

# African Social Development Index

## Measuring human exclusion for structural transformation

Central Africa Report







United Nations  
Economic Commission for Africa



# AFRICAN SOCIAL DEVELOPMENT INDEX (ASDI): MEASURING HUMAN EXCLUSION FOR STRUCTURAL TRANSFORMATION

## Central Africa Report

**Employment and Social Protection Section**

**Social Development Policy Division**

**UN Economic Commission for Africa**

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# Acronyms

AfDB	African Development Bank
AGDI	African Gender and Development Index
ASDI	African Social Development Index
AWPS	African Women's Progress Scoreboard
AUC	African Union Commission
CDF	Constituency Development Fund
COMESA	Common Market for East and Southern Africa
CSOs	Civil Society Organizations
EAC	East African Community
ECOWAS	Economic Community of West African States
HDI	Human Development Index
EIU	Economist Intelligence Unit
GDP	Gross Domestic Product
HDR	Human Development Report
HDI	Human Development Index
ICPD	International Conference on Population and Development
ILO	International Labour Organization
MDGs	Millennium Development Goals
NEPAD	New Partnership for Africa's Development
NPRS	National Poverty Reduction Strategy
RCM	UN Regional Coordination Mechanism
RECs	Regional Economic Communities

SADC	Southern African Development Community
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WB	World Bank
WDI	World Development Indicators
WHO	World Health Organization

# 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 African Social Development Index (ASDI) is built on the 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.

In Central Africa, by 9.5 percent. Poverty and malnutrition are the major drivers of human exclusion in the sub-region. On average, the ASDI for rural areas across countries is higher than the urban ASDI. That is, rural areas across different countries in Africa face higher levels of human exclusion than the urban areas. Disaggregating the data by gender, on average across countries in the period 2006-2009, the ASDI for women is slightly higher than for men. In the period 2010-2015, the average human exclusion declined for both women and men. Faster percentage reduction is observed for women than for men.

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.

# **Section I:**

# **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<sup>1</sup>. 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

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<sup>1</sup> 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).

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.

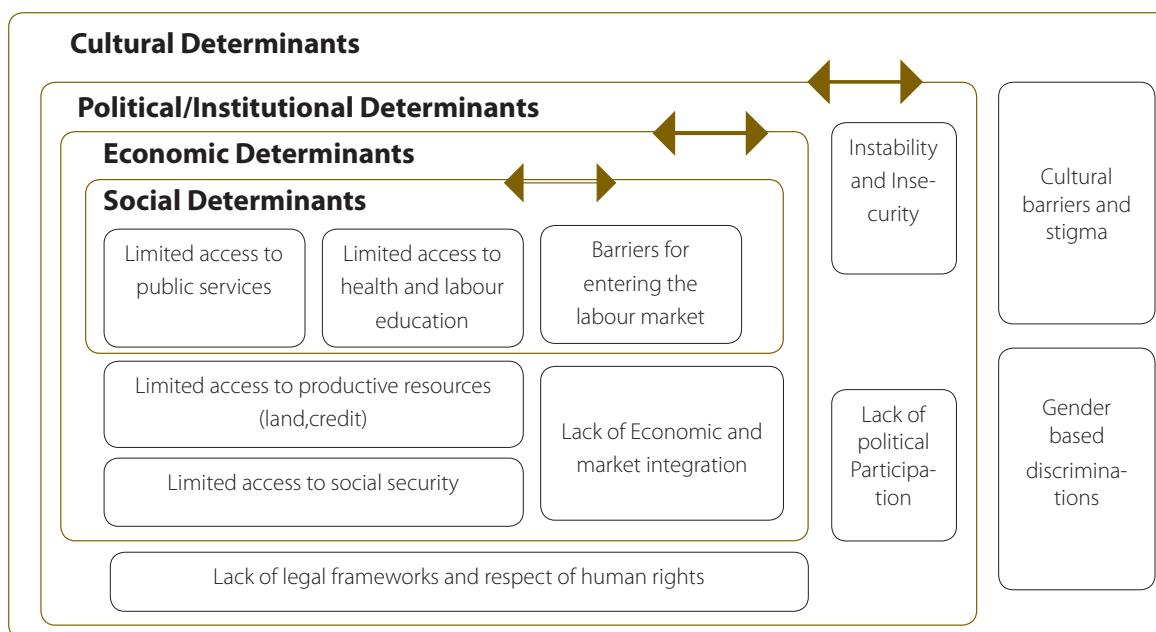
As part of this effort, a new paradigm is proposed for the social transformation of Africa, where reducing human exclusion is at the centre of this transformation. It is argued indeed that “human inclusion” should be a pre-condition to “social and economic inclusion” allowing individuals to be part of 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<sup>2</sup>:

**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’<sup>3</sup>.

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.

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)**

# 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.

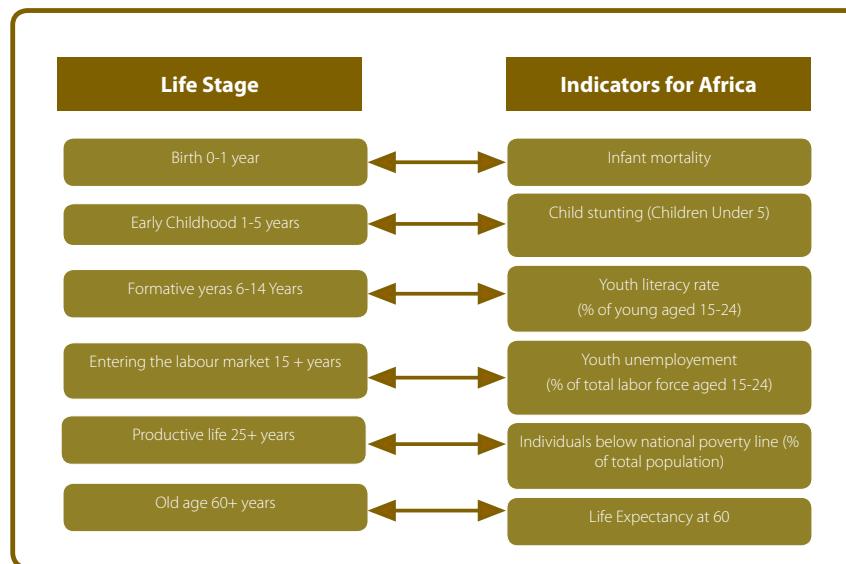
For each phase of life, a dimension of human development has been identified, from which individuals in that specific age group are more likely to be excluded - affecting their development and integration later in life (Table 2.1).

**Table 2.1: Exclusion throughout the life-Cycle**

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

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 2.1: 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 Index 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.<sup>4</sup>

## 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.

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<sup>4</sup> 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:**

## **Central Africa –**

### **A brief Introduction**

# Central Africa: a brief introduction\*

Although Africa has witnessed positive growth centre for the last 15 years, its economic performance declined from 3.7 per cent (2015) to 1.7 per cent in 2016 (ECA, 2017). This decrease is essentially the outcome of the global environment, the collapse in oil prices and adverse weather conditions. Notwithstanding poor growth in 2016, the economic results of the region were largely driven by consumption and private investment. The outlook seems promising, given that growth in Africa should recover to 4.5 per cent in 2017, thanks to the recovery of the global economy.

Growth in Central Africa is mainly positive, although unequal among the member States. The average growth rate in Central Africa was 3.4 per cent in 2015. It should stand at 2.4 per cent in 2016 and reflect the balance of growth in Cameroon (5.3 per cent), the Central African Republic (5.1 per cent), Chad (1.1 per cent), Gabon (3.2 per cent), the Republic of Congo (1.6 per cent), Sao Tome and Principe (5 per cent) and Equatorial Guinea (-4.5 per cent) (ECA, 2017). According to forecasts, however, growth in the subregion should recover in 2017 and reach 5 per cent, while consumer prices should remain moderately low at 2.4 per cent. The decline in basic commodity prices since 2014 has had serious financial repercussions, particularly on oil and minerals upon which the exporter countries of Central Africa depend. This has taken the form in the overall budget balance as a percentage of gross domestic product (GDP). Estimated at -4 per cent in 2016, it increased to -2.9 per cent in 2017 (African Development Bank, 2016). The external current account as a percentage of GDP shows similar patterns of -10.4 per cent in 2016 rising to -10.6 per cent before declining in 2017.

Agriculture, industry and services continue to dominate subregional economic activities. Between 2004 and 2012, there were more women than men working in agriculture, principally engaged in subsistence farming and agricultural activities with low added value. Nevertheless, agricultural productivity remains low, which has forced a large number of people into poverty.

In 2012, the unemployment rate stood at 4.2 per cent in Cameroon, 7.8 per cent in the Central African Republic and 8.3 per cent in Chad. During the same period, unemployment in the Democratic Republic of Congo was at 7.5 per cent, 7.8 per cent in Equatorial Guinea and 26.2 per cent in Gabon. The relatively low unemployment rate in the subregion, however, conceals the dynamism of the informal sector which employs the majority of people with low wages and poor productivity. There is also a gap between growth and the creation of employment, given that growth has not resulted in the creation of jobs and the reduction of unemployment in the subregion. This phenomenon is not specific to Central Africa alone. In fact, growth, at both the regional and subregional levels, has not been sufficiently inclusive with limited impact on social outcomes.

In 2015, three member States (Cameroon, the Central African Republic and Chad) had a human development index below 0.55 while three others (Congo, Equatorial Guinea and Gabon) were ranked as medium human development countries with a human development index ranging between 0.55 and 0.70. The standard of living in Central Africa in 2011, as measured by gross national income is relatively low compared to other subregions. It stood at \$6,400 whereas in North Africa it was \$9,900 and \$6,800 in Southern Africa (African Development Bank and others, 2016).

Furthermore, many countries in the subregion have relatively high Gini coefficients. For example, the Central African Republic has a Gini coefficient of 0.56, Chad 0.43, Gabon 0.42 and Cameroon 0.41; this denotes high levels of income inequality. In fact, high income inequality hampers the poverty reduction process and growth because when inequality increases through growth, poverty also increases (Bhorat, Naidoo and Pillay, 2016). Apart from income inequality, a number of countries have a relatively high poverty rate. In 2011-2012, the poverty rate, measured on the international poverty line of \$1.90 per day in Purchasing Power Parity (PPP terms), had produced the following results in respect of poverty rates: 46.7 per cent in Chad, 46.5 per cent in the Republic of Congo and 45 per cent in the Democratic Republic of the Congo.

These social and economic indicators highlight the increased risk of human exclusion of certain population groups from the growth process in the subregion, in particular, and from the development process in general. In fact, vulnerability in Central Africa is the result of many factors including poverty, unemployment, low human development and gender inequality. The ASDI serves to identify the factors that contribute to human exclusion. In this regard, the ASDI importance in the evaluation of social policies and their impact on human exclusion as a whole is now well established.

\* The Sub-Regional Office for Central Africa of the Economic Commission for Africa (ECA/SRO-CA) covers the following member States: Cameroon, Chad, Central African Republic, Congo, Equatorial Guinea, Gabon and Sao Tome & Principe. The ASDI was rolled out only in Cameroon, Chad, Gabon and Sao Tome & Principe as covered by this report.

# **Section IV: ASDI Country Analyses**

## 4.1 Cameroon

### Social and economic background

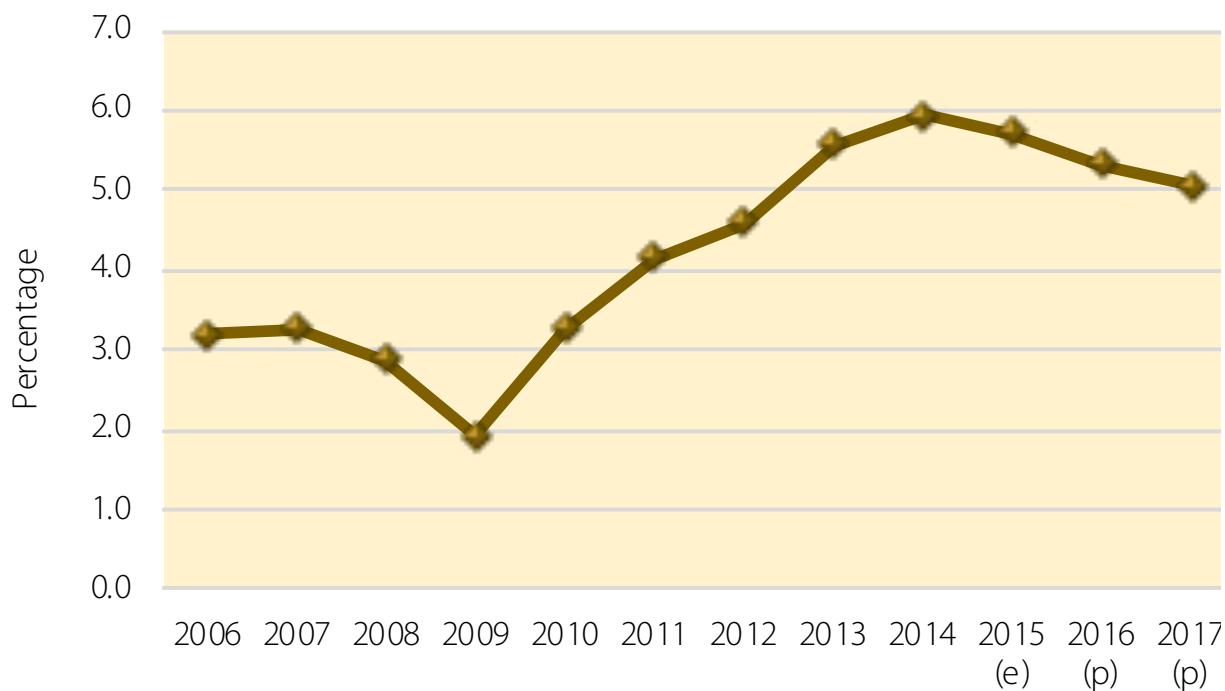
The economic performance of Cameroon has shown resilience in the face of the collapse in oil prices and the downturn in demand in the export markets. Cameroonian growth of around 6 per cent in 2015 was higher than the average growth of the member States of the Central African Economic and Monetary Community(CEMAC). This economic performance is particularly striking in view of the security issues and humanitarian crisis in the north and north-east of the country (see figure 4.1.1).

The resilience shown by Cameroon is also due to its great diversification of sources of growth. The tertiary sector continues to dominate economic production with 46 per cent of GDP, followed by the primary and secondary sectors with 32 per cent and 22 per cent of GDP, respectively.

The budget policy has remained moderately expansionist. Budgetary revenue has increased more slowly than public spending, resulting in the deficit of 2.7 per cent in 2013 rising to 3 per cent in 2014 and 3.8 per cent in 2015 (the CEMAC convergence criteria are 3 per cent). An important factor is that Cameroon represents 32 per cent of the GDP of CEMAC because of the size of its agricultural sector. In fact, Cameroon is regarded as the bread basket of Central Africa. Although, in terms of regional integration, the subregion of Central Africa is developing trade and promoting financial integration, efforts still need to be made with respect to the free movement of persons and goods and the construction of shared infrastructures (ECA, 2015).

Investments in major infrastructure projects represent 30.7 per cent of public spending, which is an increase of 7.6 per cent between 2015 and 2016. It could have the effect of "squeezing out" social benefits.

**Figure 4.1.1 GDP growth rate**



**Source:** African Economic Outlook (2016).

**Note:** (e) = estimates (p) = projections

## **Social development\***

The proportion of the population living below the poverty line (1.25 dollars per day) fell from 40.2 per cent in 2001 to 37.5 per cent in 2014. The decline in poverty is more perceptible in the urban environment because of the phenomenon of poverty has increased in the rural areas, notwithstanding the development policies that have been implemented. Geographically speaking, the three northern and the north-west regions are the most affected. The consequences of climate change have had a particular impact on the extreme north region where the proportion of the population living below the poverty threshold climbed from 56.3 per cent in 2001 to 74.3 per cent in 2014.

According to the fourth Cameroonian household survey carried out by the National Statistics Institute, the Gini coefficient, which measures inequalities between different groups, rose from 0.39 in 2007 to 0.44 in 2014, an increase of 13 per cent.

The employment rate of persons aged 15 years or older, as defined by the International Labour Organization (ILO), dropped to 72.1 per cent in 2014 from 76.2 per cent in 2010 and 81.9 per cent in 2007. A study of the combined rate of unemployment and underemployment linked to working time shows an improvement in the employment situation in Cameroon. Moreover, the fourth Cameroonian household survey revealed that the overall underemployment rate for persons aged 15 and over stands at 77.6 per cent and informal employment rate at 88.6 per cent. Thus, it seems clear that, notwithstanding the high employment rate, the quality of employment remains precarious.

According to the National Statistics Institute (2015), the infant mortality rate for Cameroon was reduced by about 4 per cent in the period 1993-2015. The infant and child mortality rate was reduced on average by over 30 per cent. These results are reflected of the efforts made by the government, particularly to provide vaccination cover for children aged between 12 and 23 months and free antimalarial for all children under 5 years of age.

In maternal health, the situation has deteriorated. The number of maternal deaths increased from 669 deaths per 100,000 live births over the period 1997-2004 to 782 deaths for the period 2004-2011. In addition to inadequacies in technical capacity and human resources, sociocultural behavior and certain traditional beliefs are the factors behind the increase in the maternal deaths.

When we come to education, the number of students enrolled in the primary education rose by an average of 3.4 per cent per annum between 2005 and 2006 and 2009 and 2010, with a trend towards acceleration at the end of the period, probably the result of the abolition of school fees in the public sector. The gross enrolment ratio for secondary education increased by 11.4 per cent for the general secondary level and 3.5 per cent for the technical secondary level between 2000 to 2012. The gross enrolment ratio in lower secondary education rose from 26 per cent to 60 percent (an increase of 34 per cent) and the upper secondary level increased from 16 per cent to 36 percent (an increase of 20 per cent) between the period 2000 to 2012 (Republic of Cameroon, 2015).

The main challenges facing the Cameroonian education systems are (i) the deterioration in the quality of education (ii) the mismatched supply of training in technical secondary education the vocational training institutions and higher education (iii) poor management and governance throughout the systems; and (iv) the persistence of the disparities relating to gender equality, region of residence and income.

**Table 4.1.1 Socioeconomic indicators**

Indicators	2000-2002	2005-2007	2012-2014
Total population, in millions of inhabitants	16.8	19.1	23.3
Total GDP in CFA*	7 583 077	9 792 273	15 686 017
Per capita gross national income (Atlas method in current United States dollars)	570	990	1 330 (2015)
Population living below the national poverty line, as a population percentage	...	...	...
Gini coefficient	42.1 (2001)	42.8	...
Unemployment, as a percentage of the total working population	5.9	4.1	4.3
Unemployment among young people, as a percentage of the total working population aged 15 to 24	9.2	6.4	6.7
Population growth, as an annual percentage	2.6	2.6	2.5
Life expectancy at birth, in years	52	52	55

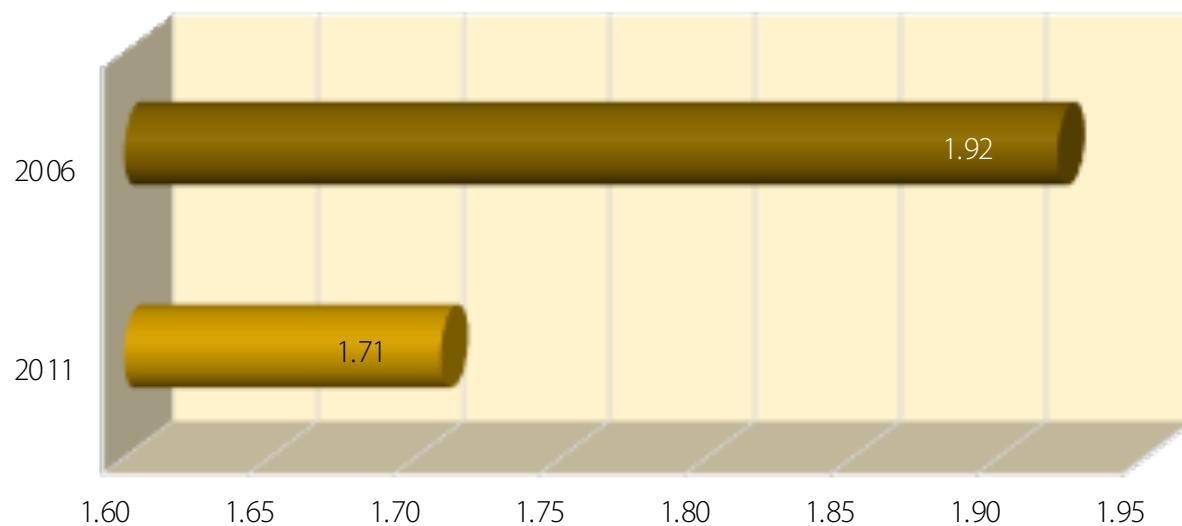
**Source:** World development indicators (World Bank)

\* International Monetary Fund world economic outlook database, consulted 19 May 2017. Available from <http://www.imf.org/external/pubs/ft/weo/2015/02/weodata/index.aspx>

### Measuring human exclusion in Cameroon

The African Social Development Index of Cameroon was low<sup>5</sup> in 2006 and 2011. Furthermore, the Index improved 10 percent from 1.92 in 2006 to 1.71 in 2011 (see graph 4.1.2). This improvement over a short span of time seems to indicate that more inclusive policies have been implemented.

**Figure 4.1.2 African Social Development Index in Cameroon**



**Source:** Computed using national data.

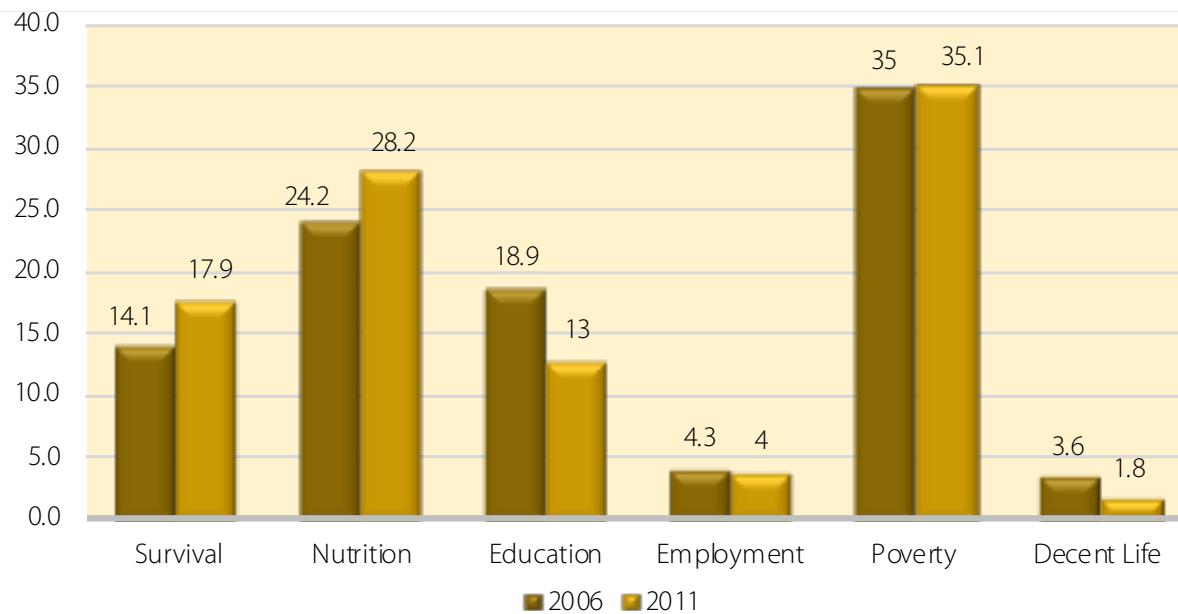
An analysis of human exclusion in Cameroon reveals a deterioration in the contribution of the health dimension with respect to child mortality and childhood stunting over the period 2006-2011. The contribution of poverty to social exclusion did not change over the period under review (see figure 4.1.3). The

<sup>5</sup> The aggregate ASDI scores range from 0 to 6. The lower the score the lower human exclusion. For analytical purposes less than 2.5 score is considered low (ECA 2015).

\*This section is based on ECA (2015a)

contribution of the first period of life to human exclusion shows that much more attention needs to be given to maternal and child health care services.

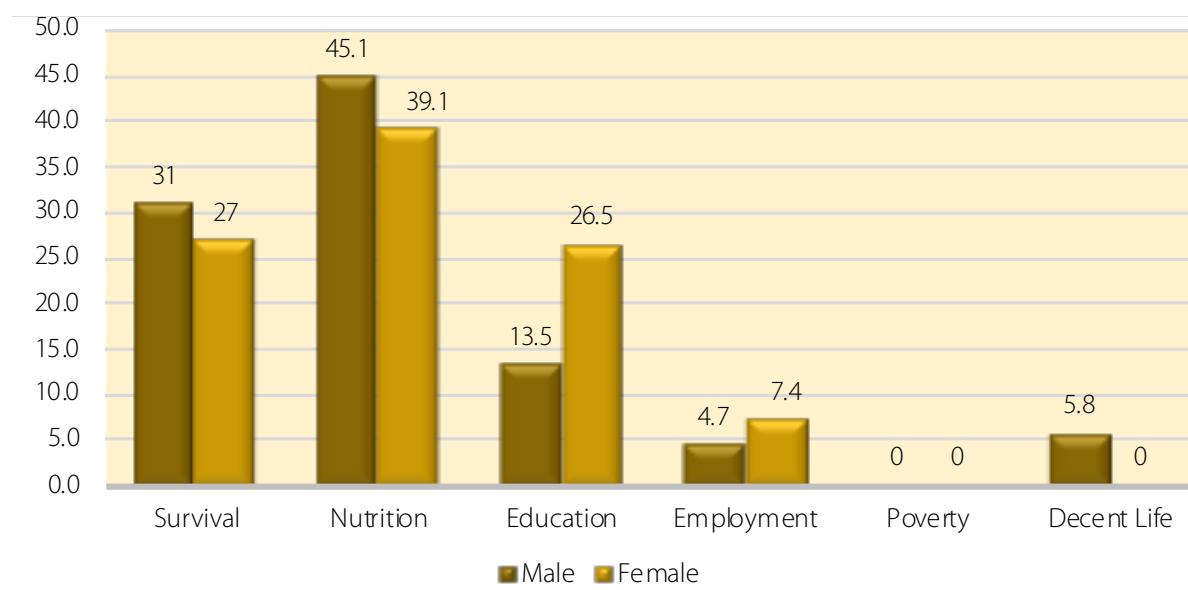
**Figure 4.1.3 Drivers of human exclusion**



**Source:** Computed using national data.

The Index disaggregated by gender in Cameroon is based on five indicators (see figure 4.1.4). Education and employment are the most important dimensions when considering the difference disaggregated by gender. It seems that because of the challenge represented by the exclusion of women from the educational system in Cameroon, more equitable gender policies must be implemented.

**Figure 4.1.4 Drivers of human exclusion by gender**

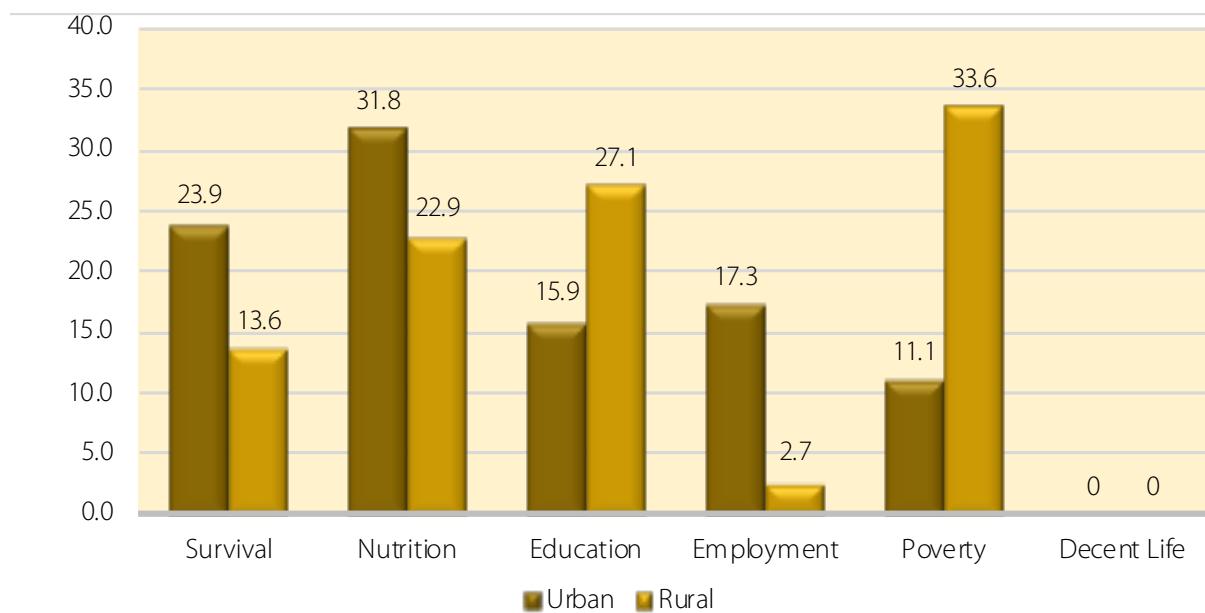


**Source:** Computed using national data.

Human exclusion drivers based on location in Cameroon show that the contribution of education and poverty to human exclusion is higher in the rural areas than urban areas. The relative contribution of the poverty dimension in rural areas is three times the contribution in urban areas (See Graph 4.1.5). The relative contribution of education in rural areas is also significant. The gender and rural bias of the education

factor of human exclusion seems to indicate certain challenges in the adequate presence social rural infrastructure such as schools, and equitable access by women.

**Figure 4.1.5 Drivers of human exclusion by location**



**Source:** Computed using national data.

### Policy considerations

In Cameroon, education policies do not satisfy employment market needs and technical and vocational training are marginalized. It is therefore necessary to provide a better match between the supply of skills and the needs of the labour market by means of governance structures which give the private sector an important role in the educational strategy of Cameroon.

Social policies demand more commitment on the part of the policymakers. A gender-sensitive educational policy including improved access for women, provision of adequate health facilities in schools for women among others is crucial in designing improved inclusive policies. Education and the health sector are developing gender bias on a broad scale, it is of primary importance to promote reproductive health and to keep girls in education.

The variation in the relative contribution of poverty to human exclusion between urban and rural areas demands policy attention. Poverty in the rural areas of Cameroon is a significant feature of human exclusion and implies that a stronger rural focus of the poverty reduction strategy of the country is needed.

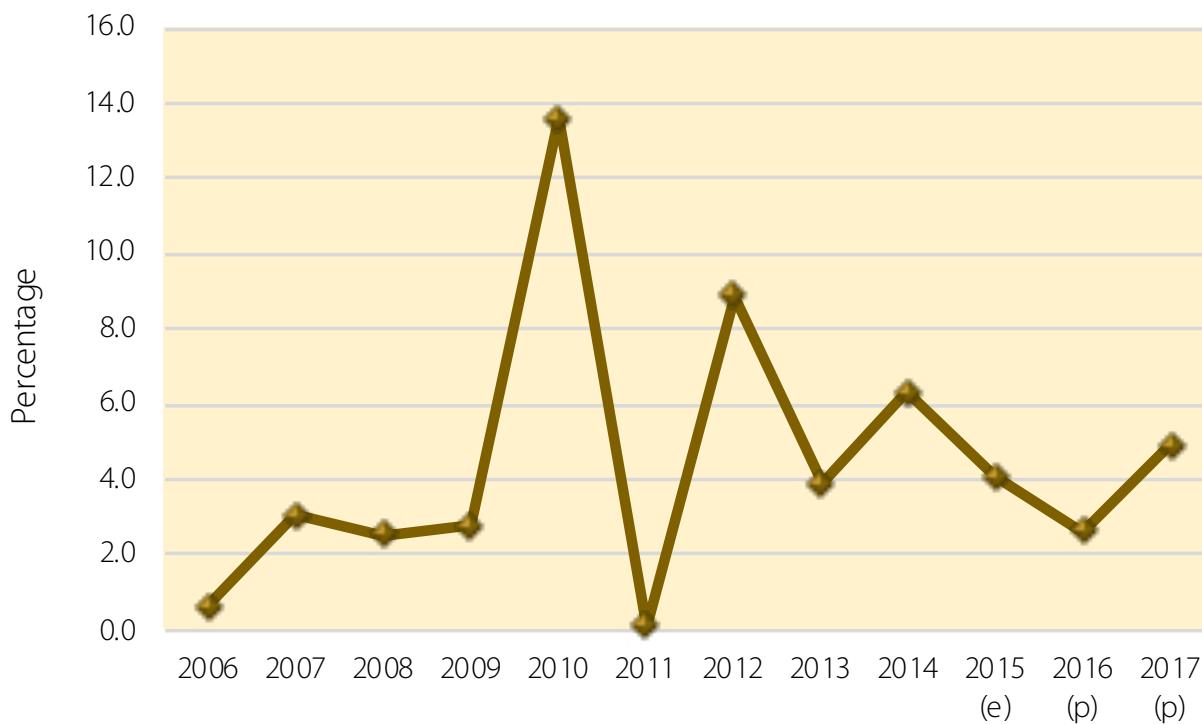
## 4.2 Chad

### Social and economic background

Essentially dependent on the petroleum industry, the economy of Chad is prey to external shocks. After achieving 6.3 per cent in 2014, GDP growth fell to 4.1 per cent in 2015 and 2.6 per cent in 2016 as a result of the collapse in oil prices in the international markets (see figure 4.2.1). This decline could lead to a significant reduction in the overall level of public investment, particularly in the extractive sector, but also in the social sectors. The country's poor agricultural performance is likely to worsen a challenging economic situation. This sector of the economy suffered from lack of rainfall in 2015 which led to a decline in cereal production of approximately 12 per cent, according to government estimates (African Development Bank and others, 2016).

The capacity of the Government of Chad to implement public investment programmes in the context of its economic policy must be re-evaluated. For example, in terms of 2015, major spending was deployed on security because of the threats and violence resulting from the activities of the terrorist sect Boko Haram and other jihadist movements, spending which placed a heavy burden on the country's economy. The inflation rate rose from 1.7 per cent in 2014 to 4 per cent in 2015, an increase which is in breach of the norm of 3 per cent fixed by the CEMAC. In 2016, however, it declined to 2.6 per cent. The main causes of this variation in the inflation rate relate to the disruption of supplies and exports because of the security situation. Conserving the country's economic gains, in particular the benefits of the achievement of the Highly Indebted Poor Countries initiative at the end of April 2015, results in cautious management of essential debt, taking into account the extreme volatility of oil prices (African Development Bank and others, 2016).

**Figure 4.2.1 GDP growth rate**



**Source:** African Economic Outlook 2016

**Note:** (e) = estimates (p) = projections

## Social development<sup>6</sup>

According to the third Survey on Consumption and the Informal Sector in Chad (ECOSIT3), published in June 2013, the population of Chad in 2011 was estimated at 10,015,591, of whom 51.5 per cent were female and 48.5 per cent male. The rural population accounts for 81.6 per cent of the total. In rural areas, there are fewer males than females (sex ratio 93.1 males per 100 females), while in urban areas the sexes are relatively evenly represented (99.8 males per 100 females). The Chadian population is a young one: in 2011, 52.3 per cent were under 15 years of age and 43.6 per cent between 15 and 59 years (ECOSIT3). This predominance of young people in the population is attributable to the high total fertility rate, estimated by the National Institute of Statistical, Economic and Demographic Studies at seven children per woman in 2016, which makes Chad one of the two countries with the highest fertility rates in the world.

According to the ECOSIT3 survey cited above, the incidence of poverty in Chad was 46.7 per cent in 2011. This poverty rate, although high, is lower than the 55 per cent recorded in 2003 (ECOSIT2). The incidence of poverty increases with increasing distance from urban centres. It is only 20.9 per cent in urban areas, but rises sharply to 52.5 per cent in rural areas (ECOSIT3). Households headed by men are more exposed to poverty than those headed by women. The incidence of poverty is 47.4 per cent in households headed by a man, compared with 42.6 per cent for those headed by a woman.

With respect of education, the literacy rate in the Chadian population aged 15-24 years was estimated at 50.1 per cent (DHS 2014-2015). This figure conceals the inequalities between males and females. Women in Chad are more likely illiterate (literacy rate: 35.3 per cent) than their male (literacy rate: 64.8 per cent) counterparts of the same age category (15-24 years).

With reference to the labour market in Chad, the working-age population increased considerably between 2003 and 2011 (INSEED/ECOSIT2&3). The figure was estimated at 5,920,776 in 2011, up from 3,676,307 in 2003, which is an average annual increase of 6.1 per cent. However, unemployment fell significantly between 2003 and 2011. From 11.9 per cent in 2003, it fell to 5.7 per cent in 2011, i.e. a fall of around six percentage points. Unemployment is still higher among men (6.8 per cent) than women (4.2 per cent), with the exception of N'Djamena, where it is 10.4 per cent for women and 8.1 per cent for men (ECOSIT3). This level of unemployment, higher for women than for men in the capital, is explained by the difficulty women experience in finding employment for cultural and social reasons. Although they are well educated, most women take on household tasks, which reduces the time they have available for seeking employment and holding down a job effectively.

There has been some progress in reducing child and maternal mortality. According to data from the Chad Demographic and Health Surveys in 1996-1997 and 2004, Multiple Indicator Cluster Survey 2010 and Multi-Indicator Demographic and Health Survey 2014-2015, child mortality decreased from 194 per 1,000 live births in 1996-1997 to 133 per 1,000 live births in 2014-2015. Maternal mortality rose between 1996-1997 and 2009, from 827 to 1,099 per 100,000 live births. However, it fell significantly in 2014-2015, to 860 per 100,000 live births. The fall in child mortality over this period is noteworthy, resulting from health measures adopted by the Government. This improvement in maternal mortality is explained by the increased number of births attended by skilled health personnel.

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6 This section is based on ECA (2016a)

**Table 4.2.1 Socioeconomic indicators**

Indicators	2000-2002	2005-2007	2012-2014
Total population, in millions of inhabitants	9	10.8	14
Total GDP in CFA*	1 567 753	4 140 248	6 883 618
Per capita gross national income (Atlas method in current United States dollars)	190	630	880 (2015)
Population living below the national poverty line as a population percentage	...	...	...
Gini coefficient	39.8 (2003)		43.3 (2011)
Unemployment, as a percentage of the total working population	7	7.1	7
Unemployment among young people as a percentage of the total working population aged 15 to 24	10.6	10.8	10.5
Population increase as an annual percentage	3.8	3.4	3.3
Life expectancy at birth, in years	56	58	60

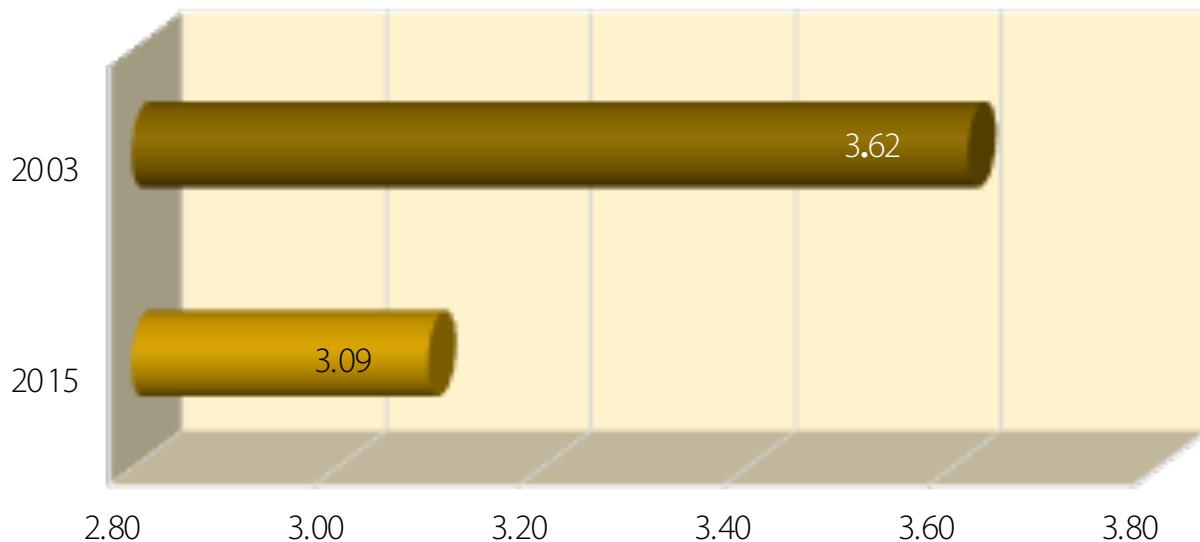
**Sources:** World development indicators (World Bank)

\* Database World Economic Outlook, consulted 19 May 2017. Available at <http://www.imf.org/external/pubs/ft/weo/2015/02/weodata/index.aspx>

### Measuring human exclusion in Chad

Notwithstanding the many challenges it faces, Chad has recorded a decline in human exclusion, falling from 3.62 in 2003 to 3.09 in 2015 (see figure 4.2.2). The efforts which the Government of Chad has made in the social sphere have produced, to some extent, positive effects on human exclusion.

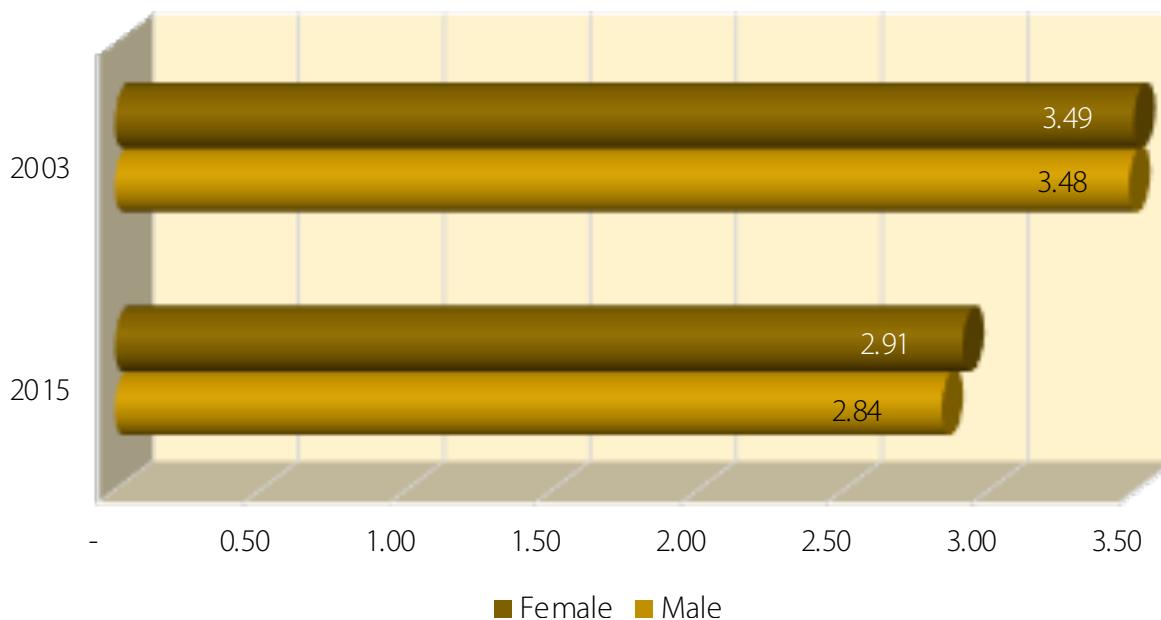
**Figure 4.2.2 African Social Development Index in Chad**



**Source:** Computed using national data.

Disaggregation of African Social Development Index by gender for Chad shows that exclusion has slightly increased over time, from 0.012 to 0.07 between 2003 and 2015 (see figure 4.2.3). There is consequently a need to strengthen gender-specific policies.

**Figure 4.2.3 Human exclusion by gender**

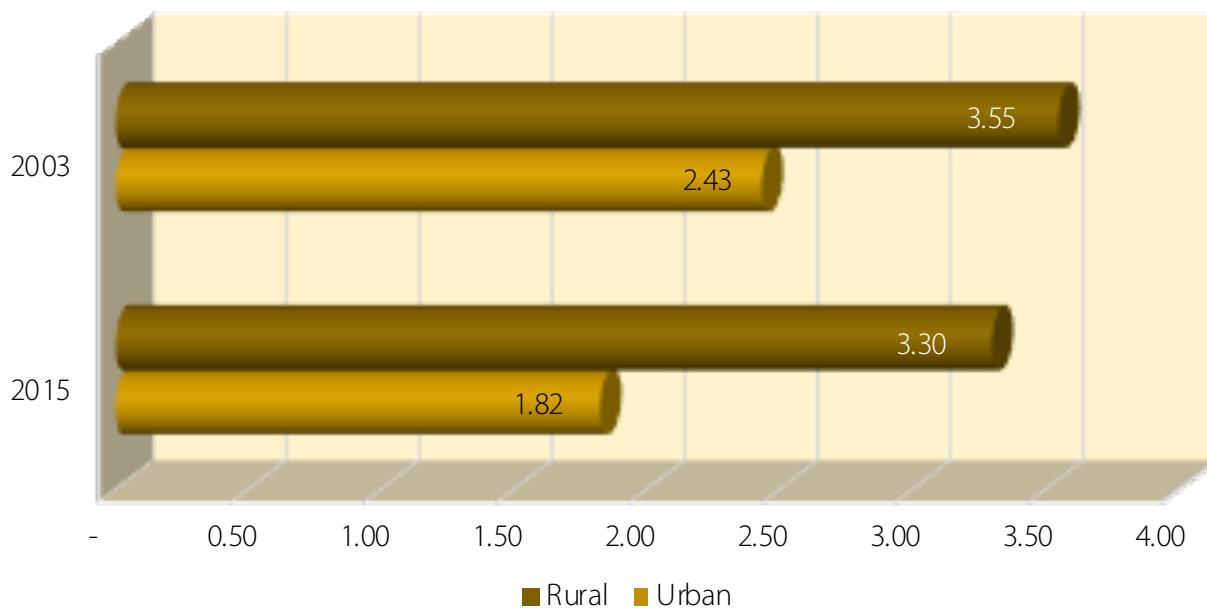


**Source:** Computed using national statistics

**Note:** Gender-based African Social Development Index comprises five indicators

There are significant differences in human exclusion between the urban and rural areas. The improvement with respect to human exclusion between 2003 and 2015 in the rural areas was only 0.25 whereas it was more than double, 0.61, in the urban areas during the same period (see figure 4.2.4). The agro-climatic conditions in certain low-yield rural areas contribute to increasing human exclusion. Consequently, decentralization policies should take agro-climatic conditions into consideration to achieve more inclusive development.

**Figure 4.2.4 Human exclusion by location**

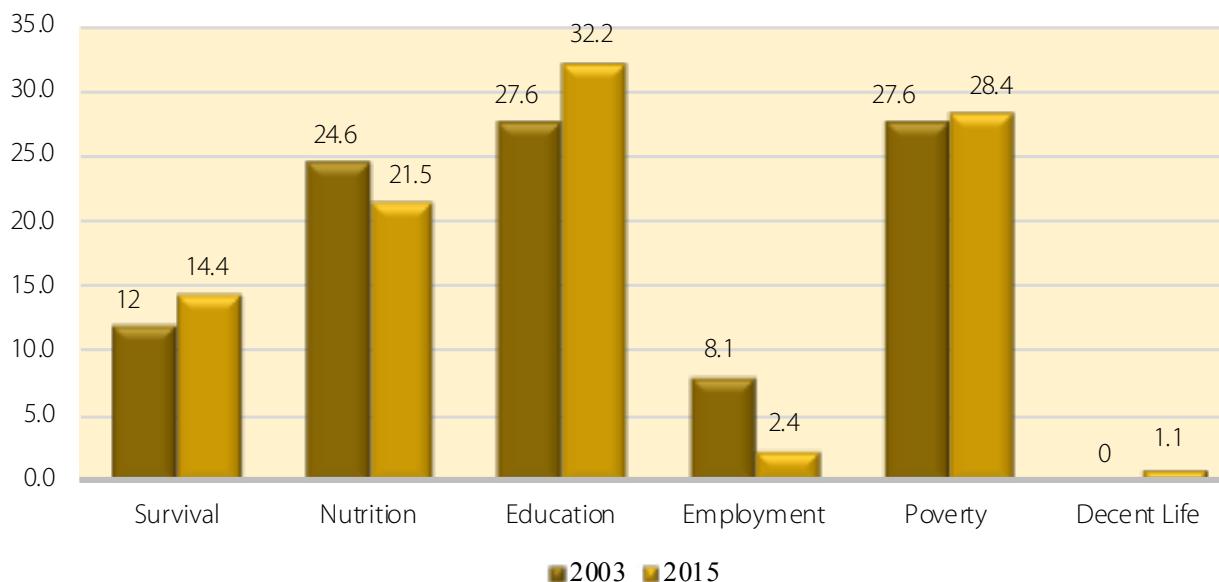


**Source:** Computed using national statistics.

**Note:** Gender-based African Social Development Index comprises five indicators.

An analysis of the causes of human exclusion shows that infant mortality and literacy also make a contribution to the increase in human exclusion, a contribution which is increasing over time. This increase shows that the health policies for the first part of life and education policies demand a fair balance to guarantee universal equal living conditions.

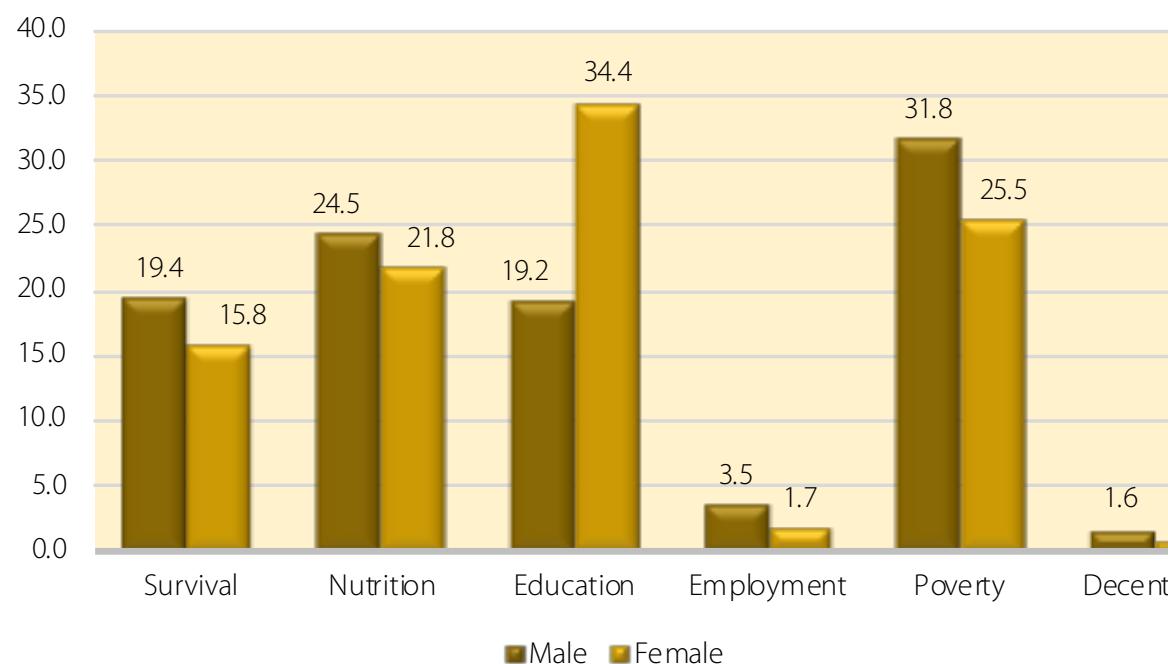
**Figure 4.2.5 Drivers of human exclusion**



**Source:** Computed using national data.

Gender-based human exclusion shows that the number of men who complete primary school education is double that of women (see figure 4.2.6). The exclusion of women from school contributes to a high fertility rate among adolescent women and to gender inequality.

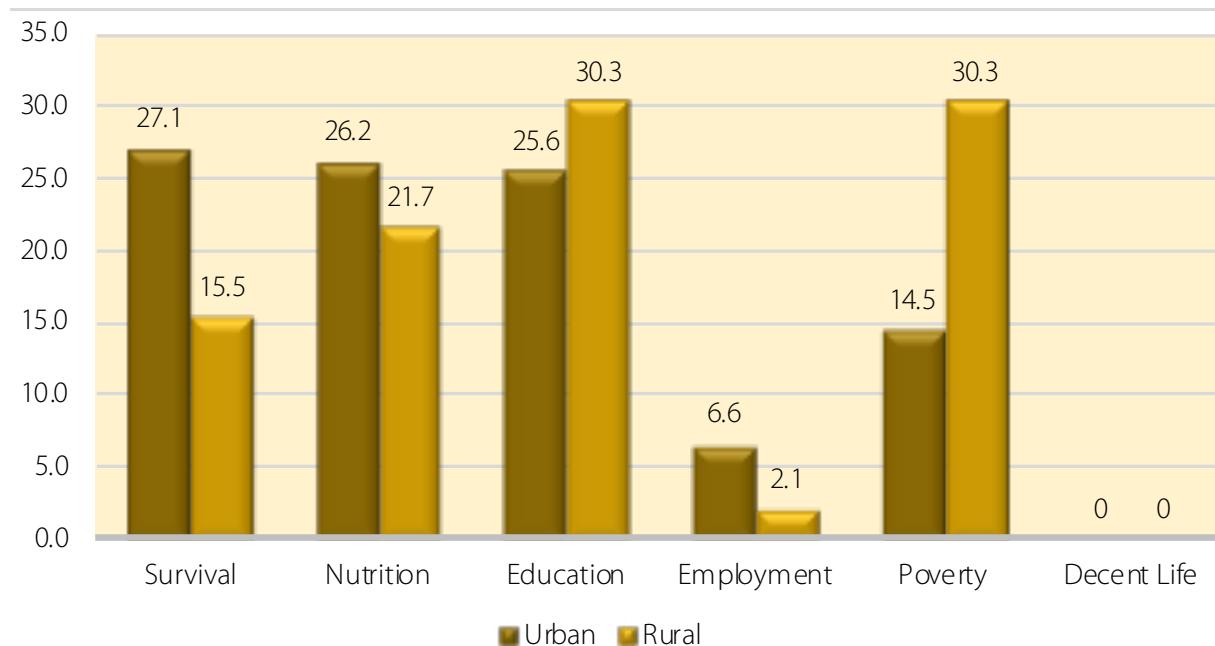
**Figure 4.2.6 Drivers of human exclusion by gender**



**Source:** Computed using national data.

Human exclusion based on location (based on five indicators) shows that the illiteracy rate and the poverty rate are much higher in the urban areas than in the rural areas (see figure 4.2.7). Child mortality and child stunting, however, are the lowest contributors to social exclusion in the rural areas. This could be due to a rural policy focused on the first stages of life in the particularly vulnerable geographical areas.

**Figure 4.2.7 Drivers of human exclusion by location**



**Source:** Computed using national data.

### Policy considerations

The fragile state of the economy of Chad resulting from the collapse in oil prices is also reflected in social fragility. The low resistance of social outcomes to exogenous shocks in terms of resources devoted to the sector contributes to low human development and exclusion.

With respect to gender-based exclusion, considerable progress has been made in certain areas. Chad has a legal framework which does not enjoy unanimous support in terms of the prevailing social and cultural norms. A beneficial policy could consist of positive discrimination measures in favour of girls with respect to access to education, health services and the job market.

The vastness of the country and its agro-climatic differences make food security a national priority. Although child stunting delay has improved over the period covered by the study, the fight against child mortality and the improvement of the health services for pregnant women is vital, as is the effort to keep girls in school.

## 4.3 Gabon

### Social and economic background

Gabon is a middle income country and the fifth largest oil producer in Africa. It has experienced strong economic growth over the last decade, resulting mainly from oil and manganese production. Over the last five years the oil sector accounted on average for 80 per cent of exports, 45 per cent of GDP and 60 per cent of budget revenue. Nevertheless, the country is facing a decline in its oil reserves and consequently the Government of Gabon has based its new strategy on economic diversification.

Growth has slowed down in Gabon and the GDP growth rate fell to 4 per cent in 2015 from nearly 6 percent in 2013 (see figure 4.3.1), notwithstanding an attempt to compensate for the low oil price by increased production. In fact, crude oil production, following a sustained decline in 2013 and 2014, climbed from 80 to 87 million barrels between 2014 and 2015. The financial situation of Gabon deteriorated in 2015 when, for the first time since 1998, it had a budget deficit. The 2016 budget contains measures of adaptation to this decline in revenue (ECA 2016).

Although the medium-term prospects are positive, the non-oil economy (mainly manganese, construction timber, the construction industry and services) will continue to be the key drivers of growth in the years to come. In the mining industry, the smelter complex of Moanda-Franceville which launched its activities in 2015 will stimulate the production of manganese. With regard to agriculture and fishing, the public-private partnership with OLAM Singapore should enable palm oil and rubber production to be increased along with fishing trips. Similarly, the partnership with Mauritius will increase the value chain of the fishing sector. Total GDP growth should achieve an average of 5.4 per cent between 2016 and 2017. Taking the falling oil prices into account, inflation should remain at 2.5 between 2016 and 2017.

**Figure 4.3.1 GDP growth rate**



Source: African Economic Outlook 2016

Note: (e) = estimate (p) = projections

## Social development<sup>7</sup>

According to Gabon's most recent general census of population and housing, the population was 1,811,079 in 2013, with a ratio of 51.58 per cent men to 48.42 per cent women. The average age is 26 years. Half of the population is under 22. The population is distributed very unevenly across the country. Almost half of the population lives in the province of Estuaire. Population density is low at the national level, with 6.8 inhabitants per square kilometer. However, it is high in some places, such as the municipalities of Libreville and Port-Gentil, where it exceeds, respectively, 3,700 and 2,480 inhabitants per square kilometer. The population is predominantly urban (87 per cent) and concentrated in only 1.1 per cent of the country's territory, while rural areas are very sparsely populated. The rate of population growth remains significant. The population more than tripled between 1960 and 2013 and it has increased 78 per cent over the last 20 years. The urban population is growing faster (at an average of 3.8 per cent per year) than the total population (at 2.9 per cent).

According to ECA (2016b), Gabon is in a position to reap a demographic dividend in that i) 34.7 per cent of the total population is under 15 years of age; ii) 64.1 per cent is under 30; iii) 61.4 per cent is in the labour force; iv) 5.6 per cent is over 60; and (v) 3.9 per cent is over 65. Furthermore, in the two decades from 1993 to 2013, the working age population increased from 55.6 per cent to 61.4 per cent.

Poverty and unemployment remain relatively high despite Gabon's abundant natural resources. According to the latest household living standard survey, conducted more than a decade ago in 2005, the poverty rate was estimated at 33.5 per cent of the total population. The most recent available data, from a 2013 study conducted by the firm McKinsey (2013), indicate that the situation has changed little, with 30 per cent of Gabonese economically vulnerable. The study shows that living conditions have deteriorated in terms of access to basic services (health care, drinking water and electricity) in 60 per cent of regions. The Gabonese authorities, aware that poverty reduction is a challenge, organized a large-scale national consultation, termed "Assises Sociales", in 2014 in order to define a human investment strategy. The new social policy has three objectives: i) to assist the most vulnerable populations (including the elderly, orphans and persons with disabilities) through integrated social programmes; ii) to provide the poorest inhabitants with income generating activities; and iii) to reduce inequalities in access to public services.

The labour market is characterized by the predominance of salaried employment, accounting for more than half of workers, followed by self-employment, representing three tenths of the employed. The latest general census of population and housing indicates that Gabon's working-age population (i.e., aged 16 to 65) is 1,031,521. Of that number, nearly 580,000 are employed. The level of economic participation for 16- to 65-year-olds is relatively low, as the total labour force participation rate is only 58 per cent. In other words, fewer than 6 out of 10 persons of working age are in the labour market. Women and city dwellers participate less in the labour market than do men and country dwellers. Approximately 47 per cent of the total labour force works in the informal sector (IMF 2013).

Unemployment is high in Gabon, as it affects one out of six members of the labour force aged 16 to 65 (16.5 per cent using the ILO classification). Unemployment is higher among women (22 per cent) than men (13 per cent). Unemployment is higher among young people, regardless of gender or area of residence. The unemployment rate for 16- to 25-year-olds varies between 25 and 42 per cent and is therefore significantly higher than the national average of 16.5 per cent. Several factors explain the existence of high unemployment despite the positive rate of economic growth: the structure of the economy relies heavily on the oil sector, which has a low degree of labour intensity, and mismatches between the

education system and the labour needs of the productive sector do not allow a large proportion of those leaving that system to take advantage of employment opportunities.

With regard to health, considerable progress has been made in the reduction of child and maternal mortality in recent years. As a result, the under-five mortality rate per 1,000 live births went from 89 in 2000 to 60.4 in 2013, and the infant mortality rate per 1,000 live births fell from 57 in 2000 to 40.6 in 2013. Similarly, significant progress in the reduction of maternal mortality has also been made over the last 20 years. The maternal mortality rate went from 519 per 100,000 live births for the period 1993- 2000 to 277 for the period 2012-2013. In addition, 2012 demographic and health survey for Gabon indicated that both the proportion of births that took place in a health facility and the proportion of births where women were attended by skilled personnel during delivery were estimated to be 90 per cent. These advances both in child and maternal health represent a move towards the targets set under the 2011-2015 National Health Development Plan.

The literacy rate for the 15-24 age group was estimated at 85.4 per cent in 2013, against 91.7 per cent in 1993, with a relatively higher rate for women (85.8 per cent) than for men (85 per cent). The net enrolment rate in lower secondary education is 41 per cent. The rate is higher for girls (44 per cent) than for boys (41 per cent) and is much higher in urban areas (45 per cent) than in rural areas (11 per cent). There is significant variation among provinces. The net enrolment rate in upper secondary education is 12 per cent and varies greatly according to place of residence (2 per cent in rural areas as compared with 13 per cent in urban areas) and province (from 3 to 17 per cent). Although the country has made considerable progress in terms of access to basic general education, access to technical and vocational education is very limited, and limited access to vocational and technical training reduces access to the labour market, particularly in the productive sector. A 2013 World Bank study showed that among those who completed upper secondary education, graduates of technical fields were less affected by unemployment (10 per cent) than those who received general education (20 per cent).

**Table 4.3.1 Socioeconomic indicators**

Indicators	2000-2002	2005-2007	2012-2014
Total population, in millions of inhabitants	1.3	1.4	1.7
Total GDP in CFA*	3 701 273	5 961 579	8 988 325
Per capita gross national income (Atlas method in current United States dollars)	3 600	6 630	9 210 (2015)
Population living below the national poverty line as a population percentage	...	...	...
Gini coefficient	...	42.2 (2005)	...
Unemployment, as a percentage of the total working population	20.7	21.1	19.7
Unemployment among young people as a percentage of the total working population aged 15 to 24	37	36.5	35.5
Population increase as an annual percentage	2.3	2.2	2.2
Life expectancy at birth, in years	59	60	64

**Source :** *World development indicators (World Bank)*

\* Database *World Economic Outlook*, consulted 19 May 2017. Available from <http://www.imf.org/external/pubs/ft/weo/2015/02/weodata/index.aspx>

## Measuring human exclusion in Gabon

In Gabon, the inequalities present in human exclusion are also reflected in the African Social Development Index on human exclusion. Between 2006 and 2012 human exclusion rose from 1.59 to 2.28, an increase of 43 per cent (see figure 4.3.2). The increase in human exclusion slightly pre-dates the international drop in oil prices but reflects an economic structure that was capital intensive, created few jobs combined with inadequate access for all to health and education services (ECA 2016).

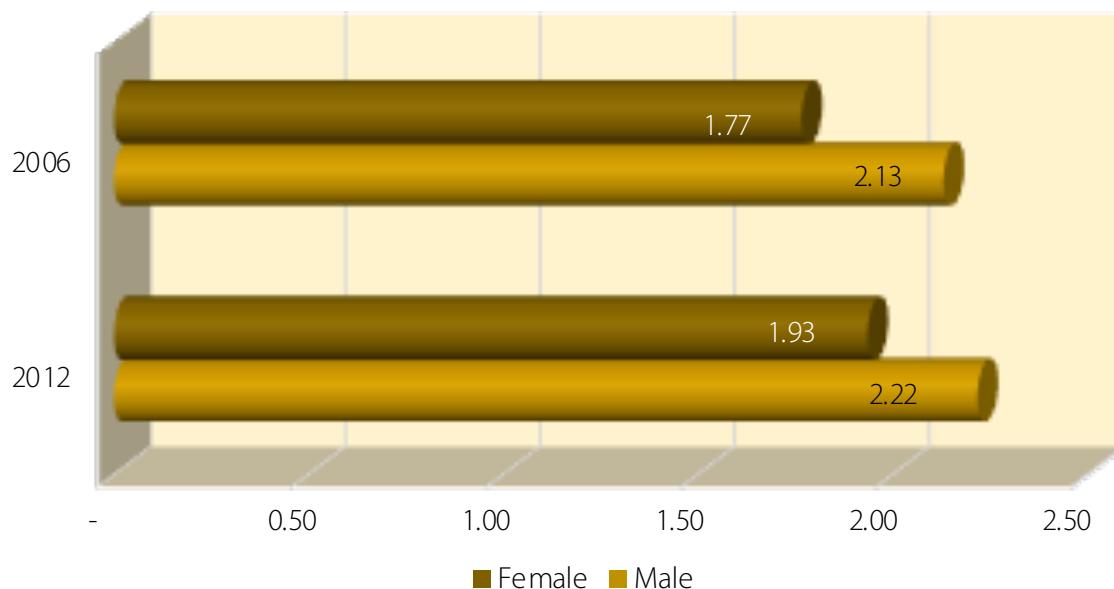
**Figure 4.3.2 African Social Development Index in Gabon**



**Source:** Computed using national statistics

The Index disaggregated by gender reflects a lower level of human exclusion of women than that of men in 2006. This situation was confirmed in 2012 (see figure 4.3.3). The policies implemented to ensure female inclusion in Gabon, notably concerning access to education, have contributed to reducing gender inequality.

**Figure 4.3.3 Human exclusion by gender**

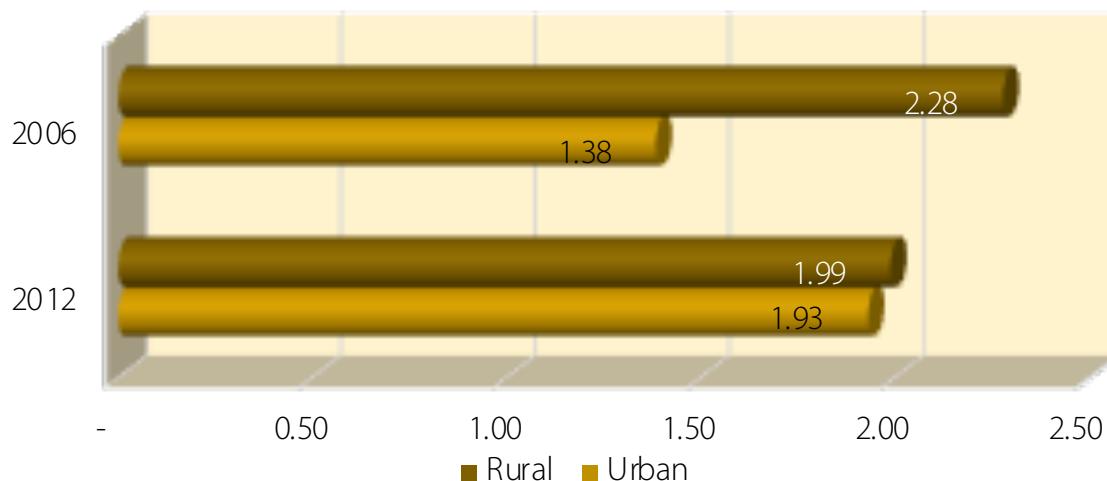


**Source:** Computed using national statistics

**\*Note:** the average of the data disaggregated by gender may not be equal to the national value. This may be due to various factors, one of which are from different data sources for the indicators.

Gabon is one of the most urbanized countries in Africa. In 2006, it showed a higher level of human exclusion in the rural areas than in the urban areas (computed using five indicators). The rural-urban gap in exclusion was 0.90 in 2006, but in 2012 the gap declined to 0.06 (see figure 4.3.4). Between 2006 and 2012, human exclusion in the rural areas decreased by 12.7 per cent, but urban human exclusion increased by 38 per cent. It seems that between 2006 and 2012 the increase in urban human exclusion could have been caused by a rural-urban migratory flow that over stretched services delivery mechanisms in cities. Secondly, the deterioration in living conditions in more than 60 percent of sub-national administrative units exacerbated both the increased demand for services in rural areas and also pushed rural-urban migration further.

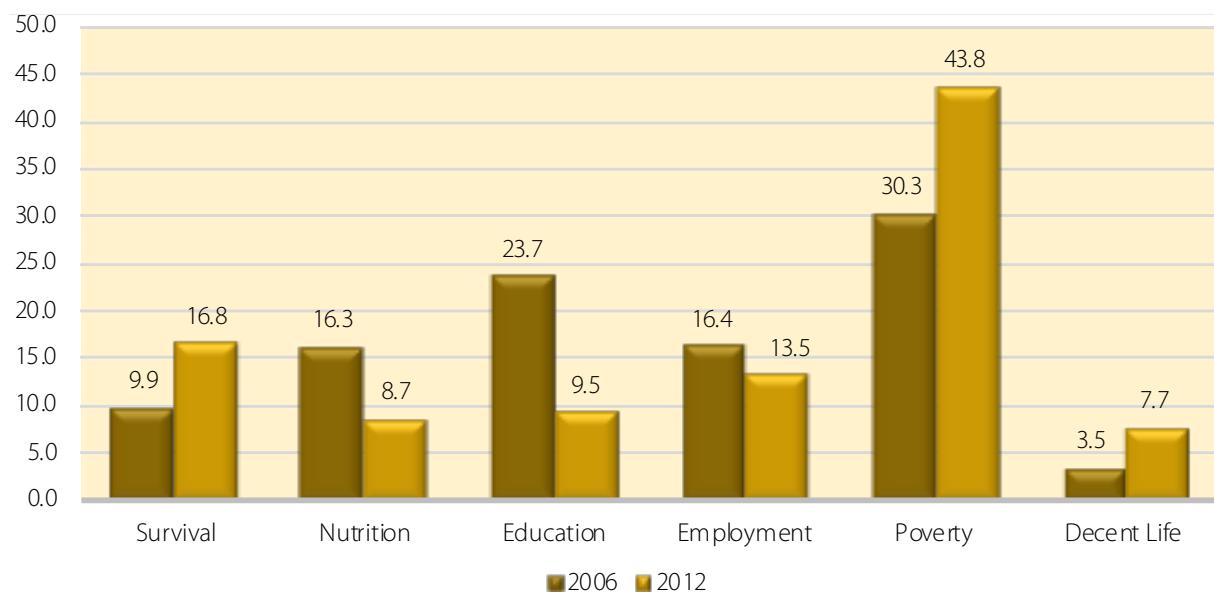
**Figure 4.3.4 Human exclusion by location**



**Source:** Computed using national statistics.

An analysis of the human exclusion factors in Gabon shows that the relative contribution of child mortality and poverty to human exclusion life expectancy at 60 [years] of age is more significant between 2006 and 2012 (see figure 4.3.5). Furthermore, an improvement in the relative contribution of education, employment and child stunting occurs simultaneously. It should also be mentioned that the measurement of survival and quality of life in Gabon is based on an international benchmark, that of the high human development countries. This high benchmark sets a considerable welfare distance for Gabon to achieve particularly as it faces the challenges induced by drops in the reserves of oil and the decrease in the oil price both of which seriously restricted Government revenues.

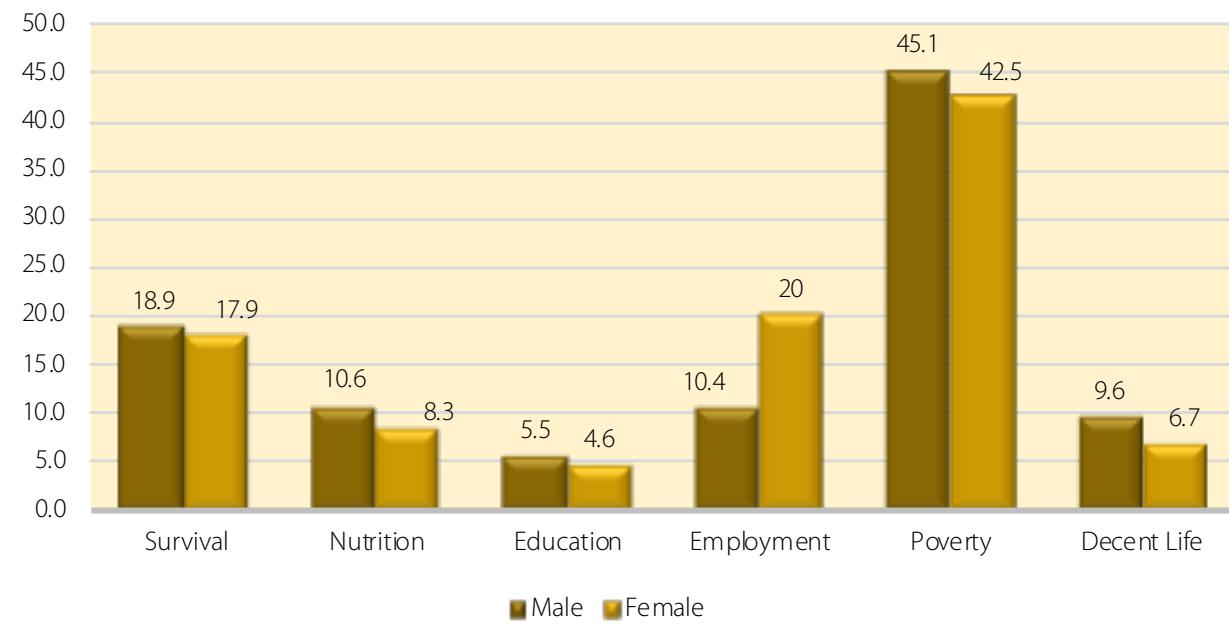
**Figure 4.3.5 Drivers of human exclusion**



**Source:** Computed using national statistics.

Human exclusion factors disaggregated by gender show that the relative contribution to human exclusion of youth unemployment is nearly twice that of men. The equal contribution of education to human exclusion by men and women reflects a certain trait which is common to other African countries. Parity or near parity in education between the sexes stops short at labour market participation.

**Figure 4.3.6 Drivers of human exclusion by gender**



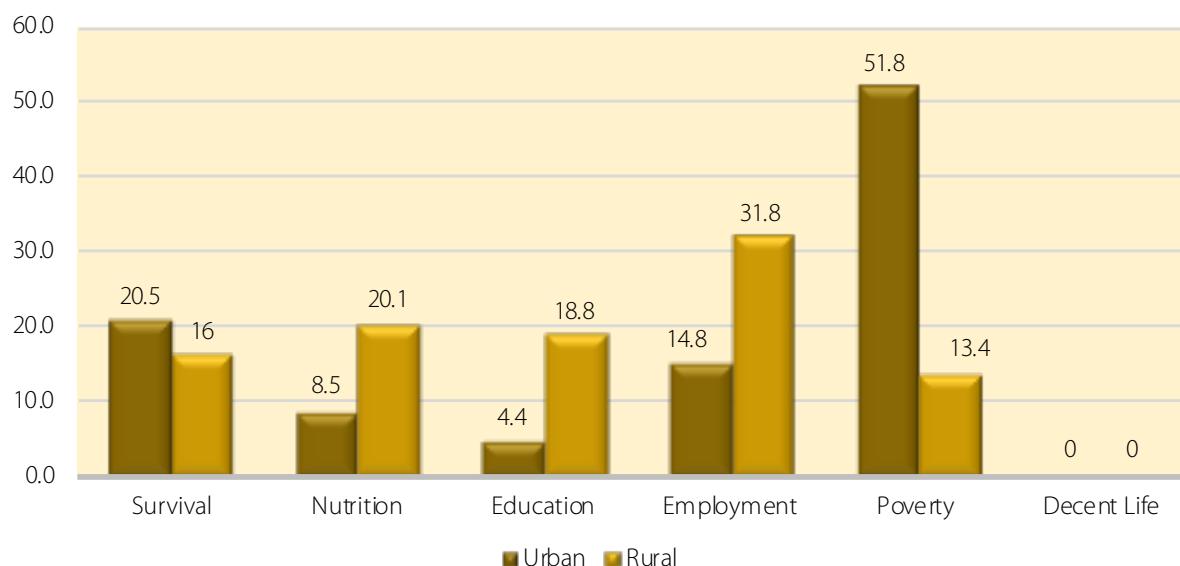
**Source:** Computed using national statistics.

In Gabon, 87 per cent of the population lives in the urban areas, in only four towns. The overwhelming predominance of urban populations tends to have a dual effect. First, there is less economic and political constituent power to invest in rural areas. Second, the pull towards urban areas to improve livelihoods is

significant. While human exclusion has increased in urban areas this does not deter that social infrastructure and service delivery are better equipped in cities.

Human exclusion factors by location show that the relative contribution of poverty and child mortality is higher in the urban areas. Similarly, the contribution of child stunting, employment and literacy to human exclusion is higher in the rural areas (see figure 4.3.7). It seems that social infrastructures such as schools and hospitals are more numerous in the towns.

**Figure 4.3.7 Drivers of human exclusion by location**



**Source:** Computed using national statistics.

### Policy considerations

Equitable and inclusive growth has become a development priority for the African continent and the Index now constitutes an opportunity to resolve the problem of persistent inequalities. In this regard, the African Social Development Index appears to complement the human development index. Equally, in this regard, it helps to implement the development policies initiated in the departments concerned (ECA 2016b).

In Gabon, gender equality policies should work on a broader scale through education. It is therefore necessary to prepare policies for access to the labour market from a gender-based perspective. Public health policies in favour of the urban areas should be re-examined. Furthermore, the lack of qualified medical personnel in the clinics and hospitals in the rural areas poses another challenge. Gabon could therefore consider introducing incentive programmes for qualified employees working in the rural areas.

Like the health programmes, education policies are suffering from the same discrimination between urban and rural areas. It is more difficult to find teachers to serve in the rural areas than in urban areas. Gabon is implementing its diversified economic strategy, based on secondary and tertiary education. Against this background, more social investment is needed. Resources should also be transferred to the outlying regions.

## 4.4 Sao Tome and Principe

### Social and economic background

The economy of Sao Tome and Principe expanded by 5.3 per cent in 2015, compared with 4.5 per cent in 2014. Economic growth should exceed 5 per cent in 2016 and 5.4 per cent in 2017 (see figure 4.4.1). Increased foreign direct investments in construction, agriculture, tourism and new donor-funded projects should stimulate future growth. Inflation, which stood at 5.3 per cent in 2015, fell to approximately 4.6 per cent in 2016 and 4 per cent in 2017, sustained by the fixed exchange rates. Structural reforms for sustainable economic growth and the creation of employment are the core elements of the Government's economic reform programme.

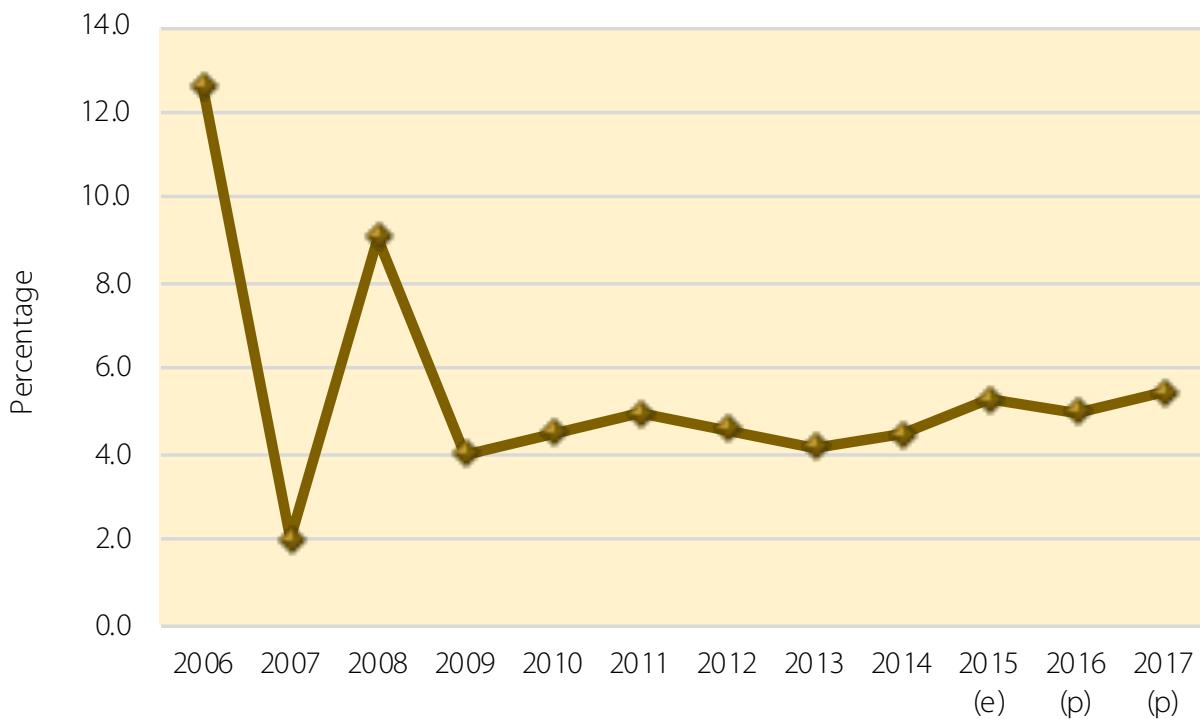
The small size of island's domestic market and its dependence on external demand remains a serious challenge. The focus on human capital particularly education and health has had significant repurcussions on the whole economy. The United Nations through the Committee on development Policy (CDP) has proposed that Sao Tome et Principe graduates out of the Least Developed Countries (LDC) category<sup>8</sup>. The island is projected to graduate in 2018 on achieving the threshold of two of the three criteria. The progress in educational and health outcomes in particular eradicating malaria incidence and ensuring completion of schooling cycles underpin this graduation prospect- only the thirs African country since 1975 after Botswana and Cabo Verde. Angola and Equatorial Guinea also marked for graduation has only been through the doubling of the income threshold of \$1681 per capita set in 2015 (CDP 2015).

The transition out of the LDC category does have some implications. The "smooth transition" out of the category (A CDP technical assistance programme) does present challenges. The small size of the internal market makes Sao Tome dependent on international demand that still renders the island exposed to external shocks. The loss of special international measures specifically for the LDCs might be lost to the detriment of a certain predictability of external assistance.

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<sup>8</sup> The current criteria are consistent with the historical development of the three areas of income, human capital and economic features. The Human Asset Index comprises 2 health and nutritionvariables- and 2 education variables. The GNI is expressed as a three-year average. The Human Asset Index (HAI) comprises 2 health variables and 2 education variables. The Economic Vulnerability index (EVI) designed to capture relative shocks of a LDC development has 2 sub-indices an exposure and shock (CDP 2015)

**Figure 4.4.1 GDP growth rate**



**Source:** African Economic Outlook 2016

**Note:** (e) = estimates (p) = projections

### Social development<sup>9</sup>

The result of the latest population and housing census of Sao Tome and Principe indicate that the total population increased from 137,599 inhabitants in 2008 to 178,739 inhabitants in 2012 and recently it is estimated at some 200,000 by the UNFPA in 2014, which makes Sao Tome and Principe one of the least populated country in Africa. The population is relatively young, constituting 52.1 per cent of the total population aged under 20, while only 3.8 per cent are aged over 65. The group of 15-64 years (working population) is not only the largest in the population but is also steadily increasing. The result is that the demographic dependence rate declined from 82 per cent in 2008 to 63 per cent in 2012. According to the finding of ECA (2015), the demographic dividend that would emerge due to the increase in the working population and the decrease in the school age population may be favorable to the development of the country.

The family income survey conducted in 2010 showed that 66.2 per cent of the population of Sao Tome and Principe lives below the poverty line, that is to say, with less than Db 30,071 (US\$ 1.5) per day. Poverty is high among women (71.3 per cent) than men (63.4 per cent). Unemployment is the main cause of poverty, given that less than 50 per cent of the formal private sector workers are poor, as against 68.6 per cent for the non-working population and 74.8 per cent for the unemployed (Democratic Republic of Sao Tome and Principe, 2015).

The Gini index dropped from 49 per cent in 2000 to 32.9 per cent in 2010, which shows a better distribution of income for the poor. This improvement came from the implementation of programmes that have

<sup>9</sup> This section is based on ECA (2015b)

made it possible to develop income-generating activities for the poor (Democratic Republic of Sao Tome and Principe, 2012).

According to the 2012 living conditions and population survey, the national unemployment rate stands at 13.6 per cent. Among women, however, the rate is 19.7 per cent, while it is 9.3 per cent for men. Furthermore, among the unemployed youth, 32.7 per cent are under 24 and 59.6 per cent are under 34. The lack of skills is clearly one of the causes of youth unemployment. Thus, among unemployed youth, 53 percent have low level education, 34 per cent have secondary education, and only 2 per cent have vocational, technical or higher level education (Democratic Republic of Sao Tome and Principe, 2015).

Regarding child health, progress have been made in reducing child mortality from 71.6 in 2001 to 34.2 in 2012. Regarding maternal health, the maternal mortality rate per 100,000 birth was 156 in 2015 against 330 in 1990. However, despite efforts made at national level, there are still high number of maternal deaths in the country. The results are better in terms of births attended by skilled health personnel, 82 per cent in 2009 compared to 79 per cent in 1990 (United Nations Statistics Division, 2015).

The literacy rate of the population aged 15-24 years in Sao Tome and Principe was estimated at 90.1 per cent in 2012, up from the 70 per cent achieved in 2001(UNDP 2014). It is 94.9 per cent among men and 85.5 per cent among women. In primary education, the net enrolment rate for boys and girls combined increased from 96.6 per cent in 1990 to 97 per cent in 2013, the highest in Central Africa. At secondary level, the distribution is almost equal between boys and girls. These figures reflect the efforts made since the country's independence to eradicate illiteracy and the current importance attached by the authorities to the education sector.

However, of the total registered for secondary school, only 16.8 per cent of them complete secondary school, while many young people face difficulty in continuing their education beyond secondary level because pf high level of tuition fees in higher education institutions.

**Table 4.4.1 Socioeconomic indicators**

Indicators	2000-2002	2005-2007	2012-2014
Total population, in millions of inhabitants	0.1	0.2	0.2
Total GDP in STD *	738 736	2 004 857	6 237 058
Per capita gross national income (Atlas method in current United States dollars)	590 (2003)	950	1670
Population living below the national poverty line as a population percentage	...	...	...
Gini coefficient	32.1 (2000)	30.8 (2010)	...
Unemployment, as a percentage of the total working population	...	...	...
Unemployment among young people as a percentage of the total working population aged 15 to 24	...	...	...
Population increase as an annual percentage	2.2	2.2	2.1
Life expectancy at birth, in years	64	65	66

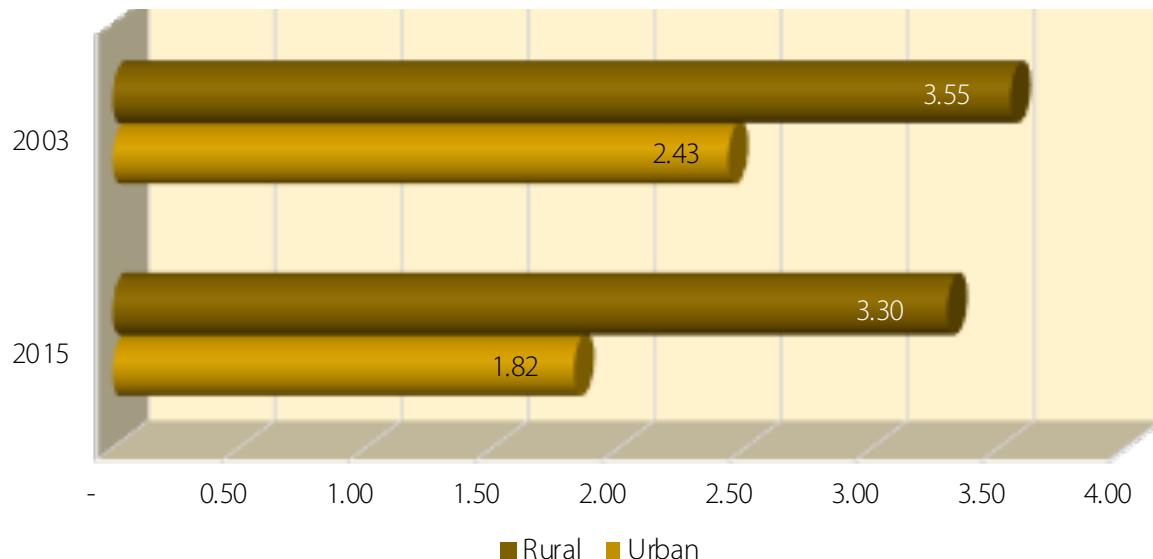
**Source:** World development indicators (World Bank)

\*Database World Economic Outlook, consulted 19 May 2017. Available from <http://www.imf.org/external/pubs/ft/weo/2015/02/weodata/index.aspx>

## Measuring human exclusion in Sao Tome and Principe

The African Social Development Index of Sao Tome and Principe was moderate (above 2.5) yet its improvement over time places its score among the low human exclusion category. In fact, it fell from 2.88 in 2000 to 1.7 in 2014 (see figure 4.4.2). The policies implemented by the Government in the health and education sectors have resulted in decreased human exclusion.

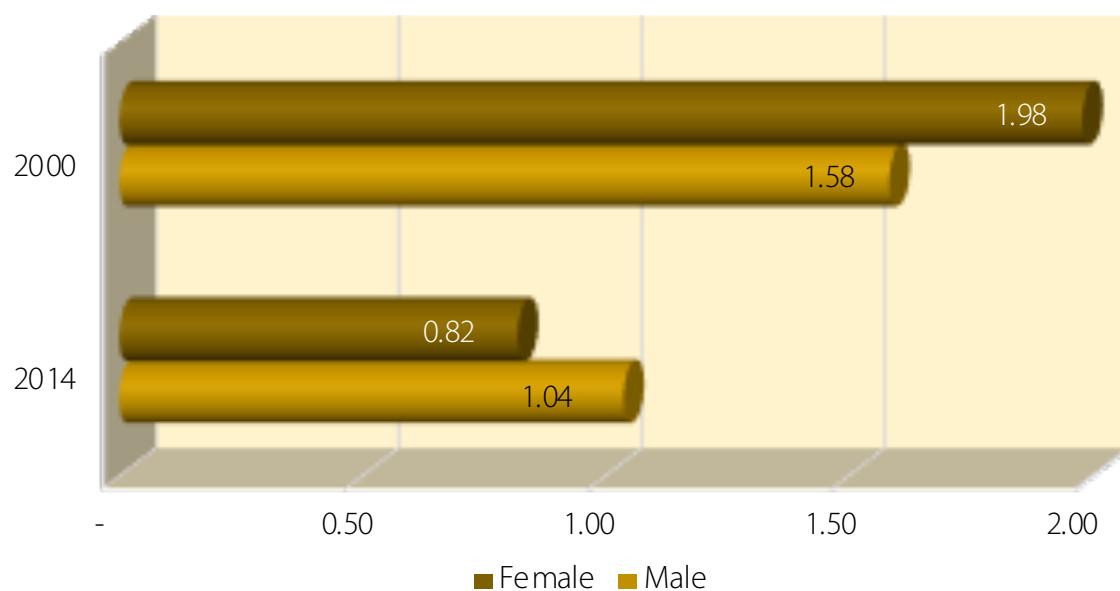
**Figure 4.4.2 African Social Development Index in Sao Tome and Principe**



**Source:** Computed using national data.

The improvement in human exclusion between 2000 and 2014, disaggregated by gender, shows that this improvement with respect to women is approximately twice times higher than that of men (see figure 4.4.3). The difference in human exclusion, however, between men and women stood at 0.4 in 2000. It fell to 0.22 in 2014. Parity policies require this improvement to guarantee equality of treatment of both men and women.

**Figure 4.4.3 Human exclusion by gender**



**Source:** Computed using national statistics.

**Note:** African Social Development Index for gender comprises five indicators.

## **Policy considerations**

The challenges facing the country's economy relate first to the expansion of the productive base of the economy and the diversification of the sources of growth and employment, and second, to the reduction of high unemployment rates, particularly among young people (23 per cent among those aged 15 to 24 years).

Improvement in the education sector will need to be achieved in two focus areas: that of human exclusion and gender inequality and that of policy interventions. Gender inequality in access to secondary education can be corrected by incentive systems. The actors in the education sector must adopt as their priority quality education with trained teachers and bringing the sector into line with the national strategy.

In addition, unemployment of young people, about 23 per cent of the working population, requires political commitment. The strategy to create a logistics hub demands a policy based on the employment of young people, following comprehensive technical and vocational training.

# Conclusion

The African Social Development Index was developed to identify the drivers of human exclusion, to evaluate the effectiveness of the social policies and improve the quality, collection and disaggregation of data in the social sectors. It also helps member States to monitor and evaluate progress made in the implementation of the different indicators through the use of the life-cycle approach. Furthermore, the Index represents an important tool for use in identifying the shortcomings of policies, drafting interventions designed to reduce human exclusion and contributing to sustainable and inclusive development.

This report examines the human exclusion trend in Central Africa. It covers 4 of the seven countries of the subregion. Data availability has remained problematic particularly at sub-national level.

The report has shown that the countries of the subregion are still faced with the challenge of human exclusion. Many people are still excluded from development at various stages of life. Inequality of access to economic and social opportunities limits their capacity to become productive and effective agents of change.

The analysis of the human exclusion factors sheds some light on the structural drivers of social exclusion in each country (Table 5). The study concludes that poverty is the principal driver of human exclusion in the four countries analysed and data availability. Furthermore, the survival of children is the key factor in exclusion in two of the four countries studied. Undernourishment (stunting) is also another major exclusion factor in Chad and in Cameroon.

**Table 5 Human exclusion drivers in Central Africa**

Country	Drivers*					
	Survival	Nutrition	Education	Employment	Poverty	Decent life
Cameroon	X	X			X	
Chad		X	X		X	
Gabon	X				X	
Sao Tome and Principe				X	X	

**Source:** Based on five African Social Development Index indicators

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

The emphasis on humanitarian aid and internally displaced persons presents challenges to a policy focused on the integration of social policies. Even though the human exclusion trend is in decline in almost every country, the relatively high composite African Social Development Index score reflects this serious concern.

Finally, the Index represents an important tool for the use of member States. It enables them to identify the shortcomings of the policies and to formulate the appropriate interventions. The disaggregation of the indices by gender and application at subnational levels is key to understanding the inequalities. The index remains useful for the integration of the most important factors in human exclusion into the national reorientation plan for more effective inclusive policies. In fact, global and regional frameworks, such as the 2030 Agenda for Sustainable Development and the Agenda 2063, offer the opportunity to go beyond economic growth and to locate human and social dimensions at the heart of the development process.

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# 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:

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

where ( $P^v$ ) 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:

$$\alpha P_x^v = 1 - (P_x^v)$$

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

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

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:

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

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:

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

17 See [http://www.who.int/gho/child\\_health/mortality/neonatal\\_text/en/](http://www.who.int/gho/child_health/mortality/neonatal_text/en/).

**Table A.1: Infant mortality**

Indicator	Infant mortality
Dimension of exclusion:	<b>SURVIVAL</b> 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. <sup>17</sup> 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.
Definition:	Number of children who die between 0 and 1 year, expressed per 1,000 live births (WHO)
Formula :	$[dEx^{Im}] = \frac{Im_{0-1}^n - Im_{0-1}^r}{Im_{0-1}^n}$ <p> <math>[Im_{0-1}^n]</math> : Degree of exclusion from basic health services  <math>Im_{0-1}^r</math> : Reference value for neo-natal mortality, given by the average value of lower middle income countries  <math>Im_{0-1}^n</math> : National estimates of child mortality         </p>
Computation :	<b>National, Rural / Urban, Male / Female</b> Applying the formula; $[dEx^{Im}] = \frac{Im_{0-1}^n - Im_{0-1}^r}{Im_{0-1}^n} \quad (*)$ <p>In Excel, use the following condition IF:            If <math>Im_{0-1}^n &lt; Im_{0-1}^r</math>, give the value 0            If NOT apply the formula (*)</p> <b>Sub-National Level</b> The procedure is as follows: We determine the <i>minimum value</i> of mortality at the sub-national level, i.e. taken among all sub-regions within the country in a given year. This becomes our <u>new reference value</u> , and referred to as
	$\min(Im_{0-1})$ OR $\min(Im_{0-1}) = Im_{SubRef\ 0-1}^{SubRef}$ Hence, the new formula becomes: $[dEx^{Im}]_i = Im_{0-1} - \min(Im_{0-1}) / Im_{0-1} \quad (**)$ <p>Where            Min (<math>Im_{0-1}</math>) is the minimum reference value for infant mortality at the sub-national level.            And <math>Im_{0-1}</math> is the sub-national estimates of infant mortality [0 – 1] year for each subregion i.            In Excel, use the following condition IF :            If <math>Im_{0-1} &lt; Im_{SubRef\ 0-1}^{SubRef}</math>, give the value 0            If not, apply the formula (*)</p>

**Table A.2: Child stunting**

Indicator	Child Stunting
Dimension of exclusion:	<p><b>NUTRITION</b></p> <p>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).</p>
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 :	$[dEx^{ChM}] = \frac{ChM_{28d-59m}^n}{1 - ChM_{28d-59m}^n}$ <p><math>[dEx^{ChM}]</math> : Degree of exclusion from health/nutrition</p> <p><math>ChM_{28d-59m}^n</math> : Proportion of children between 28 days and 59 months suffering from chronic malnutrition at the national level</p>
Computation :	<p><b>National/sub-national, rural/urban, women/men:</b></p> <p>In Excel, use the following condition IF:</p> <p>IF <math>ChM_{28d-59m}^n &gt; 50</math>, give the value 1</p> <p>IF NOT, apply the formula (*):</p> $[dEx^{ChM}] = \frac{ChM_{28d-59m}^n}{1 - ChM_{28d-59m}^n}$ <p style="text-align: right;">(*)</p>

**Table A.3: Literacy Rate (15-24 years)**

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

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18 Definitions of unemployment and youth age group differ across countries.

**Table A.4: Youth Unemployment (15-24 years old)**

<b>Indicator</b>	<b>Youth Unemployment (15-24 years old):</b>
Dimension of exclusion:	ACCESS TO LABOUR MARKET 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.
Definition:	Share of the youth labour force who is without work but available for and seeking employment (ILO definition). <sup>18</sup>
Formula :	$[dEx^{Yu}] = \frac{Yu_{15-24}^n}{1 - Yu_{15-24}^n}$ <p><math>[dEx^{Yu}]</math> :Degree of exclusion from access to the labor market</p> <p><math>Yu_{15-24}^n</math> : Proportion of individuals aged 15-24yearswho are unemployed, measured at national level</p>
Computation :	<p>National and Sub-national</p> <p>In Excel, use the following condition IF:</p> <p>IF <math>Yu_{15-24}^n &gt; 50</math>, give the value 1</p> <p>IF NOT, apply the formula (*):</p> $[dEx^{Yu}] = \frac{Yu_{15-24}^n}{1 - Yu_{15-24}^n}$

**Table A.5: National-based Poverty**

Indicator	National-Based Poverty
Dimension:	<p>MEANS OF SUBSISTENCE</p> <p>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).</p>
Definition :	Proportion of population below the national poverty line
Formula :	$[dEx^{Np}] = \frac{Np_h^n}{1 - Np_h^n}$ <p><math>[dEx^{Np}]</math> :Degree of exclusion from basic means of subsistence  <math>Np_h^n</math> : Proportion of population living below the national poverty line</p>
Computation :	<p>National and Sub-national</p> <p>In Excel, use the following condition IF:</p> <p>IF <math>Np_h^n &gt; 50</math> give the value 1</p> <p>IF NOT apply the formula (*):</p> $[dEx^{Np}] = \frac{Np_h^n}{1 - Np_h^n} \quad (*)$

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

Indicator	Life Expectancy at 60
Dimension :	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.
Definition:	Average number of years that a person of that age can be expected to live, assuming that age-specific mortality levels remain constant. (WHO)
Formula :	$dEx^{Le} = \frac{Le_{60}^{Ref} - Le_{60}^n}{Le_{60}^{Ref}}$ <p><math>[dEx^{Le}]</math> :Degree of exclusion from surviving at old age  <math>Le_{60}^{Ref}</math> : Reference value of life expectancy at 60 years  <math>Le_{60}^n</math> : National average life expectancy at 60 years</p>
Computation :	<p>National Level</p> <p>Applying the formula:</p> $dEx^{Le} = \frac{Le_{60}^{Ref} - Le_{60}^n}{Le_{60}^{Ref}} \quad (*)$ <p>In Excel, use the following condition IF</p> <p>IF <math>Le_{60}^{Ref} &lt; Le_{60}^n</math> give the value 0</p> <p>IF NOT apply the formula (*):</p> <p>Sub-National Level</p>

19 See [http://www.asia-pacific.undp.org/content/rbap/en/home/library/human\\_development/sub-national-hdi-bhutan-case.html](http://www.asia-pacific.undp.org/content/rbap/en/home/library/human_development/sub-national-hdi-bhutan-case.html)

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)<sup>19</sup>. 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  $\text{Max}(Le_{60}^{Sub})$  and the

new formula becomes:

$$[dEx^{Le}]_i = \frac{\text{Max}(Le_{60}^{Sub}) - Le_{60}^{Sub_i}}{\text{Max}(Le_{60}^{Sub})} \quad (*)$$

where  $\text{Max}(Le_{60}^{Sub}) = Le_{60}^{SubRef}$  is the maximum reference value of life expectancy at 60 at the sub-national level

And  $Le_{60}^{Sub_i}$  : are the sub-national estimates of life expectancy at 60 for each sub-region  $i$ .

In Excel, use the following condition IF:

IF  $Le_{60}^{SubRef} < Le_{60}^{Sub_i}$ , give the value 0

IF NOT, apply the formula (\*).

## 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:

$$HEx^v = dEx^{im} + dEx^{chm} + dEx^{Lr} + dEx^{Yu} + dEx^{np} + dEx^{Le}$$

As each indicator has a value ranging between 0 and 1, the overall score will take a value between  $0 < HEx^v < 6$ , 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.

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<sup>20</sup> 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).

# 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.<sup>20</sup>

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 security, political freedom and gender equality - the first three being the most important according to their weights (EIU, 2005).

21 See <http://hdr.undp.org/en/content/multidimensional-poverty-index-mpi>.

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

- **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<sup>21</sup>** (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.<sup>22</sup>

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.







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