BOTSWANA LABOR MARKET SIGNALS ON DEMAND FOR SKILLS
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BOTSWANA LABOR MARKET SIGNALS ON DEMAND FOR SKILLS
Outputs of the “Skills for Economic Growth and Diversification in Botswana” analytical work:

Policy Note 1: “Raising Botswana’s Human Resource Profile to Facilitate Economic Diversification and Economic Growth”

Policy Note 2: “Labor Market Signals on the Demand for Skills”

Policy Note 3: “Skills Needs of the Private Sector”

Policy Note 4: “Skills Implications of Botswana’s Diamond Beneficiation Strategy”

Summary Report
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## Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
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<tr>
<td>BOTA</td>
<td>Botswana Training Authority</td>
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<tr>
<td>CSO</td>
<td>Central Statistics Office, Republic of Botswana</td>
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<tr>
<td>EESB</td>
<td>Employer and Employee Survey in Botswana (2010)</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>HIES</td>
<td>Household Income and Expenditure Survey</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<tr>
<td>LFS</td>
<td>Labor Force Survey</td>
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<td>LSE</td>
<td>Lower Secondary Education</td>
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<tr>
<td>MoESD</td>
<td>Ministry of Education and Skills Development, Botswana</td>
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<tr>
<td>MoFDP</td>
<td>Ministry of Finance and Development Planning</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>NDP</td>
<td>National Development Plan</td>
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<tr>
<td>TVET</td>
<td>Technical and Vocational Education Training</td>
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<td>USE</td>
<td>Upper Secondary Education</td>
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*All dollar amounts in U.S. dollars unless otherwise indicated.*
Context of the Study

Human development is one of the pillars of Botswana’s Country Partnership Strategy with the World Bank (2009–13). The Country Partnership Strategy is in line with Botswana’s “Vision 2016,” which, in terms of human development, envisions the transformation of Botswana to “an educated and informed nation” and to “a prosperous, productive and innovative nation” as two key cornerstones of the strategy. In line with these objectives, the World Bank with support from the Ministry of Education and Skills Development (MoESD) embarked on analytical study entitled “Skills for Economic Growth and Diversification in Botswana.” The work is informed by Botswana’s need to diversify its economy to facilitate stronger, more sustainable economic and employment growth and, concurrently, equip its workforce with a variety of skill sets that meet employer needs.

The objective of the exercise is to provide the government of Botswana concrete suggestions for policy interventions that strengthen the skills base of the workforce and thus facilitate economic growth, diversification, and employment. The recommendations offered by this and the other notes that make up the study, are based on analyses of available data and international best practices. Four policy notes were developed, each of which touches on crucial aspects of strengthening the country’s skills base: “Raising Botswana’s Human Resource Profile to Facilitate Economic Diversification and Growth” (note 1), “Labor Market Signals on the Demand for Skills” (note 2), “Skills Needs of the Private Sector” (note 3), and “Skills Implications of Botswana’s Diamond Beneficiation Strategy” (note 4). The key findings and recommendations of these four notes were then integrated into a short Summary Report.

The first note assesses the strengths and weaknesses of Botswana’s education system (i.e., basic, technical and vocational, and higher education) and recommends policy interventions to strengthen students’ acquisition of relevant knowledge and skills. The second note examines both current labor and skills demand (based on available labor market data) and expected skills demand (based on the government’s economic strategies). On the basis of this analysis, it makes recommendations on skills development and government programs. The third note uses the findings of an employer-employee survey conducted in Botswana in 2010 to identify skill needs and gaps from the viewpoint of the private sector. The last note examines the skills demand implications of the government’s diamond beneficiation (processing) strategy and suggests actions that can be undertaken to ensure that the nation’s skills base supports, rather than hampers, implementation of the strategy.
1. Introduction

Botswana has an official unemployment rate of 17.8%. The low labor-intensity of growth is a potential explaining factor for this high level of unemployment. If most of the economic activity is concentrated in highly capital-intensive sectors, part of the working population is bound to stay unemployed. But the persistent unemployment may also be due to a lack of skills in the workforce, which prevents the development of a strong, labor-intensive non-mining sector able to absorb a larger share of the workforce. It is thus essential to analyze the role of education and training in the access to employment.

This note finds that the role of education has changed under the effect of schooling expansion and persistent unemployment. Access to education increased rapidly over the past decades. Data analysis shows that it is an essential determinant of the access to jobs and of the income level. However, the high level of unemployment resulting from the weight of capital-intensive economic sectors distorts the returns to education. An increasing share of unemployed workers has secondary education, and the monetary returns to secondary education seem to have decreased over the past decade. The average reservation wage may have increased as a result of better education, which may lead to wait unemployment.

The quality of secondary and tertiary education appears to be a matter of concern, as well as the lack of vocational training. Although the number of educated workers has increased, the set of skills they actually command does not always compare favorably to other similar middle-income countries. The country is lagging behind in terms of on-the-job training, which hinders the capacity of firms to generate the adequate skills in the workforce.

Labor market institutions appear to have a limited impact on employment and wage levels, while the importance of active labor market programs is growing. Wage setting mechanisms have been fully liberalized, labor unions are weak. Labor market programs, initially concentrated on rural areas, are increasingly targeting SMEs and training. The Government is putting the emphasis on the creation of skilled workforce, diversification of the economy, and strengthening of the private sector. Pursuing this paradigm, the national development plan for 2003–08 (NDP9) focused on diversification and labor-intensive growth, and the current plan (NDP10) aims at enhancing competitiveness through strengthening human resources and building a knowledge-based economy. The attainment of skilled manpower is envisioned to be achieved through continued investment in education and training, with increased emphasis on the needs of the private sector.

This note aims to identify labor market signals that point to demand for specific current and future skills. Specifically, the note seeks to answer the following questions: Does the labor market place a higher premium on workers’ literacy and numeracy skills, technical skills, or behavioral skills? Is the labor market more in need of secondary or tertiary education graduates? Will growing economic sectors (e.g., tourism) benefit more by increasing the supply of sector-specific skills (e.g., through specific training for tour guides and hospitality staff) or general skills (e.g., through training of lawyers and accountants who can be absorbed in any sector of the economy)?

This note analyzes the following data and documentation to identify labor market signals in the Botswana economy:

- **Government economic growth and diversification strategies.** The economic sectors and subsectors that the government seeks to expand are examined to understand the skills that are expected to become increasingly in demand over the short to medium term.

- **General labor market data.** Nationwide data on labor market characteristics (e.g., employment and earnings) and the demand and supply of labor are examined for the broad signals they communicate regarding the demand for various levels of education in particular sectors. The larger share of this information is derived from two national Labor Force Surveys (LFS) carried out in Botswana in 1995–96 and 2005–06; two Household Income and Expenditure Surveys (HIES) conducted in 1993–94 and 2002–03; and the Informal Labor Force Survey conducted by the Central Statistics Office in 2007. In addition, International Labor Organization’s Key Indicators for Labor Markets (KILM) are also utilized.

- **Enterprise and employee surveys.** Several recent surveys provide in-depth information on how employers perceive skills constraints, as well as the roles that different skills play in the recruitment and remuneration of employees. In addition to labor market data—which provides basic information on educational attainment—these surveys provide detailed information on the importance of actual skills. The surveys analyzed include the World Bank Enterprise Surveys of 2006 and 2010, together with the employers and employees’ survey specifically designed by the World Bank (2010) to inform these notes.

2. Overview: Skills Gaps and Mismatches

This section provides an overview of important findings on the demand for skills in the Botswana economy. These findings are briefly outlined here, then discussed in detail in the individual sections that follow.

**Employers perceive skills gaps and mismatches as the most important constraint to doing business**

The number of employers citing insufficient skills as their most important constraint has grown steadily over the past five years. Larger firms in particular, identify inadequate skills as a constraint, as do medium-sized, and foreign-owned. Nonretail service firms also cite skills as a constraint. Given that the service sector generated 45.2 percent of gross domes-

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A mismatch between available skills, expectations, and labor demand is evident

There are substantial observed differences between minimum educational requirements by employers for staff in various occupations and the much lower actual educational attainment of those workers. This finding appears to indicate both mismatches between the demand for and supply of skills in the labor market and unrealistic employer expectations of workers’ educational attainment.

This mismatch also appears borne out by the considerable time that firms require to fill vacancies, despite high unemployment.

Unemployment is growing among workers with secondary education, indicating poor educational outcomes and a high reservation wage

There has been a clear shift in the educational attainment of the unemployed in Botswana over the past decade, with educated workers becoming unemployed in greater numbers, particularly those who have completed lower and upper secondary education. Whereas unemployment among lower secondary graduates is likely of greater immediate concern, it appears that the unemployment problem may be moving upward on the skills chain. At the same time, unemployment among the uneducated and workers with primary education has fallen.

Earnings data highlight decreasing returns to both lower and upper secondary education (LSE and USE, respectively), an indication that either the demand for skilled labor demand is not keeping up with the growth in supply or that secondary graduates do not possess the skills sought by employers. At the same time, the high rate of unemployment among USE and, increasingly, USE graduates, implies that these two groups may need to adjust their earnings expectations—that is, reduce their reservation wages.

Demand for workers with tertiary education is high and increasing

While little information is available on the labor outcomes of workers with tertiary education, rates of return to tertiary education are high and increasing. This may imply a large and growing demand for workers with tertiary education relative to supply, or it may represent both excessive employer demand and/or inadequate skills among secondary education graduates.

Firms of all sizes value personal characteristics and basic literacy, numeracy, and communication skills more highly than job-specific skills

The relatively low value that surveyed employers attach to vocational skills compared to personal characteristics and general job skills indicate a low level of both basic and behavioral skills among the workforce. This finding indicates that employers in Botswana highly value behavioral skills, which include job attitudes, communication, team work, and problem solving. It also implies that these skills are not being adequately taught at the primary and secondary levels. No firm that participated in the 2010 Employer and Employee Survey in Botswana listed a job-specific skill among the top five skills that they considered most important for either managers or skilled workers. However, job-specific skills become more important for relatively larger firms.

Nevertheless, temporary postsecondary TVET graduates are in great demand by firms of all sizes

Workers with this type of education comprise the largest group of temporary workers in both exporting and non-exporting firms, comprising half of all workers recruited on temporary contracts. They are particularly in high demand by large firms, where they comprise three quarters of temporary hires. Small and medium firms have a more diverse temporary recruitment pattern that also includes relatively large shares of hires with lower, upper secondary, and general tertiary education. The next largest groups of short-term hires are workers with tertiary technical and upper secondary education (14 percent and 13 percent, respectively). Non-exporting firms appear to have a stronger need for temporary workers with postsecondary education than do exporting firms.

3. Growth and Diversification

Strategies: Expected Impact on Skills Demand

Diversification Strategies for Economic Growth

Botswana’s economic diversification and poverty eradication vision is clearly stated in its “Long Term Vision” document, also known as “Vision 2016” (Presidential Task Group 1997). This document calls for new engines of economic growth to reduce the country’s reliance on diamond mining, and higher levels of productivity, employment of skilled workers, and the fostering of technological advantages.

Vision 2016 has been translated into, among other documents, several National Development Plans (NDPs), which outline the government’s main policy guidelines for long-term development. NDP 9 and 10 identify six key hubs to support economic growth and diversification: transport, education, innovation, medical services, agriculture, and the diamond industry (box 1). NDP 10 (2008–09–2014–15) elaborates policies to develop these hubs. To date, diversification policies have mainly focused on the export-oriented manufacture of textiles, leather, glass, and jewellery, as well as the establishment of an International Financial Services Center. Other sectors that the government considers of strategic priority as potential engines of growth include tourism, the small and medium enterprise (SME) sector, the cutting and polishing of gems and precious stones, printing and publishing, and pharmaceutical production.

Implications for Future Skills Demand

Developing and sustaining the priority sectors supported by the hubs requires skills that are quantitatively and qualita-
and mid-level (technicians, clerks) workers. It also strongly
the development of highly skilled (professors, researchers)
population, are comparatively weak. This situation prevents
literacy skills of students, and by extension, the working-age
Diversification and Growth, “ shows that the literacy and nu-
“Raising the Human Resource Profile to Facilitate Economic
fundamental to achieve this goal. Policy Note 1 of this series,
proved levels of literacy and numeracy of the work force are
across-the-board improvements in labor productivity. Im-
diversify mostly into higher-value-added sectors implies
priorities and the labor force demands of a modern economy,
become an increasingly important condition for lifelong pro-
these skills, identified as “behavioral” skills in this paper,
and react appropriately to the changing environment around
ern economy, workers must be able to identify, absorb, process,
ing and the ability to work independently. To succeed in a mod-
high-level jobs, these requirements also include critical think-
communicate and engage in team work is an extremely import-
4
|          Labor Market Signals on Demand for Skills

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Box 1. Six Hubs to Achieve Diversification

The government of Botswana has identified areas of focus for enhanced economic development and growth. Six hubs have been established and are being supported during National Development Plans 9 and 10. These hubs and their respective goals are:

**Education:** to increase the quality and relevance of education at all levels, thereby making Botswana more competitive by attracting leading tertiary institutions, scholars, researchers, and students.

**Innovation:** to create a platform for local and foreign businesses engaged in research and development and knowledge-intensive activities (e.g., ICT), establish an incubator for start-up companies, and facilitate networking among businesses.

**Agriculture:** to encourage participation in farming, mentor farmers on agribusiness skills, and endeavor to commercialize the agricultural sector to make the industry more sustainable.

**Diamond Industry:** to establish a diamond trade center for rough and polished diamonds and promote sustainable downstream diamond processing activities, such as polishing and jewelry making.

**Medical Services:** to identify projects and programs to make Botswana a center of excellence in the provision of healthcare services. Plans include the outsourcing of certain hospitals in an effort to attract specialists and optimize the quality of health facilities.

**Transport:** to reposition the country as a regional hub for rail, road, and air transport, and support a competitive transport and logistics industry in Botswana.

*Source: AfDB (2009).*

|          Labor Market Signals on Demand for Skills

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6 For in-depth reviews of the evolution of skills demand in a variety of developing countries, see, for example, di Gropello (2010 and 2011) and World Bank (2012).

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tively superior to those currently available among Botswana’s workforce. Based on these sectors and their objectives, it can be broadly estimated that demand will increase in particular for the following skills and occupations/professions:

**Literacy and numeracy skills.** Botswana’s strategy to diversify mostly into higher-value-added sectors implies across-the-board improvements in labor productivity. Improved levels of literacy and numeracy of the work force are fundamental to achieve this goal. Policy Note 1 of this series, “Raising the Human Resource Profile to Facilitate Economic Diversification and Growth,” shows that the literacy and numeracy skills of students, and by extension, the working-age population, are comparatively weak. This situation prevents the development of highly skilled (professors, researchers) and mid-level (technicians, clerks) workers. It also strongly impacts the ability of the economy to increase productivity through the use of technology.

**Behavioral skills.** On a basic level, the ability to effectively communicate and engage in team work is an extremely important behavioral skills requirement of modern economies. For high-level jobs, these requirements also include critical thinking and the ability to work independently. To succeed in a modern economy, workers must be able to identify, absorb, process, and react appropriately to the changing environment around them. These skills, identified as “behavioral” skills in this paper, become an increasingly important condition for lifelong productivity—essential in all lines of work and on all levels.

**ICT and entrepreneurial skills.** In light of government priorities and the labor force demands of a modern economy, workers should ideally have at least a basic level of entrepreneurial and ICT skills, with higher levels needed by workers in technical sectors (e.g., telecommunications) and the professions (e.g., managers).

**Technical skills.** Based on the needs of the six hubs and the tourism industry, table 1 presents a list of the type of workers and specific technical skills for which demand is expected to increase. Although not an exhaustive list, the table illustrates some of the key skill sets that will be needed to build and sustain a diversified economy. It distinguishes between three different levels of skills, which are broadly assumed to correspond to education and training levels: “low-level skills” (lower or upper secondary education), “mid-level skills” (upper secondary or undergraduate tertiary education), and “high-level skills” (graduate education, i.e., master’s and doctoral degrees). While there is no clear-cut border between the various levels, the distinctions highlight that a diversified economy requires not only different *types* of technical skills but also skills of varying *degrees of depth* among workers.

It should be noted that table 1 lists only a selection of sector-specific occupations and professions limited to the priority hubs of the government. Additional sector-specific technical skills will be required to develop the additional industries (e.g., printing, publishing, pharmaceutical production) that have also been identified as potential sources of growth. The diversification and modernization of an economy is, moreover, generally accompanied by a large increase in generic technical functions, which require skills in business and facility management, administration, logistics, and legal and financial services. Likewise, workers with a variety of skills and skills levels will be required to improve, operate, and main-
tain a broad range of infrastructure, including roads, railway systems, energy, water, and information and communication technology (ICT) systems.

4. Characteristics of the Labor Force

**Labor participation, employment, and unemployment**

As defined in this paper, the labor force in Botswana consists of individuals of working age who are either employed or actively seeking work ("unemployed").\(^7\) It excludes individuals of working age who do not work or are not seeking work; for example, because they engage in other activities (such as education) or because they do not expect to find employment opportunities that meet their demands or expectations ("discouraged").

Figure 1 shows the broad composition of the overall labor force among the employed, unemployed, and inactive (consisting of both discouraged workers and individuals who are not part of the labor force for other reasons). Given a labor force of 710,600 and a total population of approximately 1.8 million in 2006, the data implies that a working member of the labor force sustains, on average, 3.5 other individuals who are not earning an income (CSO 2011a).

**Figure 1. Composition of the Botswana Labor Force, 2005–06**

| Source: Authors. |

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\(^7\) Unless otherwise indicated, data in this section originates from the Labor Force Surveys of 2005–06 and 1995–96. The term "employed" refers to all those who are working, formally or informally, for pay (in cash or kind) or who are self-employed for profit or family gain.
Although labor force participation is high in Botswana, unemployment is also significant. Among individuals 12 years of age and older who are considered part of the working-age population in the country, 68 percent were in the labor force in 2006. If the working age is narrowed to between 20 and 60 years of age, 80 percent of this group was in the labor force in 2006—a higher share than in surrounding countries. Among individuals who are not in the labor force ("inactive"), approximately half are assumed to be discouraged workers.4 In that same year, 17.5 percent of the labor force was unemployed, a decrease from 21.5 percent in 1995–96.

In terms of employment, approximately 82.5 percent of people over 12 years of age who wanted to work were actually employed in 2006 (this excludes the discouraged workers). Clear gender differences exist: 72 percent of working-age men are employed, compared to 65 percent of women. Employment, and to a slightly lesser extent, unemployment are fairly evenly split between rural and urban areas. A bit less than half of the employed reside in rural areas, a proportion that has remained stable since 1995–96, whereas the majority (57 percent) of the unemployed are located in urban areas. However, underemployment is a more serious issue in rural areas.

Unemployment is comparatively higher among women (19.7 percent and 15.3 percent for women and men, respectively) and the young, particularly the unskilled young. Workers between the ages of 15 and 34 years old make up 72 percent of the unemployed. For the cohort of 20–24-year-olds, unemployment rates are 35 percent. Unskilled youth are even worse off: more than 60 percent of unskilled 15–19-year-olds were looking for but not finding work in 2006 (Siphamba and Okurut 2011).

Despite high unemployment rates, firms take considerable time to fill vacancies, which may indicate that available labor does not possess the skills in demand by employers (World Bank 2010c). The occurrence of high unemployment alongside difficulties in filling vacancies may also reflect inefficient labor allocation mechanisms, such as employment services and career counseling in the education sector.

**Educational attainment of the labor force**

Over the period 1995–96–2005–06, unemployment increased by 2 and 4 percentage points among lower and upper secondary education graduates respectively, while broad unemployment among unskilled workers and primary education graduates fell substantially (which can likely be largely attributed to an improved skills level among workers). Nevertheless, education clearly increases an individual’s employment prospects. Table 2 shows that three times as many individuals who never attended school are unemployed than employed (14 percent versus 4 percent in 2006). Of note, whereas substantially more lower secondary education (LSE) graduates are employed than unemployed (37 percent versus 27 percent), the distribution between the two categories is much closer to equal among upper secondary education graduates (22 percent unemployed versus 26 percent employed).

Equal shares of primary education graduates are also employed and unemployed.

### Table 2. Educational Attainment of Employed and Unemployed Botswana, 1995–96 and 2005–06 (percentage)

<table>
<thead>
<tr>
<th></th>
<th>Employed 2006</th>
<th>Unemployed 2006</th>
<th>Unemployed 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never attended</td>
<td>26</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Primary education</td>
<td>37</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Lower secondary education</td>
<td>37</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Upper secondary education</td>
<td>26</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Higher education</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

Note: not available.
The data columns do not add up to 100 percent because the table does not include data on the employment and unemployment of individuals who were enrolled in education.

Despite high unemployment rates, Botswana workers—particularly LSE graduates—appear to have a rising reservation wage (i.e., the wage that induces them to accept paying employment), which may be a principal cause of unemployment among this group. Better-educated individuals who are able to find remunerative work but refuse it tend to have higher expectations of their earnings capacity, as well as a household or public safety net that allows them to remain without personal earnings for a longer period of time while they queue for jobs.9 By contrast, individuals without education often cannot afford to reject available job opportunities. The government is cognizant of the phenomenon and this has been mentioned at high levels including by the Minister of Finance and Development Planning (MoFDP).

One can conclude that the rising share of the better-educated among the unemployed is partly due to the greater supply of these workers (i.e., LSE and USE graduates) relative to job opportunities and partly to increased unemployment among the better educated. This raises a major concern that secondary education, particularly lower secondary education, may not be providing students the quality and content of skills useful for employment.

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9 Strong representation of workers with a certain level of education among the employed implies that there are relatively many options for individuals with this education level to work for a remuneration that is acceptable to them. In other words, by working (either formally or informally, as employee or as self-employed) these individuals can earn income (whether monetary or in kind) that make it worthwhile to work compared to other options (e.g., leisure, education) available to them. Overrepresentation of workers with a certain level of education among the unemployed implies that there are relatively fewer acceptable options available to these workers. This does not necessarily imply that there are no earnings opportunities at all, but that there are relatively few acceptable options. For example, workers with a secondary education or greater make up only 42 percent of the labor force in Egypt, but they account for 80 percent of the unemployed (World Bank 2008).
5. Employment and Earnings Patterns

Employment by sector

Employment by major economic sector in Botswana in 2006 was as follows: agriculture (30 percent), wholesale and retail trade (14 percent), and public administration (11 percent). Together, these three sectors employ more than half of the country’s workforce (either formally or informally). Other sectors that provide substantial shares of employment include education, manufacturing, and construction. Of these relatively large sectors, only agriculture and wholesale and retail trade have increased their share of total employment in recent years. Real estate, transport, and communication have also increased their shares, but the share of total employment of all other economic sectors has decreased (figure 2).

![Figure 2. Comparison of Employment by Industry 1995–96 and 2005–06 (percentage)](image)


Note: Figures includes formal and informal employment.

Public and private sector employment, formal and informal

The balance of employment in the country is in the private sector, with the largest share of workers employed in traditional (i.e., subsistence) agriculture. The past two Labor Force Surveys (1995–96 and 2005–06) show a substantial increase in the share of employment in the formal private sector and a decrease in both public and informal sector employment.10 The increase in agricultural employment from 9 percent in 1995–95 to 27 percent in 2005–06 cannot be clearly attributed to a certain policy change. Given that agricultural earnings have been two to three times less than worker earnings in the second-lowest-paying sector (commerce or community and personal services) since 1985,11 this difference may indicate that agriculture has become the economic sector of last resort for unemployed workers. It would seem that the sector is absorbing excess labor from the industrial and services (both formal and informal) sectors.12

Salaried and non-salaried employment

In line with the tripling of the number of individuals working on family farms (from 9 to 27 percent) the share of salaried employment in the economy fell by almost 25 percent from 1995–96 to 2005–06. Figure 3 shows that 60 percent of workers in 2005–06 were paid employees, followed by 24 percent who gained earnings from their own farms and/or lands (24 percent). Much smaller shares of workers were self-employed (with or without employees) and unpaid workers in their own households.

![Figure 3. Salaried and Non-salaried Employment, 1995–96 and 2005–06](image)


The increase in the share of what tend to be low-earning jobs at the expense of more preferable paid jobs supports the assumption above that subsistence agriculture has become the sector of last resort at a time when growth in better employment opportunities has not kept up with the growth of a more educated, and presumably more skilled, workforce. It should be noted that government income-support programs in agriculture, including the Labor-Based Drought Relief Initiative and the Labor-Intensive Public Works Program, may be perpetuating employment in subsistence agriculture. These programs seek to supplement the incomes of poor rural residents and create productive or socially useful activities; they operate mainly during the off-farm season, but have also been deployed during drought periods (Siphambe and Okurut, 2011).

Although commendable steps to support more vulnerable segments of the population, these government initiatives—particularly the long-running Labor-Based Drought Relief Initiative established in the 1960s—can inadvertently trap individuals in a low-level equilibrium of low-paying jobs. These programs need to be revisited in order to direct government resources into activities that have greater potential to generate alternative employment and income in the agriculture sector, for

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10 When parastatal employment in included, the public sector becomes the second largest employer, providing work to a bit less than one quarter of all workers. (Parastatals include a wide range of enterprises/semi-autonomous entities owned at least 50% by the Government, either profit making or non-profit making.)

11 The nominal average monthly earnings in agriculture in Botswana is 883 pula, compared to 1,804 pula for community and personal services and the 2008 national monthly earnings average of 3,990.

12
instance, by expanding support for the use of more sophisticated technology in crop production and livestock cultivation.

**Earning patterns by education level**

Using education as a proxy for skills level, the LFS of 1995–96 and 2005–06 and the HIES of 1993–94 and 2002–03 reveal that education is the key determinant of being employed in skilled occupations, with higher education a more significant determinant than upper secondary education. Unsurprisingly, higher levels of education are associated with higher earnings.

The rate of return to tertiary education has more than doubled from 1993–94 to 2002–03, from 11 to 24 percent, while that of upper secondary has plunged from 36 to 8 percent, and lower secondary, from 26 to 15 percent, implying that a downward adjustment process is occurring in which demand is less strong relative to supply for secondary education graduates. The high rate of return to tertiary education relative to primary and secondary education (9 percent for primary, 15 percent for LSE and 8 percent for USE) in 2003 appears to indicate the primary and secondary education are not delivering the skills needed by employers, as well as an imbalance in the demand for and supply of workers with secondary education (figure 4).

**Figure 4. Returns to Education in 1993–94 and 2002–03**

![Graph showing returns to education](image)

**Source:** CSO (1995 and 2004).

While the data in figure 4 should be interpreted with caution, the figure supports the need to improve the quality of education, particularly at the primary level, but also at the secondary level. It is difficult to determine whether the high and increasing returns to higher education imply that the labor market would benefit from a rise in the supply of labor with this level of education, or whether improving the quality and relevance of secondary education would deliver workers with the skills in demand on the labor market.

Finally, there is a substantial wage compression in the public sector. For lower-skilled workers, the public sector tends to pay better than the private sector, a situation that has the likely unfortunate impact of increasing the reservation wage of low-skilled Botswana workers, and thus encouraging greater unemployment.

**Employment patterns of expatriate workers**

In June 2011, approximately 16,000 foreigners were legally working in Botswana. Some 28 percent of these workers are employed in elementary occupations. The remaining breakdown of their employment by occupation was: 19 percent in professional occupations, followed by 16 percent who were employed as craft workers, 16 percent as technicians, and 12 percent as managers (CSO 2011b). Distribution of expatriate workers by sector indicates acute skills shortages in construction, which employed about 30 percent of foreigners with work permits in 2011, but only 5 percent of the Botswana workforce. Another 30 percent work in agriculture, but it is unclear whether this number implies a shortage of managerial skills or cheap unskilled labor in the sector (the Central Statistics Office reported in 2011 that few foreign workers were employed as skilled agricultural workers). Only very small numbers of expatriates worked as clerks or service and sales workers (CSO 2011b).

The 2010 enterprise survey discussed in following section (World Bank 2010c) found that the most common positions for which expatriates are recruited are engineers, accountants, and managers, for which skilled Botswana would appear to be in short supply. Two-thirds of foreign workers in 2011 were employed; the other third was self-employed, mainly in trade and real estate (about 27 percent of all self-employed foreign workers in each sector), and manufacturing and construction (around 13 percent).

6. Employer Demand for Education and Skills

This section fills in some of the information gaps regarding the demand for skills by analyzing the responses of employers to various surveys, including the World Bank Enterprise Surveys of 2006 and 2010 and the skills-focused Employer and Employee Survey in Botswana (EESB) conducted in 2010 by the World Bank in collaboration with MoESD explicitly for this report. The findings of these sources show that most employers highly value the type of general skills described in box 2 below which are in very short supply in the country.

**Skills seen as growing constraint to doing business**

The share of Botswana firms identifying insufficient skills as the key constraint to doing business has increased from 10 percent in 2006 to 18 percent in 2010 (World Bank 2006...
This result differs substantially from those of other countries in Sub-Saharan Africa, where access to electricity and finance are generally ranked the most important constraints. On average, only 3 percent of firms in Sub-Saharan Africa consider skills a key constraint to doing business. Similarly, firms in upper-middle-income countries are more likely to perceive tax rates, access to finance, and informal sector practices as key constraints, not workforce skills. (On average, only 10 percent of firms in upper middle-income countries identify skills as their main impediment.)

Table 4 shows how firms with different characteristics, such as size, economic sector, export status (exporting or non-exporting), and type of ownership (domestic or partly foreign-owned) differ in their valuation of skills as a constraint. Surprisingly, skills are perceived as a strong impediment in particular by non-retail service firms (23 percent). As could be expected, medium and large firms, together with foreign-owned firms, also found them a key constraint (22 percent, 38 percent, and 24 percent, respectively). However, so did non-exporting firms (18 percent).

These findings correspond with the assumption that non-retail service providers, larger firms, and foreign-owned firms have a relatively skill-intensive demand for labor and therefore find it harder to adequately staff their enterprises. Neverthe-

---

**Table 4. Comparison of Skills Constraints Identified by Firms in 2006 and 2010**

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Firms ranking skills as key constraint</td>
<td>Ranking of skills among other constraints</td>
</tr>
<tr>
<td>Botswana overall</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td><strong>By sector:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>n.a.*</td>
<td>n.a.*</td>
</tr>
<tr>
<td>Retail</td>
<td>8.2</td>
<td>5</td>
</tr>
<tr>
<td>Other services</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td><strong>By firm size:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small (5–19)</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Medium (20–99)</td>
<td>20.5</td>
<td>1</td>
</tr>
<tr>
<td>Large (100+)</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td><strong>By exporting type:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exporting**</td>
<td>24.8</td>
<td>1</td>
</tr>
<tr>
<td>Non-exporting</td>
<td>9.5</td>
<td>3</td>
</tr>
<tr>
<td><strong>By ownership:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>6.3</td>
<td>5</td>
</tr>
<tr>
<td>Foreign***</td>
<td>14.4</td>
<td>2</td>
</tr>
</tbody>
</table>

Notes: n.a. – not applicable.
* The 2006 data does not aggregate figures for manufacturing firms.
** Direct exports are over 10 percent of sales.
*** Foreign ownership is greater than 10 percent.
less, non-exporting firms appear to have more problems finding appropriate skills in potential employees than do exporting firms, even though one would expect the opposite.

With the notable exception of exporting firms, the majority of firms considered skills a more important constraint in 2010 than in 2006. Exporting firms were among the few types of employers that identified access to finance, licensing and permits, and access to land as substantially more important constraints (ranked by 35, 21, and 18 percent of exporting firms, respectively) than insufficient skills.

*Mismatch between employer expectations and actual worker educational attainment*

With the exception of elementary occupations, an often substantial majority of employers seek tertiary education in their employees. At the same time, the actual attainment of workers in all occupational categories is consistently and substantially lower than the minimum educational requirement identified by employers (table 5). The demand for tertiary education is a surprising finding and may represent both unrealistic employer expectations and inadequate skill levels of workers with lower levels of education. Although the large discrepancy between minimally required and actual educational attainment suggests a mismatch between the demand and supply of skills, *actual educational levels may better correspond to job requirements.*

**Employers value personal characteristics and basic job skills over job-specific skills**

Based on employer ratings of the most important skill requirements for leaders (i.e., managers and professionals) and skilled workers (e.g., production, administrative, sales, technical, and crafts workers), it is clear that firms esteem personal characteristics and basic skills more highly than job-specific or technical skills—even for leaders (World Bank 2010c).

The EESB survey grouped skills requirements into three categories: personal characteristics, core skills, and job-specific skills. Personal characteristics were defined as innate traits,

Table 5. Minimum Required and Actual Levels of Worker Educational Attainment, by Occupation

<table>
<thead>
<tr>
<th>Education level</th>
<th>Minimum required*</th>
<th>Actual average**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Managers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary technical (39%)</td>
<td>Tertiary general (36%)</td>
<td>General certificate (24%)</td>
</tr>
<tr>
<td>Tertiary general (36%)</td>
<td></td>
<td>Junior certificate (23%)</td>
</tr>
<tr>
<td>Tertiary technical (43%)</td>
<td></td>
<td>Post-secondary TVET (21%)</td>
</tr>
<tr>
<td><strong>Professionals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary general (54%)</td>
<td>Tertiary technical (43%)</td>
<td>Tertiary technical (38%)</td>
</tr>
<tr>
<td>Tertiary technical (43%)</td>
<td></td>
<td>General certificate (33%)</td>
</tr>
<tr>
<td>Post-secondary TVET (22%)</td>
<td></td>
<td>Post-secondary TVET (28%)</td>
</tr>
<tr>
<td><strong>Technicians</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary general (39%)</td>
<td>Tertiary technical (25%)</td>
<td>Post-secondary TVET (40%)</td>
</tr>
<tr>
<td>Post-secondary TVET (22%)</td>
<td></td>
<td>General certificate (34%)</td>
</tr>
<tr>
<td><strong>Clerks</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary technical (29%)</td>
<td>Tertiary general (26%)</td>
<td>General certificate (31%)</td>
</tr>
<tr>
<td>Post-secondary TVET (26%)</td>
<td></td>
<td>Junior certificate (30%)</td>
</tr>
<tr>
<td><strong>Service and sales workers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary technical (43%)</td>
<td>Post-secondary TVET (26%)</td>
<td>General certificate (26%)</td>
</tr>
<tr>
<td>Post-secondary TVET (26%)</td>
<td>Tertiary general (26%)</td>
<td>Junior certificate (24%)</td>
</tr>
<tr>
<td><strong>Skilled agriculture, fishery, and forestry workers</strong></td>
<td></td>
<td>Post-secondary TVET (56%)</td>
</tr>
<tr>
<td>Tertiary technical (67%)</td>
<td>Tertiary general (33%)</td>
<td>Tertiary technical (33%)</td>
</tr>
<tr>
<td><strong>Craft workers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary general (35%)</td>
<td>Tertiary technical (48%)</td>
<td>Completed primary (37%)</td>
</tr>
<tr>
<td><strong>Plant and machine assemblers and operators</strong></td>
<td></td>
<td>Junior certificate (32%)</td>
</tr>
<tr>
<td>Tertiary technical (35%)</td>
<td>Tertiary technical (48%)</td>
<td>Primary education (37%)</td>
</tr>
<tr>
<td><strong>Elementary occupations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General certificate (43%)</td>
<td>Junior certificate (37%)</td>
<td>Not completed primary (30%)</td>
</tr>
<tr>
<td>Junior certificate (37%)</td>
<td>Primary education (24%)</td>
<td>Junior certificate (20%)</td>
</tr>
</tbody>
</table>


* Lists educational levels that 20 percent or more employers indicated as the minimum for an occupation.

** Lists educational levels that 20 percent or more employees have actually attained.
such as honesty, commitment, hard work, and punctuality. Core skills were defined as aptitudes required for employment that can be learned over time, either at school or elsewhere. This category included such skills as basic literacy, numeracy, communication, problem solving, and team work. The last category, job-specific skills, was defined as theoretical knowledge, educational attainment, and specific job experience related to particular occupations.

Although the majority of employers rated 80 percent of the 30 skills identified in the survey as “very important” for leaders, they named honesty, commitment and hard work, reliability and punctuality, communication, and team working skills as the five most valued skills for both leaders and skilled workers (figures 5 and 6). Job-related skills were generally valued for leaders, but to a lesser extent. Their practical knowledge of a job was, for example, ranked only 16 out of 30. Skills that were not considered “very important” or “crucial” by a majority of employers were mostly job-specific skills related to educational credentials and the possession of advanced vocational competencies.

A majority of employers considered fewer skills to be “very important” or “crucial” for skilled workers (10 skills for skilled workers, compared to 24 for leaders). In addition to the top five skills cited above, employers valued the desire to learn, adaptability, and customer care skills in skilled workers. As with leaders, job-specific skills were considered relatively less important than personal characteristics and core skills.

Educational attainment of workers varies by firm size and export status

Table 6. Educational Attainment of Permanent Workforce, by Firm Size and Export Status
(percent of total employees)

<table>
<thead>
<tr>
<th>Size of firm</th>
<th>Export status</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>Medium</td>
<td>Large</td>
</tr>
<tr>
<td>Number of firms</td>
<td>415</td>
<td>78</td>
</tr>
<tr>
<td>Did not complete primary school</td>
<td>1.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Completed primary school</td>
<td>4.7</td>
<td>9.0</td>
</tr>
<tr>
<td>Junior certificate</td>
<td>26.0</td>
<td>23.5</td>
</tr>
<tr>
<td>General certificate</td>
<td>36.6</td>
<td>28.9</td>
</tr>
<tr>
<td>Postsecondary TVET</td>
<td>16.1</td>
<td>15.6</td>
</tr>
<tr>
<td>Tertiary technical education</td>
<td>7.3</td>
<td>12.7</td>
</tr>
<tr>
<td>Tertiary general education</td>
<td>6.9</td>
<td>6.3</td>
</tr>
<tr>
<td>Postgraduate education</td>
<td>1.2</td>
<td>2.2</td>
</tr>
</tbody>
</table>

All categories | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |


Postsecondary TVET graduates are in great demand by firms of all sizes and comprise the largest group of temporary workers in both exporting and non-exporting firms. Of all the workers that are recruited on temporary contracts, half fall into this category. The next largest groups of short-term hires are workers with tertiary technical education and general (secondary) certificates (14 percent and 13 percent, respectively). Firm size does however, appear to determine the relative importance of postsecondary TVET graduates. They are particularly in high demand by large firms, where they comprise three-quarters of temporary hires. Small and medium firms have a more diverse temporary recruitment pattern that also includes relatively large shares of hires with lower, upper secondary, and general tertiary education.

Non-exporting firms appear to have a stronger need for temporary workers with postsecondary education than do exporting firms (51 percent compared to 39 percent), which displays a temporary recruitment pattern similar to that of small and medium-size firms. It is unclear why non-exporting firms rely more heavily on both permanent and temporary postsecondary TVET workers than do exporting firms, which may be a worthwhile future topic of analysis. One possibility is that these differences result from the fact that non-exporting firms engage in different economic sectors that use different production processes.
Figure 5. Employer Skill Rankings for Managers, from “Not Important” to “Crucial”

Figure 6. Employer Skill Rankings for Skilled Workers, from “Not Important” to “Crucial”

Larger firms need the most time to fill vacancies, regardless of the educational attainment requirement

Larger firms report needing more time to fill vacancies for any type of occupational level than do small and medium firms. For example, large firms that participated in the survey needed, on average, 10 weeks to hire a skilled worker and more than 8 weeks to hire a manager. Small and medium-sized firms needed, on average, 5 and 8 weeks, respectively, for the same tasks. Similar or larger differences apply to the time taken to hire services and sales workers, clerks, craft workers, and plant and machine operators. While this finding may indicate that large firms are more skill-intensive and therefore have a harder time recruiting new staff, other factors may be at play. For example, larger firms may have to comply with more formal and time-consuming recruitment procedures than do smaller-size firms. These firms are also more likely to be able to operate for a longer period of time without filling an open position.

7. Recommendations

Botswana needs to improve the quality and relevance, as well as the skills outcomes, of primary and secondary education. The country boasts high investments in education, yet faces significant challenges of educational quality compared to countries with similar levels of GDP per capita. In order to improve educational quality, several major initiatives are needed: (i) the quality of basic education needs to be improved; (ii) the capacity of TVET training staff must be bolstered; and (iii) collaboration between universities, industry, and other research centers must increasingly be developed so that tertiary education is aligned with the needs of the labor market and the nation. In terms of timeline, there are short-term, medium-term, and long-term recommendations for improving education quality. These recommendations are summarized below (for a more detailed discussion, see Policy Note 1):

Short-term recommendations:
- Focus and prioritize the quality of inputs supplied to remote and rural schools to ensure equitable distribution of basic education resources and outcomes.
- Urgently complete the Botswana National Qualification Framework and introduce the process of articulation within the education system.
- Introduce pre-entry courses in STEM college programs to improve the quality of learning at higher levels of education.
- Hire expert trainers in the fields of TVET specialization that are in demand and ensure that technical training curricula respond to the needs of employers.

Medium-term recommendations:
- Adopt a monitoring, evaluation, and research system.
- Define mechanisms for using the training levy so that these funds cater to the specific needs of employers.
- Develop a system of monitoring and evaluation for the BTEP apprenticeship program that uses continual feedback mechanisms.
- Attract international talent at the university level—both faculty and students—through the use of incentives.

Long-term recommendations:
- Establish an educational research institute under MoESD.
- Redesign the GLS program so that it targets higher-level STEM skills at the postgraduate level.
- Develop select University centers in the country as center of excellence in science and technology teaching.

In addition to improving the quality of primary and secondary schooling in the country, there are several specific recommendations to address skills gaps and labor market mismatch-

Table 7. Educational Attainment of Temporary Workforce, by Firm Size and Export Status

<table>
<thead>
<tr>
<th></th>
<th>Size of firm</th>
<th>Export firm</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small (415)</td>
<td>Medium (78)</td>
<td>Large (18)</td>
</tr>
<tr>
<td>Did not complete primary school</td>
<td>0.0</td>
<td>3.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Completed primary school</td>
<td>7.8</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Junior certificate</td>
<td>13.0</td>
<td>17.1</td>
<td>1.5</td>
</tr>
<tr>
<td>General certificate</td>
<td>23.4</td>
<td>20.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Post-secondary TVET</td>
<td>31.2</td>
<td>26.7</td>
<td>75.4</td>
</tr>
<tr>
<td>Tertiary technical education</td>
<td>23.4</td>
<td>14.4</td>
<td>9.0</td>
</tr>
<tr>
<td>Tertiary general education</td>
<td>1.3</td>
<td>10.3</td>
<td>2.5</td>
</tr>
<tr>
<td>All categories</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

es that are constraining economic diversification and growth in Botswana. These specific recommendations are only briefly discussed here because they are addressed in detail by “Education for Skills and Competitiveness” (Policy Note 1) and “Skills for the Private Sector” (Policy Note 3).

**Ensure the incorporation of ICT and entrepreneurial skills in the workforce.**

Workers in most sectors would benefit from at least minimal competencies in ICT and entrepreneurship. The acquisition of these skills can be embedded in the curricula and teaching methods for all levels of education. For those already in the workforce, the government can create a more enabling environment to promote access to in-service training on these topics.

International experiences can provide some specific examples of ICT programs that are relevant to Botswana, such as:

- Developing firm-level management and business skills in the ICT sector by providing management skills training;
- Developing a critical mass of globally benchmarked and certified software developers by establishing a globally validated mechanism and implementing a sustainable training and certification program; and
- Adopting demand-based financing of skills and technology in priority sectors, including ICTs, by supporting ICT firms to upgrade workforce skills.

The World Bank has supported innovative ideas on developing the ICT and ICT Enabled Services (ITES) and Industries through its New Economy Skills for Africa Program. This program aims to build globally benchmarked skills for the knowledge economy in select countries in the region, including the examples listed above from Nigeria, Kenya, and Ghana. This approach can also support Botswana, in particular in the aspirations of the Innovation Hub which is trying to establish ICT incubators. For instance, the innovation hub has built a Microsoft innovation center in the Science and Technology Park in Gaborone with a focus on providing training to start-up companies and students. Above listed examples can be further explored by the Hub.

**Invest in programs that develop managerial and leadership skills for the export sector**

In addition to broader policies that encourage exports, managerial and leadership skills are needed in the sector, particularly as it grows. The education sector can develop such skills through business and university partnerships, such as the successful model of the Olin College Engineering in the USA, where engineering education is coupled with business teaching and work experience in the real world. Engineering students of this college must establish an operational business in order to graduate. The universities in Botswana could adopt this kind of model, which would support two priority hubs: education and innovation. The initiation of such a program would, however, require substantial support from the government in terms of resources, marketing, and support. The internship program created by the government could be an additional excellent vehicle for introducing innovative on-the-job business and managerial learning, but only if it is expanded into the private sector.

**Replace Labor-Intensive Income Support Programs in Rural Areas with Infrastructure Investments and Programs that Create Higher-Productivity Employment**

Employment support and public works programs appear to support income generation in rural areas creating a low-technology trap. Agricultural production remains based on traditional, subsistence-oriented systems, with limited commercial activities for either crops or livestock. Only 45 percent of farmers have access to roads, 17 percent to electricity, 22 percent to telecommunication, 64 percent to water for livestock, 66 percent to water for domestic use, 39 percent to grain storage, 52 percent to markets and 54 percent to sanitation.

New policies are needed to address the low technical level of agriculture and the lack of infrastructure in rural areas. Given that roughly half of employment in Botswana is in rural areas, it is also urgent to promote higher-productivity employment in those areas or risk increased migration to urban areas. Specifically, the development of agro-industrial enterprises and supply chains are needed to drive the growth of associated subsectors, such as food processing, transport, and manufacturing. In line with the goals of National Development Plan 10, income support programs in agriculture should be phased out as soon as possible and government resources invested instead in the following productivity-enhancing programs:

- Arable Agriculture Development Program: seeks to develop horticultural production, irrigation schemes, the use of waste water for production, and rain-fed cereal and legume production, as well as help farmers improve their productivity.
- Livestock Development Program: designed to improve the quality and quantity of beef and dairy cattle, small-stock, poultry and pigs.
- Agricultural Business Development Program: aims to elaborate strategies to facilitate the growth of agricultural industries, as well as monitor and evaluate the sector’s economic performance.
- Agricultural Research and Technology Development Program: seeks to develop appropriate technologies to mitigate production constraints in agriculture, particularly the negative impacts of harsh environmental conditions.
- Enhanced Service Delivery Program: designed to support arable and livestock production by providing agricultural research staff access to information technology infrastructure, thus enabling outstations to respond more efficiently to demand in the field.
Conclusion

To return to the questions raised at the outset of this Policy Note, it is clear that the labor market in Botswana places a premium on general skills, including basic literacy, numeracy, and behavioral skills such as communication and teamwork. Based on employment data, the demand for upper secondary graduates is greater than that for lower secondary graduates, although rising unemployment among both groups argues for improved skills acquisition at upper secondary level. Finally, the future economy of Botswana will require workers with both strong general and sector-specific skills. At this juncture, it appears more efficient to rely on the basic education system to provide the former, and a combination of public and private education and training institutions and programs to provide the latter.
References


