jobs transformation process. In Mozambique, one of the most visibly excluded groups are women, who are underrepresented in modern, wage-based jobs and in the formation of rural nonfarm HEs.

A. GREATER JOBS PARTICIPATION OF WOMEN

Child marriage and teenage pregnancy are persistently high, which severely limits women's capacity to participate in all but the most basic jobs. Mozambique has the 10th highest rate of early marriage in the world, with almost half of the adolescent girls ages 15–19 reporting that they are married. As of 2015, about 46 percent of this population group were already mothers or pregnant, and this percentage has increased in the last 20 years.

Mozambique's adolescent fertility rate is the fourth highest in the world (Demographic Health Survey 2015).

Girls are at high risk of GBV in Mozambique, making them among the most vulnerable population groups.

About one-third of 15-year-old adolescents girls declare that they are survivors of physical violence, and 46 percent say they are survivors of domestic, sexual, or emotional violence from their partners. Additionally, 19 percent of adolescent girls report forced sexual initiation. The practice is more common in the northern and central regions of the country, where initiation rites associated with puberty perpetuate the idea of traditional female roles in the family and make girls vulnerable to early marriage. Sexual abuse and harassment against women and girls are also a risk in schools. Across Mozambique, seven in every ten girls report knowing of cases of sexual harassment and abuse in their school.

Women are less likely to enter the higher-paying nonagricultural sectors in Mozambique. Many reasons have been advanced for this. The most common is that domestic work stops women in low-income countries from working in paid jobs. Without time-saving infrastructure and assets such as water points, electricity, or gas for cooking, basic household chores are time-consuming. Childcare is another reason. It is also time-consuming when families are large and it is easier to care for children while working in the fields or tending to livestock than in nonfarm jobs. Even in urban areas, women are mainly concentrated in household-based jobs such as agriculture and HEs, not wage jobs. Private wage employment is skewed toward men, even though most of it is in the service sector and only 33 percent is in the traditionally male-dominated sectors

[62] In urban (rural) areas, 38.3 percent (10.6 percent) of men have wage-based jobs, compared to only 16.1 percent (2.2 percent) of women.

[63] In rural areas, about 10.1 percent of men are engaged in HEs as against only 3.2 percent of women (in urban areas, where most HEs are located, the proportion of men and women in these jobs is roughly the same). We draw special attention to rural HE formation here, because it is an important income diversification strategy for escaping rural poverty.

[64] Ministerio Do Género, Criança E Acção Social 2016.

[65] USAID 2015.

of mining, manufacturing, and construction. Across HEs, segmentation by sector is common, with women typically concentrated in lower-earning activities (for example, sewing).

Arguably the main reason women do not get a higher share of wage jobs is the unequal access to education.

As noted earlier, education levels are highly correlated with the job type for both men and women. So, a high disparity in the access to good jobs is closely linked to a high disparity in education attainment levels. In turn, the disparity in education attainment between men and women can be traced to the GBV, early marriages, and pregnancy issues mentioned earlier as well as gender-related disparities in the private costs of education.

Education policy has tried to improve girls' access to education—and it has mostly succeeded in the first five grades of primary school—but women still tend to drop out of school at an earlier age than males.

Country-specific research suggests that there are both demand- and supply-side constraints to enrolling and progressing in school. In terms of demand, and consistent with the international evidence, direct and indirect (or opportunity) costs of schooling are among the most important factors affecting education. First, while there are no tuition costs in primary education, households are required to make significant expenses to attend school associated with additional fees, uniforms, books, and other supplies. In a survey in Sofala, of all the out-of-school children in the sample, 62 percent were reported to be not attending due to financial reasons, including not being able to afford uniforms, books, and materials. Second, indirect costs associated with household responsibilities and early pregnancy, combined with (expected) low returns to education investments, also contribute to dampening demand for schooling. Among women ages 15–25, as many as 40 percent report pregnancy or marriage and related household responsibilities as the main reason for leaving school early. In addition, consultations with stakeholders suggest that limited economic opportunities contribute to reduced investment in girls' human capital. Finally, in terms of supply, a shortage of schools, especially secondary education, also constitutes a barrier to enrolling and progressing in school. For every eight schools offering grades 1 to 7, there is only one offering grades 8 to 12, making distance to schools a key constraint to access secondary education, especially in rural areas.

Cash transfers. There are a number of ways to reduce the private costs of education and provide incentives to vulnerable households so that they invest more in women's education. One way is through the introduction of CCTs, which have been widely tested around the world and are often found to be effective in increasing school participation. Programs that pay for school fees or provide cash (or in-kind) transfers have proven effective in increasing girls school enrollment. Traditionally, these transfers have been channeled through the parents, but recent studies and pilot programs in other countries have shown that such cash transfer programs may be even more effective if channeled through the girls directly. Whether it is preferable to provide such transfers in a conditioned or unconditional manner is still being studied.

Information campaigns. Information campaigns aimed at parents and students can play an important role in shaping aspirations and motivation to learn and stay in school. The most vulnerable populations often underestimate the return to education and end up making poor decisions regarding marriage, childbearing,

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[66] World Bank 2018b.

[67] Roby, Lambert, and Lambert. 2009. See also UNICEF 2014; Van der Berg, da Maia, and Burger 2017

[68] In Mozambique, uniforms are the single item associated with the largest out-of-pocket school expenditure, representing approximately 30 percent of direct school costs.

[69] For example, a recent study on adolescent girls in grades 6 and 7 in the province of Manica showed that giving monetary incentives to parents if their daughter stays in school increased attendance by almost 10 percent.

[70] Before any of these considerations come into play, however, it will also be necessary to reform the payments system in Mozambique so that it can handle cash transfers more efficiently. An ongoing World Bank-supported social protection project is encountering disbursement difficulties for its cash transfers on account of institutional problems associated with the payments system. A World Bank team is exploring ways to make the transfers more effective, including through a pilot program based on the use of mobile telephones.

and education. Programs to address these perception gaps have been found to change behavior at low cost (for example, in Madagascar).

Reducing travel times. Studies have shown that longer walks to school tend to reduce school attendance for all, but this is particularly hurtful for teenage girls in secondary education. They often find it difficult to travel far, where they may have to face community disapproval or heckling or be at serious risk of violence. In several countries (for example, Afghanistan and Burkina Faso), the introduction of village-based schools has been successful in raising overall attendance rates, particularly among girls, thereby helping to close the gender gap.

Programs to provide bicycles to secondary school girls (as done in India) have also proven effective in reducing travel time and increasing girls' enrollment.

Recapturing dropout girls. Once a student leaves school, the probability of reenrollment diminishes rapidly over time. Girls who leave school due to early pregnancy or marriage are unlikely to reenroll in general education, even with the support of specific programs. However, programs that focus on technical, business, and life skills and offer job placement services (such as were introduced in Liberia) have proven to be effective in helping girls reenter the job market and reduce the costs of their earlier decision to leave school.

Increasing the ratio of women teachers. The presence of women in schools has a positive impact on girl retention and achievement. Women teachers provide a female role model to encourage girls to complete their studies and they can protect girls from unwanted attention of boys or male teachers. Women teachers are also in a better position to understand the particular issues facing adolescent girls and advocate on their behalf by representing their personal needs and promoting a more girl-friendly learning environment. In Mozambique, the ratio of female to male teachers is almost even at the lower-primary (EP1) level but then drops to 4 in 10 at the upper-primary level and to less than 3 out of 10 for the lower-secondary level. Half of the schools do not have any women teachers in the upper-secondary level.

- Recommendation 5.A.1: Foster greater inclusion of women in the jobs transformation process review and assess the effectiveness of different programs to increase the retention of teenage girls in the school system and then initiate pilot projects to test their impact in Mozambique.

B. GREATER GEOGRAPHIC CONNECTIVITY

The other major group of excluded individuals from the jobs transformation process is rural residents, who suffer from limited geographical connectivity. In particular, there are indications that the disparities in access to basic infrastructure have been increasing over the last decade, both across regions and across the urban/rural divide. The lack of connecting infrastructure across regions in Mozambique has meant that economic growth is mainly concentrated in Maputo and a few secondary cities and has bypassed most rural areas. Greater focus on developing growth poles and expanding growth corridors and secondary towns may help bring about more balanced growth.

A positive relationship between economic growth and urbanization is well-known and complements our understanding of the jobs transformation process as countries develop. Recent research on spatial development, however, suggests that this relationship is not the same for developing and developed economies. For example, Frick and Rodriguez-Pose (2017) have shown that while the relationship between growth and urbanization is robustly positive for developed countries, it is not significant for developing

[71] An analysis reported in World Bank (2019f) found that the provinces with the lowest access to basic infrastructure in 2009 were also among the least well-funded in subsequent years. Also, capital investment in roads, which represents the largest item in the public investment program is skewed toward urban areas.

countries and may even be negative. These findings suggest that other factors besides agglomeration economies affect the relationship between urbanization and growth.

A similar finding has also been made with respect to the relationship between urbanization and poverty reduction. In particular, Christiaensen and Todo (2013) found that the expansion of intermediate or secondary cities has a larger effect on poverty reduction than the urbanization of the biggest cities. What may explain this result is that even though secondary cities enjoy fewer agglomeration economies than the biggest cities, they also enjoy deeper links to the rural countryside, which has the highest poverty rates. In other words, even though the biggest cities exhibit a faster rate of growth, secondary cities have a higher growth elasticity of poverty reduction due to their deeper links to rural areas, which more than compensates for the growth difference. This suggests that growing secondary towns may do more to alleviate rural poverty than cities in the early stages of development, while cities dominate in the later stages.

The relatively low growth elasticity of poverty reduction in Mozambique is largely due to the highly concentrated pattern of growth. That is, the fast growth experienced over the last decade has disproportionally benefited the upper deciles of the income distribution in urban areas. Mozambique is now among the most unequal countries in Sub-Saharan Africa, having seen its Gini coefficient increase from 0.47 in 2008 to 0.54 in 2014.

Various factors explain the unequal distribution of growth, including the very capital-intensive, enclave nature of the fast-growing mining sector, which has been the main driver of growth in recent decades. Another is the disparities in access to basic infrastructure, which have been growing between rural and urban areas and are especially pronounced in the rural parts of Mozambique's central and northern provinces. This is most evident in the roads sector and is linked to a pattern of public investment that underemphasizes funding to rural areas in northern and central zones, contributing to a decline in rural connectivity.

- Recommendation 5.B.1: Building on the new public investment management regulations and the requirement by the government to prepare and publish a list of appraised projects, prepare a Public Investment Review. This review would pay special attention to identifying basic infrastructure gaps across regions and urban/rural areas while keeping an eye on the social rates of return. Focus on secondary cities as nodal points between the rural areas and the capital city.

  Based on the findings of the Public Investment Review, the government would be advised to set specific targets for reaching underserved areas in the government's five-year economic and social investment plan as well as update its budget allocation formulas to account for gaps in access. In parallel, the government is also advised to strengthen municipal revenue mobilization capacities, thereby freeing up central government resources for rural areas.

[72] A complete rebalancing of investment funds across rural-urban areas would constitute a mixed blessing, however. World Bank simulations based on a computable general equilibrium model shows that increasing the urban per-capita allocation of investment resources, at the expense of the rural allocation, would have the benefit of raising urban GDP and promoting faster growth in the industry and services sectors, thereby accelerating the structural transformation. However, it would also bring about a worse outcome for rural residents and the urban poor (due to higher food prices). (World Bank 2019f, 37–39).

[73] The rest of Mozambique's public investment program appears to show a better balance between urban and rural areas, possibly reflecting progress in achieving access to rural water, electricity, and health.

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ANNEX A: MOZAMBIQUE: STRATEGIC JOBS POLICY MATRIX

TABLE 2

Jobs Outcomes	Recommended Action	Milestones	Time Horizon	Lead Agency
Strategic Pillar 1: Strengthening Macroeconomic and Public Sector Management				
A. Strengthened Macroeconomic and Public Sector Management	• 1.1: Maintain macroeconomic sxtability through a program of fiscal consolidation and debt reduction, monitored with multilateral support. This program must include a strategy for avoiding or cushioning the impact of real exchange rate appreciation associated with the projected increase in O&G export revenues. • 1.2: Implement a program, with World Bank/donor support, to build public sector capacity in PFM, develop an MTEF, and strengthen the Ministry of Finance's capacity to appraise, evaluate, and prioritize public investments within SNIP.	• Declining trajectory of debt-to-GDP ratio • Stable real exchange rates • Completion of a Country Financial Accountability and Procurement Assessment Report (CFAPAR) and implementation of key recommendations • Adjusted fiscal policies in line with the MTEF	ST MT	MEF BOM MEF
Strategic Pillar 2: Boosting Job Creation in the Formal Sector				
A. Improved Economywide Competitiveness	• 2.A.1: Carry out a systematic review of Mozambique's Doing Business indicators and develop a business simplification plan with IFC support based on best-practice procedures applied in peer countries. • 2.A.2: Establish a Commission for Cross-Sectoral Business Reform, possibly through the government/CTA platform, to review all laws/regulations that impede private sector competition and undermine profitability. • 2.A.3: Create a public-private sector OPSO to review complaints of unreasonable targeting of companies about inspections, fines, taxes, and other actions. • Recommendation 2.A.4 Ensure the creation of the Competition Authority, with assignment of public budget and appointment of officials for its board and technical staff to meet the demands of the competition mandate and create the accompanying legislation.	• Created a one-stop window for business registrations • Eliminated or updated a law/regulation deemed unnecessary by the commission. • OPSO has been created and provided with a budget.	MT MT MT	MIC MIC CTA MIC CTA MIC

Jobs Outcomes	Recommended Action	Milestones	Time Horizon	Lead Agency
B. Improved Labor Market Performance and Strengthened Social Protection	• 2.B.1: Prepare and implement legislation to extend the probationary period, during which severance pay stipulations do not apply, from the current 3 months to at least 6 months and preferably 12 months, to give employers better opportunities to assess worker quality, especially of recent graduates entering the labor market. • 2.B.2: Prepare a stepwise program (a) to unify and revise minimum wages in a way that combines a transparent formula to ensure that the minimum wage remains aligned with labor productivity, with a consultation process that takes the formula as an informed starting point, and (b) to reduce the steep progression in severance payments per the number of years worked. Coordinate the implementation of this program with the implementation of a new workers' social protection system; see Recommendation 2.B.4). • 2.B.3: Continue discussions on the appropriate labor legislation for Mozambique through the established consultative mechanism, giving special attention to the regimes relevant for the hiring and dismissal of seasonal workers, the hiring of foreign workers, and looking to foster greater inclusiveness of women in the labor force. • 2.B.4: Design and discuss through the established consultative system a strategy to strengthen and expand Mozambique's social protection system in exchange for reforms (for example, reduced severance payments and lower minimum wages) intended to raise labor market flexibility.	• Presented waiver legislation to Congress • Prepared review of jobs outcomes for youth in response to the legislation • Significant reduction in the dispersion of minimum wages across sectors • Prepared a social protection system expansion strategy	ST/MT MT/LT MT/LT MT LT	MITESS MITESS CTA MITESS Ministry of Gender, Children, and Social Action (MGCAS) Institute of Social Action (INAS)

Jobs Outcomes	Recommended Action	Milestones	Time Horizon	Lead Agency
C. Accelerated MSME Growth with Developed Links	• 2.C.1: Identify the SMEs that show promise of achieving 'certified supplier' status in the O&G sector and negotiate a links program with the lead O&G companies to have them reach this status as well as support for certification through a dedicated program. • 2.C.2: Identify reforms and support needed to boost IPEME's institutional capacity and focus its activities on providing basic support services (for example, basic management training, access to credit facilities, and coordination with NGOs) to the smaller firms on the MSME spectrum. • 2.C.3: Create a Registry of Domestic Producers and Foreign Investors and develop procedures that require all public tender notices to be made available to the registered firms. • 2.C.4: Expand Mozambican capacity and competitiveness in food production to satisfy the consumption requirements of personnel working in the expanding O&G sector through the following actions: o Conduct a study to ascertain food or catering requirements in the O&G sector. o Assess the competitive advantage of the most efficient international producers capable of satisfying the large enterprises and urban market consumers' requirements to establish the level of support that would be needed to sustain import substitution activities in the sector. o Design a package of time-bound incentives (for example, through domestic preference margins that decline over time), in collaboration with the MEF and BOM, for government approval. • 2.C.5: Conduct a study of the demand for different foods and ancillary services in response to the rapid income growth expected over the next two decades and develop a plan to facilitate the transition of Mozambique's food system in line with the projected evolution of consumption patterns.	• Increase in the number of SMEs achieving 'certified supplier status' • Completed study and initiated IPEME capacity-building activities • Established a Registry of Producers and Investors • Completed study to ascertain food requirements for O&G sector • Completed assessment of the level of support needed to sustain import substitution activities in the food sector • Introduced a system of time-bound incentives to promote import substitution in the O&G sector • Increased the domestic share of total intermediate input purchases in the O&G sector • Completed demand study and prepared policy strategy for the food system	LT MT ST ST ST MT LT MT/LT	MEF MIC IPEME MEF MIC MIC MIC MIC MIC

Jobs Outcomes	Recommended Action	Milestones	Time Horizon	Lead Agency
Strategic Pillar 3: Boosting Job Productivity in the Traditional Sectors				
A. Expanded Access to Finance	• 3.A.1: Strengthen the capacity of community-based savings and credit associations through technical assistance and promote their expansion, especially those supported through IFAD-financed programs that have demonstrated a positive impact on the development of smallholder rural activities. This action could be coordinated by the MIC, in collaboration with MADER, IFAD, and other donors. • 3.A.2: Review and assess the experiences with various nonconventional financing instruments applied in Mozambique and elsewhere, including (a) efforts to increase domestic access to finance through catalytic funds, matching grants, and targeted guarantee funds; (b) the Lima-Links system in Zambia; (c) the use of e-money applications; and (d) nonbank financing options that target the agricultural sector. Seek to expand the most promising of these non-conventional financing vehicles based on the lessons from this review. • 3.A.3: Regularly prepare a publication, website, or radio program to promote awareness of the range of financial services available to different agricultural operators, from smallholders to large agribusinesses. This publication/radio program could be sponsored by the MIC in collaboration with the CTA, NGOs, and microfinance umbrella organizations.	• Carried out a review of existing community-based financial associations in Mozambique and presented a set of best-practice policies	ST	MIC
		• Completed a review of experiences with nonconventional financing instruments with recommendations on the most promising vehicles	MT	MIC
		• Government convened development partner agencies to forge agreement on concentrating financial resources on this financing vehicle.	MT	MIC BOM
		• Regular media dissemination informing rural sector operators of financing opportunities (see also 2.C.1)	ST/ MT	MIC MASA

Jobs Outcomes	Recommended Action	Milestones	Time Horizon	Lead Agency
B. Expanded Access to Productivity-enhancing Agricultural Technologies and Inputs	• 3.B.1: Implement an effective MIS by developing programs for community radio programs to provide price and other relevant information generated by trading companies, NGOs, farming associations, and the government, drawing on various national and international experiences with similar programs. • 3.B.2: Promote the modernization of the agriculture sector by enabling smallholders to link up with larger firms through aggregator arrangements. To accomplish this, begin by reviewing the aggregator experiences offered by the commercial farming sectors and the MAAP as well as the experiences with ICT products developed for smallholders (for example, to enable e-money payments). • 3.B.3: Develop a strategy to clear the backlog of IVA reimbursements and process future reimbursements in a more expedited manner. Meanwhile, simplify the tax registration system for smallholders to enable aggregator companies to deduct purchases in the calculation of the IVA. • 3.B.4: Strategically expand extension services with improved technologies in areas with good agricultural potential that are not being attended to by private agribusiness value chains by (a) strengthening research-extension links through clear agricultural research priorities attuned to the needs of different farmers, (b) increasing the number of extension officials in the areas of agronomy, veterinary science and aquaculture, (c) designing extension interventions (including in climate resiliency) for areas demonstrating the least progressive practices and agricultural potential, and (d) drawing up an annual Extension Master Plan involving all stakeholders.	• Developed a program based on community radio to provide market information from a wide range of sources (see also 2.A.3) • Completed report that reviews the aggregator experiences offered by the commercial farming sectors and MAAP • Completed report reviewing the commercialization system used by the Commodities Exchange and the Mozambique Cereal Institute to promote the sale of agricultural products • Introduced a simplified tax registration system for smallholders to allow aggregator companies to deduct purchases in the calculation of IVA • Reduced reimbursements backlog	ST ST ST ST/MT ST/MT ST/MT	MIC MIC MIC MEF MEF/ MIC MASA/ PRONEA NGOs

Jobs Outcomes	Recommended Action	Milestones	Time Horizon	Lead Agency
	• 3.B.5: To expand the availability and adoption of improved inputs, (a) promote the local production (mainly packaging/blending) of nationally available fertilizers, support IPM and the safe use of agricultural pesticides, and reinforce the local capacity to produce local animal vaccines for the main diseases; (b) develop, jointly with the private sector, appropriate input packages in accordance with targeted regions in coordination with the programmed expansion of extension services; (c) promote the expansion of community shops for improved inputs (fertilizers, seeds, and so on) by improving their competitiveness through, among others, the substitution of directly donated inputs by less distortive voucher schemes; (d) improve the effectiveness and efficiency of the machinery park program by organizing producers better; and (e) simplify bureaucratic procedures to gain access to irrigation, imported inputs, and fuel/electricity subsidies by farmers, especially smallholders.	• An Extension Services Master Plan has been prepared and is being updated on an annual basis. • Government developed a monitoring and evaluation system to evaluate progress in the execution of the Master Plan. • PRONEA's operating budget has been expanded in line with expanded responsibilities. • Appropriate input packages have been defined, by region, to accompany the expansion of extension services. • At least 10 community shops are operating in different rural areas • A simplified set of procedures to gain access to irrigation and inputs has been prepared for smallholders	ST ST/MT MT ST/MT MT	PRONEA MEF/ PRONEA MASA/ PRONEA MASA MASA
C. Expanded Access to Public Infrastructure	• 3.C.1: Identify the main transport routes that are in urgent need of rehabilitation (especially national roads network) and expand the rehabilitation, reconstruction, and upgrading of rural roads, with special emphasis on regions adversely affected by floods, droughts, and cyclones. Performance-based maintenance methods that involve the local communities to create microenterprises and empowers them to have a stake in their roads should be expanded. This will help bring large-scale employment and improve the quality of the road infrastructure.	• Government prepared a road rehabilitation plan that serves to measure progress in program implementation.	ST	RF ANE

Jobs Outcomes	Recommended Action	Milestones	Time Horizon	Lead Agency
	• 3.C.2: Review EDM's price setting behavior and publish clear guidelines for setting future prices.	• EDM has published and disseminated its energy pricing schedule.	ST	RF ANE
	• 3.C.3: Review and revise the government's national irrigation plan and the legal framework governing the management responsibilities by users of public irrigation systems, including the relevant legislation for PPPs in irrigation.	• A revised national irrigation plan has been presented.	ST MT	EDM MIC MASA
Strategic Pillar 4: Ensuring Adequate Human Capital and Skills Development				
B. Improved TVET System and Greater Investment in Life Skills	• 4.B.1: To improve the development of skills and enable a faster jobs transformation, implement the reforms initiated in the technical and vocational training system so that it takes better advantage of private delivery mechanisms and becomes more responsive to firms' training needs.	• Developed restructuring plan for IFPELAC • Implemented restructuring of IFPELAC	MT MT MT	MIC/ MITESS MIC/ MITESS IFPELAC
	• 4.B.2 Develop a program of business services support through INEP/IFPELAC, in collaboration with foreign construction companies, to put in place an apprenticeship program and to develop subcontracting skills. Direct INEP/IFPELAC to team up with firms in the O&G sector to develop training programs geared toward developing Mozambique's supplier capacity to expand local content in the future.	• IFPELAC and O&G sector representatives sign cooperation agreement on core training activities	MT	
	• 4.B.3: Review the experience with youth training programs in other developing countries, especially in the area of soft skills development, with a view to incorporating key elements of those programs into the proposed work experience programs in secondary schools to get graduates job ready. (See Rec. 4.A.2)	• Completed a review of soft skill development program in other developing countries and prepared an action plan to incorporate key elements of such programs into the job readiness programs introduced in the upper-secondary curriculum		MINEDH INEP/ IFPELAC

Jobs Outcomes	Recommended Action	Milestones	Time Horizon	Lead Agency
Strategic Pillar 5: Fostering Greater Job Inclusiveness				
A. Greater Jobs Participation of Women	• 5.A.1: Foster greater inclusion of women in the jobs transformation process review and assess the effectiveness of different programs to increase the retention of teenage girls in the school system, and then initiate pilot projects to test their impact in Mozambique.	• Developed restructuring plan for IFPELAC • Implemented restructuring of IFPELAC	ST MT	MINEDH MINEDH
B. Expanded Geographical Connectivity	• 5.B.1: Building on the new public investment management regulations and the requirement by the government to prepare and publish a list of appraised projects, prepare a Public Investment Review. This review would pay special attention to identifying basic infrastructure gaps across regions and urban/rural areas, while keeping an eye on the social rates of return. Focus on secondary cities, as nodal points between the rural areas and the capital city.	• The government's 5-year development plan contains specific infrastructure targets to reach underserved areas. • The government's budget allocation formulas have been updated to take account of gaps in access.	MT MT	Economic Cabinet Economic Cabinet

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