
BURKINA FASO: PRIORITIES FOR POVERTY REDUCTION AND SHARED PROSPERITY

SYSTEMATIC COUNTRY DIAGNOSTIC

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Abbreviations and Acronyms

ACE	Aiding Communication in Education
ARCEP	Regulatory Agency
BCEAO	Banque Centrale des Etats de l'Afrique de l'Ouest
CAMEG	Centrale d'Achats des Medicaments Generiques
CAPES	Centre d'Analyses des Politiques Economiques et Sociales
CDP	President political party
CFA	Communauté Financière Africaine
CMDT	La Compagnie Malienne pour le Développement du Textile
CPF	Country Partnership Framework
CPI	Consumer Price Index
CPIA	Country Policy and Institutional Assessment
DHS	Demographic and Health Surveys
ECOWAS	Economic Community of West African States
EICVM	Enquête Intégrale sur les conditions de vie des ménages
EMC	Enquête Multisectorielle Continue
EMTR	Effective Marginal Tax Rate
EU	European Union
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FSR-B	Fonds Special Routier du Burkina
GDP	Gross Domestic Product
GNI	Gross National Income
GSMA	Global System Mobile Association
ICT	Information-Communication Technology
IDA	International Development AssociationINTERNATIONAL
IFC	International Finance Corporation
IMF	International Monetary Fund
INSD	Institut National de la Statistique et de la Démographie
IRS	Institutional Readiness Score
ISIC	International Student Identity Card
ISPP	Institut Supérieur Privé Polytechnique
MDG	Millennium Development Goals
MEF	Ministry of Economy and Finance
MFM	Macro Economics & Fiscal Management
MFPTSS	Ministry of Civil Service, Labor and Social Security
MW	Mega Watts
NBER	National Bureau of Economic Research
NPDS	National Development Plan
NTM	Non Tarif Measures
OECD	Organisation for Economic Co-operation and Development
OHADA	Organisation pour l'Harmonisation en Afrique du Droit des Affaires
OMD	Organisation Mondiale des Douanes
ONEA	Urban water and sanitation utility of Burkina Faso
ONG	Non-Governmental Organization
PACES	Program for the Expansion of Secondary Education Coverage
PAPSA	Projet d'amélioration de la productivité agricole et de la sécurité alimentaire
PEFA	Public Expenditure and Financial Accountability
PFM	Public Financial Management
PNR	Programme National Routier
PNSFMR	National Policy for Rural Land in Rural Area
PPP	Public Private Partnership
PSM	Propensity Score Matching

QOF	Vocational skills training
QUIBB	Questionnaire unifié des indicateurs de base du bien-être
RAF	Agrarian and Land Reform
RTI	Right-to-Information
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
SCD	Systematic Country Diagnostic
SEA	Sciences Environnementales et Agriculture
SEG	Sciences Economiques et de Gestion
SIGASPE	Système Intégré de Gestion Administrative et Salariale du Personnel de l'Etat
SJP	Sciences Juridiques et Politiques
SME	Small and Medium Enterprise
SPS	Sanitary and Phytosanitary Measures
TVET	Technical and Vocational Training
UK	United Kingdom
UN	United Nations
UN IRU	United national International Road Transport Union
UNCTAD	United Nations Conference on Trade and Development
UNICEF	United Nations Children's Fund
UNICEF	United Nations Children's Fund
US	United States of America
USF	Universal Service Fund
VAT	Value-Added Tax
WAEMU	West African Economic and Monetary Union
WAN	Wide Area Network
WBG	The World Bank Group
WDI	World Development Indicators
WEF	World Economic Forum
WITS	World Integrated Trade Services
WJP	World Justice Project
WSS	Water & Sanitation Services
WTO	World Trade Organization

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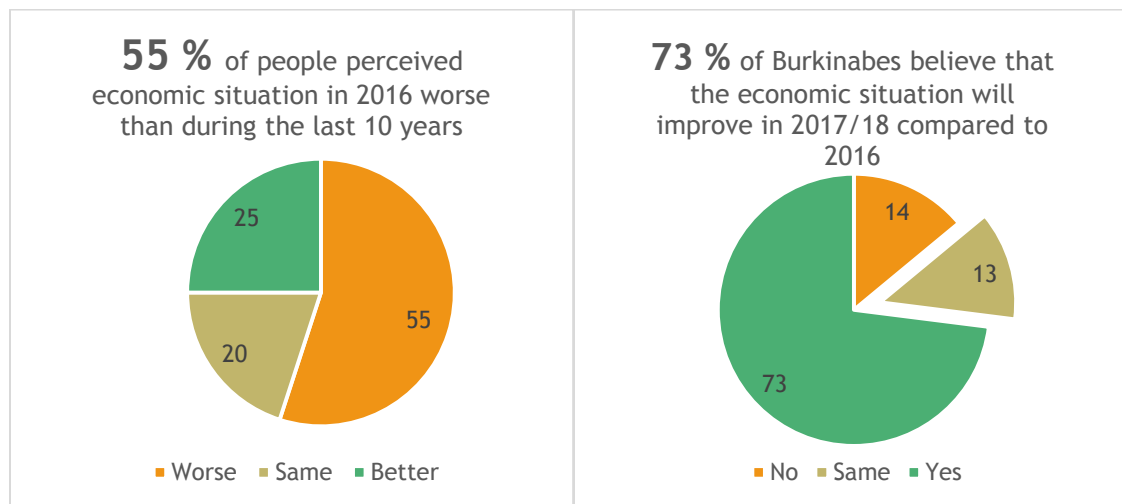
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EXECUTIVE SUMMARY

1. In order to generate a greater number of productive jobs and to increase access to social services and infrastructure by the poor, Burkina Faso needs to focus on improving the management of natural resources; promoting skills development; and reducing gender bias. The appropriate implementation of strategies to achieve these goals will enable the country to achieve the greater goals of reducing poverty and increasing shared prosperity.

2. At present, Burkina Faso is at the crossroads. After a decade of good macroeconomic performance, the country suffered a political crisis at the end of 2014, which ended with the democratic election of a new President in November 2015. Burkina Faso is at a turning point. National consultations, which included a telephone survey conducted by the World Bank in October 2016, revealed that while the majority (55 percent) of respondents believed that the economic situation in 2016 was worse than at any other point in the past decade even though economic growth rebounded after two years of significant slowdown. By contrast, a vast majority (73 percent) believed that the situation would improve in the years to come.

Figure 1: How the Burkinabé perceive their economy



Source: World Bank's survey, October 2016

Part One: PAST PERFORMANCE AND CONTEXT

A good economic performance, but on a narrow base

3. The degree to which Burkina Faso achieves success will depend on its ability to facilitate economic transformation. While the country has performed reasonably well in terms of macroeconomic indicators over the past decade or more, with its economy growing at an average annual rate of 6 percent in the period from 2005 to 2013, this growth has not had the degree of positive impacts on the majority of citizens as might be expected. The growth was built on a very narrow base, fueled primarily by the rapid expansion of the public sector, which was financed mainly by aid inflows and by the booming mining sector, as well as by the expansion of a few modern sectors such as communication, transports, and banking. As a result, Burkina Faso has failed to produce a sufficient number of productive jobs to absorb the country's rapidly expanding workforce, with 80 percent of this workforce still employed in lowly paid agricultural jobs. In

addition, Burkina Faso's sub-optimal exploitation of its natural resources has resulted in the significant depletion of these resources.

80 % of Burkinabé are primarily occupied in agriculture with an average income of less than \$350 per year

Every year the stock of natural wealth per capita diminishes by about 11%

4. **The nature of Burkina Faso's growth process has been shaped by the specific characteristics of its natural endowments and by its demographic factors.** The massive extent of the country's land resources and mining reserves explain the dominance of the mining and agricultural sectors. Difficult climatic conditions and limited water resources also explain the country's high level of vulnerability and the low level of productivity of its agricultural sector. The country's extremely rapid rate of population growth largely explains the increasing pressures on the labor market and on the delivery of basic services, with an increasing proportion of the population migrating either from rural areas to urban areas or abroad in search of better economic opportunities. As a result, approximately a third of all of the country's citizens have lived outside the country at one point, while Ouagadougou is now one of fastest growing cities in the sub-Saharan African region. The persistent high population growth is largely the consequence of the high fertility rate (one of the highest in the world, with on average five children per women in 2015). The rapid population growth combined with the uneven economic development prevents Burkina Faso from reaping the demographic dividend, increases pressure on services, and exacerbates other vulnerabilities.

5. **In addition to geographical factors, poor policy choices and institutional weaknesses have also played a role in Burkina Faso's failure to achieve better economic performance.** Despite good progress in terms of most governance indicators during the period from 1995 to 2008, disturbing signs of a decline in the quality of governance have started to become apparent. These include increases in illegal capital outflows, frequent political interference in economic management, and a growing concentration of economic and political power. The resulting increase in social inequalities, social unrest and political disturbances, combined with a series of external shocks in 2013/14, including the dramatic decline in global commodity prices, have necessitated severe fiscal adjustments and resulted in a slowdown in economic activity in 2014 and 2015.

6. **In its efforts to manage the economy, the Government must rely primarily on fiscal policy, since other instruments usually available to governments are controlled by regional authorities, within the WAMEU.** The Government has maintained control over the fiscal deficit over the past decade, with the level of expenditure keeping pace with the level of revenue collection, with the financing gap being filled by concessional aid inflows. However, the Government has failed to maintain an adequate public investment program, with expenditure on this program standing at an average annual level of only 6 to 7 percent of GDP over the past decade. Disturbingly, this figure has actually declined over recent years, dropping to as low as 3 to 4 percent in 2014 and 2015. The Government's tax revenues are now barely sufficient to pay its wage bill and to meet its commitments to provide subsidies to the energy and cotton sectors. In addition, a number of weaknesses and dysfunctions in the area of fiscal management have reduced the value for money of public expenditure. Such dysfunctions include long and overly complex procurement procedures, poor controls, and the excessive concentration of civil servants in Ouagadougou.

Still a poor and vulnerable country

7. In 2014, approximately 40 percent of the population was living in poverty. At first glance, this represented a notable improvement compared to the situation in 2003, when the poverty rate stood at more than 50 percent. However, with Burkina Faso's rapid population growth rate, the absolute number of people living in poverty remained roughly the same between the two periods, at around 7 million. In addition, a significant proportion of households are clustered around the poverty line, meaning that small variations in earnings can lead to either significant increases or decreases to the number of people living in poverty. It is estimated that about eight out of 10 citizens live on less than US\$ 3 per day.

8. In Burkina Faso, poverty is largely a rural phenomenon, with approximately 90 percent of the poor living in rural areas. There are wide variations in the rate of poverty between regions (in the range of 1 to 7), with most of these variations explainable in terms of the level of urbanization of the respective regions. As might be expected, the lowest poverty rate is recorded in Ouagadougou, with the rate standing at less than 10 percent.

7 million people lived in poverty in 2014

The poverty rate is five times lower in Ouagadougou than in rural areas

2/3 of households are negatively affected by a shock every year

9. In Burkina Faso, a poor person is most likely to be employed on a farm, to have had little or no formal education, and to have at least six children. Women-headed households are statistically more likely to be poor than male-headed households, even accounting for other factors, such as education levels. Members of poor households remain almost completely excluded from a number of basic services and from access to infrastructure. For example, less than 5 percent of members of the poorest households are connected to the national electricity grid, while the rate exceeds 50 percent for members of the wealthiest households. Similarly, members of the poorest households have also almost no access to secondary education and even less to tertiary education. In terms of access to health and water and sanitation services, the differences between the rich and the poor are not so significant.

10. Over the past 10 years, the poverty rate has declined, with the rapid GDP growth rate leading to an increase in the levels of consumption of the poorest families. The increase in consumption was significantly higher for the poor than for the rich, explaining reduced inequality in terms of consumption levels (but not in wealth) during this period. The increase in the consumption levels of the poor was the combined result of: (i) increased income generation opportunities due to the improved performance of the agricultural sector and to the urbanization process, which resulted in the creation of an increasing number of non-farm jobs; (ii) redistribution policies in the cotton sector; and (iii) an increase in the overall value of remittances.

11. However, the decline in the poverty rate must be seen in the context of two issues. Firstly, Burkina Faso has one of the highest fertility rates in the world. Thus, the rapid population increase has limited the impact of economic expansion on living conditions at the household level. When adjusted by the demographic growth rate, the average annual per capita GDP growth rate stood at only 2.6 percent in the period from 2005 to 2013. At these rates, it will take Burkina Faso



about 25 years to double its average per capita income, compared to only 7 or 10 years for countries with rapidly expanding economies such as Ethiopia and Rwanda.

12. **Secondly, the level of vulnerability is high, with two thirds of households reporting that they suffer from shocks each year, with most of these shocks related to natural hazards.** These shocks contribute to reducing the revenue and to eroding the wealth of poor families, especially in the absence of functional prevention and social protection mechanisms.

Part Two: THE MAIN CONSTRAINTS

13. **Understanding the causes behind Burkina Faso’s slow progress towards the achievement of the twin goals of reduced poverty and increased shared prosperity requires an analytical framework.** The starting point for this framework is two well-known theories that state that economic development requires: (1) the **creation of a sufficient number of productive jobs** through the structural transformation of the economy; and (2) the provision of a minimum package of basic services and infrastructure to enable households to escape the **poverty trap**. These two theories are applicable to the case of Burkina Faso, with the country’s failure to produce enough productive jobs to absorb the rapidly expanding workforce and with a vast majority of households having failed to accumulate sufficient capital to rise out of poverty on a sustainable basis.

14. **These two economic theories can be used to define symptoms, but not necessarily to identify constraints.** The decision-tree methodology proposed by Hausman, Rodrik and Velasco offers a logical means to link symptoms with associated binding constraints. For example, the lack of productive jobs can be seen as the consequence of insufficient productivity gains in agriculture, which is in turn can be explained by a series of constraints that are related to the manner in which farmers, entrepreneurs, and the Government behave and interact in Burkina Faso. The final result of this two-step approach is the identification of a list of possible constraints based not only on the analytical framework, but also on the specific context, since it is recognized that binding constraints on economic activity and household level welfare can differ from setting to setting.

The limited creation of productive jobs

15. **The limited creation of productive jobs can be largely explained by the poor performance of the agricultural sector.** With about 80 percent of the labor force being primarily employed in this sector, the most direct means to reduce poverty is to increase the average income of rural households by creating opportunities for these households to sell more and at better prices. To understand the constraints affecting this sector, this study draws a distinction between the cereals, cotton, and livestock sub-sectors. The analysis shows that these three sub-sectors have been constrained by roughly the same factors, but with the impact of these factors varying in magnitude in each of the respective cases. For example, the impact of the difficulty in purchasing seed and equipment is a more significant constraint in the case of cereal producers than in the case of cotton farmers because of the particularly poor level of access to pre-financing in the case of the former.

16. **The analysis also shows that women in the agricultural sectors suffer from persistent bias and discrimination, notably in terms of access to land and property tenure.** This bias has significant costs, because it is estimated that women account for more than half of the labor force in rural areas and produce over two thirds of food consumed in the country.

agricultural sector are as follows:

Poor risk management	<ul style="list-style-type: none"> • Soil degradation • lack of water resources and underdeveloped water management
Insufficient collective infrastructure	<ul style="list-style-type: none"> • Lack of rural roads and low connectivity • Insufficient irrigation schemes • Limited storage capacity
Limited access to external finance	<ul style="list-style-type: none"> • lack of modern equipment • Low access to inputs (seeds, pesticides, fertilizers)
Weak land management	<ul style="list-style-type: none"> • Unsecured land titles and land tenure management
Underdeveloped Information mechanisms	<ul style="list-style-type: none"> • Insufficient research • Limited training programs

17. In addition, Burkina Faso has also been unable to leverage the full potential of the rapid growth of non-farm jobs in urban centers. Attracted by better job prospects, an increasing number of mainly young migrants have moved to Ouagadougou and, to a much lesser extent, to a few secondary cities. While these migrants have generally been able to find better paid jobs in these urban centers than are available on farms, most of these jobs have involved small-scale, low productivity activities. It is estimated that about 90 percent of non-farm jobs are concentrated in the informal sector, mostly in trade.

18. The limited expansion of productive non-farm jobs can be explained by a series of supply-side and demand-side constraints. On the demand side, firms are prevented from growing and hiring workers because of the non-conducive business environment, while on the supply side, the vast majority of workers do not have skills required to efficiently establish and manage their own business or to be productive wage earners.

Constraints	Symptoms
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The key constraints behind the low productivity of the non-farm sector are the following:

Lack of access to external financial resources	<ul style="list-style-type: none"> • Insufficient investment in capital • Low creation of enterprises
Insufficient virtual and physical connective infrastructure	<ul style="list-style-type: none"> • Limited economies of scale
Complex tax system and barriers to entry	<ul style="list-style-type: none"> • High operating costs and lack competition
Underdeveloped training and education facilities and restrictive labor regulations	<ul style="list-style-type: none"> • Low skills

Insufficient human and physical capital to escape the poverty trap

19. **Although Burkina Faso has reported some significant progress in terms of non-monetary indicators of poverty, improvements in other areas have remained limited.** While the country has recorded good progress in terms of some health indicators and in terms of access to potable water, it still lags significantly behind the average level of performance for most of sub-Saharan Africa. In addition, average levels of performance fail to demonstrate the existence of wide disparities between income groups, with the members of the poorest segments of the population remaining almost completely excluded from access to some basic services. If poor people cannot access a minimal package of services and infrastructure, the likelihood that they will rise out of poverty on a sustainable basis is very low.

20. **The analysis has explored the constraints leading to: (i) the low and unequal level of access to social services; and (ii) the lack of provision of basic infrastructure to the poor.** It has also examined the constraints that impact poor household's abilities to manage shocks.

21. **In the area of social services, Burkina Faso's records a particularly poor performance in the area of education outcomes.** Although primary education registration rates have increased over the past decade, many young men and women still do not have the opportunity to participate in secondary education or to access technical or tertiary education. Significant discrimination exists against girls, especially after the primary cycle. Even when children attend school, only half of the students who graduate from a primary school have acquired basic reading and mathematics skills.

22. **Burkina Faso has recorded a better performance in the area of health outcomes.** Maternal and child mortality rates have declined significantly over the past decade, mainly due to vertical initiatives funded through international initiatives. However, on average, the quality of services remains poor, with this being a source of major frustration for many patients and their families.

23. **The poor performance of the education and health systems is explained by the combination of supply- and demand-side factors.** On the supply side, the lack of financial resources has prevented the development of the appropriate infrastructure, the provision of the appropriate equipment, and the recruitment and deployment of sufficiently qualified staff. The ratio of qualified teachers and doctors/nurses to the population is among the lowest in the world. To some extent, the weaknesses of the public services have been addressed through the emergence of private providers, particularly in urban centers. However, the quality of private services is often poorer than those of public services, and generally unaffordable for the poorest households. On the demand side, many families suffer from financial constraints, exacerbated by the distance between their home and schools and health facilities. With many educated youths remaining unemployed or underemployed, participation in education is associated with low rates of return. Compounded by cultural bias is, this discourages many households from ensuring that their children participate in education, especially after the primary cycle.

24. **The unequal level of access to education and health is largely the result of the following key factors:**

Education	Health
<ul style="list-style-type: none"> •Lack of financing and weak management leading to low spending inefficiency •Limited number of qualified teachers and poor allocation of human resources across regions and cycles •Low incentives for households to invest because of low rates of return and financial constraints •Behavioral biases against girls' education 	<ul style="list-style-type: none"> •Financing gap exacerbated by poor management and lack of supervision of private providers •One of the lowest ratios of doctors and nurses per hab. in the world, leading to unsupervised services and high degree of dissatisfaction by patients •High costs of services for poor households, exacerbated by distance to health centers.

25. The limited and unequal provision of basic infrastructure in the energy, water and sanitation, transportation, and ICT sectors is the combined result of five key constraints, which affect all sectors, although the magnitude of the impact may vary from sector to sector:

- *The financial gap*: This constraint is exacerbated by the low level of participation of the private sector in the provision of infrastructure. This constraint is especially binding in the energy sector.
- *Poor planning and execution capacities*: These factors lead to the development of non-priority projects and to the sub-optimal choice of technologies. These deficiencies are most apparent in the rural water, energy, and transport sector.
- *Poor financial management*: This factor is often associated with political interference and a weak regulatory environment, which leads to unsustainable financial and efficiency losses in the energy sector and excessive prices in the ICT sector. A notable exception to the general rule of poor financial management has been in the management of urban water through a well-functioning concession contract.
- *Limited technical capacities*: The lack of capacities applies to both the public and private sectors, with a lack not only of engineers, but of those qualified to provide advice to the Government in its negotiations with private-sector operators.
- *Lack of affordability*: Many poor households cannot afford to access infrastructure, particularly connections to the national electricity grid, to piped water, and to the Internet.

26. The accumulation of both human and physical assets at the firm and household levels is greatly affected by the high frequency of shocks, particularly those related to natural hazards. Prevention mechanisms remain largely underdeveloped because of a lack of resources and a highly fragmented institutional framework that reduces accountability. Similarly, protection mechanisms are almost completely lacking, with very limited funding from the public sector and little interest from the private sector due to the small size of the market. Most affected households have to rely on informal, often ineffective mechanisms. Social protection programs, such as cash transfer programs, are constrained by a lack of funding, with little involvement by donors, unlike the case in many other low income and vulnerable countries, including Ethiopia and Tanzania. Targeting and transfers mechanisms are also underdeveloped.

Part Three: PRIORITIES AND NEXT STEPS

27. For Burkina Faso to move towards the achievement of the twin goals of reducing poverty and increasing shared prosperity, it must address the set of constraints identified in the analysis. It must also build on the opportunities created by its vast extent of natural resources, particularly land and mineral resources, and its young population. Finally, it must also revamp its institutions to facilitate the achievement of these goals. Rather than tackling each constraint individually, international experience and the science of delivery suggests that the most effective approach is to develop synergies through the adoption of cross-cutting priorities. Not only does this create useful synergies, it may also help in the identification of cost savings solutions.

28. In order to identify these cross-cutting priorities, a two-fold approach has been adopted. First, a set of 10 priorities was derived from the analysis of the constraints, with a final process of selection and ranking conducted through an intensive and iterative consultative process involving extensive consultations with a wide range of stakeholder groups throughout Burkina Faso. Secondly, the relative significance of these 10 priorities was ranked by a representative sample of citizens (including through a phone survey) and a group of experts from the Government, academia, and the World Bank. This approach is subject to certain limitations, but nonetheless provides a strong basis for determining the most significant opportunities and constraints through the combined use of analytical tools and citizen surveys. The combination of all these priorities will contribute to improving Burkina Faso's human, physical, natural and institutional capital and to creating a strong foundation for the achievement of the country's twin goals in the coming years.

29. The resulting list of priorities should be interpreted with caution, as they reflect the beliefs and perceptions of a broad range of stakeholders who may be more interested in actions that have direct impacts on their wellbeing rather than abstracted concepts (such as governance and fiscal policy) that exert only an indirect influence on their living conditions. For example, those participating in the consultative process may not recognize the importance of basic requirements such as governance, resilience and private sector development, and therefore may not appear in the first tier of priorities. However, they play a pivotal role in achieving almost all other priorities. As explained in the main body of this report, good governance is essential for the good management of natural resources, skill development, connectivity and social protection. The same principle applies to the achievement of higher levels of resilience and private sector development. It is also worth noting that the Government may face additional trade-offs during the implementation process. Further selectivity would be certainly requiring to address limitations in terms of the public and private resources available to finance the proposed actions. In that context, Priority 7, which relates to the efficiency of fiscal policy, may be more important than was perceived by the general body of stakeholders, as it is essential to increase fiscal space and value for money within the public sector in order to achieve the other priorities. Similarly, Priority 8 on building transparent and strong institutions may be more important than reflected by the proposed ranking as a good governance framework is a prerequisite for implementing decisions that help maximize the wellbeing of the majority of citizens.

30. The first-tier priorities identified through this process were, in decreasing order of significance, as follows: (i) improving the management of natural resources; (ii) promoting the development of skills; and (iii) reducing gender bias. As the report makes it clear, all these priorities are critically important, as they have a significant impact, both individually and jointly, on job creation and the accumulation of human and physical assets at the household level, as described below:

- **Priority 1: Improving the management of natural resources:** Burkina Faso must focus on its two main assets, these being land and mineral resources. However, it must also on two scarce

resources: water and sources of energy. The availability of these resources, particularly water, is exposed to risks associated with climatic changes in both the short and longer term. Good land management is crucial to develop a modern, commercial agricultural sector and to increase the economic density in Burkina Faso's rapidly expanding cities. Mining can help create synergies through joint infrastructure development projects and technological transfers, and can contribute to raising public revenue that can finance national and local development. Good water and energy management is necessary to ensure sustainable development and better living conditions at the household level.

- **Priority 2: Promoting the development of skills:** About three-quarters of the labor force has never participated in formal education. In addition, the educational system continues to perform sub-optimally, with low rates of return and inefficient, ineffective allocation of resources. Without a well-functioning educational system, it is difficult for the population to acquire the skills that will enable them to participate in productive employment. Unless they engage in productive employment, it will not be possible for them to earn adequate incomes.
- **Priority 3: Reducing the Gender Bias against Women:** Women are systematically disadvantaged throughout the education system and in the labor market as well as they have more difficulties to access land and own productive assets, while Burkina Faso's fertility rate remains one of the highest in the world. In all of these areas, both economic and cultural factors are significant. Unleashing the potential of women's businesses, including those participating in the agricultural sector, and implementing a well-functioning family planning system could create the demographic dividend that Burkina Faso requires to achieve its goals of creating a greater number of productive employment opportunities and improving the socio-economic conditions of a large proportion of its population.

31. The second-tier priorities involve a number of cross-cutting priorities that will also play a central role in Burkina's Faso economic development. These priorities focus on four building blocks. The first block involves creating enabling conditions for business development, with this including enhanced connectivity in a country where a large proportion of farmers and other producers remain highly isolated. In addition, promoting the development of inclusive finance is also a significant priority, with less than 12 out 100 individuals currently holding a banking account and an even smaller proportion having access to credit. International experience clearly demonstrates that economic development and financial deepening usually go hand-in-hand. The private sector also suffers from formal and informal barriers to entry that limit the level of competition, with major negative implications for innovation and for consumers, including for public-private partnerships in key sectors.

Second-tier priorities

- Priority 4. Building Infrastructure to promote further Local and Regional integration
- Priority 5. Encouraging Financial Inclusion
- Priority 6. Increasing Resilience through Improved Social Protection to the Poorest
- Priority 7: Ensuring Fiscal Efficiency and Macroeconomic stability
- Priority 8: Building up Inclusive and Transparent Institutions
- Priority 9: Promoting Competition and Private Sector Development to Stimulate Efficiency and Innovation
- Priority 10: Managing Urbanization with efficient urban centers

32. **The second building block involves developing the macroeconomic and governance framework.** These priorities may not be perceived by citizens as having a direct impact at the household level. However, the existence of a good framework is vital for the achievement of economic and political stability and for creating the fiscal space required to achieve the other priorities. This is perhaps why the priority of “building inclusive and transparent institutions” was ranked as the most significant priority by targeted experts, while being ranked very low by other stakeholders. The focus should be on improving fiscal policy because it is the most important policy instrument over which the Government has direct control.

33. **The third building block focuses on providing protection for vulnerable groups.** Burkina Faso cannot afford to leave poor households exposed to the frequent shocks that result in significant losses of income and wealth. The synergistic relationship between this block and others is clear. For example, efforts to boost farmers’ productivity can be completely undone in a single season or even overnight by drought or flood. To address the impact of these shocks, the Government needs to develop both preventive and social protection programs. In terms of the latter, a quick win could be achieved by scaling up the coverage of the existing cash transfer program from 40,000 households to reach about 400,000 households that live in extreme poverty. This scaling up could be realized by targeting the poorest villages and by using mobile phones to facilitate the transfer of benefits, for an estimated annual cost of approximately US\$ 150 million per year, which is approximately only a tenth of the total value of aid inflows received by Burkina Faso.

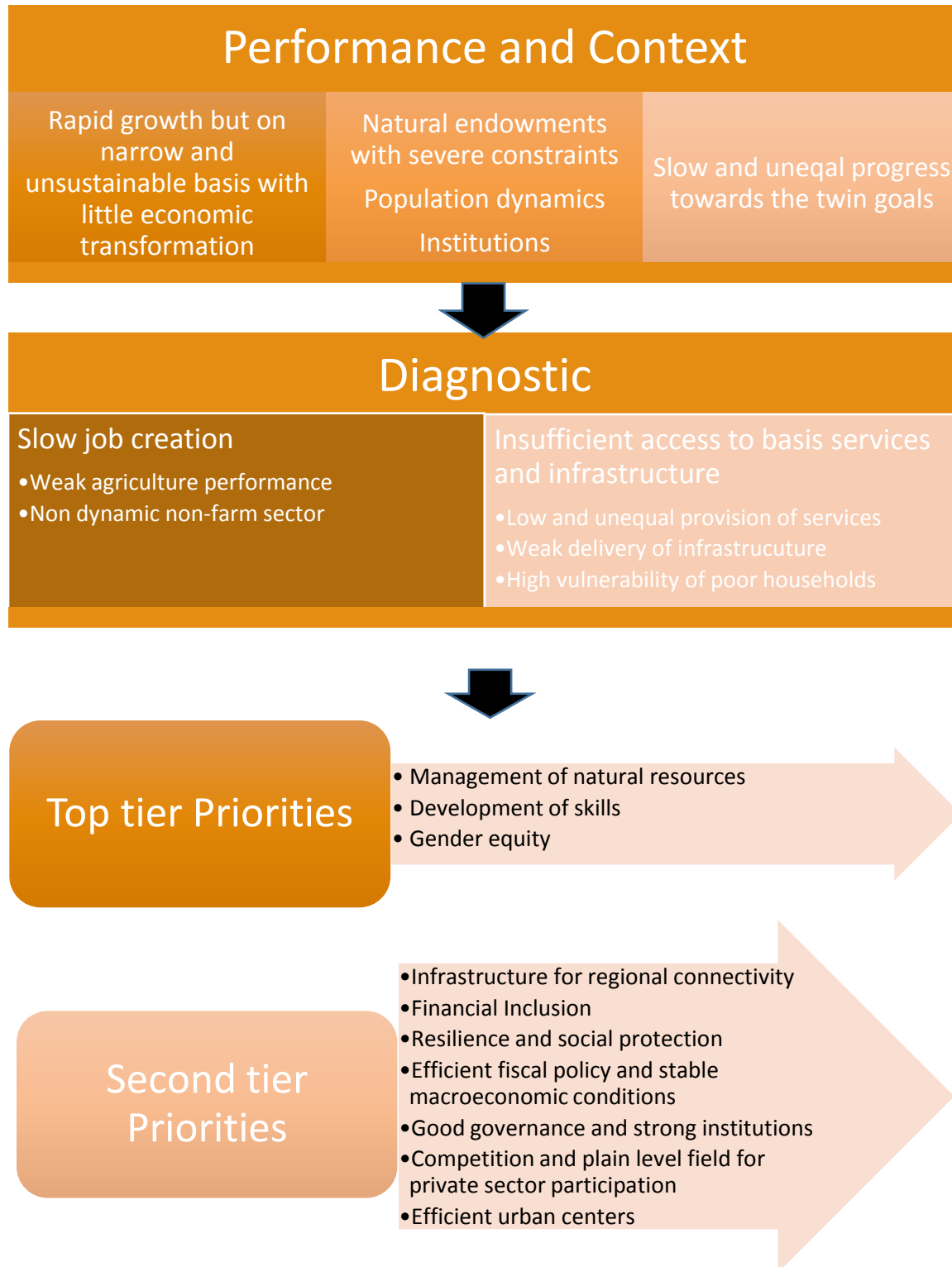
34. **The fourth block focuses on the process of urbanization and the development of urban centers.** In about 25 years, Burkina Faso will be a predominantly urban country, with the population of Ouagadougou expected to reach more than 8 million people. International experience has demonstrated that efficient cities are based on good planning that should be initiated at an early stage of the urbanization process. The development of secondary cities is also important to avoid congestion in the capital city and to create additional opportunities for the agricultural sector through the emergence of transformational value chains and customers’ markets.

35. **The SCD concludes by identifying gaps in data and suggesting a few directions for future research.**

INTRODUCTION

1. **The rate of Burkina Faso's progress towards the eradication of extreme poverty and the reduction of inequalities over recent years has been sub-optimal.** This Systematic Country Diagnostic (SCD) is an analytical report prepared by the World Bank Group (WBG) in an attempt to identify and analyze the factors that can help Burkina Faso accelerate its quest towards the achievement of the twin goals of reduced poverty and shared prosperity. The SCD assesses Burkina Faso's performance in order to identify the constraints and to formulate a set of key priorities to facilitate the achievement of these goals. By focusing on the most significant issues affecting the achievement of these goals, the SCD is intended to inform the formulation of the upcoming Country Partnership Framework (CPF) and thus to facilitate the optimization of the WBG's assistance to Burkina Faso.
2. **The SCD draws significantly on a wide range of recent analytical work.** It places particular emphasis on relevant World Bank sector studies and reports. In particular, the SCD draws heavily on 14 analytical policy notes prepared by the WBG country teams in April-June 2016 and on a series of background papers that are listed in Annex 1. The SCD was also informed to a significant extent by the new National Development Strategy, approved by the Government in June 2016.
3. **The formulation of the SCD benefited from intensive consultations in six of 13 regions of Burkina Faso, including its two main urban centers, with these consultations involving a wide range of stakeholders, comprising government officials, local authorities, customary chiefs, private sector operators, development partners, the civil society, and representatives of the media.** These consultations, which were conducted in September and October 2016, enabled the WBG to share its findings with key stakeholders at an early stage of the report's preparation in order to incorporate their feedback and to address their concerns in the final version. In addition, in October/November 2016, a comprehensive phone survey was conducted to further identify and rank the key priorities of significant stakeholders. To maximize the level of stakeholder participation and to improve the analytics, a steering committee consisting of 10 local leaders provided input and assistance to the WBG team throughout the process of preparing the report.
4. **In order to evaluate Burkina Faso's performance relative to countries with similar natural endowments, the SCD utilizes five peer countries as comparators, these being Mali, Ethiopia, Rwanda, Bolivia and Laos.** These comparators were selected on the basis that they each had one or more of the characteristics that define Burkina Faso, such as a dry and hot climate, vast agricultural and mining resources, a rapid demographic growth, and no direct access to oceans.
5. **The SCD is organized in three parts.** Part One establishes a context for the analysis through an assessment of the state of Burkina Faso's economy and the progress it has made towards the achievement of the twin goals of poverty eradication and shared prosperity. Part Two presents a unified analytical framework to identify the main constraints on the lack of Burkina Faso's progress towards the achievement of these goals. This framework focuses on two key constraints, these being the limited extent to which productive jobs have been created and the limited degree of access by poor households to a minimal package of services and infrastructure. Part Three attempts to rank policy priorities in the context of the analysis of the key constraints, international experience, and the perceptions of key stakeholder groups in Burkina Faso.

Figure 2: The SCD in one page




PART ONE: PAST PERFORMANCE AND CONTEXT

1. Part One establishes a context for the analysis contained in later parts through an assessment of the state of Burkina Faso's economy and the progress it has made towards the achievement of the twin goals of poverty eradication and shared prosperity over the past few decades. In global terms, Burkina Faso's economic performance has been very good, with the country consistently being included in the top five performers by the World Bank Country Policy and Institutional Assessment during the past decade. Over this period, Burkina Faso received massive aid inflows and attracted a high level of foreign investment from a number of multinational companies, particularly after the discovery of substantial gold reserves. However, as the remaining sections of Part One demonstrate, Burkina Faso's has recorded sub-optimal economic performance in a number of areas, including the following six areas in particular:

- a. Burkina Faso's generally high rates of economic growth have not resulted in the generation of a sufficient number of productive job opportunities to meet the needs of the country's expanding population, with a lack of diversification towards modern sectors. With rapid population growth and the overuse of non-renewable resources such as soil, minerals and water, there has been a deterioration in Burkina Faso's net per capita wealth.
- b. The agriculture and mining sectors continue to dominate Burkina Faso's economy, with a high proportion of the activities of these sectors located in rural areas. However, with the rapid population expansion, there has been an increasing pressure on the labor market and social services in rural areas. As a result, there has been significant immigration from rural to urban areas and to foreign countries.
- c. In the period before 2008, indicators show that the quality of governance in Burkina Faso was consistently improving. However, there has since been a decline as a result of the increasing concentration of power and increasing corruption. However, the country has achieved democratic elections in 2015 with civil society getting more voice in the political debate. At the same time, fiscal space has been reduced due to the Government's weak revenue collection efforts and the weight of incompressible spending in the Government's budget.
- d. The poverty rate in Burkina Faso remains high, standing at approximately 40 percent. While this rate has declined over the past 10 years as the combined result of improved non-monetary indicators, accelerated urbanization, and private money transfers, with the country's rapid population growth rate, the absolute number of people living below the poverty line in 2014 remained the same as in 2003, standing at 7 million.
- e. Poverty is overwhelmingly a rural phenomenon, with 90 percent of Burkina Faso's poor living in rural areas. Members of a typical poor household are employed on farms and have little or no formal education, with the typical poor household having more than six children.
- f. The vast majority of households in Burkina Faso remain highly vulnerable to economic and other shocks, with two thirds of households reporting that they were negatively impacted by shocks in 2014. The most important shocks are the result of climatic hazards, followed by prices volatility and insecurity. Environmental shocks are also significant.

2. Part One is organized in three chapters. Chapter 1 reviews Burkina Faso's economic performance over the past decade, with particular attention to the drivers of growth, job



creation, and sustainability. Chapter 2 explores the extent to which Burkina Faso's economic performance has been influenced by its geography, population and institutions. In doing so, the authors of this report follow a popular strand of economic theory that considers that these variables and their relationships are at the center of the development process. Chapter 3 assesses Burkina Faso's progress towards the achievement of the twin goals of eradicating poverty and reducing inequality by examining recent trends in these areas and by investigating sources of vulnerability and their impact on households' welfare.

1.1: Growth and Economic Performance over the Past Decade

3. **At first glance, Burkina Faso has recorded good macroeconomic performance over the past 15 years.** After a long period of economic stagnation, Burkina Faso recorded one of the best levels of macroeconomic performance in Africa in the period from the early 2000s to 2013. Over this period, Burkina Faso recorded an average annual GDP growth rate in excess of six percent, one of the highest average rates amongst WAEMU countries. Over this period, Burkina Faso's inflation rates were also relatively stable, except in 2008 and 2009, when the country was negatively impacted by the global food, economic and financial crisis and by severe local flooding. Measured in constant US\$, in the period from 1995 to 2013, Gross National Income (GNI) increased by a factor of three (see Figure 3).

4. **Burkina Faso's good macroeconomic performance was also demonstrated in terms of a number of other fiscal and financial variables** (see Table 1). Compared to a set of countries with similar natural endowment characteristics, Burkina Faso consistently recorded lower levels of overall fiscal deficits and debt. The external imbalance was easily financed by a combination of FDI and aid inflows, with the inflation rate remaining low at an average annual rate of around 1.2 percent as a result of the application of prudent monetary policy. Overall, Burkina Faso received high rankings from the World Bank in terms of its macroeconomic management, with one of the highest CPIA scores in the sub-Saharan African region.

Figure 3: A booming economy since 1995

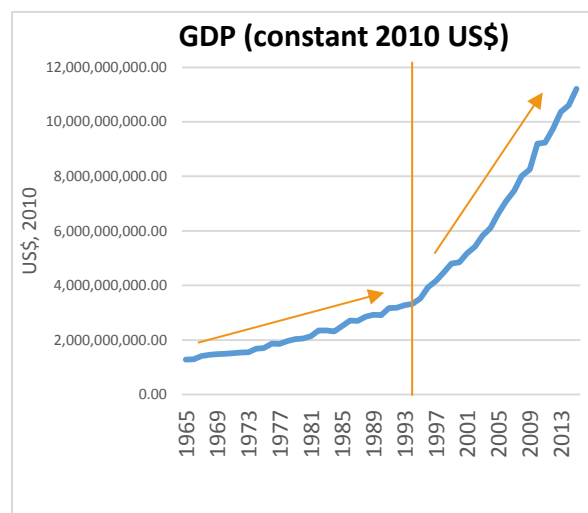
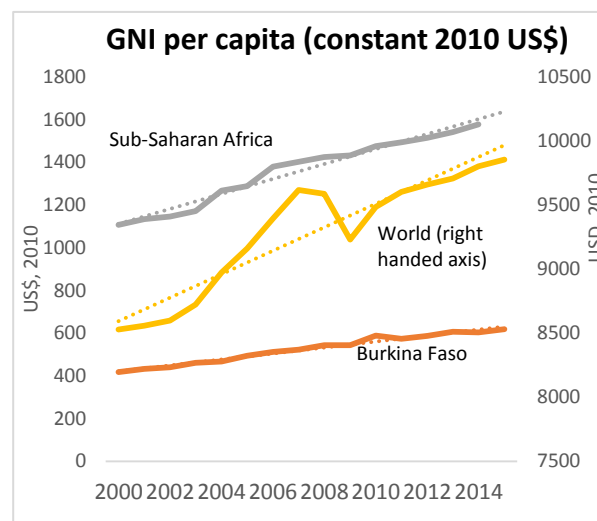


Figure 4: But more modest when adjusted by the population growth



Source: World Development Indicators, 2016

Table 1: Economic Performance Indicators: Burkina Faso and comparator countries (2010-13)

	Burkina Faso	Mali	Ethiopia	Rwanda	Bolivia	Laos
GDP per capita growth (%)	2.6	0.4	7.8	4.5	3.7	6.3
Fiscal Balance (% of GDP)	-2.8	-2.6	-2.8	-4.6	-5.3	-4.7
Current Account Balance (% of GDP)	-4.6	-12.8	-6.5	-9.9	3.5	-2.4
Debt level (% of GDP)	29.9	35.8	57.1	30.4	38.0	60.1
Inflation (% , y/y)	1.2	1.9	15.9	4.1	5.7	5.7
Credit (% of GDP)	20.9	18.6	na	19.1	50.3	26.5
CPIA (macro)	4.5	4.2	3.2	4.0	3.6	83.

Source: World Development Indicators, 2016 and IMF database.

5. While Burkina Faso recorded relatively high GDP growth rates over this period, these rates must be seen in the context of its high population growth rates, which partially offset the impact in per capita terms. As a result of the high population growth rate, Burkina Faso's average annual per capita GNI increased by only 2.6 percent in the period from 2006 to 2013, which is lower than the global and African average rate for the same period (see Figure 4). At this rate, it would take approximately 25 years for the country to double its average per capita income. Considering the Burkina Faso is amongst the poorest countries in the world, this rate is clearly insufficient for the country to achieve rapid reductions in poverty. By comparison, at current rates, it will only take seven years for Ethiopia to double its per capita income and 12 years for Rwanda.

6. Not only does Burkina Faso need to achieve higher rates of economic growth to significantly reduce poverty, it also needs to achieve a much higher level of diversification. As the following sections demonstrate, Burkina Faso's economic growth has been built on a narrow base, with limited diversification and insufficient productive job creation over the past decade. The current sources of economic growth have also contributed to the depletion of the country's natural assets, raising concerns regarding the sustainability of growth over the longer term.

Economic growth built on a narrow base

7. Burkina Faso's economic expansion has been built on a narrow basis, with four economic sectors and the expansion of the Government sector contributing to more than 80 percent of GDP growth (see Table 2, second column). The main contributor has been the expansion of the Government sector, driven by rapid increase in taxes (derived mainly from booming mining revenue) followed by non-trade services, trade, administration, communication and mining. It is worth underscoring that the contribution of non-trade and non-trade services is explained by their weight in Burkina Faso's economic structure (about 46 percent of GDP) rather than their rapid expansion during this period. In descending order, the fastest growing sectors have been mining, communication, transports, energy, and finance (see Table 2, first column).

8. With the exception of the non-trade and trade services, all the major contributors to GDP growth account for a marginal share of employment in Burkina Faso (see more details on the structure of employment in the next section). By contrast, agriculture, which employed about 80 percent of the labor force, has only contributed to about 15 percent of GDP growth. This simple statistic makes it abundantly clear that most workers have not directly benefited from the relatively rapid expansion of the economy during the last decade.

Table 2: Annual growth per sector, 2006-13

Average growth in Percentage per year		Contribution to growth in Percentage	
Mining	44.8	Taxes	16
Communications	15.0	Non trade services	16
Transports	14.9	Trade	15
Energy	11.3	Administration	14
Finance	10.0	Communications	12
Taxes	9.9	Mining	10
Trade	8.0	Construction	8
Construction	7.6	Agriculture	7
Subsistence agriculture	6.4	Finance	4
Fisheries	5.2	Livestock	4
Administration	4.6	Fisheries	3
Agriculture	4.5	Energy	3
Non trade services	2.7	Transports	2
Livestock	2.4	Subsistence Agriculture	1
Industry	-0.3	Industry	-1

Expanding by over 10% per year

Explain 83 % of economic growth

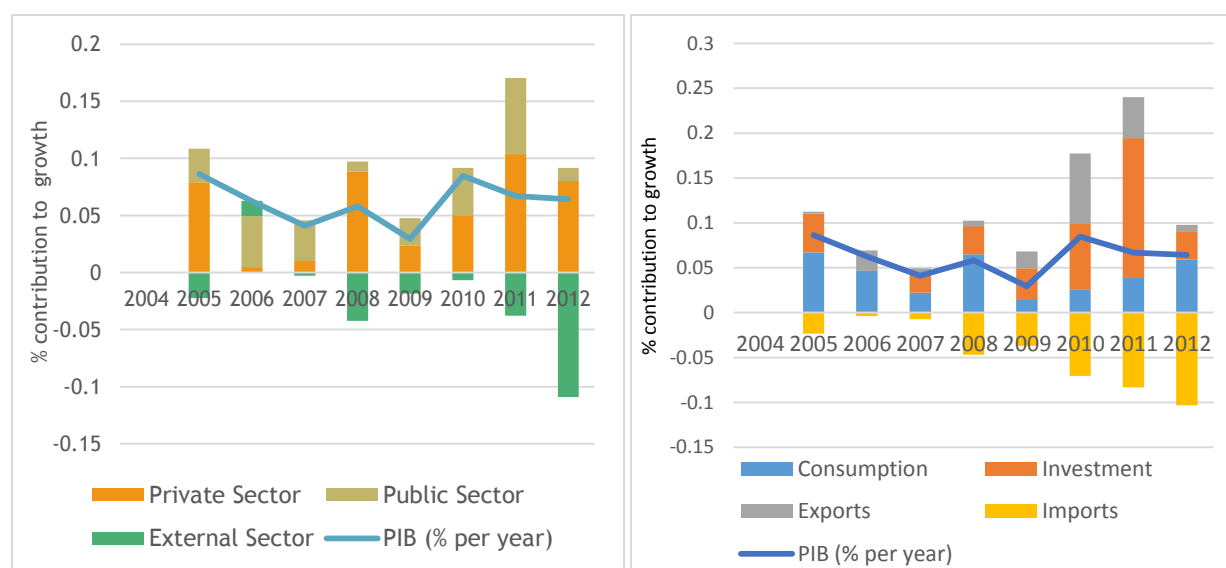
Source: Burkina Faso's National Statistics Institute

9. On the demand side, the private sector has been the main contributor to growth, accounting for about half of GDP growth over the past decade. However, the role of the public and external sector has also been relatively important over this period (see Figure 5). The expansion of the public sector contributed to approximately one third of GDP growth in the period from 2005 to 2013, with a peak of 40 percent in 2010 and 2011. This contribution, which is higher than in most other developing countries, was funded by the rapid increase in aid inflows and, in later years, from increasing mining revenues. These two sources of financing, largely outside the

Government's control, declined abruptly in the period from 2013 to 2015, necessitating a drastic adjustment to fiscal policy and resulting in significantly lower rates of GDP growth.

10. **Exports were the second most significant driver of growth, contributing to more than 20 percent of GDP growth in the period from 2010 to 2013.** However, this boom in exports was almost exclusively involved a single commodity: gold exports, which increased by a factor of more than 170 in the period from 2001 to 2014.

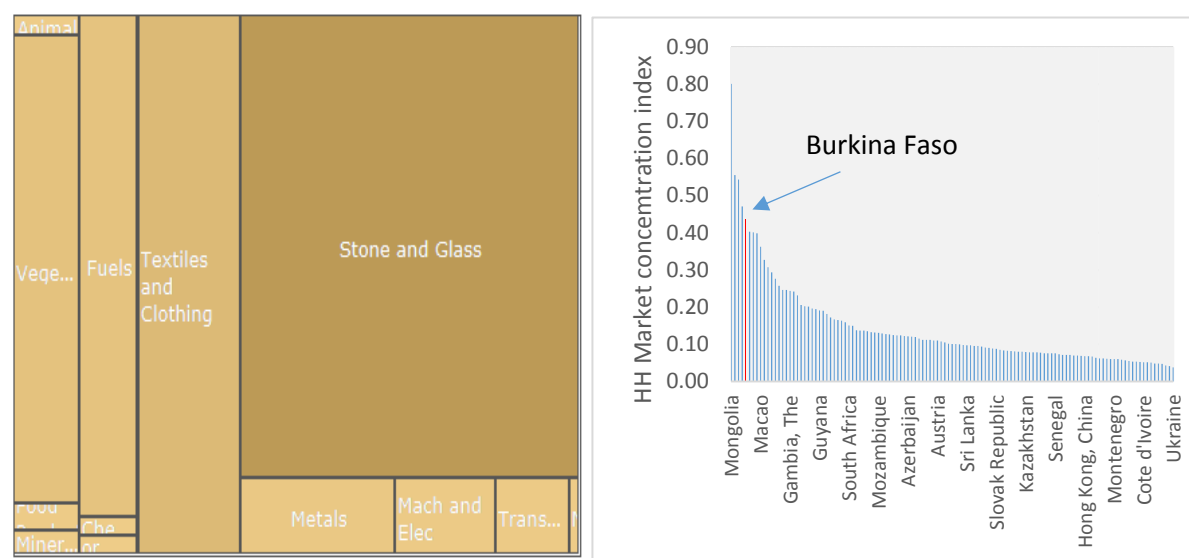
Figure 5: Drivers of growth on the demand side



Source: World Bank and Ministry of Finance.

11. **Burkina Faso's lack of diversification is further indicated by the highly concentrated nature of its exports.** In 2014, gold and cotton together accounted for approximately 80 percent of total exports, with three-quarters of these exports going to four markets (Switzerland, Singapore, South Africa, and Côte d'Ivoire). Thus, Burkina Faso had one of the highest levels of export concentration in the world (see Figure 6).

Figure 6: The concentration of trade in Burkina Faso



Source: WITS

Note: In the first figure, each box represents the share of the categories of merchandise in total exports of Burkina Faso during 2010-14.

12. **The concentrated nature of Burkina Faso's exports is associated with a high level of vulnerability to external shocks, particularly shocks related to fluctuations in the prices of cotton and gold on international markets.** This vulnerability became particularly apparent when average global prices for these two commodities fell in the period after 2012, reducing exports flow and thus government revenues by about two percentage points.¹ In addition to the impact on external and fiscal balances, the narrow basis for Burkina Faso's growth has prevented the emergence of new high-value economic activities and the creation of a greater number of productive jobs.

Limited structural transformation of the labor market

13. **International experience shows that over time, sustainable growth processes result in increased employment rates and increased labor productivity gains.** Successful emerging countries are characterized by the ability to create a sufficient number of productive jobs to meet the needs of their often rapidly expanding populations, with the creation of these jobs in sufficient numbers being the most direct way to alleviate poverty.² International evidence shows that on average, as average household incomes increase by 2 percent per year, national poverty rates are reduced by a rate of between 1.2 to 7 percent.³ A country can increase its labor

¹ For a detailed analysis of Burkina Faso vulnerability to external shocks, see IMF, *Selected Issue: Public Investment and Debt Sustainability Analysis in Burkina Faso*, December 2016.

² Gabriela Inchauste, João Pedro Azevedo, Sergio Olivieri, Jaime Saavedra, and Hernan Winkler, *When Job Earnings Are behind Poverty Reduction*, World Bank, November 2012.

³ Source: IFC Jobs Study, *Assessing Private Sector Contributions to Job Creation and Poverty Reduction*, January 2013.

productivity by two basic means. The first is to improve the efficiency of traditional sectors through intra-sectoral productivity gains. The second is to facilitate a shift of workers from traditional, low-productive sectors to modern, high-productive sectors (inter-sectoral productivity gains). Successful emerging countries are often characterized by both intra-sectoral and inter-sectoral productivity gains.

Box 1: Unemployment is not an option for the vast majority of Burkinabé

As in many poor countries, in Burkina Faso, while rates of unemployment are low, the proportion of the population engaged in high productivity employment is also low. With a lack of safety nets, it is simply not possible for people to remain unemployed. Thus, approximately 90 percent of Burkina Faso's working age population is active on the labor market, regardless of their age, sex, and location.

Over the past 15 years, almost 2.8 million jobs have been created in Burkina Faso, amounting to roughly 174,000 a year. However, the number of additional jobs created is roughly equivalent to the increase in the size of the labor force, with the unemployment rate remaining roughly constant at 1-2 percent throughout this period.⁴

The true challenge for most workers is not merely to find a job, but to find a productive job that provides them with a sufficient income to enable them to meet their needs. Thus, a productive job is defined as a job that provides a sufficiently high salary for the worker and his or her dependents to obtain the required feeding calories on a daily basis and to provide sufficient social protection.

14. Over the past few decades, Burkina Faso's labor productivity has increased by an average annual rate of approximately 2.3 percent.⁵ While this rate is higher than that achieved by most other countries in the sub-Saharan African region, it is still much lower than the rates recorded by successful emerging countries elsewhere. Burkina Faso's increased labor productivity is largely attributable to a shift of a significant proportion of the workforce from the agricultural sector toward services. Intra-sectoral gains have remained limited, especially in industry and services (see Figure 7).

15. Most of Burkina Faso's productivity gains have resulted from inter-sectoral labor movements, although the magnitude of these gains is relatively low compared to those achieved by successful emerging countries. In terms of its contribution to total employment, the share of agriculture in Burkina Faso declined by seven percent in the period from 1990 to 2008. By contrast, the contribution fell by more than 30 percent in Thailand and Indonesia and by almost 20 percent in Vietnam in the same period.⁶ In India, the contribution of agriculture to total employment declined by 27 percent in the period from 1993 to 2012, representing a rate about three times as fast as that achieved by Burkina Faso.⁷

⁴ For more details, see World Bank, *The Job Agenda in Burkina Faso: Workers and Jobs*, draft, June 2016.

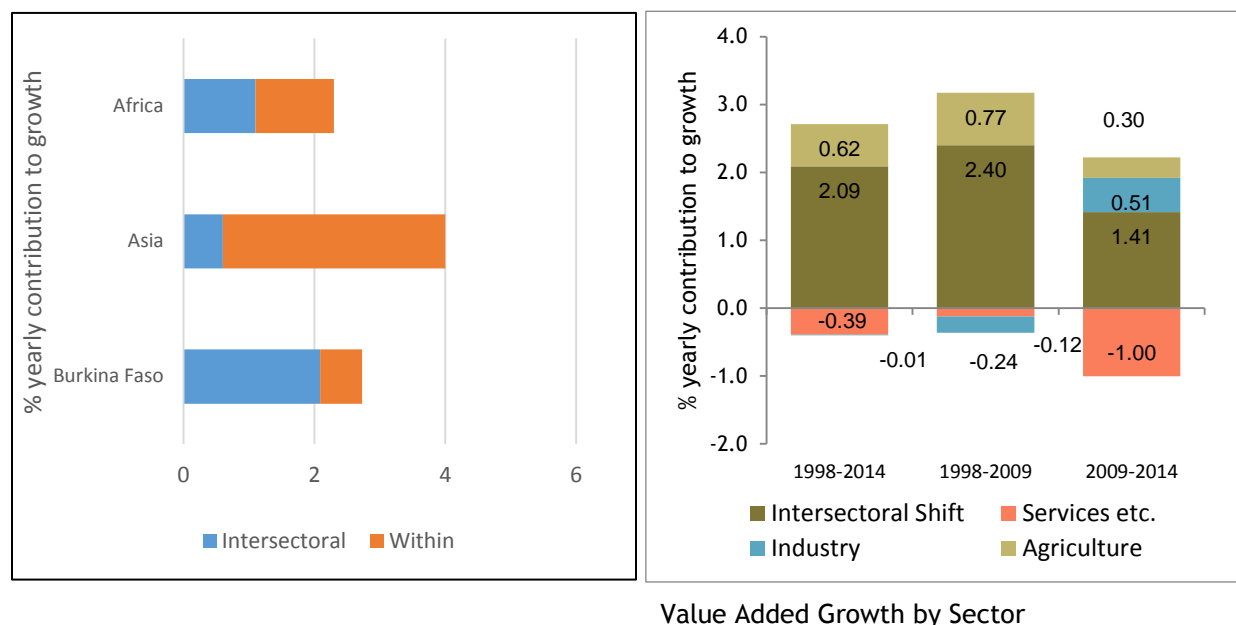
⁵ For details on the methodology used in this section, especially on labor productivity, see the SCD background paper on the labor market.

⁶ G. de Vries, M. Timmer, K. de Vries, *Structural transformation in Africa: Static gains, dynamic losses*, draft, 2015.

⁷ H. Jacoby et B. Dasgupta, *Changing Wage Structure in India in the Post-Reform Era: 1993-2011*, World Bank Policy Research Paper, 7426, September 2015.

Figure 7: Decomposition of labor productivity changes

Labor Value Added growth per regions



Source: McMillan and D. Rodrik (2011) and SCD's background paper on labor market.

16. In addition to the limited inter-sectoral labor movements, the average level of labor productivity of the industrial and services sectors actually declined in the period from 1998 to 2014, by an average annual rate of 0.01 percent in the case of the former and 0.39 percent in the case of the latter (see Figure 7). Those declines contrast sharply with gains recorded in a number of emerging countries in Asia, where intra-sectoral productivity gains have played a pivotal role in facilitating economic transformation. Even more disturbingly, the decline in the productivity of the service sectors appears to have accelerated in recent years, with the decline reaching an annual average rate of 1 percent in the period from 2009 to 2014. Arguably, this trend reflects the “reluctant entrepreneurs” phenomena described by Esther Duflo, who describes reluctant entrepreneurs as rural migrants who are attracted by the perceived opportunities in urban centers but, after failing to obtain productive employment, are forced to resort to low productivity self-employment.⁸ Many of these reluctant entrepreneurs are engaged in selling a few low value products or services for a few hours each day in the streets of Ouagadougou in order to eke out an income barely sufficient for their survival. This phenomenon is apparent from the growth in the share of self-employment and non-paid jobs in non-farm jobs over time. Only a small proportion of workers are able to obtain relatively well paid jobs, with about half of them employed in the public sector. The composition of the labor market will be further analyzed in Part Two of this SCD.

⁸ Esther Duflo and A. Banerjee, *Poor Economics*, 2011.

17. While the agricultural sector has recorded positive intra-productivity gains, these gains have been modest. In Burkina Faso, the level of labor productivity in the agricultural sector has increased by an average annual rate of 1.4 percent over the past decade. By contrast, successful agricultural countries such as Vietnam and Thailand have recorded increases almost three to four times higher. In 2014, the value added per worker in Burkina Faso in the agricultural sector stood at US\$ 323, compared to the median level of US\$ 555 for 36 African countries.

18. The slow rate of transformation of Burkina Faso's agricultural sector is demonstrated by its high share of agricultural employment and its low and relatively stagnant value added per worker in the sector. Figure 8 below shows that Burkina Faso continues to have one of the highest shares of agricultural employment in the world, despite the decrease of approximately 7 percentage points in the period from 1995-2000 to 2010-14. Figure 9 shows that Burkina Faso's value added per worker in the agricultural sector is one of the lowest in the world, having increased only marginally over the past 15 years. When these two pieces of information are seen together, it can be seen that overall national economic growth has not translated into higher incomes for a vast majority of the country's labor force.

19. Looking to the future, Burkina Faso faces the twin challenges of accelerating labor productivity gains in agriculture and increasing the level of productivity of non-farm jobs. If it does not increase its labor productivity gains in agriculture, it may face increased food insecurity due to rapid population growth and increasing urbanization. International evidence shows that successful emerging countries are generally characterized by a dramatic increase in productivity of their agricultural sectors in the first stage of their transformation process. Second, while the level of productivity of non-farm jobs in Burkina Faso is still higher than for farming jobs, it has been declining in recent years. The vast majority of new jobs have been in the informal sector, involving low productivity activities in urban centers. This pattern will not be sustainable over time.

Figure 8: One of the countries with the highest share of agricultural employment...

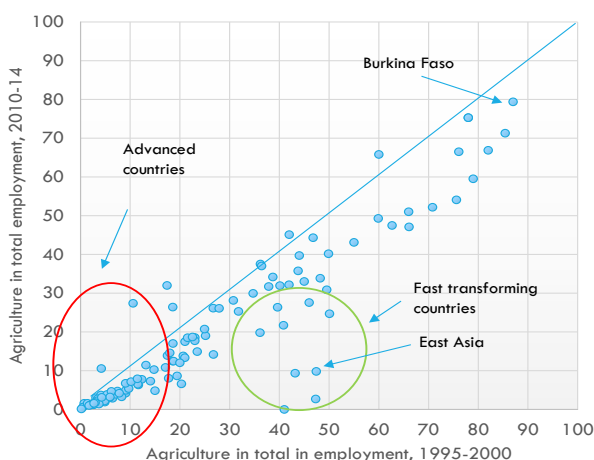
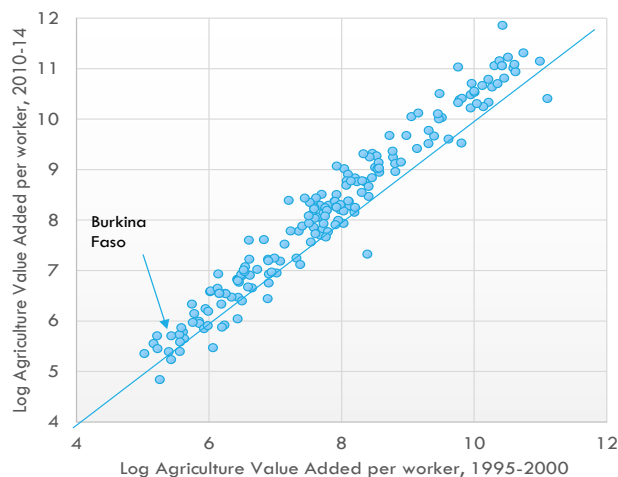


Figure 9: ... But with a very low labor productivity



Source: Authors' calculations based on WDI.

Depletion of stock of natural wealth

20. The quality of a country's economic growth is often evaluated in terms of its impact on that country's stock of natural wealth over time. Wealth is defined as the sum of gross savings, depreciation of physical capital, human capital formation, and natural capital depletion.⁹ If economic growth is achieved solely by drawing on the country's stock of natural wealth, this growth will not be sustainable in the longer run. The objective should not only be to maintain and increase overall national wealth, but to maintain and increase average per capita wealth, which requires the accumulation of capital at a rate higher than the rate of population growth.

21. Unfortunately, Burkina Faso's recent economic growth has been associated with a significant degradation of its stock of per capita wealth over the past few decades, with an average annual per capita decline in the stock of US\$ 73 in the period from 1995 to 2010.¹⁰ In other words, each Burkinabé has been losing about 14.8 percent of his or her wealth every year. However, it should be noted that the rate of depletion of natural capital in Burkina Faso is lower than the average for the sub-Saharan African region (see Figure 10).

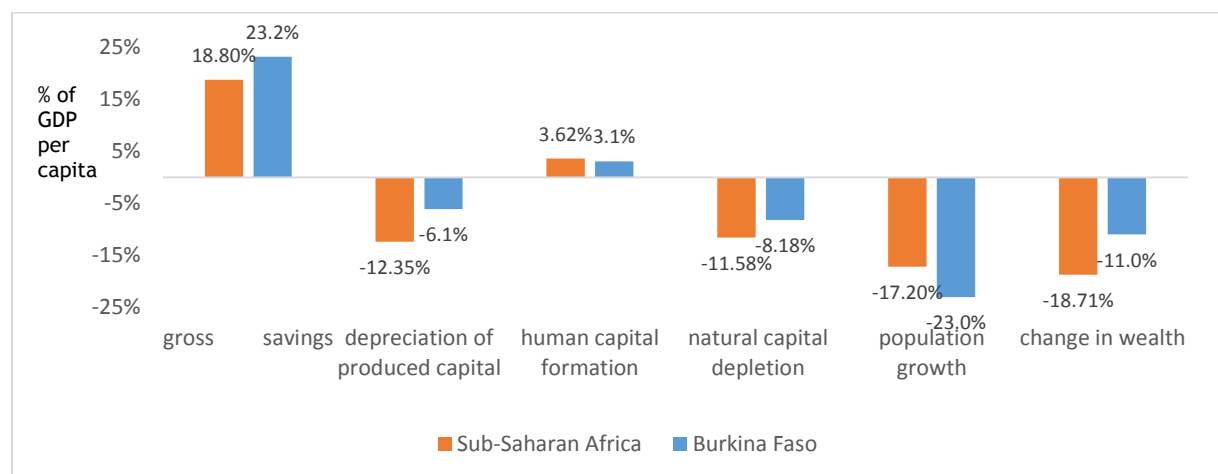
22. The main drivers of this decline in average per capita wealth have been the rapid demographic expansion and the unsustainable exploitation of non-renewable resources, mining resources and deforestation. In other words, the increased population, the extension of cities and of agricultural areas, and the intensive extraction of mining resources have contributed to the reduction in the country's natural wealth. On the positive side, gross national savings

⁹ *The Changing Wealth of Nations: Measuring Sustainable Development in the New Millennium*, World Bank, 2011.

¹⁰ Source: World Bank, *Burkina Faso: macroeconomic analysis and national climate - climate and disaster risk management screening tool outcomes*, July 2016.

increased from 17 to 23.2 percent of GDP over the 1995-2010 period, while the stock of human capital rose by 55 percent over the same period.

Figure 10: Change in wealth per capita components (% of GDP per capita), 2010



Source: SCD's background paper on risks assessment.

1.2: Burkina Faso's performance in light of its natural endowment, population, and institutions

23. The nature and quality of the growth process in Burkina Faso has been the result of a series of complex interactions between geographical, demographic and institutional variables. The debate regarding the relative importance of these three factors and the interactions between them is ongoing. Some economists, such as J. Sachs, argue that geography is the most significant factor through its direct impact on production and through its indirect impact on institutions.¹¹ Others rather emphasize the role of demography, including population shifts, on economic development, with urbanization being increasingly regarded as the main driver of economic growth through its ability to facilitate agglomeration effects.¹² Finally, a number of theorists, most notably D. Acemoglu and D. Rodrik, argue that the prime determinant of economic success is the quality of institutions.¹³ They argue that good policies can compensate for poor geographical conditions and maximize the positive impacts derived from the exploitation of natural resources on economic growth and poverty alleviation.

24. It is clear that all of these factors have contributed to shaping Burkina Faso's development processes. With Burkina Faso's rich natural endowments in terms of fertile land and

¹¹ John Luke Gallup, Jeffrey D. Sachs, Andrew D. Mellinger; *Geography and Economic Development*, NBER Working Paper No. 6849; December 1998.

¹² P. Romer, *Urbanization Passes the Pritchett Test*, May 2015.

¹³ See for example, D. Acemoglu, S. Johnson, and J. Robinson, *Institutions as a fundamental cause of long-term growth*, in *Handbook of Economic Growth*, Volume 1A. Edited by Philippe Aghion and Steven N. Durlauf, 2005; or D. Rodrik, A. Subramanian, F. Trebbi, *Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development*, NBER Working Paper, 2002.

mineral resources, it is clearly comprehensible that the agricultural and mining sectors have played a prominent role in the country's development process. At the same time, limited energy and water resources explain the relative insignificance of the industrial sector. At the same time, it is clear that rapid population growth has increased pressure on the labor market and on the delivery of social services, which in turn explains the significant population shifts both within the country and abroad. Finally, Burkina Faso's economic performance has clearly been influenced by the quality of its governance framework, which increased consistently in the period up to 2008, followed by a subsequent deterioration.

Geography: location, climate and natural endowments

25. **Burkina Faso's patterns of economic development have been clearly influenced by the country's geographical conditions.** As stated previously, the predominance of agriculture and mining is largely attributable to the nature of the country's natural endowments, while its landlocked condition, its rough climate, and the limited availability of water and energy have constrained industrial development.

26. **Burkina Faso is a land-locked country located in the Sahel zone in West Africa.** The country shares borders with six neighbors, of which five are Francophone countries (Côte d'Ivoire to the southwest, Mali to the north, Niger to the East, Togo to the South and Benin to the Southeast) and one Anglophone country (Ghana to the South). As a landlocked nation, Burkina Faso has no direct access to an ocean, a condition generally regarded as a major constraint to economic development.¹⁴ However, in the case of Burkina Faso, the inherent disadvantages of its landlocked state are mitigated by the existence of several competitive gateways to ports, with access to regional and global markets through Côte d'Ivoire, Ghana, Togo, Benin, and Senegal (via Mali). While these options broaden the country's range of possibilities, all these gateways are characterized by particular inefficiencies, contributing to high transportation and trade costs. Infrastructure is sometimes either non-existent or poorly maintained along those corridors. In addition, a number of trade and non-trade barriers contribute to increasing transportation and trade costs. For example, despite an existing rail road, it takes more than 140 hours for merchandise to transit from Ouagadougou to Abidjan by road, despite the fact that the distance between these two cities is only 1,116 km.

27. **As a Sahelian country, Burkina Faso is subject to severe climatic conditions, which are becoming even more severe due to the impact of the three following phenomenon:**¹⁵

- **Rising temperatures:** The average annual temperature increased by at least 0.5°C in the period from 1961 to 2008, reaching 28.5°C in 2008. It is projected that the maximum and minimum temperatures could increase by 0.9°C by 2025 and 1.5°C by 2050 compared to their average levels in the period from 1980 to 1999.
- **Lower and more erratic rainfalls:** Burkina Faso has experienced "quasi-drought" conditions since the early 1970s, with rains having become increasingly sporadic and with the declines in levels of water retention. These quasi-drought conditions are most pronounced

¹⁴ P. Collier, *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It*, Oxford University Press, 2007.

¹⁵ For more details, see World Bank, *Climate and Disaster Risk Screening Report: Burkina Faso*, Draft, June 2016.

throughout the country in November and December, when the average level of humidity stands at only 10 percent. In the northern region, rains occur on average only during two months out of each year. The country is likely to become increasingly dry in the future, with increasingly short periods of heavy rainfalls occurring between pockets of drought. Forecasts suggest extreme variability in rainfall distribution, with an increased occurrence of flood episodes.

- **Stronger winds:** Burkina Faso's dry season is influenced by the Harmattan, a dry and hot wind blowing throughout the country from October to March and from the North East to the South West. This wind brings hot, dry air and sand storms across the central Mossi Plateau. When coinciding with locust outbreaks, the Harmattan winds can accelerate their spread to communities at a rate of up to 200 km per day. Moreover, it has been noticed that over the past 40 years, strong winds have become more frequent and intense, exacerbating drought, deforestation, desertification, and the general effects of environmental degradation.

28. Burkina Faso's unfavorable and volatile climatic conditions explain that around two thirds of households report being impacted by natural hazards almost every year. Unfavorable climatic conditions reduce agricultural productivity and raise the level of food insecurity. These conditions also explain the prevalence of a number of diseases, with more than 5 million people being infected by malaria in Burkina Faso each year. These epidemics are the main cause of death in Burkina Faso, accounting for 59 percent of deaths in the country in 2013 and absorbing significant public resources. Labor productivity is also negatively impacted by high absenteeism rates resulting from disease. If each infected person misses three days of works, this represents up to 7.5 million of working days lost per year (assuming that only half of the infected population is active on the labor market).¹⁶

29. Burkina Faso's water and energy sources are limited. Reduced rainfall, evapo-transpiration, run-off and infiltration, erosion and sedimentation are natural factors that cause water scarcity throughout the country. There is only 732 m³ per capita per year of internal renewable fresh water in the country, which places Burkina Faso behind Cape Verde, Somalia, Eritrea, Kenya, Niger, Mauritania, and Sudan in the sub-Saharan African region and well below the accepted water scarcity threshold, which stands at 1,000 m³ per capita per year. Though water shortages are often a problem in Burkina Faso, the country has a number of large ponds and is crossed by a number of rivers, including the Mouhoun (Volta Noire), the Nakambé (Volta Blanche), the (Volta Rouge), the Comoe and the Niger River. Furthermore, crystalline rocks cover 80 percent of the territory. Burkina Faso has limited energy sources, with no oil reserves and very limited potential to generate hydropower. Thus, the country has become increasingly dependent on imported energy over the past few years. The only as yet untapped potential domestic source of energy could be solar power.

30. Burkina Faso's main traditional natural asset has been its vast extent of agricultural land, which covers approximately 45 percent of its total territory. Only about half this land is currently being utilized. In addition, about 15 percent of the territory is secured as classified forest land and protected areas, which provide multiple types of ecosystem services and serving as a source of fuelwood (90% of household consumption), biodiversity, bush meat, non-timber forest

¹⁶ See for example, W. Easterly and R. Levine, *Tropics, Germs, and Crops: How endowments influence economic development*, NBER Working Paper, 2002

products, and medicinal plants, amongst other resources. Connective infrastructure and water facilities are not present in large portions of this territory. Over the past fifty years, the extent of agricultural land has increased from 30 percent of the total land area in 1965 to 44.96 percent in 2013, a rate of expansion of 51 percent. This increasing pressure on land has led to the multiplication of conflicts over land use and has been identified as one of a number of potential threats to political stability. Amongst other purposes, Burkina Faso's land is used for the cultivation of livestock, with a total stock of approximately 10 million cattle and 13 million goats.

31. **The combined impact of climatic conditions, water availability, and ecology has shaped the allocation of agricultural activities over Burkina Faso's territory.** Agricultural activities can be classified into four main categories (see Table 3). As explained in the next part of the SCD, agricultural production continues to be characterized by a limited level of diversification, even though some initiatives have been taken to develop a horticulture sector (including the cultivation of green beans, onions, tomatoes). The three main activities involve the cultivation of cereals, cotton, and livestock.

Table 3: Agriculture Activities by climatic areas

Climate		Region	Agriculture/Livestock
Pre Guinea	Grass, forests.	South west, West	Sorghum, maize, sugarcane, cashew nuts. Igname
South Sudanese	Savanna with trees or shrubs, sparse forests	West, South West, South	Agricultural area characterized by perennial crops (mangos, citrus, cashew etc.), cotton; yams and cereals (sorghum, millet and maize). Used by transhumant in the dry season with sometimes mortal conflicts between pastoralists and farmers.
North Sudanese	Savannas with trees or shrubs	West, North West, Center West	Cotton area with agriculture based on sorghum, millet, cowpea and groundnut Transhumant pastoralism and sedentary village stock raising
Sahelian	Steppe with thorny bushes and annual grasses	North, North West, Center; North Est	Subsistence farming based on millet, sorghum and cowpea Transhumant herding

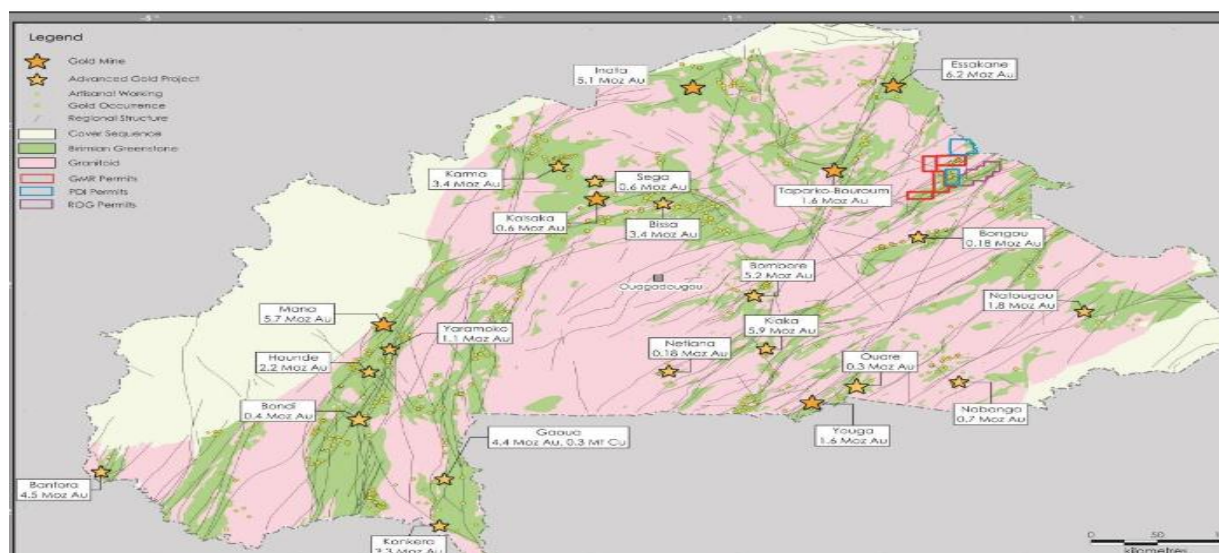
Source: Authors based on World Bank's information.

32. **For a long period of time, Burkina Faso was seen almost exclusively as an agricultural country. However, perceptions of the country's economic potential changed dramatically when massive reserves of gold were discovered in the early 2000s, generating an unprecedented boom to the mining sector, with this sector now accounting for approximately 50 percent of the country's total exports.** While small-scale mining activities have been conducted in Burkina Faso for many years, since the early 2000's, a number of multinationals have invested heavily in building large industrial sites in the country. As a result, gold production has skyrocketed, increasing from 209 kg in 2001 to 36,300 kg in 2014.¹⁷ Today, Burkina Faso is currently the fourth largest gold producer in Africa, and the third most explored region in the African continent. There are also substantial reserves of manganese, limestone, and marble (see

¹⁷ See section 2.2 for a fuller analysis of the mining sector.

Figure 11). With the identification of these resources, nearly 60 international companies are conducting a range of mining activities throughout the country.

Figure 11: Mining sites and resources



Source: Government of Burkina Faso.

Population: Young, fast growing, and moving

33. In 2015, Burkina's Faso population was estimated to stand at 18.5 million, with this number projected to increase to up to 40 million by 2050. The precipitous projected increase is due to the fact that infant mortality has declined dramatically, while average life expectancies, though still low, have increased. Birth rates remain high extremely high, at an average rate of more than five children per woman (by comparison, the average number for Bangladeshi women is two). Unless Burkina Faso's fertility rate falls sharply, its population will continue to grow exponentially (see Box 2 below for fuller details). This population increase will place increasingly intense pressure on land use, the labor market and public services.¹⁸

Box 2: Explaining the high fertility rate

The rapid population growth in Burkina Faso is primarily explained by the high fertility rate, since a woman was on average giving birth to five children 2015. This number, down from seven in 1993 and six in 2010, is still very high by international comparison (the world average rate is around 2.5). There are various causes behind

¹⁸ In addition, there is a growing literature on demographic vulnerability arguing that rapid population growth in countries with weak institutions is a very strong predictor of social and/or political instability because a large number of youth with poor job prospects are much more likely to protest, become criminals, and/or join insurgent movements than youth with good employment opportunities. See for example, World Bank 2013b. *World Development Report 2013: Jobs*. Washington, DC: The World Bank.

Burkina Faso's high rate, including:

- Location: The fertility rate is higher in rural areas (5.8 children per woman) than in cities (3.7 children per women).
- Family planning is still relatively underutilized, with the rate of contraceptive use standing at only 23.8 percent in 2015 (up from 13.8 percent in 2003). This low rate is partly explained by the lack of information available to potential users. However, supply side factors are more significant, with a limited availability of contraceptive instruments in rural areas. As a result, the demand for family planning is incompletely satisfied, with only half of requests for contraception being met in 2015.
- Education: Only 40 percent of girls were registered in secondary schools in 2014, with most of them unable to complete the cycle.
- Behaviors: Many adolescents have sex early (approximately one out of four girls aged between 15 and 19 years has already given birth).

All these factors are interconnected and influence each other. For example, access to education and family planning is greater in urban than in rural areas. Better information and family planning will lead to less involuntary pregnancy, which is likely to result in a greater number of young women achieving higher levels of educational attainment.


Looking forward, the projected increase in urbanization rates; improved access to education for girls; and improved access to family planning should lead to a gradual decline in the fertility rate. The recent study on the demographic dividend in Burkina Faso forecasts a decline in the fertility rate from the current level of five children per woman in 2015 to 4 (low case scenario) or 2.5 (high case scenario) in 2050.

Source : Rapport provisoire, *Profil du dividende démographique du Burkina Faso en 2014*, Septembre 2016.

34. While Burkina Faso's rapid population growth creates risks, it could also generate a demographic dividend if the nation's youth were able to find productive jobs. The term demographic dividend refers to the accelerated economic growth that may result from a decline in a country's population growth rate and the subsequent change in the age structure of the population resulting in a larger share of working age population.¹⁹ There is no automatic correlation between declining population growth rates and higher rates of per capita income growth. Rather, a series of intermediate steps must also occur simultaneously, including reduction in fertility and infant mortality rates. These will result in reductions to average family size and so allows parents to invest to a greater extent in the human capital development of each child. In addition, a decline in the average number of children may facilitate an increase in female labor market participation because women will not be required to spend as much time raising children. In Burkina Faso, the ratio of working people relative to the total population has increased from 43 percent in 1997 to approximately 45 percent in 2016. This creates increased opportunities for households to finance education expenses for the youth and to care for old people over time.²⁰

¹⁹ For a good summary, see Bloom, David, David Canning, and Jaypee Sevilla. 2002. *The Demographic Dividend*. Santa Monica, CA: The Rand Corporation or Bloom, David, David Canning, Gunther Fink, and Jocelyn Finlay. 2007. *Realizing the Demographic Dividend*. Cambridge, MA: Program on the Global Demography of Aging, Harvard University.

²⁰ This is low compared to East Asia, the region that benefitted most from creating a demographic dividend. At the height of its youth bulge, the working-age share of the population reached just over 70 percent. By contrast, under current projections, the



This increasing number of workers is also creating a new consumer market.²¹ However, these positive effects will require that the new entrants to the labor market are able to find productive jobs. As the next part of this report makes clear, this remains a significant challenge in Burkina Faso.

35. **Burkina Faso has a significant degree of ethnic and religious diversity, with more than sixty ethnic groups.** Within this diversity, there are three main ethnic groups. Mossis comprise the majority, with most members of this group living in the central and northern regions; the Dioulas are the second largest group, with most of this group living in the Western regions; the Peulhs are the third largest group, being concentrated in the Sahel region. In terms of religion, the majority of the population identifies Muslims (60.5 percent), with the second largest group identifying as Catholics (23.2 percent), followed by animists (7.3 percent), Protestants (6.7 percent) and others (2.3 percent). Although the economic literature has pointed to a negative association between a high level of ethnic diversity and accelerated economic growth, economic and political power has been traditionally shared relatively equitably between the various ethnic and religious groups in Burkina Faso.²² Existing conflicts between pastoralists and livestock farmers tend to be driven to a far greater extent by disputes related to land and water resources than to ethnic differences.

working-age share of Burkina Faso's population is likely to rise slowly. Therefore, Africa's demographic dividend, even under ideal policy conditions, is likely to be more modest than in East Asia.

²¹ McKinsey's 2010 [*Lions on the Move*](#) study was largely predicated on a theory of economic growth known informally as "just add people".

²² See W. Easterly and P. Levine, *Africa's Growth Tragedy: Policies and Ethnic Divisions*, *The Quarterly Journal of Economics*, 112 (4), 1997

Box 3: Local Culture matters for Economic Development

There is a high level of cultural diversity in Burkina Faso, with more than 60 identified ethnic groups. While these ethnic groups share many common characteristics, there are also significant cultural differences, particularly in terms of patterns of wealth accumulation by individuals. In many regions, a large proportion of the population still use traditional medicine to cure illnesses. Providing formal education to female children is not a priority for many groups, with teenage girls often married at an early age. As described by Johannes and Korbéogo, the level of women's access to land and other physical assets is particularly low in the Eastern region, leading to wide gaps between the economic status of men and women.²³

In the South-West and the East, the accumulation of wealth by individuals is constrained by local community rules. Under these rules, individual members of the community cannot build new houses, own motorized vehicles, or hold a bank account. The basic principle is that wealth has to be equally shared within the community, acting as a disincentive on individual initiative and saving.²⁴ By contrast, in the West, wealth accumulation at the household level is encouraged, leading to the widespread construction of modern buildings and the accumulation of other assets, with members of communities taking advantage of the positive externalities related to the presence of surrounding coastal countries.

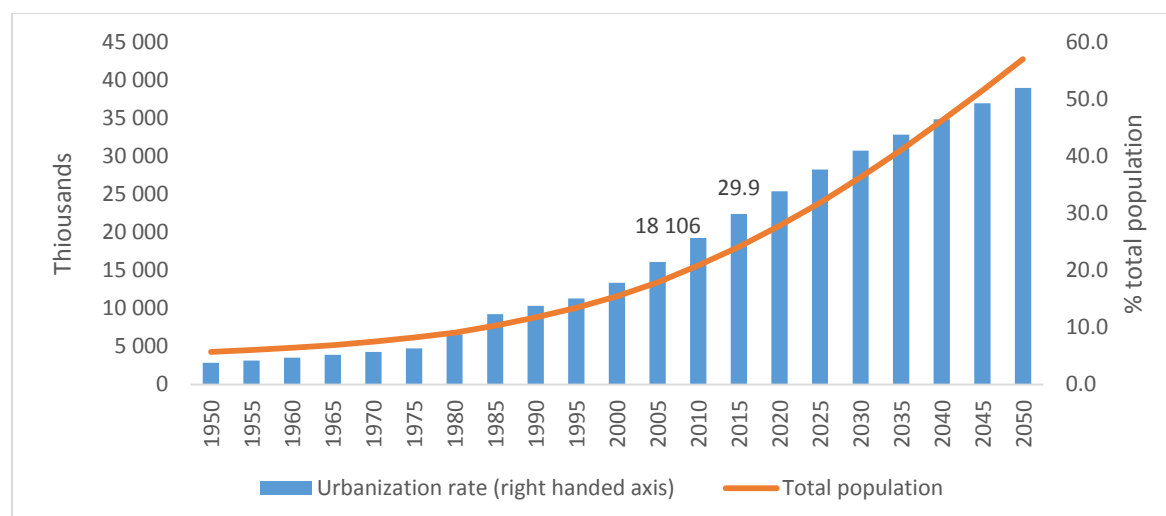
As a result, the incidence of poverty is higher in the East of the country than the West, despite the fact that both have approximately the same natural assets in terms of soil fertility and rainfalls.

36. As elsewhere throughout the developing world, there has been an increasing trend towards urbanization in Burkina Faso, with a significant proportion of the rural population migrating to urban centers (see Figure 12). However, despite the acceleration in the rate of urbanization in recent years, Burkina Faso remains a predominantly rural country, with only about 30 percent of its population living in urban centers at the end of 2015. This compares with the average rate of 34 percent for the sub-Saharan African region as a whole.

²³ See Johannes Gutenberg and Gabin Korbéogo, *La sécurité foncière comme compétence Politique, normes sociales et accès aux ressources naturelles au Gourma*, 2009

²⁴ See Evariste N. Poda, *la société dagara entre hier et demain : Mutation difficile ou développement impossible ?* 2004

Figure 12: Population Dynamics: Almost 20 million people will live in urban centers by 2050



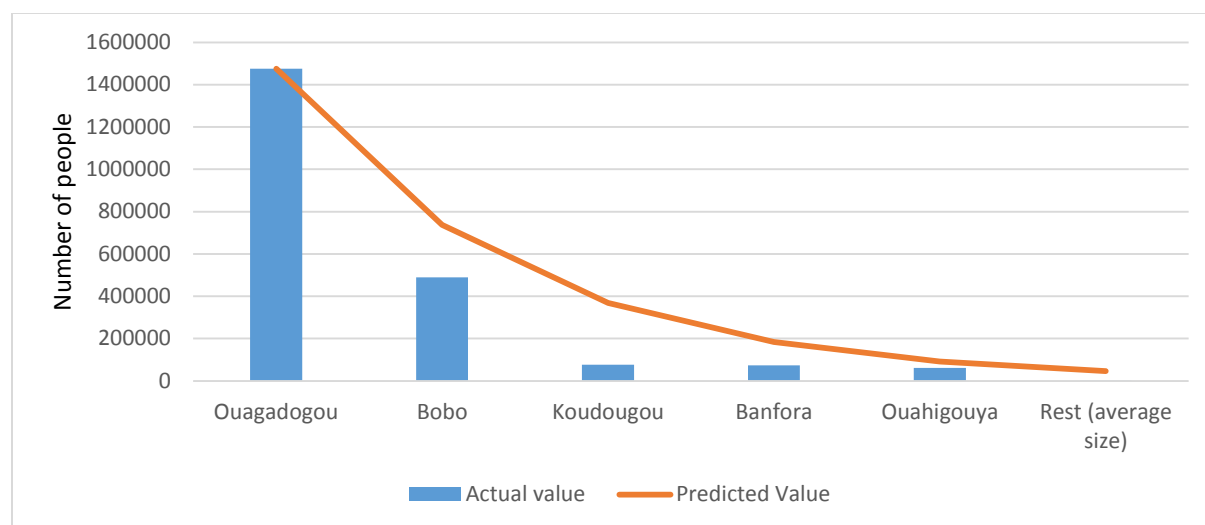
Source: UN Population's projections

37. In Burkina Faso, the urbanization process has been primarily characterized by migration to the country's two major cities, Ouagadougou and Bobo-Dioulasso. As a result, these two cities are amongst the most rapidly expanding cities in Africa. They account for more than 60 percent of Burkina Faso's total urban population, with secondary cities remaining relatively underdeveloped. Patterns of urbanization in the country thus do not conform with Zipf's law, which states that the city with the largest population in any particular country is generally twice as large as the next largest, and so on (see Figure 13).²⁵ The rapid urbanization process is increasingly seen as a major driver of economic growth and poverty alleviation in African countries.²⁶

²⁵ E. Gleaser, *Tale of Many Cities*, New York Times, April 20, 2010.

²⁶ See for example, Ede Ijjasz-Vasquez, *Making urbanization work for Africa*, World Bank blog, 09/15/2015

Figure 13: Unequal distribution of cities in Burkina Faso



Source: National Institute of statistics.

Note: The predicted values are calculated by applying the Zipf's law.

38. **Another significant characteristic of the population of Burkina Faso is its relatively high rate of migration to neighboring countries, with migrants leaving in search of better job opportunities.** Partly as the result of Burkina Faso's relatively unfavorable climatic conditions, there has been a long tradition of workers migrating to neighboring countries, in particular Côte d'Ivoire and, to a less extent, Ghana. While accurate data is not available, it is estimated that the number of expatriate laborers ranges from 6 to 10 million (see Box). This high rate of migration means that remittances from overseas workers are a significant contributor to household incomes, with 82 percent of households reporting the receipt of transfers from relatives living abroad at least once per month.²⁷ At the same time, this high level of migration has the potential to result in a brain drain, with individuals with relatively high skill sets leaving the country to seek higher levels of remuneration elsewhere. However, at present, it appears that this trend is not as significant as it is in a number of other countries in the region.

²⁷ Source; Afrobarometer, 2015.

Box 4: The main characteristics of migrants

The data shows that young men are the demographic group most likely to migrate, with most international migrants, both within and outside Africa being male (over 70 percent) and with an average age of around 32 years. The majority of those migrating to neighboring countries have only completed primary education, while internal migrants have on average completed secondary education. The main reason for migration abroad is to pursue economic opportunities (78 percent), followed by study (8 percent) and, finally, marriage or family reasons (4 percent). As a result of migration, an increasing proportion of workers become wage employees rather than engaging in self-employment. The survey data show that the rate of return for migrants going abroad was only 3 percent in Nigeria and 9 percent in Senegal, compared to the figure of 25 percent for Burkina Faso. The majority of those who returned to Burkina Faso and Nigeria did so in less than four years

Source: S. Plaza et al., *Migration and Remittances Household Surveys in sub-Saharan Africa: Methodological Aspects and Main Findings*, Draft, World Bank, 2011.

Political Context, Institutions and Human Made Policies

39. Since Independence in 1960, the political context in Burkina Faso has been marked by long periods of stability interrupted by relatively short periods of crisis (see Box 5). The last episode of instability occurred in 2014, when the former President Compaoré was expelled from power. The transition period lasted for one year, ending with the organization of presidential and legislative elections in November 2015.

Box 5: Burkina Faso political history in five episodes

The first period, following independence in 1960, was dominated by the country's first president, President Maurice Yaméogo, who was removed from power on January 3, 1966 following widespread protests against the mismanagement of public resources.

During the second period (1966-1983), military coups resulted in the installation of President Sangoule Lamizana and President Saye Zerbo, amongst others, with these presidents designing a number of programs to manage the economy. This included the imposition of a period of austerity, known as "Garangose," which was intended to enable Burkina Faso to control gaps in public finance. During this period, Burkina Faso developed its relationship with Bretton-Woods institutions to enable it to build up a sustainable economy. President Zerbo faced difficulties with the country's powerful trade unions and was deposed by another member of the military, Jean-Baptiste Ouedraogo, who established the Council of Popular Salvation and promised to facilitate a transition to civilian rule.

The third period (1983-1987) was characterized by a period of so-called revolution, during which a Sankara-inspired pan-African socialist led Burkina Faso and imposed a series of rolling five-year plans financed by internal resources and, to a less extent, by external donors. During this period, the economy grew by the relatively low average annual rate of 1.2 percent.

The fourth period (1987-2014) has been characterized by a long period of political and economic stability under the leadership of President Blaise Compaoré, who helped Burkina Faso to move beyond the austerity and centralized model towards market-oriented reforms and re-engagement with the international community.

The fifth period has been characterized by the inauguration of a transitional government following the October 2014 crisis to prepare democratic and transparent Presidential and parliamentary elections in November 2015.

40. While the series of political crises that have characterized Burkina Faso's political history have a range of causes, these crises can be partly explained by the high and increasing level of concentration of political and economic power. It can be argued that a certain degree of political equilibrium was maintained until the mid-2000's, but that the political system became increasingly instable after the discovery of massive gold reserves, which created new revenue opportunities for the elites.²⁸ These opportunities sharply increased the degree of political inequality, with political power holders being able to amass great wealth. The increased concentration of political power became apparent through the quasi complete control of the former President political party (CDP) over the administration and national Assembly; the lack of independence of the justice system; and above all, by the former President's tentative attempt to extend his mandate, against the terms of the Constitution.²⁹

41. For the purpose of this analysis, the most important point is that increasing political inequality has been associated with corresponding increases in the level of economic inequality. The degree of economic inequality remains significant, as can be seen from the following data:

- Eighty percent of public revenues are controlled by central administration, despite extended administrative decentralization/de-concentration initiatives in 13 regions, 45 provinces, 350 departments, 359 communes, and 8000 villages;
- Over half of Burkina Faso's public employees are located in Ouagadougou, despite the fact that this city is home to only around 15 percent of the country's total population;
- Public investment is biased towards the development of urban centers, as indicated by the gap in the level of access to electricity and water between urban and rural areas. Thus, 41 percent of households in Ouagadougou have access to electricity compared to the national average of only 14 percent;
- Two commodities (cotton and gold) account for around three-quarters of total exports, with three large companies (IAM Gold, SEMAFO, and SOFITEX) controlling close to half of these exports;
- The oligopolistic structure of a number of strategic sectors enables existing companies to record substantial margins at the expense of competing firms and consumers (see Box 6).

²⁸ For a political economy analysis of the mining sector, see SCD background paper on the mining sector. See also, Oxford management group, Political Economy Analysis of the Mining Sector, Burkina Faso, 2011.

²⁹ For fuller details, see International Crisis Group, *Burkina Faso : Neuf mois pour achever la transition Rapport Afrique*, N°222, 28 Janvier 2015.

Box 6: Excessive rents in two strategic sectors: rice and cement

Rice: Together with millet and maize, this crop forms the staple diet of the population of Burkina Faso. In urban areas, four out of five households eat rice on a daily basis. Over the past five years, Burkina Faso has imported approximately 360 metric tons of rice each year, with the bulk of this rice coming from China, India, Vietnam, and Thailand. By examining the export price in these countries, with adjustments for duties, taxes and transportation costs, it can be calculated that importers' average margin stands at around 142 percent, considerably higher than the 12 percent maximum permitted by prevailing laws.³⁰ Data from the customs authorities show that there are about 300 importers of rice in Burkina Faso, although in reality, control of the trade is concentrated between five strategic buyers located in Ouagadougou.

Cement: The consumption of cement has increased rapidly in recent years as a result of the mining boom and accelerated urbanization. This boom has led to the entrance of new investors, with four major companies currently operating on the local market, being primarily engaged in importing clinker from Togo. However, retail prices have remained relatively stagnant and high. In 2015, the price per kg was still 30 percent higher than in Mali and 22 percent higher in Togo. If the retail price of cement in Burkina Faso was equivalent to the price in Mali, local consumers would have saved a total of around 10 million FCFA.

42. **By the beginning of the 2010s, the increasing level of economic inequality had fueled social discontent and led to increasing levels of political instability.** The causal link between economic inequality and political instability was demonstrated by a hypothesis tested by Alesina and Perroti (1996), Alesina (2003) and Acemoglu (2007), who described the negative role of economic inequalities and the concentration of political power on economic development, with political decisions reflecting the wishes and interests of only a small subsection of the society.^{31,32} The unanticipated brutal decline in the international prices of gold and cotton (which decreased by 24 percent and 7 percent respectively in the period from 2012 to 2014) exacerbated these tensions by reducing available resources for the elites and ultimately forcing the Government to reduce expenditure. In November 2014, former President Compaoré was ousted from power following widespread riots, following which a Transition Government was installed.

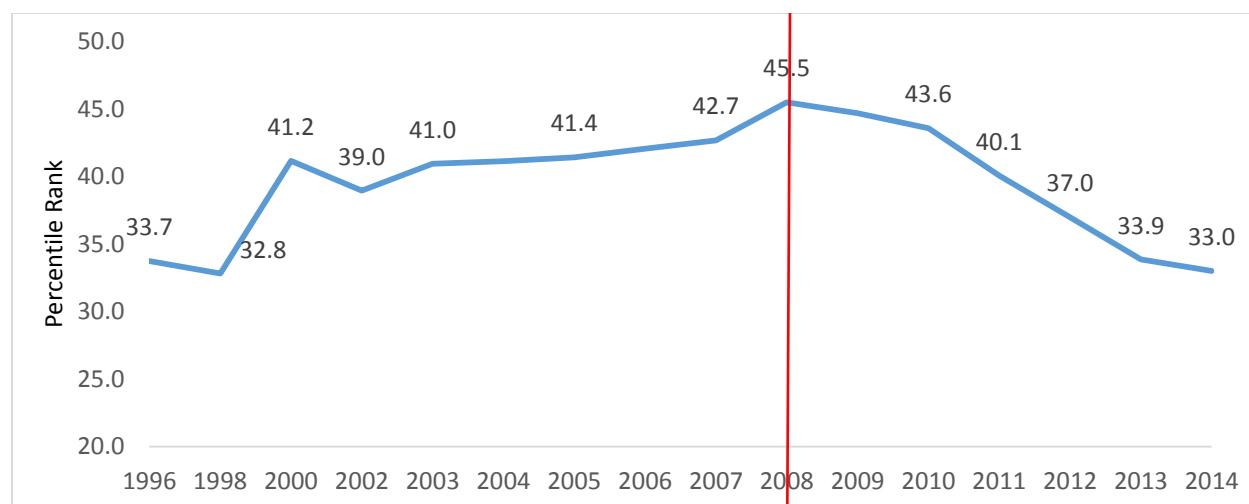
43. **The deterioration of the political climate in recent years concurred with a decline in the quality of governance.** While Burkina Faso was consistently perceived to be a good performer in this area in the period from 1995 to 2008, its governance indicators have indicated a dramatic decline in performance in the period since 2008. The most readily apparent effect of this deterioration has been the increasing level of political instability and the decline in the rule of the law as measured by the World Bank (see Figure 14). Concurrently, Burkina Faso continues to rank relatively low in terms of its ability and willingness to share data and information. In 2015, it was ranked 90th out of 102 countries in terms of indicators defined by the World Justice Project (WJP) Open Government Index.

³⁰ See Arrêté 2011-0221/MICA/DGCI from the Trade Ministry of Burkina Faso

³¹A. Alesina, 2003, successfully tested on a sample of 70 countries for the period 1960-85 the following hypotheses. Income inequality, by fueling social discontent, increases socio-political instability (Source: A. Alesina et al, *Fractionalization*, NBER Working Paper No. 9411, January 2003). See also, Alesina, Alberto, and Roberto Perotti. 1996. *Income distribution, political instability, and investment*. European Economic Review, 40(6): 1203-1228.

³² Daron Acemoglu, Maria Angelica Bautista, Pablo Querubin, James A. Robinson, *Economic and Political Inequality in Development: The Case of Cundinamarca*, Colombia, June 2007.

Figure 14: The deterioration of Governance since 2008



Source: World Bank Governance Indicators.

Note: The percentile rank indicates the percentage of countries worldwide that rates below Burkina Faso. Higher values indicate better governance ratings. This index is calculated as the unweighted average of the five following components: (i) first against corruption; (ii) rule of law; (iii) government effectiveness; (iv) political stability; and (v) regulations.

44. **The deterioration in the governance framework is further evidenced by growing irregularities in the trade and capital flows between Burkina Faso and its main partners.** It has been estimated that illicit capital outflows during the late 2000s reached a value in excess of US\$100 million.³³ There have been indications of serious misreporting of the value of bilateral trade. For example, 49 percent of the gold exports registered as going from Burkina Faso to Switzerland in the period from 2010 to 2014, with a total value of approximately US\$ 2.5 billion, cannot be traced through an examination of Switzerland's bilateral trade data. While such misreporting appears to be a common characteristic of trade between African countries and international centers such as Switzerland and the Netherlands, it raises serious concerns regarding the activities of the multinationals operating in Burkina Faso.³⁴ It is possible that in some cases, products may have ended up in destinations other than those listed in the official records, probably in tax havens to facilitate tax evasion. An alternative explanation is that this misreporting may be the result of exporters trying to take advantage of tax incentives aimed at promoting export-oriented activities. Determining the causes and extent of this phenomena may require comprehensive company-level investigations in Burkina Faso.

45. **Using the WBG Governance indicators, the quality of governance in Burkina Faso can be compared to that in peer countries at the end of 2014 (see Table 4).** This comparison shows

³³ Source: Global Financial Integrity Report, 2015.

³⁴ UNCTAD, *Trade Misinvoicing in Primary Commodities in Developing Countries: The cases of Chile, Cote d'Ivoire, Nigeria, South Africa and Zambia*, 2016. See also, and N. Saloum and A. Siri, *Capital Flight from Burkina Faso: drivers and impact on tax revenues*. Centre d'Analyses des Politiques Economiques et Sociales (CAPES) & African Economic Research Consortium, November 2016.

that Burkina Faso scored relatively highly compared to other countries in the CPIA, although it was in the same range as a number of other countries in terms of some sub-categories. However, its level of performance compared to Rwanda was considerably worse, with Rwanda being the best performer in the sub-Saharan African region in terms of control of corruption, the rule of law, quality of regulations, and government effectiveness.

Table 4: Governance Indicators - A comparison with peer countries, 2014


	Burkina Faso	Mali	Ethiopia	Rwanda	Bolivia	Laos
CPIA (Governance)	3.5	3.0	3.0	3.5	3.5	2.5
Voice	34	41	13	17	48	4
Stability	19	7	10	43	32	61
Government effectiveness	31	14	36	56	30	39
Quality regulations	43	31	16	59	20	21
Rule of Law	35	29	39	61	13	29
Control of corruption	37	27	41	77	30	25

Source: World Bank Governance Indicators and World Development Indicators.

46. The election of a new President through a peaceful and democratic process in January 2016 marked the end of the political transition, providing Burkina Faso with an opportunity for a new start. The new President is the first ever president not to have a military background, widely regarded by civil society and the international community as a significant breakthrough. An additional development regarded as positive by civil society and the international community was the significant role played by the civil society in the process, with the high level of participation creating opportunities to diversify political and economic power and to strengthen the country's governance framework. The participation of women has also increased in both the executive and the legislature.

47. However, the new Government will have to work hard to continue to build on these positive developments. This will require the Government not only to develop new, more inclusive and effective political institutions, but also the capacity to create economic opportunities for a larger proportion of the population. Theoretically, it can be anticipated that increased economic equality will lead to a decrease in the concentration of political power, but the link between the two also works in the opposite direction, with those with increased political power being able to amass greater economic wealth. Reinforcing this double causal link will justify an emphasis on respect for the rule of law, with an effort to improve the functionality of the justice system and of regulatory bodies.³⁵ The authorities will need to evaluate the effectiveness of the decentralization process to find a consistent way to align the distribution of administrative, legal, and economic resources across the different levels of the Government. At present, the responsibilities of the multiple layers of administrative units (from the central administration to

³⁵ The role of military forces in the economic and political power would also need to be assessed in light of their strong involvement in Burkina Faso over the years. Along the same lines, the justice process for alleged crimes committed in previous regimes (high in the agenda of the current Administration is also a source of uncertainty. The new Government has set up an Independent Commission that has not the resources sufficient to deal with the about existing 5000 cases.



villages via districts and regions) remain unclear, with the major proportion of financial resources remaining under the control of the central administration. Finally, the efficiency of public administration will need to be improved through the implementation of better, more transparent management systems.

48. **A number of new challenges have also emerged, with a number of strikes occurring at both the national and regional levels, requiring the authorities to address the increased insecurity.** The country has suffered from terrorist attacks since 2015, with a devastating impact on the investment climate and on tourism inflows.³⁶ At the same time, the level of domestic insecurity has increased, with a dramatic increase in the rate of incidents of crimes and thefts in recent years (see Box 7). The new Government has faced recurrent strikes (nine in 2016), which have paralyzed activities in some sectors, with trade unions engaging in strike action on average once per month to support their claims for wage increases and better workplace conditions.

³⁶ The role of terrorism in the Sahel region goes beyond the scope of this SCD but it is worth underscoring that its impact cannot be neglected in Burkina Faso. The country's central position especially on the border with Mali, has led to terrorist groups passing through the country's northern and western regions on a regular basis. There have been thirteen terrorist attacks with more than 57 deaths and 82 injured people since 2015.

Box 7: Growing insecurity and the emergence of self-defense groups

For a long period, Burkina Faso was perceived as a relatively secure country. However, since 2011, these perceptions have changed as the result of conflicts in neighboring countries, particularly in Mali, (and as a result of the increased level of domestic political instability). The number of incidences of violence have increased, especially but not exclusively in urban centers. The number of robberies within villages and on roads has also increased over time, leading to insecurity for travelers and preventing the expansion of trade, particularly in the East at the border with Togo.

While the significance of the increase in the incidence of such attacks varies from one region to another, it has been particularly severe in the Eastern region, with the number of attacks increasing from an average of two per week to four per week over the past three years, with those in this area subject to losses of property and life.

To address this issue, self-defense groups have been established under the name of “Koglweogo”, which in the local language means “protector of the bush”, to tackle security issues. In many cases, these groups previously functioned to protect the ecosystem, but have adopted a new role to protect members of the community against robbers. In fact, these groups have existed since the Revolutionary period (1983) under President Thomas Sankara, having been established to ensure the rational exploitation of natural resources. These groups were established in order to increase villagers’ awareness of ecological issues and to mitigate the impact of droughts. However, the groups’ environmental protection functions have occasionally been extended to include protection against other threats, including threats related to rivalries between villages. Since 2015, these groups have become more oriented to the physical protection of members of the community, rather than the environment. There is a general agreement that these groups perform a socially accepted function as an endogenous means to respond to the growing insecurity. These groups now often carry arms.

To date, there has been little formal analysis of the role of the Koglweogo, with knowledge regarding their methods of recruitment, composition, constitution, procedure, structures, and links with other community groups remaining limited. However, these groups involve a range of community members who perform a range of different functions.

The Koglweogo often complement the functions of the national police and have demonstrated their capacity to defend villagers and travelers against crime. While there is a lack of clarity regarding the status of these atypical self-defense groups, the Government has required that they comply with the laws in place and has implemented a capacity building program to improve their ability to fulfill their functions.

49. As has been in the case in the past, the Government will have to rely on fiscal policy, as other policy instruments fall within the mandate of regional authorities within WAMEU. While all member countries are involved in decision-making processes, Burkina Faso can only exert indirect and partial control over monetary, exchange rate, financial, and trade policies.

50. The World Bank has conducted a recent study to examine the relationship between fiscal policy and economic growth on WAMEU countries.³⁷ This study shows that Burkina Faso ranks at the top of regional countries in term of public sector expansion and its subsequent impact on economic activities over the past decade. The magnitude of this impact arises from the short-

³⁷ B. Moreno-Dodson and N. Bayraktar, *Public Spending and Growth in an Economic and Monetary Union: The Case of West Africa*, MFM Discussion papers, 2015.

term increase on aggregate demand and its longer-term effect on the supply side of the economy through improvements to stocks of human and physical capital.³⁸

51. **More broadly, the efficiency of fiscal policy can be evaluated according to four criteria: (1) fiscal sustainability; (2) allocative efficiency; and (3) technical capacity and; (4) financial efficiency.** The first criterion relates to the authorities' ability to maintain a low and financeable overall deficit over time; the second criterion indicates the level of efficiency of the authorities' allocation of public resources; the third criterion relates to the extent to which civil servants are adequately equipped financially and technically to fulfill their functions; and the fourth criterion reflects the extent to which financial resources reach the intended beneficiaries.

52. **The detailed analysis of Burkina Faso's performance with respect of these four criteria can be found in Annex 2, but the key conclusions are summarized below:**

- *Criteria 1: Fiscal sustainability.* While the Government has been able to maintain the level of overall fiscal deficit under control over the past decade, there are three main sources of fiscal fragility: (i) heavy dependence on mining revenues and official aid due to sub-par ability to collect other tax revenues (especially VAT); (ii) the high level of incompressible expenses, particularly the wage bill; and (iii) contingent risks associated with the mixed performance of state owned enterprises and agencies.
- *Criteria 2: Allocative-efficiency.* While the Government has consistently allocated a significant share of its resources toward social sectors, the true level of capital investment has been insufficient to fill the existing gaps in infrastructure and productive assets. When adjusted by the execution rate and accounting only for the purchase of capital good, the public investment rate has only averaged 6-8 percent over the last few years.
- *Criteria 3: Technical capacity.* The number of qualified civil servants is proportionally very low. For example, Burkina Faso has one of the lowest ratio of doctors/nurses per household in the world. Those gaps have been exacerbated by inadequate human management, including limited training opportunities and a lack of performance-based incentives. A disproportionately high number of civil servants are concentrated in Ouagadougou, leaving some regions underserved.
- *Criteria 4: Financial efficiency.* The recent PEFA exercises has emphasized progress but also identified persistent weaknesses in procurement, execution, and controls. Excessive centralization of delivery mechanisms reduce accountability, which is also weakened by the limited access to data and information.

53. The overarching message is that while fiscal policy is the main policy instrument in hands of the authorities in Burkina Faso, significant reforms need to be implemented to increase its capacity to enhance economic growth and its impact on the life of citizens both in the short and longer term.

³⁸ For a more general analysis of fiscal policy in low income countries in Africa, see C. Deléchat et al., *Exiting from Fragility in sub-Saharan Africa: The Role of Fiscal Policies and Fiscal Institutions*, IMF Working Paper, N. 15/268, December 2015.

1.3: Assessment of twin goals: Poverty and Inequality

54. The average annual per capita income in Burkina Faso has more than doubled since 1990, increasing from US\$ 360 at that point to approximately US\$ 720 in 2013. This increase in average incomes has resulted in increased shared prosperity, with the average annual consumption levels of poor households growing faster than those of wealthier households over this period. However, poverty is still prevalent throughout the country, with an estimated 7.2 million people, or approximately 40 percent of the population, living below the national poverty line at the end of 2014. In addition, a large proportion of households clustered just above the poverty line, making them vulnerable to falling into poverty in the case of household or communal shocks.

55. Compared to the defined comparator countries, in 2014 Burkina Faso had the second-highest poverty rate in terms of the proportion of households living on incomes of less than US\$ 1.9 per day (see Table 5). If the poverty line is set at US\$ 3.1 per day, Burkina Faso's poverty rate increases to more than 80 percent. While the poverty rate has declined as a result of GDP growth, the value of elasticity has been significantly lower than recorded in Mali and Bolivia, although higher than in Ethiopia and Rwanda. Economic growth has been pro-poor, with an increase in the consumption levels of the 40 percent of poorest households. However, at 1.4 percent, the annual rate of growth of consumption amongst this group is lower than the rate in Rwanda and Bolivia. Finally, the inequality level in Burkina Faso was in the mid-range amongst the comparator countries, with the country's Gini coefficient standing at 39.8 in 2014.

Table 5: Poverty and Inequality- benchmarking, 2014

	Burkina Faso	Mali	Ethiopia	Rwanda	Bolivia	Laos
% pop below \$1.9 per day	55.3	49.3	33.6	60.3	7.7	29.9
% pop. below \$3.1 per day	80.5	77.7	71.3	80.6	13.4	63.3
Growth consumption per year of bottom 40% ^{1/}	1.4	2.24	-1.45	5.03	10.1	1.24
Inequality (Gini)	39.8	33.0	33.2	51.3	48.6	37.9
Poverty Elasticity to Growth ^{1/}	-0.98	-1.41	-0.13	-0.35	-1.38	-0.47

Source: World Bank and National sources

1/ Calculated between the two last surveys available for each country.

56. This chapter presents a quantitative and qualitative historical description of the state and evolution of poverty and inequality in Burkina Faso. It attempts to determine the main causal factors for poverty in the country, both from a macroeconomic and household perspective. It first presents an estimate of the poverty headcount on the basis of the 2014 Household Survey, with a description of poverty trends over the past decade. It also examines the geographical distribution of poverty. The second chapter presents a profile of poor households in 2014, while the third chapter presents a description and analysis of the multiple factors that have influenced poverty and inequality trends over time. The fourth chapter examines the close linkages between poverty and vulnerability in Burkina Faso.

Burkina Faso Remains Poor in spite of Progress

57. While Burkina Faso has achieved a significant reduction in its poverty rate over the past 15 years, this rate remains high. In terms of the national poverty line (based on a consumption level of 421 CFA per capita per day³⁹), the proportion of the population living in poverty declined from 52.7 percent in 2003 to 48 percent in 2009, and then to 40.1 percent in 2014. This represents a decrease of 13 percentage points over a period of 11 years. Over the same period, the poverty gap (the gap between the poverty line and the average consumption of the poor) and the squared poverty gap (the level of inequality among the poor) have also declined.

Box 8: Data for poverty analysis

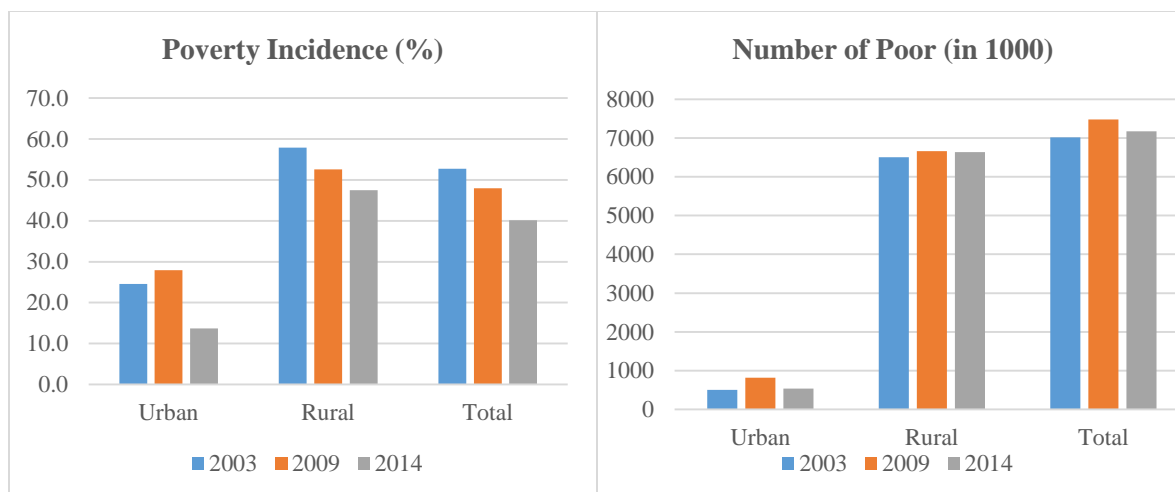
Data from three Household Surveys, conducted respectively in 2003, 2009 and 2014, are the main input for the analysis of poverty trends over time. The surveys were implemented with the objective of producing solid data for the purpose of such analysis. The sample size of each of the surveys (8,500 households in 2003, 8,404 in 2009, and 10,511 in 2014) are representative at the regional level. Because consumption data collection methods varied over the years, statistical techniques have been used to facilitate better comparability at the national level and between rural and urban areas. However, there are limits to the effectiveness of this approach, especially at the regional level.

58. Despite the sharp decline in the proportion of the population living in poverty, with the high population growth rate, the absolute number of those living in poverty has not decreased (see Figure 15). Burkina Faso has a very high population growth rate, with this rate standing at 3.1 percent according to censuses conducted in 1996 and 2006. Thus, the decline in the poverty rate was not sufficiently high to prevent an increase in the absolute number of those living in poverty, with this number increasing from 7.0 million to 7.5 million in the period from 2003 to 2009, before declining to 7.2 million in 2014, a figure still higher than the baseline number in 2003. The high population growth rate is mainly the result of high rates of fertility. With an average of six children per woman in 2013, Burkina Faso's fertility rate is amongst the highest in the world. At the same time, while the fertility rate has remained roughly constant, the infant mortality rate is decreasing and the average life expectancy is increasing.

59. There is a high concentration of individuals clustered around the basic needs threshold (see Figure 16). For instance, if the defined poverty line was increased by 10 percent to FCFA 463 per capita per day, the poverty rate would increase by eight percentage points, with an additional 1.3 million people categorized as poor. If the defined minimal consumption level is increased to FCFA 663 per capita per day, a level equivalent to the international poverty line of US\$ 3.1 per capita per day, the poverty rate would increase to almost 75 percent. The significant proportion of the population clustered around the poverty line suggests that while a significant proportion of moderately poor people may be in a position to move out of poverty if pro-poor economic growth is achieved, a significant proportion of non-poor people are vulnerable to falling into poverty in the case of economic shocks.

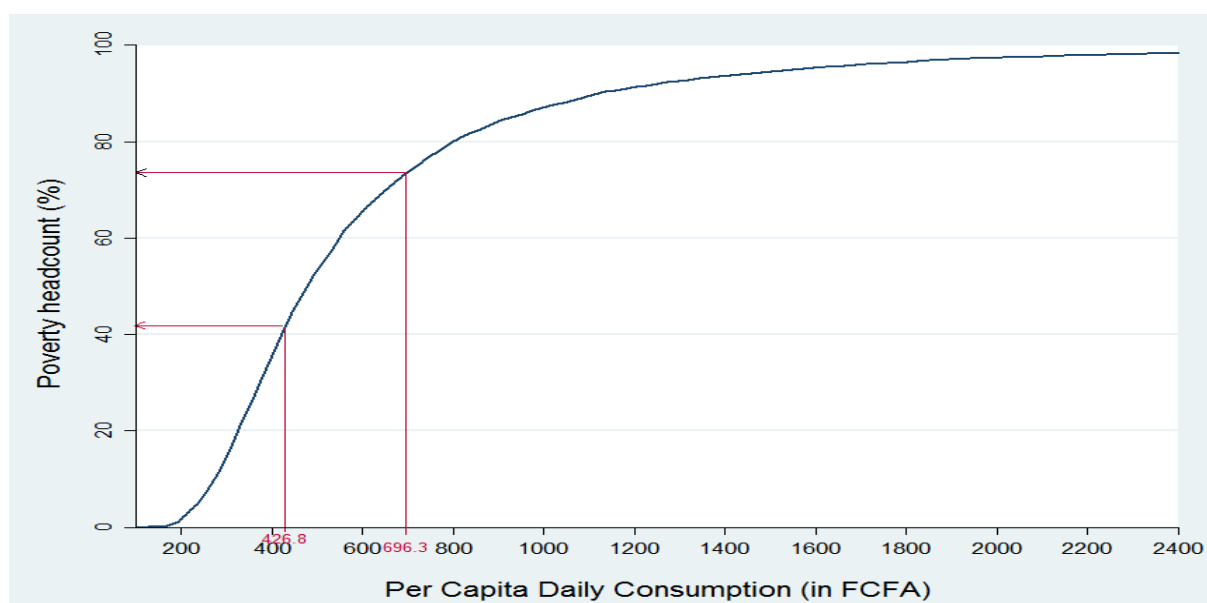
Figure 15: Poverty Incidence (in percentage) and Number of Poor (in 1000)

³⁹ Burkina Faso most recent national poverty line in 2014 is 153530 FCFA per capita per year or 421 FCFA per capita per day. This poverty line is very close to the international poverty line, which is \$1.90 per day in 2011 PPP. Indeed, using the 2011 PPP and the inflation between 2011 and 2014, the international poverty line corresponds to 426.8 FCFA per capita per day in Burkina Faso; and the \$3.1 per day per capita correspond to 626.3 FCFA per capita per day in Burkina Faso in 2014.



Source. QUIBB-2003, EICVM-2009, EMC-2014

Figure 16: Many households are clustered around the poverty line -daily Per Capita Consumption in 2014 by Percentile



Source: EMC 2014.

60. In Burkina Faso, poverty is mainly a rural phenomenon, with more than 90 percent of the poor living in rural areas (see Table 6). In Burkina Faso, not only does the majority of the population live in rural areas, those living in rural areas are on average significantly poorer than those living in urban areas. The country's urbanization rate stood at the modest level of 30 percent at the end of 2014. The rural poverty rate is almost three times higher than the urban poverty rate, with the gap between rural and urban areas increasing over time. In the period from 2003 to 2014, the urban poverty rate declined by almost half, decreasing from 24.6 percent to 13.7 percent. By contrast, over the same time period, the rural poverty rate declined much more slowly, decreasing from 57.9 percent to 47.5 percent. However, some caution should be applied

when examining these statistics because of different assumptions regarding the poverty lines and survey design.⁴⁰

Table 6: Poverty indicators by area of residence

	Poverty headcount	Poverty Gap	Squared poverty gap	Percentage population	Percentage Poor
2003					
Urban	24.6	6.7	2.6	15.5	7.2
Rural	57.9	20.4	9.5	84.2	92.8
Total	52.7	18.3	8.4	100.0	100.0
2009					
Urban	27.9	7.8	3.2	18.7	10.9
Rural	52.6	17.4	7.8	81.4	89.1
Total	48.0	15.6	7.0	100.0	100.0
2014					
Urban	13.7	2.9	0.9	21.8	7.5
Rural	47.5	11.6	4.0	78.2	92.5
Total	40.1	9.7	3.3	100.0	100.0

Source: QUIBB-2003, EICVM-2009, EMC-2014

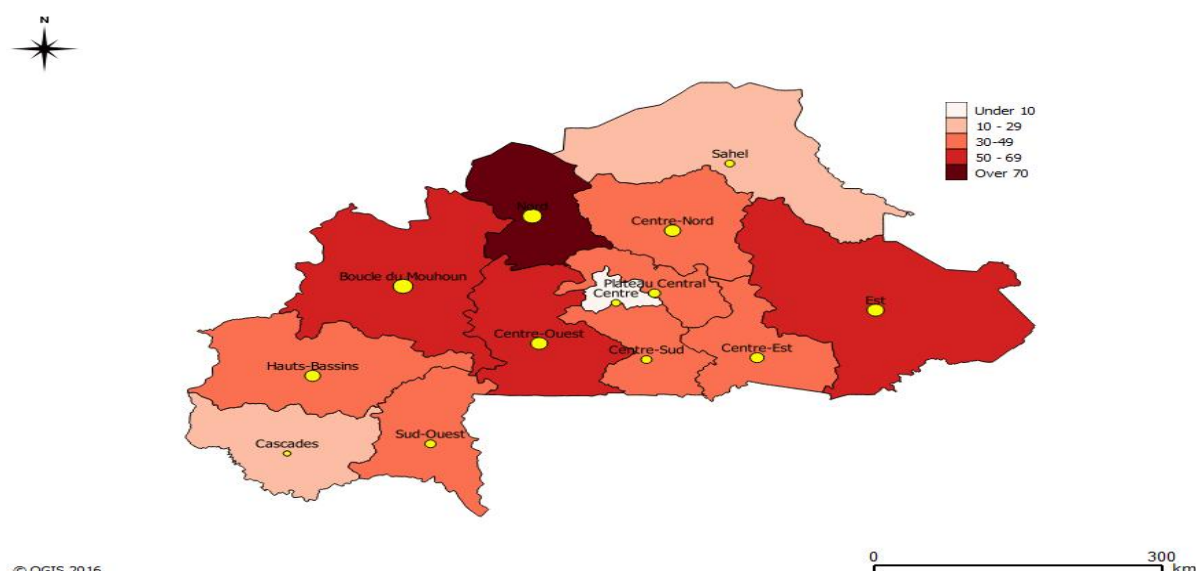
61. Regional variations in poverty are also significant, with the rate ranging from less than 10 percent in the Central region to more than 70 percent in the Northern region (see Figure 17). To a significant degree, these variations reflect the fluctuating degrees of urbanization in the respective regions, with the regions with the highest rates of urbanization recording the lowest rates of poverty. Thus, the Central region, which includes the capital city (Ouagadougou), has the lowest poverty rate (below 10 percent). The region of Hauts-Bassins in the West (which includes Bobo-Dioulasso, the second city) also has a moderately low rate, standing at around 35 percent. By contrast, the rate exceeds 50 percent in the Boucle du Mouhoun, East and Center West regions, and reaches more than 70 percent in the North region, with all of these regions being predominantly rural. Together, these four regions contain one third of the total population of Burkina Faso, but half of the poor population. Regional differences also reflect the distribution and the productivity of varying agricultural activities, with cotton production concentrated in the

⁴⁰ If the national poverty line used in Burkina Faso were revised to a level closer to the World Bank's extreme poverty line, the urban poverty rate would jump to 18 percent. If the urban poverty line was equivalent to the rate used in Niger, the urban poverty rate would increase even more dramatically, to 24 percent. These figures show that the measurement of the poverty rate is highly sensitive to basic assumptions, and that these rates should therefore be interpreted with caution, particularly when comparing the rates of different countries using varying basic assumptions. However, it is worth emphasizing that the poverty gap between rural and urban areas in Burkina Faso would remain roughly the same, at about 35-40 percentage points, regardless of the basic assumptions on which the poverty line is based. A gap of this level is high, even by sub-Saharan African standards. The only other countries in the region with comparable gaps are Cameroon, Niger, and, to a lesser extent, the Republic of Congo.

South and South-East of the country, with these regions recording somewhat lower rates of poverty, although still higher than the relatively highly urbanized regions.

62. With the decline in the poverty rate in monetary terms, there have been corresponding improvements in terms of non-monetary indicators, although Burkina Faso's performance in terms of these indicators is still poor relative to lowest income or sub-Saharan African countries. The recent trend in non-monetary indicators in the education, health, water and sanitation sectors, and in terms of assets are presented in Annex 3. It can be seen that there is a significant degree of variation in terms of performance between different sectors, with good performance being recorded in health and water, but with mixed results in education, electricity and access to equipment and fixed capital.

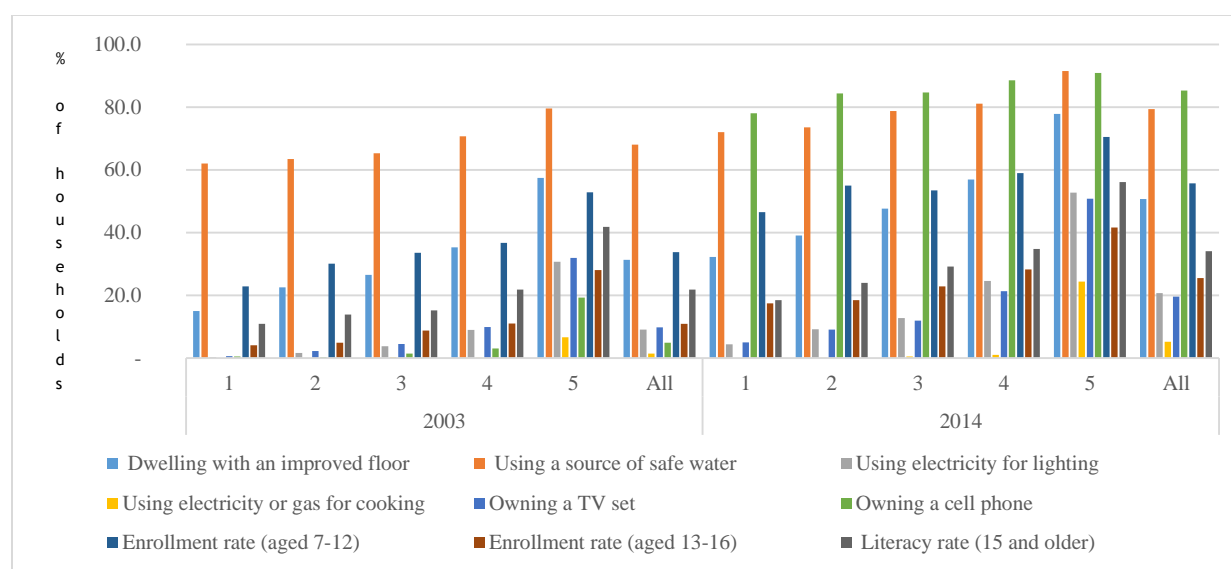
Figure 17: Poverty Headcount, Percentage of the population and Percentage of poor per region



Source: Authors calculations using EMC-2014

63. In general, the level of access to social services and infrastructure remains strongly correlated with household incomes (see Figure 18). With the notable exceptions of mobile phone use and access to safe water, access to social services and infrastructure and in terms of all other indicators increases with the level of income. For example, the rate of use of electricity for lighting is five times higher for the wealthiest quintile than for the poorest quintile. The enrolment rate in secondary schools is four times higher.

Figure 18: Improving living conditions for most households but variability across income quintiles



Source: Authors calculations using EICVM 2003 and EMC2014

64. Despite significant improvements, in 2014, members of the poorest households remained largely excluded from access to basic social services and infrastructure. In the poorest quintile, the rate of enrolment in secondary education was less than 18 percent; the proportion of households owning a television set was seven percent; the rate of use of electricity for cooking was 0 percent; and the rate of use of electricity for lighting was five percent. The extremely limited level of access to services and infrastructure for members of the poorest households is largely attributable to the biases of public policies and to a lack of affordability (see Part Two for a more complete discussion).

Households' Poverty Profile in 2014

65. Poverty varies with the socio-demographic characteristics of the household and its head. As in most low-income countries, the typical poor household in Burkina Faso is likely to be located in a rural area; to be distant from basic services; to be headed by a woman; to have more than six children; its members are likely to be employed on a farm; and they are likely to have little or no formal education.

66. To capture the main factors affecting households' welfare, the authors of this report conducted a multi-regression analysis on the basis of the 2014 survey data. The dependent variable was the level of household welfare measured by the logarithm of per capita annual expenditure divided by the poverty line, while the explanatory variables fell into six broad categories: (1) socio-demographic (household composition, gender of household head, handicap, etc.); (2) human capital (education of the head and the spouse, experience of the head and his spouse, etc.); (3) labor market (institutional sector, type of industry, etc.); and (4) productive and social capital (land ownership, being member of an association, etc.); (5) access to infrastructure (time to the nearest road, time to nearest market, etc.); and (6) geographic (area and region of residence).

67. **The results from this multi-regression analysis are presented in Annex 4.** While some important potential explanatory variables are missing (such as access to electricity or telephone), the broad approach adopted by the analysis has the advantage of accounting for the simultaneous effects of variables on poverty and thus avoiding spurious correlation. For example, a simple correlation suggests that poverty is not significantly different between male and female-headed households, indicating the absence of a gender bias. However, this correlation becomes significantly different from 0 when other variables are included in the analysis.

68. **The main results show that socio-demographic characteristics, including gender, have a significant impact on household welfare.** In particular, household size is negatively correlated with household living standards. For each additional member of a household, regardless of gender or age, there is a decline in household welfare. For example, each additional teenage member of a household reduces per capita consumption by 14 percent in urban areas and by 11 percent in rural areas. This confirms the importance of demographic factors on household welfare. Gender also matters, with female-headed households having a per capita consumption that is 36 percent lower in urban areas and 14 percent lower in rural areas than male-headed households. This result raises two interesting points. First, in contradiction of the conclusion suggested by simply descriptive statistics, female-headed households actually have a lower welfare level when all other factors are controlled. Second, the gap in living standards between male and female-headed households is even greater in urban areas than in rural areas. Other socio-demographic characteristics, such as households headed by a disabled person or a non-Burkina Faso national, also have a negative impact on household welfare.

69. **Human capital variables, particularly work experience and education levels, are positively correlated with the household welfare.** Work experience (proxied by age) of the household head has a positive influence on the living standard of urban households, although this is not the case in rural areas. However, the level of experience of the spouse of the household head is negatively correlated with the living standards of household. In other words, the spouse (who is usually a woman) is more productive for the household at a young age, and becomes less productive as she becomes older, possibly because of maternity. The level of education of the head of the household and that of his/her spouse is significantly positively correlated with higher levels of household welfare. For example, in urban areas, the fact that a household head has completed primary education is correlated with a 13 percent improvement in per capita consumption compared to a household whose head has never gone to school. This figure increases to 84 percent for households with a head who has tertiary level education. The correlation between welfare levels and education levels are also significant in rural areas.

70. **The sector in which the household head is employed is also significantly correlated with welfare levels.** There is a correlation between self-employment and lower household consumption levels and relatively low household consumption levels compared to employment in institutional sectors (public administration, public enterprises and formal private enterprises). There is also a correlation between employment on farms and in the primary sectors and relatively low household consumption levels compared to employment in the secondary and tertiary sectors.

71. **The results also identify the effects of productive assets and social capital on the levels of household welfare.** Ownership of a hectare of land is correlated with increases to the level of per capita household consumption of approximately 0.3 percent. Similarly, the fact that a household has at least one member affiliated with any association is correlated with increases to the level of per capita household consumption of 8 percent compared to cases where no members are affiliated with an association. Indeed, associations play an important role in improving access to credit and to finance income-generating activities. They also play an insurance role to mitigate

the impact of negative shocks (illness, death, etc.); and a solidarity role (mutualization of labor force, etc.).

72. **The results indicate that the time necessary to reach the nearest basic infrastructure has an impact on household living standards.** The longer the time necessary to reach a food market, pharmacy or medicine store, civil service or police station, the lower are household living standards. When infrastructure is close, transaction costs are lower, which has a positive impact on household welfare.

Explaining the Poverty Trend

73. **In general, poverty trends are explained by three main factors:** (i) the growth process and its capacity to create opportunities; (ii) redistribution; and (iii) population dynamics. A more significant decline in poverty can be expected when a country's economy is rapidly expanding and the benefits of this expansion are reaching the poorest groups. The level of redistribution is affected by public policy, but also by remittances across households. A high rate of rural-urban migration is regarded as being beneficial to poverty alleviation, while a high rate of population growth is regarded as being detrimental to the poverty reduction process.

74. **In Burkina Faso, all these three factors have influenced poverty trends over the past decade.** While each of these factors is important individually, the manner in which they interact may be even more significant, as each of these factors influences the other. For example, the creation of growth opportunities for members of the poorest groups has been partially the result of their increased rate of migration toward urban centers.

75. ***Growth opportunities:* Over the past decade, opportunities to generate higher incomes have expanded for the vast majority of population, including the poorest households.** This is demonstrated by the relatively high elasticity value between GDP growth and poverty reduction. On the basis of the 2003 and 2014 surveys, it can be calculated that for each percentage point increase in GDP, the poverty rate declined by 1.6 percent, which is a relatively high ratio for the sub-Saharan African region.⁴¹

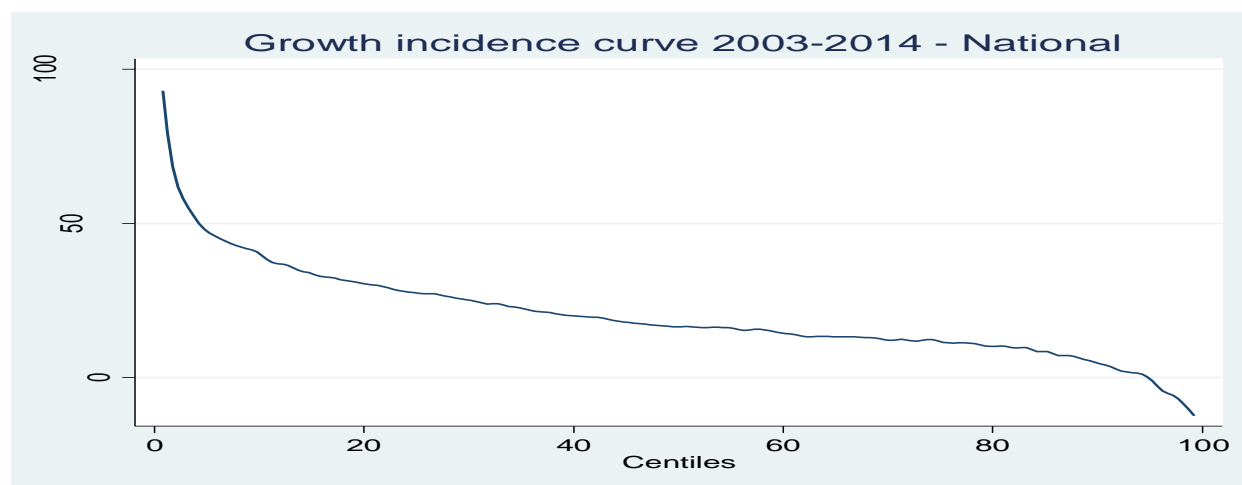
76. **Burkina Faso's economic growth has been inclusive.** This is corroborated by Figure 19 below, with this figure showing that: (i) the growth impact is visible through an increase in the growth rate of the annual per capita consumption at almost all points in the distribution; and (ii) the impact on inclusion is demonstrated by a more rapid increase in the annual per capita consumption of the poorest groups than of the richest.⁴² Burkina Faso's robust economic performance not only boosted the average per capita consumption level by 0.7 percent per year in the period from 2003 to 2014, it had a more significant positive impact on members of the poorest

⁴¹ This elasticity value is however cut by half when the consumption increase is measured by the national accounts rather than the households' surveys. This reflects a statistical difficulty that can only be resolved with more comparable surveys and an update of national accounts (the base year is 1999).

⁴² In both urban and rural areas, growth has contributed to poverty reduction. The profile of rural areas is the same as the national profile, as growth and inequality equally contribute to poverty reduction. However, in cities, the decline in poverty has more to do with the decline in inequality, as growth plays a lesser role.

groups. Thus, the bottom 40 percent of households reported an increase in consumption that was twice as high as the increase recorded by the top 60 percent.⁴³

Figure 19: Pro-poor consumption growth between 2003 and 2014



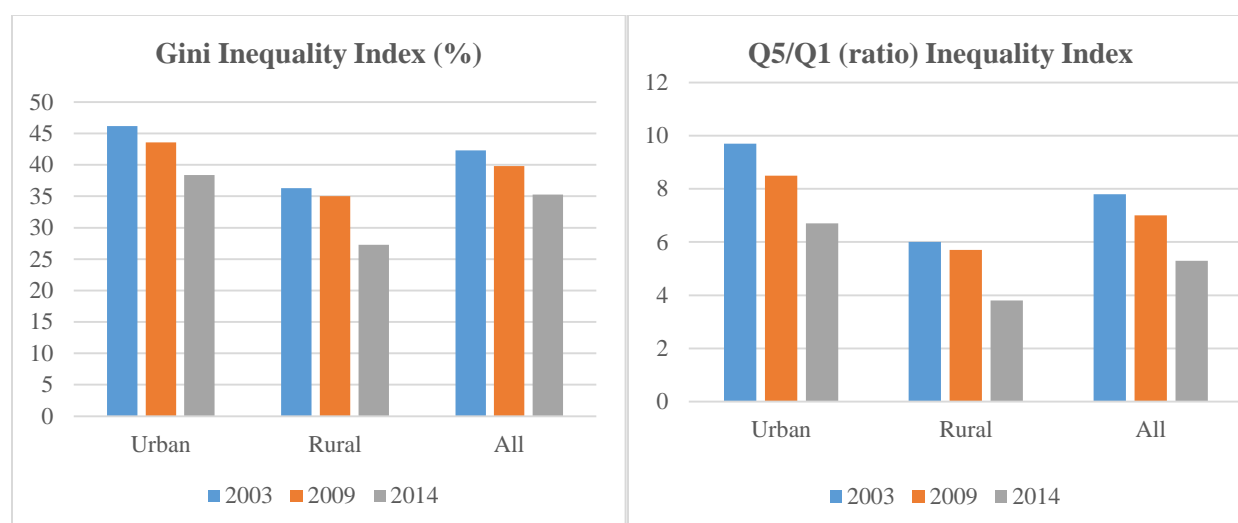
Source: Authors calculations using INSD surveys QUIBB-2003, EICVM-2009, EMC-2014

77. **The inclusiveness of the growth process in Burkina Faso has been correlated with a decrease in the level of inequality over the past decade.** The growth inequality decomposition shows that for the period from 2003 to 2014, the decline of nearly 13 points in the poverty rate resulted is equally attributable to economic growth and to the decline in inequality. The standard indicator of inequality, the Gini index, decreased by a significant 7 percentage points in the period from 2003 to 2014. With a Gini coefficient of 35 in 2014, Burkina Faso was among the least unequal countries in the sub-Saharan African region. Burkina Faso's Gini coefficient is below the sub-Saharan Africa average of 45.1 and below the global average for low-income countries of 40. The gradual decline in inequality is also reflected by the ratio of the consumption share of the wealthiest 20 percent of the population to that of the poorest 20 percent of the population, which declined from 7.8 to 5.3 in less than six years (see Figure 20).⁴⁴

⁴³ These figures on consumption are derived from the households' surveys. They are lower from those calculated from the national accounts, which indicated that the annual growth of per capita consumption was equivalent to 1.3 percent. Despite these difference, both measurements capture an improvement in the welfare of the average household.

⁴⁴ Of course, those indicators do not capture increases in income, which can be used to increase consumption but also to purchase assets. They also do not include variations in wealth, notably the higher value associated to land over time.

Figure 20: Inequality Indexes



Source. QUIBB-2003, EICVM-2009, EMC-2014

Box 9: Limitations of inequality measured by consumption survey

In Burkina Faso, as in most low-income countries, inequality is measured on the basis on consumption surveys. Therefore, measures of inequality reflect the difference between the values of consumption for different income groups. The latest survey reveals that about 40 percent of Burkina Faso's consumption is concentrated amongst 20 percent of households. This ratio is in the lower range for countries in the sub-Saharan African region and has declined in recent years.


However, consumption-based indices are an imperfect proxy of income/wealth differences across households. Firstly, this is because savings behaviors are not captured by this measurement. Rich households have higher savings capacity and greater existing assets than poor households.

Secondly, this is because consumption surveys suffer from methodological weaknesses. For example, important spending categories are not included, such as spending in foreign countries and/or spending on luxury goods. The extreme groups are not statistically well represented in a national wide survey. The extremely poor do not have an official identify or a permanent home and are therefore not included in the sample. Similarly, the number of extremely rich is not high enough to be statistically representative.

But these two reasons, income or assets inequality can be seriously underestimated by consumption survey is. They also highlight that divergent trends are possible, since consumption differences may decline over time but income/assets may increase exponentially for the richest during the same period.

78. The inclusiveness of Burkina Faso's growth process is the combined result of three factors. The first is that the rate of increase of labor productivity in agriculture, while modest compared to successful emerging countries, has stood at almost 2 percent per year over the past decade (see Part One for details). This has generated higher average incomes for rural households and therefore facilitated a reduction in poverty. However, this positive impact remains fragile, as it is closely related to external factors such as global cotton prices and climatic conditions.

79. The emergence of non-farm jobs in Burkina Faso is another significant factor. As detailed in Part One, the most rapidly expanding job markets in recent years have been in the urban areas. On average, these jobs are better paid than farming occupations, so the expansion of



job opportunities in urban areas has translated into higher average household incomes. However, this dynamic has become decreasingly significant over time, with the large pool of workers migrating from rural to urban areas leading to a decline in the level of labor productivity in the industrial and service sectors (see Part One for more details). In other words, the large majority of new jobs created in cities are not highly productive and are concentrated in the informal sector, with this tendency becoming more pronounced over time.

80. **Supply-side factors have also been significant, with the average level of productivity of workers increasing as a result of improvements in terms of health and educational indicators and access to infrastructure.** These improvements have increased the stock of human and physical capital and promoted higher income opportunities even though, as described earlier, access to social services and infrastructure remains closely linked to the income level of households.

81. **Although the recent economic performance has been inclusive, favoring an increase in the consumption rate of the poorest households, this positive assessment has to be nuanced by the fact that many households remain close to the poverty rate.** The progress in non-monetary indicators has also been limited for many poor households.

82. ***Redistribution of Income:* A high level of redistribution to some extent explains the degree to which prosperity has been relatively evenly shared in Burkina Faso.** Redistribution may have been partly the result of government policies, but financial transfers across households probably play a more significant role.

83. **Government redistribution policies have had a relatively modest impact.** In terms of the Government's revenue collection efforts, the current tax system is certainly regressive, relying disproportionately on indirect rather than direct taxes. In terms of the Government's expenditure, social protection policies have remained largely underdeveloped in Burkina Faso. For example, social security programs only cover 5 percent of the labor force, while cash transfer programs are still in the early stages of development.

84. **The authorities' most significant redistributive intervention involves subsidies, although their effectiveness is questionable.** The two main categories of subsidies are agricultural subsidies and energy subsidies.

85. **From the private sector side, household level remittances are the most significant redistributive intervention.** These remittances can involve domestic money transfers, from an urban center to a village, or transfers from migrant workers from abroad. The large number of migrant workers suggests that international remittances have played a significant role in the redistribution of income among households in Burkina Faso. The accelerating urbanization rate also suggests that domestic transfers will continue to increase.

86. **Measuring the total value of private money transfers is difficult.** In 2014, the World Bank estimated that the value of international remittances received by households in Burkina Faso stood at around US\$ 400 million per year. The recent 2014 household consumption survey suggests that the total value of remittances stood at approximately US\$ 120 million, with approximately 40 percent originating from outside the country. These discrepancies emphasize that income figures are difficult to measure through surveys, as respondents are often reluctant to report the value of these revenues accurately.

87. **The 2014 household consumption survey nonetheless provide useful insights into the origin of these transfers, their motives, and the uses to which they are put by recipients.** The

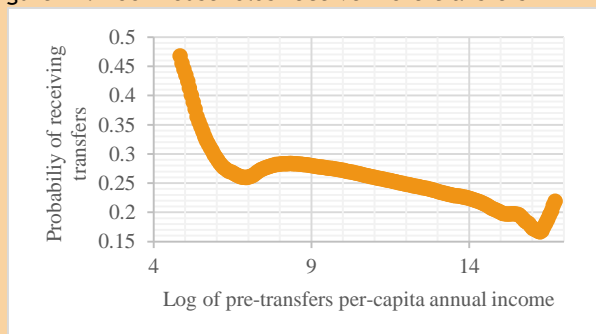
survey found that the transfers originate from both domestic and international sources, with the majority of the latter originating from Côte d'Ivoire, the destination of choice for a significant proportion of migrant workers (see Figure 22). Domestically, approximately two-third of transfers originate from urban areas, despite the fact that only around 30 percent of the total population is located in these areas. Therefore, it is four times more likely that a resident of an urban area will transfer cash than a resident of a rural area.

88. **The vast majority of those transferring money do so to assist family members, with this being the motivating factor for approximately 95 percent of all transfers.** Approximately 35 percent of all transfers are from children to their parents, while transfers from parents to children account for another 7 percent. As in many African countries, many members of the community feel an obligation to support siblings and other family members, with this being the motivating factor for up to 50 percent of all transfers.

Box 10: Remittances as a poverty reducing mechanism in Burkina Faso, especially for Women-headed households

Approximately a quarter of all households reported receiving money transfers. From the 2014 Household Survey, it can be calculated that the probability of receiving transfers is approximately twice as high for the poorest as for the wealthiest households. This indicates that in Burkina Faso, transfers serve as a poverty reducing mechanism (see Figure 21). However, while on average the wealthiest households received fewer transfers, the value of the transfers they receive is generally higher.

Figure 21. Poor households receive more transfers



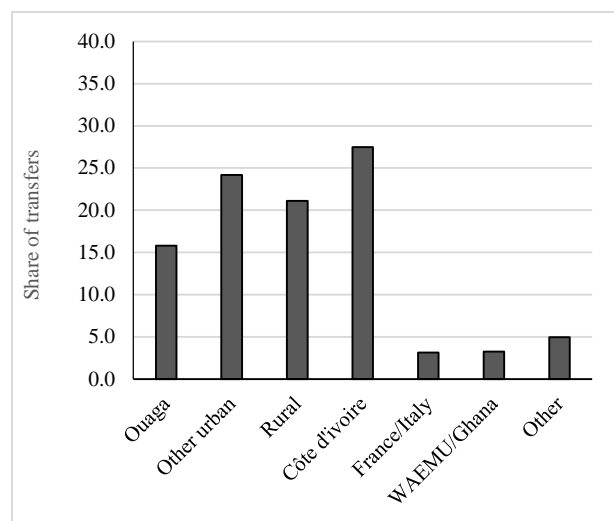
Since households headed by women are generally poorer than others (see preceding chapter), female-headed households are more likely to receive transfers. About 46 percent of female-headed households receive a transfer while only 23 percent of male-headed households received a transfer. The average amount of transfer received by a female-headed household (65,281 CFA) is 2.6 times the average amount received by a male-headed household (25,239 CFA).

Source: Author's calculation using 2014 EMC Household Survey

89. **The principal use to which recipients put the transfers is to smooth consumption over time** (see Figure 23). Transfers are partially a risk sharing mechanism that act as a buffer in case of shocks. Only 10 percent of transfers are directed to funding investments in education, health and economic activities.⁴⁵

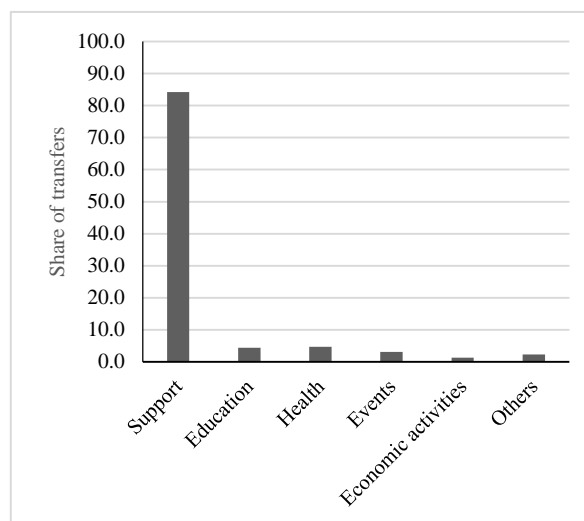
⁴⁵ An important part of transfers can be on own investment of a migrant in his own country, and since no household benefit from it, this type of transfers is not captured by household surveys.

Figure 22: Share of transfers by their origin



Source: Author's calculation using 2014 EMC Household Survey

Figure 23: Share of transfers (in the total) by motive



Source: Author's calculation using 2014 EMC Household Survey

90. **Population dynamics:** As described earlier, Burkina Faso is characterized by (i) a young and rapidly growing population; (ii) a low but accelerating urbanization rate; and (iii) a large stock of expatriates living abroad. These three characteristics have had significant impacts on the country's poverty dynamics:

- **Young and rapidly growing population:** Burkina Faso's rapidly expanding, young population reduces the strength of the correlation between economic growth and poverty alleviation, at least in the short term. To illustrate, if Burkina Faso had recorded an annual average population growth rate of 2 percent (instead of 3 percent), its poverty rate would have stood at 36.9 percent (instead of 40.1 percent) and the number of poor would have stood at 6.3 million (instead of 7.2 million) in 2014. This simple mechanic simulation is corroborated by international experience, which indicates that the countries that have been the most successful at reducing their poverty rate have also been those that have recorded a sharp decline in their rates of population growth. For example, China, Thailand, and Nepal reported an average decline in their annual population growth rates of 2 percentage points while reducing their poverty rates by more than 50 percent over the past two decades.
- **Low but accelerating urbanization rate:** As in most African countries, the acceleration of the urbanization rate has contributed to about one quarter of the decline in the overall poverty rate in Burkina Faso from 2003 to 2014 because the urban poverty rate is on average lower than the rural poverty rate by more than 30 percentage points. By 2025, the urban population is projected to grow fivefold, to between 10 to 12 million people. However, the positive impact on poverty will not be automatic, as migrants will have to find productive jobs and to obtain access to decent services, housing and infrastructure.

- **The large stock of expatriates living abroad:** International emigration has also probably contributed to poverty reduction. Around 150,000 migrant workers go abroad each year, with the favored destinations being Côte d'Ivoire, Ghana and Mali.⁴⁶ This outflow reduces demographic pressures and may help to improve the welfare of remaining households. As discussed previously, migrant workers can further contribute to domestic growth through remittances. On the negative side, the outflow can lead to a “brain drain” and negatively impact the growth trajectory from a dynamic perspective, since on average most emigrants have a higher level of educational attainment than the general population (see Part One for further details).

Vulnerability and Poverty

91. **Vulnerability and poverty are closely interlinked.** Indeed, many households remain poor because they are vulnerable to shocks. In addition, poverty exacerbates the negative impact of shocks, as poor households usually do not have sufficient savings to mitigate their impacts. These two effects have had a significant impact in Burkina Faso, shaping the poverty landscape over time.

92. **Burkina Faso is extremely vulnerable to shocks at the household, community, regional and national level.** Covariant shocks may affect groups of households, a community, a region or even an entire country. Shocks of this type include price shocks (the increase of food prices for household, the increase of input prices or the decrease of output prices for farmers) and hazards (drought, flood). Idiosyncratic shocks affect a specific household, with such shocks including those related to personal issues (divorce, death), employment issues (loss of job or wages); and health issues (illness or death).

93. **The 2014 Household Survey has made an effort to capture some basic information related to the type of shocks affecting households and the coping mechanisms they adopt to mitigate their impact.** In the 12-month period before the data collection process, nearly two-thirds of the households (64 percent) report having been affected by shocks of one sort or another (see Figure 24). Covariant shocks were reported as being the most commonly experienced, with around half of all surveyed households reporting that they had experienced this type of shock over the previous year, compared to a quarter who reported having experienced an idiosyncratic shock. A closer examination of the details shows that a quarter of the surveyed households reported experiencing price shocks, while two-fifths reported being affected by a natural hazard. Amongst those reporting that they had experienced idiosyncratic shocks, 17 percent of the households stated that they had been victim of an insecurity issue (crime or violence), while only 4 percent reported that they had been affected by employment issues (loss of jobs or wages); 2 percent by health issues; and 2 percent by a specific household issue (see Figure 25). The relation between shocks and poverty can also be demonstrated by the fact that shocks affected a relatively high proportion of the rural population (7 households out of 10), although the urban population was also affected, albeit to a lesser extent (4 households out of 10).

⁴⁶ This emigration rate is relatively high since it is equivalent to about 1/3 of young people emerging on the labor market every year.

Figure 24: Almost two thirds of households' report being affected by shocks

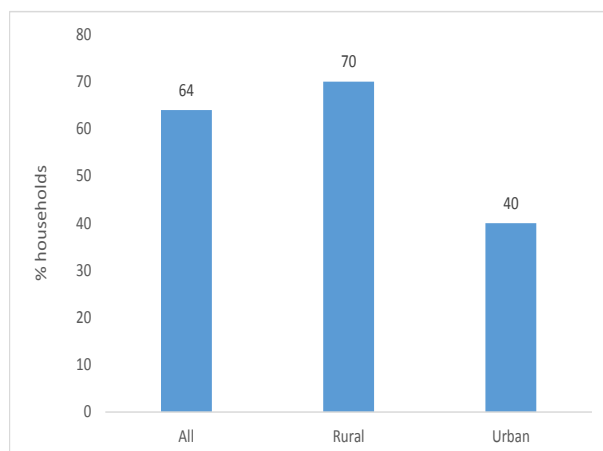
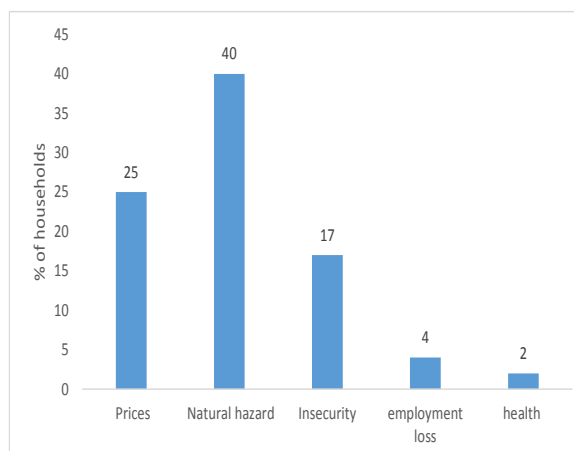


Figure 25: Shocks related to natural hazards, price fluctuations and insecurity are the most frequently reported



Source: Authors calculations using EMC-2014

94. By far, the most significant shocks were those related to natural hazards. Shocks of this sort often originated from non-anticipated changes in climatic conditions, such as variable rainfalls. These shocks can also result from the gradual consequences of long-term actions linked to the overexploitation or mismanagement of resources or to global phenomenon such as global warming.

95. In Burkina Faso, the main causes of environmental degradation are related to agricultural practices, livestock husbandry and small-scale mining activities. The extensive implementation of agriculture has led to high levels of environmental degradation that have affected the quality of soil. About 170,000 hectares per year of natural vegetation are lost because of this type of land degradation and deforestation. At the current pace, Burkina Faso will lose approximately 15 percent of its agricultural land within 10 years. If this trend continues, Burkina Faso may be subject to food insecurity and broad sustainability issues in the future. The sustainability issues may include environmental, social and fiscal issues. Social sustainability will become a significant issue in the near future as a result of the rapid population growth combined with the rapid decrease in the availability of land and the recurrent conflicts between agricultural, forest, livestock, mining and urban interests.

96. As described in the Part One, Burkina Faso is a Sahelian country, with low and variable rainfalls, and with water management being a major environmental concern.⁴⁷ Burkina Faso is viewed as a severely water distressed country. Over the years, there has been an expansion of arid zones, particularly in the South of the country.⁴⁸ The potential to mobilize groundwater resources is limited, since 80 percent of the national territory is covered by crystalline rocks. As result, conflicts over water use have been frequent and have increased in intensity over time,

⁴⁷ Burkina has faced its unprecedented drought in 1971 and floods of 2009 causing severe damages in public and private goods. The historical data show a fluctuation of growth as a consequence of rainfall and commodities prices.

⁴⁸ A shift of about 200 km south in the last 50 years.

with conflicts between farmers and pastoralists being particularly significant. These pressures are expected to increase as a result of the rapid population growth and the on-going urbanization process, both of which are generally associated with increased demand for water. The other direct driver of deforestation and environment degradation has been the proliferation of small-scale mining activities, many of which use chemical products such as cyanide and mercury.

97. Over time, Burkina Faso will become increasingly exposed to the impact of global climate changes. At present, the country ranks only in the 22nd place out of 234 countries in the Environmental Vulnerability Index. However, according to the study on the long-term impact of climate change on the country carried out in 2007,⁴⁹ rainfall will decrease by roughly 3.4 percent by 2025 and 7.3 percent by 2050. Weather variability will also increase over time. These changes will have a particularly severe impact on the following sectors: water, agriculture, livestock and forests. At the same time, rural populations in general and small-scale farmers, including youth and women in particular, are expected to experience increased levels of vulnerability as a result of these changes.

98. The current weaknesses of the legal framework for the management of environmental issues hamper the implementation of sustainable investment and programs. Most of the legal texts are now obsolete, and their inadequacy is partly responsible for the poor implementation of many infrastructure projects.

99. The combined impact of these shocks will have a deep and significant effect on the economy. In Part One, it was calculated that Burkina Faso's net wealth has declined over time partly because of the overexploitation of soils and other natural resources. Natural hazards will have a further negative impact on the natural resources upon which the agricultural, water, and forestry sectors are based. The table below summarizes the main risks for each of these various sectors, drawing attention to both the current and future key drivers of impacts on each of these sectors.

100. Shocks have a direct negative impact on welfare at the household level. For example, farmers may lose their harvests because of unfavorable climatic conditions. A sharp increase in food prices translates into a decrease in real income, at least for households who are net consumers. An illness can result in absenteeism and loss of income. In all of these situations, the resulting loss of income will negatively affect welfare at the household level. On the basis of the 2014 Household Survey, the results of a Propensity Score Matching (PSM) analysis show that a shock may reduce household expenditures by 11 percent compared to the expenditures of a household not affected by a shock. Since rural households are more vulnerable to shocks, they are also generally poorer. There is also a strong correlation between household-level poverty and the amount of rainfall and the variation in rainfall between regions. High levels of rainfall and low variation are correlated with lower levels of poverty. Regions such as Bobo Dioulasso and Banfora in the Western region receive almost half of the country's overall rainfall. Consequently, households in these regions are considerably less poor (35 percent) than those in the Northern region, which is experiencing increasingly intense desertification due to insufficient rainfall. In contrast to the Western region, the rate of poverty in the Northern region remains high (70 percent), with households in this region subject to relatively high levels of food insecurity, hunger and malnutrition.

⁴⁹ Source: <http://unfccc.int/resource/docs/napa/bfa01f.pdf>

Table 7: Sectors most impacted by natural hazards and climate change

	AGRICULTURE		WATER		NATURAL RESOURCE MANAGEMENT	
	Historical/ Current	Future	Historical/ Current	Future	Historical/ Current	Future
FORESTRY						
Potential Impact						
Extreme Temperature						
Extreme Precipitation and Flooding						
Drought						
Sea Level Rise						
Storm Surge						
Strong Winds						
Overall Sector Potential Impact						
Institutional Readiness Score						
	0-Minimal		0-Minimal		0-Minimal	
Preliminary Sector Impact						
Development Context Considerations						
	<ul style="list-style-type: none">• Access to technology : Decreases risk• Land ownership issues : Increases risk• Political instability : Increases risk• Population growth : Increases risk		<ul style="list-style-type: none">• Education : Decreases risk• Political instability : Increases risk• Population growth : Increases risk• Pollution : Increases risk		<ul style="list-style-type: none">• Land ownership issues : Increases risk• Legal enforcement : Decreases risk• Population growth : Increases risk• Pollution : Increases risk	
Overall Sector Risk						
Insufficient Understanding	No Potential Impact	Low Potential Impact		Moderate Potential Impact		High Potential Impact


Insufficient Understanding	No Potential Impact	Low Potential Impact	Moderate Potential Impact	High Potential Impact
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Source: World Bank's climate and disaster risk screening report, 2016.

1.4: Conclusion

101. Burkina Faso has recorded a relatively good economic performance over the past decade, with an average annual rate of GDP growth of about 6 percent, with controlled fiscal and external balances. However, it has yet to achieve a significant structural economic transformation, with approximately 80 percent of its labor force employed in low paid agricultural jobs. The level of economic diversification remains low, with more than three-quarters of exports consisting of two commodities: gold and cotton. The stock of natural wealth has also declined over time due to the rapid population growth and the unsustainable use of agricultural and mineral resources, and the poor land use management. Because Burkina Faso's wealth has not been managed sustainably over the past fifteen years, the country's ability to sustain production and welfare is undermined. The impacts on Burkina Faso's natural capital were particularly severe in the period from 2005 to 2010, with a loss in terms of GDP per capita equivalent to 6.3 percentage points.

102. Burkina Faso's economic performance can be largely explained in terms of its geographical and demographic attributes. Burkina Faso has rich endowments of land and mineral resources. However, its limited water and energy resources, which partly explain the low level of



access to infrastructure, and the poor management of natural resources, including land and mineral resources, has constrain the achievement of higher levels of economic development and productive job creation. Burkina Faso's rapidly expanding population has also exacerbated pressures on the labor market and on the provision of infrastructure and services. This rapid expansion also partially explains the accelerating urbanization process and the tendency for workers to migrate to foreign countries.

103. Burkina Faso's failure to achieve optimal growth is also the result of institutional factors. The economic and political instability observed in recent years is partly the consequence of the growing concentration of economic power since 2008. This concentration led to the exclusion of many strategic groups from the growth process in the late 2000s, resulting in increasing political tensions. These were exacerbated by a series of exogenous shocks in 2012 and 2013 that ultimately led to the ousting of ex-President Compoaré at the end of 2014. During the last decade, the Government has retained tight control over its fiscal policy, keeping the overall fiscal deficit to a level lower than 3 percent of GDP. While this has kept the economy on track, it has not been accompanied by corresponding good performance in terms of allocative and financial efficiency. Public investment has been low and not always directed to the most essential sectors, with numerous leakages reducing the overall effectiveness of public spending.


104. Over the past decade, Burkina Faso has managed to achieve both economic growth and poverty reduction. The extent to which it has facilitated shared prosperity is demonstrated by the relatively high increase in the levels of consumption of the poorest households compared to the wealthiest households. As a result, both the levels of poverty and inequality reached record low levels in 2014. These trends have been mirrored by significant but uneven gains in terms of non-monetary welfare indicators.

105. However, this good performance has not been sufficient to effectively transform Burkina Faso. With an average per capita income of US\$ 700 and with approximately 40 percent of the population living below the national poverty line, Burkina Faso remains a poor country. The drivers of poverty alleviation have not been sufficiently strong to generate significant productivity gains and to generate higher incomes for the vast majority of the population.

106. The poverty alleviation process has been primarily driven by increased income opportunities achieved through productivity gains in agriculture and the gradual shift of the labor force toward non-farm jobs in urban centers. However, the magnitude of these two effects remains weak compared to that recorded in successful emerging countries. Government redistribution policies have been almost non-existent, with the exception of inefficient agricultural and energy subsidies. Rather, private money transfers (remittances) have played a significant redistributive role, with the poorest households being most likely to receive such transfers.

107. The positive effects of improved income generation opportunities and redistribution through remittances on poverty alleviation have been partially offset by Burkina Faso's rapid population growth. At around three percent per year, Burkina Faso rate of population growth remains amongst the highest in the world. This growth has resulted in increasingly intense pressures on the delivery of services and infrastructure and on the labor market. However, the accelerating urbanization rate has accounted for about a third of the decline in poverty over the past decade, with living conditions and income generation opportunities being on average significantly better in urban areas than in rural areas.

108. In Burkina Faso, poverty is strongly correlated with vulnerability through a double causal link. Firstly, many households remain trapped in poverty because of the frequency and



magnitude of shocks of various kinds, ranging from natural hazards to prices volatility. Secondly, vulnerability is exacerbated by poverty, as members of poor households usually do not have sufficient human and financial resources to absorb shocks. Government social protection policies and programs remained underdeveloped, with few risk sharing instruments offered by the private sector. To absorb the impact of shocks, poor households must rely exclusively on relatives and friends, with this coping mechanism being clearly insufficient to provide adequate protection, or migration, which may cause increase instability within the country over land tenure issues.

PART TWO: IDENTIFYING THE CONSTRAINTS

“Economists, like physicians, sometimes confront a patient with an obvious problem but no obvious diagnosis. That is precisely the situation we face right now.”

G. Mankiw, June 17, 2016.

109. Over recent years, as Part One makes clear, Burkina Faso’s economic performance has been moderately good. It has made some significant progress towards the achievement of poverty alleviation and shared prosperity, although it could be argued that it still has some way to go in these areas. It has been argued that Burkina Faso’s slow and unequal development can be partially attributed to its geography, its demography and its governance framework and to the effectiveness or otherwise of government policies. All these variables have shaped the path of the country’s economic expansion and its impact at the household level over the past few decades. However, these variables may be better described as symptoms rather than causes. They provide a basis for the diagnostic but do not provide clear explanations for the observed economic growth rate and the poverty rate.

110. Part Two attempts to identify the underlying causes for Burkina Faso’s mixed performance in terms of achieving poverty alleviation and shared prosperity. It then attempts to determine the means by which to achieve these goals to provide optimal benefits to the majority of Burkina Faso citizens. Part Two adopts a two-step approach, with the first step being based on a unified framework informed by two widely accepted theoretical concepts, these being that the achievement of the twin goals of poverty alleviation and shared prosperity are predicated on: (1) the creation of a greater number of productive jobs through the structural transformation of the economy; and (2) the provision of a minimum package of basic services and infrastructure to allow a greater proportion of households to escape the poverty trap. These two concepts are particularly relevant for the case of Burkina Faso, since productive jobs have failed to materialize in sufficient numbers to meet the needs of the country’s rapidly expanding population and since a vast majority of households has not yet accumulated sufficient capital to rise out of poverty on a sustainable basis.

111. The second step is to identify the constraints on the creation of productive jobs and on the provision of services by adapting the decision-tree methodology proposed by Hausmann, Rodrik and Velasco in their growth diagnostic.⁵⁰ This methodology will allow us to hierarchize binding constraints in a logical way by linking them to symptoms. For example, we will emphasize that the lack of a sufficient number of productive employment opportunities is due to the insufficient productivity gains in agriculture and insufficient job creation in non-farm sectors. In turn, these two symptoms will be explained in terms of a number of constraints through an investigation into the manner in which farmers, entrepreneurs, and the Government behave and interact in Burkina Faso. This will enable us to identify a list of possible constraints based not only on an analytical framework, but also on context, since binding constraints on economic activity can differ from setting to setting.

⁵⁰ R. Hausmann, D. Rodrik, and A. Velasco, *Getting the Diagnosis Right: A new approach to economic reform*, Finance & Development, Volume 43, Number 1, March 2006. R. Hausmann, D. Rodrik, and A. Velasco, 2005, *Growth Diagnostics*, John F. Kennedy School of Government, Harvard University (Cambridge, Massachusetts).
<http://ksghome.harvard.edu/~drodrik/barcelonafinalmarch2005.pdf>

112. The main messages from Part Two can be summarized by the following five points:

- Incomes in the farming sector have increased only marginally because of a series of common binding constraints the roots of which lie in market and policy failures. These constraints relate to a number of factors including land access and management; collective infrastructure; access to financing; and risks management. The significance of these constraints varies in the respective cases of a range of different activities (cereals, cotton and livestock).
- To a large extent, non-farm jobs are concentrated in low productivity sectors and activities. This situation is due to the lack of alternatives for many unskilled workers, but also to the lack of dynamism of firms, which are constrained by a number of factors, including limited market size; barriers to entry and competition; a shortage of skills; limited access to external financing; and complex administrative and tax procedures.
- The level of human capital accumulation remains low due to the limited availability of qualified and healthy human resources, which in turn is the result of constraints related to the poor performance of teachers and health workers; a bias against girls; and the poor management of human and financial resources in the education and health sectors.
- Poor households have limited access to land and ownership of productive assets.
- High levels of vulnerability result in a degradation of both human and productive assets.

113. Part Two of the SCD is divided into three chapters. The first chapter explains the analytical framework with specific references to the economic literature and with a discussion of how this framework can be applied to the context of Burkina Faso. The second chapter explores the constraints that have prevented the creation of a sufficient number of productive jobs both in traditional sectors, particularly agriculture, and in modern sectors, including services and manufacturing. The third chapter reviews the reasons behind the limited accumulation of human and physical capital by poor households, despite a moderate degree of success in terms of increasing access to, and improving the quality of, services in the areas of water and health, and with a much more limited degree of success in the areas of education, electricity, and transportation.

2.1: The Proposed Analytical Framework

114. Of the many prevailing theories on economic development, two in particular appear to fit well with Burkina Faso's experience over the past two decades. These theories relate to: (i) the structural transformation of the economy and (ii) the poverty trap. They can be used as a starting point to formulate our hypotheses and to develop an approach to identify the most significant constraints on Burkina Faso's economic performance.

115. According to a long established theoretical approach, a structural transformation of the economy is essential for a developing country to generate sufficient productivity gains so

that it can increase its average per capita income in a sustainable manner.⁵¹ According to this theoretical framework, Burkina Faso remains a poor country because it has been unable to create a sufficient number of productive income generating opportunities for its working population. At present, in spite of the increasing urbanization rate, about 80 percent of Burkina Faso's labor force remains employed in the agricultural sector, which is characterized by a low level of productivity and a high level of vulnerability to natural hazards and exogenous factors. While workers are migrating to cities in increasing numbers, this flow is still relatively marginal. In addition, most migrants are forced to engage in low productivity activities in the informal sector, with only limited prospects of obtaining better jobs in the future. The creation of productive non-farm enterprises, which is necessary for the creation of productive job opportunities, is constrained by a number of obstacles, which we will attempt to identify in due course.

116. According to another established theoretical approach, a country is unlikely to achieve shared prosperity while a significant proportion of its population lacks adequate levels of human and productive capital. In turn, it is difficult to accumulate this capital until there is shared prosperity. Thus, the vicious cycle is often described as a 'poverty trap.'⁵² This theory can be applied relatively well to the situation in Burkina Faso, as it has been established that those in the lowest income quintiles continue to be excluded from access to basic services and infrastructure. While the previous part of this SCD acknowledged that significant improvements have been recorded in the areas of infant mortality and access to improved water sources, it also made it clear that Burkina Faso continues to lag in terms of the delivery of secondary education, access to electricity, and housing infrastructure compared to many other countries in the sub-Saharan African region. As expected, the level of access to these services was negatively correlated with the level of household wealth. In addition, the existence of poverty traps in Burkina Faso was further evidenced by the difficulty for poor households to mitigate the impact of weather and other shocks.⁵³

117. Using these two theories as a starting point, the next step is to understand why Burkina Faso has not been able to generate greater productive gains to enable a greater proportion of poor households to escape the poverty trap. Our methodology is summarized in the diagram below.

118. For each theory, we utilize a decision tree, in the tradition proposed by Hausman, Rodrick and Velasco in their growth diagnostic. This manner in which this decision tree is utilized can be illustrated to analyze the challenge of creating jobs as follows: we start by postulating the question: *What constrains the creation of productive jobs?* Is it a failure to achieve a sufficient level of productivity gains in the agricultural sector? Or is it the limited degree to which the labor force has shifted toward modern activities? If it is a case of low agricultural productivity, is that due to insufficient investment in complementary factors of production, such as human capital or infrastructure? Or is it due to poor access to imported technologies? If it is a case of the limited degree to which productive jobs have been created in the non-farm sector, is this due to high taxation, poor property rights and contract enforcement,

⁵¹ This theory has been partly described in the first part of the SCD. For more details, see, B. Herrendorf, R. Rogerson, Á. Valentinyi, *Growth and Structural Transformation*, NBER Working Paper No. 18996, April 2013.

⁵² See, for example, C. Azariadis. 2006. "The Theory of Poverty Traps: What Have we Learned?" In *Poverty Traps*, ed. S. Bowles, S. Durlauf, and K. Hoff. Princeton: Princeton University Press.

⁵³ Michael R. Carter, Travis J. Lybbert, *Consumption versus asset smoothing: testing the implications of poverty trap theory in Burkina Faso*, *Journal of Development Economics*, Volume 99, Issue 2, November 2012, Pages 255-264.

labor-capital conflicts, or learning and coordination externalities? If it is a case of limited access to finance, are the problems with domestic financial markets or external ones? In this manner, we attempt to identify the constraints and their underlying causes to provide a basis to address these constraints meaningfully.

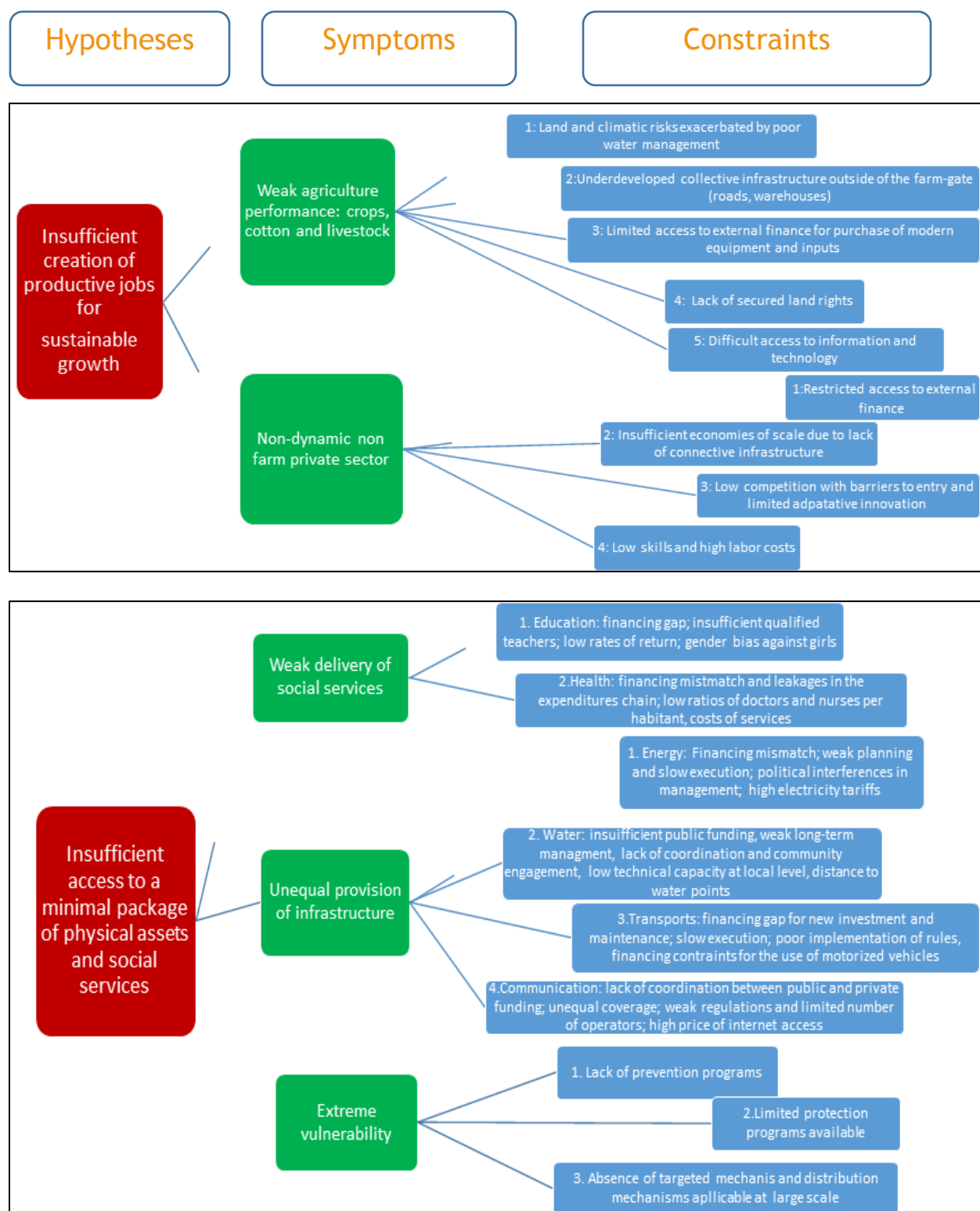
119. The decision tree model can build on the two theoretical hypotheses that we have selected to identify the key underlying constraints. The complete methodology is illustrated in Figure 26 below. The first column lists the two theoretical hypotheses, while the second column lists the possible symptoms. The third column lists the underlying constraints associated with each of the identified symptoms. (See also Annex 5 for a complete list).

120. The selection of the two basic hypotheses is partially based on the experiences of other predominantly agricultural countries that have made substantial progress towards the achievement of reduced poverty and shared prosperity over the past few decades. While these two basic hypotheses may not enable us to determine a complete explanation for Burkina Faso's mixed performance in terms of the achievement of the two goals, it is clear that in order to achieve prosperity, it is essential that a greater number of productive income generation opportunities are created for the rural population and that the level of access to basic services and infrastructure is improved, especially for the poorest households. The experience in countries that were historically dependent on the agricultural sector, such as Malaysia, Vietnam, and Thailand, show that their successful achievement of shared prosperity was based largely on their ability to fulfill these two prerequisites. While each of these forces may play a role on its own, there is also a significant degree of interaction between them. It is by fulfilling both prerequisites in combination that successful emerging countries have been able to facilitate the achievement of positive transformation. These Southeast Asian countries have been able to generate substantial productivity gains by making their agricultural sectors more productive and by facilitating a shift by a greater proportion of the working population to more productive off-farm jobs. At the same time, these productive gains have been made possible these countries' successful endeavors to boost their physical and human stocks of capital by facilitating access to basic services and infrastructure by the poor.

2.2: The Main Constraints on the Creation of Productive Jobs

121. Burkina Faso's limited success in achieving the twin goals of poverty alleviation and shared prosperity is partly explained by its failure to create a sufficient number of productive job opportunities over the past few decades. While a significant number of jobs have been created, only a small proportion are able to provide decent incomes and to raise workers out of poverty. As explained in Part One of this SCD, this failure is the result of the limited productivity gains in the agricultural sector and the marginal movement of workers into more productive, modern sectors. The following section contains an analysis of the factors that have constrained these processes.

Figure 26: A unified analytical framework



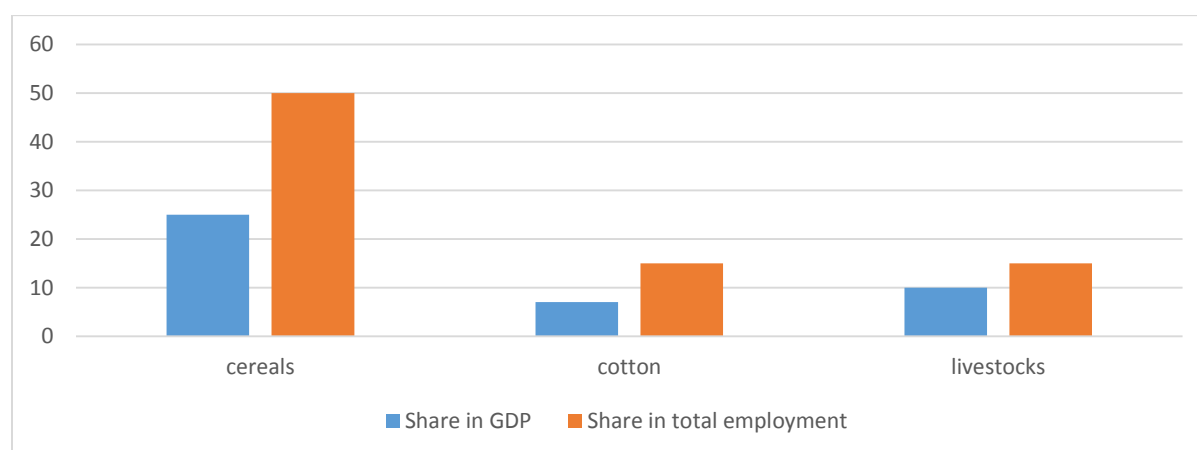
Weak Agriculture performance

122. There is strong empirical evidence to support the notion that higher yield growth on farms leads to a cumulative beneficial impact on economic growth and poverty reduction.⁵⁴

Thus, the prevalence of poverty in Burkina Faso can be largely explained by the current low level of productivity in the agricultural sector. As previous sections of this SCD have made clear, almost 90 percent of Burkina Faso's poor live in rural areas, with approximately two-thirds of rural households engaged exclusively in farm work. Most agricultural workers are unpaid or family workers (52 percent) or self-employees (18.5 percent) working small plots. Seasonality and natural hazards result in a high degree of income variation. As a result, the average income of farmers is approximately US\$ 323 per year, about 60 percent of the average figure for the sub-Saharan African region as a whole.

123. In Burkina Faso, agriculture consists of three main activities: (i) the production of subsistence crops (mainly cereals); (ii) the production of cotton; and (iii) livestock husbandry. These three activities play a major role in the economy, accounting for around 20 percent, 5 percent and 10 percent of GDP respectively in 2014. In terms of employment, their contribution is more difficult to quantify, although they probably account for around 50 percent, 15 percent, and 20 percent respectively (see Figure 27). While these different sectors may face similar challenges, they tend to respond to different factors in different manners. Thus, each of these sectors is analyzed separately below.

Figure 27: The share of subsistence products, cotton, and livestock in total employment and GDP, 2014.



Source: World Bank and FAO.

Subsistence Crops (Cereals)

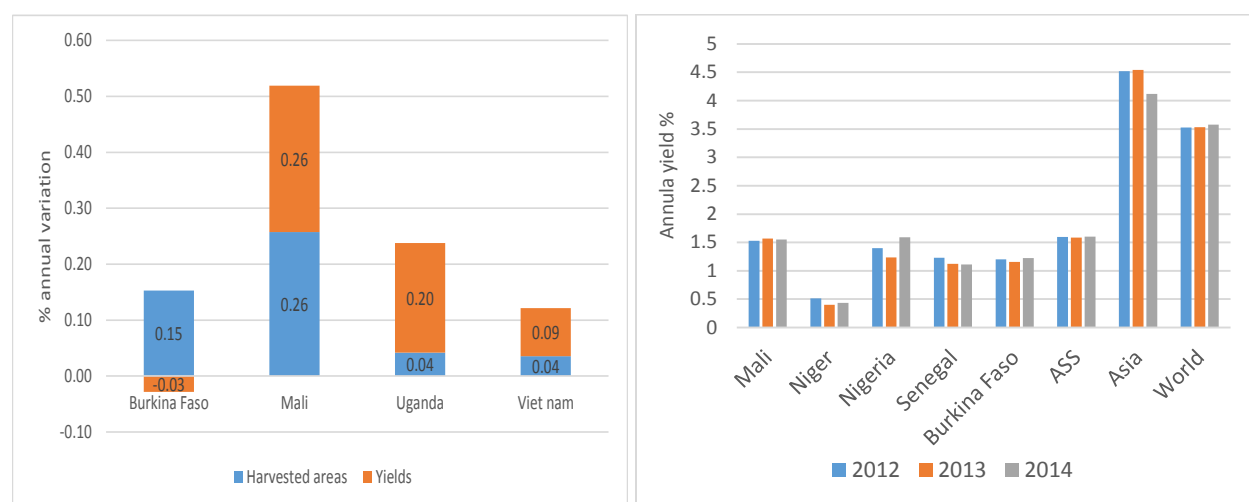
124. The production of subsistence crops is by far the most significant agricultural activity in Burkina Faso. The principal subsistence crops are cereals, including sorghum, millet, maize, and rice. In the period from 2005 to 2014, cereal production increased by around 10 percent,

⁵⁴ For such literature, see A De Janvry, E Sadoulet, *Agricultural growth and poverty reduction: Additional evidence*, The World Bank Research Observer, 2009. World Development Report 2008: Agriculture for Development, Washington D.C., World Bank.

which is approximately the rate of increase recorded by Vietnam over the same period. However, this increase is much lower than that recorded by Mali (almost 50 percent) and Uganda (more than 20 percent) (see Figure 28).

125. There are two possible means of increasing agricultural production, the first being to extend the area of cultivable land, the second being to increase yields. In Burkina Faso, the increase in the production of cereals over the past decades is almost entirely the result of the extensification of cultivable land. In fact, average yields have actually declined, by about 3 percent, over this period. By comparison, yields increased by about 26 percent in Mali and by about 20 percent in Uganda in the period from 2005 to 2014 (see Figure 28).

Figure 28: Cereal production increased, but yields declined in Burkina Faso, Average growth 2005-14



Source: FAO statistics

126. In Burkina Faso, the extensification of agricultural areas continues to be possible because of the large area of land that remains uncultivated while being potentially suitable for agriculture. However, the potential for extensification is constrained by the lack of connective infrastructure and the limited access to water resources in remote areas. Thus, the cost of extensification is high and is likely to exceed the expected rate of returns on investments in remote areas, although opportunities do still exist.

127. For similar reasons, increased productivity has been the defining characteristic of successful rural agricultural economies around the world. Such economies are able to achieve sustainable increases to the productivity of their agricultural sector. While productivity gains can be achieved by investments in capital assets and technology, these gains are also usually associated with the creation of a greater number of productive job opportunities. In the case of Thailand, increased agricultural productivity was associated with an increase in the number of stable agricultural jobs, from 519,000 in 1960 to almost three million by 2008. As countries continue on the development trajectory, both the share of jobs in the agricultural sector and their absolute number typically declines. However, countries with rich natural endowments of arable

land and favorable climates, including many countries in Africa, can defy this trend, at least in the short term.⁵⁵

128. **Not only do farmers in Burkina Faso need to increase their yields by producing their traditional crops more efficiently, they also need to diversify.** At present, the level of diversification within Burkina Faso's agricultural sector is very limited. To illustrate this lack of diversification, a comparison with the case of Kenya is useful. In 1970, both countries relied overwhelmingly on the production of traditional crops. However, 40 years later, in Kenya, traditional crops constitute only one third of its agricultural output. Diversification to non-food products (such as meat, honey) and high-value crops (such as tomatoes, avocados) accounted respectively for 53 percent and 16 percent of Kenya's total agricultural output. By contrast, the composition of Burkina Faso's agricultural production has remained more or less unchanged over the past 40 years (see Table 8).

Table 8: Relatively little diversification away traditional crops compared to Kenya (Percentage of total production)

	Burkina Faso		Kenya	
	1970	2010	1970	2010
Traditional Crops	59	54	82	32
High value products	27	34	6	16
Non-crop products	14	12	12	53

Source: FAO.

Notes: For Burkina Faso, traditional crops are defined as sorghum, millet, maize, rice, and groundnuts. High value products include fruits, vegetables, and cotton, while non-crop products are eggs, meat, and fish.

129. **The diversification away from traditional crops is also transformational because it can accelerate the process of adding value to the agricultural sector.** Diversification is not merely about substitution, but rather about achieving complementarities that act as a catalyst for the whole agricultural sector. Shifting rural activities toward high-value agricultural products or off-farm activities is likely to create a greater number of productive jobs and to increase incomes in rural areas. The production of staple foods such as grains and sorghum involved is the employment of between ten to 50 workers per 1000 hectares. The production of horticultural commodities is considerably more labor-intensive, with, for example, the production of olives involving the employment of around 300 workers per 1000 hectares and the production of oranges of around 800 workers.

130. **However, it should be noted that increasing agricultural productivity is not an end in itself.** The goal for the farmer is to sell his or her produce. This is the only way to increase revenues (assuming constant prices for the commodities). While productivity gains are important, improved access to markets through efficient commercialization chains from the farm to the

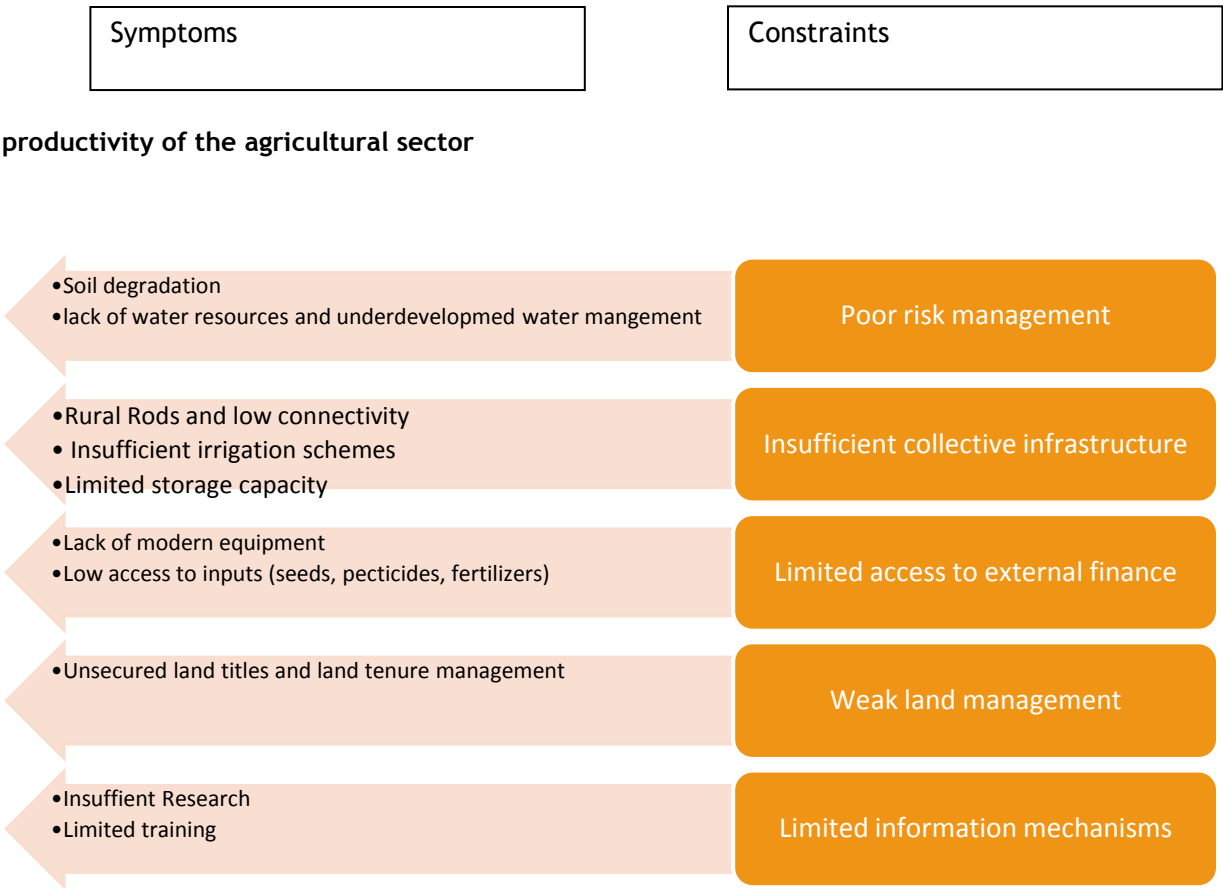
⁵⁵ The substitution of labor by capital and technology is a long term process as revealed by the experience in China and India. While these two countries have been able to realize important gains in agricultural productivity, the share of their labor force employed in this sector only declined gradually over time. Second, diversification toward more labor intensive agricultural products (from maize to vegetables) has proved to be the response for high and better employment in Thailand.



consumers is just as significant. The efficiency of these chains is dependent on the availability and quality of warehouses, transportation infrastructure, intermediaries, and government policies. The experience of successful emerging Asian countries suggests that the most binding constraints are often outside the farm-gate. The increases in rural incomes achieved by these countries were principally the results of actions that increased farmers’ access to markets. When good connections between farmers and markets were established, the market had incentives to increase the level of services to farmers, who benefited from services by banks, insurance providers, transportation services, and wholesalers.

131. It is therefore essential to identify not only the constraints on farmers achieving higher yields and diversifying their crops, but also the constraints on the commercialization of their production. As stated earlier, the challenge is to distinguish between symptoms and causes. For example, the limited use of modern inputs is a symptom of restricted access to finance, which is itself partly rooted in the lack of secured land title systems. Similarly, the vulnerability of crops to climatic conditions has been exacerbated by the limited use of collective irrigation schemes and weather insurance mechanisms. The figure below points to five constraints that are associated with a range of symptoms that characterize the subsistence agriculture sector in Burkina Faso (see Figure 29 and Box 11).

Figure 29: The key constraints behind the low



132. The analysis stresses five main constraints, which exist as a result of a combination of market and policy failures. Private market failures continue to act as constraints, although it should be noted that

133. These constraints cannot be remedied by private operators alone. For example, the Government must intervene to establish an adequate system of land management as a precondition for financial service providers to offer services that require collateral. Similarly, public financial mechanisms are needed to avoid sub-optimal investments in collective infrastructure. The Government's failures are the result of misguided policies that are characterized by poorly conceived and implemented regulations, ineffective investment allocation, or the inadequate provision of incentives.

Box 11: Are the constraints in agriculture stronger against women?

While the vast majority of small-scale crop producers face similar constraints, the significance of these constraints is usually greater for women. This results in a missed opportunity, since women account for more than half of the agricultural activities in Burkina Faso, with these activities fulfilling 75 percent of the country's food needs.


The gender bias faced by women around the world is often expressed in terms of their unequal access to education and external finance. However, in Burkina Faso, the most significant factor is that most women still lack security of tenure, despite the terms of Article 15 of the Constitution, which guarantees equal access to land ownership.

The majority of rural women gain access to land for cultivation through their husbands. In general, women cultivate staple crops alongside their husbands and members of their husbands' families in a family field. They also grow a combination of vegetables for family consumption, staple crops for consumption and sale, and/or market crops such as peanuts or cow peas on another, much smaller plot of land separate from the family field. In this way, women not only contribute to the provision of staple food crops for their families, but also supply nutritious vegetables from their gardens, and support their families through the cash they earn from selling their products. This smaller plot of land is often marginal land, and typically is not granted to a woman for life, but belongs to her husband or her husband's family. Rather, a woman's husband may take back the land that she uses to cultivate legumes for the cultivation of millet after the legumes have improved the soil through nitrogen fixation and by breaking up the soil with their roots, or at other points. Women's insecurity of tenure is exacerbated by cultural norms that dictate that women must leave their husband's home, family and land after he dies.

Women have fewer incentives for investing in their land because of this lack of security of tenure. Women may be less likely to invest in land improvements or other inputs such as improved seed because (1) of their lack of security of land tenure; (2) they lack decision-making power within the household; and (3) they cannot access the labor needed for labor-intensive improvements as easily as men. For example, to dig holes or half-moons used for water catchment and/or soil fertility treatments requires a great deal of labor, often involving work parties. Women may not be able to invest the labor necessary for these activities, nor do they have the social capital or finances to acquire the necessary labor.

Source: Kelsey Jones-Casey, *Land Tenure Security and its Contribution to Food Security Burkina Faso*, Brief, Focus on Land in Africa.

134. **Constraint 1: Poor risk management:** This constraint relates to the management of land and climatic risks. As discussed in the Part One of this SCD, Burkina Faso is exposed to a range of natural risks that negatively affect its water resources and soil quality. Rainfall is generally low (from about 300 mm/year in the North to about 1,200 mm/year in the far South-West), irregular and unevenly distributed. About half (46 percent) of the country's land mass suffers from soil degradation. Agricultural yields are indeed highly correlated with climatic conditions and soil



management. The Government should play a more active role in managing the exploitation of soil, including through measures to reduce the impact of deforestation, and in managing the use of limited water resources, including through measures to manage conflicting interests.

135. **Evaporation currently accounts for losses of around 60 percent of the water retained in dams, threatening fish farming, forestry and animal farming, and limiting the availability of drinking water and water for crops.** Declining rainfall and rising temperatures is also expected to reduce millet yields on land with limited water reserves in the Sahelian zone. In the Sudanian zone, the millet, sorghum and maize yields derived from land with deep soil is likely to increase due to the slight improvement in rainfalls predicted to occur in June, with these increased rainfalls expected to play a positive role in enabling the seeds to germinate. It is also projected that the maize yields derived from land grown with limited useful water reserves will significantly decrease in the same region due to the lack of water in the months of July, August, and September. Even with constant or improved precipitation, yields have been declining steadily over the years.

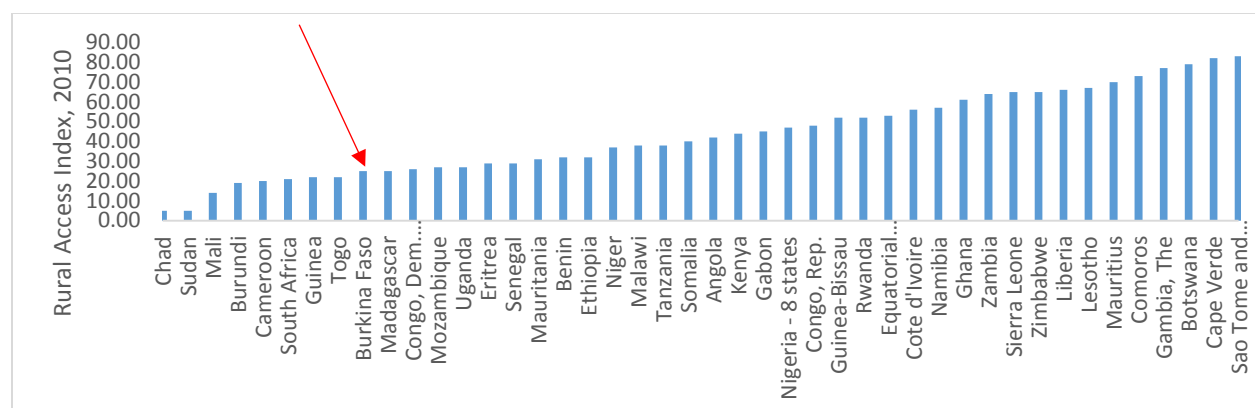
136. **The Government should also develop a long-term vision that takes into account the multiple usages to which water resources are put, with this vision informed by economic and demographic developments and anticipated climatic changes in the longer run.** Conflicts have increased over the years, and their resolution will have to be integrated in any future agricultural program.

137. **Constraint 2: Insufficient Collective Infrastructure: Individual famers do not have the financial resources or incentives to build the necessary road, water and storage facilities to facilitate the commercialization of their production.** This is related to the concept of public goods, in the sense that the existence of these facilities does not merely benefit individual farmers, but has a broader positive impact on entire communities. Thus, interventions by the public sector are justified. Without such interventions, the risk of underinvestment in these priority areas is high. In Burkina Faso, the Government has failed to provide sufficient collective infrastructure (public goods) to enable effective commercialization through public investment and/or private sector participation.

138. **Many poor farmers are affected by serious infrastructure deficits, particularly in terms of their access to roads and modern irrigation technologies:**

- **Roads/connectivity:** In terms of the World Rural Access Index, Burkina Faso has one of the lowest rankings in Africa (see Figure 30). Farmers are very isolated, with approximately one out of five rural households being located at a distance of more than one hour's travel from the closest village market. The high cost of transportation is exacerbated by numerous roadblocks and the limited number of trucks available to farmers. As a result, not only is the potential for commercialization reduced, so is the opportunity to utilize improved inputs. Several recent studies in Tanzania have demonstrated that the use of fertilizers and pesticides by farmers is closely correlated with proximity to roads and/or village markets.
- **Water:** Only 12 percent of the area of land that should be irrigated has benefited from irrigation infrastructure, making farmers vulnerable to fluctuations in rainfalls, which are erratic in most regions.

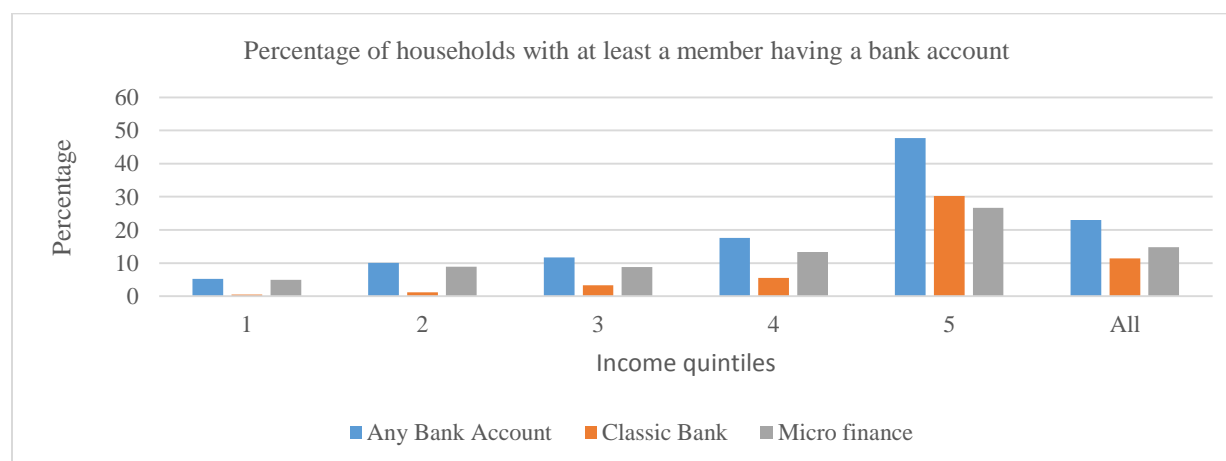
Figure 30: Rural Households remain isolated even in comparison of other African countries



Source: World Bank

139. **Constraint 3: Limited Access to External Finance:** The vast majority of farmers have almost no access to external finance or other services provided by financial institutions. Only around 8 percent of farmers have accounts with financial institutions, with this figure falling to almost zero in the case of the bottom two quintiles of the population (see Figure 31). Therefore, only a tiny proportion of farmers are in a position to apply for credit, with most applications refused by financial institutions because of the lack of bankable projects and/or guarantees. At present, less than one percent of commercial credit is extended to the agricultural sector, with the exception of credit extended to commercial companies engaged in the production of cotton. The very low level of access to credit makes it difficult for farmers to produce enough to meet their subsistence needs and to generate a surplus for commercial purposes. Since the general level of commercialization amongst farmers is extremely limited, they have little cash with which to purchase fertilizers and other agricultural inputs. Without these inputs, their level of productivity remains low, keeping the poorest households trapped in a vicious cycle of poverty.

Figure 31: Percentage of Households with at least one Member Having a Bank Account by Quintiles



Source: Authors calculations using EMC-2014

140. The financing constraints faced by farmers are partly the result of market failures that have not been addressed through government interventions. The constraints are exacerbated

by asymmetric information that prevents banks and even micro-finance institutions from providing credit to farmers. The risk is also exacerbated by the lack of secure property rights and an often dysfunctional justice system, which reduce the opportunities to use land as collateral. In many countries, governments have intervened to provide guarantees or to encourage the provision of credit through matching grants or subsidized credit programs to the agricultural sector, with these interventions based on an explicit recognition of the difficulties faced by private commercial banks in providing credit to farmers under these conditions. In others, the authorities have supported the development of micro-credit institutions as a means to facilitate the provision of credit to poor farmers. The recently introduced Warehouse Receipt System (Warrantage), developed through the World Bank's PAPSA project, demonstrated the need for innovation and mechanisms to improve farmers' access to credit. Unfortunately, such channels are still nascent in Burkina Faso and are largely unavailable to most farmers in the country.

141. Constraint 4: Weak land Management: This constraint relates to the difficulties to secure land property rights and to establish sound and sustainable land use planning tools. Over the past few years, the Government has conducted a consultative process to implement a number of land reforms, which have led to the adoption of a number of new legal mechanisms.⁵⁶ Despite these reforms, only a small proportion of Burkina Faso's agricultural land has been registered. According to estimates from the 2014 Household Survey, only 2.1 percent of the total area of utilized land was registered formally. In urban areas, the registration of land titles is more common, although even in these areas, it is still subject to administrative hurdles that delay the process.⁵⁷ Only 19,000 land tenure certificates were issued in 2013, in a total of 302 communes. In rural areas, the slow implementation of the new legal framework has been exacerbated by institutional weaknesses, including poor coordination between agencies and between the Government and communities, and by the lack of technical capacities at the central and local levels. In addition, until the transfer of responsibility for the management of natural resources to the communes, land planning and zoning policies were poorly implemented and enforced. The decentralization process, strengthened by democratic reforms implemented in 2016 and involving the election of mayors, creates opportunities to implement land tenure reform and to improve land use planning in the rural communes.

142. Constraint 5: Underdeveloped information management: Farmers continue to be constrained by their limited access to information and technology. Most farmers are not connected to markets because they are not able to access the appropriate information in a timely manner, including information related to the quality standards applied in more developed countries. Farmers do not use the appropriate technologies because they are not aware of their existence or do not have the skills to utilize these technologies efficiently.

143. Again, the Government could conduct interventions to facilitate the provision of information and training, which should also be considered as a public good. The Government could play a direct role as a provider of training and as a disseminator of information, or an indirect role by encouraging private operators to reach out to rural communities through the provision of incentives and other means. There is a need to develop a greater number of agricultural training centers (e.g., *lycées techniques agricoles*) and to encourage compliance with

⁵⁶ The National Policy for Rural Land in Rural (PNSFMR) in 2007, of the law No. 034-2009 / AN of 16 June 2009 on Rural Land Tenure, and Act No. 034-2012 / AN of 2 July 2012 concerning Agrarian and Land Reform (RAF).

⁵⁷ For the time to register a property, Burkina Faso was ranked 147 out of 189 countries in the 2015 Doing Business report.

quality and hygiene standards through the provision of information, testing, and controls. There is a need for a more comprehensive SPS strategy at the national and regional levels.

144. Another means by which the Government could reduce constraints on access to information is by promoting the use of mobile telephone services in rural areas. While the penetration rate is already reasonably high, it is not yet at the levels recorded in East Africa or even in Côte d'Ivoire. While it is still too early to fully assess the impact of these constantly evolving new technologies, the evidence suggests that ICT access has beneficial impacts on smallholder farmers by enhancing spatial arbitrage and by reducing price dispersion through mechanisms that enable greater marketing efficiency. Indeed, the use of mobile telephone services has been shown to be at least partially responsible for the successes achieved by farmers in Tanzania and Kenya, where these farmers have increased their levels of marketed production and managed to sell their produce at higher prices as a result of improved access to price information. New technologies also enable small-scale farmers to reach out to markets. For example, recent initiatives have shown that the virtual distance between services providers (banks and wholesalers) can be reduced significantly through the use of these new communication tools. In Sri Lanka, the partnership between CISCO and village communities contributed to the connection of 1,000 villages in 2009.

145. Taken together, these five constraints explain to a significant extent why Burkina Faso's agricultural yields have failed to increase more significantly. Most rural households are almost completely dependent on agricultural activities, and suffer from land degradation and natural hazards. Their ability to establish linkages with markets is limited by high transportation costs, and they cannot access finance to purchase the necessary equipment and modern inputs to improve their productivity. Insecure property rights prevent them from optimizing the use of their land and making long-term investments. Finally, most farmers have only limited access to basic information related to market conditions and quality standards. They also suffer from serious deficits in skills and technology.

Cotton

146. Cotton has traditionally been Burkina Faso's main cash crop.⁵⁸ The cotton sector provides employment to around 15-20 percent of the active labor force, supporting 1.5 million-2 million people. The sector is dominated by small farms and smallholders, with a small number of large farms owned by members of the rural elite.⁵⁹ Until 2008, when it was surpassed by gold, cotton was the most significant export crop. The cotton sector is relatively well organized, with three large companies purchasing the vast majority of the output from small producers, most of whom are members of farmers' associations.

147. This cotton sector is exposed to two main exogenous vulnerabilities, these being: (i) climatic hazards; and ii) the price volatility of cotton and major inputs on international markets. These two factors have a significant impact on cotton revenues over time (see Figure 32). Farmers are further exposed because they have limited financial resources to implement measures to

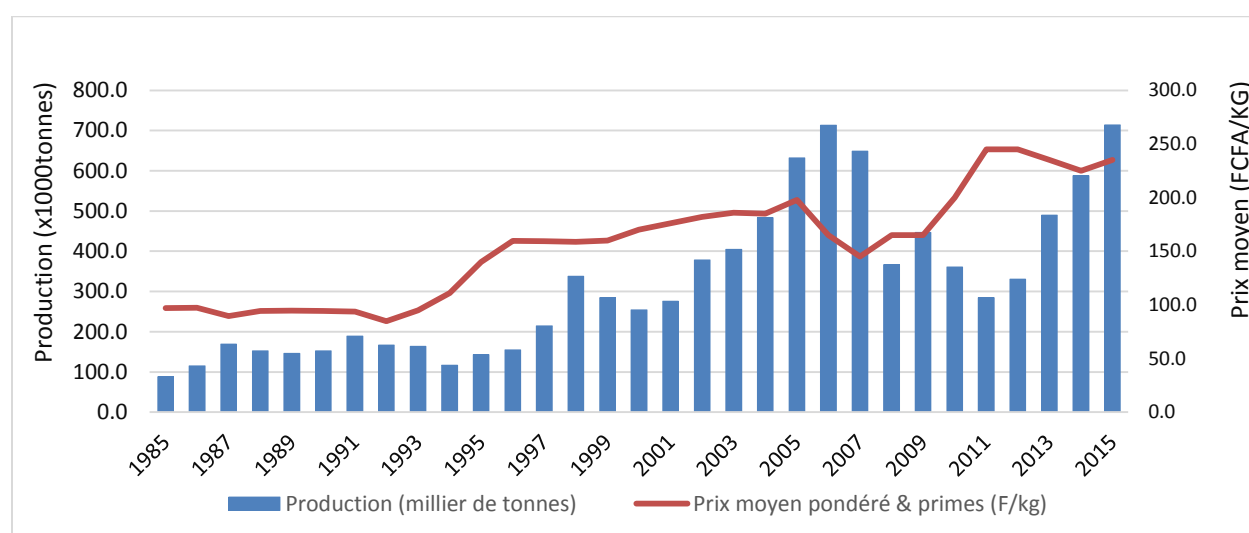
⁵⁸ For a good recent study, see IMF, *Selected Issues: An overview of the cotton sector in Burkina Faso*; 2014. See also, Jonathan Kaminski, *Cotton Dependence in Burkina Faso: Constraints and Opportunities for Balanced Growth*, World Bank.

⁵⁹ Half of the producers cultivate less than 1.5 hectare of cotton and on average a household cultivate 2.7 hectares of cotton.

mitigate against these risks. They usually have only very limited savings upon which to draw, with only a very small minority able to access external financing or to participate in government-sponsored insurance mechanisms. The *Fonds de Lissage* program, established in 2007, is running a deficit and cannot provide adequate assistance to cotton producers in a context in which global cotton prices have been low for several years.⁶⁰ The quasi-absence of an insurance market means that farmers have few available risk mitigation measures. Approximately one quarter of rural households admit that they have no strategy in place to deal with emergencies, with practically none participating in formal insurance mechanisms. To demonstrate the importance of such mechanisms, international experience shows that an innovative financial product, weather-based index insurance, allows smallholder farmers, financial institutions, and even governments to hedge against production risks associated with adverse weather events such as drought, flood, or frost. While this financial innovation has significant potential to enable rural households to mitigate the risks they face, voluntary uptake at the household level has been disappointingly low.

148. **Other risks to which the cotton sector is exposed relate to the ongoing degradation of soil quality and to variable rainfalls.** Soil degradation is partly the result of the increase in yields achieved during the 1990s and 2000s, which led to overexploitation. Most producers have little or no access to modern irrigation schemes and so are highly vulnerable to variable climatic conditions. While some moves have been made to develop water infrastructure, the number of available irrigation schemes remains very limited.

Figure 32: Cotton production and prices (1985-2015)



Source: World Bank.

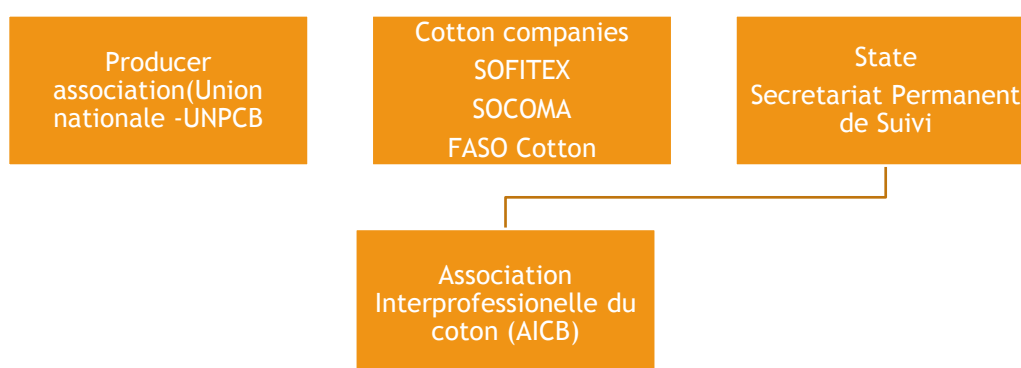
149. **Maximizing synergies along the value chain between producers and processing industries is key to improving productivity.** One constraint relates to the acquisition of seeds

⁶⁰ The *Fonds de Lissage* assumes a decent farm-gate price, independently of the variations in international prices. When prices are higher, reserves are accumulated but when they are lower a subsidy is paid to farmers. The Fund has been running a deficit in recent years because of persistent low prices and needs to be recapitalized. Meanwhile, the Government has been paying subsidies directly to farmers, up to FCFA 6.5 billion.

and other inputs by small producers, who lack resources and information regarding markets. At present, cotton producers rely mostly on farming contracts with distribution companies. The Government should implement measures to ensure that these contracts are fair, since this market is not competitive and is characterized by asymmetry of information. There is also a need to establish clear risk-sharing mechanisms. In order to facilitate the acquisition of inputs by small producers, the Government created an Input Fund in 2014, with financial support provided by the World Bank. However, because this mechanism has only been recently established, it has not yet been possible to evaluate its effectiveness.

150. In addition to constraints related to risk management, the cotton sector suffers more broadly from general poor governance.⁶¹ As stated previously, the market is dominated by three companies, each of which has a fixed market share (see Figure 33). The oligopolistic structure of this sector imposes constraints on the regulatory control of the sector by the authorities. This market structure not only creates the risk of a price entente between these firms in the short term, it also limits efficiency gains and innovation in the longer term, since the buying companies are not competing with each other. The risk of oligopolistic behavior is also enabled by the low capacity of the state to perform a regulatory role. In addition, there is an inherent conflict of interest, with one of these three companies, SOFITEX, being owned by the state.

Figure 33: Market structure of the cotton sector




Source: SCD background paper on the cotton sector.

151. Finally, the potential of the cotton sector is negatively affected by high transportation costs. High transportation costs are related to the distance between production sites, ginning sites, and main market places, the poor quality of roads and other connective infrastructure, and Burkina Faso's lack of integration with main export markets.

Livestock

152. Burkina Faso has a large and diversified stock of livestock. In 2014, the total number of livestock was estimated to stand at 7 million. This livestock provides income directly and

⁶¹ For more details on the governance in the cotton sector, see the SCD Background paper on the cotton sector, 2016.



indirectly to about 86 percent of the population. While traditionally farmers in rural areas have conducted the vast majority of livestock activities, many households, principally women, in urban areas are now also involved in activities such as raising poultry.

153. **Burkina Faso has a large number of pastoral areas, village-level pasture zones, transhumance corridors and various agro-ecological areas suitable for the diversified development of the livestock sector.** However, pastoral activities have been on the decline, with this decline at least partially caused by conflicts with farmers regarding land usage and by competition with neighboring countries such as Niger and Cote d'Ivoire.

154. **The cattle/beef and poultry subsectors are facing significant competition from neighboring countries, particularly Côte d'Ivoire and Niger.** Meat is considerably cheaper in Côte d'Ivoire (2000 FCFA per Kg) than in Burkina Faso (2500 FCFA per Kg). Low productivity per animal in an intensive system combined with poor control of disease and poor sanitary conditions in slaughtering facilities have all contributed to a decline in the level of competitiveness of Burkina Faso's livestock sector and its capacity to respond adequately to the greater domestic demand and to comply with the standards required to participate in export markets.

155. **The pastoral sector has performed poorly for a variety of reasons, including:**

- Lack of access to land and water and the degradation of pastures, with this being at least partially caused by a lack of available breeding areas, which has led to frequent conflicts between producers of livestock and agriculturalists.
- A lack of disease control measures and poor sanitary conditions.
- Weak human capacity, with limited knowledge of hygiene standards.
- Limited access to inputs that could improve productivity, especially animal feeds and veterinary products.
- The nonexistence or poor state of necessary infrastructure, with producers having inadequate skills and limited information related to market conditions. The country is lagging in terms of creating a value chain for meat exports, despite the modernization and expansion of slaughterhouses in cities like Ouagadougou and Bobo-Dioulasso. Further losses occur during transportation because of inappropriate conditions ("*la chaine du froid*" is deficient).

156. While the Government has traditionally allocated a significant proportion of public resources to develop and support the agricultural sector, only one percent of the national budget is allocated to support the livestock subsector. In addition, the Ministry of Animal Resources has serious difficulties in recruiting veterinarians.

Lack of dynamism of the non-farm private sector

157. **International experience shows that at the national level, increases to average incomes are usually associated with a gradual shift of workers away from agriculture toward non-farm**

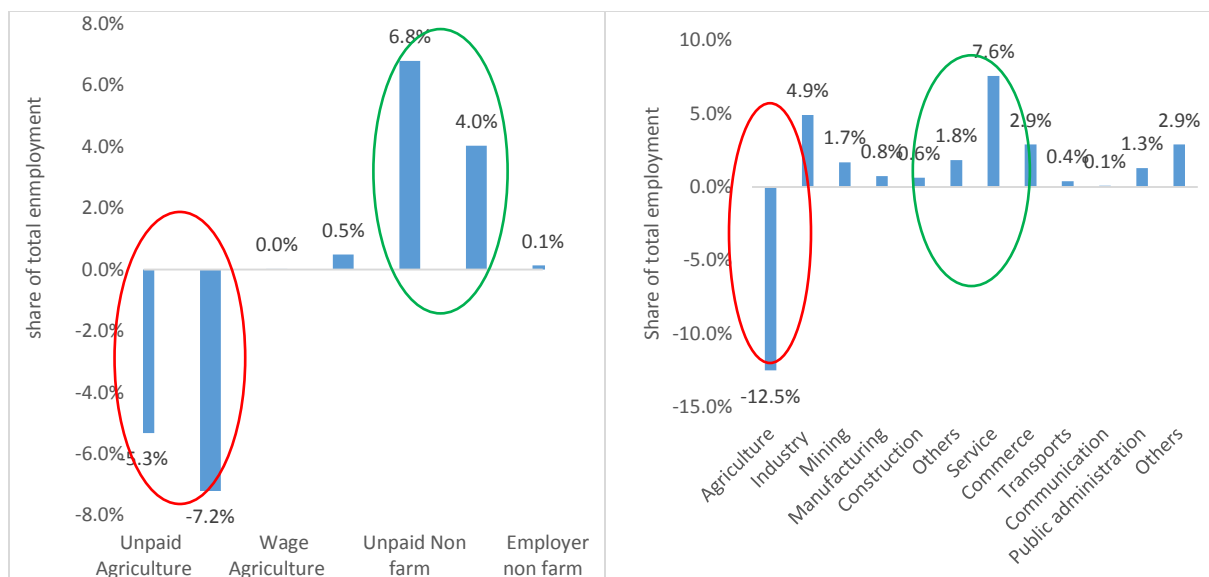
employment.⁶² In Burkina Faso, in the period from 1994 to 2014, the contribution of farming to employment declined by 16 percentage points. This shift was associated with the process of urbanization, with the majority of jobs in urban centers being in non-agricultural sectors. While the urbanization process in Burkina Faso is still in its early stages, an increasing number of workers from rural areas are migrating to urban centers to take up employment in these non-agricultural sectors. As a result, the proportion of the workforce employed in urban areas increased from around 20 percent in 1998 to around 30 percent in 2014.

158. **Employment data shows that in 2014, 28 percent of Burkina Faso's workforce was engaged in non-farm employment, with an increase of 11 percent recorded in 1994 and 15 percent in 2005** (see Figure 34). This gradual shift in the composition of the workforce has been driven by the rapid increase in the number of small, informal activities and non-farm household enterprises, with the proportion of the workforce employed in the latter increasing by seven percentage points in the period from 2005 to 2014. The vast majority of the workers employed in these sectors are employed in informal commerce, with their jobs generating infrequent and generally low incomes. These workers are generally young, with low levels of educational attainment. As in most developing countries, those participating in these jobs do so more as a residual choice, with opportunities for employment in formal enterprises extremely limited. Indeed, the proportion of the workforce engaged in wage labor in the formal sector has increased by only four percentage points over the past decade.

159. **In terms of their contribution to employment, the greatest increases have been recorded in the industrial and services sector, with the contribution of the industrial sector increasing by five percent and of the services sector by eight percent over the past decade** (see Figure 34). A more detailed breakdown shows that job creation has been concentrated in commerce, mining, and construction. The boom in the mining industry, which now accounts for more than half of Burkina Faso's exports, has resulted in the creation of a relatively limited number of jobs (see Box 12).

Figure 34: Winners and losers on the Labor market per category and sector, variation between 2005 and 2014

⁶² Katy Hull, *Understanding the Relationship between Economic Growth, Employment and Poverty Reduction*, in promoting Pro-poor Growth: employment, OECD 2009



Source: SCD background paper on jobs, 2016.

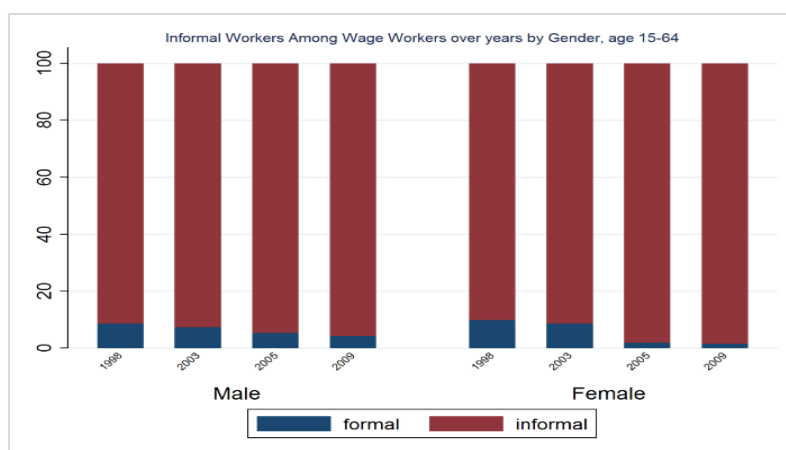
Box 12: Employment in mining: A dual sector

Large industrial mines first began operations in Burkina Faso in 2008. Their impact on local employment can be analyzed in several phases. The first phase, the construction phase, commenced following the massive FDI inflow necessary to build the plants and infrastructure (roads, electricity). During this phase, the creation of direct jobs was significant, mostly involving low-skilled employment in construction. The second phase began when operations commenced. At this point, the contribution to direct job creation was marginal.

In addition to industrial mining activities, artisanal mining can be found in a few regions, with this accounting for approximately 500,000 jobs. The main activity consists of gold panning, and is principally informal. This activity provides a small, complimentary income to many rural households, who are simultaneously engaged in farming. Over the past decade, about 10,000 direct jobs have been created in and around big mining projects, facilitating the creation of approximately 30,000 indirect jobs, with these jobs having a direct positive impact on the welfare of around 100,000 people.

160. In Burkina Faso, in terms of access to employment opportunities, the bias against women remains extremely significant. On average, women are far more likely to be employed in lower paid informal jobs, mainly in subsistence agriculture (see Figure 35). Women have fewer opportunities than men to move to cities or to other countries, where jobs are generally better paid. Part of this bias is rooted in women's average level of educational attainment (see more details later in the text), but also in the fact that women find it harder to access legal services and so to protect their rights. Complex cultural factors contribute significantly to limiting women's access to education and other services.

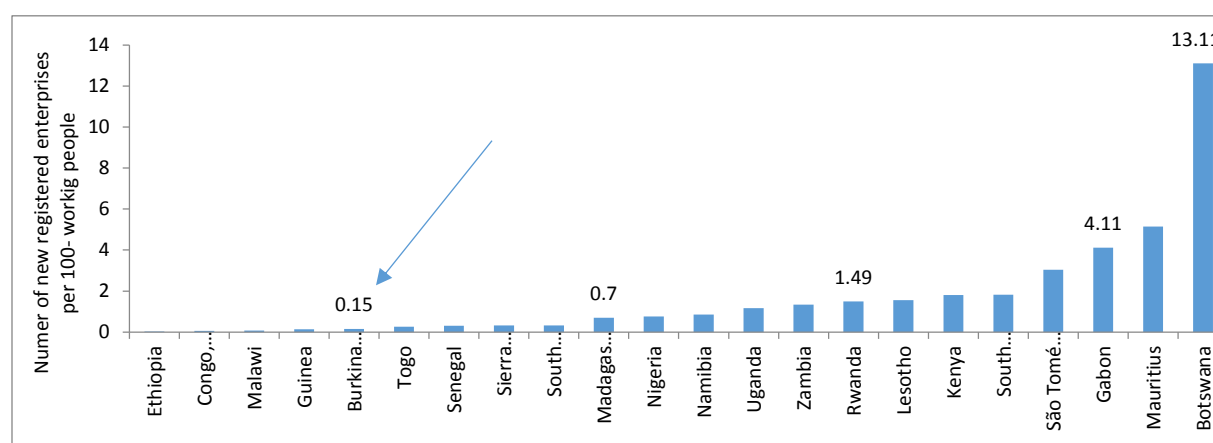
Figure 35: Women are more confined in informal jobs than men and the gap is growing over time



Source: SCD background paper on jobs, 2016.

161. As the previous discussion has made clear, the slow rate of creation of productive jobs has been the combined result of two phenomena: (1) the concentration of new jobs in low paid, low productivity informal activities; and (2) the low level of demand by formal enterprises. The vast majority of the labor force employed in non-agricultural sectors is engaged in self-employment or small-scale enterprises. These low productivity jobs provide only limited incomes, with limited potential for expansion and growth. The low level of demand by formal firms is largely the result of the slow emergence of formal firms (see Figure 36), but also the result of severe constraints in the labor market itself. Many firms in the formal sector deliberately limit the number of formal employees because of restrictive regulations that encourage them to intensify the use of capital or to utilize informal labor.

Figure 36: The creation of formal firms is low in Burkina, even by low-income countries standards



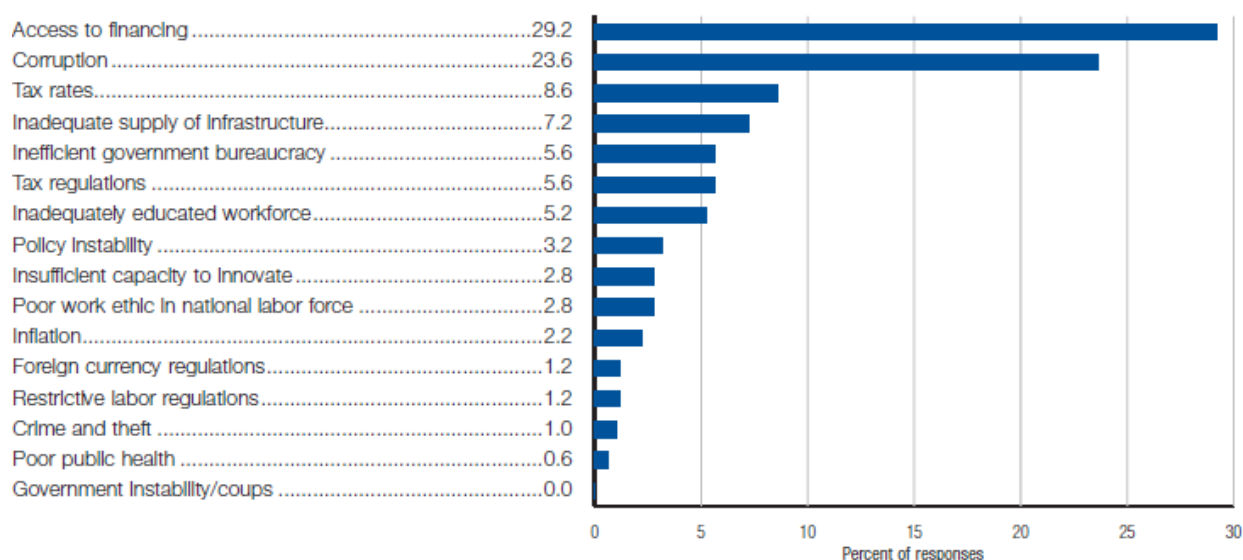
Source : World Bank, <http://www.doingbusiness.org/data/exploretopics/entrepreneurship>

Note: Data is provided on new business entry density, defined as the number of newly registered corporations per 1,000 working-age people (those ages 15-64).

162. There is an extensive and growing literature that addresses the reasons for the failure of many African countries to achieve the rapid expansion of their non-farm private sectors.

This literature makes use of a combination of cross-country regressions and individual case studies and conducts benchmarking exercises on the basis of successful experiences to derive a series of possible causes.⁶³ Another approach has been to survey entrepreneurs to gauge their opinions on the constraints they face.⁶⁴ The survey conducted by the WEF/World Bank in Burkina Faso in 2014 showed that entrepreneurs reported that the most significant constraints they faced, in descending order, were restricted access to finance; corruption; and taxes. Surprisingly, infrastructure bottlenecks were not reported to be significant to the extent recorded in many other African countries, with less than 10 percent of survey respondents stating that they considered this to be a severe constraint (see Figure 37).

Figure 37: The most problematic factors for Doing Business, 2014/15



Note: From the list of factors above, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Source: World Economic Forum

163. A combination of these approaches enables the identification of a set of symptoms and key constraints on the development of the non-farm private sector in Burkina Faso. In terms of the main symptoms, non-farm businesses in Burkina Faso appear to be: (i) underequipped and characterized by the limited use of technological innovations; (ii) small in size, with few or no employees, and with a limited export orientation; (iii) characterized by a low level of skill by both management and staff; and (iv) characterized by a high degree of informality. These symptoms are clearly associated with the low level of productivity of the private sector, and enable an explanation of binding constraints.

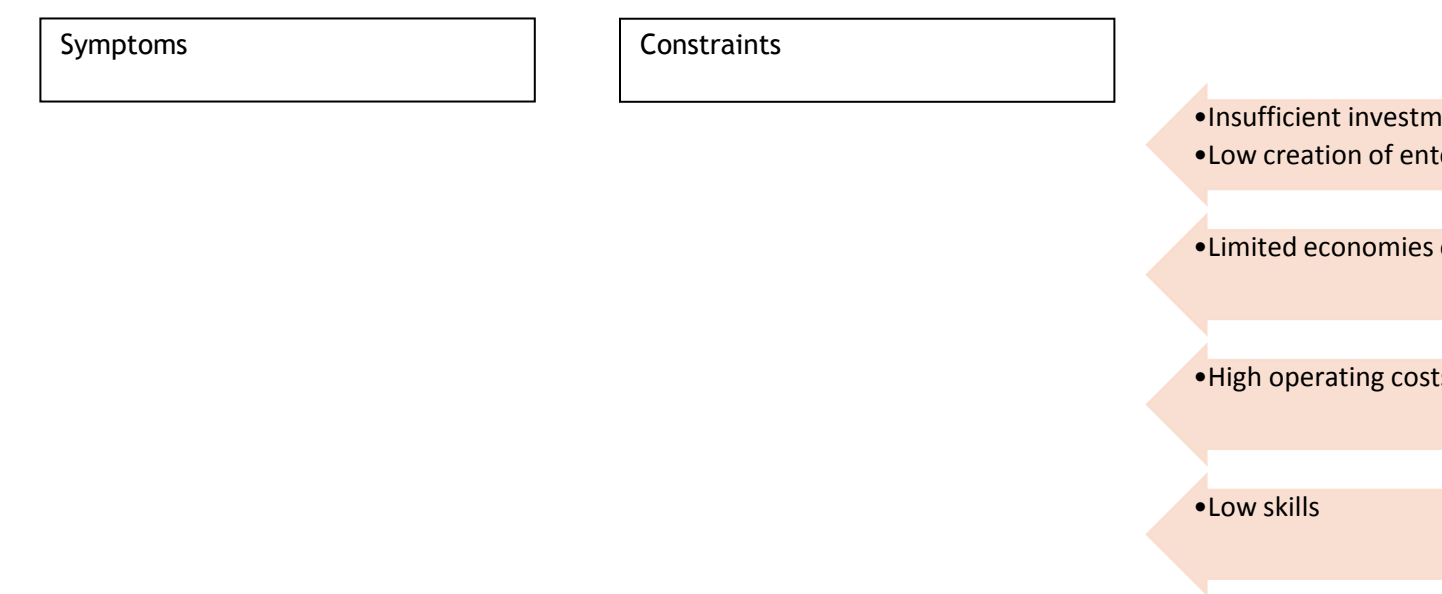
⁶³ For a good and recent summary, one can refer to Gelb and Ramachandran, *Africa's Private Sector: what's wrong with the Business environment and what to do about it*, Center for Global Development, 2009. Another study is H. Hihn and V. Palmade (2014).

⁶⁴ See for example, A. Bigsten and M. Soderstrom, *What have we learned from a decade of manufacturing enterprises surveys in Africa*, World Bank Policy Research Papers, n. 3798, 2005.



164. Each of these identified symptoms can be associated with underlying causes (See Figure 38). The limited use of new technologies is partly caused by the lack of access to external finance and to the low level of skill development. The small size of private enterprises is partly the result of limited agglomeration effects due to limited urbanization and restricted access to regional and global markets. The high level of informality can be at least partially explained by high administrative costs and barriers to entry. All these constraints are significant on their own. However, it is the interaction between these constraints that is the most significant factor to explain the limited efficiency of most firms operating in Burkina Faso.

Figure 38 : The key constraints behind the low productivity of the non-farm sector



165. Before engaging in a discussion of the underlying causes behind the identified symptoms, it must be acknowledged that the list of identified constraints is by no means comprehensive. A number of other constraints could also be considered, including, for example, the lack of access to electricity and the limited existence of adequate land management systems. However, these constraints are deemed to be less relevant than the constraints identified above for the average business in Burkina Faso, although they may be disproportionately significant for specific activities. For example, for mining, energy and land issues are indeed two decisive factors. However, the result of the enterprises survey show that access to energy was identified as a severe constraint by only 10 percent of respondents, five times lower than those identifying access to finance or corruption as a severe constraint.

166. **Constraint 1: Lack of access to external financial resources:** Most firms in Burkina Faso have limited access to external financing. The financial market in Burkina Faso is poorly developed with a low ratio between deposits and credits in proportion to GDP. As result, a large majority of firms are not able to access credit to finance their investment needs. This constraint is especially binding for start-ups and small enterprises, which are almost completely excluded from formal credit mechanisms and which can only rely on self-finance or informal channels. A tiny fraction of firms with less than 100 employees have access to any form of formal credit, with the lending to these firms accounting for less than 10 percent of total bank lending in Burkina Faso. The extent of financing constraints is demonstrated by the low rate of land utilization. The vast

majority of producers do not use all the land that they own for business purposes because they lack the funds for investment.

167. **As a result of the lack of access to external financial resources, most small and informal businesses have to rely on other sources of financing** (see Table 9). These alternative sources of financing have captured the attention of policy makers in recent years because these alternative sources may be able to bridge the gap between the supply and demand for credit, at least to some extent. In Burkina Faso, the alternatives may include: (a) microfinance institutions; (b) village community associations; (c) supplier/trade credit; and (d) mobile banking options. However, these options are still undeveloped compared, for example, to East African countries such as Kenya or even Tanzania. While micro-finance institutions have expanded rapidly, only 9.4 percent of households report using them, with 7.8 percent utilizing the *Caisse Populaire*. While micro-institutions are able to serve a significant number of customers (approximately 1.35 million members at the beginning of 2015), the volume of the credit they provide is equivalent to only 5 percent of total credit. Similarly, supplier credits are used by only a small proportion of households (8.9 percent), with most of these users concentrated in few specific industries such as the cotton value chain. Mobile banking is still in its early stage of development in Burkina Faso. A relatively frequently utilized channel is community-driven initiatives, such as *tontines* and cooperatives.

Table 9: Type of Credit used by households, Percentage of total sources

Lender	Percentage of total
Bank	8.5
Micro-credit (ONG)	1.6
Caisse and CMDT	7.8
Supplier	8.9
Cooperatives and tontines	14.6
Other households	43.1
Others	15.4

Source: Households Survey, 2014.

168. **In Burkina Faso, firms' relatively limited access to commercial financing is the result of constraints on both the supply and demand sides.** On the supply side, the main reason that commercial banks do not extend a greater volume of credit to small firms relates to high transaction costs resulting from limited economies of scale and the high level of risk. For a commercial bank, the costs of a transaction are relatively fixed, varying only marginally for small or large loans, with the information search and processing time being similar in both cases. Therefore, for small loans, banks must absorb these costs by imposing high lending rates. For this reason, the current annual interest rate paid on a typical loan to an SME is in the range of 13 percent, compared to the rate of 3.5 percent for large businesses in the formal sector. These high rates represent an extremely significant burden for small businesses.

169. **However, the limited access to external finance is not merely related to the high cost of credit but, to a greater extent, to the rationing of this credit.** Banks are simply not prepared to consider applications for credit from most small enterprises because of excessive risks. To a significant extent, these risks relate to poor information, which are embedded in various sources. Not only are small firms more vulnerable to economic shocks, they also present asymmetric information risks. A commercial bank cannot easily obtain financial information from potential borrowers, especially those in the informal sector, where good financial record keeping is the exception rather than the rule. The risks posed by asymmetric information could be mitigated by the establishment of credit reference bureaus or credit verification systems. While efforts are

underway to establish credit reference projects in Burkina Faso and within WAMEU, the current lack of a credit reference system acts as an important constraint on bank lending to SMEs, particularly when it is combined with issues related to collateral and the recovery of bad loans, which is presently a time-consuming and difficult process. Recent initiatives in Nigeria, South Africa, and Rwanda have demonstrated the benefits of the establishment of private credit bureau.⁶⁵

170. An additional constraint is that banks find it difficult to obtain a guarantee from potential borrowers. The absence of formal, bankable property rights on land is a particular concern, being the main reason why credit applications are refused by banks (47 percent of refusals). The issue is rooted in land policy and the weak implementation of the laws and sanctions in places of non-reimbursement.

171. On the demand side, the main reason for the limited use of commercial credit is that many firm owners are not banked. Indeed, the first step to gaining access to credit is to open a banking account to establish a relationship with the potential lender. The level of financial inclusion remains extremely limited in Burkina Faso, with only 20 percent of households reporting that at least one of their members held a bank account. Urban households and businesses are more likely to be banked than those in rural areas. Even with this limited level of financial inclusion, most account holders do not use their bank accounts to obtain credit but rather to send remittances, to pay wages, and to receive government payments. Increasingly, an alternative channel for these purposes has been to use mobile phone services to transfer money, although this practice is still not nearly as common in Burkina Faso as it is in Kenya, Tanzania or even Côte d'Ivoire (see Box 13).

Box 13: Mobile banking

An increasing proportion of Burkina Faso's population is now using mobile payment (m-payment) services in their everyday lives. The two major mobile operators (Telmob and Airtel) now offer a range of m-payment services, facilitating money transfers, payments in shops, bill payments, salary payments, and mobile credit recharge. However, value-added mobile-banking services such as saving, credit, insurance and international transfer are not yet available, despite being prevalent in other African countries.

Physical distribution points ("kiosks") are prevalent, not only in the capital of Ouagadougou, but even in rural areas. Obtaining a license to engage in m-payment services is relatively easy, so many vendors who sell products such as fruits and crafts etc. add this service to their already existing business. Through these kiosks or boutiques, people are able to top up their prepaid cards with airtime, to transfer money and to receive cash. In other words, cash can be converted into "virtual currency" or "digital money". However, only 5 percent of the population was using "digital money" by the end of 2014, a significantly lower rate than that recorded in Mali and Côte d'Ivoire.

Table 10: Digital money accounts number in WAEMU's countries

⁶⁵ Berg, G. and M. Fuchs, (August 2013), "Bank Financing of SMEs in Five Sub-Saharan African Countries: The Role of Competition, Innovation, and the Government," World Bank Policy Research Working Paper No. 6563.

Comptes de monnaie électronique	Nombre de comptes ouverts	Nombre de comptes actifs	Taux d'actifs
BENIN	1 097 021	134 766	12,28%
BURKINA	1 242 476	274 535	22,10%
COTE D'IVOIRE	9 300 113	7 784 910	83,71%
GUINEE BISSAU	ND	ND	100,00%
MALI	2 290 456	1 163 997	50,82%
NIGER	1 559 915	268 343	17,20%
SENEGAL	2 584 166	1 087 786	42,09%
TOGO	159 297	ND	ND
TOTAL	18 233 444	10 714 337	58,76%

Source BCEAO

172. **Many households complain about the poor quality of services provided by commercial banks.** Many customers state that they cannot trust banks, with more than 80 percent stating that they are not satisfied with the level of helpfulness and knowledge of bank staff and with the services provided, and with 70 percent complaining about the long queues. Restricted geographical coverage impedes access to banks, especially in rural areas (with the notable exception of the cotton zones in the Western part of the country). While factors such as population density, lack of supporting infrastructure, and transaction costs (time, information barriers, transport) impede the spread of bank branches, there is also vast potential for banks to reach out to serve more remote population using new technologies facilitated by mobile phone platforms.

173. **Lack of financial skills, education, and access to information constrain the demand for banking services.** There is a strong positive correlation between level of education and likelihood of obtaining a commercial loan. There is a positive and growing correlation by level of education, with university education predicting the likelihood of financial access by 81.2 percent. Additionally, those who are financially literate are more likely to be banked, regardless of education level, as compared to those that do not have financial skills. Greater emphasis on financial literacy programs might encourage budding entrepreneurs to better assess the costs and benefits of formalization, and to better understand the range of financial services available to them.

174. **Constraint 2: Insufficient virtual and physical connective infrastructure: Access to markets is limited by the low level of agglomeration (low urbanization and regional integration).** This constraint is related to economies of scale, which are often necessary to reduce production costs and to improve competitiveness. For many economists, including Paul Collier, the failure to realize sufficient economies of scale is viewed as the main obstacle to the emergence of an industrial sector in most African countries.⁶⁶ These countries find it difficult to break into manufacturing because they lack sufficient cluster scale economies, with clustering attracting purchases, share resources, and supporting the expansion of enterprises. In Burkina Faso, these economies of scale are difficult to achieve for private operators because of the limited number of customers in local markets. The local market base consists of only 17 million people, with a low average purchasing power.

175. **The limited market size is further exacerbated by the limited rate of urbanization and the failure to compensate for the small size of local markets with access to regional and global markets.** As this SCD has made clear, Burkina Faso's urbanization rate is still very low. This is significant, given that cities are generally seen as the best vehicle to realize agglomeration effects

⁶⁶ Source : Paul Collier, op.cit.

and so to generate economies of scale for the private sector.⁶⁷ In urban centers, firms are closer to inputs and customer markets, enabling them to reduce their production and distribution costs. There are only two large cities in Burkina Faso that have the potential to generate economies of scale, these being Ouagadougou and Bobo. No other urban center in the country has more than 100,000 inhabitants.

176. Theoretically, the limits created by the small size of local markets could be mitigated through improved access to regional and global markets. However, although access to global markets is possible through Abidjan, Tema, Cotonou, and Lomé, these four corridors are among the least competitive in the world, with, amongst many other factors, extremely inefficient ports.⁶⁸ There are also many obstacles, ranging from roadblocks to lack of regional harmonization between Burkina Faso and its partners in the areas of transportation policy and customs administration. In terms of the Doing Business 2016 trading across borders indicator, Burkina Faso is ranked in 103rd place out of 189 countries. As a result, it is difficult for businesses located in Burkina Faso to import inputs and equipment, which are rarely or never produced in the country, and to export their output.


177. For a landlocked country such as Burkina Faso, a higher level of regional integration to create growth spillovers between countries is crucial. Outside of Africa, improvements to landlocked countries' economic growth rates are to a large extent associated with improvements to their neighbors' economic growth rate. In fact, these improvements account for 0.6 percent of the landlocked country's growth. By contrast, in Africa, there have been few cases of such spillovers over the past 40 years. Given the importance of integration in terms of access to markets, the effective development of these growth spillovers should be prioritized as a matter of urgency.

178. Constraint 3: Complex tax system and barriers to entry: Burdensome administrative procedures contribute to increased operating costs for firms, encourage corruption, and act as barriers to entry, thus reducing competition and discouraging innovation. As the following sections demonstrate, the combination of these three effects have had a significant detrimental effect on the development of the private sector in Burkina Faso.

179. In terms of the World Bank Group Doing Business report's indicators, Burkina Faso is ranked in 143rd place out of 189 countries (see Box). Excessive administrative procedures are a significant deterrent for businesses, as they increase their operating costs and reduce their competitiveness. However, it must be emphasized that the impact of burdensome procedures is not equal on all firms. Recent studies have shown that small firms and new entrants are less equipped to deal with these procedures than large, well-established companies. Small firms do not have the financial and human resources to deal with the administrative burden, while new operators are not yet familiar with the system. The burden on businesses operating in particular sectors or locations may vary respectively. For example, administrative costs are generally lower in the capital, where most government offices are located. Tax and trade procedures are also more important since they occur on a recurrent basis for most enterprises, while registration is a one-off procedure. An important new finding is that the costs associated with administrative

⁶⁷ See for an excellent summary, *Gates to the world: African cities*, World Bank, 2016.

⁶⁸ For example, it costs more than \$10,000 to move a single 20-foot container overland from Dakar to Ouagadougou, a distance of about 2,000 km, passing no fewer than 55 checkpoints that can impose unpredictable delays and add between 11 and 17 days to shipping time.



barriers are not the only deterrent for private operators. For many, the fear of government interference in the firms' operations is the major factor. Recent studies have indicated that as a result of such fears, many informal firms resist registration, even if those procedures are free of charge.⁶⁹

⁶⁹ Bruhn, M. and D. McKenzie, *Entry regulation and formalization of microenterprises in developing countries*, June 2013.

Box 14: Doing Business Reforms in Burkina Faso

Since 2005, with the support of the World Bank Group through the IFC's "Doing Business Better in Burkina Program," Burkina Faso has established an investment climate reform agenda to build a conducive environment to attract and maintain private investment. These efforts have been focused on improving performance in terms of the Doing Business indicators. A number of reforms intended to improve performance in terms of these indicators have been implemented. As a result of these efforts, Burkina Faso was recognized as the top reformer in the West Africa sub region and in the OHADA zone in 2010. Since 2011, the political and social movements in the country have jeopardized the Doing Business reform agenda. With the exception of indicators related to business entry and construction permits, where the country is ranked among the top 80 in the world, significant efforts are still required to improve its performance.

In short, the Doing Business 2016 survey showed that the most critical areas for reform in Burkina Faso are: access to electricity (with Burkina Faso ranked 183rd out of 189 countries), commercial justice/enforcing contracts (163rd out of 189 countries), access to land/registering property (one four nine out of 189 countries), paying taxes (153rd out of 189 countries), and access to credit (133rd out of 189 countries).

180. With reference to taxes, the most significant constraint identified by businesses relates to the proliferation of small taxes, licenses, and fees that contribute to increased transaction costs and delays. While there are also a few issues with the main domestic taxes, which have been established with reference to the WAEMU architecture, tariffs and nontariff measures (NTM) have been identified as the most significant constraint on business expansion. While customs duties have decreased slightly over time, the weighted average tariff applied for all products remains at the high rate of 10.4 percent, according to the WTO. In 2012, Burkina Faso continued to impose at least one type of NTM on 92 percent of its product lines, affecting more than two-thirds of the value of imports. Burkina Faso has four different independent ministerial bodies involved in the inspection of local or imported products before they can be placed on the domestic market. There is an overlap between the responsibilities of the various inspection agencies involved in the issuance of conformity certificates, which often results in confusion and conflicting guidelines.

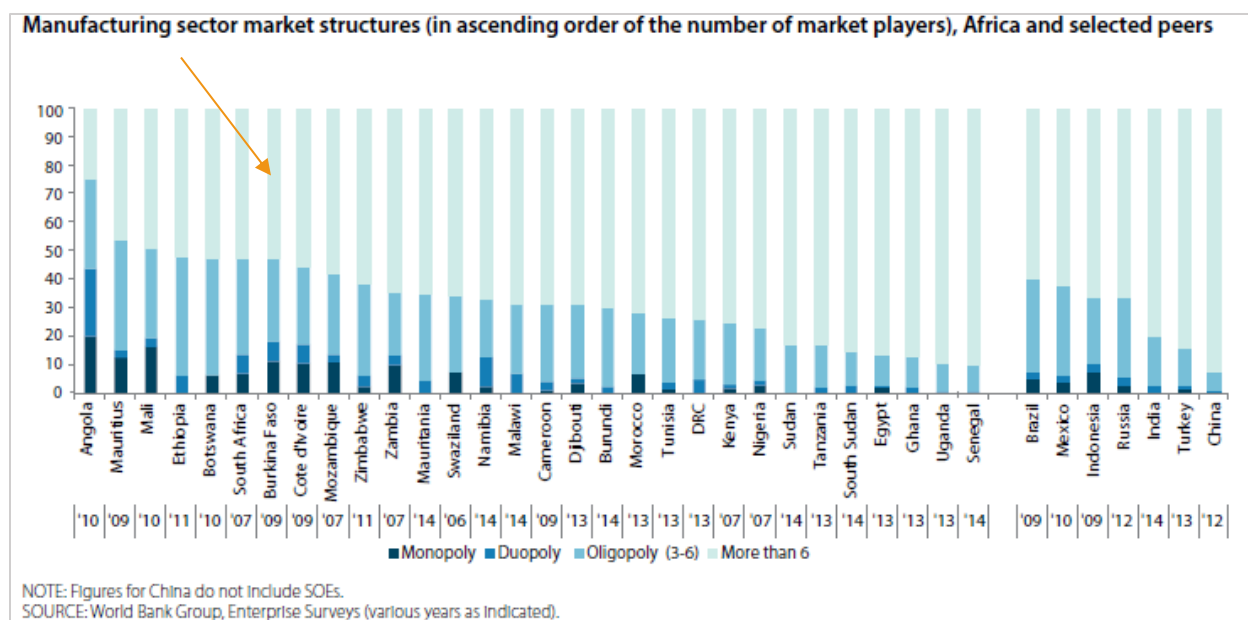
181. The complexity of the administrative system is conducive to corruption and requests for illegal payments. Indeed, private operators are often prepared to pay a customs official to avoid going through the official system, as the cost of the bribe is often significantly lower than the administrative costs, both in monetary terms and in terms of opportunity costs. As Samuel Huntington stated in his seminal book published in 1968, corruption is often merely a logical response to government failure. In these terms, corruption is efficient, as it reduces the cost of doing business for operators and therefore ultimately benefits consumers. However, from a broader perspective, it is non-transparent and unfair, with costs dependent on the bargaining power of each individual business. In particular, it is likely to represent a disproportionate burden to small businesses and new entrants.

182. Thus, burdensome administrative procedures act as a barrier to entry, limiting the level of competitiveness in a number of sectors. This is the most obvious for tariff and non-tariff trade barriers, both of which contribute to increasing the cost of imports, including inputs such as basic equipment and other necessities. High registration costs also act as a barrier to the entry of new competitors.

183. These factors contribute to reduced competition in key economic sectors in Burkina Faso. While recent data is hard to find, it can be seen that the structure of the manufacturing sector was highly concentrated in 2009, with no more than six operators dominating in half of all economic sub-sectors (see Figure 39). The top three or four firms produce more than 50 percent

of domestic output in their ISIC group. In an earlier section, this SCD noted the high level of concentration in the cement and rice sectors, with detrimental effect on consumers.

Figure 39: The lack of competition in the Manufacturing sector - an international comparison



184. In general, it can be said that a low level of competition hinders innovation. Innovation and the appropriate use and uptake of technology are viewed as fundamental drivers to sustainable business growth. This is intuitively obvious: a country or a firm will perform better if it manages to remain one step ahead of its competitors in terms of technology use. Innovation and its relationship with economic growth have been widely analyzed in both economic theory and applied research. Innovation can take various forms. While most people think of innovation as the discovery of new technologies, it can be more broadly defined as discovering, adapting, or adopting technologies and successfully applying them to business. For most countries, including Burkina Faso, the broader definition is more applicable. In fact, pure research is highly concentrated in a few industrial countries, as illustrated by the number of patents delivered every year.

185. Increased competition would spur innovation in Burkina Faso. There is strong international evidence that increased local competition promotes increased productivity growth because, in a competitive environment, firms invest to improve productivity to compete more effectively against each other.⁷⁰ This result holds for Burkina Faso as well. When enterprises face a lower level of competition, they tend to invest less in new technologies than when they faced two or more competitors. The difference was even more revealing for innovation in products and processes, with 30 percent more firms investing in such innovations in a competitive environment compared to the case in a non-competitive environment.

⁷⁰ For such an evidence in Sub-Saharan countries, see World Bank, *Breaking down Barriers: Unlocking Africa's Potential through Vigorous Competition Policy*, June 2016.

186. **Constraint 4: Undeveloped training and educational facilities and restrictive labor regulations:** This constraint relates to the low level of skills and high costs of labor (compared to capital). Private sector expansion and the quality of jobs are highly correlated to the level of skills of the labor force. A firm is more productive when its managers and employees are more highly skilled, which in turn greatly depends on their level of education. There is also a strong interrelationship between skills and capital investment. The positive effect associated with education is magnified in capital-intensive sectors such as industry and mining. It is also higher in technology-intensive sectors, including communication and financial services. As the empirical literature both at the micro and macro-levels demonstrates, skilled workers are more productive when they are provided with appropriate technology and equipment.⁷¹ Note that the inverse relation is also true: higher levels of technology also require workers with higher levels of skill.

187. In Burkina Faso, there is a significant body of evidence to demonstrate a strong, positive correlation between levels of educational attainment and wage performance. Completing primary education significantly increases the probability of being a wage worker.⁷² Similarly, higher levels of educational attainment are strongly correlated with the probability of employment outside of agriculture. Failure to complete primary education increases the probability of employment in agriculture by 5 percentage points while having completed primary school decreases the chances of remaining in agriculture by 23 percentage points. Completing secondary or tertiary level education decrease the likelihood of agricultural employment by 23 and 29 percentage points respectively. As a result, workers with higher levels of educational attainment dominate jobs in services, while 99.5 percent of those employed in the agricultural sector have no education or are primary school dropouts.

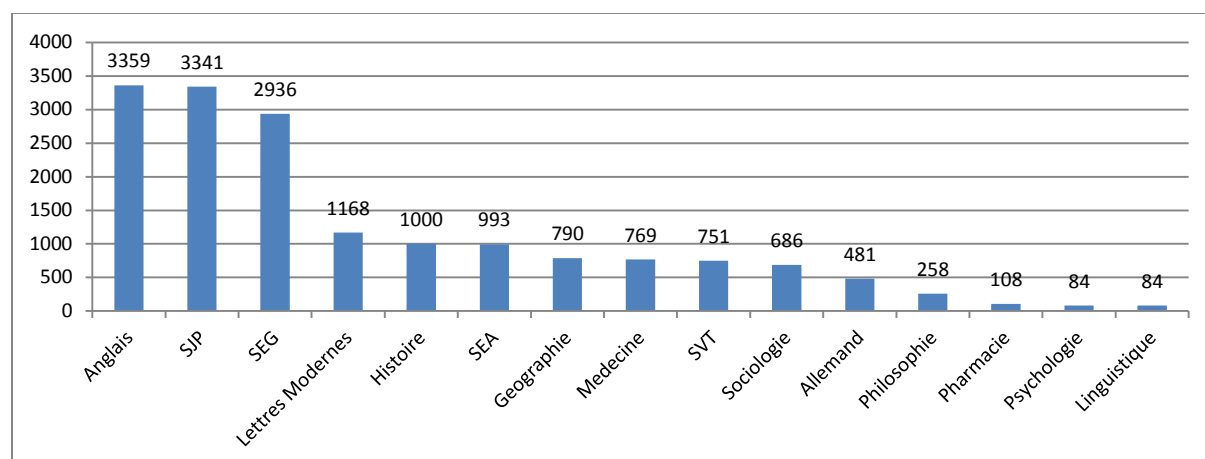
188. In Burkina Faso, many workers are ill equipped to participate in the labor market either because they have not attended school at all, because they have dropped out before completing primary school, or because they have not progressed beyond the primary level. Only one quarter of the working population has gone to school, and those who have attended school are not always able to read at the end of the primary cycle. If an increase in the level of qualifications leads to an increase in labor productivity, the question then is why more children do not attend schools. The weaknesses of the educational system will be examined in fuller detail in the next section, which contains a description and analysis of the low level of access to basic services by Burkina Faso's poor.

189. While failure to participate in education or to progress to higher levels is clearly an impediment, it is by no means clear that those who complete their studies are well equipped to participate in the labor market. Indeed, the unemployment rate is highest among youth who have completed post-secondary education. According to the 2014 EMC, approximately 12,000 graduates attempt to enter the labor force each year, but only a small fraction of these graduates is able to secure productive employment. In fact, the unemployment rate exceeds 25 percent for educated youth. These statistics emphasize the mismatch between the education system and the demand from private firms. For example, more than 80 percent of first-degree students majored in English, despite the fact that the need for translators or teachers is relatively insignificant (see Figure 40). At the other extreme, only 5 percent of students graduated from medicine, despite the country's pressing need for doctors.

⁷¹ See, for example, Acemoglu, D. (2001), *Productivity Differences*, The Quarterly Journal of Economics, 116 (2): 563-606.

⁷² Further evidence on rates of returns associated to education are presented in the next section.

Figure 40: Students orientation to University section in 2015



Source : ISPP Burkina 2015, (SJP: Sciences Juridiques et Politiques ; SEG : Sciences Economiques et de Gestion, SEA : Sciences Environnementales et Agriculture)

190. In many countries, the failure of the basic education system to provide the appropriate skills for participation in the labor market is compensated for by the provision of technical and vocational training, either on-the-job or through other means. In Burkina Faso, the provision of such training is quite limited. Such training as exists can be divided into two categories: (i) technical and vocational training (TVET) and (ii) vocational skills training (QOF).⁷³ Vocational and technical training is perceived as an inferior choice to other forms of formal education, with most participants being students who were unable to complete the secondary cycle. Also, the training provided is often highly theoretical, due to the lack of connections and linkages with the private sector to ensure that it meets the sector's needs. The costs of providing on-the-job training are too high for small firms who lack sufficient human and financial resources. This is unfortunate, as on-the-job training, notably through apprenticeships, has been recognized as a good means to provide relevant technical skills and productive jobs to a rapidly expanding young population. The performance of the vocational and technical system is further negatively impacted by the lack of qualified teachers and of adequate funding, both from the public and private sectors (with only 1.8 percent of the total education budget being allocated to the system).⁷⁴

191. As a result of these factors, only 30,000 students, or about five percent of the total number of post-primary students in the country, were registered in the vocational and technical education system. Despite this relatively low figure, there is a relatively high number (373) of technical and vocational schools, with on average only 80 students attending each school. The small size of most schools prevents economies of scale, making monitoring by the authorities extremely difficult. The quality of the teaching at these schools varies considerably. There is large variety in the quality of teaching across schools.

⁷³ The Orientation of Education Law, adopted on 30 July 2007 and promulgated by Decree No. 2007-540 / PRES 05 September 2007, stipulates in Article 2 that vocational training is defined as "all activities aimed to ensure the acquisition of knowledge, skills and abilities required to practice a profession or function with skill and efficiency. "

⁷⁴ About ¾ of technical schools are private that received a subsidy from the Government.

Table 11 : Number of student in vocational and technical schools, 2015/16

	Short-cycle			Medium Cycle			Long cycle			TOTAL
	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total	
Public	1095	1979	3074	1488	2455	3943	1250	1508	2758	9775
Private	1385	2962	4347	1786	3224	5010	5595	4381	9976	19333
Total TVET	2480	4941	7421	3274	5679	8953	6845	5889	12734	29108

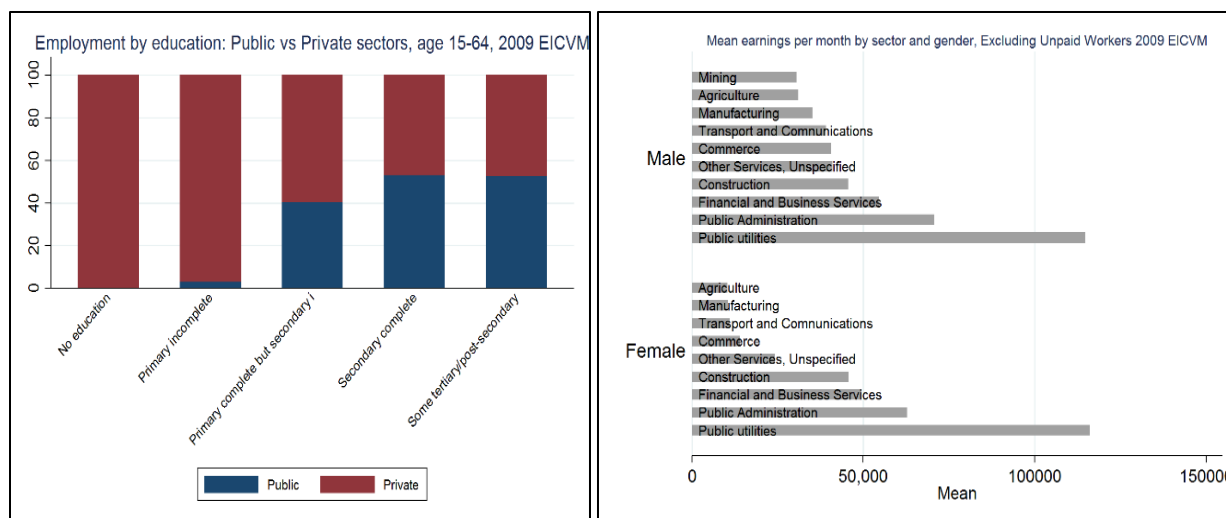
Source: Government of Burkina Faso.

192. With the brain drain abroad and the dominance of the public sector, the supply of skilled workers available to the private sector in Burkina Faso is particularly limited. The public sector employs approximately half of all workers who have completed secondary education (see Figure 41). The attraction of the public sector lies in its capacity to pay higher wages than most private firms, both for men and women. In addition, there are multiple non-financial benefits (such as job security and better social security coverage) associated with public employment. However, the difference between public and private sector wages tends to disappear when the level of qualifications and the duration of the contract are taken into account.

193. At a global level, the flight of skilled workers from less developed countries to more industrialized countries is a well-established phenomenon. From a theoretical point of view, Hatton and Williamson have shown that although the cost of immigration does not vary greatly according to the level of education of the immigrant, the decision to leave is related to the gap between the potential income that the worker can hope to earn in the foreign country and what he or she can earn in his or her country of origin.⁷⁵ Because of the relatively low wages available to skilled workers in Burkina Faso, compared to what they might aspire to earn in Europe or the United States, it is therefore logical that a significant proportion of skilled workers aspire to settle abroad. This phenomenon is commonly referred to as “brain drain.” At the global level, Asia is by far the region with the highest number of highly skilled workers migrating to seek better opportunities elsewhere. However, Africa is also significantly affected, with estimates that approximately 12 percent of skilled workers across the continent migrate.

Figure 41: Half of educated workers are employed by the public sector and get the highest wages

⁷⁵ Hatton and Williamson, *Human Capital Flight: Impact of Migration on Income and Growth*, IMF Staff Papers, vol. 42, No.3, September 1995 and *Demographic and Economic Pressure on emigration out of Africa*, NBER working paper, No. 8124, February 2001.



Source: SCD background paper on jobs, 2016.

194. In Burkina Faso, measuring the extent of the brain drain is difficult because of the lack of reliable statistical information. Nonetheless, brain drain is clearly a reality, playing a major role in the lack of labor productivity growth. Amongst African countries, Burkina Faso has the third highest share of emigrants, after Côte d'Ivoire and South Africa.⁷⁶ Furthermore, migrants are more likely to be young adults, male, and to have higher than average levels of educational attainment than the non-migrant population. However, it would be wrong, and even counterproductive, to seek to limit these flows by imposing barriers on emigration, as these flows will gradually decline as employment prospects improve in the country. First, in view of the differences in potential incomes, it is very likely that workers will continue to leave, at any cost, as we are sadly reminded by the images of despair on Spanish and Italian coasts. Second, immigration should be understood in a dynamic perspective. The problem for Burkina Faso is not necessarily the departure of skilled workers to industrialized countries, because through the process of migration, these migrants can acquire knowledge and skills that they could not acquire at home. The problem is that they do not always return or that they do not establish links with the local economy.

195. In principle, it might be expected that the lack of skilled labor would be reflected by low wages, such as in Ethiopia and Madagascar. Lower wages would contribute to reduce the unit labor costs for firms and to encourage labor creation. However, in Burkina Faso, an adjustment mechanism of this sort has been limited because wages in the formal sector are relatively high due to rigid regulations. The adoption of the Labor Code in 2008 was a significant step forward, reducing the costs associated with hiring and firing and making labor contracts more flexible. However, rigidities have persisted, including in terms of the relatively high level of minimum wages and the proliferation of labor taxes. In 2015, the minimum wage was equivalent to 53,337 FCFA/month for an employee of the 5th category in the trade sector (equivalent to US\$ 108 per month). This is equivalent to 0.95 percent of the GNI, which is very high by international

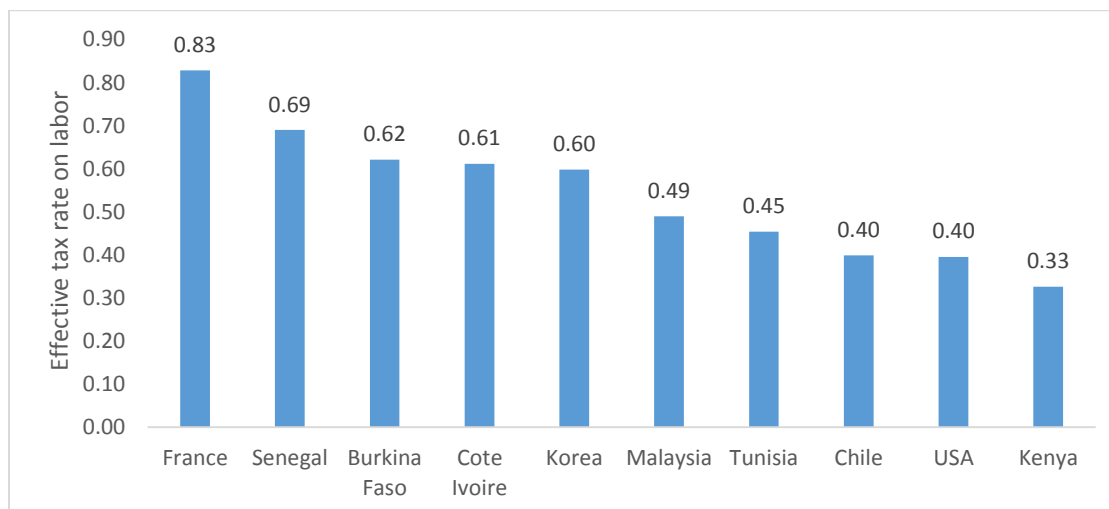
⁷⁶ Dilip Ratha et al., *Leveraging Migration for Africa: Remittances, Skills, and Investments*, Washington D.C., 2011.

standards. While the minimum wage is intended to protect unskilled workers, its excessive level encourages firms to use informal workers to avoid the regulatory requirements.

196. In order to highlight the heavy fiscal and social burden of wages in Burkina Faso, the effective marginal tax rate (EMTR) methodology can be used to measure the costs associated with taxes and social contributions on the last labor unit used by businesses and provided by workers.⁷⁷ The EMTR is defined as the difference between the gross salary paid by the company and the net salary received by the employee, adjusted by the real wage. The EMTR is influenced by three factors: (i) the net cost of social contributions paid by the employer; (ii) the consumption tax paid by the employee (who is also a consumer); and (iii) social costs and income tax paid by the employee. Apart from direct taxes and contributions on labor (social security contributions paid by employees and employers and apprentice fee of 3 percent), the consumption tax is equivalent to the VAT (at a rate of 18 percent), with corporate and personal income tax set at 30 percent.

197. The application of the EMTR methodology shows that the weight of taxes and social contributions in Burkina Faso reaches to 0.62 for a company and a worker who pay their full retirement contributions (without supplements) and their family allowances and health insurance contributions (see Figure 42). This rate is one the highest from a sample of countries throughout the sub-region (Côte d'Ivoire, Senegal), the continent (Kenya), emerging countries (Malaysia, Tunisia), and OECD countries (France, USA, Korea). This high rate discourages formal employment, as it becomes much cheaper for firms to hire workers through informal channels, explaining to some extent why approximately 95 percent of workers in the private sector do not have a formal labor contract.

Figure 42: High Taxation of labor in Burkina Faso



Source: World Bank, Authors' calculations.

⁷⁷ For more details on this methodology, D. Romero-Jordan & J. Sanz, [An international comparison of effective marginal taxes on labor use](#), *Public Economics*, 2004.

2.3: The Main Constraints behind Limited Access to Services and Infrastructure

198. A significant proportion of poor households are unable to rise out of poverty because they cannot accumulate sufficient human and productive assets to enable them to do so. The poverty trap theory applies well to Burkina Faso, with the country lagging behind most countries in the sub-Saharan African region in terms of a number of social and infrastructure indicators. By average global standards, Burkina Faso is even further behind. At present, the typical household in Burkina Faso is only a third as likely to be connected to the national electricity grid as the average household in sub-Saharan Africa, and its members are much less likely to travel on a paved road or to benefit from improved sanitation. The average child may or may not complete primary education, but there is only a one in four chance that he or she will register at a secondary school and an even lower chance that he or she will complete studies at that level.

199. Not only does the average citizen of Burkina Faso have a much lower level of access to basic services and infrastructure than do citizens in other countries in the region, the poorest sections of society are almost completely excluded. For example, only 5 percent of the poorest quintile are connected to the national electricity network, compared to the figure of 50 percent for the richest quintile. In the case of other indicators, similar gaps are evident. There are also large gaps between rural and urban areas; between different regions; and between the genders.

200. The near total exclusion of the poorest segments of society from access to social and infrastructure services has significant negative implications at the micro and macroeconomic level. At the microeconomic level, households that have not accumulated a minimal level of education or physical assets have very limited opportunities to increase their incomes. A recent study in Tanzania, the findings of which are certainly relevant to Burkina Faso, show that the probability of a household rising out of poverty increase by 60 percent if its members have access to a decent level of education, health and infrastructure services.⁷⁸ At the macroeconomic level, the poverty trap can reduce the aggregate demand in the short term and negatively impact long-term growth due to insufficient investment in human and physical capital over time. The World Bank has argued that some countries are “too poor to grow” because they cannot benefit from the above-mentioned virtuous circles created through the aggregate demand and supply.⁷⁹ The poverty trap is self-reinforcing, with households unable to generate additional income until they reach a certain threshold of human and physical capital, and unable to reach that threshold until they generate additional income.

201. This section explores the reasons why households in Burkina Faso have not been able to accumulate sufficient human assets, with a particular attention to education and health. The next section focuses on productive assets, such as energy, transport, water, and ICT. The final section examines the impact of vulnerability on the process of the asset accumulation process, as shocks can prevent households from accumulating both human and physical assets.

Weak delivery of social services - education and health

⁷⁸ World Bank. Tanzania: Poverty Assessment, 2015.

⁷⁹ See H. Lopez and L. Serven, *Too poor to grow*, World Bank Working Paper, 2008.

202. **A minimal package of education and health is necessary for personal and household-level development.** At the country level, a close correlation has been established between human capital development and long-term growth. This correlation applies in the case of both health and education. For example, improved health reduces the unused human and physical resources that results from bearing and raising children who die before their productive age. Conversely, early childhood malnutrition irreversibly affects brain and physical development, leading to higher school dropout rates, reduced school performance, and lower lifetime earnings. The cost of epidemics, in particular of malaria, is visible in the high number of cases of sickness and death. These epidemics absorb significant public resources and affect the productivity of workers and firms.

203. **With education, it is well established that there is generally a positive correlation between the number of years of education and income at the individual level.** Over a period of decades, analysis of a vast number of Mincerian wage regressions has confirmed the elasticity of wages to additional education outcome attainments. At the macroeconomic level, Barro and Lee have demonstrated that countries with high average educational outcomes report higher rates of economic growth in the long term.⁸⁰ The quality of education is also highly significant, with Hanushek and Kimko (2000) and Barro (2001) having shown that scores on international examinations have quantitatively more significant effects on economic growth than the number of years of participation in education.⁸¹ This effect is particularly strong in the case of the hard sciences.

204. **While Burkina Faso has recorded progress in terms of access to social services over the past decade, it still lags behind comparator countries in the sub-Saharan African region in terms of almost all indicators related to human capital development** (see Table 12). Only in terms of some health and nutrition outcome indicators does it record a slightly better than average performance, with lower maternal mortality and child mortality rates than the average for the sub-Saharan African region.

Table 12: Social Services indicators, 2014 or latest year available

	Burkina Faso	Sub-Saharan Africa	Red=worst Orange= average Green=better
<u>Education</u>			
Literacy rate (%)	28.7	60.4	
Primary Completion (%)	62.7	69.1	
Secondary enrollment (%)	21.7	33.7	

⁸⁰ R. Barro et Lee, *A New Data Set of Educational Attainment in the World, 1950-2010*, NBER Working paper, 15902, Avril 2010.
R. Lucas, *Human Capital and Growth*, American Economic Review, 105(5), 2015.

⁸¹ Robert J. Barro, 2002. "Quantity and Quality of Economic Growth," Journal Economía Chilena (The Chilean Economy), Central Bank of Chile, vol. 5(2), pages 17-36, August. E. Hanushek and D. Kimko, *Schooling, Labor-Force Quality, and the Growth of Nations*, The American Economic Review, vol. 90, N. 5, 2000.

Health/Nutrition			
Maternal mortality (per 100,000 live births)	371	547	
Children mortality (per 1000 births between 0 and 5 years)	83.2	88.6	
Life expectancy (years)	56.3	56.8	
Stunting (%)	35	38	
Wasting (%)	15	9	

Source World Bank.

205. The level of access to social services is not only lower than average for the region, there are also significant variations in the level of this access according to income, gender and location. Some of these variations are described in the box below, but fuller explanations will be found later in this SCD.

Box 15: Some evidence of unequal access to social services in Burkina Faso

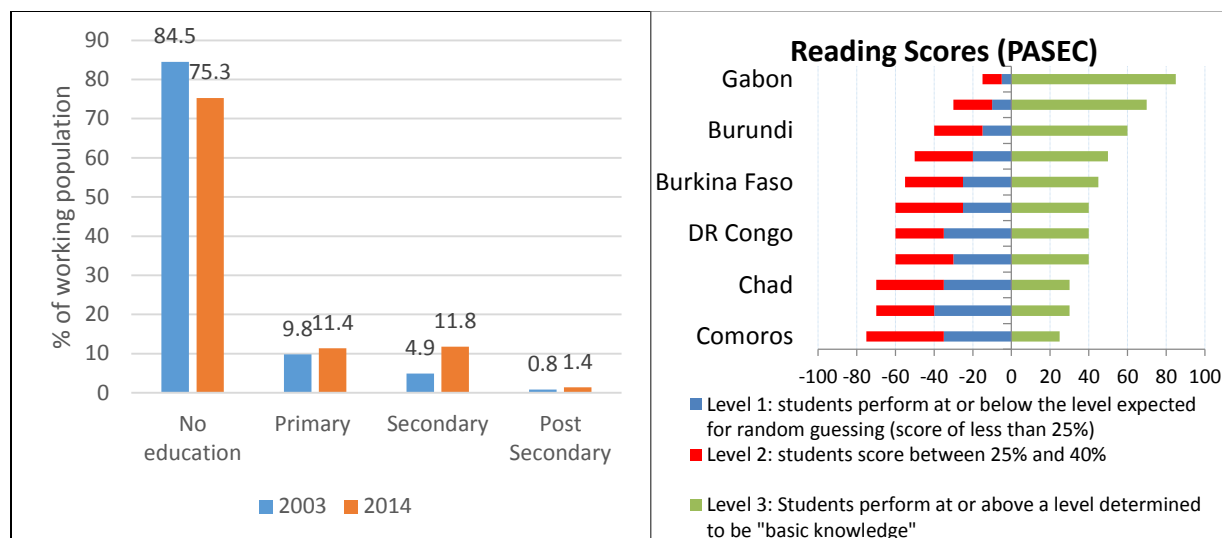
- In total, 92 percent of household heads in the lowest income quintile never attended school, while the figure for the highest quintile was only 51 percent.
- Household heads in the highest quintile were three times more likely to have attended primary school and 15 times more likely to have attended secondary school than those in the lowest income quintile.
- Over half of the members of the poorest households have never visited a health center, with this proportion climbing to one third in the case of members of the wealthiest households.
- Children from the poorest households are twice as likely to suffer from stunting as children from the richest households (40 percent compared to 20 percent)

Source. ENM, 2014

Constraints behind the low and unequal access to education

206. A minimal level of qualifications is necessary for a worker to become productive. In Burkina Faso, three quarters of household heads have never participated in formal education, with the proportion being even higher in the case of the poorest households, where the figure stands at 93 percent (see Figure 43). Not only is failure to participate in education a severe constraint on enhancing workers' capacities, it also reduces the gains from any subsequent efforts to train or support them.

Figure 43: Only a quarter of the labor has gone to school and many 6th graders do not reach basic reading skills



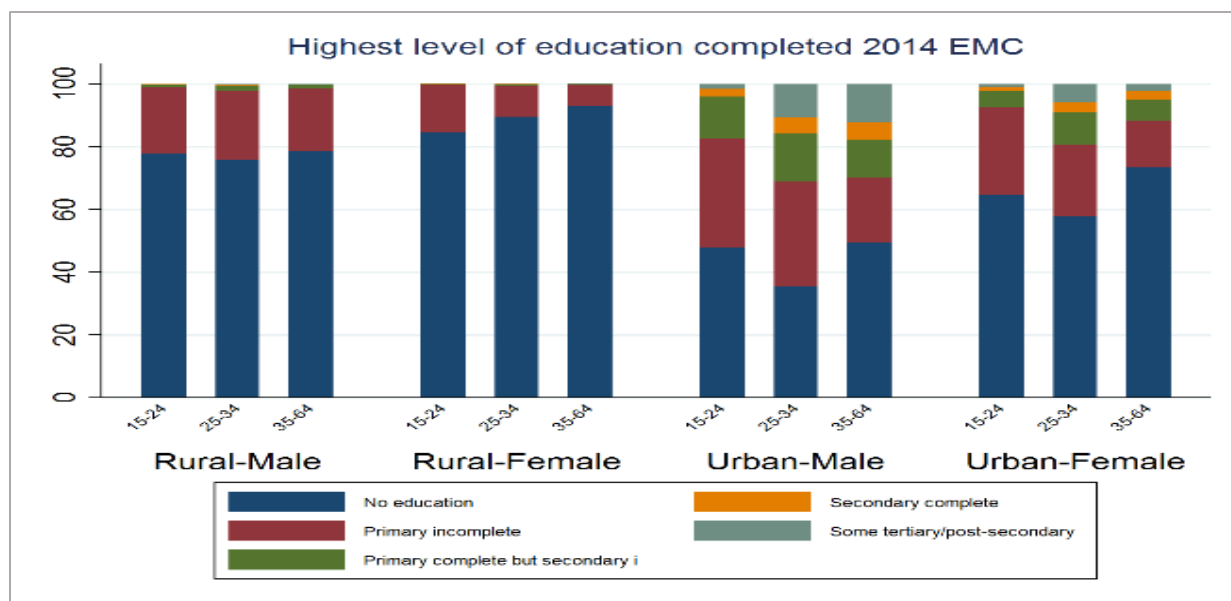
Source: World Bank and SCD background paper on jobs, 2016.

207. In addition to the low participation rates, the quality of the education provided is also a matter for major concern. Of the children who have completed their primary studies, only around half acquire basic reading skills (see Figure 43). While the issue of the quality of education is a concern across the region, the quality of education in Burkina Faso is considerably lower than in the case of comparators such as Burundi and Gabon.

208. Not only is the level of access to education generally low in Burkina Faso, the level of inequality in terms of access is particularly high, with sharp variations to the level of access between households with different income levels, between the genders, and between different locations:

- *Income groups:* On average, members of households in the lowest quintile attend school for five fewer years than do those from the top quintile. Access to post-secondary education is almost exclusively limited to those in the top quintile.
- *Gender:* There is a significant gender gap in terms of access to education (see Figure 44). This gap is apparent in both urban and rural areas, and becomes increasingly large over the education cycle (see later for a more complete explanation).
- *Location:* the average level of educational attainment is much higher in urban areas than in rural areas (both for male and female). In rural areas, more than 80 percent of people report that they have not participated in formal education, with only a small increase in the proportion registering for primary education over time (see Figure 44).

Figure 44: Education outcomes by regions and by gender



Source: SCD background paper on jobs, 2016.

209. There are four basic factors that constrain the accumulation of education by members of the poorest households in Burkina Faso. These constraints are both on the supply side, in the sense that the provision of education services is still sub-optimal, and on the demand side, in the sense that failure to accumulate education is due to the behavior of households.

210. **Constraint 1: Lack of financial resources and weak financial management:** The first basic constraint relates to the limited availability of financial resources and weak financial management. The Government has allocated approximately 17-20 percent of its budget to the education sector over the past decade. This figure is equivalent to around 4 percent of GDP, which is on the low side relative to the proportion allocated by comparator countries, including other low-income countries such as Ethiopia and Rwanda (see Figure 45). A significant portion of the available resources were provided by donors, who have allocated a significant share of their support to pro-poor sectors such education, health and other social services. Fielding (2006) found that foreign aid in Burkina Faso has positive impact on education.⁸²

211. The value of the financial resources allocated by the Government is even lower when measured in absolute numbers. The value of these resources in terms of US\$ spent per secondary student (adjusted for PPP) is considerably lower than that allocated by other low-income countries, including Mali and Rwanda. The gap is even higher when Burkina Faso is compared to Bolivia or Brazil (see Figure 467). These absolute figures are significant because of international standards related to schools' buildings and textbooks, even though the main factor is the number of teachers and the value of their salaries, which can vary significantly across countries.

⁸² Fielding et al, *A Wider Approach to Aid Effectiveness: Correlated Impacts on Health, Wealth, Fertility and Education*, WIDER working Paper, 2006. See also, M. Furjelova, "Does development aid have in fine positive or negative effects on growth in developing countries? Case study: Burkina Faso", 2010.

Figure 45: Public expenditures in education

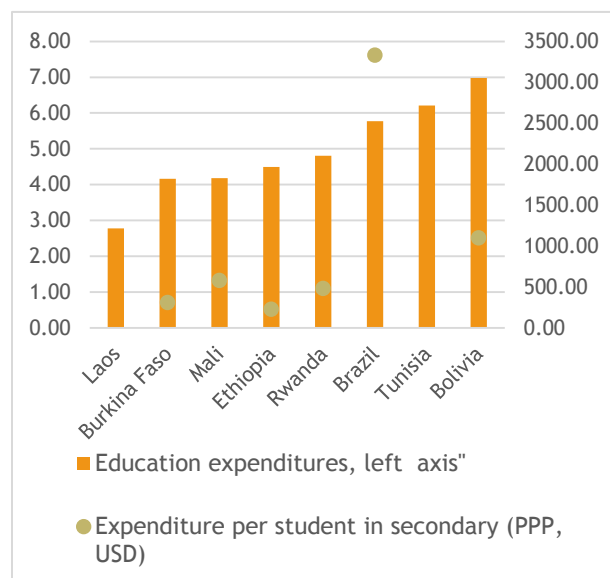
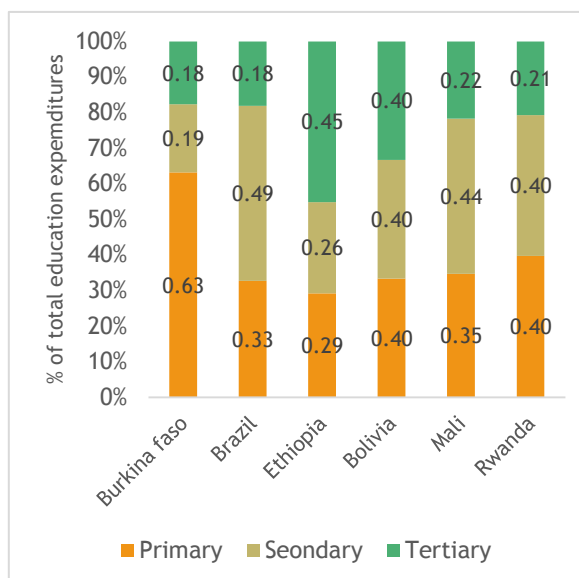


Figure 46: The allocation of education expenditures per level



Source: World Bank, Education database.

212. **Not only is the value of financial resources allocated to the educational sector relatively low, a number of factors undermine efficiency of expenditure, including imbalances in the allocation of resources between levels of education.** In Burkina Faso, approximately two-thirds of the education budget is allocated to primary education. This proportion is much higher than in the case of other countries with similar demographic profiles (Mali and Rwanda) or in countries with better educational outcomes (Brazil, Bolivia). As a result of the high proportion allocated to primary education, the allocation for secondary education is relatively much lower, with the budget share for secondary education being only half that recorded in Bolivia, Rwanda, and Mali.

213. **Financial management in the educational sector is characterized by a number of serious weaknesses.** A recent study shows that about 12 percent of the financial resources allocated to non-wage expenses was lost along the spending chain and was not used for the intended purposes.⁸³ The main weaknesses are approximately the same as those affecting government expenditure more generally, including lengthy and complex procurement procedures, insufficient controls and monitoring, and weak sanctions. Excessive centralization also mitigates against the implementation of a policy of proximity to bring decision making processes closer to schools and communities.

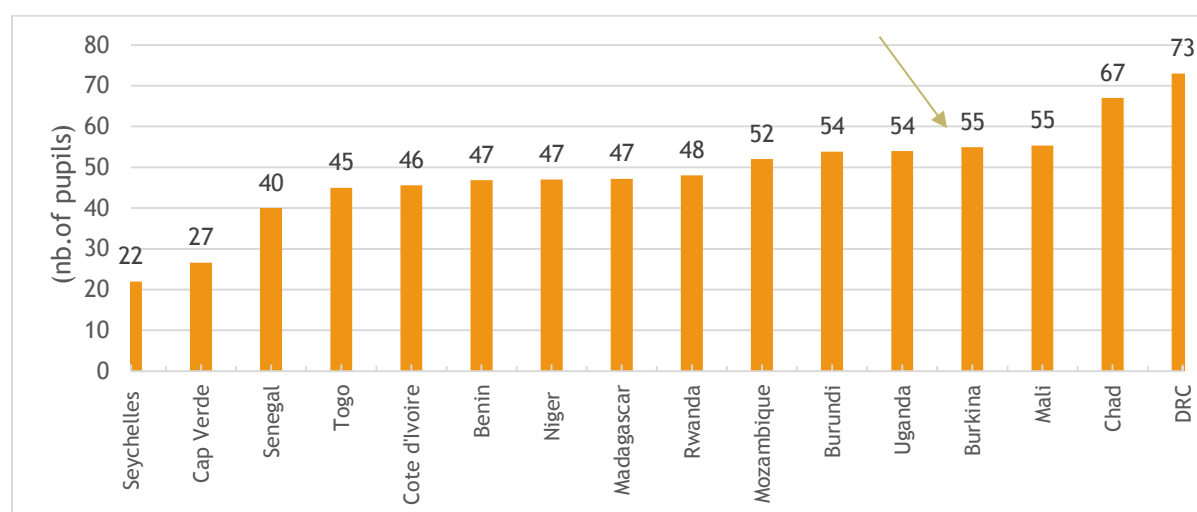
214. **Outside the public sector, the provision of educational services by the private sector has increased rapidly in recent years, notably in the post-primary education cycle.** Students

⁸³ For details, see UNICEF, *Etude de traçabilité des dépenses publiques dans le secteur de l'Education primaire au Burkina Faso*, Décembre 2012.

registered in private primary schools constituted about 20 percent of the total number of total students in 2011-12, up from only 6 percent in 2001-02. At the post-primary level, students registered in private schools constituted up to 40 percent of the total. Private schools help to complement the public provision of educational services and thus receive subsidies from the Government (to a value of approximately FCFA 1.1 billion in 2011/12). On average, private schools perform less well than public schools, reporting lower grades in mathematics and French. However, there costs and quality vary considerably.⁸⁴ Priority should be given to strengthening the regulatory environment and monitoring the performance of private schools, possibly by linking the subsidy to the results these schools achieve.⁸⁵

215. Constraint 2: The second constraint relates to the limited availability of qualified teachers, with average class sizes at the primary level standing at more than 55 students per teacher. This is an extremely high ratio, even by generally high African standards (see Figure 47). In addition, there is a high degree of variability in class sizes across regions, with a disproportionate number of teachers deployed in the Ouagadougou region. The insufficient number of teachers is related to the lack of financial resources, with the teacher wage bill accounting for the vast majority of the educational sector's budget. Pressure is likely to increase over time due to the rapidly expanding number of students.

Figure 47: The average class size is high in Burkina Faso



Source: World Bank, Education database.

216. A number of technical deficiencies are apparent in the education sector. To an increasing extent, newly recruited teachers have lower levels of qualifications. Surveys show that teachers are also among the least happy and least motivated of all public servants, often not only for reasons associated with their generally low salaries. An increasingly large proportion of

⁸⁴ In that context, it would be important to evaluate the quality of Qur'anic schools, notably in their capacity to prepare their students for the labor market.

⁸⁵ Private education is regulated by Decree n°2010-386 / PRES / PM / MESSRS / MEBA / MASSN of 29 July 2010.

teachers work on unsecured work contracts and in difficult conditions. As a result, absenteeism rates are high.

217. **The salary system is principally based on length of experience rather than performance.** While this system ensures stability, it does not motivate high levels of performance.

218. **Constraint 3: The third constraint relates to household-level evaluations of the expected return on investments in education relative to the associated financial burden.** As such, it is a demand-side constraint. In Burkina Faso, the expected returns are relatively low, since participation in education does not necessary lead to a significant income premium on the labor market. At the same time, the financial burden is high, especially on poor households. The combination of these two factors explain the relatively low rates of participation, especially from the secondary level and onwards.⁸⁶

219. **Participation in education does not necessarily guarantee higher incomes in the future, although it is clear that there is a positive correlation.** In general, for each additional year's participation in education, it can be expected that earnings will increase by 6 percent. However, this positive effect is non-linear, with increases being more significant at higher levels. While graduation from primary school is associated with a 56 percent increase in earnings relative to those who have not participated in education at all, participation in secondary and post-secondary education have an even more significant impact, with the former associated with a 119 percent increase and the latter associated with a 98 percent increase. Interestingly, the returns from graduation at the secondary level are higher than the returns from graduation from post-secondary education, which raises concerns regarding the quality and relevance of post-secondary education (see previous section). In addition, it is worth emphasizing that no significant differences in earnings have been found between genders.

220. **Although the returns on participation in education are positive, the magnitude of these returns is lower than is the case in many other countries.** For example, the returns associated with each additional year of participation in education stand at around 10.3 percent in Chile and 9.3 percent in the United States, which is almost twice as high as in Burkina Faso. In addition, wage premiums appear relatively low for those who decide to invest in secondary and (above all) in post-secondary education. For example, a post-secondary student will spend approximately 10 more years in schools than a primary student, and he will only be able to double his expected earnings in the future. This low wage premium discourages families from investing in education.

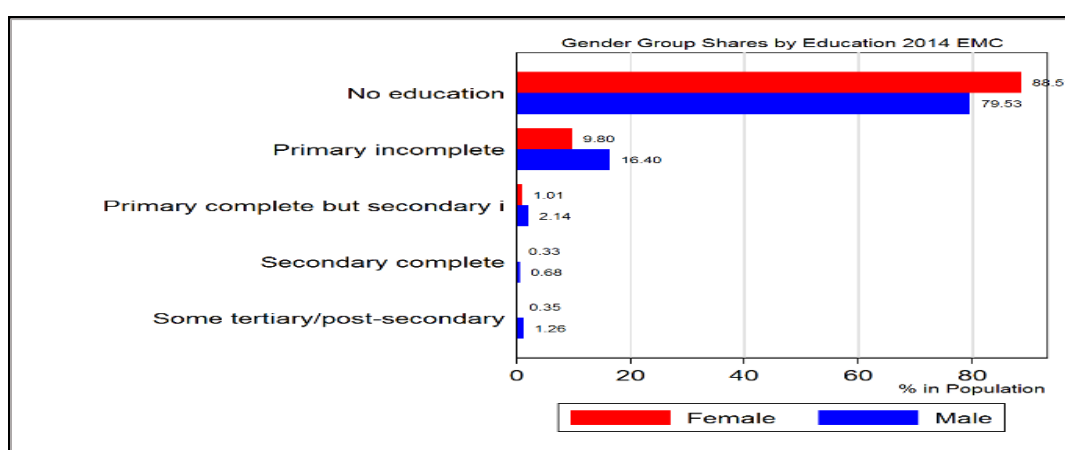
221. **The disincentives on investment in education are exacerbated by the high associated financial burden.** The cost of one year's schooling at the secondary level is about FCA 800,000, which is beyond the means of most households. This estimated cost includes school supplies and meals but does not cover school fees and transport costs. Distance matters, with unequal access to education strongly related to the cost of transportation. For example, only 22 percent of members of households in the poorest quintile are located at less than 30 minutes' travel from a secondary school, while this proportion increases to 63 percent for the wealthiest quintile. This difference can explain to some extent the variations in registration rates in secondary schools between these two groups.

⁸⁶ There is also a time inconsistency problem since return are expected in the future, while costs are immediate.

222. Because of relatively low returns and the high financial burden, many poor families cannot afford to send their children to schools or have to develop coping strategies, such as sending only one child to school. This kind behavior is more apparent at the higher levels of the education cycle, partly because of opportunity costs, since teenagers can work and so provide income to the family.

223. **Constraint 4: The fourth relates to behavioral bias at the household level regarding the importance of education for girls.** To cope with budget constraints, many families choose to provide education to only one or several of their many children. Partly for cultural reasons, a disproportionate number of girls thus abandon their studies. While the gender gap is relatively small at the primary level, it increases at the secondary and postsecondary levels (see Figure 48). It is only 1.67 times more likely that a boy will complete primary level education than a girl, but this increases to 2.06 in the case of secondary education and to 3.5 for post-secondary education.

Figure 48: Gender bias in access to education.




Source: SCD background paper on jobs, 2016.

224. Generally low marriage ages help to explain the wide gender gap in school enrollment at the secondary level and beyond. The median age for first marriages overlaps with the age at which the gender gap in school attendance begins to increase dramatically. The median age for first marriages for females age 25-49 is around 17. There is a significant variation between urban and rural areas, with the figure reaching as high as 20 in Ouagadougou. The 2014 EMC for Burkina Faso and other sources confirm that early marriages are a cause for the low level of female participation in education. Women begin to bear children at a relatively young age, with the proportion increasing rapidly. The share of young women that have given birth at least once or are currently pregnant increases sharply from one percent at age 15 to 57 percent at age 19.

Constraints behind the low and access to health and nutrition

225. As earlier sections of this SCD have made clear, Burkina Faso has recorded better progress in terms of health outcomes than in education. However, almost two thirds of members of the poorest households (65.3 percent) have no access to health services, while for the non-poor (4th and 5th quintiles), the proportions are respectively 32.8 percent and 52.3 percent. Appropriate young child feeding, while very low in general (3.1 percent), is three times better for the highest quintile (7.7 percent), while the stunting rates for children in this quintile (19 percent) is less than half that of the poorest two thirds (40 percent). The poorest households in rural areas lack access to adequate health care. Members of poor households need to travel much



longer distances than those in the richest quintile to reach health centers. Even if the health services are almost free, with the poor transport infrastructure, the poorest members of society cannot afford the time it takes to walk very long distances to reach the nearest health facility. In addition to access, issues related to quality have a disproportionate impact on poor people.

226. The lack of access to health services by poor households is rooted in constraints on both the supply and demand sides.

227. Constraint 1: Insufficient public financing of the health and nutrition sectors is exacerbated by the pressure created by the rapidly growing population. The budget allocation for the Ministry of Health has been around 12 percent of total public expenditures over the past few years, which is lower than the level of 15 percent committed to at the Abuja Conference. Financing pressures will become even more intense in the near future given the Government's stated ambition of providing universal health coverage in the coming years. In addition to the insufficient availability of funds, the allocative and financial efficiency of the sector is weak. A 2012 study conducted by UNICEF showed that about 15 percent of the funds allocated for basic medicines and equipment were used for other purposes.⁸⁷ To address these leakages, improvements in the governance framework of the sector are required, possibly through a higher level of deconcentration/decentralization to bring services closer to customers and thus to increase accountability.

228. The governance challenges in the health sector are further indicated by the financial distress reported at the *Centrale d'Achats des Medicaments Generiques* (CAMEG). This agency, which plays a pivotal role in the provision of medicine to the population, was almost bankrupt at the end of 2015.

229. Despite the low level of the financial resources allocated through the budget, the health sector has benefited from the provision of vertical funds from multinational organizations and private partners. These funds have been effectively utilized to promote vaccination programs and other activities such as campaigns to prevent epidemics and malnutrition. However, they are less effective as a means to improve health services, with these improvements being more dependent on the quality of staff and equipment.

230. In recent years, the private sector has played an increasingly significant role in delivering health services to the population, providing almost half of health services in the country. Despite a burdensome legal and regulatory framework, there are large variations in the quality of health services offered by these private providers, partly because of a lack of monitoring and ineffective sanctions by the authorities. Educated and wealthier households generally utilize private health centers, with the rate of use standing at only 10 percent amongst those who have either not participated in education or who have only completed education at the primary level. On average, households spend more than 30 percent of their budget on health-related expenses, the second highest category after food.

⁸⁷ For details, see UNICEF, *Etude de traçabilité des dépenses publiques dans le secteur de la santé au Burkina Faso*, Décembre 2012.

231. **Constraint 2:** Partly as the consequence of the limited availability of budgetary resources, there are not enough qualified staff in the health sector. The ratio of doctors to patients stands at five per 100,000, while the ratio for nurses to patients stands at 41 per 100,000. These are amongst the lowest ratios in the world. As a point of comparison, the ratios are twice as high in Cote d'Ivoire and three times as high in Zambia.

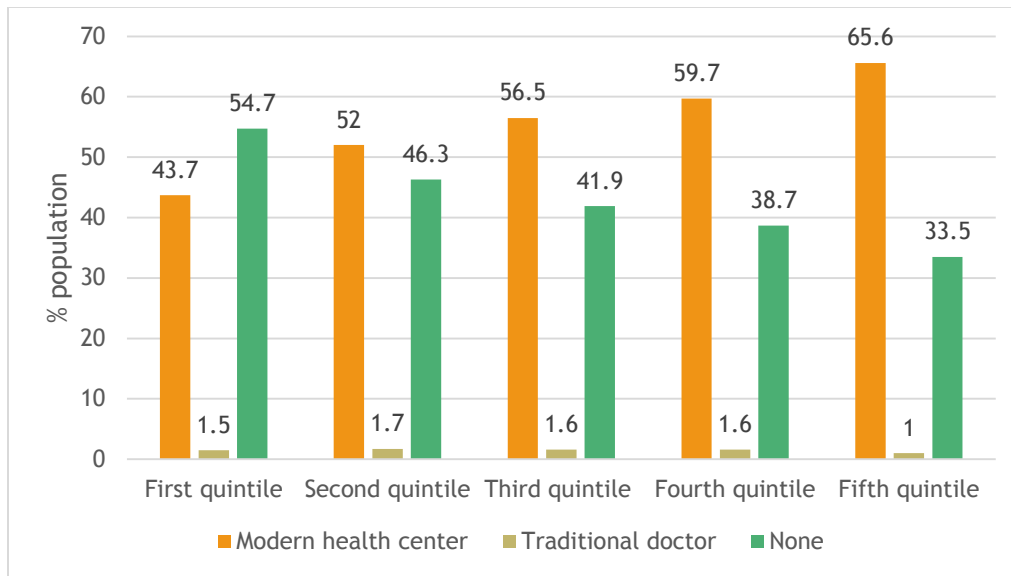
232. Not only there are not enough qualified health workers in the country, these workers are disproportionally concentrated in a few locations. It is estimated that about half of qualified medical staff are located in the three largest urban centers (Ouagadougou, Bobo Dioulasso and Koudougou). Therefore, some regions are dramatically underserved with an extremely low ratio of doctors and nurses to patients.

233. The lack of qualified staff explains why about one out of seven patients reports being unsatisfied with the quality of services. In addition, according to the 2014 Household Survey, almost half of patients (42.2 percent) reported being unhappy with the long waiting times. To illustrate the shortage of medical staff, in 2014, only 1.7 percent of all deliveries were assisted by a doctor, although almost all of them were assisted by nurses or midwives.

234. **Constraint 3:** In addition to financial and human resource constraints, in the case of poor households, the use of health services is constrained by lack of affordability. On average, health-related expenditures account for an average of 30 percent of household budgets. At the national level, this amounts to 3 percent of GDP.

235. While on average approximately two-thirds of sick people visit doctors and services nationwide, there are significant variations between regions and income groups (see Figure 49). However, there are no significant variations between gender. Financial capacity remains a constraint on access to good health services for the poor population. In 2014, 31.3 percent of poor did not visit a doctor because of a lack of financial resources. Distance matters, with transportation costs influencing household level decisions related to whether or not to visit a doctor or a health center.

Figure 49: Visits to health centers and hospitals increase with income



Source: Household Survey, 2014

Unequal Provision of infrastructure

236. It has been calculated that the expansion of infrastructure has contributed 1.3 percentage points to Burkina Faso's annual per capita gross domestic product (GDP) growth rate over the past decade, with much of this contribution due to improvements in information and communication technology (ICT).⁸⁸ Overall, a 2011 study conducted by the World Bank estimated that increasing Burkina Faso's infrastructure endowment to that of the average level recorded by the region's middle-income countries (MICs) could result in increases to the rate of annual growth of more than 3 percentage points. However, to achieve this, Burkina Faso would have to invest US\$ 3 billion in the development of its infrastructure in the period from 2014 to 2020.

⁸⁸ Source: C. Briceno-Garmendia and C. Dominguez Torres, *Burkina Faso's Infrastructure: A Continental Perspective*, the World Bank, 2011.

Box 16: The impact of infrastructure on economic growth and firms' productivity

Simulations suggest that addressing Burkina's infrastructure deficits to the level where its stock of infrastructure was equivalent to that of the African leader, Mauritius, could boost the growth rate by 3.8 percentage points, with potential contributions coming equally from the ICT, road, and power sectors.

Part of the contribution of infrastructure to economic growth would come from improved living conditions of households, with these households benefiting from improved access to social services and jobs. This virtuous circle will receive much attention in this section of the SCD.

However, an additional benefit is through improvements to firms' level of productivity. At the firm level, evidence from enterprise surveys suggests that the quantity and quality of infrastructure are responsible for about one-third of the productivity performance of Burkina Faso firms. Soft issues related to transport, such as customs clearance and transport logistics in general, weigh most heavily on firms' productivity, with electricity being a distant second.

Source: C. Briceño-Garmendia and C. Domínguez-Torres, *Burkina Faso's Infrastructure: A Continental Perspective*, The World Bank, 2011.

237. There is an extensive literature to demonstrate the positive relationship between economic development and the quality and quantity of infrastructure. Both economic theory and empirical studies have demonstrated the robust and positive impact of infrastructure on both economic growth and poverty alleviation, including in the sub-Saharan African region. In a World Bank study, C. Calderon and L. Serven found that a one percent increase in the stock of infrastructure lead to a 0.34 percent increase in GDP growth, both through quantity and quality effects. The highest impact was found in the case of increases in the stock of telecommunications infrastructure, followed by energy and roads.⁸⁹

238. Similarly, it has been demonstrated that increases in the stock of infrastructure have a positive impact on the poverty rate. Improved infrastructure has a disproportionately positive effect on the income/welfare of the poor, who are more constrained by the lack of access to infrastructure services than the non-poor.⁹⁰ For example, big firms or rich household can compensate for their lack of access to electricity by purchasing generators. They can use four-wheel drive cars to drive on roads in poor conditions. In any case, better access to roads, for example, works as a channel to connect all people, goods, services and ideas and helps to promote increases to the level of firms' productivity and to improve households' living conditions. The same effects are associated with improved communications infrastructure, which can boost virtual connectivity between firms, workers and markets. Better access to water and electricity services reduces firms' operating costs and raises the quality of living at the household level. Infrastructure also raises the value of existing assets (e.g., land) or lowers the cost of acquiring them (transport to schools and health facilities, etc.). Finally, infrastructure can increase the stock of human capital through its direct impacts, such as through the effect of improved water and sanitation services on health.

⁸⁹ César Calderón and Luis Servén, *Infrastructure and Economic Development in Sub-Saharan Africa*, Policy Research Working Paper 4712, 2008.

⁹⁰ For some estimates, see C. Calderon and L. Serven, op. cit.

239. Therefore, it can be argued that Burkina Faso's lack of progress towards the achievement of the twin goals of poverty reduction and shared prosperity is at least partly due to the limited access of the vast majority of its population to quality infrastructure. Compared with average levels for Africa, Burkina Faso is lagging in the area of transportation, communication, and energy. It exceeds the average in only one area, this being the water sector (see Table 13).

Table 13: Infrastructure indicators, 2014 or latest year available

	Burkina Faso	Sub-Saharan Africa	Red=worst Orange= average Green=better
<u>Electricity</u>			
Access to electricity (% population)	18	35.3	
Power consumption per capita	185	511.9	
<u>Transports</u>			
Road density (per km2)	337	-	
Paved roads (% of total)	5	19	
<u>Water</u>			
Improved sanitation (%)	19.7	29.7	
Improved water source (rural) (%)	75.8	55.9	
<u>Telecommunications</u>			
Mobile cellular suscriptions (% population)	72	71	
Mobile cellular sub-basket (US\$ per month)	11.7	13.0	

Source: World Bank.

240. Not only are average figures low by regional standards, they mask significant variations across locations, gender and income levels. For example, members of lower income groups generally have to travel a longer distance to access water services and food markets than do members of wealthier groups. Members of the lower income groups have almost no access to electricity, while over half of the wealthiest group report having this access. These differences are illustrated in Table 14 below.

Table 14: Access to infrastructure increases with income, 2014, % population

Infrastructure		First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
Travel time more than 30 minutes	Access to water	23.4	20.1	19.8	16.1	9.5
	Access to food market	50.7	51.1	46.5	44.4	27.8
	Access public transport	64.6	64.3	58	53.3	35.2
	Access to electricity	4.9	8.2	11.1	22.7	53.8
	Use of toilet facilities	35.3	39.5	42.7	51.2	73.8

Source: Household Survey

241. Understanding the main constraints on access to infrastructure by poor households is critically important in the effort to accelerate progress toward the twin goals. On the supply side, the provision of infrastructure may be limited because of limited funding, weak strategic planning and implementation, poor accountability and financial management, and limited technical capacity. By examining these constraints, the emphasis is on the provision of these infrastructure services. However, in many instances, poor households have no access to these services because they simply cannot afford to pay for them. This question of affordability is especially important in the case of water and electricity services.

242. This unified framework, which explores a set of supply- and demand-side constraints, is applied to the energy, water and sanitation, transport, and communication sectors.


Constraints on access to electricity

243. Burkina Faso has one of the lowest levels of access to electricity in the world. The average level across the country stands at only 20 percent, with a significant gap between urban and rural areas. In urban areas, the rate stands at 35 percent, compared to only five percent in rural areas. The lowest income groups are almost fully excluded from the national electricity network.

244. The nature of Burkina Faso's natural endowments provides a partial explanation for the limited energy supply in the country. It has only a limited capacity to produce energy with its own natural resources, mostly from hydro and, increasingly, from solar. Therefore, it has to import gas and fuel and process them domestically or to purchase electricity from neighboring countries. In 2014, Burkina Faso imported about 40 percent of its consumed electricity. This dependence adds to the country's vulnerability to international price fluctuations.

245. **Constraint 1: The State lacks the capacity to keep pace with the increasing demand for energy.** The budget allocated to the energy sector (around US\$ 100 million in 2013) has been insufficient to finance the necessary new investments in generation and distribution, the value of which is estimated to reach around US\$ 200 million per year.⁹¹ Maintenance has also been neglected. As a result, the installed capacity amounted to only 315 MW in 2015, with most of this

⁹¹ This figure is extrapolated from the study of C. Briceno-Garmendia and C. Dominguez Torres, *Burkina Faso's Infrastructure: A Continental Perspective*, the World Bank, 2011.



capacity derived from expansive thermal sources, just sufficient to cover demand during non-peak periods. Load shedding averaged at around 340 hours.

246. **The lack of financing is also demonstrated by the financial distress experienced by SOEs operating in this sector.** The electricity company (SONABEL) and the company in charge of importing fuel (SONABHY) have faced large but variable operational deficits over the years, with the size of these deficits depending on fuel prices and electricity tariffs. Their financing gap was expected to be filled by Government subsidies, but these have not always been paid, leading to growing arrears. This precarious financial situation has created uncertainty in the sector, discouraging potential investors.

247. **Private sector financing has been virtually absent in the energy sector.** The legal and institutional framework has not been conducive to the development of PPPs, and the fragile financial situation of the sector has resulted in a lack of interest on the part of potential investors.

248. **Constraint 2: Because financial resources are limited, it is critically important for Burkina Faso to use available resources efficiently by making the optimal strategic choices upfront.** However, planning has often been weak. Over the past decade, even when programs and projects are approved, they have rarely been well implemented. Thus, it is essential that the Government give careful consideration to a number of trade-offs and strategic choices, including between different technologies (renewables/hydro/fuel), locations (rural/urban), sources of financing (external/domestic), and ownerships (private/public). The Government also needs to develop a strategy to determine how the country will negotiate the needed connections with the regional power pool, with particular reference to negotiations with Ghana, Côte d'Ivoire, and Nigeria.

249. **Financing needs can be reduced by making the right choices, particularly in terms of technologies and mixed sources.** The adoption of off-grid solutions, particularly solar energy, should be considered to provide electricity in rural areas.

250. **Once these strategic choices have been made through a participatory process, it will still be necessary for the Government to formulate a clear roadmap to determine where investment projects will be implemented and to identify maintenance needs.** This step is essential and will require a strong public investment management capacity, with the implementation plan possibly involving the use of PPPs.

251. **Constraint 3: The quality of governance matters for ensuring that available resources are properly used.** Unfortunately, the energy sector has suffered from serious weaknesses and deviations from good governance, including political interferences in the management of the SOEs and their relationships with clients. For example, electricity tariffs have been consistently insufficient to cover the operational costs of the energy company. In addition, the Government subsidies requested to compensate the losses have not been paid or have been significantly delayed. As a result, significant arrears have accumulated between the central administration and the operating companies. The regulatory agency has been of limited effectiveness, unable to fulfill its monitoring and regulatory roles.

252. **Constraint 4: The development of the energy sector has also been constrained by the lack of technical capacities, including at the local level.** The number of engineers is limited both within the Ministry of Energy and within operating companies. While the Government aims to develop partnerships with the private sector, it will need to upgrade its capacities to conduct technical and financial negotiations with private companies if it is to do so effectively. Such

capacity building is essential, with the negotiation powers of experienced multinational companies clearly much stronger than the Government's.

253. **Constraint 5:** In a country where the average household income is less than US\$ 800, affordability is a key issue for the energy sector. Electricity tariffs average at US\$ 0.21 per Kwh, which is amongst the highest level in the WAMEU. While these tariffs are not sufficient to cover operating costs, they partly explain why members of the poorest groups are failing to connect to the national electricity grid.

Constraints behind access to water and sanitation

254. Burkina Faso has recorded a relatively strong performance in terms of the provision of water and sanitation services. The level of access to a safe source of water is on average higher in Burkina Faso than in the rest of the sub-Saharan African region, both in urban and rural areas (89 and 66 percent, respectively), with even members of the poorest income groups having relatively good access to safe water and sanitation services.

255. However, a number of challenges remain, as the quality of services is not always guaranteed nationwide, with poor maintenance and old equipment being particularly significant issues.⁹² There are also significant variations in the level of access across regions and locations. For example, the level of access to potable water is high in cities but still low in rural areas and in populated peri-urban settlements. To improve the situation, the authorities will have to manage the growing mismatch between fast-growing demand and limited supply, particularly in the context of the expected climatic changes, which are projected to increase the extent of arid surfaces in the medium to longer term. They will have to formulate strategies and implement measures both to collect more water using new technologies and to bring the extracted water to users.

256. The key factors constraining the provision of quality water and sanitation can be analyzed in terms of the five potential causes highlighted earlier.

257. **Constraint 1:** According to a 2011 World Bank study, annual financing needs for the water and sanitation sector are estimated to reach a value of around US\$ 250 million.⁹³ While this figure is only indicative, this amount is far higher than the budget allocated to the Ministry of Water, which has averaged around US\$ 120 million in recent years. It should be noted that since 2004, the responsibility for rural water has been mandated to local governments.

258. Extra-budgetary funding has already been used to help close the gap, especially in the urban centers (Ouagadougou and 49 secondary cities), where the provision of water is under the responsibility of ONEA, an autonomous State company. The strong performance of this company has been well recognized over the years (see Box 18).

259. However, other extra-budgetary initiatives have remained relatively limited. While community driven initiatives have been used in many low-income countries, especially in Latin America, this approach has only been used to a limited extent in Burkina Faso. The

⁹² In 2015, about 15 percent of water pumps were not functioning in rural areas.

⁹³ Op. cit. Burkina Faso's Infrastructure: A continental Perspective, 2011

regulatory framework is weak and expected returns for private operators are low due to the low population density and weak purchasing power of rural households.

260. **Constraint 2:** Although the Government has developed relatively comprehensive programs (*“Programme National d’Approvisionnement en eau potable et assainissement pour l’atteinte des OMD”* and the *“Plan pour la gestion intégrée des ressources en eau”*), the sectoral strategy can be improved on several fronts, including through measures to address the following issues: (a) the lack of an enabling environment, with a lack of inclusion of the poverty dimension in sector policy, strategies and investments programs and plans; (b) the inefficient targeting of populations and areas to be served by service providers; (c) the weak systems of WSS assets management, monitoring and evaluation and mainly; (d) the lack of high-quality economic evidence to facilitate improved decision making for water.

261. **Adopting lower-cost technologies could substantially reduce the cost of meeting the posited infrastructure targets, thus improving cost efficiency and eliminating the funding gap.** For example, the adoption of lower-cost technologies such as stand posts, boreholes, and improved latrines could reduce the associated price tag from US\$ 208 million to US\$ 165 million each year.

262. **In the future, the Government will need to pay great attention to the management of water resources.** The demand for water is expected to increase very rapidly as the result of rapid demographic growth, urbanization, and the development of irrigated agriculture. At the same time, the water supply will remain limited due to scarce and unevenly distributed natural reserves and changing climatic conditions. Not only will the projected mismatch between aggregate demand and supply need to be appropriately managed, the authorities will also have to address the possible conflicts resulting from multiple usages. This will require careful planning and communication programs, based on a good understanding of the crossed effects between agricultural, livestock and other economic activities and the usage of water over time.

263. **Constraint 3:** The extent of spending inefficiencies is apparent from the slow rate of execution of the budget and the weak governance framework, with the notable exception of ONEA (see Box 18). The most pressing issues relate to the provision of water and sanitation in rural areas, where close to 80 percent of the population still live. The accountability mechanisms are fragmented between the central administration and local authorities and across several agencies, creating confusion and reducing the effectiveness.

264. **It could be argued that the decentralization of WSS services is appropriate, with proximity resulting in improved accountability. However, there is a severe mismatch between the responsibilities devolved to local governments and their revenue generation capacity.** In addition, transfers from the central administration are also insufficient. However, despite the need for increased financial resources, the quasi-absence of internal and external controls at the local level is a constraint on transferring these increased resources to them.

Box 17: Burkina Faso Urban Water Reform

The urban water and sanitation utility of Burkina Faso (ONEA) is one of the best performing public water utilities in the sub-Saharan African region. This strong performance is the result of a gradual corporatization process spanning over two decades. The key to this entity's success has been the Government's strong commitment to the reform process, with this process including a short period of innovative private sector participation, while maintaining the utility under public management. ONEA's experience demonstrates that it is possible to establish a well-performing public water utility in a water-stressed Sahelian country, as long as the proper governance framework is in place.

In 1994, the Government of Burkina Faso formulated a strategy to streamline its relationship with ONEA so that the utility could manage urban water services efficiently and autonomously achieve financial equilibrium through the application of an appropriate tariff policy. The sector reform relied on: (i) a performance contract between the Government and ONEA (Contract-Plan) defining clear rights, duties and obligations for both parties; and (ii) periodic independent assessments of the execution of the contracts (Contract-Plan and associated performance agreements). The three-year contracts include explicit targets for operational and financial indicators, and are monitored each year through a report prepared by an external independent auditor and submitted by the Board to the General Assembly of State Companies. The Board of Directors (made up of members appointed by the Government and including representatives from the Ministries of Hydraulics, Finance and Trade, as well as one from the mayors' and consumers' associations) is responsible for the supervision of ONEA's performance and for all strategic decisions. To improve the commercial and financial management capacity of ONEA, with these capacities being identified as a main weakness at the onset of the reform, a five-year service contract (with strong incentives for results) was signed with a private partner in 2001 to fill the gap for a defined timeframe.

These reforms have significantly improved the performance of the sector. Access to piped water service has significantly improved, increasing from 54 percent of the urban population in 2001 to 90 percent in 2016, with 63 percent of this access being facilitated through household connections. Compared to the situation in 2001, when the water service was chronically intermittent and of low pressure, 24/7 water supply service is now ensured with sufficient pressure in almost all urban towns covered by ONEA. The bill collection ratio has increased from 83 percent to 97 percent over the period, while the level of water losses, measured in terms of the percentage of non-revenue water, has been stabilized at 18 percent, a highly satisfactory performance by international standards. The financial equilibrium of the sector has been restored and maintained since 2006, with the sector becoming financially autonomous and able to recover its cash operating expenditures and debt service from the tariff.

Recognizing the relevance and impact of the reform, donors (including IDA, the lead partner in the sector reform) enthusiastically supported the development of the infrastructure through a US\$ 200 million investment program, which resulted in doubling the water production capacity for Ouagadougou, expanding water distribution networks by 30 percent and quadrupling the number of private customers in the perimeter covered by ONEA through subsidized social water connections programs targeting the poor.

Burkina Faso's successful urban water sector reform was largely the result of a combination of sustained commitment from the central government, the development of the appropriate governance framework, competent public management at ONEA, innovative recourse to the private sector, and strong financial support from donors. Identifying the relative contributions of each of these factors is difficult: all were essential and the reform was successful because various partners each played their respective roles and worked together well. However, the following key aspects should be highlighted.

- The political commitment of the Government and its strong leadership was critical to the success of the reform.
- A clear accountability framework based on a detailed review of performance by independent reviews and incentives to boost performance or penalize poor performance played a vital role.
- The use of private sector participation under a service contract to address the soft spots at the beginning of the reform was also essential.

265. **Not only do the central and local governments have weak monitoring and evaluation capacities, there are also severe weaknesses on the demand side of governance.** Worldwide, civil society has played a significant role in advocating, designing, implementing, and monitoring the performance of the water and sanitation sector. While there are several agencies, the participatory process has been weakening over the years.

266. **Constraint 4: Technical capacities are limited, especially at the local level.** This constrains the adoption of new currently available technologies. There is a need to develop knowledge regarding the possible impact of climatic changes on the provision of water in the medium to long term.

267. **Constraint 5: The cost of water does not appear to be a significant constraint for most households.** The price of water is minimal (free in many instances), so cost does not deter poor users with limited financial resources. If private investors are expected to play a more important role in the provision of water in rural areas, the question of tariffs will become more important, given the low purchasing power of most households. The Government will need to find a balance between sustainability and equity by considering the use of social tariffs, which may require subsidization.

268. **On the demand side, another main constraint lies in the distance between the water supply and users.** The time taken for 23.5 percent of members of the poorest groups to travel to a water source exceeds 30 minutes, with this figure falling to less than 10 percent in the case of members of the wealthiest groups.

Constraints on the use of transportation

269. **In Burkina Faso, transportation infrastructure consists of a network of national, secondary, and tertiary roads; one railway line; and two international airports.** The development and maintenance of its transportation network is pivotal for Burkina Faso, given the low population density and its location far from global markets. The following section focuses on the road network.

270. **Despite the importance of the transport sector for Burkina Faso's economic growth, the road network remains underdeveloped.** The extent of the main classified road network is 15,300 km, of which 24 percent was asphalted as of 2015, according to the PNR. The Rural Access Index stands at only 26 percent, significantly lower than the sub-Saharan African average of 34 percent. Furthermore, the extent of the tertiary road network is 46,000 kilometers, of which 50 percent is impassable during the rainy season. Thus, in the rainy season, millions of people are deprived of access to health centers, education centers, markets and administration.

271. **The lack of mobility of goods and people in Burkina Faso is largely explained by the absence of hard infrastructure of sufficient quality.** It is also the result of soft constraints, such as high transportation costs, which are the result of the structure of the transport sector and of complex and burdensome procedures and regulations imposed by central and local administrations. The stock of trucks is old, drivers are not always competent, and multiple controls on the roads contribute to increased costs and travel times.

272. **Consequently, urban-rural economic linkages and linkages to export markets are constrained by the dysfunctionality of roads and related hard and soft infrastructure.** Rural areas and agricultural production zones remain distant from the main markets, including export markets. With the rapid urban growth, urban mobility is important for the development of cities.

However, mobility is constrained by increasingly significant impediments related to outdated infrastructure, weak public transport systems, and ill-adapted behaviors.

273. The following section discusses the main constraints on the development of the transportation sector, using the framework defined earlier.

274. **Constraint 1: The lack of adequate funding for development and maintenance:** The development and maintenance of infrastructure require adequate funding. Over recent years, the average budget allocated to the Ministry of Transports has stood at approximately 5 percent of the total budget. This budget is insufficient to cover not only the sector's current needs, but also its future needs, with these needs set to increase in coming years with the country's rapidly expanding population.

275. Burkina Faso has established a road maintenance system which was supposed to be financed by dedicated funds. The Special Fund for Roads ("*Fonds Special Routier du Burkina*," FSR-B, and the former Road "*Fund - Fonds d'Entretien Routier du Burkina*") is underfunded and unable to fully finance the required road network maintenance. The Government provides only 50 percent of the funds required to adequately maintain the classified road network (15,300 km). Efforts should be made to improve the level of collection of funds and the associated transfer mechanisms. As of 2014, only 30 percent of the road network could be classified as being in good condition, a very low level even by generally low regional standards.

276. The use of private funding could be considered for specific important and strategic roads. However, it is hard to imagine that this source of funding would be available on a large scale, simply because of the low volume of traffic in Burkina Faso.

277. While additional funding is essential, it should be noted that some measures could be taken to increase mobility without a huge amount of additional financial resources. In particular, these measures could include reforms to the organization of the transport sectors, through measures such as the formulation and implementation of more efficient regulations to govern matters such as the overloading of trucks. In addition, measures to professionalize drivers through the provision of training and other measures could help to reduce transport costs and delays. Actions can also be taken to reduce burdensome police and customs controls along the road, including at borders.

278. **Constraint 2: Matching plans with the availability of funding and addressing limited capacities:** The Government has prepared the Transport Sector Development Strategy, which runs from the period from 2011 to 2025 and is intended to develop the infrastructure network to cater to economic needs, improving the level of transportation service, particularly in the rural areas, facilitating international traffic, and supporting regional integration. In addition, the Ministry of Infrastructure has prepared a National Road Program, the "*Programme National Routier* (PNR)," for the period from 2016 to 2020. This plan provides a roadmap for the years ahead, providing a sense of direction to enable the prioritization of projects.

279. At this stage, the main challenge for the Government is to match its ambitious plans with the availability of public and private funding and to address the relatively low capacities of the sectors. Within this context, meeting transport connectivity standards by using lower-cost road surfacing technologies (such as single-surface treatment) could reduce the associated annual price tag from US\$ 144 million to US\$ 105 million.

280. **Constraint 3: Improving the regulation of traffic:** The management of the roads sector suffers a number of weaknesses. Some of them are embedded in the PFM issues that affect the

national budget more broadly, such as low execution rates due to weak procurement procedures and weak control of the use of the funds.

281. **However, a number of weaknesses exist specifically at the sector level.** There is a multiplicity of agencies and institutions that weaken decision-making processes and explain the lack of accountability. The lack of coordination is most apparent in the area of urban transport infrastructure, where the responsibilities of the municipalities, district and central administration are often poorly defined.

282. **While the legal framework for the regulation of traffic conforms to a significant extent to international standards, in actual practice, implementation is often very weak.** The number of accidents on national roads is high. Violation of traffic regulations and the weak enforcement of sanctions contribute significantly to unnecessary congestion, especially in urban centers. Lastly, there is a need to strengthen vehicle inspections (Regulation 14 of the WAMEU agreement signed in 2005), particularly in the case of trucks used for freight transport. These trucks are often significantly overloaded, and pose a major danger to other vehicles and important damage to roads.

283. **Constraint 4: The lack of technical capacities:** The lack of technical capacities in all areas, from management to monitoring, is a constraint on the provision of efficient and modern transportation services. The Ministry of Transport has a total of only four engineers, with no mechanical engineer to plan and monitor transport programs and policies adequately. The combination of deficient infrastructure, lack of human resources and inadequate regulations is causing into a huge gap between Burkina Faso and other countries. While the other ministries have created training centers to promote and replace retired high level civil servants in their respective areas of competencies, the Ministry of Transport has yet to do so. In addition, many transport operators are not staffed with suitable “*gestionnaires*” to carry out their activities efficiently. While driving schools are proliferating in the thirteen regions of Burkina Faso, most of them have no instructors that meet international standards (UN IRU agreement) and their curricula do not meet modern driving and safety standards.

284. **Constraint 5: Affordability of public and private transportation services:** In the area of access to transportation services, affordability is an issue not so much to the extent that it constrains access to roads, but rather refers to the affordability of public and private transportation services. Most households do not have the financial means to purchase their own car or even a motorcycle. As a result, throughout the country, there was an average of only one motorized four-wheel vehicle per 61 people, and 12-wheel vehicle per 30 people in 2014.

285. **In terms of access to public transportation, the biggest issue is not so much the cost of public or even private transportation services, but rather physical accessibility.** The cost of these services is regulated by the Government, and accounts for less than six percent of the average household budget per year. However, on average, two thirds of members of the poorest group of households are located at a distance of more than 30 minutes’ travel from the closest public transportation point. In the case of members of the wealthiest groups, this ratio declines to one third.

Constraints behind the provision of communication

286. In Burkina Faso, the level of access to mobile telephones and other ICT tools is relatively good. In 2014, two-thirds of households reported owning at least one mobile phone. The rate of ownership was high even for members of the poorest households, with the rate for this group standing at 6 percent. The rate was higher for men and young people in general than it was for women and old people. By contrast, the usage rate for other ICT tools, such as computers, remains very low, as does the rate of access to the Internet. Only 5 percent of people reported having used a computer over the past 12 months in the 2014 Household Survey, while only six percent reported having been connected to the Internet over the same period.

287. The high rate of usage of mobile phones is a common characteristic throughout Africa. The reasons for this high rate of usage have been widely discussed, with significant factors including the deregulation of the sector with the arrival of private operators, break-through technological innovations (3G was introduced in 2013), and affordability. New ICT tools have contributed to closing the distance between people and are increasingly used to facilitate the transfer of money and services.

288. While Burkina Faso has followed these trends, with the rate of usage increasing dramatically in recent years, it still records much lower rates than countries such as Kenya and Tanzania in East Africa or even Côte d'Ivoire in West Africa. In 2015, only 9.4 percent of the population were using ICT, significantly lower than the average rate of 13 percent for ECOWAS countries. Also, the average band rate of 2,860 bit/s available per user is well below the rate of 8,349 bit/s per user recorded in Senegal or the rate of 221,660 bit/s per user recorded in France.

289. The following sections contains a list and discussion of the constraints that have affected the recent development of this sector:

290. **Constraint 1:** In contrast to the other infrastructure sectors, the bulk of financing in the telecommunication sector has been from the private sector. However, public investments are often necessary to build the shared infrastructure required to enable private services to exist, both at the regional and national level. Concessional financing has been made available by donors, including through regional projects, to connect Burkina Faso through the backbone with Niger and Ghana. While public investment is still required to establish the last-mile network necessary to connect households, this access gap can be addressed by smart regulatory interventions (USF, licensing conditions, spectrum reframing, etc.).

291. **Constraint 2:** The role of the Government is threefold: (i) vision; (ii) coordination; and (iii) regulation. The first two roles relate to planning, while the last one relates to protecting operators and customers through the formulation and implementation of adequate regulations. In terms of vision, the two main challenges are to improve the level of access to reach international standards and to reduce the connectivity gaps across regions. To address these two challenges, Burkina Faso must build basic cable infrastructure to establish connections with neighboring countries and to extend connections to households at the local level, including in rural areas. The speed of connection will also need to be accelerated through the development of this new infrastructure.

292. In terms of coordination, the institutional framework for the regulation of the communication sector remains fragmented. There is a need to establish better linkages between the Ministry of Telecommunications and other relevant agencies, such as ANPTIC. There is a lack of integrated digital platforms and applications for the Government. Progress has been realized through the WAN initiative, but this effort still needs to be complemented by the implementation of the BKF 21 project, which is intended to establish linkages with several secondary cities through satellite connections.

293. **Constraint 3:** In order to address governance-related constraints, the main challenge is to find the balance between competitiveness and equity. Competitiveness is key for private investors, who need to be able to generate sufficient levels of profit to make the necessary investments in the required infrastructure. However, equity is also essential to ensure that private operators do not charge excessively in the context of the oligopolistic structure of this sector.

294. While prices appear reasonable for mobile communication services, they are relatively high for Internet services. One reason for the relatively high prices might be the small number of service providers in this field (two for mobile internet, and three for fixed internet). Thus, the authorities may be able to address this constraint by opening the market to enable more operators to provide services, and thereby increasing the level of competitiveness.

295. In this context, strengthening the capacities and expanding the mandate of the regulatory agency (ARCEP) is essential. This agency has to improve its capacities, particularly through the deployment of a greater number of qualified technical staff. In addition, its mandate needs to be expanded to cover the growth and expansion of the sector and the adoption of a range of new technologies.

296. In addition, measures need to be implemented to enable the proper monitoring of the funds collected by the Telecommunication Agency.

297. **Constraint 4:** In the area of technical capacities, it is essential to implement measures to build the capacities required to maintain and develop the ICT infrastructure and services. On the supply side, this constraint should be addressed through the inclusion of capacity building components in upcoming investments. There is an untapped potential to leverage the ACE center in Burkina to provide high-tech training in the areas of telecommunications engineering and computer sciences.

298. As might be expected, the rate of usage of ICT tools is higher amongst young people. Only 33 percent of people over the age of 65 years own a mobile telephone, with this proportion increasing to 63 percent in the case of people aged between 15 and 24 years. A gap of a similar magnitude exists between educated and non-educated people.

299. **Constraint 5:** Affordability does not appear to be a significant constraint in the case of ownership of mobile phone, although it clearly does act as a constraint in the case of the ownership of computers and access to the internet. Almost 90 percent of people with post-secondary education own computer, which reflects not only their higher level of need for this equipment, but also their higher income.

300. The average cost of a monthly internet plan stands at about US\$ 44 dollars, which is higher than the average income for the majority of the population. This cost is slightly higher than the average level for ECOWAS countries, which stands at US\$ 42.

Extreme vulnerability

301. Clearly, the accumulation of productive and human assets can be negatively impacted by the degree of vulnerability to shocks. A natural hazard can destroy houses and land. A job loss or a sudden death can force families to withdraw their children from schools. There is a growing literature linking poverty and vulnerability.⁹⁴

302. As reported earlier, approximately two-thirds of households in Burkina Faso report being negatively impacted by shocks every year. The most significant of these shocks relate to natural hazards. These shocks may have a significant impact on welfare at the household level not only because of their intrinsically destructive nature, but also as a result of the absence of collective mitigation mechanisms. Traditionally, most vulnerable members of the community rely on their own resources, their families and on informal networks as mechanisms to cope with the impact of shocks and insecurity.⁹⁵ While such mechanisms may provide some security, their effectiveness is reduced by a number of significant limitations. The most important is that the families of vulnerable members of the community are themselves often poor or vulnerable to poverty and thus cannot always provide support. Informal collective mechanisms may be of use to mitigate against the impact of household-level misfortune, but less so in the face of major or sustained shocks that may affect entire communities, as may be the case with climatic shocks. In the latter cases, the effectiveness of the mechanisms may be significantly reduced by the fact that all members of a support network may be impacted by the shock to a greater or lesser extent. In cities, informal protection networks also tend to be either less effective or non-existent, leaving individuals with little or no protection in the case of disease, job loss, or other catastrophes. Private sector mechanisms, such as insurance schemes, remain limited and accessible to only a small proportion of privileged households. Health insurance is usually only available to employees in the formal sector, with few or no such mechanisms available to the self-employed, most of whom Worked in the agricultural sector in rural areas. Other risks insurances are non-existent and there is no organized social protection system (like unemployment benefits or any specific assistance for poor households).

303. In recent years, the Government has attempted to strengthen its social protection policy through a stated intention of offering collective insurance mechanisms to the most vulnerable groups. This commitment resulted in the adoption of the new Social Protection Strategy in 2014, which recognizes the need to develop social safety nets similar to those developed through initiatives implemented first in Latin America and more recently in Africa. However, as yet, little progress has been made in terms of the implementation of this strategy.

304. To varying extents, the Government has utilized social protection mechanisms of three main types, these being a contributory system; the provision of subsidies; and direct assistance to vulnerable groups. While the Government has established a contributory pension system, its coverage is extremely limited, including only a proportion of those involved in the formal sector and almost completely excluding those in the informal sector, where the majority of

⁹⁴ J. Morduch, *Poverty and Vulnerability*, The American Economic Review, 1994. S. Dercon, *Assessing Vulnerability to Poverty*, Paper prepared for the UK Department for International Development. Department of Economics, Oxford University, 2001. F. Bourguignon, C. Goh and. Kim, *estimating individual vulnerability to poverty with pseudo-panel data*, World Bank Policy Research Working Paper 3375, August 2004.

⁹⁵ According to the 2014 Household survey, half of the households use their own savings to cope, one out of four households has to sale an asset and one out of four benefit from an informal credit or assistance. There is also 20 percent of households admitting that they adopt no strategy.

the workforce is employed. At present, it is estimated that less than 10 percent of the labor force contributes to the social security system.


305. **The Government also subsidizes the provision of basic services and infrastructure.** In particular, it provides subsidies to control the price of electricity and cotton inputs. However, the effectiveness of these subsidies as a pro-poor measure is extremely dubious, given that very few poor households have access to electricity. Subsidies on cotton inputs are distributed to all producers, regardless of their wealth. As a pro-poor measure, it is common for governments to provide basic social services free of charge or at a minimal cost to the population, as in the case of initiative to provide universal access to basic health services or free primary education programs. Those initiatives are well intended but are generally very costly for the Government, making these initiatives difficult to implement for governments with limited financial resources, such as Burkina Faso. They also target all households, without any distinction to their level of income. However, they may be feasible in the case of services for which the marginal cost is very low and where small variations in prices can make significant differences in terms of behaviors at the household level. Global experience has shown that water and immunization programs are prime candidates for such comprehensive initiatives.

306. **In Burkina Faso, there are very few examples of the provision of direct assistance to vulnerable groups through measures such as food programs, public work programs (*Travaux d'intérêt général*), and cash transfers.** However, a cash transfer program was initiated in 2014, with the assistance of the World Bank. This program provides support to poor households for three years in order to build up their resilience and to help them invest in productive assets and in their children's human capital. However, coverage remains very limited in terms of numbers and scope, with only 40,000 households in three regions (North, East and Centre-East) enrolled in the program. By comparison, the cash transfer program in Tanzania has been scaled up to cover around one million households, nearly 10 percent of the population.

307. **The first constraint on the provision of direct assistance relates to the limited financing available for social protection programs.** The current budget allocated to social protection is in the range of 1 percent of GDP, which is very low even by low-income countries. By contrast, Ethiopia, for example, spends more than 3 percent of its GDP to finance safety nets programs. Tanzania has also substantially increased its level of financial support in recent years. It must be acknowledged that in these countries, donors provided a significant degree of support through the allocation of financial resources to safety net programs, which has not yet been the case in Burkina Faso.

308. **Because of the significant financial constraints, it is therefore necessary to design and implement the most cost-effective programs possible.** Unfortunately, the current strategy remains highly unselective, with many and competing programs. While each of these programs may be well intended, there is simply not enough money and human capital capacity to implement them all effectively. As a first step, the Government will need to formulate a well thought out strategy to select the most efficient and effective programs.

309. **The second constraint relates to the difficulty of targeting the most vulnerable groups.** Effective targeting is highly dependent on the availability of reliable statistics. While instruments such as the 2014 Household Survey may inform the targeting of interventions, the sample of households on which the survey was conducted is not statistically consistent at the community level, with this consistency a necessary requirement for the development of effective distribution mechanisms. Therefore, these surveys need to be complemented by initiatives that can identify more precisely the most vulnerable households in each community. In Burkina Faso, the national registry system can help distinguish between chronically poor and vulnerable (transient)



households. In any case, international experience shows that the criteria used to target beneficiaries should be kept as simple as possible. For example, it can focus on the poorest regions or the regions most exposed to shocks (geographical criteria), on children (age criteria) or women (gender criteria). Simplicity also limits the risk of leakages during implementation.

310. **The third and last constraint relates to delivery mechanisms.** The financial support provided through a direct transfer intervention needs to be delivered on time and in full to intended beneficiaries. In Burkina Faso, this delivery is constrained by the low level of financial inclusion of the poor, preventing financial or cash transfers through the banking system. The Government has had to rely on the postal network, which is well known for its lack of efficiency and transparency. However, the recent rapid growth of micro-finance institutions and the dramatic increase in the rate of usage of mobile phones have been a game changer. Those new instruments are now used by a high proportion of households, including those in the poorest groups, as evidenced earlier. These technologies create new channels for the delivery of assistance, as has been successfully demonstrated by experiences in many other poor countries, including Tanzania.

2.4: Conclusion


311. **Burkina Faso's quest towards the achievement of the twin goals of reduced poverty and shared prosperity has been constrained by the difficulties it has faced in: (i) creating a sufficient number of productive jobs to provide employment to its rapidly expanding labor force; and (ii) providing access to a minimal package of infrastructure and services to its poor population.** These two difficulties have been demonstrated on the basis of the empirical evidence in Burkina Faso with reference to the two of the main theories of economic development: the structural transformation of the economy and the poverty trap.

312. **However, these two challenges are more symptoms than root constraints that fully explain Burkina Faso's mixed results in terms of the progress it has made over the past few decades.** Therefore, a systematic effort has been made to identify the main constraints by using the tree-decision approach advocated by Hausman-Rodrik-Velasco in recent years. This approach has enabled the identification of a set of key constraints behind the two symptoms mentioned above.

313. **With regards to the first symptom, the failure to create a sufficient number of productive jobs, the constraints affecting the creation of both farm and non-farm jobs were examined and analyzed.** While a common set of factors may be expected to influence all categories of jobs, their force and significance can vary considerably depending on the sector and location. For example, factors related to land property rights and access to water may be far more significant in the case of farming than for an industry located in Ouagadougou.

314. **The creation of farm jobs appears to be constrained by five main factors, these being climatic risks (water); underdeveloped collective infrastructure to link farms to markets; the low level of access to external finance to enable the purchase of equipment and inputs; the lack of secure land titles; and insufficient access to information and technologies.** Those constraints vary in order and intensity in the cases of cereals, cotton and livestock respectively.

315. **The creation of non-farm jobs appears to be constrained by four main factors, these being restricted access to finance, insufficient economies of scale resulting from distance to markets, low levels of competition, which reduces incentives for (adaptive) innovation; and human capital issues, particularly the insufficient skills of the working force.**



316. With reference to the second theory of economic development, the poverty trap, a distinction was made between access to social services, infrastructure, and vulnerability, as follows:

- a) *Social services*: The provision of health and educational services is limited because of financing gaps that are exacerbated by the low level of efficiency in spending; the insufficient number of qualified staff and their uneven distribution across regions; low rates of returns; and budget constraints on poor households.
- b) *Infrastructure (energy, water and sanitation, transportation, and communication)*: The main constraints are found in the mismatch between the limited allocation of financial resources and rapidly expanding demand; poor planning and the slow rate of execution of projects; political interference in the management of sectors and tariffs, and budget constraints on poor households.
- c) *Vulnerability*: Shock are frequent and have a significant impact at the household, district, regional, and national levels. Despite this, prevention and protection programs are extremely limited in terms of scope and coverage, and are constrained by lack of funding and by the limited capacity to target and distribute cash transfers or services effectively.

317. The complete set of constraints identified in the analysis is summarized in Annex 5.

PART THREE: PRIORITIES FOR POVERTY REDUCTION, SHARED PROSPERITY, AND SUSTAINABILITY


318. This SCD argues that Burkina Faso's lack of progress towards the achievement of the twin goals of poverty reduction and shared prosperity can be explained by two underlying truncated processes. Burkina Faso has not been able: (i) to create a sufficient number of productive jobs to raise incomes at the household level; and (ii) to provide a minimal package of services and physical assets that poor households need to escape poverty. On this basis, a set of constraints was identified by conducting a decision-tree approach in Part Two, with the identified constraints ranging from difficult access to finance for many private operators to the unexpected impact of climatic shocks; the lack of qualified staff in education and health sectors; and political interferences in the management of infrastructure sectors.

319. The objective is here to identify priorities that are intended to address the above-mentioned set of constraints as inputs for policy-making. This process utilizes a two-step approach with the application of three basic filters to derive 10 cross-cutting priorities on the basis of the analysis of constraints conducted in the preceding part of the SCD. The second step is to rank these priorities on the basis of feedback collected from a phone survey of over 1000 households and a smaller group of targeted experts from the Government, academia and the donor community. This combined approach has led to the identification of three top-tier priorities: (i) the appropriate management of natural resources; (ii) the consolidation of skills for the fast-growing labor force; and (iii) the promotion of gender equity. Addressing these priorities will have a significant impact in terms of the achievement of the interlinked goals of the creation of a significant number of productive jobs and the provision of a minimum package of quality services and infrastructure to the poor. The seven other priorities are described in the text, with these priorities aiming to address some of the country's key weaknesses and to consolidate its strengths. While these priorities are presented and discussed separately and while addressing each priority on its own would facilitate progress towards the twin goals, it should be stressed that the priorities are interlinked and that addressing them together will have a positive synergistic effect and therefore a greater impact in terms of the achievement of the goals.

320. Part Three of the SCD is divided into four sections. The first section describes the two-step methodology used to identify the 10 cross-cutting priorities. The second section focuses on the three most significant constraints. The third section reviews the second-tier priorities. The last section discusses knowledge gaps and directions for future research.

3.1: Methodology for selecting cross priorities

321. To create a greater number of productive jobs and to provide a minimal package of basic services and infrastructure, it is not sufficient merely to implement one or two critical policy measures. Rather, it requires comprehensive, concerted, and integrated actions to address a broad set of priorities. This relatively broad agenda reflects the complexity of Burkina Faso's development challenges and opportunities. It is based on a recognition that investments in a broad set of productive endowments are needed for Burkina Faso to achieve its aspirations. Effective market institutions and good governance (institutional capital); quality infrastructure (physical capital); a productive labor force with relevant skills (human capital); and sustainable use of Burkina Faso's natural resource asset (natural capital) are all critical to facilitating the achievement of higher levels of growth and shared prosperity into the future. While a broad range of actions in differing areas is required, international experience and the science of delivery



suggest that adopting cross-cutting actions will help create synergies, resulting in greater impacts at lower cost.

322. To further prioritize actions to address the set of constraints that constrain the achievement of the twin goals in Burkina Faso, this SCD utilized a two-step approach. The first step aimed to derive a set of 10 cross-cutting priorities from the analysis of constraints produced in the preceding part of the SCD. To derive these cross-cutting priorities, three key filters were applied:

- a) Which measures are the most likely to enable Burkina Faso to achieve the twin goals of creating a greater number of productive jobs and providing a minimal package of services and physical assets to the poor?
- b) Which measures respond to the most pressing needs and aspirations of the population, especially members of the poorest segments?
- c) Which actions will be the easiest to implement in terms of the Government's available financial resources and technical absorptive capacity?

323. The World Bank team identified a set of priorities that attempt to address the main constraints that were identified in the analysis conducted in Part Two. Rather than tackling individual constraints by sectors, the focus was on cross cutting actions that could address a set of constraints simultaneously. For example, the lack of connectivity was identified as a constraint for farmers, non-farm businesses and for the access to basic services by the poorest households. It was therefore proposed as a potential priority. The same approach was followed for other priorities such as urbanization, skills, vulnerability, and governance, all of which were identified as key constraints on job creation and access to basic services or infrastructure.

324. In order to identify the most appropriate set of cross-cutting actions, a wide range of local stakeholders were involved in an intensive consultation process (see Box 18). This process enabled the World Bank to test its initial choices and to take the stakeholders' feedback and ideas into account. At the end of this process, 10 cross-cutting priorities were identified, as presented in Table 1 below.

Box 19: The In-Country Consultations for the SCD

The SCD consultations commenced on September 5, 2016 and lasted for approximately two months. The World Bank team, led by the Country Manager, visited the East and Central regions and the regions of Mouhoun and Hauts-Bassins, with a particular focus on the poorest regions. Another objective was to find a balance between rural and urban areas, with the inclusion of Burkina Faso's two most important economic centers (Ouagadougou and Bobo). In the regions, local governments facilitated the invitation of large and diversified groups of stakeholders, ranging from representatives of the formal private sector (regrouped within the Chamber of Commerce and Industry), traders and entrepreneurs in the informal sector, members of civil society, members of youth associations, women, representatives from local and central government agencies and representatives of the donor community. Meetings were also organized with Parliament members, traditional chiefs, and media.

The objective of these consultations was to present the initial diagnostic formulated by the World Bank team to collect feedback from multiple and diverse stakeholders. Overall, the diagnostic was well received, with a widespread recognition of the relevance of the two underlying hypotheses that Burkina Faso has yet to fully achieve the twin goals of poverty alleviation and shared prosperity because of its lack of capacity to: (i) create sufficient productive jobs for its rapidly expanding population; and (ii) deliver sufficient quality services and infrastructure to the poorest segments of the population.

Several participants raised specific concerns. Women and women's associations raised issues related to the difficulties they faced in developing their income generating activities because of lack of access to land and to external finance. Many raised the issue of their incapacity to obtain credit from banks as they cannot provide the requested guarantees. Young workers complained about the challenges they faced in the labor market, even following participation in higher education. They stressed the gap between the theoretical knowledge they had gained in schools and the needs of the private enterprises. Farmers talked about their lack of knowledge of new technologies and their dependence on rainfalls in the absence of modern irrigation systems.

In the two urban centers, the quality of the business environment and of the governance framework also received substantial attention. The two longer term challenges of demographic growth and climatic changes were also discussed at many meetings.

A final workshop was organized for the Government's Cabinet, under the leadership of the Prime Minister, to share the results of the consultation process, to listen to top policy makers' reactions and advice, and to align the diagnostic with the national strategy adopted by the Government in July 2016.

325. The second step was to rank the identified 10 priorities by consulting the main body of stakeholders, including but not only through a phone survey of approximately 1,000 people in October/November 2016. The sample group was defined to account for age, gender, occupation, and location characteristics.⁹⁶ In addition, the questionnaire was shared with approximately 60 targeted experts, including from the World Bank, academia, and government. Interviews were also conducted with experts, including with members of the Steering Committee, which was composed of national academics, former top officials, and representatives of civil society.

326. From this consultation, three first-tier priorities were identified as most important by more than 40 percent of the respondents (see Table 15). The other seven priorities (second-tier) were identified as most important by proportions ranging from ranging between 37 percent and 9.3 percent.

⁹⁶ For complete details on the sample and on result, see SCD background paper by APIDON, *World Bank's Phone Survey of Population's assessment on Policy Issues and Priorities in Burkina Faso*, November 2016.

Table 15: Summary of priorities and their ranking

	Priorities	Contribution to:
First tier	Priority 1. Improve Natural Resources Management	Natural and physical assets
	Priority 2: Promote Skills Development	Human assets
	Priority 3: Reduce Gender Bias against Women	Human assets
	Priority 4. Build Infrastructure to Promote Further Local and Regional integration	Physical Assets
Second tier	Priority 5. Encourage Financial Inclusion	Human and Physical Assets
	Priority 6. Increase Resilience through Improved Social Protection to the Poorest	Human and physical Assets
	Priority 7: Ensure Fiscal Efficiency and Macroeconomic stability	Institutional Assets
	Priority 8: Build up Inclusive and Transparent Institutions	Institutional Assets
	Priority 9: Promote Competition and Private Sector Development to Stimulate Efficiency and Innovation	Physical and human assets
	Priority 10: Manage Urbanization with efficient urban centers	Physical and human assets

327. Before describing those priorities and the manner in which addressing them will have a joint impact on job creation and on improving the level of access to services and infrastructure by the poor, it is worth underscoring that the results obtained were consistent across age groups, location, and gender. The only few exceptions were as follows:

- **Rural Vs Urban:** In urban areas, the promotion of skills development was viewed as one of the three most important priorities by the largest proportion of respondents, followed by improved management of natural resources and reducing gender bias. Surprisingly, the management of urbanization was regarded as one of the three most important priorities by the smallest proportion of both urban and rural respondents. In rural areas, the development of connective infrastructure was identified as one of the three most important priorities by a relatively larger proportion of the respondents, ranking in second place, reflecting the distance of these respondents from markets.
- **Men Vs Women:** In terms of gender, with men, the third largest proportion of respondents ranked the development of infrastructure as the important priority, while with women, the largest proportion of respondents ranked reducing gender bias as the most important priority.
- **Old Vs Young:** Amongst respondents under 30 years, the largest proportion of respondents ranked the promotion of skills development as one of the three most important priorities, while in the case of respondents aged between 30 and 50 years, the fourth largest proportion ranked it as one of the three most important priorities.
- **Experts Vs the General Populace:** Amongst the group of targeted experts, the largest proportion stated that building up inclusive and transparent institutions was one of the three most important priorities (78.6 percent), a much larger proportion than those identifying improve natural resources management or the promotion of skills development as most important. Reducing gender bias was ranked as one of the three most important priorities by only the fifth largest proportion of these respondents.

328. While the ranking of the priorities was partly based on the perceptions of the phone survey's respondents, it is worth underscoring that the sample used, while representative, was small and may not fully capture all views in the country. The responses may also reflect opinions on priorities that might evolve over time. More fundamentally, one can question if policy making should be based on the perceptions of citizens who may not have the background necessary to understand the complexity of economic analysis, especially when certain issues, such as the quality of governance or the efficiency of fiscal policies, appear somewhat abstract.

329. However, even with these limitations, the resulting ranking based on the two-step approach can be said to express the aspirations of citizens and tackle in a comprehensive way the need to improve human, institutional, natural, and physical capital of Burkina Faso (see last column of Table 15). These 10 priorities, and their ranking, are also relatively well aligned with the main axes identified by the Government its recent National Development Plan (NPDS), as illustrated in Annex 6. Among the differences are the greater emphasis placed on developing the resilience of the most vulnerable groups through improved social protection and the management of urban development by efficient cities in the SCD.

330. The manner in which priorities are presented is always subject to interpretation. Some critical concerns for the future of Burkina Faso, such as governance, vulnerability and private sector development, are captured well by specific priorities (such as Priority 8 on stronger institutions, Priority 6 on resilience, and Priority 9 on improved competition), but they are also embedded in other priorities. For instance, improved governance is required for the good management of natural resources (Priority 1), for skill development (Priority 2), or for achieving fiscal efficiency (Priority 7). Similarly, good management of natural resources (Priority 1), inclusive finance (Priority 5), safety nets (Priority 6) and efficient fiscal management (Priority 7) are all necessary to improve resilience and reduce vulnerabilities both at the household and macroeconomic levels. While the development of the private sector is captured by Priority 9, this development is also a key engine for the delivery of more and better education services (Priority 2), the optimal use of natural resources (Priority 1), the development of physical and virtual connectivity within the country and at the regional level (Priority 4) and urbanization (Priority 10). This double reading of our list of priorities emphasizes the importance of these three concepts not only on their own, but also through their impact on other areas.

331. Last but not least, the Government is likely to face trade-offs during the implementation, even after the selective process proposed in this study. Many actions will require financing that may exceed the existing fiscal space or capacities from the private sector. In that context, Priority 7 on fiscal efficiency is especially important, as it aims at increasing the value for money in the public sector. Priorities 8 and 9 are also pivotal, because they would increase accountability and enhance private sector participation (including through PPPs). Nonetheless, even with adequate measures to increase public and private finance, some further selectivity might be required. This explains some choices made in the presentation below, such as in Priority 6, where the focus is on cash transfers because it appears to be a relatively cost-efficient action for Burkina Faso. The same principle applies with the recommendation to focus on connecting villages to secondary cities, in Priority 4. Our main message is that the prioritization exercise presented in this SCD should be viewed as indicative for policy makers, although they may need to adjust it depending on the evolving context over time.

3.2: First-tier of priorities: Natural resources management, skill development, and gender equity

332. Improved natural resources management, the promotion of skill development, and reducing gender bias were regarded as the three most important priorities by more than 40 percent of the survey's respondents. These three priorities aim at addressing some of Burkina Faso's main constraints, such as limited water and energy resources or the low educational outcomes and the bias against women on the job market. They also intend to consolidate some of country's strengths, such as the availability of a large extent of agricultural land and of mineral reserves and of a young and growing labor force. In the case of each of these priorities, we explain why the particular priority matters for Burkina Faso, with particular reference to its impact on job creation and the provision of services and the delivery of infrastructure. We then propose a number of actions that were identified through the analysis conducted in Part Two. When possible, we will refer to global best practice. These actions should be viewed as indicative, serving as input and providing a basis for the future CPF.

Priority 1: Improving Natural Resources Management

333. In spite of Burkina Faso's vast reserves of land and mineral wealth, it has not been able to exploit these natural endowments efficiently, with these endowments having been gradually depleted over time. Burkina Faso suffers from deficits in terms of water and sources of energy, requiring the smart management of these resources both in the short and longer terms.

334. The efficient management of natural resources will improve Burkina Faso's capacity to create a greater number of productive jobs and to increase access to services and infrastructure. Two of the country's most important economic sectors are the agricultural and mining sectors, together contributing to almost 40 percent of the country's GDP and to 85 percent of its employment. In addition, the living conditions of members of poor households will improve with better access to energy and water, which will in turn create multiplier effects through improvements to poor households' capacity to learn and to secure a decent job. Improved access to energy will also lead to an increase in firms' productivity and their demand for labor.

335. Looking forward, Burkina Faso will greatly depend improvements to the management of the following natural resources:

- **Land:** The aim should be to promote sustainable and optimal use of land across the country through good planning and smart management. This is vitally important, given the gradual depletion of arable land and the increasing intensity of climatic risks. Improved management is particularly important, not only in view of the traditional conflicts between pastoralists and farmers in rural areas, but also increasingly because of conflicts in urban or peri-urban areas as the result of the accelerating urbanization (see more on the urbanization process in the section on Priority 10). Concurrently, the Government should accelerate reforms to secure property rights, since land is perhaps the only physical asset owned by most farmers. However, without secure property rights, it becomes difficult for these households to invest in the longer term and to access external finance. Burkina Faso's economy requires a significant increase in the level of agricultural productivity. This is unlikely to occur unless major progress is made in the implementation of land property rights.

- **Mining:** Gold has become Burkina Faso's most significant foreign exchange earner, contributing to more than half of its merchandise exports. Prospects for the future are also good, with the discovery of significant additional mineral reserves. However, many citizens are yet to realize any material benefits from these resources. Burkina Faso should focus on three complementary actions: (i) maximizing joint investment projects in infrastructure such as roads and energy through smart partnerships between multinational companies and the State (including communities), as has been the case in Madagascar (see Box 20); (ii) creating synergies through the development of backward and forward linkages between large multinational firms and local SMEs; and (iii) securing tax and non-tax revenue and using these resources efficiently through the implementation of fair and transparent mechanisms. Traditionally, governments (including that of Burkina Faso) favor the third action at the expense of the other two, despite the difficulty of enforcing the compliance of both companies and official with the proper procedures. The last emerging concern to be targeted is the environmental and social impacts of mining, especially artisanal/informal exploitation, in terms of shocks on local communities, destruction of land cover and soil/water contamination.

Box 21: South of Madagascar: Building infrastructure through smart partnerships

Rio Tinto has invested more than US\$ 5 billion in a mining project in Fort Dauphin, in the South of Madagascar. This company has helped developed infrastructure throughout the region through a partnership with the Government and with the participation of donors such as the World Bank and the EU.

The starting idea was simple. Since Rio Tinto had to invest in roads, energy and a port for its commercial operations, it was therefore proposed to finance the extra mile with public money so that all these new infrastructures could also meet the needs of the broader population in the region. As a result, Fort Dauphin has the most modern port in Madagascar and benefits from a modern electricity network.

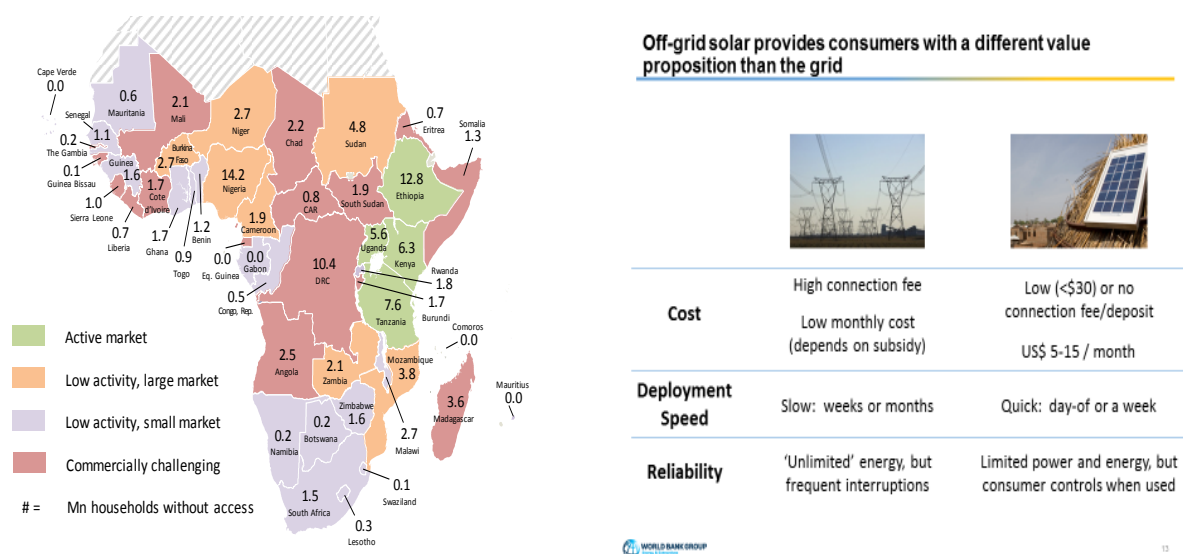
Concurrently, Rio Tinto has contributed to a fund for the development of the region and provided technical assistance to benefit local governments and local enterprises, including farmers.

- **Water:** Water resources are scarce in Burkina Faso due to the hot and dry climate and to the limited above and underground water reserves. Increasingly intense conflicts have emerged between users, including agriculturalists, livestock breeders, and urban population. Agricultural productivity has also suffered significantly from the lack of a reliable access to water. Public interventions should prioritize the development of irrigation systems that can significantly reduce the dependency on rain and therefore the vulnerability of farmers to shocks such as droughts (by far the most significant source of vulnerability in Burkina Faso).⁹⁷ Improved access to potable water should also be prioritized, with a particular focus on meeting needs in rural areas. Public funding will be necessary, but community-driven initiatives should also be considered, as they have proven to have been successful a number of other poor countries.
- **Energy:** With one of the lowest electrification rates in the world, Burkina Faso needs to improve the provision and distribution of electricity. This would require increases to the energy supply though a combination of: (i) a shift from expensive fuel/diesel to cheaper

⁹⁷ To improve irrigation, the authorities will need to address a variety of challenges, including weak planning, improper drainage design and inefficient maintenance plans and enforcement.

sources of production (including renewables); (ii) imports from neighboring countries (Côte d'Ivoire and Ghana) and (iii) improved financial management of the sector. Because significant investments are needed, the Government will have to partner with private operators. If these private operators can provide funding and technologies, the development of a comprehensive legal framework and a strong and independent regulatory authority should be prioritized to ensure the smooth functioning of markets, particularly given that the potential for political interference on the part of vested interests is high. Smart actions and the appropriate technological choices also offer cost-saving opportunities, with solar energy having particularly good potential, as recently demonstrated by cases in Morocco, India, and Zambia (see Figure 50 and Box 21).⁹⁸

Figure 50: The potential for solar energy



Source: World Bank.

⁹⁸ An important challenge would be to manage the demand for households for non-electricity energy. About 85% of household energy needs are currently met by wood energy. National potential for sustainable fuelwood production cannot fit the current demand, which continues to increase, leading to the destruction of wood stocks. Deforestation also degrades soils, negatively impacts water resources, and destroys non-timber forest product opportunities such as native shea nut production. The SCD could put more emphasis on rural energy access by mentioning local energy production through alternative means, e.g. bioenergy, biodigesters, off-grid solar etc.

Box 22: Kenya's street lights: Smart actions does not require much funding

The case of Kenya's dysfunctional street lights demonstrates the importance of maintenance. Although 46 percent of households reported that there were public street lights in their neighborhood, only 32 percent said the lights worked most of the time. Instead of having just a third of their city illuminated, Kenyans could have almost half their streets lit with a small amount of additional effort on maintenance (e.g. fixing broken lights and ensuring electricity supply). This is a low-hanging fruit given that electricity lines already exist and, by installing light poles or masts, these cities have already spent the bulk of the money needed to achieve the ultimate goal of lighting the streets.

Source: S. Gulyani, re you being served? The gap between effective and nominal access to infrastructure services, World Bank blog, August 2016.

Priority 2: Promoting Skills Development

336. Almost three-quarters of Burkina Faso's labor force has never participated in formal education. Without education and with few skills, they are unlikely to secure productive jobs and stable incomes. As earlier sections of this SCD have made clear, access to education remain highly unequal and inequitable: for example, only 51 percent of members of the wealthiest group have not participated in formal education, while this ratio raises up to 92 percent for members of the poorest quintile. Similar gaps exist across locations and gender (see next priority).

337. At present, it can be argued that the education system in Burkina Faso is in a state of low equilibrium. On the one hand, households have limited incentives to send their children to schools because the rates of return associated with longer periods of study are low. On the other hand, these rates of return are low because of the lack of funding, of quality teachers, and of educational programs. Any reform program would have to address those challenges on both the supply and demand sides simultaneously. They would also need to encompass all levels of education, from early childhood to post-secondary. They would also have to address vocational training.

338. To address supply-side constraints, the Government will need to think creatively to identify additional new sources of funding. Not only are there currently not enough teachers per students, the country's rapid population growth and its stated intention of providing universal education will result in a dramatic increase in the need for teachers. Additional investments in material and equipment will also be necessary. Public funding through the budget will most likely be the most important source of the required resources, but efficiency gains must be realized through the implementation of better controls and through improved financial and human management. Private funding will have to play an increasing role, especially in the provision of post-primary education in urban areas, where the student density is sufficiently high to attract private investors.

339. Beyond the need to find new sources of funding, fiscal efficiency gains will need to be realized to improve the value for money in the education sector. These efficiency gains could be realized by better management of human resources (for example, by using an effective evaluation system for teachers and linking it to salaries), and lower administrative costs. International experience has shown that improved accountability can be achieved by reducing the distance between providers and beneficiaries. For example, this can be achieved by increasing the role of local communities or parents' associations. Simple rules of good governance, such as

publishing the budget allocated to each school, could also improve the delivery of services at the local level.

340. Concurrently, the Government needs to address two key deficiencies in early childhood, primary, secondary and tertiary education, with these deficiencies relating to: (i) educational curriculum and (ii) teacher performance. International and local experience and evidence shows that these two factors are the most significant factors in determining educational outcomes. At present in Burkina Faso, the curriculum is not sufficiently oriented to meeting the needs of the labor market, contributing to the relatively high unemployment rate for post-secondary students. Teacher performance could be improved by introducing more financial and non-financial incentives for good performance and through the implementation of improved controls, particularly to reduce the high absenteeism rate. The reallocation of teachers toward underserved regions would help to reduce existing discrepancies across regions, with there being an excessive concentration of the teacher force in Ouagadougou.

341. Another issue that needs to be addressed is to improve the performance of private schools. This would require a better understanding of the factors influencing their quality and the kind of support, if any, they should receive from the national budget. An evaluation system should be implemented with a sense of urgency.

342. Technical and vocational training has been neglected, with less than 5 percent of the total student body participating in such forms of education. With only 3 percent of students graduating from standard secondary education, these alternative programs require specific attention. International experience has shown that strong vocational and technical programs can help provide basic skills to young workers, especially when they are delivered in close collaboration with the private sector, including through apprenticeships and on-the-job training.⁹⁹ In view of the rapid growth of private establishments, there is an opportunity to build on this trend by developing performance-based incentives and through close monitoring. At present, there are large variations in the quality of the education provided by these schools.

343. On the supply side, the most significant constraint relates to affordability, particularly in the case of poor families. Poor families do not have the financial resources to pay for education, with the issue not only relating to school fees, but also to transport costs and the opportunity costs related to the fact that those attending schools may have to forgo the opportunity to participate in the labor market for a significant period. One option would be to use school vouchers, targeting poor households (see Box 22). An interesting example is the conditional cash transfer program for primary education utilized in Pakistan and known as Waseela e Taleem.¹⁰⁰

⁹⁹ International experience has shown that integrated programs combining training courses and access to finance are the most performing in providing the tools to a largely poorly educated workforce to becoming independent employers. See for example, D. Mc Kenzie, *Identifying and Spurring High-Growth Entrepreneurship: Experimental Evidence from A Business Plan Competition*, World Bank Policy Research Paper, 7391, 2015.

¹⁰⁰ See for details, <http://pubdocs.worldbank.org/en/131781463001111932/13-Benazir-Income-Support-Programme-Waseela-e-Taleem-Pakistan.pdf>.

Box 23: How do School Vouchers Help Improve Education Systems?

While the demand for education has been increasing, resources remain scarce. In most countries, the Government is both the major financier and the provider of educational services. However, these services are still not equally accessible to all members of society.

One means of financing education is to provide families with the funding through cash transfers to schools based on enrollments or by providing cash to families to purchase schooling or, in other words, through vouchers. The objective of a voucher program is to extend the financial support from the Government to these other education providers and thus to provide all parents, regardless of income, with the opportunity to choose the school that best suits their needs and preferences.

School voucher systems are often promoted as a means of increasing competition in the school system. Advocates of the voucher system believe that competition will lead to efficiency gains, as both public and private schools compete for students and try to improve quality while reducing expenses. The idea is that when private schools are encouraged to attract students, they become innovative and thereby bring improvements to the learning process. Likewise, public schools, to attract students and the resources that come with them, seek to improve the services they offer to provide educational services on par with those provided by private schools. On the other hand, opponents believe that under a voucher system, private providers will be unaccountable to taxpayers and the public. They question claims of efficiency gains. They assert that choice will lead to privatization, less public control of education, and increased segregation. While all these concerns need to be taken into consideration, the decision on how to finance education should be based on evidence

Essentially, there are two types of voucher programs: Targeted or Universal.

Colombia has a targeted voucher system. The Program for the Expansion of Secondary Education Coverage (PACES) was launched in 1991 to provide the poorest third of its population with access to secondary education. The program was oversubscribed, so students selected by a lottery were provided with vouchers to attend private schools. Municipal governments provided 20 percent of the funding for PACES, with the federal government providing the remainder. The program, which ran until 1997, covered 125,000 children in 216 municipalities. The unit cost per student for participating private schools was 40 percent lower than for non-participating private schools. The lottery allocation created a natural experiment for researchers. Findings from the analysis showed that that voucher beneficiaries achieved higher levels of educational attainment than non-beneficiaries. When compared with non-voucher students, voucher students were 6 percent less likely to repeat a grade; they scored 0.2 standard deviations higher on achievement tests; and they were 20 percent more likely to take the college entrance exam. They were also less likely to marry young and higher wages.

Chile, on the other hand has implemented a universal voucher program since 1980. Every municipality receives individualized monthly grants based on the number of students attending class in its schools. The municipal authorities also fund student attendance at subsidized private schools, which parents can select. While test scores are similar in both, after controlling for socioeconomic status, unit costs are lower in subsidized private schools. Research on Chile's voucher program has been subject to a high level of scrutiny. Though there are no randomized trials or rigorous impact evaluations, a lot of research has been conducted on the system and the results have been mixed. Some find small average treatment effects, others find large treatment effects, and a few others find no effect. One study found evidence that the voucher program leads to increased sorting, as the "best" public school students leave for the private sector.

The case of the Netherlands also illustrates the effectiveness of vouchers. In this country, 70 percent of enrollments are in government-financed private schools. On average, these students tend to be from families from a lower socio-economic class than those from which pupils attend public school, and yet the average test scores they achieved are higher. The level of choice offered, with fixed funding from government per student (with additional funding for disadvantaged students) appears to provide sufficient incentives for Dutch schools to continue to strive to improve. At the same time, given the need for the schools to compete for students by demonstrating success, there is no evidence of grade inflation.

These examples demonstrate that voucher systems can enable countries to improve their education systems. However, they do so within a context. To understand how they work, if they work, and for whom they work, we need to do a lot more serious research. Fortunately, a lot of this research is underway by top economists from institutions in donor countries and by national researchers.

Source: <http://blogs.worldbank.org/education/how-do-school-vouchers-help-improve-education-systems>

Priority 3: Reducing Gender Bias against Women

344. **There is a significant body of evidence to demonstrate the extent of gender bias against women in Burkina Faso.** For example, Women-headed households are generally poorer; girls are less likely to go to schools than boys; even when they do attend school, they are unlikely to complete secondary education; they are discriminated against on the job market; they are less likely than men to own land; and they are less likely to hold a bank account.

345. **Specific actions to address the fertility rate are also required in order to improve the potential demographic dividend arising from the increase in the share of working people in the total population.** This dividend will be magnified if the fertility rate (five children per women average in 2015) is reduced through a combination of actions in the areas of education, labor mobility, family planning, and access to productive assets. International experience and historic evidence from Burkina Faso over the past few decades show that more educated, informed, and wealthier women are more likely to have less children and invest to a greater extent in the education and health of their families. A reduction in the fertility rate will also lower demographic vulnerabilities linked to pressures on the labor, land and services markets.¹⁰¹

346. **Reducing gender bias and improving gender equity is an effective way of creating more productive jobs and enhancing both human and physical assets.** If women have greater access to education, they will acquire the skills necessary for them to improve their productivity and so their income. Such an evolution will lead to an increase in the aggregate level of domestic demand, creating a virtuous cycle characterized by accelerated economic development, as the experience of many emerging countries over the past few decades clearly demonstrates. The building blocks for the achievement of this priority could involve a combination of the following actions:

- **Access to education:** As stated previously, girls are less likely to attend schools than boys, especially at higher levels of education, for a variety of financial and cultural reasons. Therefore, actions to reduce gender bias could involve the provision of incentives that encourage behavioral changes at the household level. One option could be to provide conditional cash transfers, with these transfers containing incentives to ensure that girls complete post-primary studies. A well-designed communication and information strategy should be conducted concurrently to raise awareness of the advantage of girls' attendance at school.
- **Maternal health and nutrition:** Women are still exposed to substantial risks during pregnancy and delivery. To address this, greater efforts must be made to provide adequate health services. In this area, the main constraint is not on the demand side, with evidence that members of households are willing to visit health centers if they are available and provide adequate services. Rather, the most significant constraints are on the supply side, relating mainly to the proximity of infrastructure and the quality of services. The training and recruitment of nurses and mid-wives should be prioritized, as the current ratio of these professionals to the general population in Burkina Faso is amongst the lowest in the world.
- **Family Planning:** While better educated and wealthier women would on average give births to fewer children, this trend would be gradual, increasing over time there is a need for information campaigns at the family level, which should be conducted in close

¹⁰¹ For a good survey on how a decline in the fertility rate can contribute higher growth rates, see D. Bloom, M. Kuhn, and K. Prettnner, *Africa's Prospects for enjoying a demographic dividend*, NBER working paper series, 22560, August 2016.

collaboration with local communities. Access to contraceptive devices needs to be improved, especially in rural areas, where the demand is not being met.

- **Access to productive assets:** Gender bias are especially apparent in rural areas where systems of land ownership generally favor men. Lack of land tenure security for women prevent them from investing to a greater extent in their productive activities and thereby increasing their income.
- **Reduced domestic violence:** While the full extent of this problem is difficult to capture accurately in numbers, it was raised as a significant issue by a number of groups during the SCD consultations. To address this issue, extensive information campaigns should be conducted, together with measures to ensure the enforcement of effective sanctions.

3.3: Second-tier of priorities

347. **The second-tier of priorities include cross actions such as the development of connective infrastructure, access to finance, and the promotion of strong and inclusive institutions.** They augment the first three priorities described above, as they have significant impacts on both job creation and the delivery of social and infrastructure services.

348. **The second-tier priorities aim at addressing four categories of constraints:** First, they aim to enhance the enabling conditions for private sector development. Secondly, they aim to ensure the emergence of a stable and sustainable macroeconomic/fiscal framework and strong institutions. Thirdly, they provide protection for vulnerable groups. Fourthly, they play a role in facilitating the management of urban development and the emergence of efficient cities. While each priority is presented separately, they are obviously interconnected in many different aspects. For example, strong regulatory agencies are necessary for good policy making, but they are also necessary for encouraging competition and innovation by private firms. Similarly, efficient cities will create the economies of scale necessary to facilitate the development of competitive enterprises.

Priority 4. Building Infrastructure to promote further local and regional integration

349. **Burkina Faso is small, landlocked country with no direct access to global markets.** Furthermore, most of the labor force remains located in rural areas, with poor connections between these areas and urban centers. Thus, those living in rural areas continue to be isolated from markets. Measures should be implemented to bring the market to operators, including farmers, so they can realize economies of scale and become more competitive.

350. **Improved connectivity is essential for the achievement of the commercialization of agriculture and the development of agribusiness.** Transport is essential to effectively link farmers to wholesalers, to processing industries, and to customers. Without improved connectivity, such a value chain cannot emerge, as cases from a number of landlocked countries clearly demonstrates. Not only do lower transports costs enable farmers to transport their products from the farm to markets, but they enable sellers to reach them more effectively. These combined effects create a virtuous circle, with increased access to markets and inputs increasing productivity and income, which in turn provides traders with increased incentives to meet the needs of farmers through the provision of inputs, which in turn results in further increases in productivity. To demonstrate the potential magnitude of improvements, in Colombia, for example, a reduction in transit time led to a 50 to 200 percent improvement in yields.

351. **Improved connectivity requires the construction and maintenance of an effective transport network, with such a network clearly lacking at present in Burkina Faso.** The focus should be not only on the construction of new roads, but also on their ongoing maintenance, with specific attention to regional corridors and rural roads. In Burkina Faso, two of the most important corridors are those connecting the country to Côte d'Ivoire and Togo. At present, both these corridors are characterized by high trade and transportation costs. The Ouagadougou-Abidjan corridor is associated with particularly high costs, even by African and regional standards. Reducing these costs would have significant positive economic benefits on the flows of goods, people, and services. Not only will these benefits apply to the corridor itself, there would be some significant spillover effects beyond the corridor itself. Not only would reduced transportation prices play a vital role in facilitating much-needed economic transformation, it would also have a direct positive impact on poverty reduction outcomes, by promoting better regional integration and improved access to basic goods and services. Notably, reduced transportation prices and more efficient logistics services to enable the movement of food staples would enhance food security by preventing the loss of crops during transport, while helping to strengthen the competitiveness of traditional exports such as cattle from landlocked countries in the Sahel.

352. **Investments in the building, rehabilitation and maintenance of rural roads probably offer the highest rates of return out of all public investment projects** (see Box 23). In terms of transportation costs, it is often the 'final mile' of road connecting primary producers to networks that is most significant. While the unit cost of building and maintaining those roads is relatively low, the number and extent of the roads required is so vast that the Government will have to prioritize expenditure in this area. In the determination of priorities, the authorities should focus on locations where roads are expected to produce the largest short term positive impact so that the support for road building is consolidated through a demonstration of its benefits. A number of clusters or potential growth poles have already been identified by the Government.

Box 24: India: The multi-benefits of connecting villages

One of the key issues in developing transportation and road services is the ability to achieve the twin goals of generating the great advantages that a new road brings to a village, while at the same time achieving cost effectiveness and compliance with environmental and social standards. The advantages of roads to a village community are clear: when a village in India finally gets a paved road, life becomes freer, safer, and more prosperous. A new road that connects a rural village opens the local economy to new opportunities. Additionally, farmers can travel further to sell their produce and thereby to receive better prices for their output, children can go to schools more easily and migrants who go elsewhere to work can come back to their families more easily.

A recent study has examined the impact of a national rural road construction program that has built paved roads to provide these benefits for more than 100,000 villages in India since 2000. This study shows that road construction to previously unconnected villages leads to a 10 percentage point reduction in the share of households and workers in agriculture, with an equivalent increase in participation in wage labor market. This sectoral reallocation is concentrated among males and households with low levels of land, precisely those groups who have the lowest costs and highest returns on sectoral reallocation.

Labor reallocation to the wage labor market is strongest in locations relatively close to major cities, suggesting the importance of access to urban markets in the process of achieving structural transformation. Rather than facilitating the growth of non-farm jobs in treated villages, rural roads enable workers to access external labor markets.

Source: S. Ashery and P. Novosadz, Market Access and Structural Transformation: Evidence from Rural Roads in India, 2016

353. **Regional evidence shows that high trade and transport costs in West Africa are at least to some extent the result of a combination of market distortions in the transportation sector.** In particular, inadequate regulatory frameworks, shortcomings in their implementation, and established collusive business practices limit effective competition within the trucking industry.

This sector is dominated by a large number of small, poorly organized and inefficient transportation services, which rely on intermediaries and market organizers to find freight. While this opaque allocation creates sizeable rents, because of their poor organization and high level of fragmentation, truckers themselves often only obtain barely break-even rates. The low level of profitability creates strong incentives for small truckers to resort to short-term survivalist practices, including practices such as the overloading of trucks beyond the legal axle load limit. Overloading adversely affects the durability of the trucks and the safety of their operations, damages the road network, and discourages containerization. In addition to the market structure, a major problem affecting the profitability of the trucking industry and increasing trade costs is the slow rotation time on the corridor (the small number of round trips from Abidjan to Ouagadougou made by the average truck). This is the result of a combination of several factors, including delays at the port, the difficulty of finding backhaul cargo, and cumbersome trade and transit procedures in both coastal and hinterland countries.

354. **Lastly, connectivity can also be improved through the use of virtual technology, particularly with the current explosion in the number of mobile devices.** While the penetration rate for mobile phones in Burkina Faso is not as high as in Kenya, Tanzania or even Côte d'Ivoire, it nonetheless stood at close to 70 percent in 2014, with the rate increasing fast. Increasingly, mobile phones are also used to facilitate money transfers. This includes not only domestic transfers, but also transfers from foreign countries. This is particularly important in Burkina Faso, where almost a third of the population migrate abroad in search of work. Mobile phones are also a game changer for poor households which have previously been isolated from information flows and markets. Burkina Faso needs to improve its communication infrastructure, particularly in terms of connections to the international network and in isolated regions. The implementation of the appropriate regulations is also essential to prevent excessive prices (or limited access), including for Internet access, which at present remains very expensive.

Priority 5: Encouraging financial inclusion

355. **International experience shows that higher levels of economic development are almost always accompanied by financial development.** In Burkina Faso, the level of financial inclusion is extremely low, with only 14 percent of people over the age of 15 holding an account at a financial institution. The credit market is also underdeveloped and highly fragmented, excluding almost all small and medium size business operations and poor households. By far, the lack of access to credit is the most significant constraint on private operators doing business in Burkina Faso.

356. **Financial inclusion starts with the monetization of the economy, with Burkina Faso's current level of monetization remaining extremely low.** It is necessary to identify and implement measures to promote the ownership of monetary accounts at financial institutions by reducing the costs and increasing the benefits. In particular, it is necessary to reduce transaction costs, with these costs remaining too high to make holding an account viable for a large proportion of households. For most of the population, particularly those in rural areas, the offices of financial institutions are located at great distance, with banking infrastructure still largely underdeveloped. The charges and commissions imposed by banks are also very high for low income earners, with these charges often fixed without reference to the value of the account or of the financial transaction. Promisingly, reductions to these costs have been made possible by the increased use of mobile technology to facilitate banking transactions. An increasing number of people in Burkina Faso now hold a mobile banking account, which a high proportion use to send or receive remittances. In particular, mobile banking services are often used to send and receive remittances from France and Côte d'Ivoire.

357. The Government could consider additional measures to achieve higher levels of financial inclusion. The Government could increase and improve the use of mobile and other banking services to make payments to beneficiaries. This could involve the use of mobile and other banking services to facilitate the payment of cash transfers and salaries, and the purchase of goods and services. The Government could also improve its revenue collection performance by digitalizing tax collection. Financial institutions could also play a role in conducting informational campaigns targeting potential savers, possibly together with the Government, as information is at least partially a public good. These institutions could also develop specific activities targeting households that are reluctant to participate in the banking system. A recent study in Mexico has shown that the propensity to open a bank savings account increases significantly if the account holders can use a debit card to check their transactions on a regular basis. More generally, the use of electronic transactions can substantially reduce delays and costs and so encourage a higher level of savings at financial institutions.

358. In addition to monetization, efforts should be made to increase private operators' level of access to credit. In particular, these efforts should focus on two sectors that are currently almost completely excluded from the credit system, these being the agricultural sector (with the exception of the cotton subsector) and the small and medium enterprises sector in urban centers. In the case of these sectors, the main challenge is to reduce the risks associated with lending. This could be achieved through a combination of the following actions:

- *Mutualizing risk by lending to associations rather than individuals.* This is the logic behind some initiatives by microfinance institutions that have engaged in lending to groups to diversify risk. With these initiatives, the common practice is for the group as a whole to monitor and enforce repayments by members, with the group taking collective responsibility in cases of default. This reduces the risk of delinquent credit, with defaulters subject to social pressure from a group of peers (risk of exclusion).
- *Developing collective information centers to provide reliable information on existing and potential borrowers:* The BCEAO has already taken some steps towards establishing regional credit bureaus, although these are yet to be fully operationalized. The further development of institutions of this sort could take advantage of a number of innovative new approaches. For example, the quality of clients could be evaluated by accessing data from telecommunication companies' databases (to check the creditworthiness of clients), an approach that has been tested by the Bill Gates Foundation in Tanzania.
- *Developing the use of new instruments such as leasing and affacturage that reduce the need for large guarantees.*
- *Enhancing supplier credits in value chains:* To a certain extent, the cotton subsector already makes significant use of this form of credit system. This approach could also be applied to suppliers and distributors of large companies in the telecommunication and mining industries.
- *Informing and train customers:* Individuals ability to apply for credit is often constrained by their inability to complete an application and/or to provide the necessary basic information. This constraint could be overcome through the provision of information and training to potential customers.

359. The measures described above are all intended to reduce the risks associated with lending. However, it must be recognized that, to some extent, the dysfunctionality of the

financial sector and the failure to achieve higher levels of financial inclusion is strongly related to the dysfunctionality of other markets. For example, the lack of a system of secure land titles prevents applicants for loans from providing a land title or any proof of ownership as collateral (see Priority 1). The high cost of credit can also be explained by the dysfunctionality of the justice system (see Priority 8).

360. In the medium to long term, the authorities should consider a three-pronged strategy. The first component of the strategy would be to facilitate the transformation of mobile operators into providers of micro-credit, following the successful example of a number of East African countries.¹⁰² The second component should be to develop a strategy to finance the development of infrastructure through the use of funds held by banking and non-banking operators, such as pension funds, equity markets, and insurers. The third component should be to develop housing finance, which remains very undeveloped in Burkina Faso. This three-pronged strategy is of strategic importance and requires not only the participation of Burkina Faso's government, but also other regional countries. The development of this strategy will require adjustments to the regional legal and regulatory framework for WAMEU.

Priority 6: Increasing resilience through improved social protection to the poorest


361. The high rate of prevalence of poverty in Burkina Faso is exacerbated by extreme vulnerability to shocks. While the increased availability of productive job opportunities and improved access to social and physical assets will help to improve resilience at the household level, this effect will take time to materialize fully, with those in extreme poverty remaining excluded from inclusive mechanisms for the longest.

362. The Government could adopt two complimentary strategies to reduce vulnerability at the household level. Firstly, it could attempt to reduce the magnitude and frequency of the shocks through a well-designed, effective preventative program. Secondly, the authorities could implement a social protection policy to help vulnerable households to mitigate against the impact of the shocks. Unfortunately, neither of these strategies has yet been well developed in Burkina Faso.

363. To develop a well-designed, effective preventative program to mitigate against the impact of shocks, the Government should consider a number of priority actions. For example, the degradation of soil and forest could be reduced by adequate land-planning mechanisms and the development of environmentally-friendly technologies (such as solar energy).¹⁰³ Similarly, the use of water could be better regulated, with the exact nature of the associated mechanisms informed by the Burkina Faso's development priorities and designed to meet the often-conflicting needs of different interests. All these actions will have to be closely coordinated and appropriately implemented. They require the development of a solid legal and institutional framework and a sufficient level of technical capacities at the national and sectoral levels.

¹⁰² For more details, see GSMA report, 2016.

¹⁰³ An element of the strategy could be to rely on the development of ecosystems, which integrate agriculture, livestock and forestry to build resilience to shocks, while protecting the natural capital. Protected areas could also help find the balance between environmental protection and agricultural activities.



According to the recent World Bank's Institutional Readiness Score (IRS), this framework and capacities are still lacking.¹⁰⁴

364. **The second strategy to reduce household-level vulnerability involves the development and expansion of targeted social protection assistance programs.** At present, such programs are only just beginning to come into existence, with only 1.5 percent of households reporting that they had received formal assistance from the Government in the previous 12 months prior to being surveyed and less than 5 percent reporting that they had received formal credit in that period.

365. **Several initiatives have been recently implemented by the Government, including the move toward universal health coverage and public work programs.** Yet, the emphasis should be on (conditional) cash transfer programs, as international experience has clearly demonstrated their cost effectiveness and the high rate of return on investment in terms of improvements to the welfare of poor households (see Box 24). There is significant potential to scale up effective safety nets to benefit the poorest segments of society in Burkina Faso. The World Bank has conducted simulations to show that it would cost only around 1 percent of GDP per year to scale up safety net programs to cover half of all chronically poor households in the country (around 2.4 million people). In other words, only one tenth of the aid inflows that the country receives each year would be sufficient to fund the achievement of this goal.¹⁰⁵

366. **The use of conditional cash transfers could help to promote behavioral changes in education and health as well as nutrition.** While the lack of access to these services is partly explained by supply-side factors, they are often exacerbated by behavioral and cultural factors. For example, the lack of available information may be a cause of malnutrition or inadequate family planning. The delivery of cash transfers could therefore be combined with (soft) conditions.

¹⁰⁴ For details, see *World Bank's climate and disaster risk screening report*, 2016.

¹⁰⁵ An average monthly transfer of FCFA 10,000 targeted to half of all of the chronically poor rural households in Burkina Faso can be expected to result in a reduction of around 21 percent in the chronic poverty rate and a reduction of 17 percent in the poverty gap nationwide. These estimates may vary depending on the final targeting method and its implementation efficiency as well as other implementation related aspects.

Box 25: Examples of successful cash transfers programs

Cash transfer programs have become increasingly widely accepted around the world following their successful implementation in Latin America and more recently in Africa (Ethiopia, Tanzania). These types of transfer programs, with or without work requirements, can help ease household spending and consumption constraints, and enable the poorest to invest additional resources into more productive economic activities, to diversify livelihoods and to generate sources of income that have the capacity to produce higher yields, and to build the human capital of their children through improved participation in schooling, more frequent use of health services and improved nutrition.

While 20 years ago, the provision of support for direct cash transfers would hardly have been considered by any development agency, a significant number of such programs now exist in many countries, including in East Africa, Ethiopia, Kenya, and Tanzania, with the total number of beneficiaries of such programs estimated to reach up to one billion. Many of these programs are supported by major multilateral and bilateral agencies, with the approach now considered mainstream and effective, at least at the conceptual level. While state investments in human and physical capital remain a key strategy for the achievement of poverty reduction, particularly for addressing supply-side issues, the effectiveness of cash transfer programs as a parallel mechanism to generate demand for services has been widely acknowledged.

Priority 7: Ensuring fiscal efficiency and macroeconomic stability

367. In the participatory process upon which this SCD is based, the achievement of fiscal efficiency and macroeconomic stability was not ranked among the top priorities by a large proportion of those surveyed, perhaps because their impact is not as readily apparent as the promotion of skills development or reducing gender bias to most households. However, it must be said that macroeconomic and fiscal conditions clearly do have a significant impact on the achievement of the stated twin goals, with a significant impact on welfare at the household level and on business productivity. For example, a sudden increase in the inflation rate can reduce both the spending power and the value of physical and financial assets at the household level. Poor financial management in the area of public spending can reduce the capacity of the state to deliver infrastructure and services. Unfair tax policies can increase inequalities and thus increase social tensions.

368. In Burkina Faso's case, the Government should focus primarily on fiscal policy, given that the responsibility for monetary and exchange rate policies has to a large extent been transferred to regional authorities. Traditionally, the Government has been able to maintain low levels of fiscal deficit and public debt. These efforts are to be lauded, but it must also be acknowledged that a large portion of the budget is influenced by factors outside the direct control of the Government, with approximately 40 percent of total resources being derived from official aid.

369. A top priority for the Government should be to increase its fiscal space by improving the mobilization of domestic revenues. While the authorities have focused on issues related to tax administration, these efforts are unlikely to create the expected results if additional structural reforms are not conducted. It can be argued that increases in tax revenues will only be achieved if a comprehensive approach is adopted. The tax system has to be affordable, fair, simple, and transparent. The Government also has to be accountable for the uses to which the money it receives is put. Only when these basic conditions are met will the level of compliance with the tax system increase. The existence of a set of simple rules, based on common sense, is one of the defining characteristics of a high-quality tax system. Firstly, taxpayers must perceive the system as being fair, affordable and transparent. Second, the level of tax revenues should be sufficient to enable the state to meet the current and future needs of its citizens.

370. In both these areas, Burkina Faso's performance is questionable. To improve its performance in these two areas, the Government will need to implement bold and innovative actions that go beyond the traditional administrative measures. These actions should be intended to ensure the following:

- **The system must be affordable.** In Burkina Faso, the actual cost of paying taxes remains very high, as demonstrated by the country's poor ranking in terms of the World Bank's Doing Business survey's "ease of paying taxes" indicator. To address this, it is necessary to simplify the system. The Government should streamline the numerous current small taxes, which impose a high burden on businesses without corresponding gains to government revenues. The Government must also reduce the use of tax exemptions. The explosion in the use of mobile devices represents a great opportunity for tax authorities to use accessible, cost-effective systems to enable taxpayers to make payments. Once transaction costs are reduced, tax compliance should improve, resulting in higher revenues.
- **The system must be perceived as fair.** In particular, it is necessary to broaden the tax base. Tax revenue collection is concentrated in a few locations (mostly in Ouagadougou) and in a few specific sectors, with a disproportionate proportion of revenues derived from customs. There is a huge imbalance between the taxation on labor and capital income, including from taxes on building and land. Property taxes should be appropriately applied not just to boost government revenues, but also to improve land management. Smart innovations can also modify taxpayers' behavior. The introduction of a so-called tax lottery, where the tax receipt is also a lottery ticket, with attractive prizes, has been successfully tested in China and Mauritius. Similarly, public recognition of high tax payers can also incentivize payment. Of course, stronger and effective sanctions against tax evaders are also vitally necessary.
- **The system must be transparent.** The Government needs to publish comprehensive, accessible reports on its tax collection efforts. In this area, the private sector can play a role. For example, some major telecom companies in Tanzania have announced that they will voluntarily publish full details of their tax payments. Initiatives of this sort could be replicated in Burkina Faso. Such a level of transparency should be mandatory for all public enterprises and agencies.

371. The Government should also implement strategies to increase the value for money generated through public spending. This strategy would necessarily involve close collaboration with donors, because of the heavy reliance on external aid. Next, it is essential to find the right balance between current and capital spending. The wage bill consumes more than 45 percent of domestic revenue, leaving little space for other expenditures. As a result, the level of capital expenditures and maintenance is too low to enable Burkina Faso to fill the existing infrastructure gaps. There is an urgent need to improve the management of human resources, with these resources being fragmented between several ministries and agencies, suffering from political interferences, and relying on a misguided allocation mechanism, with an excessive number of civil servants deployed in Ouagadougou.¹⁰⁶

¹⁰⁶ For some proposals, see IMF, *Selected Issue Paper: The Wage bill in Burkina Faso -past trends and challenges ahead*, December 2016.

372. **The efficiency of the Government's capital expenditure is also affected by weaknesses in the financial management system.** The execution rate for capital development projects is low because of slow and overly complex budgetary and procurement procedures. A large fraction of capital expenditures as they are presented in the budget are not for the purchase of equipment but rather used to pay salaries and other administrative expenses. The true public investment rate has been closer to 6-7 percent of GDP than the claimed figure of 10-12 percent of GDP when these factors are taken into consideration. The development of a good public investment system should be a priority, with this system appropriately managing the selection, design, implementation and control of investment projects.

373. **The Government should consider accelerating the decentralization process.** At present, local governments have few areas of mandated responsibility, with these responsibilities restricted to matters such as the provision of water and sanitation in rural areas. This also reflects the extreme concentration of public revenues. Expanding the mandate for the delivery of investments and social expenditure to local governments would conform to the subsidiary principle advocated by the winner of the 1982 Nobel Economics Prize, James Buchanan. According to Buchanan, the authorities with a mandate for the delivery of services and infrastructure should be located in close proximity to the intended beneficiaries, with these authorities having a better understanding of what the beneficiaries need and want and with the beneficiaries being highly motivated to monitor and control local decision makers. This could result in the improved design and implementation of projects and higher levels of accountability amongst politicians.

Priority 8: Building up inclusive and transparent institutions

374. **As emphasized in Part One of the SCD, an influential strand of economic theory states that there is a strong correlation between levels of economic development and the strength and inclusiveness of institutions.** The argument is that strong, inclusive institutions can ensure that policy decisions are formulated and implemented to benefit the large majority of citizens rather than vested interests. The decline in the quality of governance in Burkina Faso since 2008 is recognized as a contributing factor to the deterioration of its political climate, which culminated in the ousting of ex-President Compaoré at the end of 2014. In that context, it is somewhat surprising that this priority was ranked in the top three by only 21 percent of the survey's respondents, with the notable exception that three-quarters of the targeted groups of government officials, academics and World Bank staff identified this as the top priority.

375. **The first step towards the development of a good governance framework is to establish strong, efficient regulatory and control agencies.** These agencies must ensure that both the Government and private operators behave in a manner that maximizes collective welfare, rather than merely benefiting vested interests. At the Government level, there is a need to implement efficient internal and external controls. This requires well-staffed, politically independent, and transparent institutions which publish the results of their investigations on time. There should be an emphasis on improving governance in the area of procurement procedures, as these are often a source of delay and are frequently prone to corruption.

376. **Strong regulatory bodies are particularly essential in sectors dominated by a few operators, due to their oligopolistic structure.** These sectors may be dominated by public enterprises, as is the case in the energy sector, or by private enterprises, as is the case in the financial and telecommunication sectors. The regulatory bodies should be able to ensure that prices are set fairly, effectively and through clear mechanisms, with minimal political interference.

377. It should be noted that a good monitoring and regulatory system has little meaning if it is not backed up by an effective justice system. When cases of fraud are detected, sanctions should be applied consistently, fairly and transparently. In Burkina Faso, the justice system suffers from deficiencies and dysfunctionalities related to: (i) lack of capacity; (ii) complex and long procedures; and (iii) low levels of accountability.

378. To improve the governance framework, civil society and other stakeholders should be assisted and empowered to become more involved in decision-making and monitoring processes. International experience has shown that the involvement of well-informed citizens improves policy decisions and their implementation over time because of higher levels of participation and accountability. Strengthening the demand side starts with the production and publication of good statistical information, an area in which Burkina Faso is still deficient. Addressing this requires a targeted effort by the National Statistical Agency. For example, the National Accounts are based on data from 1999, while the weights used to measure the consumer prices index are more than five years old and calculated only for the capital city Ouagadougou.¹⁰⁷ In short, the GDP and price series, the two basic foundations for informed policy decision making, are likely to reflect a highly distorted reality. Not only does the production of statistical information need to be improved, but its diffusion still lags behind best practice countries such as Kenya in sub-Saharan Africa (see Box 25). Finally, the availability of public information is really only truly meaningful when citizens have the tools to understand this information and the means to influence policy makers.

¹⁰⁷ For more details on the statistical caveats in Burkina Faso, see for example Robert Dippelsman, Venkat Josyula, and Eric Météreau, *Fixed Base Year vs. Chain Linking in National Accounts: Experience of Sub-Saharan African Countries*, IMF working paper, WP/16/133, July 2016.

Box 26: The Open data initiative in Kenya

On 8 July 2011, President Mwai Kibaki launched the Kenyan Open Data Initiative, making key government data freely available to the public through a single online portal. The 2009 census, national and regional expenditure, and information on key public services were some of the first datasets to be released. Tools and applications have already been built to access this data and to utilize it for useful purposes.

Kenya was the first low-income group country to have an open government data portal, bringing into focus the supply and demands sides of government information that other countries may take for granted.

In terms of supply, data have been collected by official government agencies, donors, international agencies or by citizens themselves. Of course, open government initiatives require more than this. Thus, there is a need to work across ministries and departments to make open government a sustained success.

In terms of demand, with more than a hundred requests from the public for new datasets on the opendata.go.ke site, it is clear that there is a demand for more information. Citizens want to be able to access the same kind of data as that they can in more developed countries, including land registries, company registrations and employment statistics, to name a few. Kenyans also want data that citizens of more developed countries may be less likely to ask for, such as fire protection information (how many fire engines are there per county?), school payment disbursement data (do government funds actually reach schools?) and livestock populations.

Source: "What's special about open data in Kenya?" <http://blogs.worldbank.org/developmenttalk/whats-special-about-open-data-in-kenya>

Priority 9: Promoting Competition and Private Sector Development to Stimulate Efficiency and Innovation

379. In Burkina Faso, business operations continue to face a number of significant constraints. These constraints include the limited size of the domestic market, which mitigates against economies of scale; high transportation costs, due to the country's geography; and difficult access to energy and water, because of limited domestic reserves of these resources. These natural obstacles are exacerbated by policies that increase the cost of doing business, as reflected by Burkina Faso's poor ranking in terms of the Doing Business indicators.

380. Some of the obstacles faced by private sector operators could be addressed through a number of the other priorities identified by the SCD. Improving skills, connectivity and access to energy would all play a significant role in reducing costs and improving competitiveness. Reducing gender bias would also play a role, enabling women to become increasingly active and productive on the labor market. The gradual urbanization of the country will bring markets closer to firms, reducing their costs and expanding their customer base. All these factors are important, although they are likely to have an impact only in the medium to long-term future. It takes a long time and requires significant effort for a country to acquire skills, build roads and to produce more and cheaper energy. Therefore, the Government must implement measures specifically intended to increase the level of participation of the private sector by reducing costs and creating momentum to promote private sector development.

381. International experience indicates that significant progress can be achieved in the short term by reducing the administrative costs of registering and operating a business. These costs not only influence an individual firm's productivity, they also act as barriers to entry on new local and foreign investors, thereby reducing competition and innovation in the economy.

382. **Unfortunately, in Burkina Faso, business registration and operational costs remain very high.** The entry costs faced by private operators are partially reflected by the country's poor performance in terms of the Doing Business indicators. However, they placed disproportionate emphasis on a number of procedures conducted on a one-time basis only, such as registration or connection to infrastructure, while other factors, such as complicated and expensive tax and custom payments, are a more enduring constraint. Secondly, these indicators do not adequately capture a number of barriers that prevent newcomers from operating. Such barriers exist in strategic markets such as rice and cement, contributing to the excessive levels of concentration in these fields. They are also visible in the semi-public markets for energy, where private sector participation has been virtually absent. The PPP infrastructure database reveals that only five projects reached the point of closure in the period from 1990 to 2014, including three ICT projects.¹⁰⁸

383. **In order to increase private-sector participation and to improve the level of competition, the Government should focus on measures to reduce barriers to entry.** While some progress has been made in these areas, as reflected by improvements in terms of the Doing Business indicators in 2013, Burkina Faso was still ranked in 146th place in the 2017 Doing Business survey, down from 142nd place in 2016. The country received its worst rankings in the areas of paying taxes, enforcing contracts, and access to electricity, suggesting that these areas should be the focus of the authorities' attention. In the area of paying taxes, recommendations were formulated in Priority 8. Special attention should also be paid to labor regulations, which are relatively costly by international standards, as Part Two of this SCD makes clear. Progress made towards streamlining these procedures will not only reduce the constraints on new entrants, it will also improve the efficiency and willingness to innovate of existing operators, enabling them to become productive over time.

384. **Together with broad, cross-cutting reforms intended to improve private sector participation overall, the Government should also pay particular attention to a number of strategic sectors:**

- **Agriculture:** The entry of new investors could play a positive role in transforming the composition of agricultural production. Indeed, it is essential that there be a shift in emphasis from subsistence to cash crops, from food staples to intermediate inputs, and from low-value/low-risk crops to high-value/high-risk crops. This kind of transformation is the defining characteristic of successful emerging agricultural economies. It can be accelerated by building bridges between large commercial operators and small-scale producers in dense areas or by attracting new investors in agricultural areas that have not yet been optimally exploited. The adoption of technological innovations should lead to the use of more efficient irrigation, mechanization, and new improved inputs (seeds, fertilizers, and pesticides). Much of the success of emerging countries has been generated by the combination of high rates of investment in crop research, infrastructure, and market development, and appropriate policy support (for example, see Box 26). Along the same lines, smart partnerships could lead to the development of transformation value chains in the agricultural sector (for example livestock), creating additional jobs in growing urban centers and additional revenue for the country.

¹⁰⁸ Source: PPP.Worldbank.org.

Box 27: Tanzania: The SAGCOT Initiative

As in many other parts of Africa, small-scale farmers in Tanzania have lacked access to modern inputs, are at risk from climate change, and remain locked out of international markets.

The Southern Agricultural Growth Corridor of Tanzania (SAGCOT) is attempting to address these issues by linking farmers to modern supply chains and by making agriculture a profitable activity in a country where more than 75 percent of the population is engaged in the sector. The corridor could feed the East Africa region and become a major agricultural exporter to rival the likes of Brazil. The initiative is supported by a public-private partnership of global agriculture businesses, international development agencies, farmers' groups, and the Government of Tanzania.

The rationale for this approach is to improve synergies between large operators and small scale producers. It differs from the "growth pole" approach used in Burkina Faso in the sense that large operators have played the leading role since the inception of the initiative by providing upfront financing and technical transfers. In Burkina Faso, the sequencing (for example in the Bagre Growth Pole) is that the Government has taken the lead by establishing the "right" conditions that will subsequently attract new investors.

- *Infrastructure (energy, water):* As discussed in the section on Priority 1, the development of public-private partnerships is necessary to bridge the financial and technological gaps in these two sectors.
- *Education and health:* Already, a significant share of these services is provided by private operators. This move is welcome in view of the rapid increase in the demand for these services and the financial constraints facing the Government. With these sectors, the main challenge relates to ensuring quality.


385. Opening local markets will stimulate private sector activity and create a greater number of productive jobs. However, it is also necessary to reinforce measures to achieve this goal through the development and implementation of the appropriate regulatory environment, as mentioned in the discussion on Priority 8. Liberalizing markets can result in unexpected negative effects, especially in markets with oligopolistic structures, if customers are not properly protected.

Priority 10: Managing Urbanization with efficient urban centers

386. In the participatory survey that formed the basis for this SCD, the development of efficient urban centers was viewed as the least significant of the ten identified priorities. Somewhat surprisingly, even the respondents located in the cities of Ouagadougou and Bobo concurred with this view. This result most certainly reflects the current economic and demographic structure of the country, but fails to anticipate future trends. At the current pace, more than 50 percent of Burkina Faso's citizens will live in cities by 2045.

387. Ouagadougou has become one of the most rapidly expanding cities in the world in recent years. However, secondary cities have remained relatively small. Urbanization creates both opportunities and challenges. These need to be managed with a sense of urgency, or there is a real risk that poverty will be transferred from rural to urban areas.

388. The process of urbanization creates great opportunities for growth and transformation for Burkina Faso. Indeed, cities can play a significant role in fostering equitable economic growth and creating productive job opportunities, reducing distance and expanding markets. The increasing concentration of the population in urban areas is caused by widespread beliefs that



economic conditions are better in these areas, which itself offers additional opportunities for business and for job creation. Economic theory has demonstrated that the concentration of potential customers and workers in a reduced space can help businesses to expand more rapidly through so-called agglomeration effects, with these effects occurring within and between firms. Through proximity, firms may reduce their internal transaction and transport costs, making them more competitive. They can also recruit qualified employees more easily and benefit from better access to infrastructure and resources such as electricity and roads. At the sector level, economies of scale can be achieved by grouping activities such as the training of workers and developing joint energy infrastructure and transport modes. As a result, cities have been by far the most dynamic areas of the economy in most countries around the world.

389. However, urbanization also creates significant challenges. In particular, these challenges arise from the lack of a conducive environment to foster the growth of small businesses, which in turn is related to the uncertain rule of law, excessive bureaucracy, corruption and rent seeking, congestion and lack of basic services. These challenges can be addressed through the implementation of smart policies to facilitate positive growth in urban areas. The growing concentration of the population in urban areas also requires the provision of adequate social and physical infrastructure, including but not limited to housing and roads. Unfortunately, in all of these areas, Burkina Faso is at risk of lagging.

390. The Government will need to address these two issues simultaneously. First, it will have to ensure that firms and workers in urban areas are able to operate in a conducive environment. This will require good land allocation policies and access to the necessary infrastructure, including good transportation infrastructure. A combination of improved urban planning practices and strategic investments should be prioritized to improve connectivity, particularly in a metropolitan region like Ouagadougou. Cities need to improve urban planning practices so that they can build the infrastructure necessary to accommodate the growing number of people and businesses. Catalyst investments in areas such as public transportation are central to transforming the city's growth, to improving mobility, and to providing better quality services and alternatives to cars. Further investments in urban roads are needed, with priority given to securing future right of ways before they are lost to encroachment. The development of special zones for businesses may play a critical role in addressing congestion costs and encouraging agglomeration effects.

391. Substantial investments in social services and infrastructure will be required to meet the needs of the rapidly expanding urban population to maintain and improve their living conditions over time. The provision of housing, education and health services, electricity, water, and sanitation will all be essential. Security issues are likely to become an increasingly significant challenge. Government involvement will be required to facilitate the dissemination of security information; to invest in critical infrastructure such as streetlights and storage facilities; and to strategically deploy trained police forces. The Government may also indirectly encourage businesses to achieve improved security through measures such as providing financial incentives for business associations to collectively invest in security.

392. As stated previously, secondary cities remain largely underdeveloped in Burkina Faso. This pattern of urbanization has implications for poverty reduction, as evidenced by the experiences of other low income countries. For example, in Tanzania, the most significant reductions in the rate of poverty were recorded by those who opted to migrate to regional urban

centers rather than those who moved to the capital city or stayed in rural areas. Cross-country evidence suggests that poverty declines faster when people leave agriculture for secondary towns and their rural hinterlands, rather than when they move to large cities.¹⁰⁹ Why might the development of secondary towns be more effective at increasing the earnings of the poor? First, the economies of scale associated with many of the activities most developing countries focus on can already be captured at much smaller urban scales. Secondly, from the workers' perspective, jobs nearby tend to be more accessible. Links with the farm and the family can be better maintained, which is a crucial factor when land rental markets function poorly or when there are no good fallback options beyond the family and the village in times of need. These jobs are also easier to find and reach, with lower transport costs and better social linkages. They are also more likely to match the skills of jobseekers. With most of the poor living in the rural areas, an increase in the availability of jobs in the hinterlands of smaller urban centers will especially benefit the poor. The

393. It has not been conclusively demonstrated that the development of secondary towns is necessarily a more effective means of generating employment opportunities and increasing the earnings of the poor. However, the evidence is sufficiently strong that policy makers should pay more attention to their development, notably by improving their connectivity to both rural hinterlands and the largest economic centers, with secondary cities being able to play a role in the value chain of commercialization of agriculture products.

3.4: Identified data and knowledge gaps


394. While Burkina Faso's Household Surveys are well designed and provide good data, data in a number of other areas is weak. The most significant weakness is that the national accounts are based on data from 1999. The consumer price index is also outdated and relies only on data collected in Ouagadougou. It is therefore urgently necessary to rebase the national accounts and the CPI, since these are the basic foundations of a reliable national statistical system.

395. In addition, data related to Burkina Faso's large migrant worker population, which is estimated to number in the range of approximately 6-10 million, is weak, making it difficult to calculate their exact number, their destination country, the sectors in which they work, and their level of well-being and needs. Filling this gap would enable a better understanding of the impact of this large pool of migrants on the economy, including the impact of brain drain and of their remittances.

396. Similarly, the lack of gender-disaggregated quantitative data in key sectors and the limited reporting of violence against minorities limits effective policy dialogue. Thus, the true extent of economic development outcomes, in areas from housing to education to health care, is largely unknown. The impact of discrimination and violence (including terrorism) on socio-economic status and/or the ownership of essential assets is another largely unexamined issue, despite the fact that Burkina Faso society is prone to recurrent social and political tensions.

397. More analysis is needed on the market structure of key sectors. The small number of operators raises concerns regarding their level of competitiveness. Many goods and services are

¹⁰⁹ See, *Towns, not cities, are best for jobs and poverty reduction*, by L. Christiaensen and R. Kanbur, <http://blogs.worldbank.org/jobs/towns-not-cities-are-best-jobs-and-poverty-reduction>



expensive in Burkina Faso (such as rice and cement) or of poor quality (such as energy), possibly because of the lack of competition and political interference. Political and economic concentration have most certainly played a role in the repeated outbreak of political crises over the last few decades.

398. Furthermore, the impact of climate change on different development scenarios and on the poor needs to be examined in more detail. Related to this, the means of enhancing the provision and management of water resources at the local and national levels needs to account for and mitigate against the adverse impacts of climate change and natural disasters need to be examined.

399. There is a need for better information on water availability, use and respective economic, social and environmental values of water. Such information would be extremely useful for designing and implementing a new national strategy on water management.

400. In the area of education services, there is a need to develop a comprehensive approach to managing the role of the private sector. Increasingly, private schools have become a provider of education services, especially from the secondary level onwards. A robust study comparing learning outcomes and school management between the public sector and the low-cost private sector (usually subsidized by the state) could be critical in identifying the gaps in the low cost private schooling system and ultimately finding pathways by which this sector could bridge the gaps left by the public schooling system. The private sector has also an important role to play in defining the orientation of the education system that should in part respond to the need of firms.

401. Another gap relates to the lack of a time series of disaggregated public spending at the regional level. This limitation means that it was not possible to conduct an accurate analysis of the impact of public spending on provincial-level outcomes (poverty, job creation).

402. Burkina Faso has consistently received large amounts of official aid over the past two decades. Despite this, no comprehensive study has been conducted to determine the level of effectiveness of this aid. Many donors are established in the country, and there is an integrated structure to coordinate aid interventions and to align them with the national strategies. At this stage, there is a need to accurately evaluate the impact of aid inflows, especially to determine the impact of budgetary support that has accounted for a large of proportion of financial support over the years. These kind studies have prepared in many other countries that receive substantial financial aid (Tanzania, Uganda, and Mozambique). The lack of such a study for Burkina Faso should be addressed.

ANNEXES

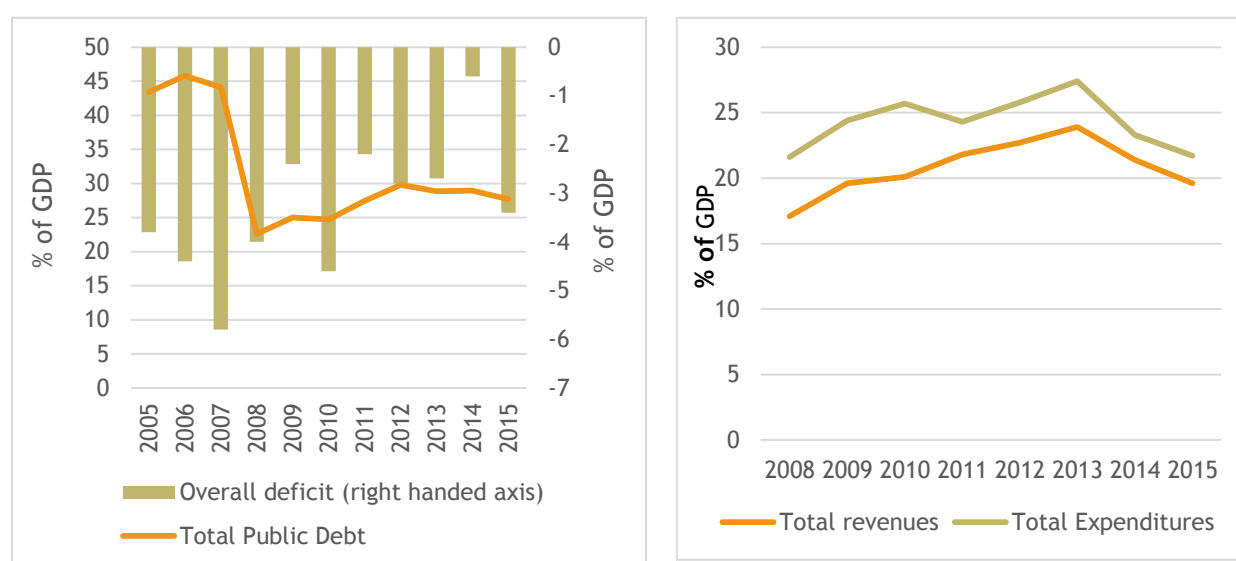
Annex 1: List of Background Papers prepared for this SCD

1. World Bank, *14 Policy notes for the new government of Burkina Faso*, Mariam Diop (coord.), June 2016.
2. World Bank, *Burkina Faso Poverty and Vulnerability Analysis*, Prosperere Backiny-Yetna, Poverty Global practice, June 2016.
3. World Bank, *Private transfers and poverty in Burkina Faso*, Prosperere Backiny-Yetna, Poverty Global Practice, September 2016.
4. World Bank, *Public investment Trend and Repartition in Burkina Faso*, Dr Alain Siri, October 2016.
5. World Bank, *A Political Economy Analysis of the Mining sector in Burkina Faso*, November 2016.
6. World Bank, *Governance in Burkina Faso's Cotton sector*, November 2016.
7. World Bank, *What will it take to improve domestic security? Case of the "Koglweogo" in Burkina Faso*, Dr Habibou Fofana, October 2016.
8. INSUCO, *Feuille de route de sécurisation foncière au Burkina Faso- Cadrage Général*, Dr. Peter Hochet, octobre 2016.
9. World Bank, *Climate and Disaster Risk Screening Report: Burkina Faso*, Draft, June 2016.
10. World Bank, *Burkina Faso Note: Macroeconomic Analysis and National Climate and Disaster Risk Management Screening Tool Outcomes*, June 2016.
11. World Bank, *Growth, Demographic Change, Structural Transformation, and Jobs: A Macro Perspective*, Michael Weber, Social Protection Global Practice, 2016.
12. APIDON, *World Bank's Phone Survey of Population's assessment on Policy Issues and Priorities in Burkina Faso*, November 2016.
13. World Bank, *Agricultural Sector Risk Profile*, January 2016.

Annex 2: An analysis of fiscal policy in Burkina Faso

Criteria 1: Fiscal sustainability. Burkina Faso's Government has successfully maintained low and controlled levels of fiscal deficit and debt over the past 15 years (see Figure 52). The overall fiscal deficit has stood at an average level of 2.8 percent of GDO in the period from 2010 to 2014 (see Table 1 for an international comparison). More generally, the authorities have been able to adjust public expenditure in accordance with the level of fiscal revenues they receive, as described in Figure 52. Both revenues and expenditures increased significantly in the period from 2005 to 2013, before declining together in the period from 2013 to 2015. Because of this high level of fiscal discipline, Burkina Faso's level of debt and debt services are among the lowest in Africa. At the end of 2015, Burkina Faso continued to be classified as a low distress country by the World Bank and the IMF.

Figure 51: Controlled public deficit and debt levels in Burkina Faso over time.



Source: World Bank and IMF.

However, the Government's high level of fiscal discipline masks a number of significant fragilities. Firstly, public revenue is highly dependent on aid and mining revenues. These sources of revenue are highly volatile, as evidenced by their sudden decline in 2014 and 2015 (see Figure 52).¹¹⁰ This dependence has been exacerbated by low non-mining tax revenues, with the value of these revenues amounting to only around 14.6 percent of GDP. The low level of efficiency of the tax system is most apparent in the case of VAT revenues, which amount to only 28 percent of the potential basis.¹¹¹ The tax base is narrowed by the application of tax exemptions and by fraud. For

¹¹⁰ For a detailed analysis of revenue from the mining sector, see IMF, Selected Issue, *Mining Sector and consideration for a fiscal rule in Burkina Faso*, 2014.

¹¹¹ VAT revenue performance can be measure by its: C-efficiency = Actual VAT revenue τ x final consumption.

example, customs fail to collect a large proportion of potential revenues as the result of the under-invoicing of imports, as illustrated by the example of bilateral trade with France.

Box 28: Revenues losses at customs: The illustration of trade flows with France

France is one of Burkina Faso's major trade partners. A comparison of the value of trade flows as reported through the UNtrade system shows significant variations in the reported value of this trade.

The value of imports by Burkina Faso from France was under invoiced by approximately US\$ 100 million in the period from 2010 to 2014 (2012 data is missing), equivalent to 8 percent of the total value of imports during this period. This under invoicing results in significant revenue losses since a lower value of customs duties and VAT are paid on the imported goods at the point of entry in Burkina Faso.

Concurrently, the value of exports from Burkina Faso to France is over-invoiced by more than 67 percent, equivalent to a value of approximately US\$ 180 million. This over invoicing may be the result of exporting companies attempting to reduce their tax burden in Burkina Faso.

In addition to policy and administrative weaknesses, Burkina Faso's poor revenue collection performance can be explained by the traditional availability of large aid inflows and mining revenues (see Figure 53). A recent IMF study presents evidence to suggest that a country's commitment to collecting non-resource revenue tends to decline when the resource revenue-to-GDP ratio is relatively high.¹¹² Similarly, several empirical studies have presented evidence to demonstrate the possible substitution effect of aid on tax collection efforts. High levels of aid have a particularly strong negative effect on domestic tax revenue collection efforts in low-income countries and in countries with relatively weak institutions.

¹¹² Alun Thomas and Juan P. Treviño, *Resource Dependence and Fiscal Effort in Sub-Saharan Africa*, IMF working paper, 13/188, 2013.

Figure 52: High dependence of revenues on mining and aid inflows

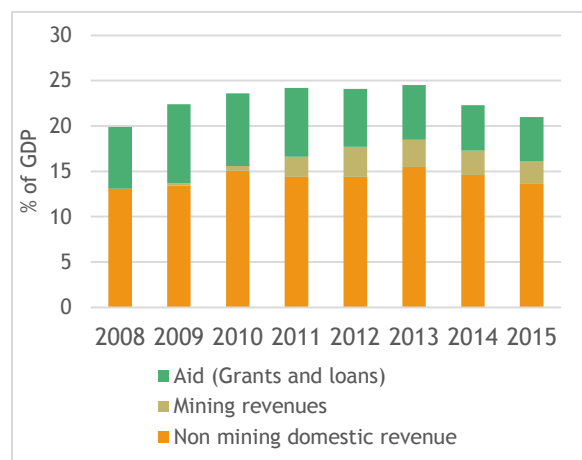
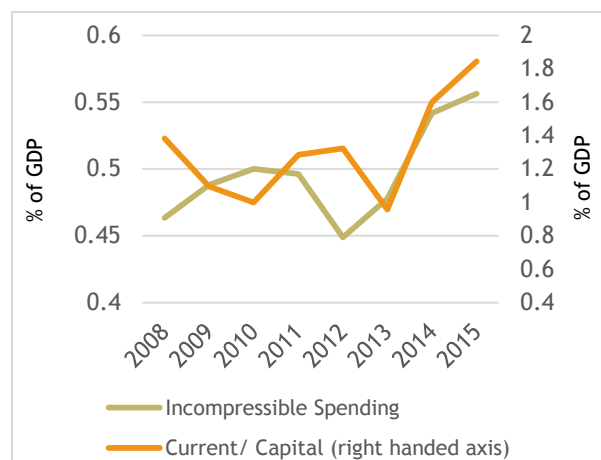


Figure 53: Increasing incompressible spending



Source: World Bank and IMF.

The second source of fiscal fragility lies in the high share of incompressible expenditures in the Government's budget (see Figure 54). Indeed, the wage interest payment bill has accounted for almost 60 percent of total expenditures over the past few years.¹¹³ The high share of these incompressible expenditures reduces the fiscal space for the Government so that it has no other choice than to reduce expenditure on its investment program when public revenues decline, with direct negative consequences on economic growth. This occurred in 2014 and 2015, when capital expenditures declined by 4-5 percent of GDP over a period of only two years.

The third source of fragility lies in the liabilities of government agencies and state-owned enterprises. While the level of official debt remains low, the contingent liabilities of state-owned enterprises represent a risk for the central government. This risk appears to be relatively high in the energy sector, where operating SOEs have accumulated debts and arrears in recent years.¹¹⁴

Criteria 2: Allocative efficiency. The impact of fiscal policy on economic growth is largely determined by the allocation of public resources over time. While the optimal composition for the allocation of public resources is still a matter of debate, a basic rule of thumb is that the share of resources allocated for capital investment should be sufficiently high to build a country's stock of human and physical capital over time.

The Government has traditionally devoted a significant share of public resources to finance its investment program, but a large fraction of those resources were not used to purchase capital goods. On average, almost 14 percent of GDP was allocated to public investment in the period

¹¹³ For a detailed analysis of the wage bill in Burkina Faso, see IMF, *Selected Issue Paper: The Wage bill in Burkina Faso - past trends and challenges ahead*, December 2016.

¹¹⁴ The public electricity company, SONABEL, was running an operational deficit of FCFA 14 billion in 2014. The sector includes a complex web of subsidies, arrears, weak management, and political interferences. For example, electricity tariffs have not been modified since 2006 in spite of marked variations in the price of fuel -- the main source of electricity. The Government is allocating over FCFA 85 billion in subsidies to SONABEL and SONABHY but is late in paying its electricity bill.

from 2005 to 2014, which is the highest ratio among WAMEU countries. However, the execution rate was only 75 percent during this period, meaning that the effective public investment rate was only 10 percent (see Figure 55). A closer examination also indicates that only 40 percent of public investment expenditures were used to purchase capital goods. Thus, the “true” public investment rate was equivalent to only 6 percent of GDP, which is clearly insufficient to build the Burkina Faso’s stock of capital and to have a significant positive impact on long-term economic growth. In 2014 and 2015, the true investment rate sunk to as low as 3.5 percent of GDP.

In terms of the allocation of public expenditure across sectors, the Government has allocated a significant share of its budget to the social sectors. However, it has found it difficult to allocate sufficient resources to productive sectors because of high administrative expenditures (see Figure 56). The proportion of the budget allocated to social expenditures averaged at about 27 percent in the period from 2011 to 2013, while the proportion allocated to infrastructure averaged at 10 percent and two economic expenditures at 23 percent over the same period. The proportion of the budget allocated to administrative expenditures stood at 15 percent. In comparison with the global average, this is a high proportion, reducing the fiscal space for increased expenditure on the productive sectors.¹¹⁵

Figure 54: Allocation of public resources by sectors

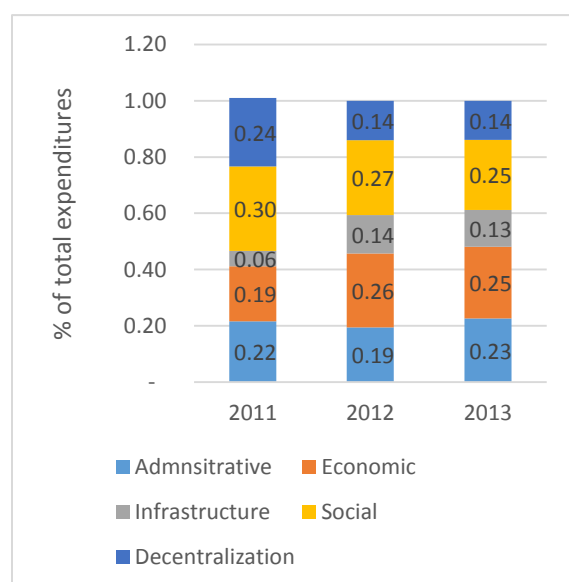
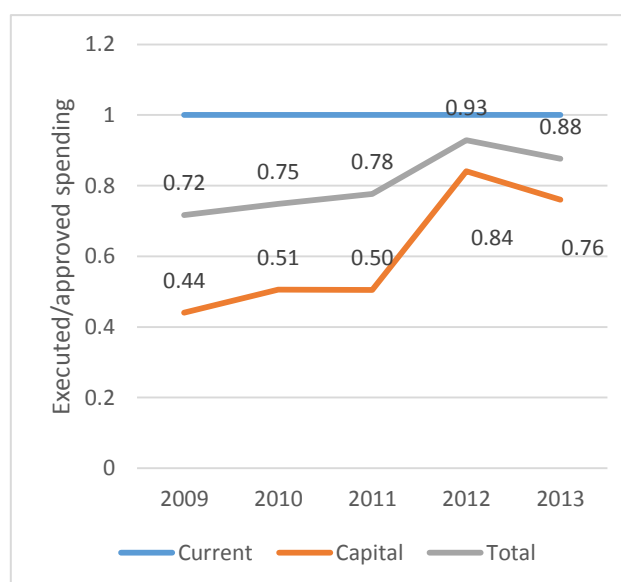



Figure 55: Low and variable execution rates of the budget



Source: World Bank and IMF.

Criteria 3: Technical capacity: The ability of the Government to implement efficient fiscal policy is also influenced by its technical capacities. In Burkina Faso, the average level of technical capacity appears to be relatively low. In education, the recruitment of qualified teachers cannot

¹¹⁵ See, N. Bayraktar and B. Moreno-Dodson, *How Can Public Spending Help you Grow? An empirical Analysis for developing countries*, World Bank Working paper, 2009.



keep pace with the rapidly growing student population. At present, the average student/teacher ratio stands at close to 40 in primary schools. Not only is there an insufficient number of teachers, their working conditions are often precarious and unstable. Human capital deficits are also significant in the health sector, with a ratio of five doctors and 41 nurses per 100,000 citizens. These ratios are twice as low as those in Côte d'Ivoire and three times lower than those in Zambia. Outside the social sectors, there is a lack of civil servants with a strong background in mathematics and sciences, negatively impacting the Government's capacity to manage water, sanitation, and environment issues, all of which are key priorities for Burkina Faso's sustainable development.

Weak technical capacities are also reflected through deficiencies in human resources management systems. The lack of coordination between the Ministry of Economy and Finance (MEF) and the Ministry of Civil Service, Labor and Social Security (MFPTSS) leads to confusion and low levels of accountability. Although concerted efforts have been made to streamline and strengthen civil service information systems through the introduction of the Integrated Human Resource Management System (*Système Intégré de Gestion Administrative et Salariale du Personnel de l'Etat*, SIGASPE), the human resources management system remains fragmented, duplicative, and overly complex. Consequently, recruitment, career management and retirement processes are often delayed and/or mismanaged, with negative implications for labor productivity within the public sector.

Another weakness of the human resources management system lies in the lack of performance-based incentives for civil servants, with this lack resulting in low levels of motivation. There are few financial incentives for public employees to engage in training and/or to make a high level of effort to deliver results. In addition to the lack of financial incentives, working conditions have become increasingly unstable, with the proliferation of temporary contracts. In 2013, 54.6 percent of civil servants reported that they were employed on short-term or temporary contracts, with a disproportionate share of those working on these terms deployed in the education and health sectors. Poor working conditions are also apparent from the poor state of office spaces, the limited availability of basic office supplies, the uncontrolled, inefficient and limited use of information technology and the absence of reliable archiving facilities, all of which have constrained staff efficiency and negatively impact their morale.

Lastly, the allocation of public servants does not always match the demand at the regional level. Today, approximately 56 percent of civil servants reside in the Central region in or around Ouagadougou, while only 15 percent of the population are living in this location. Such concentration means that many regions are underserved, limiting the front-line service delivery of basic services and infrastructure.

Criteria 4: Public Financial Management: To achieve higher levels of efficiency, the Government should also implement measures to ensure that allocated financial resources reach the intended beneficiaries. While the Government has made progress in this area, the 2013 PEFA study demonstrates that serious weaknesses in PFM continue to negatively impact the efficiency of public spending. This study found that a particularly significant factor was the slow and unequal rate of budget execution, particularly in the case of the investment program. The budget execution rate ranged from a low of 45 percent in 2009 to a high of 84 percent in 2012, with major bottlenecks in capital expenditures. Some of the key financial management bottlenecks include: (i) failure to take into account the actual capacity of the state to commit public investments in twelve months; (ii) a disconnect between the annual budget cycle and the multi-year nature of some capital budget commitments leading to unfunded commitments; (iii) the lack of monitoring of investment projects and delays in execution; (iv) the lack of technical and financial feasibility of investment projects proposed for inclusion in the National Investment Plan;

(v) cash flow constraints coupled with complex and useless control and payment processing procedures; and (vi) inconsistencies in governance arrangements with a high turnover of administrative and financial directors and procurement officers.


This low execution rate was associated with slow and overly complex procurement procedures. Though efforts have been made to improve the procurement framework to comply with the WAEMU Directives on Public Finance, the technical capacities of the administration to achieve proper implementation remain weak. The length of the average time taken to conduct a process from advertisement to contract award stood at six months in 2015. In June 2016, the Government revised its procurement rules to provide increased flexibility and to accelerate approval procedures.

Another weakness in the area of budget execution relates to the high level of leakages along the expenditure chain. As a result, a significant share of allocated resources are not reaching the intended beneficiaries. The findings of the 2012 tracking survey in the education sector found that in 2010, more than 29 percent of textbooks “disappeared” as they made their way from the central to the local levels. However, this rate decreased to 16 percent in 2011 and to 10 percent in 2012 as a result of the implementation of regular controls by the inspection bodies. This “disappearance” of the books was found to be more significant in rural areas than in urban areas.

The quality of public spending is also affected by low levels of accountability, with Burkina Faso ranking in 90th place out of 102 countries surveyed in the 2015 Open Government Index. The Government has made efforts to strengthen internal and external controls over the budget by providing additional human and financial resources to the General Inspectorate and the *Cour des comptes*. This effort should be strengthened through the increased involvement of the Parliament and civil society. Opening up government information to civil society is a critical step towards increasing the level of the Government’s accountability to citizens and to building citizens’ trust in government. While Burkina Faso established an open data portal in 2014, the level of citizens’ access to information remains limited, with vast archives remaining in paper form and unavailable to the public. In addition, the low rate of penetration of the Internet in Burkina Faso limits the impact of the open data portal initiative. Consequently, citizens are unable to access data electronically at their convenience.

In August 2015, the National Transitional Government promulgated the Right-to-Information (RTI) legislation, as a result of which Burkina Faso became one of only six countries in the sub-region with RTI legislation. While the introduction of the legal framework represents a significant step towards improving transparency, the law has yet to be implemented. There are likely to be significant implementation challenges associated with the new legislation, particularly with regards to establishing the necessary institutional arrangements, to instilling an administrative culture of open information, and to developing effective mechanisms for sensitizing and supporting users.

Finally, the Government implemented a significant initiative to increase accountability and to improve service delivery through the adoption of a decentralization strategy since late 1990s, with the additional adoption of the *Code general des Collectivités territoriales* in 2004. The goal of these initiatives was to reduce the distance between service and infrastructure providers and their clients. In that spirit, responsibility for matters such as rural water and sanitation services, basic education, health services, and education was devolved to local authorities. However, despite progress over the years, the implementation of these reforms has been slow and uneven, with on average only 5 percent of the national budget being to the communes, often with significant delays. Many decision processes remain highly centralized and there is often confusion on the delineation of responsibilities between decentralized and deconcentrated structures. In



addition, local authorities usually do not have the technical and financial resources to finance and implement investment programs in the areas for which they are theoretically responsible.

Annex 3: Recent trends in non-monetary indicators

- *The performance in terms of health indicators has improved substantially:* The most recent DHS surveys, conducted in 2003 and 2010, indicate that the infant mortality rate has decreased from 91 deaths per 1000 live births to 65 per 1000 between the two time points. Similarly, the mortality rate for children under five declined from 168 per 1000 to 125 per 1000 over the same period. The maternal mortality rate has also improved, from 440 deaths per 100,000 births in 1998, to 341 per 100,000 in 2010. These improvements can be largely attributed to better access to health services. For example, the vaccination rate for children between 12 and 23 months has increased from a low 39 percent in 2003 to 81 percent in 2010. In terms of nutritional status, progress has been less impressive. While stunting rates declined from 43 percent in 2003 to 35 percent in 2010, wasting rates have not improved, with the rate standing at 13 percent in 2003 and actually increasing to 15 percent in 2010. Anemia in children is omnipresent, with the rate of incidence barely changing in the period from 2003 (92 percent) to 2010 (88 percent). The linkages between early childhood malnutrition, poor school performance, and low adult lifetime earnings as a result of impaired cognitive and physical development have been clearly established, has been It has been clearly established, so the widespread incidence of malnutrition in Burkina Faso has significant implications for long-term human capital development.
- *Performance in terms of educational indicators has been mixed:* Rates of enrolment in primary education have increased significantly, with the rate for girls having caught up with the rate for boys. In 2003, one third of children aged from 7 to 12 were enrolled in school. By 2010, this figure had increased to 55 percent. Over the same period, the ratio between the rate for girls and boys increased from 0.772 0.99. The literacy rate for adults aged from 15 to 24 has increased from 31 percent to 50 percent over the same period. However, enrolment rates for secondary education remain very low, standing about 40.2 percent for the first cycle, and declining significantly throughout subsequent cycles, with a rate of only 12.8 percent at the beginning of the second cycle in 2014. Only 1-2 percent of children have access to post-secondary education, with access limited almost exclusively to children from the wealthiest quintile of households.
- *Performance in terms of water and sanitation indicators has been generally good in both rural and urban areas:* In rural areas, the water coverage rate increased from 51.5 percent in 2003 to 65 percent in 2010, while in urban areas increased from 68 percent to 89 percent over the same time period. In terms of sanitation coverage, the rate increased from 0.8 percent to 12 percent in rural areas, and from 15 percent to 34 percent in urban areas over the same time period. However, despite the improvements, the rate stood well below defined MDG targets.
- *Some improvements have been recorded in terms of housing facilities and access to fix capital and equipment:* In 2014, half of the population lived in a house with an improved floor (cement or tile) compared to one third in 2003. By 2014, 80 percent had access to safe water, although only 20 percent used electricity as a source of lighting and only 5 percent use a clean source of energy (electricity or gas) for cooking. In 2014, one fifth of all surveyed individuals lived in a household with a television set, compared to one tenth in 2003; half of the individuals lived in a household where there was a motorbike, compared to one fourth in 2003. However, in 2014, less than 3 percent lived in a household where there was a car.

- *The rate of penetration of telephony services has increased significantly:* in 2014, the rate for fixed and mobile telephony services stood at 70 percent, compared to 26 percent in 2009.¹¹⁶ Taking into account the multi-SIM effect (there was an estimated 1.68 SIM card per user in 2014 and 1.25 in 2009¹¹⁷, as users tend to have multiple phones to benefit from bonuses and cheaper calls within the same network), these figures suggest that only 41 percent of the population had direct access to telephony services in 2014, compared to 20 percent in 2009.

¹¹⁶ Source: ARCE, annual report 2014

¹¹⁷ Source: GSMA intelligence

Annex 4: The main determinants of poverty in 2014 - a multi regression analysis

	National		Urban		Rural	
	Parameter	T-Student	Parameter	T-Student	Parameter	T-Student
Sociodemographics						
Kids less than 5	-0.104	-15.9	-0.149	-10.5	-0.094	-12.9
Kids less than 5, squared	0.008	8.6	0.017	5.4	0.007	6.7
Boys 5-14	-0.134	-19.2	-0.154	-9.9	-0.117	-15.2
Boys 5-14, squared	0.013	10.3	0.016	4.1	0.011	8.3
Girls 5-14	-0.139	-18.3	-0.179	-11.1	-0.125	-14.7
Girls 5-14, squared	0.017	11.2	0.028	6.6	0.014	8.8
Men 15-64	-0.040	-4.9	-0.089	-6.6	-0.020	-2.0
Men 15-64, squared	0.002	2.0	0.007	3.9	0.001	0.5
Women 15-64	-0.039	-5.2	-0.080	-6.1	-0.022	-2.5
Women 15-64, squared	0.004	5.0	0.008	4.6	0.003	3.2
Men 65 or more	-0.080	-2.0	0.024	0.3	-0.083	-2.0
Men 65 or more, squared	0.050	1.7	-0.064	-0.9	0.060	1.9
Women 65 or more	-0.120	-5.0	-0.118	-2.4	-0.093	-3.6
Women 65 or more, squared	0.009	0.6	-0.002	-0.1	0.003	0.2
Head married (yes)	-0.110	-2.2	-0.282	-3.2	0.161	2.6
Head is a woman (yes)	-0.352	-15.7	-0.439	-12.8	-0.147	-4.9
Head not a Burkinabe (yes)	-0.280	-4.9	-0.316	-4.6	-0.057	-0.5
Head is disabled (yes)	-0.045	-2.2	-0.005	-0.1	-0.059	-2.5
Age						
Age of head	0.005	2.4	0.012	3.3	0.001	0.3
Age of head squared	0.000	-3.4	0.000	-3.4	0.000	-1.1
Age of spouse	-0.010	-4.1	-0.010	-2.1	-0.010	-3.4
Age of spouse squared	0.000	4.7	0.000	2.9	0.000	3.4
Education of head						
None	ref					
Primary	0.103	7.2	0.126	6.0	0.060	3.1
Low secondary	0.228	11.1	0.218	8.3	0.160	4.6
Upper secondary general	0.415	14.6	0.357	10.4	0.468	7.6
Upper secondary professional	0.484	7.4	0.449	6.0	0.247	1.4
Post-secondary & University	0.700	20.5	0.608	15.1	0.704	7.5
Education of spouse						
None	ref					
Primary	0.084	4.7	0.102	4.0	0.100	4.1
Low secondary	0.110	4.8	0.146	5.0	0.144	3.4
Upper secondary	0.095	2.2	0.177	3.5	-0.040	-0.3
Post-secondary & University	0.231	3.7	0.282	4.0	0.286	1.8
Labor market of head						

Non-participant	ref					
Participant	-0.003	-0.1	-0.023	-0.6	0.099	1.6
Institutional sector of head						
Public administration	ref					
Public enterprise	0.017	0.3	0.015	0.2	-0.232	-1.3
Private enterprise	-0.035	-1.0	-0.044	-1.1	-0.143	-1.8
Individual enterprise	-0.055	-2.0	-0.067	-2.0	-0.097	-1.6
Type of industry of head						
Agriculture	ref					
Industries	0.285	12.0	0.244	7.5	0.282	7.5
Construction	0.235	7.1	0.187	4.8	0.380	4.6
Commerce	0.333	16.7	0.325	12.2	0.269	7.4
Restaurant/Hotel	0.427	8.5	0.374	6.1	0.342	3.4
Transportation	0.299	8.1	0.263	6.0	0.404	4.3
Education/Health	0.278	7.8	0.191	4.5	0.668	8.3
Other services	0.288	12.5	0.244	8.3	0.290	6.0
Institutional sector of head						
Public administration						
Public and private enterprise	0.163	2.5	0.085	1.1	0.445	3.0
Individual enterprise	0.044	0.9	0.000	0.0	0.169	1.7
Unemployed	0.121	2.5	0.088	1.5	0.255	2.5
Type of industry of head						
Agriculture	ref					
Industries, construction	-0.022	-0.8	0.027	0.7	-0.069	-1.6
Commerce	0.064	3.3	0.084	3.0	0.127	3.8
Restaurant/Hotel	0.134	3.2	0.168	3.2	0.186	2.3
Education/Health	0.143	2.5	0.152	2.3	0.104	0.8
Other services	-0.006	-0.2	-0.002	-0.1	0.123	1.6
Time to the grocery market						
Less than 15 minutes	ref					
15-29 mns	-0.033	-2.5	-0.035	-1.7	-0.034	-2.1
30-44 mns	-0.034	-2.3	-0.105	-4.0	0.002	0.1
45-59 mns	-0.046	-2.3	-0.100	-2.4	-0.023	-1.1
60mns et +	0.004	0.3	-0.076	-1.7	0.029	1.6
Time to the nearest pharmacy						
Less than 15 minutes						
15-29 mns	-0.043	-3.2	-0.036	-1.8	-0.035	-1.9
30-44 mns	-0.045	-2.8	-0.049	-1.8	-0.023	-1.2
45-59 mns	-0.081	-4.0	-0.142	-3.4	-0.050	-2.2
60mns and +	-0.023	-1.3	-0.056	-1.2	-0.005	-0.3
Time to the civil registration center						
Less than 15 minutes						
15-29 mns	-0.045	-3.2	-0.046	-2.0	-0.027	-1.6

30-44 mns	-0.030	-1.8	0.005	0.2	-0.037	-2.1
45-59 mns	0.004	0.2	-0.022	-0.3	0.003	0.1
60mns and +	0.002	0.1	-0.053	-0.9	-0.003	-0.2
Time to the police station						
Less than 15 minutes						
15-29 mns	-0.037	-2.1	-0.032	-1.5	-0.036	-1.0
30-44 mns	-0.051	-2.7	-0.015	-0.6	-0.087	-2.6
45-59 mns	-0.057	-2.8	0.012	0.4	-0.121	-3.5
60mns and +	-0.108	-5.9	-0.105	-3.2	-0.134	-4.4
Physical and social Capital						
Area land cultivated	0.004	2.6	-0.002	-0.4	0.006	3.6
Area land cultivated, squared	0.000	-3.2	0.000	-0.3	0.000	-3.8
Member of any association (yes)	0.076	7.7	0.086	4.8	0.063	5.6
Regions						
Nord	ref					
Hts Bassins	0.148	6.9	0.157	4.2	0.111	4.2
Bcle Mouhoun	0.005	0.3	0.005	0.1	-0.013	-0.5
Sahel	0.368	15.9	0.305	7.4	0.382	14.2
Est	0.123	5.5	0.092	2.3	0.112	4.3
Sud Ouest	0.175	7.5	0.315	7.6	0.128	4.7
Centre Nord	0.280	12.6	0.276	6.9	0.254	10.0
Centre Ouest	0.096	4.3	0.102	2.6	0.082	3.2
Plateau central	0.102	4.5	0.021	0.5	0.134	5.1
Centre Est	0.244	11.1	0.170	4.5	0.291	11.2
Centre	0.277	12.3	0.291	8.2	0.183	6.0
Cascade	0.274	11.7	0.214	5.3	0.292	10.5
Centre sud	0.163	7.1	0.074	1.8	0.209	7.9
Residence						
Rural (yes)	-0.034	-2.7				
Constant	1.101	12.0	1.309	10.3	0.443	2.8
Statistics						
# observations	10411		4003		6408	
R ²	0.572		0.630		0.402	

Source: Authors calculations using EMC-2014

Annex 5: Summary matrix

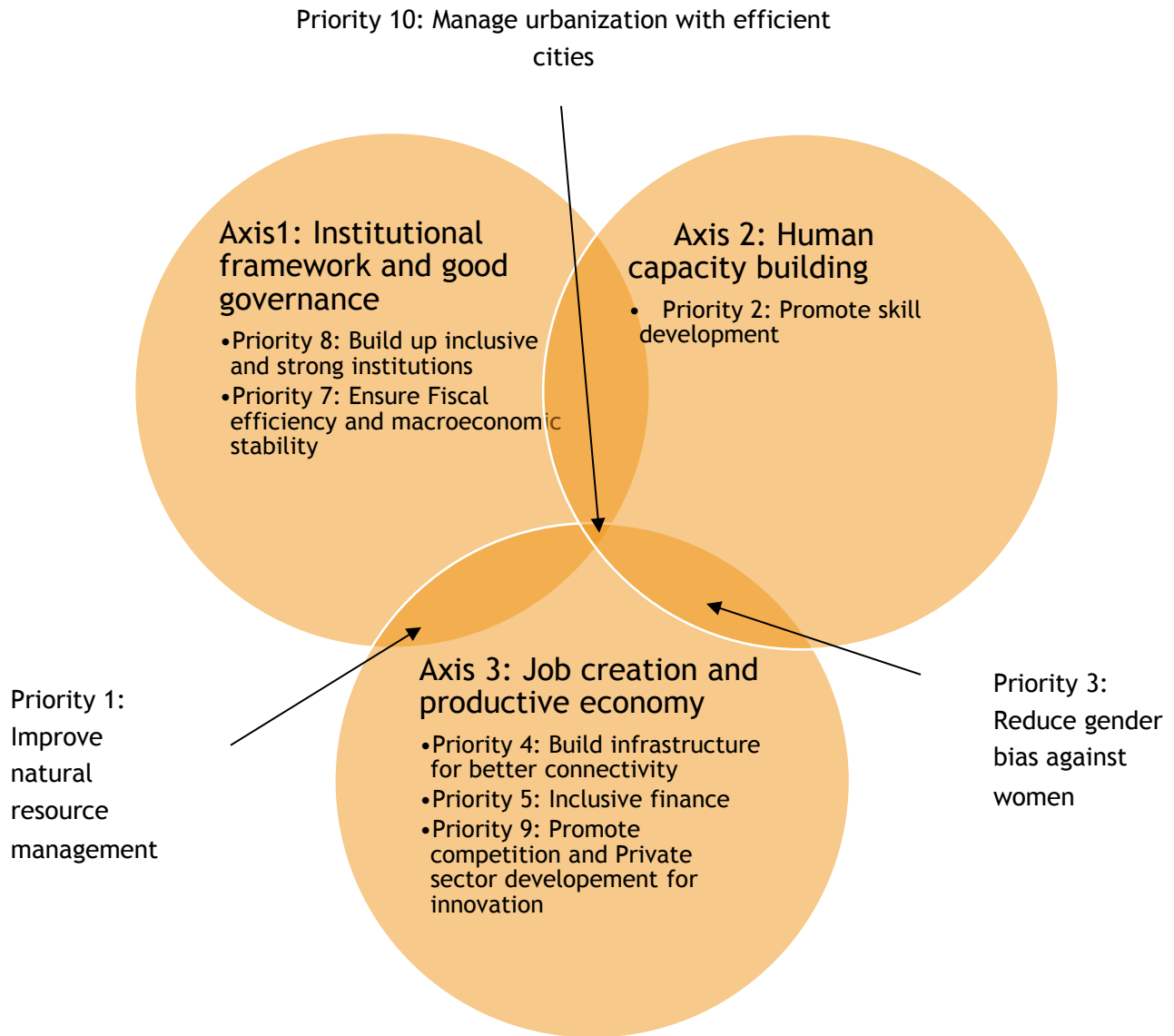
	CONSTRAINT 1	CONSTRAINT 2	CONSTRAINT 3	CONSTRAINT 4	CONSTRAINT 5
1.INSUFFICIENT GROWTH OF PRODUCTIVE JOBS					
1.1. Weak agriculture performance					
Cereals	Land and climatic risks exacerbated by poor water management	Underdeveloped collective infrastructure outside of the farm-gate (roads, warehouses)	Limited access to external finance	Lack of secured land rights	Difficult access to information and technology
Cotton	Vulnerability to rainfalls and prices	Sub-optimal synergies between producers and service providers	Non-competitive market structure	Governance	High transport costs
Livestock	Limited access to land and pasture	Diseases and insecurity	Low standard and hygiene	Cost of transformation due to high electricity costs and unreliability	
1.2.Non dynamic non-farm private sector	Restricted access to external finance	Insufficient economies of scale due to lack of connective infrastructure	Low competition with barriers to entry, limiting innovation	Poor skills and high labor costs	
2.INSUFFICIENT ACCESS TO MINIMAL PACKAGE OF GOODS AND SERVICES					
2.1. Weak delivery of social services					
Education	Financing mismatch and weak financial efficiency in current spending as well in the allocation of resources.	Insufficient qualified and motivated teachers who are highly concentrated in Ouagadougou.	Reduced incentives for families to send children to schools because of low rates of return and severe budget constraint in	Gender bias against girls, especially after the end of the primary cycle.	

			poor households		
Health/Nutrition	Financing gap compared to fast growing demand and financial leakages along the expenditure chain	One of the lowest ratio of doctors and nurses per habitants in the world.	Costs of services too high for poor households, especially by private providers.		
2.2. Unequal provision of infrastructure					
Energy	Financing mismatch exacerbated by insufficient private sector participation and financial distress of SOEs	Weak planning and execution of investment projects as well as sub-optimal energy mix	Poor governance with political interferences in tariffs and in management of utilities	Insufficient technical capacity, including for partnership with private operators	High electricity tariffs
Water/Sanitation	Insufficient public funding and community driven initiatives	Weaknesses in long-term management of water resources, including the impact of climatic changes.	While effective management of urban water, lack of coordination in rural areas, including in the decentralization process.	Low technical capacity at the local level.	Excessive distance to water supply for many poor households.
Transports (roads)	Financing gap for new investments and maintenance	Lack of granularity in national strategies and slow implementation of projects	Lack of application of rules on traffic and excessive roadblocks		Limited use of motorized vehicles because unaffordable for population and limited access to public transportation, outside of urban areas.
Communication	Lack of coordination between public and private sector for financing of basic infrastructure	Need to improve connections of isolated regions and the international communication network.	Weak regulatory framework with limited number of operators in some segments and high prices	Insufficient number of skilled ICT workers and need to educate customers	Excessive cost of internet connection



2.3. Vulnerability to shocks	Insufficient prevention and risk management programs	Limited protection programs available	Absence of targeting mechanisms	Ineffective distribution of benefits to targeted groups	
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Annex 6: The SCD priorities in light of the National Development Plan Axes



Annex 7: Country Map

