AFRICAN SOCIAL DEVELOPMENT INDEX (ASDI): MEASURING HUMAN EXCLUSION FOR STRUCTURAL TRANSFORMATION
East Africa Report
AFRICAN SOCIAL DEVELOPMENT INDEX (ASDI): MEASURING HUMAN EXCLUSION FOR STRUCTURAL TRANSFORMATION

East Africa Report

Employment and Social Protection Section
Social Development Policy Division
UN Economic Commission for Africa
Ordering information

To order copies of *African Social Development Index (ASDI): Measuring Human Exclusion For Structural transformation*, please contact:

Publications
Economic Commission for Africa
P.O. Box 3001
Addis Ababa, Ethiopia

Tel: +251 11 544-9900
Fax: +251 11 551-4416
E-mail: ecainfo@uneca.org
Web: www.uneca.org

© 2016 Economic Commission for Africa
Addis Ababa, Ethiopia
All rights reserved
First printing September 2016

ISBN: 1441859303

Material in this publication may be freely quoted or reprinted. Acknowledgement is requested, together with a copy of the publication.

Designed and printed by the ECA Documents Publishing Unit. ISO 14001:2004 certified.
# Table of Contents

Acknowledgements ............................................................................................................ iv

Acronyms .............................................................................................................................. v

Executive Summary ........................................................................................................... vii

Section 1: Introduction ........................................................................................................ 1

Background .......................................................................................................................... 2
  - Rationale behind an African Social Development Index .............................................. 2
  - A new paradigm for inclusive development ................................................................. 3
  - Key drivers of human exclusion .................................................................................. 4
  - Differential impacts of exclusion on women and men .................................................... 6
  - Exclusion in urban and rural areas .............................................................................. 6

Section II: The African Social Development Index (ASDI) .............................................. 7

Section III: East Africa – A brief Introduction ................................................................. 10

Section IV: ASDI Country Analyses .............................................................................. 12
  - 4.1. Burundi .................................................................................................................. 13
  - 4.2. Comoros .............................................................................................................. 19
  - 4.3. Djibouti ................................................................................................................ 25
  - 4.4. Democratic Republic of Congo ............................................................................ 32
  - 4.5. Kenya .................................................................................................................... 38
  - 4.6. Madagascar ......................................................................................................... 43
  - 4.7. Rwanda ................................................................................................................ 49
  - 4.8. Uganda ................................................................................................................ 55

Conclusion ............................................................................................................................ 61

References ............................................................................................................................ 63

Annex 1: Methodological foundations of the African Social Development Index .......... 68

Annex 2: Review of social development and exclusion indices ...................................... 77
Acknowledgements

This report is the result of two sub-regional capacity building workshops on *Reducing Human Exclusion for Structural Transformation: The African Social Development Index (ASDI)*, which were co-organized by the Employment and Social Protection Section of the Social Development Policy Division (SDPD) and the Economic Commission for Africa East and Central Africa Sub-Regional Offices, in Kigali (Rwanda), and Douala (Cameroon), in June 2015. The main objective of the workshops was to equip member States from the sub-regions with conceptual background and practical application of the ASDI at national and sub-national levels. The workshop, whilst providing the participants with increased capacities in monitoring exclusion, allowed member States to share the results of the ASDI and the impact of social policies in reducing exclusion over time.

The Economic Commission for Africa (ECA) is grateful to all the experts that took part in the ASDI training in East Africa for providing the initial datasets for the computation of country results. The countries represented at the capacity building workshop, along the names of experts were: Burundi (M. Semyotsos Pascal, National Institute of Statistics and Economic Studies of Burundi and Mme Nsabimana Viola, Ministry of Finance), Comoros (M. Said Djaffar Soudjai Ali, National Institute for Statistics and Economic Studies and Demographic and M. Soulailana Hassani Nouhou, Ministry of Finance), Djibouti (M. Konate Sekou Tidjani, Department of Statistics and Demographic Studies and M. Kadar Mouhoumed Hassan, Ministry of Economy and Finance for Industry), DRC (M. Nkenku Luaka Evrard, Ministry of Planning and M. Mbiantondo Ndombele José, National Statistics Institute), Kenya (Mr. Torome Joel Saitoti, Kenya National Bureau of Statistics and Mr. William M. Munyoli, Ministry of Devolution and Planning Economist), Madagascar (M. Rajoelina Fenitra Andriamamerolankinana, National Statistics Institute), Rwanda (Kanobana Muchochori Dominique and Nkurunziza Venuste, National Institute of Statistics of Rwanda), Uganda (Sheila Lwamafa Nuwamanyi, Ministry of Finance, Planning and Economic Development and Baryahirwa K Stephen, Bureau of Statistics).

The report was written under the general direction of Takyiwaa Manuh, Director of the ECA Social Development Policy Division and the direct supervision of Saurabh Sinha, Chief of Employment and Social Protection. The core team of the report was composed of Adrian Gauci (Economic Affairs Officer); Iris Macculi (Economic Affairs Officer); Jack Jones Zulu (Social Affairs Officer); Kalkidan Assefa (Research Technician) and Melat Getachew (Research Assistant).

ECA would like to thank all member States for their engagement and for providing the core data and technical inputs in the report. Special thanks go to the East and Central Africa ECA Sub-Regional Offices for their invaluable support in the organization of the trainings and other outreach activities.

Rockefeller Foundation’s invaluable support and assistance in the outreach activities of the ASDI including the capacity building workshops is gratefully acknowledged.

Final thanks go to ECA’s Publication Section led by Demba Diarra for coordinating the editing, printing and publication of the report.
# Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>AGDI</td>
<td>African Gender and Development Index</td>
</tr>
<tr>
<td>ASDI</td>
<td>African Social Development Index</td>
</tr>
<tr>
<td>AWPS</td>
<td>African Women's Progress Scoreboard</td>
</tr>
<tr>
<td>AUC</td>
<td>African Union Commission</td>
</tr>
<tr>
<td>CDF</td>
<td>Constituency Development Fund</td>
</tr>
<tr>
<td>COMESA</td>
<td>Common Market for East and Southern Africa</td>
</tr>
<tr>
<td>CSOs</td>
<td>Civil Society Organizations</td>
</tr>
<tr>
<td>EAC</td>
<td>East African Community</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
</tr>
<tr>
<td>HDI</td>
<td>Human Development Index</td>
</tr>
<tr>
<td>EIU</td>
<td>Economist Intelligence Unit</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HDR</td>
<td>Human Development Report</td>
</tr>
<tr>
<td>HDI</td>
<td>Human Development Index</td>
</tr>
<tr>
<td>ICPD</td>
<td>International Conference on Population and Development</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>NEPAD</td>
<td>New Partnership for Africa’s Development</td>
</tr>
<tr>
<td>NPRS</td>
<td>National Poverty Reduction Strategy</td>
</tr>
<tr>
<td>RCM</td>
<td>UN Regional Coordination Mechanism</td>
</tr>
<tr>
<td>RECs</td>
<td>Regional Economic Communities</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Name</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>UNDESA</td>
<td>United Nations Department of Economic and Social Affairs</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNECA</td>
<td>United Nations Economic Commission for Africa</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children's Fund</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
<tr>
<td>WDIs</td>
<td>World Development Indicators</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
Executive Summary

Africa’s very positive economic growth over the last two decades has shown resilience in the wake of the international crisis of 2008. This positive performance has not yet translated its economic gains into meaningful social development outcomes. Whilst social outcomes have improved over the last two decades this improvement has been selective with higher income urban male as beneficiaries (ECA 2015). High inequalities persist in most countries and growth has not been sufficiently inclusive and equitable for all segments of the population. As a result, exclusion has become a challenge for Africa’s future development, and yet no meaningful indicators exist to properly monitor the patterns of exclusion and help member States develop appropriate inclusive policies. The construction of an index that addresses these challenges emanates from this vision, and from a request of African member States to develop a tool that reflects the African specific development challenges.

The proposed African Social Development Index (ASDI) is built on an important premise that social development should be reflected in the improvement of human conditions. Too often, the focus is on measuring the contextual elements that are expected to have an impact on improving people’s lives, such as expansion of coverage, and increased involvement in planning and service delivery. However, challenges seem to arise in directly translating these contextual changes into meaningful impacts at the human level.

Using a life-cycle approach, the ASDI focuses on six key dimensions of well-being that reflect the impact of human exclusion over time. As a monitoring and policy tool, the ASDI should help member States devise more inclusive social policies, and guide them in the implementation of Agenda 2063 and Agenda 2030 development frameworks, both of which place a high premium on inclusiveness as a driver of sustainable and equitable development.

The policy reference to the regional Africa Vision Agenda 2063 and Agenda 2030 reiterates the need to “leave nobody behind” as also encapsulated in the global Sustainable Development Goals (SDGs)’ insistence on tackling inequality—thus reinforcing the relevance of the ASDI.

Against this backdrop, the ASDI is relevant to East Africa within the context of the East African Community (EAC) Vision 2030 and the Common Market for East and Southern Africa (COMESA) Strategic Vision. The EAC-COMESA-SADC tripartite agreement for an integrated market and improved regional integration is a blueprint to accelerate poverty eradication and to attain economic and social development goals. The ASDI can assist in supporting subregional efforts of the relevant regional economic communities’ strategic frameworks to track progress in selected social and economic indicators.
Section 1: Introduction
Introduction

Background

African countries have experienced unprecedented economic growth since the early 2000s, and shown strong resilience to the global downturn affecting most of the world’s economies. Growth on the continent has averaged 5 percent yearly, with some countries posting 7 to 11 percent growth in gross domestic product (GDP) in recent years. Despite this remarkable stride, member States have yet to transform their economies and achieve the level of social development witnessed in other regions.

The continent is still fraught with inequalities and exclusion caused by differences in income, ethnicity, gender, age, disability and location among others. Indeed, evidence shows that poorer children in Africa are still about two and a half times more likely to be underweight and up to three times more likely to be out of school than those from the richest households (United Nations, 2012). Such inequalities often lead to a lack of social and economic opportunities in life – excluding the same individuals from development and full participation in society.

The dominant view is that Africa has for a long time focused on economic growth, with the expectation that improvement in social development would follow. One of the reasons for such a paradox hinges on the very nature of growth – largely driven by capital-intensive sectors – with limited value addition and job creation, and unfair redistribution of economic gains. In short, growth is not sufficiently inclusive and equitable – compromising its sustainability and fueling the risk of social and political instability in the region.

At the same time, limited coverage of social protection in many countries has exacerbated the exclusion of the most marginalized groups of the population. These groups, in addition to having limited access to social and economic opportunities, are also more vulnerable to external shocks that reduces their productive capacities, pushing them back, or further into poverty.

Promoting a more inclusive development path in Africa is an urgent priority and a pre-condition for building more sustainable and cohesive societies. However, policy interventions based on aggregate figures are generally not conducive to optimum decision-making and the inadequacy of relevant data and monitoring mechanisms are likely to lead to weak policy formulation and planning.

Rationale behind an African Social Development Index

In Africa, the emergence of social development as a central plank of economic development has gained impetus. The need for an inclusive and transformative growth strategy is a clear political intent firmly expressed by African leaders, in the context of the Africa Union Agenda 2063 and Agenda 2030 for Sustainable Development which are anchored on the principles of equality, sustainability and “leaving no-one behind” (AUC and ECA, 2013).

The recognition of the role of inclusiveness in sustaining development is not new. At the 1995 World Summit on Social Development held in Copenhagen, world leaders acknowledged the importance of social inclusion and integration for achieving sustainable development worldwide. For the first time, there was a shift from a simple model of deprivation to a holistic one of human poverty, exclusion and participation.
At the United Nations Conference on Sustainable Development in 2012, global leaders renewed their commitments to promote social integration through the creation of more cohesive and inclusive societies. Following the Conference, the need to tackle exclusion as an objective per se started to gain resonance in the development discourse.

African governments have also become increasingly aware of the centrality of “inclusiveness” in the continent’s development agenda. This is reflected in their commitment to the 1995 Copenhagen Declaration and Programme of Action, underscored by the 2008 Windhoek Declaration on Social Development and Social Policy Framework for Africa, which have been instrumental in advancing the New Partnership for Africa’s Development (NEPAD) social development priorities across the continent. African countries have also taken action to address specific challenges of excluded groups – including youth, women and the elderly – using platforms such as the International Conference on Population and Development (ICPD), the Beijing Platform for Action, the Ouagadougou Plan of Action, the Abuja Declaration and the Madrid Plan of Action on Ageing, among others.

However, the implementation of these commitments has not led to the desired outcomes for a number of reasons. Firstly, until recently, only a few had a clear understanding of the challenge of “exclusion”, and how it could be addressed and incorporated into national development planning (ECA, 2008).

Secondly, so far none of the internationally-agreed development goals, including the Millennium Development Goals (MDGs), have explicitly addressed the inclusive dimension of development, and their aggregate nature has failed to identify within-country inequalities that would require different policy interventions from those devised at national or regional levels.

Capacity gaps also persist, and there is a lack of monitoring mechanisms to assess inclusion in Africa, thereby leading to inadequate statistical follow-up and policy formulation.

To accelerate progress, governments need to develop policies that make equality and inclusion a choice of development strategies rather than their by-product, for Africa’s structural transformation to be inclusive, the continent requires strong and responsive developmental states and long-term development planning that is consistent with a more inclusive development framework, as envisioned in the African Agenda 2063 and Agenda 2030 for Sustainable Development.

**A new paradigm for inclusive development**

Exclusion is a multidimensional phenomenon, whose contours are difficult to define unless a clear framework is established on how it should be assessed and what aspects should be covered in the process. It is acknowledged that, despite strong economic growth, an “excluded” society is likely to limit the human and social development of its citizens. This is indeed what the continent is currently experiencing, with strong economic growth unable to ensure inclusive and equitable distribution of benefits across all sections of society.

There is evidence that progress towards inclusive development in Africa has been slow, and its drivers limited, to meet the needs of its people. This increases exposure to economic volatility and vulnerability to external shocks, particularly for the poorest and the marginalized groups. It is critical to ensure that

---

1 Inclusive society was defined as “a society for all, in which every individual, each with rights and responsibilities, has an active role to play”. Such a society is based on the fundamental values of equity, equality, social justice, human rights and freedoms. It should also be equipped with appropriate mechanisms that enable its citizens to participate in the decision-making processes that affect their lives and shape their common future (United Nations, 1995).
Introduction

these groups are included in the development process, accelerating the transition towards more equitable development (Figure 1.1).

Figure 1.1: From basic structural transformation to inclusive development

In this context, the economic transformation of the continent seems to be well defined and under way, with four essential and interrelated processes, namely: a declining share of agriculture in GDP and employment; a rural-urban migration that stimulates the process of urbanization; the rise of a labor-intensive industrial and modern service economy; and a demographic transition from high to lower mortality and fertility rates, associated with better health standards in both rural and urban areas (ECA, 2013b). However, the human and social development impacts underpinning this process require further analysis.

A key component of this framework is the need to address the needs of excluded groups for a balanced transformative agenda. This would provide the basis for redressing country-specific exclusion patterns, through effective policy formulation, both at national and sub-national levels.

As part of this effort, a new paradigm is proposed for the social transformation of Africa, where reducing human exclusion is at the centre of this transformation. It is argued indeed that “human inclusion” should be a pre-condition to “social and economic inclusion” allowing individuals to be part of the development process as a first step to social and economic integration. The challenge for African countries is therefore to accelerate the path to structural transformation, while addressing the factors that contribute to exclusion.

Key drivers of human exclusion

Exclusion is structural and needs to be prioritized in order to sustain growth and maintain peace. Exclusion also skews development dynamics, economic opportunities and job creation, leaving the economy with a narrow base and higher vulnerability to external shocks. In addition to its economic impact, exclusion – whether based on income, gender, geographical, political or other factors – has critical social costs.
It is argued that the drivers of exclusion are often determined by the interaction of a series of contextual factors, as illustrated in Figure 1.2:

**Figure 1.2: Determinants of Exclusion**

- **Social factors** include elements associated with access to basic social services, including health, education, and social security, among others;

- **Economic factors** take into account access to productive resources – including land and credit – as well as the degree of economic and market integration;

- **Political-institutional factors** encompass government policies and programmes aimed at addressing instability and insecurity, ensuring political participation and access to civil and human rights; and,

- **Cultural factors** define the norms and environment in which a person lives, in terms of traditions or gender-based barriers. These factors, often a consequence of policies and programmes, can have an impact on the likelihood of an individual to be either included or excluded from the development process. Within this framework, human exclusion can therefore be defined as ‘the result of social, economic, political, institutional and cultural barriers that are manifested in deprived human conditions and that limit the capacity of individuals to benefit from and contribute to economic growth’.3

It is important in this context to highlight the distinction between human exclusion and the commonly-used term of social exclusion. Social exclusion generally refers to a person or a group’s inability to participate in social, economic, political and cultural life and their relationships with others. Human exclusion, on the other hand, defines the individual’s inability to participate in and benefit from the growth process itself. To that extent, human inclusion can be considered a stage prior to social inclusion – people need to be part of the growth process, and benefit from it, before they can participate meaningfully in society.

---

2 For more details, see also Macculi and Acosta (2014).

3 Other inhibiting factors, which are not explicitly included in this framework but are often found to be underlying determinants of exclusion, include the rural-urban divide, disability, ethnicity, HIV/AIDS status, internal and external conflicts, among others.
Introduction

Human exclusion can manifest at different stages of a person’s life. So while infants may receive adequate nutrition during the early stages of their lives, they may face discrimination in school or at the workplace. Exclusion based on gender and location is common in many countries.

Differential impacts of exclusion on women and men

In each phase of life, women and girls are affected by vulnerabilities to a different extent and in different ways than their male counterparts. This stems from the fact that women and men have different roles in society, different access to and control over resources, and different concerns that can impact their likelihood of being included or excluded from mainstream development.

Some of these differences are intrinsic to gender, while others are the result of cultural biases and social factors, which can affect women throughout their life cycle. Indeed, there are large number of studies showing that women and girls generally bear the brunt of unpaid care work; are generally paid lower wages, suffer more than boys the consequences of a truncated education; are more likely to enter into unskilled informal labour; and are more often victims of exploitation, violence or early marriage. All of this may critically affect their future development and ability to participate in social, economic and decision-making processes.

The effects, however, can vary across dimensions and stages in life. For instance, it is found that in developing countries, girls who survive early stages of life and reach adulthood have a life expectancy that approaches that of women in developed countries, a gap that will most likely narrow in the future, as mortality declines at younger ages. On the other hand, child malnutrition is higher among boys than girls in most developing countries, although results are not uniform across countries. In India for instance, because of their lower social status, girls are more at risk of malnutrition than boys (Smith and Haddad, 2000).

Early marriage and other traditional practices have also a significant bearing on girls’ educational achievements, lowering their future life opportunities and aspirations. These differential outcomes – whether based on contextual factors or intrinsic to gender – need to be tackled, as indeed policies that do not adequately address such differences tend to perpetuate gender inequalities over time (Hedman, 1996, ECE and World Bank Institute, 2010).

Exclusion in urban and rural areas

Patterns of exclusion are also influenced by the geographical location in which an individual is born and lives. People in rural areas are more likely to lack the minimum social and economic infrastructure – including basic social services – that would allow them to develop to their full potential. Globally, 75 percent of those living in extreme poverty in 2002 resided in rural areas, despite the fact that only 52 percent of the world population was living in such areas (Ravallion et al, 2007).

The latest findings also point to higher rural poverty rates in Africa (UN, 2014). While this is true, African cities are also increasingly faced with other challenges, such as urban congestion, environmental and health hazards, poor infrastructure, social fragmentation, limited access to land as well as increased competition that bars unskilled workers from economic and social opportunities.
Section II: The African Social Development Index (ASDI)
The African Social Development Index (ASDI)

African Social Development Index (ASDI)

The ASDI has been developed to assess the overall degree of human exclusion. It follows a life-cycle approach on the premise that exclusion manifests at different stages of an individual’s life.

For each phase of life, a dimension of human development has been identified, from which individuals in that specific age group are more likely to be excluded - affecting their development and integration later in life (Table 2.1).

Table 2.1: Exclusion throughout the life-Cycle

<table>
<thead>
<tr>
<th>Period</th>
<th>Stage in the life cycle</th>
<th>Key dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 year</td>
<td>Birth</td>
<td>Survival</td>
</tr>
<tr>
<td>1 to 5 years</td>
<td>Early childhood</td>
<td>Health/Nutrition</td>
</tr>
<tr>
<td>6-14 years</td>
<td>Formative years</td>
<td>Quality education</td>
</tr>
<tr>
<td>15+</td>
<td>Entering the labour market</td>
<td>Productive employment</td>
</tr>
<tr>
<td>25+</td>
<td>Productive life</td>
<td>Means of subsistence</td>
</tr>
<tr>
<td>60+</td>
<td>Old age</td>
<td>Living a decent life</td>
</tr>
</tbody>
</table>

To make this framework operational, each dimension has been associated with one indicator that best captures the aspects of exclusion identified in the model (Figure 2.1).

Figure 1.2: Determinants of Exclusion

The value of each indicator ranges between 0 and 1 and the aggregate value of ASDI lies between 0 and 6. The higher the value of ASDI, the higher the extent of human exclusion.
The African Social Development Index (ASDI) seeks to capture the differential impacts of exclusion based on gender and location. This allows capturing inequalities within countries and social groups that would otherwise remain unaccounted for. The findings should guide development-planning processes and improve policy targeting at the local level and on different population clusters.4

**Selection of indicators**

The selection of indicators is the result of a strong consultative/participatory process, involving experts from member States, regional institutions and development partners. Final selection was based on three main criteria: (I) relevance of dimensions/indicators in the African context; (ii) readily available data, possibly at various tiers of administration; and (iii) ‘impact’ rather than ‘output’ indicators.

While the selected indicators may not capture the full dimension of exclusion in each phase of life, they were chosen as the best proxy indicators based on available data and empirical evidence on exclusion in Africa. The methodological foundations of the Index are detailed in Annex 1.

**Key features of the ASDI**

The ASDI has a number of key features that distinguishes it from other indices:

- Developed on the basis of a request from member States;
- Uses national data, and so does not rank countries;
- Simple to comprehend and compute;
- Only index that measures human exclusion;
- Follows a life-cycle approach.

**Implementation Strategy**

The roll-out of the Index in 46 African countries has allowed testing and further refining the tool, making it more responsive to the needs of member States. More importantly, the training and application of the Index has contributed to strengthening national capacities in identifying policies and programmes that have contributed to reduce exclusion over time and across groups of population.

An important development of the ASDI has been its scale-up at the sub-regional level, through its applicability in select Regional Economic Communities (RECs), for monitoring implementation of their development plans and fostering economic and social integration.

Finally, a policy-mapping framework is being developed by the ECA to further assess the effectiveness of social policies in tackling human exclusion. This exercise will be a major step forward in using the ASDI for development planning and improved policy targeting. The setting of National Implementation Teams (NITs) is also being instrumental for ensuring the ownership and critical buy-in of Governments in the use of the Index for promoting and enhancing more inclusive development.

---

4 The application of the index in Africa is currently led by national implementation teams, which include senior experts from relevant ministries and national statistical offices. Data needed to compute the index are based on national statistics, mainly censuses and household, demographic and health surveys.
Section III: East Africa – A brief Introduction
East Africa: A brief introduction

Africa's growth, while remaining positive over the past 15 years, declined slightly from 3.9 per cent in 2014 to 3.7 per cent in 2015. Importantly, economic growth in Africa continues to be driven by private consumption and investment. Continued government spending on infrastructure projects in member States, in particular, has also been positively contributing to growth (ECA, 2016).

Despite a volatile and an uncertain global economic environment since 2009, East Africa has been growing rapidly and remains a top growth performer across Africa. The sub-region posted an impressive performance, sustaining an average GDP growth of 6.6 percent per year between 2009 and 2014 (UNECA SRO-EA, 2016). The GDP of East Africa as a whole stands at US$ 229.6 billion, with a population of 299 million (International Monetary Fund, 2013).

Infrastructure development, robust private consumption and exports continued to drive growth in most of the countries in the subregion. In 2016, growth is expected to be led by the increased inflow of foreign direct investment, increased public spending on infrastructure and growing domestic markets. However, on the downside, the subregion faces some uncertainties, both exogenously and endogenously determined. International commodity prices have fallen sharply, with oil prices dropping by 43 per cent and metals by 17 per cent in the period between June 2014 and October 2015, and prospects remain the same for 2016 (International Monetary Fund, 2015). The subregion faces some difficulty regarding food security through climate change-induced variation in agricultural production. There are also political uncertainties in Burundi, the Democratic Republic of the Congo and South Sudan, as well as terrorist threats in Kenya and Somalia, which continue to undermine the subregion’s growth prospects.

The resilience in the subregion’s growth pattern, whilst noteworthy, has not led to improved social outcomes. Poverty and income inequalities persist, and inequalities in access to education and health care across income groups, location and gender reinforce the inequalities of outcomes.

An estimated 10-12 million new entrants join the labour force each year in Africa; in contrast, Africa as a whole has created only 37 million jobs over the past decade, of which only 28 per cent are wage-paying formal jobs (Mckinsey Global Institute, 2012). Informal sector employment is high in on the continent and in East Africa, with low social protection and significant wage differentials between informal and formal employment, which in turn perpetuates poverty.

These aggregate statistics indicate the marginalization and exclusion of some groups from the positive benefits of growth. The employment, poverty and inequality figures of the subregion are driven by an array of common drivers including quality of growth, low industrial development, gender disparity and informal employment. However, the drivers of exclusion that are country-specific provide better opportunities for policy planning, monitoring and targeting.

In this context, the index assists in identifying the extent of human exclusion across six social and economic indicators across the subregion. Subregional workshops were held in Kigali, Rwanda, and Douala, Cameroon, in order to build the capacity of relevant national officials on the computations and use of the index for policy analysis. Eight countries5 attended, with each country represented by senior officials from national statistical offices, ministries of finance and ministries in charge of social affairs. The results of the index analysis developed with the country teams are presented in the following section.

---

5 Burundi, Comoros, Djibouti, Democratic Republic of the Congo, Madagascar, Kenya, Rwanda and Uganda.
Section IV: ASDI
Country Analyses
Country Analyses

4.1. Burundi

Socio-economic conditions

Burundi has had moderate, although volatile economic growth rates in recent years. However, growth has picked up since 2012 to reach a projected 5 percent in 2016 (Figure 4.1.1). Economic growth is however dependent on weather patterns and international commodity prices, namely coffee.

Figure 4.1.1: GDP growth rate

Source: African Economic Outlook 2015
Note: *(e) estimates, *(p) projection

In 2013/2014, growth was mainly driven by the tertiary sector (45 percent of GDP), followed by the primary (39 percent) and the industrial sectors (16 percent). Growth in the primary sector, however – including agriculture and mining – fell from 5.2 percent to 3.9 percent. Green-coffee production in the 2013/14 season contracted by 42.5 percent. The vulnerability of the economy to exogenous shocks seriously affects overall economic performance and limits improvements in social outcomes (AfDB et al., 2015).

Social development

Poverty in Burundi remains high, with over half of the population living below the poverty line, above the African average of 48 per cent. There are large spatial variations: 68.8 per cent of the poor live in rural areas and 27.6 per cent in urban areas (Government of Burundi, 2014). Life expectancy at birth remains extremely low compared to the regional average, although it is improving slightly (see table 4.1.1).

Poverty is driven by a host of factors, including lack of improved sanitation, flooring, asset ownership, cooking fuel and drinking water, which together contribute to 48.8 per cent of deprivation in Burundi, followed by limited access to health and education, at 25 and 26.2 per cent, respectively (UNDP, 2015).
Generally, however, there has been significant improvement in human development in Burundi since the adoption of the national “Cadre stratégique de croissance et de lute contre la pauvreté” in 2012. Notwithstanding this progress, poverty and the quality of health care and education remain serious challenges.

Investment in agriculture and social sectors increased from 28.9 per cent to 38 per cent of total expenditure in 2013 (Government of Burundi, 2014). This was complemented by social welfare programmes providing support for the most vulnerable groups. Furthermore, the Government introduced a health insurance card system in 2013, which gives 20 per cent of the population access to health care.

Table 4.1.1: Socio-economic indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population, in millions</td>
<td>7.1</td>
<td>8.5</td>
<td>9.7</td>
</tr>
<tr>
<td>GDP total in billions of BIF*</td>
<td>768,235</td>
<td>146,710</td>
<td>466,312</td>
</tr>
<tr>
<td>GNI per capita (atlas method current US$)</td>
<td>120</td>
<td>160</td>
<td>270</td>
</tr>
<tr>
<td>Population below the national poverty line (percent of the population)**</td>
<td>…</td>
<td>67.1</td>
<td>64.6</td>
</tr>
<tr>
<td>Gini Index</td>
<td></td>
<td></td>
<td>0.334 (2006)</td>
</tr>
<tr>
<td>Unemployment, percent of total labour force</td>
<td>7.3</td>
<td>7.2</td>
<td>6.9</td>
</tr>
<tr>
<td>Unemployment, youth total (percent of total labour force ages 15-24)</td>
<td>10.9</td>
<td>10.8</td>
<td>10.7</td>
</tr>
<tr>
<td>Population growth (annual percent)</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
</tr>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>47.6</td>
<td>46.5</td>
<td>51.9 (2014)</td>
</tr>
</tbody>
</table>


** National Data

Measuring human exclusion in Burundi

The African Social Development Index, using national data, provides an important complementary perspective on poverty and human development, contributing to more detailed information on the excluded groups over the life-cycle.
There was a positive change in the ASDI between 2005 and 2010, with a 21 percent drop in human exclusion, although the overall level remains high (Figure 4.1.2).

**Figure 4.1.2: ASDI in Burundi**

<table>
<thead>
<tr>
<th>Year</th>
<th>ASDI Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>3.46</td>
</tr>
<tr>
<td>2010</td>
<td>2.74</td>
</tr>
</tbody>
</table>

*Source: Computed using national data*

The positive change in the overall ASDI was not equitably distributed across gender and location (Figure 4.1.3). There was an approximately equal drop in exclusion for both men and women during the period under review, which is an important distinction of Burundi, as compared to other countries in the sub-region. Seemingly, Government interventions to attenuate human exclusion have not had a gender bias.

**Figure 4.1.3: Human exclusion by gender**

<table>
<thead>
<tr>
<th>Year</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>3.40</td>
<td>3.51</td>
</tr>
<tr>
<td>2010</td>
<td>2.71</td>
<td>2.76</td>
</tr>
</tbody>
</table>

*Source: Computed using national data*

On the other hand the rural-urban dichotomy remains a serious challenge in the country (Figure 4.1.4). Human exclusion in the rural areas dropped by 14 percent between 2005 and 2010 whilst the level in human exclusion dropped by 27 percent in the urban areas over the same period. This matches the predominately rural nature of poverty in the country mentioned above. Furthermore, the specific vul-
nerabilities of the rural populations in Burundi to extreme weather variations and agricultural production exacerbate their exclusion and persistent poverty.

**Figure 4.1.4: Human exclusion by location**

![Human exclusion by location diagram](image)

**Note**: Based on five indicators

**Source**: Computed using national data

This spatial exclusion factor is borne out by the results of the ASDI at sub-national level (Figure 4.1.5). Human exclusion dropped in all sub-regions, yet with wide variations. Indeed, the positive rate of change in the North – the largest urban area - has had a four-fold improvement as compared to other areas. This seems to indicate inadequate attention to appropriate fiscal transfers to outlying regions, based on differences in exclusion. The North and Center of the country have achieved better progress, and possibly indicate some re-prioritization of fiscal transfers from the central government towards these regions.

**Figure 4.1.5: Change in ASDI at sub-national level (percentage)**

![Change in ASDI at sub-national level diagram](image)

**Source**: Computed using national data

The drivers of human exclusion as measured by the index provide further insights into policy interventions and their impact. From 2005 to 2010, the relative contribution of undernutrition and poverty to exclusion increased (see figure 4.1.6). Health policies, particularly in early stages of life, have not had the desired impact. This could be the result of the limited coverage of the health insurance scheme, as
mentioned above. This takes on increased importance with the high levels of poverty, and possible lower access to health provision by lower income groups.

**Figure 4.1.6: Drivers of human exclusion**

An important aspect of the ASDI is the disaggregation of drivers by gender, which can assist in improving policy targeting. The difference in the educational exclusion across gender clearly stands out (Figure 4.1.7), yet is not reflected in variance in employment. Education policies, particularly on ensuring access to education by women, seem to be a challenge. The cost-sharing with families on schooling could have the effect of intra-household decisions, particularly those of low incomes, of excluding girls from attending primary school.

**Figure 4.1.7: Drivers of human exclusion by gender**

Note: The value for female elderly is zero because it exceeds the lower middle income country reference value

Source: Computed using national data
The variation across rural and urban areas could be further assessed by examining its drivers across dimensions (Figure 4.1.8). The positive urban bias on education and health does indicate that spatial variations in public services remain an important feature of human exclusion in Burundi. Urban areas, however, are confronted with large shares of youth unemployment, possibly as a result of high levels of informality outside the major cities.

**Figure 4.1.8: Drivers of human exclusion by location**

![Figure 4.1.8: Drivers of human exclusion by location](image)

*Note: ASDI score by location is computed based on five indicators. From the indicators, data for life expectancy at 60 (elderly) is missing.*

*Source: Computed using national data.*

**Policy considerations**

The nature of exclusion in Burundi mirrors the challenges of rural dwellers and the need to focus on reducing their specific vulnerability to external shocks through asset building. The recent increased allocation to agriculture by the Government is noteworthy, yet the impact on rural exclusion has been weak.

The gender difference in human exclusion needs to be closely monitored and remedial action taken. Equitable access to education by girls is critical, as it provides a number of positive spillover effects in the short and medium term in reducing poverty and providing access to economic opportunities. Increasing public incentives to keep girls in school is an important policy direction.

Nutritional policies have a positive effect on one’s life chances and need to be strengthened. Tackling child stunting, through targeted infant and child support policies, has the overall effect of improved educational performance, productivity gains and reduced health costs (AUC et al., 2015). This takes on importance in urban areas where adequate nutrition is possibly dependent on household income more than in rural areas.

Finally, the variation in the drivers of human exclusion across location could be used to reassess budget allocation to sub-regions focusing on indicators showing the least progress. The magnitude of exclusion at sub-national level could be a useful input into the recalibration of a more equitable fiscal transfer across all administrative regions.
4.2. Comoros

Socio-economic conditions

The Union of Comoros is one of the smallest African nations. The country consists of four major islands: Grand Comore, Moheli, Anjouan, and Mayotte, the last of which continues to be administered by France as an overseas department.

Comoro’s economic growth dropped from 2.6 to 0.6 percent between 2006 and 2008, as a result of a series of political and institutional crises, before picking up and reaching a stable 3.5 percent since 2012, still below the regional average. The growth rate for 2016 is expected to remain stable at 3.6 percent, mainly propelled by international remittances and development assistance (Figure 4.2.1).

Figure 4.2.1: GDP growth rate

As a small island state, Comoros’ economy depends largely on fishing and subsistence crops. In 2014, agriculture accounted for about 50 percent of GDP, while industry and services contributed to 12 and 38 percent respectively, a sharp decline from the recent past. Agriculture is also the main provider of jobs - employing about 80 percent of the population - as well as exports (65 percent). While some commodities are increasingly exported - including spices (vanilla, cloves) and essence (ylang-ylang, copra), the trade flow is not yet sufficient to cover the critical current account deficit, as the country remains highly reliant on imports, especially energy (AfDB et al, 2015).

Social development

Social progress in Comoros has been extremely slow, reflecting a weak structural transformation, political instability and limited institutional capacities, which have all had a limited impact on people’s lives. The population remains predominantly rural (72.1 %), and the majority is young, with an average age of 24.1
years. High fertility rates – at 4.8 in 2012 – contribute to accelerate this trend, putting a strain on the provision of social services, as well as on human capital and employment creation.

The weakness of the private sector is a further hindrance to economic and employment opportunities in the country. The state remains the main provider of jobs, but its capacity to absorb the increasingly large population is limited. Women and youth, in particular, are poorly equipped to respond to the needs of the labour market. Seventy percent of the working population in Comoros still lives below the poverty line, and 1 out of 2 qualified youth are unemployed (UNDP, 2015). Women are also largely excluded from economic and political participation, with virtually no female representative in parliament, according to the latest data available (AfDB, 2015). There is also no social measure in place to protect informal workers or vulnerable populations in any of the three islands.

This state of affairs is reflected in a low level of human development. In 2014, Comoros was ranked 159th out of 188 countries in the Human Development Index with a score at 0.488 – less than 8 percent increase from 2005, placing it well below the average for countries in Africa, excluding North Africa (UNDP, 2015).

**Table 4.2.1: Socio-economic indicators**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population, in millions</td>
<td>575,428</td>
<td>649,404</td>
<td>769,991</td>
</tr>
<tr>
<td>GDP total in billions of KMF*</td>
<td>131,293</td>
<td>167,126</td>
<td>253,167</td>
</tr>
<tr>
<td>GNI per capita (atlas method current US$)</td>
<td>390</td>
<td>670</td>
<td>790</td>
</tr>
<tr>
<td>Poverty - $1.90 a day (PPP) (percent of population)**</td>
<td>…</td>
<td>13.5 (2004)</td>
<td>…</td>
</tr>
<tr>
<td>Gini Index</td>
<td>…</td>
<td>0.559 (2004)</td>
<td>…</td>
</tr>
<tr>
<td>Unemployment, percent of total labour force</td>
<td>6.7</td>
<td>6.6</td>
<td>6.5</td>
</tr>
<tr>
<td>Unemployment, youth total (percent of total labour force ages 15-24)</td>
<td>10.5</td>
<td>10.6</td>
<td>10.6</td>
</tr>
<tr>
<td>Population growth (annual percent)</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>60</td>
<td>61</td>
<td>63 (2013)</td>
</tr>
</tbody>
</table>

Source: World Development Indicators (World Bank).


** National data was not available

**Measuring human exclusion in Comoros**

Despite a number of social challenges, the overall level of exclusion in Comoros seems to have declined, from 2.90 in 1996 to 2.06 in 2013. This shows that the country has made some progress, although the current economic and social outlook is not sufficient to drive a real change in people’s lives (Figure 4.2.2).
The reduction in exclusion has been faster for women than it has been for men – possibly as a result of effective affirmative policies (Figure 4.2.3). However, the coexistence of customary and modern laws in Comoros is still a major hindrance to women's full participation in development. Literacy rates have improved over time, and infant mortality among girls has decreased but at a slower pace than among boys. The largest improvement has been registered in poverty reduction, with rates dropping from 75 to 25 percent for women, against a 10 percent reduction for men.

Irrespective of gender, however, exclusion in Comoros remains largely a rural phenomenon. Overall, the level of exclusion is almost twice as high in rural areas as it is in the cities, and the gap has further increased over time (Figure 4.2.4). This calls for accelerated infrastructure development and expanding social service provision to rural communities, particularly in the most decentralized areas.
The overall drop in human exclusion is reflected across the three islands. The Grand Comore has registered the largest progress across all dimensions of inclusion (50 percent) – and this calls for further investments in Moheli, Anjouan and other minor islands that are geographically, socially and economically isolated (Figure 4.2.5). Improvement in transport and communication, and the creation of commercial hubs in some strategic locations across the islands could be an important step forward in this direction.

Inclusion in education has significantly improved – most likely as a result of the recent education policy put in place under the accelerated growth strategy (2010-2014), which has prioritized human capital development among other things. Infant mortality continues to be an important driver of exclusion in Comoros, and its relative contribution has greatly increased over time (Figure 4.2.6). This is a critical challenge, if the country is to build a strong human capital foundation, as exclusion in the earliest stages of life is likely to have incremental and irreversible impacts in future opportunities in life.
Figure 4.2.6: Drivers of human exclusion

![Graph showing drivers of human exclusion](image)

Source: Computed using national data

Figure 4.2.7: Drivers of human exclusion by gender

![Graph showing drivers of human exclusion by gender](image)

Note: The value for Female Elderly is Zero because it exceeds the lower middle income country reference value

Source: Computed using national data
**Policy considerations**

Poor in natural resources, Comoros needs to diversify and rapidly transform the structure of its economy. This will help reduce the risks to external shocks, particularly those affecting agriculture, currently the main driver of growth and employment. Structural reforms are also needed to create a more enabling environment for business development and for improving fiscal management and communication between the three main islands.

The Government has recently put in place a new Strategy for Accelerated Growth and Sustainable Development (SCA2D) 2015-2019. Its implementation, however, will depend on the capacity of the State to solve the energy crisis, which is inhibiting most business activities. A strategic focus is given to infrastructural development and support to the private sector, which should generate the much-needed jobs, particularly for the youth.

Poverty remains a major obstacle to development, which is intensified by migrations from the poorest areas towards the main cities, mostly in the Grand Comore, thus exacerbating spatial and economic inequalities. The current demographic trends are likely to intensify these flows and trigger social tensions, calling for improved urban planning, and a more equitable distribution of resources and social protection coverage.

---

**Figure 4.2.8: Drivers of human exclusion by location**

![Bar chart showing drivers of human exclusion by location.](chart)

**Note:** The value for Rural Elderly is Zero because it exceeds the lower middle income country reference value.

**Source:** Computed using national data.
4.3. Djibouti

Socio-economic conditions

Djibouti’s economy has been resilient over the past decade, with a GDP growth rate of 5 percent in 2013, which is expected to increase and reach 6.2 percent in 2016 (Figure 4.3.1).

The economy, however, remains concentrated around port activity in Djibouti city – mainly transit goods to and from Ethiopia – as well as Foreign Direct Investments (FDI) channeled to developing port infrastructure, roads, buildings and hotels. In 2013, FDI accounted for 18.6 percent of GDP, a record high, while exports remain below 8 percent of GDP – mostly concentrated on livestock to Somalia, Yemen and the Gulf states (AfDB et al. 2015).

Despite a positive economic outlook, diversification remains a major challenge. Industrial development is weak, hindered by high production costs, particularly those linked to energy and water. Agriculture is challenged by arid land and harsh weather conditions. As a result, the service sector continues to dominate the economy – contributing to 76 percent of GDP and providing jobs to over 60 percent of the population (ibid). Traditional services, such as transport and construction, have been bolstered by the recent expansion in tourism and telecommunications. Most of the jobs created in this sector, however, are largely informal, with lack of social protection and decent opportunities, particularly for the youth (DSP, 2011-2015).

The expansion of the private sector is also hindered by limited access to credit and a skilled labour force. In 2014, the country was ranked 140th in the World Bank Doing Business Report, due to obstacles in property registration, ease of credit and protection of investors. The Government, however, has recently embarked on a number of reforms and investment programmes to provide incentives to the private sector. A vast infrastructural development project is underway to strengthen the country’s strategic position as a logistical, commercial and financial hub. Regional integration continues to expand under the COMESA trade mechanisms. In 2012, a tripartite agreement was also signed between Djibouti, Ethiopia and South Sudan – fostering transport and other economic activities in the sub-region.
The country’s external position, however, remains vulnerable, putting the country at high risk of over-indebtedness.

**Social development**

Despite a positive economic performance, Djibouti displays one of the highest poverty rates in the continent. The lack of economic diversification and rural development has held back poverty reduction in the country. Poverty has almost doubled in the past decades – from 41.4 percent in 1996 to 79 percent in 2012 – and extreme poverty is at 42 percent, a level unchanged since 2002. In terms of human development, the country was ranked 168th globally – at 0.470 in 2014, maintaining the country in the low human development category (UNDP, 2015).

The level of undernutrition has also increased by around 50 percent between 1990 and 2013, and one out of three children today in Djibouti is still undernourished (ECA et al, 2014). Social inequalities and the lack of basic education – particularly among women – are among the factors leading to a high number of underweight children. This is further exacerbated by adverse weather conditions – including recurrent droughts and flooding – but also high volatility in food prices and regional conflicts affecting the Horn of Africa, leading to increased food insecurity and undernutrition. Access to water and sanitation has also worsened in recent years, particularly in rural areas. This range of factors have severely affected people’s adaptation and resilience to external shocks.

A recent study also shows that lack of education, particularly in rural areas, is a major cause of multidimensional poverty in Djibouti (AfDB, 2014). The net enrolment ratio is still below 75 percent, and lower for girls. Completion rates have considerably improved, but were still below 60 percent in 2011. The same report also indicates slow progress in gender parity across all sectors, particularly in secondary education and under-five mortality rates (ibid).

Unemployment is probably the most critical social challenge in Djibouti today. Eighty percent of the young population is unemployed. The concentration of economic and employment opportunities in Djibouti city, notably around the port activities and foreign military base, has pushed most of the people to the capital. Today, almost 80 percent of the population is concentrated in urban areas, with more than 60 percent in the capital city alone. This is likely to increase human exclusion and strain the quality of service delivery and economic opportunities, particularly in remote areas.

Gaps between urban and rural areas are apparent in all social sectors. In 2012, 35 percent of the rural populations had access to safe drinking water – against virtually 100 percent in urban areas. Access to improved sanitation for rural dwellers has even regressed – from 39.2 percent in 1990 to 21.6 percent in 2012 (ECA et al, 2014).
Table 4.3.1: Socio-economic indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population, in millions</td>
<td>745,459</td>
<td>799,309</td>
<td>876,174</td>
</tr>
<tr>
<td>GDP total in billions of DJF*</td>
<td>105,953</td>
<td>150,658</td>
<td>282,403</td>
</tr>
<tr>
<td>GNI per capita (atlas method current US$)</td>
<td>800</td>
<td>1,030</td>
<td>…</td>
</tr>
<tr>
<td>Population below the national poverty line (percent of the Population)**</td>
<td>…</td>
<td>…</td>
<td>79</td>
</tr>
<tr>
<td>Gini Index</td>
<td>0.400</td>
<td>…</td>
<td>0.451 (2012)</td>
</tr>
<tr>
<td>Unemployment, percent of total labour force</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
<tr>
<td>Unemployment, youth total (percent of total labour force ages 15-24)</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
<tr>
<td>Population growth (annual percent)</td>
<td>1.5</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>57</td>
<td>59</td>
<td>62</td>
</tr>
</tbody>
</table>

Source: World Development Indicators (World Bank)


** National Data

Measuring human exclusion in Djibouti

The observed social challenges are reflected in relatively high levels of human inclusion in the country. Despite a strong economic performance, the ASDI score has only slightly decreased over the past decade from 2.92 to 2.85 (Figure 4.3.2).

Figure 4.3.2: ASDI in Djibouti

Source: Computed using national data

Interestingly, however, women appeared to be less excluded in 2013 as compared to 2002, possibly as a result of effective gender policies (Figure 4.3.3).
Consistent with other countries in the region, exclusion in Djibouti remains largely a rural phenomenon. Overall the ASDI score is almost twice as high in rural areas as it is in the urban areas (Figure 4.3.4). This calls for further investments in local-based development by expanding infrastructure and ensuring access to and quality of social services to rural communities.

At sub-national level, progress has been negative in two sub-regions, Obock and Tadjourah, situated in the Gulf of Aden, where exclusion has increased by 12 and 5 percent respectively. However, in the regions of Dikjiyl, Ali Sabieh situated inland, as well as in Djibouti city, inclusion has increased over the past decade (Figure 4.3.5). This calls for further investments in infrastructure and reallocation of resources to the most arid and vulnerable areas.
Youth unemployment is by far the major factor of human exclusion in Djibouti, with over 40 percent contribution, both in 2002 and 2013, followed by malnutrition and education (Figure 4.3.6).

The same trends are observed when exclusion is disaggregated by gender. Youth unemployment is a critical hindrance to human inclusion. However, the gender gap is far more pronounced in the area of education, which contributes to 22 percent of exclusion among women, against 10 percent among men (Figure 4.3.7).
Figure 4.3.7: Drivers of human exclusion by gender

Unemployment also appears to be largely an urban phenomenon, in line with what is observed in other countries (Figure 4.3.8). For many, working is often a survival strategy, particularly in rural areas, where the lack of social protection forces people to take any type of job to secure a livelihood. Poverty is also driving exclusion in rural locations, where state interventions and provision of social services are often inadequate or deficient. This is further exacerbated by a critical lack of human capital, another key driver of exclusion among rural dwellers.

Figure 4.3.8: Drivers of human exclusion by location

Policy considerations

Social development in Djibouti has slightly improved in recent years, following a massive expansion of FDI and trade activities – but only in Djibouti city, leaving behind the populations in rural areas.

Hence, within-country inequalities need urgent attention, in order to reduce the risk of social tensions in an already unstable region. Efforts should be made to make economic growth more inclusive and
equitable, in line with the priorities stated in the National Initiative for Social Development – including better resource allocation and expanding social protection and services to vulnerable populations.

To address these challenges, the authorities have made poverty eradication a key priority of their National Strategic Plan 2011-2015 and long-term Vision 2035. The Government is also pointing to key economic sectors in order to generate employment, particularly for women and youth.

There is wide recognition that the country’s major assets – such as FDI and trade/transit activities – could be better shared among the entire population, the majority of which is without a job. Employment opportunities should be created outside the capital city of Djibouti, to ensure that the benefits of growth are equally shared. A recent LDC Report indicates that less than half of the key priority actions and programmes under the latest Poverty Reduction Strategy Paper (PRSP) have been implemented, 17 percent completed and over a third never initiated, pointing to institutional constraints as well as weak economic governance (République de Djibouti, 2009).
4.4. Democratic Republic of Congo

Socio-economic conditions

The Democratic Republic of Congo is emerging from conflict, posting substantial improvement in overall macroeconomic performance since the cessation of war, on the back of robust copper and cobalt exports. For a number of years, the economy has attained growth of 8 percent, and the medium-term perspective confirms the continuation of this high trend (Figure 4.4.1). Growth has been driven by extractive industries and agriculture, – with mining contributing the largest share, at 3.1 percent of such growth.

Inflation has also declined remarkably and it has stabilized at single-digit levels thanks in major part to restrictive monetary policy achieved through expenditure compression. These positive developments notwithstanding, the country remains confronted with structural problems at the sectoral level and budgetary constraints on social service provision.

The Democratic Republic of Congo, second largest country in Africa, has limited infrastructural endowments that permit a more homogenous socio-economic development. For example, national electrification is at 10.3 percent coverage but Kinshasa and Katanga, two important cities, are at 59.5 and 17.7 percent respectively, with the other sub-regions registering only 4 percent (AfDB et al., 2015).

Figure 4.3.1: GDP growth rate

Social development

Poverty levels dropped from 71 to 63 percent over the period 2005 to 2012 as measured by national poverty line. Child malnutrition is particularly critical, yet showing some signs of improvement, with 43 percent of under-five children registering chronic malnutrition. Malaria prevalence stands at 60 percent and in 2014 there was an Ebola outbreak that was successfully quelled (AfDB et al., 2015).

The non-inclusive nature of growth has been recognized by the country and the national plan 2014-2016 for social cohesion, social protection and decent work was formulated and is being implemented. An interesting innovation in this regard is the screening by the government of social investments to better link them with increased assets for active participation in the labour market.
The education budgetary allocation was increased from 20.9 percent in 2013 to 25.2 percent in 2014. An important aspect of gender equality and the empowerment of women is that in the national plan, a new family code was presented in parliament, which among other aspects, recognized decisions taken by women within households without the necessity of male authorization. This has had an immediate effect of female-headed enterprises, increasing from 27 percent to 32 percent between January and April 2014 (ibid).

**Table 4.4.1: Socio-economic indicators**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population, in millions</td>
<td>50,971,407</td>
<td>59,834,875</td>
<td>74,877,030</td>
</tr>
<tr>
<td>GDP total in billions of CDF*</td>
<td>3,025,871</td>
<td>8,456,110</td>
<td>33,224,281</td>
</tr>
<tr>
<td>GNI per capita (atlas method current US$)</td>
<td>190</td>
<td>250</td>
<td>380</td>
</tr>
<tr>
<td>Population below the national poverty line (percent of the population)**</td>
<td>...</td>
<td>...</td>
<td>61.3</td>
</tr>
<tr>
<td>Gini Index</td>
<td>...</td>
<td>0.442 (2004)</td>
<td>0.421 (2012)</td>
</tr>
<tr>
<td>Unemployment, percent of total labour force</td>
<td>8.2</td>
<td>8.2</td>
<td>8.0</td>
</tr>
<tr>
<td>Unemployment, youth total (percent of total labour force ages 15-24)</td>
<td>12.5</td>
<td>12.4</td>
<td>11.9</td>
</tr>
<tr>
<td>Population growth (annual percent)</td>
<td>3.0</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>51</td>
<td>55</td>
<td>58 (2013)</td>
</tr>
</tbody>
</table>

*Source: World Development Indicators (World Bank).*


** Measuring human exclusion in DRC **

There has been slight progress in the overall African Social development Index over the period 2001 to 2014 (Figure 4.4.2). The annual rate of change of human exclusion was 1 percent and although overall exclusion remains moderately high, the performance is notable and could be a reflection of, among other factors, better political stability leading to positive social outcomes.
The disaggregation of the ASDI provides interesting results across gender and location (Figures 4.4.3 and 4.4.4). The gender gap in human exclusion has significantly narrowed between 2001 and 2014, although the level of exclusion among women remains slightly higher (Figure 4.4.3). This is a reflection, to some extent, of the positive developments in public interventions on women empowerment – including changes in the civil code on gender equality within households as well as incentives for female-headed enterprises.

The large size of the country and the sparse distribution of infrastructure renders spatial variation in exclusion rather important. The rural-urban differences in access to public services and the provision of education and health services, is an important source of exclusion. Rural areas have registered a much larger reduction in exclusion, bridging some of the spatial inequalities existing in the country (Figure 4.4.4). This is possibly resultant to effective impact of social policies in rural areas and a migratory flow to urban areas that has led to increased strains on public services delivery in the cities. These flows are partly caused by improved job opportunities, services, but also political stability.
Indeed, as can be observed from Figure 4.4.5, there has been an increase in exclusion in four of the sub-national provinces, with Kinshasa registering a 15.3 percent and West Kasai a 13.6 percent increase. On the other hand, 5 sub-regions, have reduced exclusion, contributing to the aggregate improvement of the ASDI (Figure 4.4.5). A key feature emerging from the analysis is the large variation across sub-regions, which require policy attention in terms of transfers of resources and capacity at lower tiers of Government.

The phases of life and areas in which exclusion occurs provide important information for policy direction. The contribution of infant mortality to overall exclusion, in particular, has decreased between 2001 and 2014, while child stunting and poverty shares have worsened, with the latter remaining by far the main driver of exclusion in DRC (Figure 4.4.6.). A combination of health and nutritional policies in the early stages of life could assist in ensuring inclusion in development of the children under five.
The drivers of exclusion by gender show a marked difference in education, with its contribution to exclusion almost three times higher among girls as compared to boys. This is carried on to the labour market, where female unemployment is a significant driver of exclusion. The new civil code and women empowerment initiatives are not fully reflected in improved access for women in education and employment opportunities. This could be caused by social norms that are still deeply rooted in some parts of the country, critically affecting girls' access to schooling.

The drivers of rural exclusion are largely in nutrition and education across the key formative years of life, and confirm the inadequacy of appropriate policy interventions to address spatial inequalities across these indicators. Movements towards urban centres in recent years have also put a strain on employment opportunities, particularly for the youth, leaving many of them excluded from development.
Policy considerations

The level of human exclusion in the DRC, although slightly improving, is greatly influenced by the geographical size of the country. The difficulty in achieving homogenous development given the different agro-climatic conditions, infrastructure endowments and political stability across the different sub-regions is an additional challenge in addressing the specific exclusion patterns within the country.

A more equitable spatial distribution of physical infrastructure, including electricity, is an essential condition for improving social outcomes and inclusion of all citizens in development.

The recognition of women’s rights in the reformed civil code has increased the number of women entrepreneurs. This, however, needs to be complemented by improved gender access to education and health, through sensitization campaigns, including on better nutrition, and incentive schemes for increased participation of girls in school.

Exclusion at sub-national level needs to be addressed to create some form of level playing field. The need to capacitate lower levels of government through recalibrating transfers from the centre to outlying regions is essential, especially in a large country like DRC.

Rural migratory flows could also be stemmed, to alleviate the overstretched resources in urban areas. If matched by physical infrastructure, including better schools and health services, as well as creation of employment opportunities, the most excluded sub-regions could harness the youth potential to contribute to a more homogenous and inclusive development.
4.5. Kenya

Socio-economic conditions

Kenya’s growth has been resilient, despite headwinds from external shocks occasioned by a slowdown in the global economy and heightened domestic insecurity. The country’s economy grew by 5.7 per cent in 2013 with a further growth projection of 6.3 per cent in 2016 (AfDB et al., 2015). Disaggregated by sector, growth in 2015 was mainly driven by public investments in infrastructure and strong consumer spending (ECA, 2015a) as well as booming economic activities in manufacturing, construction and the huge increase in information, communication and technology (ICT) services. However, future economic performance is contingent upon good weather for agricultural production and improved domestic security, particularly containing frequent incursions and terrorist attacks. On the demand side, higher investments thanks to consumer confidence are expected to bolster the country’s economic growth (Government of Kenya, 2015).

Inflation is expected to remain in single digits in 2016, despite the depreciation of the Kenyan Shilling and accompanying high food prices6. The budget balance as a percentage of GDP has deteriorated over time on account of fiscal pressures to finance national projects and consumption expenditure. Trade deficits have also been expanding due to unfavourable terms of trade.

Figure 4.5.1: GDP growth rate

Source: Computed using national data

Note: *(e) estimates, *(p) projection

Social development

The country has made impressive progress in attaining universal primary education. The net enrolment ratio in particular increased from 67.8 percent in 2000 to 95.9 percent in 2013 (AfDB et al., 2015). This achievement can be attributed to the government’s free primary education programme introduced in 2003 and its substantial investment in education at all levels. In 2008, the government extended the concept of free basic education to include public secondary schools covering tuition costs only. Notwith-

---

standing these notable social gains, there are still some 1.2 million children who are not attending school, and the quality of primary education in public schools remains rather low. In addition, gender disparities in education are prevalent, with males having higher literacy rates relative to their female counterparts.

Basic health services have improved in recent years with 52 percent of the country’s population having access to health. However, Kenya needs to upscale its provision of basic primary healthcare and referral services particularly in the rural areas. Notably, infant and under-five mortality rates have steadily declined in recent years. Infant mortality rate fell from 52 per 1000 live births in 2008/2009 to 39 in 2014 and was above many comparator countries in the region. The under-five mortality rate stood at 52 per one thousand live births in 2014 against 74 in 2008/2009 (ECA et al., 2015). The government has been able to contain most of the drivers of infant and under-five mortality, particularly pneumonia, malaria and diarrhea through programmatic interventions such as childhood immunization and malaria prevention. However, maternal mortality remains very high relative to other countries in the region. In 2013, it stood at 400 per 100,000 live births and was almost double the Africa’s regional average of 210 deaths per 100,000 live births. Most maternal morbidity and mortality cases in Kenya are related to unsafe abortion, obstetric complications such as severe bleeding, infection, hypertension disorders, and obstructed labour.

Other gains were recorded in poverty reduction. Using the latest data available, Kenya reveals that the incidence of poverty declined from 53 percent in 1997 to 47 percent in 2005/06, with most gains being achieved in urban areas (ECA 2015a). However, extreme poverty remains endemic, although it has declined by 11 percentage points – mainly due to progress achieved in rural areas. Youth unemployment declined only marginally from 17.5 percent in 2000/02 to 17.4 percent in 2012/14, mostly because many youths are either self-employed or working in the informal sector (Table 4.5.1).

Table 4.5.1: Socio-economic indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population, in millions</td>
<td>32.7</td>
<td>37.2</td>
<td>44.9</td>
</tr>
<tr>
<td>GDP total in billions of KES*</td>
<td>1,038,764</td>
<td>1,833,511</td>
<td>4,562,267</td>
</tr>
<tr>
<td>GNI per capita (atlas method current US$)</td>
<td>390</td>
<td>730</td>
<td>1,290</td>
</tr>
<tr>
<td>Population below the national poverty line (percent of the population)**</td>
<td>...</td>
<td>47</td>
<td>...</td>
</tr>
<tr>
<td>Gini Index</td>
<td>...</td>
<td>0.47</td>
<td>...</td>
</tr>
<tr>
<td>Unemployment, percent of total labour force</td>
<td>9.7</td>
<td>9.4</td>
<td>9.2</td>
</tr>
<tr>
<td>Unemployment, youth total (percent of total labour force ages 15-24)</td>
<td>17.5</td>
<td>17.1</td>
<td>17.4</td>
</tr>
<tr>
<td>Population growth (annual percent)</td>
<td>2.5</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>52.9</td>
<td>56.6</td>
<td>61.7</td>
</tr>
</tbody>
</table>

Source: World Development Indicators (World Bank).


** National Data

7 See http://www.unesco.orgUILLitbase/?menu=4&programme=145
8 See http://www.who.int/pmnch/media/membernews/2011/20121216_kenyaparliament.pdf
Generally, employment in Kenya is mostly tilted towards informal employment because the formal sector has not expanded fast enough to absorb the increasing number of young people entering the labour market. The inability of the country to achieve rapid capital accumulation coupled with strict labour market regulations are among the factors that have hindered formal employment creation (Kimenyi, Mwega and Njuguna, 2016). Income inequality in Kenya is higher than in many other East African countries, and the human development index stood at 0.548 in 2015, thus placing the country in the low human development category (UNDP, 2015).

**Measuring human exclusion in Kenya**

The levels of exclusion in Kenya has declined only marginally, from 2.37 in 2003 to 2.32 in 2010 (Figure 4.5.2). This in part reflects government’s commitment to prioritize infrastructure development and place special attention on improving education and health services across the country to increase people’s welfare. However, this has not yet been sufficient to reduce the exclusion patterns observed in the country.

![Figure 4.5.2: ASDI in Kenya](image)

*Source: Computed using national data*

![Figure 4.5.3: Human exclusion by gender](image)

*Note: The average of ASDI score disaggregated by gender shows a slight increase from 2003 to 2010 both for male and female unlike that of the overall ASDI score reduction at national level. This is due to the estimation of the gender disaggregated ASDI score based on five indicators unlike six indicators to estimate the overall score i.e. the gender disaggregated ASDI score misses the poverty headcount value which skewed the result to the opposite direction compared to the national score. Source: Computed using national data*

---

9 Data on the six indicators of the African Social Development Index across districts and disaggregated by location (rural/urban) were not available, and this has limited the analysis of exclusion to the national and gender-disaggregated levels.
Between 2003 and 2010, more males than females suffered from higher levels of exclusion. Notably, male exclusion increased by 5.1 percent against 8.7 percent among females. Across gender, human exclusion was largely driven by infant and undernutrition—reflecting health challenges in the early phases of life (Figure 4.5.4). Irrespective of gender, however, most of the infant mortalities in Kenya occur during the first 27 days of life, mainly due to severe infections, followed by birth asphyxia, preterm births and congenital anomalies\textsuperscript{10}. Gender differences were also observed in child stunting, with boys' rates reported at 41.3 percent against 36.1 for girls, according to the latest data available.

The major drivers of human exclusion in Kenya in 2010 were poverty (39.4%), infant mortality (27.4%) and undernutrition (23.5%) in that order respectively (Figure 4.5.4). Together, these factors accounted for nearly 90 percent of changes in human exclusion—clearly suggesting the need for robust poverty and health interventions across the country. Although the contribution of poverty to overall exclusion had marginally declined, it remained rather high, at nearly 40 percent.

**Figure 4.5.4: Drivers of human exclusion**

![Figure 4.5.4: Drivers of human exclusion](image)

**Note:** The value for elderly is zero because it exceeds the Upper middle income country reference value

**Source:** Computed using national data

During the same reference period, there was a deterioration in the indicator for undernutrition. Indeed, food security in recent has become a challenge in the sub-region, particularly in rural areas, on account of extreme weather conditions and food price hikes. Recent evidence in Africa also demonstrates the debilitating and cumulative effects of undernutrition on health, education and labour markets, and hence the need to prevent malnutrition in its early stages, particularly during a mother's pregnancy.

**Policy considerations**

Against a backdrop of pervasive poverty, infant mortality and malnutrition across the country, the government of Kenya has outlined a number of broad priorities to bolster social development and improve the welfare of its citizens. A pro-equity policy direction on the provision of health and education is essential for sustaining social development in Kenya.

The country has also invested heavily towards improving the domestic security situation in order to foster a friendly business environment, which is essential for private sector development and the creation of productive jobs. Given that human exclusion in Kenya is mostly driven by poverty, the authorities

10 See http://www.who.int/pmnch/media/membernews/2011/20121216_kenyaparliament.pdf
intend to open up opportunities to tap the latent talents and the entrepreneurial capabilities of the most excluded groups, so as to enable them to participate fully in the country’s current economic transformation and lift them out of poverty.

Employment creation remains one of the most viable options for reducing poverty and other forms of vulnerabilities. In this respect, the government has developed a national employment policy to address widespread youth unemployment across the country. Once passed by parliament, all major projects in the country would be vetted to determine their youth employment creation potential before being given the go-ahead\(^\text{11}\). Firms applying for government contracts would have to state how many youths they intend to employ before they can qualify. The government has also directed its departments to determine the number of jobs they can create for the youth, especially through the 30 percent procurement rule for Women, Youth and People with Disability, while at the same time promoting societal welfare through public works.

In terms of addressing infant mortality and malnutrition, the government has increased budgetary allocations to child and maternal health care in tandem with social protection to reach vulnerable groups. More broadly, Kenya’s new constitution of 2010 places a high premium on every citizen having the right to life, and to the highest attainable standard of health. The Bill of Rights specifically highlights the rights of children to basic nutrition and healthcare\(^\text{12}\). Notwithstanding these legal frameworks, concrete policy actions are needed to reduce the levels of exclusion in the first phases of life.

---

11 See http://www.worldpolicy.org/blog/2013/10/15/reducing-youth-unemployment-kenya
4.6. Madagascar

Socio-economic conditions

Madagascar has slowly recovered from its political crisis, which started in 2009 and lasted until 2013. Annual growth has also picked up from a negative 3.5 percent in 2009 to a positive 3 percent in 2014 during the political crisis, and projected to be 5.1 percent in 2016 (Figure 4.6.1). The current growth resurgence is driven by three major factors – namely the rich natural resource base of minerals and oil that are currently being extracted, the rebound in tourism in 2015, and an increase in agricultural production (EIU 2016).

The costs of the crisis were severe, estimated at US$6.3 billion during the period 2009-2013, which represent over half the GDP and more than 15 times the government expenditure on healthcare (Chatham, 2013). The sustainability of growth over a longer period has some downside risks of extreme changes in weather conditions, compounded by a drop in agricultural production and a further deterioration in poor governance.

Figure 4.6.1: GDP growth rate

Social development

In Madagascar, an island state with a population of 22 million, approximately three out of four people are still living below the national poverty line13 (Figure 4.6.1). There is also a high prevalence of chronic under-nourished proportion of the population at 27 percent, and people suffering from food insecurity of up to 56.7 percent registered in 2013. The economic geography of Madagascar, with a highland plateau that is fertile and remote semi-arid or arid areas, has created a spatial divide in infrastructure, social service delivery and economic opportunities.

13 Proportion of population living under 535,603 ariary, equivalent to US$ 171, per person per year (SASPEN 2015).
Madagascar’s Government put in place a new social protection policy in 2015, informed by the current extent of poverty and vulnerability in the country. The policy is implemented around 3 main pillars, including social services, social assistance and social security, with the overall aim of reducing the number of people living in extreme poverty by 15 percent (SASPEN 2015). In addition, a transformative approach – including livelihood support interventions - has been identified as critical for meaningful poverty reduction. The new policy also addresses social justice arising from the structural inequalities present in the country and aim to empower and achieve equity and economic and cultural rights (ibid).

A conscious Government choice of linking the new social protection policy to the Agenda 2030 and the Sustainable Development Goals (SDGs) in order to reduce effectively poverty and relaunch social development – is paramount to put the country on a broader and more sustainable development path. The adherence to the SDGs and the need to accelerate inclusive growth in the country renders the ASDI particularly useful in identifying areas and groups that are excluded across the country and for recalibrating policy interventions.

### Table 4.6.1: Socio-economic indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population, in millions</td>
<td>16.7</td>
<td>19.4</td>
<td>23.6</td>
</tr>
<tr>
<td>GDP total in billions of MGA*</td>
<td>6,008,370</td>
<td>13,759,733</td>
<td>25,774,535</td>
</tr>
<tr>
<td>GNI per capita (atlas method current US$)</td>
<td>230</td>
<td>330</td>
<td>440</td>
</tr>
<tr>
<td>Population below the national poverty line (percent of the population)**</td>
<td>70 (2000)</td>
<td>…</td>
<td>72 (2013)</td>
</tr>
<tr>
<td>Gini Index</td>
<td>0.474</td>
<td>0.389</td>
<td>0.406</td>
</tr>
<tr>
<td>(2001)</td>
<td>0.474</td>
<td>0.389</td>
<td>0.406</td>
</tr>
<tr>
<td>Unemployment, percent of total labour force</td>
<td>4.4</td>
<td>4.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Unemployment, youth total (percent of total labour force ages 15-24)</td>
<td>5.8</td>
<td>5.1</td>
<td>5.2</td>
</tr>
<tr>
<td>Population growth (annual percent)</td>
<td>3.0</td>
<td>2.9</td>
<td>2.8</td>
</tr>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>59.7</td>
<td>62.1</td>
<td>65.1</td>
</tr>
</tbody>
</table>

**Source:** World Development Indicators (World Bank).


**National Data**

### Measuring human exclusion in Madagascar

There was a general improvement in human inclusion between the years 2000 to 2014, as measured by the ASDI (Figure 4.6.2). The drop in exclusion was led by a substantial decrease in infant mortality of approximately 50 percent over the period under review. This drop was also underpinned by humanitarian aid that assisted the country.
An important variation in human exclusion is observed across gender (Figure 4.6.3). The positive change over time is slightly more marked for women than it is for men. The increase in women's inclusion can be due to effective gender equity policies particularly in primary and secondary education (AfDB et al., 2015).

The socio-economic development of the island is characterized by large disparities across sub-regions, due to different infrastructure endowments. Indeed, the ASDI disaggregated by location shows a large rural/urban divide in the extent of exclusion. Over the period 2000 to 2014, although there has been a notable reduction in human exclusion in rural areas between 2000 and 2014, the level remains comparatively high (Figure 4.6.4). The inadequacy of schools and clinics and other public amenities in rural areas in Madagascar reinforces the need to address the specific exclusion patterns in the country.
The drivers of human exclusion confirm the predominance of undernutrition and poverty dimensions, whose contribution to exclusion have increased over time – together they contribute more than 80 per cent of exclusion in the country in 2014 (see figure 4.6.6). On a more positive note, the significant drop in infant mortality, from 88 deaths per 1,000 live births in 2000 to 42 deaths in 2014, is the key feature in the reduction of exclusion in Madagascar. This is likely to be the result of the specific child and mother health
policies introduced since the late 1990s, including the free provision of immunization (over 78 percent covered) and vitamin A supplements (100 per cent of the child population). However, child stunting remains a critical exclusion factor across the country.

**Figure 4.6.6: Drivers of human exclusion**

![Bar chart showing drivers of human exclusion with data for 2000 and 2014.]

*Source: Computed using national data*

The drivers of human exclusion as highlighted above take on a more nuanced narrative if disaggregated by location (Figure 4.6.7). The major contributors to exclusion differ in urban and rural areas. Education has a larger contribution in rural areas, approximately five times higher than in urban areas. However, poverty is a larger contributor to exclusion in cities than in rural areas. Political instability during the more recent times has contributed to a rural-urban migration which increased security has induced rural migration to urban areas contributing to urban poverty (EIU 2016).

**Figure 4.6.7: Drivers of human exclusion by location**

![Bar chart showing drivers of human exclusion by location with data for urban and rural areas.]

*Note: Based on five indicators  
Source: Computed using national data*

**Policy considerations**

In the short to medium term, the recurrent climatic changes particularly El Nino are likely to affect agricultural production and overall growth in Madagascar, with cascading impact on food insecurity and
poverty eradication. This economic outlook, compounded with the risk of political and social instability, constrains growth and the capacity to finance social investments including social protection programme. The national target set at of 3.5 percent of GDP on social protection from the current 1 percent of GDP is unlikely to be attained in the face of the downside risks prevailing.

Child stunting and nutritional insecurity remain important contributors to exclusion. The need to implement appropriate health policies in the early stages of life is vital. The coordination between health and education and food production policies to ensure a synergic approach to nutritional insecurity might be a useful direction.

Good governance sustainable and adequate resourcing across sub-regions are important ingredients for the achieving a more balanced and equitable socioeconomic development. The focus and commitment of the government on a specific social challenge have resulted in significant improvement in child mortality. This can be leveraged as a best practice in ensuring the right policy features are in place for different social interventions.

Future revenue growth and spending, particularly on social development, will rely heavily on donor assistance, which brings into question its long-term sustainability. The social protection programme that combines tackling vulnerability and the structural causes of poverty is definitely in the right direction of a more inclusive sustainable development. Implementation of this programme is incumbent on adequate resources that require an improvement in governance and a stable environment for attracting productive investments in the country.
4.7. Rwanda

Socio-economic conditions

Rwanda’s economy showed remarkable resilience with real GDP growth rate increasing from 4.7 percent in 2013 to 7.0 percent in 2014. This represents a marked improvement after the economy was negatively impacted by the suspension of disbursements by a group of donors (ECA, 2015b). As indicated in Figure 4.7.1, growth is expected to remain strong and projected to hit 7.5 percent in 2016, thanks to public and private investments and a recovery in agriculture and services. In the period 2014/2015, these sectors posted strong growth of 9 percent and 5 percent respectively. Agriculture production has shown resilience to variable weather conditions, while low oil prices strongly supported trade in services. On the other hand, growth in industry has slowed on account of a downturn in mining, manufacturing and construction (AfDB et al., 2015).

Figure 4.7.1: GDP growth rate

![GDP growth rate graph](source: African Economic Outlook 2015)

Note: *(e) estimates, *(p) projection

Inflation remains generally low, and is projected to rise to 5.0 percent in 2016 representing 1.2 percentage points over the previous year. The budget balance as a percentage of gross domestic product (GDP) was in deficit but stable between 2013 and 2015, at 5.2 percent. However, it is expected to improve to 3.6 percent in 2016 on account of a tight fiscal policy. The current account balance as a percentage of GDP recorded a deterioration between 2014 and 2015 due to challenges in the external sector, but is projected to make steady recovery in 2016, as exports pick up.

Rwanda has recently embarked on economic transformation by refocusing towards more services and industry as a platform for achieving a middle-income status, and has identified five key priority areas to focus on: (i) increase domestic interconnectivity of the Rwandan economy; (ii) increase the external interconnectivity of the economy and boost exports; (iii) transform the private sector by increasing investments in priority areas; (iv) transform the economic geography of the country by facilitating urbanization and promoting secondary cities; and (v) pursue a “green economy” approach to economic transformation (Govt. of Rwanda 2013).
Social development

Riding on the back of high growth in recent years, Rwanda has achieved notable social outcomes, particularly in education, health and poverty reduction. Gross enrolment ratio (GER) for primary school increased from 123.2 percent in 2012 to 138.5 percent in 2013, clearly indicating that all children of primary school-age are in school. The GER for lower and upper secondary school levels increased from 49.2 percent and 27.1 percent in 2012 to 49.8 percent and 32.6 percent in 2013 respectively. However, the drop from lower to upper secondary denotes quality concerns that should be addressed - through adequate teacher training, better school facilities and pupil/teacher ratios, and availability of teaching aids, among other imperatives (EICV4).

In recent years, health services and facilities have been greatly expanded across the country. For example, the proportion of deliveries in health facilities increased from 63 percent in 2012 to 90.5 percent in 2013/14, above the 86 percent target. In addition, district and referral hospitals increased to 42 percent, exceeding the target by 13 facilities. Between 1980 and 2013, Rwanda’s life expectancy at birth also increased by 16.1 years to 64.2 in 2014, mean years of schooling went up by 2.5 years and expected years of schooling increased by 5.4 years - clearly pointing to strong government interventions in social development (UNDP, 2015).

National poverty levels have significantly declined from 56.7 percent in 2005/06 to 44.9 percent in 2010/11 and decelerated further to 39.1 percent in 2013, according to the latest household survey (EICV4). However, rural poverty remains pervasive and widespread, especially among women. The Gini coefficient which measures income inequality, declined from 0.52 to 0.49 between 2005 and 2013 while the country’s gross national income per capita increased more than three times in the period between 2000 and 2014 (Table 4.7.1). Despite these notable social achievements, the country remains in the low human development category, with the HDI at 0.483 in 2014, ranked 163rd out of 188 countries globally.

Table 4.7.1: Socio-economic indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population, in millions</td>
<td>8.53</td>
<td>9.48</td>
<td>11.3</td>
</tr>
<tr>
<td>GDP total in billions of RWF*</td>
<td>797.5</td>
<td>2,064.7</td>
<td>5,388.7</td>
</tr>
<tr>
<td>GNI per capita (atlas method current US$)</td>
<td>220</td>
<td>360</td>
<td>700</td>
</tr>
<tr>
<td>Population below the national poverty line (percent of the population)**</td>
<td>... 56.7</td>
<td>39.1</td>
<td></td>
</tr>
<tr>
<td>Gini Index</td>
<td>... 52 (2005)</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Unemployment, percent of total labour force</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Unemployment, youth total (percent of total labour force ages 15-24)</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Population growth (annual percent)</td>
<td>2.5</td>
<td>2.7</td>
<td>2.4</td>
</tr>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>50.4</td>
<td>58.6</td>
<td>63.9</td>
</tr>
</tbody>
</table>

Source: World Development Indicators (World Bank).


**National Data

Measuring human exclusion in Rwanda

Starting from 2000 as a baseline, the levels of human exclusion in Rwanda has dropped markedly, from 2.79 to 1.67 in 2013 (Figure 4.7.2). This is indicative of the government’s strong stance to deliver development to its citizens through comprehensive social welfare packages as well as increased expenditures on poverty reduction programmes. Under the Economic Development and Poverty Reduction Strategy I (2008-2012), the country sustained an average economic growth of 8 percent, reduced poverty by 17 percentage points and also achieved a notable reduction in income inequality.

**Figure 4.7.2: ASDI in Rwanda**

Between 2002 and 2013, more males than females suffered from various forms of exclusion (Figure 4.7.3). These were mostly driven by high poverty, undernutrition and infant mortality. However, females had higher rates of poverty at 49.2 percent compared to males at 34.6 percent. Males had worse indicators for undernutrition and infant mortality relative to females while the indicator for decent life does not seem to contribute much to human exclusion across gender. There is therefore need to reduce the poverty gaps between men and women through economic empowerment programmes, while at the same time investing heavily in early immunization and nutrition programmes at community levels, in order to improve survival rates of infants especially male children.

**Figure 4.7.3: Human exclusion by gender**

*Note: Based on five indicators
Source: Computed using national data*
Notwithstanding the small geographical size of Rwanda, progress towards improved human exclusion across sub-national areas provides some useful information (Figure 4.7.4). Notably, all sub-regions registered remarkable improvements in the reduction of human exclusion – yet with large variations - clearly demonstrating some imbalances in addressing social development in the country. However, the computations at sub-national level were based on five indicators, hence the need for caution in their interpretation particularly as they relate to variations across all provinces. For example, in the East province, infant mortality dropped significantly from 125 to 63 per 1,000 live births. This drove the overall improvement for East province to a high 49 percent (Figure 4.7.4).

**Figure 4.7.4: Changes in ASDI at sub-national level (percentage)**

The major drivers of human exclusion in Rwanda appear to be poverty and undernutrition (Figure 4.7.5). The contribution of poverty to overall human exclusion increased by 2.7 percent between 2005 and 2013. In contrast with the positive poverty reduction efforts observed in the country, poverty still remain a major obstacle to inclusion over the life-cycle. The increased contribution of stunting to exclusion in children under 5 - from 29.7 percent to 36.6 percent in the period under analysis - is also of concern. The AUC et al. study on the Cost of Hunger conducted in Rwanda showed the in 2012 49.2 percent of the population aged 15-64 suffered from under-nutrition as children. This represents more than 3 million people of working age population who were not able to achieve their full potential, and likely to be excluded from reaping the benefits of growth in Rwanda. This calls for the need to scale up nutritional interventions and stem the tide of undernutrition across the country.

Government’s strong interventions in child health yielded encouraging results, which are particularly evident in terms of infant mortality, whose share has dropped from 12.5 percent in 2005 to 5.6 percent in 2013. Marginal improvements in life expectancy at 60 were also noted, reflecting improved access to health and other basic facilities by the elderly.
Figure 4.7.5: Drivers of human exclusion

![Graph showing drivers of human exclusion for different categories: Survival, Nutrition, Education, Employment, Poverty, Decent Life. The data is presented for two years: 2005 and 2013.](image)

Source: Computed using national data

The drivers of human exclusion can be furthered disaggregated, thus providing engendered policy interventions and fiscal distribution. In terms of gender exclusion, the dimensions on poverty and life expectancy at 60 show the largest differential. However, the marginal improvements of inclusion in education do not seem to translate into equitable participation in the labour market between males and females (Figure 4.7.6).

Figure 4.7.6: Drivers of human exclusion by gender

![Graph showing drivers of human exclusion by gender for different categories: Survival, Nutrition, Education, Employment, Poverty, Decent Life. The data is presented for males and females.](image)

Source: Computed using national data

Policy considerations

Human exclusion in Rwanda is largely driven by poverty and malnutrition, hence the need for comprehensive and more targeted policy interventions that focus on these two key areas.

Rwanda has been riding on its high growth since 2000 to lift people out of poverty. In order to sustain these gains, the government has identified a number of key priority areas under the rubric of economic transformation, with a strong focus on increased productivity in agriculture and youth employment. More specifically, authorities are putting a high premium on growth and rural development underpinned by appropriate skills and productive employment, especially for the youth. There are also deliberate efforts...
to address hard and soft ICT infrastructure, stimulate entrepreneurship and improving the efficiency of labour markets, as key policy interventions.

Rwanda has also placed a high priority on food security and malnutrition by coordinating, strengthening and scaling-up community-based nutrition programmes and information campaigns across the country. For example, the government has intensified the use of community-based nutrition programmes to empower communities to treat and prevent malnutrition\(^\text{15}\) through monitoring children’s growth, providing demonstrations on proper nutrition practices, and starting home or community gardens. This will help to reduce the levels of exclusion in Rwanda, largely driven by high rates of child stunting and poverty, across gender.

The policy directions emanating from the Cost of Hunger Study in Rwanda could provide further insights on better targeting malnutrition, to promote the full integration of individuals in development from the first stages of life, and build the human capital foundation for future economic and social opportunities.

\(^{15}\) See http://www.unicef.org/nutrition/rwanda_61400.html.
4.8. Uganda

Socio-economic conditions

Uganda has an area of 241,039 square kilometers and is administratively divided into 112 districts. The economy is traditionally agricultural, with the majority of the population dependent on subsistence farming and light agro-based industries. Coffee remains the main foreign exchange good for the country’s economy.

On average, the country is among the fastest growing economies in Africa. Economic growth, however, has been fluctuating over the past decade, with real GDP growth of 5.9 percent in 2014 from 3.6 percent growth in 2012, and projected to rise to 6.5 percent in 2016.

Even though agriculture has been traditionally the dominant sector, services have become the most vital activities in the Ugandan economy. In 2014, the service sector contributed to 50.9 percent of GDP, followed by agriculture with 26.8 percent and industry with 22.3 percent (Government of Uganda, 2015).

Figure 4.8.1: GDP growth rate

Social development

Uganda has experienced one of the highest rates of population growth, almost three times higher than the global average of 1.1 percent, increasing by 3 percent every year since 2000. At the same time, national poverty rate has reduced dramatically, from 50.1 percent in 1995 to 31.1 percent in 2005-2007, and down to a further 19.7 percent in 2012/2014, according to official statistics (Table 4.8.1). Poverty, however, is higher in rural areas, where approximately 22.8 percent of the population lives below the poverty line, as compared to 9.3 percent in urban areas16. The country has also managed to reduce income inequality, with the Gini coefficient declining from 0.452 in 2000/2002 to 0.419 in 2012/2014 (Table 4.8.1).

The removal of education fees in primary school since 1997 has led to a significant increase in net enrollment rates, from 83 percent in 2002 to 95 in 2013, whereas secondary school enrollment stood at 22 percent (ECA, 2015c). Uganda's affirmative action has yielded spectacular results in promoting gender equality in the area of education, with enrollment rates 3 and 2 percent higher for females in primary and secondary school respectively.

In terms of employment, the country has made promising progress in reducing unemployment rates, from 8.6 percent in 2000-2002 to 3.8 percent in 2013 (Table 4.8.1). However, youth unemployment has remained virtually unchanged over the same period of time. The largest proportion of workers are still employed in the agricultural sector - mainly women (77 percent) - while the share of the informal sector in Uganda stands at 53 percent, according to the latest national statistics.

### Table 4.8.1: Socio-economic indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population, in millions</td>
<td>25.4</td>
<td>29.9</td>
<td>37.8</td>
</tr>
<tr>
<td>GDP total in billions of UGX*</td>
<td>11,672</td>
<td>22,854</td>
<td>71,490</td>
</tr>
<tr>
<td>GNI per capita (atlas method current US$)</td>
<td>250</td>
<td>380</td>
<td>680</td>
</tr>
<tr>
<td>Population below the national poverty line (percent of the population)**</td>
<td>…</td>
<td>31.1</td>
<td>19.7(2013)</td>
</tr>
<tr>
<td>Gini Index</td>
<td>45.2</td>
<td>…</td>
<td>41.9</td>
</tr>
<tr>
<td>Unemployment, percent of total labour force</td>
<td>8.6</td>
<td>3.0</td>
<td>3.8 (2013)</td>
</tr>
<tr>
<td>Unemployment, youth total (percent of total labour force ages 15-24)</td>
<td>6.1</td>
<td>5.2</td>
<td>6.8</td>
</tr>
<tr>
<td>Population growth (annual percent)</td>
<td>3.3</td>
<td>3.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>50</td>
<td>55</td>
<td>59 (2013)</td>
</tr>
</tbody>
</table>

Source: World Development Indicators (World Bank).

Measuring human exclusion in Uganda

The overall social performance is reflected in improved levels of human inclusion, at 1.29 in 2013 as compared to 1.83 in 2000, representing a reduction of 29.5 percent (Figure 4.8.2). This takes on increased importance given the high population growth, and efforts made by the government to integrate an increased number of people in the development process.
Figure 4.8.2: ASDI in Uganda

The ASDI score shows a slight difference when disaggregated by gender (Figure 4.8.3). Exclusion appears to be higher for men than it is for women across time, which might be the result of recent affirmative action that was taken in Uganda. Indeed, the country has been considered as a role model in East Africa in setting up frameworks, policies and legislation to improve gender equality.

Figure 4.8.3: Human exclusion by gender

The gap between rural and urban areas remains a huge challenge in the country. Exclusion in rural areas is almost three times higher than it is in urban areas, although slightly decreasing over time (Figure 4.8.4). Infant mortality and poverty are the highest contributors to the rural/urban divide. The high rural poverty mentioned above bears out exclusion among rural dwellers. One of the reasons could be the inequitable spatial distribution of health facilities, particularly if cost-sharing among low-incomes renders access a challenge.
Notwithstanding the urban/rural divide, Uganda has shown a consistent reduction in the levels of exclusion across all sub-regions. Largest progress is observed in the East part of the country (-55 percent), followed by the central region, where the capital city of Kampala is located (Figure 4.8.5). In the East regions agricultural cooperatives have remained economically active in cash crops, and cross border trade with the Kenyan economy has driven the integration of many in the region in the development process.

When we decompose the analysis by dimensions, we find malnutrition and poverty as the major drivers of exclusion in Uganda. However, the priority given to poverty eradication in the current National Development Plan can partly explain the declining contribution of income poverty to exclusion, from 33.1 percent in 2000 to 19.1 percent in 2013 (Figure 4.8.6). On the other hand, the contribution of child stunting to overall exclusion is on the rise, calling for urgent attention by policy makers. A recent AUC-led study shows that a third of all children under five in Uganda were affected by stunting in 2009. The same study also finds that 15 percent of all child mortalities, another important driver of exclusion in the country were associated with undernutrition (AUC et al., 2009). It is important however to note that child
stunting rates dropped from 38.1 percent to 33.4 percent in two years (2009-2011), according to national statistics, a notable gain of 5 percent showing a positive impact of the nutritional policies adopted.

**Figure 4.8.6: Drivers of human exclusion**

When disaggregated by gender, exclusion appears to be largely determined by malnutrition and infant mortality, particularly for boys, while women are more excluded when it comes to education, unemployment and poverty (Figure 4.8.7).

**Figure 4.8.7: Drivers of human exclusion by gender**

Child stunting remains an important contributor to exclusion, whilst quite unexpectedly infant mortality is a larger exclusion factor in urban areas. The underlying causes of stunting, and more generally undernutrition in Uganda are inadequate water and sanitation, coupled with inadequate health infrastructure and food insecurity, particularly in rural areas (FANTA 2, 2010).
Figure 4.8.8: Drivers of human exclusion by location

![Bar chart showing drivers of human exclusion by location](image)

Note: Based on five indicators
Source: Computed using national data

Policy considerations

Despite having achieved notable progress in social development, micronutrient deficiencies are still very common among women and children in Uganda. Vitamin A, iron and zinc deficiencies, in particular, are a recurrent phenomenon across the entire country. To reduce the rate of under-nutrition among children, the government has recently formulated the Ugandan Nutrition Action Plan (UNAP) for women of reproductive age and children, to ensure that everyone is properly fed. To effectively achieve this objective, special attention should be given to pregnant women so that they are properly nourished with potential benefits to the unborn child at the start of its life cycle. However, the findings indicate that human exclusion in Uganda, whilst declining, is still driven mainly by undernutrition. The progress registered between 2009 and 2011 augurs well but needs to be scaled-up. In this regard, a more coordinated effort across health, agriculture and finance could be instrumental for improving policy design and for an accelerated and more effective response. Shorter periodicity in assessing progress towards nutritional targets should also be envisaged.

The other important driver of exclusion in Uganda appears to be infant mortality, which calls for a recalibration of health interventions, particularly at the very earlier stages of life. Seemingly, the government needs to introduce a more equitable health strategy and facilitate the contribution of the private sector, representing nearly 50 percent of the market, to ensure access for all and strengthening inclusion in health development, which is critical to ensure future opportunities in life. In this regard, the introduction of community health insurance schemes in Uganda could assist in achieving this objective.

An improved redistribution of resources based on the different patterns of exclusion observed in the country could assist in a more homogenous and inclusive social development. Capacitating outlying regions through adequate financial and human resources, among other factors, could help to close the gap between excluded and included groups and enhance the impact of social interventions, in particular in the areas of under-nutrition and poverty reduction.
Conclusion

Initial results of the ASDI have indicated that human exclusion remains a crucial aspect as the continent transits from the MDG to the SDGs and Agenda 2063. The results point to the need for African countries to refocus their development agenda in order to address human exclusion more effectively and deal with both its underlying and structural drivers. Exclusion is a multidimensional phenomenon, and addressing it is a long-term process, particularly when its causes are rooted in historical and cultural norms. However, this can be done by designing policies that can help expand opportunities and build human capital – ensuring the effective integration of all individuals in the development process. This will require a mix of targeted and universal interventions, to ensure that both the group-based vulnerabilities and the individual rights to social and economic integration are addressed effectively.

East Africa has shown that, despite high levels of economic growth, countries are still confronted with the challenge of making growth more inclusive and equitable. Many individuals are still excluded from development at different stages of life. Unequal access to social and economic opportunities limits their capacity to become productive and effective agents of change – undermining their potential and overall social progress. The analysis of the drivers of human exclusion provides critical insights on the structural causes of exclusion in each country (Table 5). Poverty and nutrition (stunting) are the key contributors to exclusion in at least six of the eight countries. Unemployment and infant mortality are important drivers of exclusion in Djibouti and Comoros respectively. This emphasizes the need to place these dimensions at the center of development strategies, as these affect the capacity of the individuals to fully participate in growth and development process, at different stages of life. (ECA, 2013a).

Table 5: Drivers of human exclusion in East Africa, 2013

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Infant mortality</th>
<th>Stunting</th>
<th>Literacy</th>
<th>Unemployment</th>
<th>Poverty</th>
<th>Life Expectancy at 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comoros</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Djibouti</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRC</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Madagascar</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* These drivers together contribute to more than 50 percent of human exclusion in the respective countries.

**The year of reference for Burundi and Rwanda is 2005-2010.**
Another important result is the large variations observed across sub-regions for all countries in East Africa. The capacity at lower levels of Government and fiscal transfers towards sub-national level need to be recalibrated for a more equitable and inclusive development.

In this context, the ASDI provides an important tool for member States to identify policy gaps and formulate appropriate interventions to bridge the gap between the haves and the have-nots. Further, the application of the Index at sub-national levels is critical in capturing within-country inequalities, reorienting and placing inclusive policies at the center of national and sub-national planning. Indeed, global and regional frameworks, such as Agenda 2030 and the AU Agenda 2063, offer an important window of opportunity to move beyond economic growth and place human and social dimensions at the center of the development process.
References


AUC et al. (2009), The Cost of Hunger Study in Uganda, AUC, in collaboration with ECA, NEPAD and WFP, Addis Ababa.


References


Economist Intelligence Unit (2016), Madagascar Country Profile, UK.


References


IMF (2013), Regional Economic Outlook 2015, International Monetary Fund (IMF), Washington DC.


IMF (2015), Regional Economic Outlook 2015, International Monetary Fund (IMF), Washington DC.


References


Republic of Kenya (201). Budget Statement for the Fiscal Year 2015/2016, delivered by the Cabinet Secretary for the National Treasury, Nairobi, Kenya

République de Djibouti (2009), Revue sur le programme d’actions pour les pays les moins avancés, Djibouti, République de Djibouti.


References


Annex 1: Methodological foundations of the African Social Development Index

Theoretically, the Index seeks to measure the distance between people who are able to participate in development and those who are excluded from development processes. Hence, the "distance" between the included/excluded groups may be measured as follows:

\[ [dE_x^v] = \frac{\alpha P_x^v}{1 - \alpha P_x^v} \]

where \((P_x^v)\) measures the degree of exclusion of an individual for a specific dimension of development or vulnerability \((v)\), such as the prevalence of children undernourished or the proportion of individuals below the poverty line, in a particular population group \((x)\).

If \(P_x^v > 0.5\), the formula will establish a maximum value of 1, as more than 50 percent of the population excluded would represent a disproportional situation (normalization).

In the case where the indicator measures the degree of inclusion (or "non-exclusion"), for instance the proportion of people NOT affected by a specific vulnerability \((\alpha P_x^v)\); as is the case of literacy rate, the indicator is transformed by applying:

\[ \alpha P_x^v = 1 - (\alpha P_x^v) \]

Hence the "distance" in the level of exclusion can be calculated by applying the inverse equation:

\[ [dE_x^v] = \frac{\alpha P_x^v}{1 - \alpha P_x^v} \]

Similarly, if \(P_x^v < 0.5\), the formula will establish a maximum value of 1.

After normalization, the level of human exclusion will result in a score that will range between \((0 < dE_x \leq 1)\), indicating the proportional distance between those participating in the specific dimensions of development and those excluded from those processes. In the case of indicators where there is no national comparative value, such as the case of mortality rates and life expectancy, a comparable reference is applied to estimate the distance to a desired or expected situation, as follows:

\[ [dE_x^r] = \frac{P_x^r - P_x^v}{P_x^r} \]

Where \((r)\) is a reference value established as a comparative parameter for a given population \((P)\) and age group \((x)\).

In case the indicator presents a situation of "inclusion", such as life expectancy at 60, the following reverse equation should be applied:

\[ [dE_x^r] = \frac{P_x^r - P_x^v}{P_x^r} \]
Table A.1: Infant mortality

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Infant mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension of exclusion:</strong></td>
<td><strong>SURVIVAL</strong></td>
</tr>
<tr>
<td>The number of children who do not survive the first year of life can be used to gauge survival or access to life. It is estimated that roughly 45 per cent of deaths among children under-five occur during this period. This situation is often a reflection of exclusion from and the quality of health facilities. The measurement of exclusion in this area is computed using infant mortality rates at national levels, as compared to the average infant mortality rate in (lower) middle-income countries.</td>
<td></td>
</tr>
</tbody>
</table>

**Definition:** Number of children who die between 0 and 1 year, expressed per 1,000 live births (WHO)

**Formula:**

\[
[dEx_{0-1}^m] = \frac{Im_{0-1}^n - Im_{0-1}^r}{Im_{0-1}^n}
\]

\([dEx_{0-1}^m] : Degree of exclusion from basic health services\)

\(Im_{0-1}^r : Reference value for neo-natal mortality, given by the average value of lower middle income countries\)

\(Im_{0-1}^n : National estimates of child mortality\)

**Computation:**

**National, Rural / Urban, Male / Female**

Applying the formula:

\[
[dEx_{0-1}^m] = \frac{Im_{0-1}^n - Im_{0-1}^r}{Im_{0-1}^n}
\]

(*)

In Excel, use the following condition IF:

IF \(Im_{0-1}^n < Im_{0-1}^r\), give the value 0

IF NOT, apply the formula (*)

**Sub-National Level**

The procedure is as follows:

We determine the minimum value of mortality at the sub-national level, i.e. taken among all sub-regions within the country in a given year. This becomes our new reference value, and referred to as

\(\min(Im_{0-1})\)

OR

\(\min(Im_{0-1}) = Im_{0-1}^{SubRef}\)

Hence, the new formula becomes:

\([dEx_{0-1}^m] = Im_{0-1} - \min(Im_{0-1}) / Im_{0-1}\) (**)

Where

Min \((Im_{0-1})\) is the minimum reference value for infant mortality at the sub-national level.

And \(Im_{0-1}\) is the sub-national estimates of infant mortality [0 – 1] year for each subregion i.

In Excel, use the following condition IF:

IF \(Im_{0-1} < Im_{0-1}^{SubRef}\), give the value 0

If not, apply the formula (*)

---

**Table A.2: Child stunting**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Child Stunting</th>
</tr>
</thead>
</table>
| Dimension of exclusion: | **NUTRITION**  
The second dimension of exclusion is the diminished capacity of children to meet their basic nutritional needs. The life-long consequences of early child malnutrition have been widely documented, and its prevalence indicates, among others, exclusion from the adequate delivery of health services (ECA, 2013a). |
| Definition:     | Percentage of children under five who are stunted – i.e. whose height for age is more than two standard deviations below the median for the international reference population aged 0-59 months (WHO). |
| Formula:        | \[ dEx_{ChM}^{ChM} = \frac{ChM_{28d-59m}^n}{1-ChM_{28d-59m}^n} \]  
\[ dEx_{ChM}^{ChM} \]: Degree of exclusion from health/nutrition  
\[ ChM_{28d-59m}^n \]: Proportion of children between 28 days and 59 months suffering from chronic malnutrition at the national level |
| Computation:    | National/sub-national, rural/urban, women/men:  
In Excel, use the following condition IF:  
\[ ChM_{28d-59m}^n > 50 \] , give the value 1  
IF NOT, apply the formula (*):  
\[ dEx_{ChM}^{ChM} = \frac{ChM_{28d-59m}^n}{1-ChM_{28d-59m}^n} \]  
\[ (*) \]
Table A.3: Literacy Rate (15-24 years)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Literacy Rate (15-24 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension of exclusion:</td>
<td>EDUCATION</td>
</tr>
<tr>
<td>A third manifestation of</td>
<td>exclusion in the life cycle may</td>
</tr>
<tr>
<td>may be associated with</td>
<td>be associated with access to</td>
</tr>
<tr>
<td>access to quality</td>
<td>quality education, which</td>
</tr>
<tr>
<td>education, which provides</td>
<td>provides the means for larger</td>
</tr>
<tr>
<td>the means for larger</td>
<td>opportunities later in life.</td>
</tr>
<tr>
<td>opportunities later in</td>
<td>Literacy rates observed after</td>
</tr>
<tr>
<td>life.</td>
<td>educational years (15-24 years)</td>
</tr>
<tr>
<td></td>
<td>provide a good proxy for</td>
</tr>
<tr>
<td></td>
<td>the effectiveness of</td>
</tr>
<tr>
<td></td>
<td>educational efforts, at the</td>
</tr>
<tr>
<td></td>
<td>impact level.</td>
</tr>
<tr>
<td>Definition:</td>
<td>Percentage of population</td>
</tr>
<tr>
<td></td>
<td>between 15 and 24 years of age</td>
</tr>
<tr>
<td></td>
<td>who can read and write</td>
</tr>
<tr>
<td></td>
<td>(UNESCO)</td>
</tr>
<tr>
<td>Formula:</td>
<td>$\left[ \bar{dEx}^{Lr} \right] = \frac{1 - Lr_{15-24}^g}{Lr_{15-24}^g}$</td>
</tr>
<tr>
<td></td>
<td>$\left[ \bar{dEx}^{Lr} \right]$ : Degree of exclusion from access to quality education</td>
</tr>
<tr>
<td></td>
<td>$Lr_{15-24}^g$ : Literacy rate</td>
</tr>
<tr>
<td></td>
<td>among 15-24 years old</td>
</tr>
<tr>
<td>Computation:</td>
<td>National and Sub-national:</td>
</tr>
<tr>
<td></td>
<td>In Excel, use the following</td>
</tr>
<tr>
<td></td>
<td>condition IF:</td>
</tr>
<tr>
<td></td>
<td>IF $\propto Lr_{15-24}^g \leq 50$ give the value 1</td>
</tr>
<tr>
<td></td>
<td>IF NOT apply the formula (*):</td>
</tr>
<tr>
<td></td>
<td>$\left[ \bar{dEx}^{Lr} \right] = \frac{1 - Lr_{15-24}^g}{Lr_{15-24}^g}$ (*)</td>
</tr>
</tbody>
</table>
### Table A.4: Youth Unemployment (15-24 years old)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Youth Unemployment (15-24 years old):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension of exclusion:</td>
<td>ACCESS TO LABOUR MARKET</td>
</tr>
<tr>
<td></td>
<td>Another form of exclusion faced by individuals when they complete their educational cycles is reflected in their capacity to access decent job opportunities. The school-to-employment transition is often determined by the capacity of an economy to generate job opportunities for this key age group.</td>
</tr>
<tr>
<td>Definition:</td>
<td>Share of the youth labour force who is without work but available for and seeking employment (ILO definition).(^{18})</td>
</tr>
<tr>
<td>Formula:</td>
<td>[ dEx_{Yu} = \frac{Yu_{15-24}}{1 - Yu_{15-24}} ]</td>
</tr>
<tr>
<td></td>
<td>( dEx_{Yu} ): Degree of exclusion from access to the labor market</td>
</tr>
<tr>
<td></td>
<td>( Yu_{15-24} ): Proportion of individuals aged 15-24 years who are unemployed, measured at national level</td>
</tr>
<tr>
<td>Computation:</td>
<td>National and Sub-national</td>
</tr>
<tr>
<td></td>
<td>In Excel, use the following condition IF:</td>
</tr>
<tr>
<td></td>
<td>IF ( Yu_{15-24} \geq 50 ), give the value 1</td>
</tr>
<tr>
<td></td>
<td>IF NOT, apply the formula (*):</td>
</tr>
<tr>
<td></td>
<td>[ dEx_{Yu} = \frac{Yu_{15-24}}{1 - Yu_{15-24}} ]</td>
</tr>
</tbody>
</table>

---

18 Definitions of unemployment and youth age group differ across countries.
### Table A.5: National-based Poverty

<table>
<thead>
<tr>
<th>Indicator</th>
<th>National-Based Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension:</strong></td>
<td>MEANS OF SUBSISTENCE</td>
</tr>
<tr>
<td>A major form of exclusion during adulthood can be reflected in the inability of an individual to ensure the basic needs for them and their families to live a decent life. This is reflected in the level of poverty, based on consumption, calorie in-take or income (according to the poverty threshold set at national level).</td>
<td></td>
</tr>
<tr>
<td><strong>Definition:</strong></td>
<td>Proportion of population below the national poverty line</td>
</tr>
<tr>
<td><strong>Formula:</strong></td>
<td>$\left[dEx^{\text{np}}\right] = \frac{Np^{\text{np}} - Np^{\text{np}}} {1 - Np^{\text{np}}}$</td>
</tr>
<tr>
<td>$\left[dEx^{\text{np}}\right]$</td>
<td>Degree of exclusion from basic means of subsistence</td>
</tr>
<tr>
<td>$Np^{\text{np}}$</td>
<td>Proportion of population living below the national poverty line</td>
</tr>
<tr>
<td><strong>Computation:</strong></td>
<td>National and Sub-national</td>
</tr>
<tr>
<td>In Excel, use the following condition IF:</td>
<td></td>
</tr>
<tr>
<td>IF $Np^{\text{np}} &gt; 50$ give the value 1</td>
<td></td>
</tr>
<tr>
<td>IF NOT apply the formula (*):</td>
<td></td>
</tr>
<tr>
<td>$\left[dEx^{\text{np}}\right] = \frac{Np^{\text{np}} - Np^{\text{np}}} {1 - Np^{\text{np}}}$</td>
<td>(*)</td>
</tr>
</tbody>
</table>
**Methodological foundations of the African Social Development Index**

**Table A.6: Life Expectancy at 60**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Life Expectancy at 60</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension:</strong></td>
<td>A key form of inclusion in later stages of life deals the ability of the elderly to remain socially integrated and live a decent life. In this regard, life expectancy at 60 may be a good proxy of their quality of life and a reflection of the social security provided to them by the state. The measurement of exclusion in this area is computed using national life expectancy at 60, as compared to the average life expectancy at 60 in lower middle-income countries.</td>
</tr>
<tr>
<td><strong>Definition:</strong></td>
<td>Average number of years that a person of that age can be expected to live, assuming that age-specific mortality levels remain constant. (WHO)</td>
</tr>
<tr>
<td><strong>Formula:</strong></td>
<td>[ dEx_{60} = \frac{Le_{60}^{Ref} - Le_{60}^{n}}{Le_{60}^{Ref}} ]</td>
</tr>
<tr>
<td>[ dEx_{60} ]: Degree of exclusion from surviving at old age</td>
<td></td>
</tr>
<tr>
<td>[ Le_{60}^{Ref} ]: Reference value of life expectancy at 60 years</td>
<td></td>
</tr>
<tr>
<td>[ Le_{60}^{n} ]: National average life expectancy at 60 years</td>
<td></td>
</tr>
<tr>
<td><strong>Computation:</strong></td>
<td>National Level</td>
</tr>
<tr>
<td></td>
<td>Applying the formula:</td>
</tr>
<tr>
<td></td>
<td>[ dEx_{60} = \frac{Le_{60}^{Ref} - Le_{60}^{n}}{Le_{60}^{Ref}} ]</td>
</tr>
<tr>
<td></td>
<td>In Excel, use the following condition IF</td>
</tr>
<tr>
<td></td>
<td>IF [ Le_{60}^{Ref} \leq Le_{60}^{n} ] give the value 0</td>
</tr>
<tr>
<td></td>
<td>IF NOT apply the formula (*):</td>
</tr>
<tr>
<td><strong>Sub-National Level</strong></td>
<td></td>
</tr>
</tbody>
</table>
The methodology used here to determine not the scores of the ASDI, but the values of life expectancy after 60 at sub-national levels, is drawn from UNDP (2009)\footnote{See http://www.asia-pacific.undp.org/content/rbap/en/home/library/human_development/sub-national-hdi-bhutan-case.html}. This method requires two sets of data:
(a) national life expectancy at 60 years of age, and
(b) The proportion of population that is above national life expectancy at 60 years of age.

Therefore, the computation entails the following:
Determine the proportion of population aged 60 and older in a given year and for each sub-region (for this, we will need demographic data disaggregated at sub-national level). We call this Xydis;
Determine the median (m) of this proportion, for a given year.
Then, apply the following criteria:
If Xydis > m, then Lei = Len\*\[1 + (Xydis / 100)\]
If Xydis < m, then Lei = Len\*\[1 - (Xydis / 100)\]
If Xydis = m, then Lei = Len

Once the life expectancy at 60 has been determined for each sub-region, the formula for computing the ASDI for Indicator 6 at sub-national level is the following:

After having obtained the estimations for life expectancy at 60 at sub-national level, the computation of the ASDI at sub-national level is as follows:
We determine the maximum value of life expectancy at sub-national level, which becomes our new reference value, in a given year. It is called $\text{Max} \left( L_{60}^{\text{Sub}} \right)$ and the new formula becomes:

\[
\left[ dE_{60}^{\text{Le}} \right] = \frac{\text{Max} \left( L_{60}^{\text{Sub}} \right) - L_{60}^{\text{Sub}_i}}{\text{Max} \left( L_{60}^{\text{Sub}} \right)} \quad (\ast)
\]

where $\text{Max} \left( L_{60}^{\text{Sub}} \right) = L_{60}^{\text{Sub}_\text{Ref}}$ is the maximum reference value of life expectancy at 60 at the sub national level

And $L_{60}^{\text{Sub}_i}$: are the sub-national estimates of life expectancy at 60 for each sub-region i.

In Excel, use the following condition IF:
\[
\text{IF} \quad L_{60}^{\text{Sub}_\text{Ref}} < L_{60}^{\text{Sub}_i}, \text{give the value 0}
\]
\[
\text{IF} \ NOT \quad \text{apply the formula} \ (\ast).
\]
Methodological foundations of the African Social Development Index

Aggregation of the Index

In order to assess the overall degree of human exclusion throughout the life cycle, we aggregate the levels of exclusion in each of the six dimensions. Using a simple arithmetic sum, the overall level of exclusion can therefore be defined as:

\[ H_{Ex}^v = d_{Ex}^{im} + d_{Ex}^{chm} + d_{Ex}^{lr} + d_{Ex}^{yu} + d_{Ex}^{np} + d_{Ex}^{le} \]

As each indicator has a value ranging between 0 and 1, the overall score will take a value between 0 < \( H_{Ex}^v \) = <6, reflecting the degree of exclusion of an individual throughout his or her life cycle. The total value of the Index will therefore represent an absolute value of exclusion, reflecting the likelihood of an individual to be excluded from the six dimensions of development described above. In case of missing values in one of the dimensions, an expansion factor will be applied to facilitate the computation of results. Missing information for two or more dimensions will prevent proper assessment of exclusion, making it necessary to eliminate the country concerned from the exercise.

Estimations at sub-national levels and across time

The same conceptual and methodology frameworks can be applied to assess levels of exclusion at sub-national levels and over different periods of time. Data can be used at different tiers of government to estimate exclusion across sub-regions. The approach can also be used with longitudinal data sets to identify the drivers of exclusion across time for each sub-region. These outcomes will provide powerful information on the type of policies that have contributed to reduce or increase exclusion over time and across sub-regions.

Exclusion between subgroups of population

Similarly, the Index can be applied across gender and urban and rural settings. Maintaining the same decomposition in six dimensions, this method allows for a cross-sectional analysis of exclusion between groups, helping identify the driving factors of exclusion for each subgroup of population, as illustrated in the report.
Annex 2: Review of social development and exclusion indices

For a very long time, per capita GDP was used as the sole indicator of economic growth in most countries and regions in the world. In 1990, UNDP made a major breakthrough in the measurement of human development with the publication of its first Human Development Report (UNDP, 1990). The Human Development Index was then introduced on the assumption that economic growth, using traditional income-based measures such as GDP per capita is not sufficient to reflect progress in human and social development. The index comprises three main dimensions of well-being, namely, life expectancy at birth, educational attainment and real GDP per capita. UNDP has since refined some of these components and developed supplementary measures, such as the Gender-related Development Index and the Gender Empowerment Measure, which reflect the degree of gender equality and women's empowerment in development across countries.20

While the HDI has had much resonance in the development discourse over the years, some people believe that the HDI indicators are still too broad and that they fail to capture critical aspects of development, such as inequalities, vulnerability or environmental issues. Others have questioned the implications of arithmetically folding the three component indicators of the HDI into a single index, a method that presumably masks the trade-offs between the various components of the same index (Desai, 1991; McGillivray, 1991; Sen., 1993). However, the HDI's simplicity has been vital in positioning it as arguably the most popular development index globally.

At the Millennium Summit in 2000, global leaders made another breakthrough with the adoption of the Millennium Development Goals (MDGs) as a major global framework to help countries monitor and accelerate progress towards economic and social outcomes by the year 2015. Each of the eight internationally agreed goals includes a list of quantifiable and time-bound targets and indicators for monitoring progress in the areas of poverty (Goal 1), universal primary education (Goal 2), gender equality (Goal 3), child and maternal mortality, health and major diseases (Goals 4, 5 and 6), environmental sustainability (Goal 7) and global partnership for development (Goal 8). Since their adoption, the MDGs have probably become the most important framework for development cooperation worldwide, catalyzing efforts among all regions and countries and setting up the path for the development agenda beyond 2015.

A number of institutions and countries have developed and used a range of other tools and indicators to track specific social development outcomes:

- The Economist Intelligence Unit (EIU, 2005) developed a “quality of life” index in 2005, based on a methodology that links the results of subjective life-satisfaction surveys to the objective determinants of the quality of life across 111 countries. The model comprises nine factors: health, material well-being, political stability and security, family relations, community life, climate change, job secu-

---
20 Both introduced by UNDP in 1995, these two measures are considered to be “gender-sensitive extensions of the HDI.” While the Gender-related Development Index takes into account existing gender gaps in the Human Development Index, the Gender Empowerment Measure is based on estimates of women’s economic income, participation in high-paying positions and access to professional and parliamentary positions (Klasen, 1998).
rity, political freedom and gender equality - the first three being the most important according to their weights (EIU, 2005).

- **The ILO decent work indicators (ILO, 2012a)** are based on 10 substantive elements of decent work, including equal opportunities at work, adequate earning, productive work, social security and social dialogue. Elements of social inclusion exist, but refer to the legal framework underpinning employment conditions and opportunities.

- **The OECD social indicators (OECD, 2011)** have been recently developed to assess social progress among OECD countries in four broad policy areas, including self-sufficiency, equity, health status and social cohesion. The latter is particularly important in terms of exclusion, as it measures the extent to which people participate in their communities or trust others. Equity includes the ability to access social services and economic opportunities, while self-sufficiency comprises indicators such as employment and student performance.

- **The European Union indicators** of social inclusion are a series of measures, clustered in five key dimensions, which measure poverty, inequality, employment, education and health outcomes among EU countries.

- **The Multidimensional Poverty Index** (MPI, 2011) was developed by the Oxford Poverty and Human Development Initiative and UNDP. It is a composite index based on a combination of income and non-income based measures, following an approach pioneered by Townsend (1979) and later by Sen. (1985). It has been so far applied to 91 countries globally, and is considered as the main metrics in the application and monitoring of the new sustainable development goals and post-2015 development agenda.

Two additional indices are particularly important, as they have been developed specifically for Africa:

- **The Ibrahim Index of African Governance** measures African national governance against 88 criteria, divided into four overarching categories: (a) Safety and rule of law; (b) Participation and human rights; (c) Sustainable economic opportunity; and (d) Human development. The index aims to capture the quality of services provided to citizens by African governments.

- **The African Gender Development Index** was developed by ECA as a multidimensional and region-specific tool to assess the status and progress towards gender equality and women’s empowerment in Africa (ECA, 2012). The second phase of the Index – which was first piloted in 12 countries in 2009 – was carried out in 14 countries in 2012. The Index is based on a quantitative assessment of gender gaps in the social, economic and political spheres of life – through the Gender Status Index. The second component of the African Gender Development Index is the African Women’s Progress Scoreboard, which provides a qualitative evaluation of governments’ efforts to implement global and regional commitments affecting women and their rights.

Despite the wide array of development indicators available, the approach used in the Index is novel, insofar as it seeks to capture the impacts of exclusion throughout the life cycle, assessing the effects of being excluded from early childhood to old age in key dimensions of development. Its computation across time and for different subgroups, both at the national and sub-national levels, makes it possible to capture inequalities within and between countries and groups of population.

---

22 See box 1 for a comparative analysis of the Human Development Index, the Multidimensional Poverty Index and the African Social Development Index.
Review of social development and exclusion indices

AFRICAN SOCIAL DEVELOPMENT INDEX (ASDI)