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

North Africa Report

Employment and Social Protection Section
Social Development Policy Division
UN Economic Commission for Africa
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## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>AMU</td>
<td>Arab Maghreb Union</td>
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<tr>
<td>ASDI</td>
<td>African Social Development Index</td>
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<tr>
<td>COMESA</td>
<td>Common Market for Eastern and Southern Africa</td>
</tr>
<tr>
<td>EAC</td>
<td>East African Community</td>
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<tr>
<td>ECA</td>
<td>Economic Commission for Africa</td>
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<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
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<tr>
<td>HDI</td>
<td>Human Development Index</td>
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<tr>
<td>EIU</td>
<td>Economist Intelligence Unit</td>
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<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>GNI</td>
<td>Gross National Income</td>
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<td>HDI</td>
<td>Human Development Index</td>
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<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>IPRSP</td>
<td>Interim Poverty Reduction Strategy Paper</td>
</tr>
<tr>
<td>MMR</td>
<td>Maternal Mortality Rate</td>
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<tr>
<td>NEPAD</td>
<td>New Partnership for Africa’s Development</td>
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<td>NIT</td>
<td>National Implementation Team</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>UNDESA</td>
<td>United Nations Department of Economic and Social Affairs</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<td>WHO</td>
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Executive Summary

Africa’s positive economic growth over the past two decades has shown resilience in the wake of the international crisis of 2008. However, this positive performance has not yet translated its economic gains into meaningful social development. Rising incomes have often gone hand in hand with rising inequality – undermining the efforts made by many countries to reduce poverty, and fuelling social and economic instability in the region. Indeed, the structural transformation under way on the continent – largely driven by capital-intensive sectors – has not created sufficient and decent jobs to be able to lift many individuals from poverty and vulnerability.

Unequal access to social and economic opportunities as well as inadequate social protection have also limited the capacity of individuals to both contribute and benefit from economic growth. As a result, exclusion has become a real challenge for Africa’s future development, and yet no meaningful indicators exist to properly monitor the patterns of exclusion and help member States to develop appropriate, inclusive policies. The construction of an index that addresses these challenges emanates from this necessity, and from a request of African member States to develop a tool that reflects Africa’s specific development challenges.

The African Social Development Index (ASDI) is built on the important premise that development should be reflected in improved human conditions. By adopting a life-cycle approach, the ASDI measures the extent of human exclusion in six key dimensions of well-being, including survival, health, education, employment, means of subsistence and living a decent life after 60. One of the key features of the index is that it can be measured across time and disaggregated by gender and geographical location, thus helping to capture patterns of inequality and exclusion within and between countries. As such, the ASDI offers a new conceptual framework for identifying the drivers of human exclusion in Africa and linking them to better policies in nutrition, education, employment and social protection.

As a monitoring and policy tool, the index should help member States devise more inclusive social policies, and guide them in the implementation of Agenda 2063 and Agenda 2030 for Sustainable Development, both of which place a high premium on inclusiveness as a driver of sustainable and equitable development. The policy reference to these regional and global development frameworks reiterates indeed the need to “leave nobody behind” – reinforcing the relevance of the ASDI.

Against this backdrop, the ASDI is relevant to North Africa, where the non-inclusive nature of growth has resulted in social and political instability in recent years. The application of the Index in each country reveals some of the challenges and factors driving exclusion, which can inform and help policy-makers address structural inequalities and formulate more targeted and effective policy options.
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 per cent yearly, with some countries posting 7 to 11 per cent 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. Evidence shows that poor 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 fuelling 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. 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 and 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 Agenda 2063 and the 2030 Agenda for Sustainable Development, which are anchored on the principles of equality, sustainability and “leaving no one behind” (African Union Commission 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 reiterated their commitment to promoting social integration through the creation of more cohesive and inclusive
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 young people, women and the elderly – using platforms such as the International Conference on Population and Development, the Beijing Platform for Action, the Ouagadougou Plan of Action, the Abuja Declaration and the Madrid Plan of Action on Ageing.

However, the implementation of these commitments has not led to the desired outcomes for a number of reasons. First, 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).

Second, so far none of the internationally agreed development goals, including the Millennium Development Goals, have explicitly addressed the inclusive dimension of development, and their aggregate nature has failed to identify with in-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 Agenda 2063 and the 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 these groups are included in the development process, accelerating the transition towards more equitable development (see figure 1.1).

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1 Inclusive society was defined as “a society for all, in which every individual, each with rights and responsibilities, has an active role to play”. Such a society is based on the fundamental values of equity, equality, social justice, human rights and freedoms. It should also be equipped with appropriate mechanisms that enable its citizens to participate in the decision-making processes that affect their lives and shape their common future (United Nations, 1995).
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; rural-urban migration that stimulates the process of urbanization; the rise of a labour-intensive industrial and modern service economy; and a demographic transition from high to low 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, location or political 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 1.2.²

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

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**Figure 1.1: From basic structural transformation to inclusive development**

- **Basic Structural Transformation**
  - Job-rich and sustained economic growth

- **Inclusive, Equitable Development**
  - All segments of population contribute to and benefit from economic growth

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² For more details, see also Macculi and Acosta (2014).
• **Social factors** include elements associated with access to basic social services, including health care, education and social security;

• **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;

• **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.

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 an 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.

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.

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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.
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 is a large number of studies showing that women and girls 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 also have 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 policies that do not adequately address such differences tend to perpetuate gender inequalities over time (Hedman, Perucci and Sundstroem, 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 per cent of those living in extreme poverty in 2002 resided in rural areas, despite the fact that only 52 per cent of the world population was living in such areas (Ravallion, Chen and Sangraula, 2007).

The latest findings also point to higher rural poverty rates in Africa (United Nations, 2014). Nevertheless, African cities are also increasingly faced with 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.

The present report is the result of two subregional capacity-building workshops on the ASDI, which were held in Cotonou, Benin, and Cairo, Egypt, in May 2015, and co-organized by the ECA’s Social Development Policy Division and the Subregional Offices for West and North Africa. The main objective of the workshops was to equip member States with the tools to compute the African Social Development Index in their countries and develop capacities in the use of the Index for policy analysis.

The workshops also allowed member States to share their results of the ASDI and map out successful social policies for reducing human exclusion over time. Five countries from North Africa attended the workshops4, including experts drawn from National Statistical Offices, Ministries of Finance, Ministries of Development Planning and line Ministries in charge of Social Affairs. The country teams and trained participants provided the national data and contributed to the production and validation of the ASDI results, which are presented in the following section.

4 Algeria, Egypt, Morocco, Sudan and Tunisia. Mauritania joined the initiative in 2016 and were able to provide the full dataset for the computation of the ASDI.
Section II: The African Social Development Index
The African Social Development Index

The African Social Development Index (ASDI) was 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 (see table 2.1).

Table 2.1: Exclusion throughout the life-cycle

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

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

Figure 2.1: Indicators of human exclusion using a life-cycle approach

The value of each indicator ranges between 0 and 1 and the aggregate value of the index lies between 0 and 6. The higher the value of the index, the higher the extent of human exclusion. The index seeks to capture the differential impacts of exclusion based on gender and location. This allows for 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.5

5 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.
Selection of indicators

The selection of indicators is the result of a strong consultative and participatory process, involving experts from member States, regional institutions and development partners. Final selection was based on three main criteria: relevance of dimensions and indicators in the African context; readily available data, possibly at various tiers of administration; and “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 African Social Development Index has a number of key features that distinguish 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 rollout of the index in 46 African countries has allowed for 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 strengthen 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 index has been its applicability at the subregional level, with training of 10 Regional Economic Communities, and potential for monitoring implementation of regional development plans and fostering economic and social integration.

As part of this process, a policy-mapping framework is being developed 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 up of National Implementation Teams (NITs) in each country has also been instrumental for ensuring the ownership and critical buy-in of Governments and Regional Economic Communities in the use of the Index for promoting more inclusive development policies.
Section III: North Africa—A brief Introduction
North Africa: A brief introduction

Growth in North Africa has continued to expand in 2016, with a GDP growth rate of 4.4 percent, from 4 percent in 2015 (Figure 3.1). Yet the political instability and insecurity in the region constitute a serious threat to future economic prospects and have severely affected tourism, a major driver of growth. Reducing dependence on commodity exports and promoting economic diversification are also important ingredients for sustaining growth in the long run. Algeria, Sudan and Mauritania, in particular, are highly dependent on oil and mining, and the volatility of international prices could undermine their future economic prospects (AfDB, 2015). Morocco and Tunisia have achieved a higher degree of structural transformation, but are also very reliant on agricultural production.

Figure 3.1: GDP growth rate in Africa and North Africa

Source: UN-DESA and ECA, compiled data from national sources.

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

To address these challenges, most countries are undergoing major structural reforms to strengthen their economies and place them on a more sustainable path. Private sector investments, along with improved business environment and governance, would be important catalysts to boost economic growth and attract foreign direct investments. The creation of value-added products and high-skilled jobs, in particular, will be key to ensure a sustainable, broad-based development and reinforce political and social stability in North Africa.

The region is also facing increased difficulties in tackling hunger and other social challenges due to conflicts and prolonged calamities. Countries like Mauritania and Algeria are becoming highly reliant on food imports – as a result of demographic growth, rapid urbanization, water shortage and climate change. The recent increase in food prices, in particular, has had huge economic impacts – resulting in escalating inflation, trade deficits, fiscal tension and food insecurity, which have all contributed to increase poverty and under-nutrition in the region. Promoting regional integration would be critical to alleviate some of these challenges. Today, only 4 percent of all import/export activities take place within the Arab Maghreb Union (AMU), where a free trade agreement is under negotiation.

Another critical challenge that the region is facing is youth unemployment, with about one out four young people today who are left out of the labour market. More critically, insufficient job creation is affecting qualified youth with tertiary education. In Tunisia, for instance, the five top sectors recruiting university graduates (mainly modern services) accounted for only 6.7 percent of total employment in 2010. In
Morocco, over 300,000 jobs were created in the last eight-year period, but these were not sufficient to absorb the increasing youth labour force, whose unemployment rate stands today at about 19.3 percent.

Labour force participation rates are also critically low, as a result of social and cultural norms, and women in North Africa are up to four times less likely to participate in the labour market as compared to men (ILO, 2015).

These facts point to an increased risk of marginalization and exclusion of some groups of population from the positive benefits of growth. This could trigger increased social unrest in a region already torn by political and economic instability.

In this context, the ASDI applied in North Africa can help to better understand the extent and patterns of human exclusion across the individual life-cycle and for different groups of population. The drivers of exclusion that are country-specific can provide key insights for improved social policy planning, monitoring and targeting.
Section IV: ASDI
Country Analyses
4.1. Algeria

**Socioeconomic conditions**

Algeria has experienced sustained economic growth over the past decade, averaging a GDP growth rate of 3.1 per cent between 2007 and 2015 (Figure 4.1.1). In 2016, growth is estimated at 4 per cent, driven by good agricultural production and the slow recovery in commodity prices. Currently, petroleum products – oil and gas – account for 46.6 per cent of government revenues, (National Statistical Office, 2016b).

Yet, the concentration of exports in these two key products, in a context of dwindling international prices, has led to a negative external position of -9 per cent of GDP in 2015, for the first time in 16 years (AfDB and others, 2016). Furthermore, the budget deficit has increased to 16 per cent, and budget spending – currently at 43 per cent of GDP – has created serious challenges for the management of public finances. The fiscal consolidation in force to counteract the effects of the drop in revenues could also have a negative impact on investments in the social sectors.

**Figure 4.1.1: GDP growth in Algeria**

![GDP growth in Algeria](image)

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

*Source:* African Economic Outlook, 2015

In the short run, growth in Algeria is poised to continue, following a likely recovery in commodity prices and the discovery of new oil reserves. However, it will be important to sustain growth in the long run through stronger transformation and diversification of economic activities, that can lead to meaningful job creation and integration in regional and global value chains.

**Social development**

The country has managed to put in place a comprehensive social development strategy in recent years and raise its level of development, reaching the category of upper middle-income countries at the global level. The human development index (HDI) improved from 0.57 in 1990 to 0.73 in 2014, recording an average increase of 1 per cent per annum (UNDP, 2015).
Provisions introduced in the country’s Constitution concerning the right of every citizen to a decent standard of living have led to the implementation of specific social protection programmes, including a mandatory maternity leave of 98 days, and the provision of unemployment benefits for 8.8 per cent of the population, compared with 6.6 per cent in countries with similar income levels (Boulabel, 2010).

Yet a number of inequalities persist across social groups in Algeria. Similar to other countries in the subregion, the labour force participation rate is critically low at 43.9 per cent, compared with an average of 67.1 per cent in upper middle-income countries. Disaggregated by gender, the gap is even more striking, with a participation rate of 66.3 per cent for men, against only 17.3 per cent for women (ONS, 2016a). Disparities can be found in unremunerated work, with 312 minutes per day allocated on average by women, compared with 54 minutes for men, according to a recent survey (UNDP, 2015).

Algeria is also faced with relatively high maternal mortality rates (MMR), at 50 deaths per 100,000 live births, relatively higher than the average for upper middle-income countries. Young people (15-24 years) are also facing high rates of unemployment (24.7 per cent in 2014 as compared with 9.9 per cent of total unemployment), and almost one out of two young women are today unemployed, against 1 in 4 men (Table 4.1.1).

While the recent tendency for young university graduates to seek a secure job in the public sector may have influenced the characteristics of the labour market in Algeria, the root cause of unemployment is structural and relates to the nature of economic growth. Insufficiently diversified, growth is not creating enough productive jobs to absorb the large young labour force that enters the labour market each year.

**Table 4.1.1: Socioeconomic indicators**

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Per capita GNI (Atlas method in current US dollars)</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Population below the poverty line of US$ 1.9 per day (percentage of the population)</td>
<td>0.8 (2000)</td>
<td>...</td>
<td>0.8 (2011)</td>
</tr>
<tr>
<td>Gini Index</td>
<td>0.26 (2000)</td>
<td>0.14 (2010)</td>
<td>0.10 (2011)</td>
</tr>
<tr>
<td>Unemployment (percentage of the total working population)</td>
<td>20.2 (2005)</td>
<td>72.9 (2010)</td>
<td>9.9 (2016)</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>72.5 (2000)</td>
<td>74.6 (2005)</td>
<td>77.2 (2014)</td>
</tr>
</tbody>
</table>

*Source: National Statistics Office (ONS), Algeria.*

Algerian geography is marked by division between the coastal region, the high plateaux and the Sahara, with the bulk of the population (over 70 per cent) living and moving to and around the capital and coastal cities, owing to the concentration of economic activities. This rapid urbanization has produced significant inequalities between the various regions of the country.

**Measuring human exclusion in Algeria**

The ASDI provides an additional perspective on the analysis of inequalities in Algeria. The impact of exclusion throughout the life-cycle and for different population groups is a major factor in targeting of social policies.
The outcomes of the ASDI at the national level reveal a particularly low level of human exclusion, which declined during the period 2000-2014 (Figure 4.1.2).

One interesting outcome is the significant reduction in exclusion for men (from 1.64 to 1.32) whereas for women the level of exclusion increased by almost 30 per cent, rising from 1.40 to 1.72 between 2000 and 2014 (Figure 4.1.3). Disaggregating this outcome by dimension reveals an increase in the unemployment of young women (from 31 to 45 per cent) over the period studied, compared with a decline from 34 to 27 per cent for men, according to the latest national data.

Over 80 percent of total exclusion in Algeria was driven by infant mortality and youth unemployment in 2014 – highlighting two severe challenges that require better-targeted interventions to reduce the risk of exclusion in these two crucial phases in life. More data is needed, however, especially on national poverty indicators, in order to refine the analysis and gain an enhanced understanding of the determinants of exclusion in Algeria, its duration and its impact for different population groups. The lack of data disaggregated by location and sub-regions for the six ASDI indicators also limits the analysis. This information is essential for an enhanced understanding and adequate response to existing spatial inequalities in Algeria.
Policy considerations

Algeria has made remarkable strides in advancing social and human development in recent years. Most of the social indicators in education, health and access to other social services have recorded significant improvements, placing Algeria among the countries with high income and human development levels. However, gender-related and spatial disparities continue to be major issues for the country. The labour force participation rate is among the lowest in Africa and women are still under-represented in public and decision-making processes. Secondary education also continues to be a major area of concern for the country. Although now almost every child completes primary education, only 30.4 per cent of boys and 47.7 per cent of girls complete secondary education, according to the latest survey data. The level of household income and mothers’ education seem to be the significant factors affecting the average length of schooling and secondary education in Algeria, reflecting inequality of opportunities and limited social mobility for certain sections of the population.

The social welfare programme currently in place will need to take account of these challenges to ensure a more inclusive and sustainable development in Algeria. To this end, the Government has developed a national maternal mortality reduction plan (PANRAMM, 2015-2019), which expresses the political will to speed up the reduction of maternal mortality through bold policy actions.

To address spatial inequalities, the Government has set up an urban development strategy (2000-2025), which is linked to the national plan and designed for balanced urban development.

The current context of declining exports and oil revenues provides Algeria with an opportunity to diversify its economy away from natural resources and to create the conditions for attracting both local and foreign investments and entrepreneurial activities that can generate the much needed jobs, especially for young people and women in the country.
4.2. Egypt

Socioeconomic conditions

Egypt’s economy steadily recovered from a low 1.8 percent in 2011, increasing to 2.2 percent in 2014 and estimated to pick up to 4.3 per cent in 2016, mainly buoyed by a recovery in the manufacturing sector underpinned by a relatively stable political environment. However, the macroeconomic outlook remains fragile due to high inflation rates, estimated at 10.1 percent in 2016, and a debt-to-GDP ratio of 8.5 percent in 2016, down from 13.7 percent in 2013 (AfDB, 2015). In recent years, Egypt has also experienced the consequences of political instability, non-inclusive growth and high unemployment rates, which triggered social unrest and culminated in the first political upheaval of 2011⁶.

The Government has recently embarked on a number of structural reforms aimed at boosting economic growth and promoting a more stable business environment. As part of these efforts, authorities have succeeded in significantly reducing the underlying budget deficit despite a decline in foreign grants, thanks to a wide-ranging set of reforms, including energy subsidy reforms, and progress in containing the wage bill and increasing tax revenues⁷. However, to consolidate the gains in economic performance, the government should continue to address headwind inflation and fiscal challenges in order to further unlock the growth potential.

Figure 4.2.1: GDP growth in Egypt

Social development

With a population of nearly 90 million people of which 29 percent are aged 15-29 years and 32 percent are below 15 years, Egypt has recorded notable progress in some of its social indicators. For example, the country attained gender parity in primary and secondary education by 2015. It has also achieved the MDG target on reducing under-five mortality ratio (U5MR), mainly due to improvements in health services, especially in urban areas.

Notwithstanding these impressive achievements, the country continues to face challenges in reducing the proportion of people living in extreme poverty. Poverty is widespread with three-fourths of the poor living in rural areas compared to urban areas. This is largely attributed to lack of adequate public infrastructure, private capital accumulation, and low investment in human capital as well as the absence of pro-poor fiscal policy, which collectively have led to a deterioration of living standards in rural areas.

In addition, unemployment remains pervasive across the country. Youth unemployment, in particular, has increased by 50 percent over the past decade, from 28 percent in 2000-2002 to 42 percent in 2012/2014, because of subdued economic opportunities (Table 4.2.1). In addition, gender disparities are high, with female youth unemployment standing at 64.9 percent in 2012 relative to their male counterparts at 23.8 percent (ILO, 2012a). It is also worth pointing out that unlike other subregions of Africa, unemployment in North Africa, including Egypt, affects mostly educated youth, leading to underemployment as many of them pick up informal jobs for survival.

Although the country’s Gini coefficient of 0.30 is relatively low in comparison to other African countries, there are widespread disparities between urban and rural areas. However, the gap in inequality is more geographical, namely between the four main Egyptian cities and the rest of the country, than properly urban-rural (Verme et al., 2014). In addition, the same authors note that inequality within urban areas is significantly higher than inequality in rural areas. This indicate increased levels of income inequality and possibly challenges in fiscal and distributional policies across the country.

Table 4.2.1: Socioeconomic indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (in thousands)</td>
<td>70,908</td>
<td>77,605</td>
<td>89,579</td>
</tr>
<tr>
<td>Total GDP in millions of EGP*</td>
<td>378,900</td>
<td>744,800</td>
<td>1,997,600</td>
</tr>
<tr>
<td>Per capita GNI (Atlas method in current US dollars)</td>
<td>1,360</td>
<td>1,550</td>
<td>3,050</td>
</tr>
<tr>
<td>Population below the poverty line of US$ 1.9 per day</td>
<td>...</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>(percentage of the population)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gini Index</td>
<td>...</td>
<td>0.308</td>
<td>...</td>
</tr>
<tr>
<td>Unemployment (percentage of the total working population)</td>
<td>10.2</td>
<td>8.9</td>
<td>13.2</td>
</tr>
<tr>
<td>Youth unemployment, total young people (percentage of</td>
<td>28</td>
<td>26.1</td>
<td>42</td>
</tr>
<tr>
<td>the total working population 15-24)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population growth (annual percentage)</td>
<td>1.9</td>
<td>1.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>69</td>
<td>70</td>
<td>71</td>
</tr>
</tbody>
</table>

Source: World Development Indicators (World Bank).

Table 4.2.1: Socioeconomic indicators

*2015 Statistic "World Economic Outlook Database," IMF, accessed January 25, 2016,

Measuring human exclusion in Egypt

While Egypt has shown steady recovery in its economic performance in the last few years, this has not been sufficient to reduce various forms of economic and social vulnerabilities. Although the country has a relatively low human exclusion index, overall it has increased marginally (+0.04) between 2006 and 2014 (Figure 4.2.2).
Evidently, the political instability that followed the 2011 social unrest weakened the economy by affecting overall development, particularly leading sectors such as tourism and hotel industry, which experienced a slump in job opportunities. For example, Chingarande (2014) found that tourism in Egypt decreased from 15 million arrivals in 2010 to 10 million in 2011.

In terms of gender dynamics, the ASDI results show females suffer higher levels of exclusion over the entire life-cycle relative to males (Figure 4.2.3). However, both males (+0.19) and females (+0.26) have faced increases in human exclusion between 2006 and 2014 for a number of factors that are discussed below.

Consistent with empirical evidence from other African countries, people in rural areas in Egypt suffer from higher levels of human exclusion as compared to those living in urban areas (Figure 4.2.4). This is not surprising given that most infrastructure and accompanying services tend to be concentrated in urban areas. Notably, there was an increase of 12.8 percent in rural exclusion between 2006 and 2014. However, these results should be interpreted with caution because the index was computed based on five indicators, which may implicitly carry statistical biases.
The main determinants of human exclusion at national level are youth unemployment and poverty, with 27.6 percent and 19 percent contribution respectively in 2014 (Figure 4.2.5). On the other hand, the contribution of indicators such as stunting and illiteracy to overall human exclusion decreased by 34.4 percent and 22.6 percent respectively, while shares of mortality, youth unemployment and poverty increased by varying degrees between 2006 and 2014.

The statistics on poverty are also quite revealing. At the national level, poverty went up by 4 percentage points, from 22 percent in 2009 to 26 percent in 2013 – possibly as a result of a slump in economic activities. Policy commentators have noted that the political turbulence that started in 2011 and its snowballing effects on the economy and labour markets fueled an increase in poverty making nearly 21.7 million people unable to meet their basic food and non-food needs (Government of Egypt and UNDP, 2015).

The statistics on poverty are also quite revealing. At the national level, poverty went up by 4 percentage points, from 22 percent in 2009 to 26 percent in 2013 – possibly as a result of a slump in economic activities. Policy commentators have noted that the political turbulence that started in 2011 and its snowballing effects on the economy and labour markets fueled an increase in poverty making nearly 21.7 million people unable to meet their basic food and non-food needs (Government of Egypt and UNDP, 2015).

**Figure 4.2.4: Human exclusion by location**

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>1.51</td>
<td>1.95</td>
</tr>
<tr>
<td>2014</td>
<td>1.66</td>
<td>2.20</td>
</tr>
</tbody>
</table>

*Source:* Computed using national data.

*Note:* Human exclusion by location is based on 5 indicators.

**Figure 4.2.5: Drivers of human exclusion**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Percent</th>
<th>2006</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survival</td>
<td></td>
<td>14.7</td>
<td>15.2</td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
<td>14.5</td>
<td>15.2</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td>17.8</td>
<td>18.7</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td>18.7</td>
<td>19.0</td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td>15.0</td>
<td>19.0</td>
</tr>
<tr>
<td>Decent Life</td>
<td></td>
<td>6.4</td>
<td>5.9</td>
</tr>
</tbody>
</table>

*Source:* Computed using national data
When disaggregated by gender, unemployment and illiteracy appear to be the major drivers of exclusion among women, while poverty and unemployment have a relatively higher contribution to exclusion among men (Figure 4.2.6). Poverty levels have also increased by varying degrees across gender. This speaks to the need for gender-sensitive policy interventions in economic and social sectors, in order to address the key factors that drive human exclusion across gender.

There are also stark differences in the labour force participation among men and women. Men have higher participation rates as compared to women due to a number of factors, including cultural and social norms (ILO, 2015). Although youth unemployment for males is lower relative to females, it has increased from 16 percent in 2009 to 29 percent in 2013, according to national statistics. On the other hand, female youth unemployment remained high, although it marginally declined from 56 to 52 percent over the same period. The marginal decline in female youth unemployment could be indicative of affirmative actions and women empowerment programmes put in place by the government, especially in terms of training and skills development programmes to improve youth employability.

Figure 4.2.6: Drivers of human exclusion by gender (2014)

Source: Computed using national data

Figure 4.2.7 illustrates the various determinants of exclusion by location, with unemployment and poverty standing out as key drivers of exclusion, although with differential impact. Unemployment in Egypt is largely an urban phenomenon while people in rural areas and those living in urban poor settlements are more likely to experience poverty and exclusion from education and health services.
Generally, people living in urban slums lack adequate water and sanitation facilities, which predisposes them to communicable diseases. It unlikely that local authorities will provide social amenities to these communities, thereby entrenching their exclusion from economic and social opportunities. Therefore, poor people living in these locations tend to suffer from multiple deprivations, which include lack of financial services, employment opportunities and social safety nets. Tacoli, McGranahan and Satterthwaite (2014) found that the lack of provision of public services in unplanned settlements also means higher prices (and often poor quality provision) for private services – such as water vendors or kiosks, latrine-emptying services, schools and health care. The aggregate effects of the absence of these services in both urban slums and poor rural areas reinforce the levels of human exclusion for the affected communities.

**Policy considerations**

The analysis above has pointed to youth unemployment and poverty as critical factors of exclusion in Egypt. Addressing these challenges requires understanding their underlying causes, as unemployment is often one of the root causes of poverty, but also of social unrest and youth disillusionement.

Part of the interventions to resolve the youth unemployment problem lies in equipping the youth with the requisite skills that are responsive to the needs of employers in the labour markets. Put differently, the skills mismatch has to be tackled from both the supply side—through relevant curricula and training—and the demand side. In 2012, McKinsey proposed a broad intervention called the Education to Employment: Designing a System that Works, in which they addressed issues of enrolling in post-secondary education, building the right skills, and finding the right job across many countries. The study found a glaring gap between educational outcomes on one hand and the needs of the employers on the other.

Accordingly, the McKinsey report stressed the need for employers and training institutions to interact more frequently in order to understand the respective needs. This would narrow part of the skills’ gap, and allow the youth to transition more easily from education to employment. Other studies have suggested interrelated actions to address youth unemployment, particularly in North Africa including Egypt, which

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Figure 4.2.7: Drivers of human exclusion by location (2014)

![Graph showing drivers of human exclusion by location (2014)](image)

*Source:* Computed using national data.

*Note:* Human exclusion by location is based on 5 indicators.

ND: No data

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involve reducing the barriers to growth and job creation faced by firms and entrepreneurs, bridging the gap between education systems and the requirement of employers; and making youth employment programmes more effective (AfDB et al. 2012).

In terms of addressing poverty, different policy tools can and should be used depending on the level of deprivation. In Egypt, the unemployed are not necessarily the poor or illiterate but rather, the overwhelming majority of the unemployed are certificate holders (El Laithy, 2009). Most of them are working in the informal sector without social protection, earn low wages and have low productivity. Against this background, poverty reduction policies must simultaneously target under-employment and informal employment. The Government is already using broad employment policies to support those that are at the margin of poverty, particularly the youth.

In line with this, the Egyptian government has embarked on a wide economic reform programme to raise growth, create jobs, and contain fiscal and external deficits and the loss of foreign exchange reserves. More specifically, the Government is using the Social Fund for Development (SFD) which was established in 1991 to protect and improve the status of the poor and unemployed across the country. Among other things, the SFD aims at (i) reducing poverty by supporting country-level initiatives; (ii) increasing employment opportunities, and (iii) encouraging small enterprise development.

Other government interventions involve the use of social safety nets that include an extensive food subsidy system. This consists of two programmes: baladi bread, available for all, and ration cards, which provide card holders with fixed monthly quotas of basic foodstuffs (Gaafarawi, 2012). Generally, social safety nets are used to support those trapped in poverty, especially people living in slums without access to basic social services. The government is also using conditional cash transfers (CCTs) to target poor households on a monthly basis, while the newly introduced Social Pension Law guarantees benefits to the unemployed. However, financing these interventions may prove to be onerous in the face of a reduction in government revenues due to a slump in tourist activities on account of insecurity in the region. There is therefore a need to prioritise and rationalise the use of public resources with effective social protection programmes.

Given that human exclusion in Egypt is mainly driven by structural factors (poverty and unemployment), more forward-looking policy interventions are highly desirable. In addition, the government needs to ensure and reinforce political stability as a necessary condition for propelling investment and economic growth. Key fiscal reforms will also contribute to rationalise public expenditures, particularly as they relate to fuel and natural gas subsidies.

In the medium to long-term, efforts should be targeted at promoting peace and security as enablers of human development. On the macroeconomic front, significant investments in education, health, employment, housing and infrastructure development are needed as part of the policy response to poverty and human exclusion in general (Said, 2015). Ultimately, policy interventions to address various levels of exclusion should be contextual and informed by initial conditions in the country.

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4.3. Mauritania

Socioeconomic context

Mauritania has been one of the most successful economies in the subregion, posting positive results since 2009, although growth performance remains below the peak achieved in 2006 (Figure 4.3.1).

Figure 4.3.1: GDP growth in Mauritania

![GDP growth in Mauritania](image)

*Source:* National Statistics Office (ONS), Mauritania.

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

Following several years of political instability, the democratic transition, which started in 2005, had an almost immediate impact on economic growth. However, between 2006 and 2009, the return of instability and the international financial crisis resulted in a slump, with negative growth in 2009. Elections held during the same year and the consolidation of macroeconomic indicators during the successful roundtable conference held in Brussels in 2010 contributed to a swift economic recovery. Since then, democracy became entrenched through inclusive political dialogue, economic stability and general elections held in 2013 and 2014, which contributed to strengthen the country’s credibility and provided the conditions to increase confidence and attract foreign investors.

This has resulted in a dramatic increase in mining exports, which accounted for 40 per cent of GDP in 2012. It is important to note that China has played a key role in the Mauritanian economy since 2012. In fact, 55 per cent of national exports go to China, followed by Italy, its second largest market with only 9 per cent (Central Bank of Mauritania, 2016). The country’s main exports are iron (37.8 per cent of total exports in 2014), gold (21.1 per cent), copper (8.6 per cent), fishery products (19.5 per cent) and crude oil (10.1 per cent).

Nevertheless, the economic performance has not been sufficient to strengthen Mauritania’s resilience to external shocks. The global economic outlook, and especially the fall in international commodity prices and the economic slowdown in China could in fact reverse the gains achieved by the country today.

In addition, there is a major risk posed by the current insecurity situation in the Sahel and Maghreb regions. To deal with these challenges, the government has put in place several security and social protection strategies, in order to reinforce food security, access to basic social services and contain forced migration and social radicalisation, in particular of young people.
Social development

The geographical diversity of Mauritania has a significant impact on its social development outcomes and policy interventions. The country is characterized by major spatial disparities that are mainly the result of the country’s size (1 030 000 km²) and its robust population growth (3.33 per cent per year) according to latest census data (Table 4.3.1). This is especially true for Nouakchott, which is home to over one quarter of the total population, and annual population growth of 4.4 per cent. The latest census also reveals a very young population, with 44.2 percent of people under the age of 15.

Table 4.3.1: Socioeconomic indicators

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Total population (in thousands)</td>
<td>2,571</td>
<td>2,914</td>
<td>3,517</td>
</tr>
<tr>
<td>Total GDP in billions of MRO*</td>
<td>333 387</td>
<td>754 927</td>
<td>1 602 094</td>
</tr>
<tr>
<td>Per capita GNI (Atlas method in current US dollars)</td>
<td>520.6</td>
<td>977</td>
<td>1473.5</td>
</tr>
<tr>
<td>Population living below the international poverty line of USS 1.9 per day (%)</td>
<td>51 (2000)</td>
<td>42 (2008)</td>
<td>31 (2014)</td>
</tr>
<tr>
<td>Gini Index</td>
<td>0.39 (2004)</td>
<td>0.38 (2008)</td>
<td>0.34 (2014)</td>
</tr>
<tr>
<td>Unemployment, total of young people (percentage of the totals in the working population aged 14-34). (15-35 in 2012)</td>
<td>...</td>
<td>14.3 (2012)</td>
<td>21.01 (2014)</td>
</tr>
<tr>
<td>Population growth (annual percentage)</td>
<td>2.47</td>
<td>2.54</td>
<td>3.33</td>
</tr>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>58</td>
<td>61.1</td>
<td>60.3 (2013)</td>
</tr>
</tbody>
</table>

Sources: National Statistics Office; Central Bank of Mauritania; Macroeconomic framework Art. IV IMF, (February, 2016).


In the field of education, some progress has been achieved in the primary sector, but significant disparities in educational outcomes persist between the rural and urban areas and between different subregions and income quintiles. Moreover, there is a considerable drop in enrolment rate at the secondary level, particularly in rural areas. Overall, only one of two children completes basic education, with a higher probability for boys, i.e. 42 per cent compared with 34 per cent for girls (Bocchi et al. 2008).

With its arid climate and geographical location covering much of the Sahel, the country is also extremely vulnerable to the impact of climate change, particularly for those living in the rural areas. In 2014, the incidence of poverty stood at 31 per cent nationally, with a considerable gap between rural areas (44.4 per cent) and urban areas (16.7 per cent). During the last agricultural season, almost 28 per cent of the production was lost through drought, which pushed the Government to invest heavily in food security and social welfare programmes.

Two major programmes have been put in place to deal with these challenges. The first is a special intervention programme launched in 2008 in response to the global food and energy crisis. The second, Emel (Arabic for ‘hope’), structured around two elements: a component of emergency food supplies, complemented by a “food transfer” category introduced in 2012, which accounts for 80 per cent of the programme’s total; and a social assistance programme for livestock focused on the pastoralist population.

Public spending for these two programmes peaked in 2012, when investment in social safety nets accounted for 5.4 per cent of GDP (18.1 per cent of government spending, including food and fuel subsidies).

In 2016, the Government is making a provision of 451.2 billion Mauritanian Ouguiya (approximately US$1.3 billion) in its Finance Act, i.e. 2.68 per cent more than the 2015 budget. However, about 90 per cent of
spending on social security is still in response to the crises and not focused on long-term development outcomes.

**Measuring human exclusion in Mauritania**

The African Social Development Index of Mauritania reveals a decline in human exclusion of 9 per cent between 2003 and 2014, a remarkable outcome following the end of political and economic instability (Figure 4.3.2).

**Figure 4.3.2: ASDI in Mauritania**

![Graph showing ASDI in Mauritania](image)

*Source: Computed using national data.*

The analysis of the index by dimensions shows the relative contribution of each driver to exclusion throughout the life-cycle. While exclusion in health, measured by infant mortality, has remained largely unchanged over time, the contribution of stunting in total exclusion has almost doubled. The social safety nets and social protection policies implemented during the period under analysis seem to have had a positive impact on literacy and poverty, with a reduced contribution to overall human exclusion (Figure 4.3.3).

**Figure 4.3.3: Drivers of human exclusion**

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

*Source: Computed using national data.*

Illiteracy and unemployment continue to be significant drivers of exclusion for women, although infant mortality remains the principal cause of exclusion in Mauritania, regardless of gender (Figure 4.3.4). This outcome emphasises the need to take account of exclusion factors from the earliest stages of life, to ensure a full physical and cognitive development of the individual. This is key to ensuring participation and access to productive and equitable socioeconomic opportunities later in life (AUC et al., 2014).
As indicated above, the country’s geographical situation and the high concentration of its population in the coastal areas result in significant spatial inequalities, with differentiated effects depending on location (Figure 4.3.5). In rural areas, poverty and infant mortality appear to be the two dominant drivers, contributing to over 50 percent of total exclusion, while the risk of youth unemployment is almost four times higher in urban areas as compared with rural areas, where the majority of people work in informal settings.

**Figure 4.3.5: Drivers of exclusion by location (2014)**

![Bar chart showing drivers of exclusion by location in 2014](source: Computed using national data.)

As indicated above, the country’s geographical situation and the high concentration of its population in the coastal areas result in significant spatial inequalities, with differentiated effects depending on location (Figure 4.3.5). In rural areas, poverty and infant mortality appear to be the two dominant drivers, contributing to over 50 percent of total exclusion, while the risk of youth unemployment is almost four times higher in urban areas as compared with rural areas, where the majority of people work in informal settings.

**Figure 4.3.5: Drivers of exclusion by location (2014)**

![Bar chart showing drivers of exclusion by location in 2014](source: Computed using national data.)

**Policy considerations**

The rural nature of exclusion and poverty in Mauritania is an incentive to strengthen public interventions to meet the specific needs of rural households and to reduce their vulnerability to external shocks. The implementation of social welfare programmes has indeed had mixed results in the country. Food subsidies have had a positive impact on nutritional indicators and poverty. However, the differential impact across sub-regions confirms the need to strengthen decentralization and improved governance in the implementation of social safety nets.
Required measures will include reorientating the scope of social programmes towards asset building and broadening access to education and health to build productive human capital and to create an environment conducive to social and economic opportunities for all. There is a large body of evidence showing that increasing access for girls to education has significant positive spin-offs on poverty reduction in the short and medium term. Increasing public incentives to keep girls in school would therefore be a key strategic policy direction.

The analysis of exclusion by subregions in Mauritania could make an important contribution to identify the areas and factors of human exclusion, which could guide social policy targeting and resource allocation, particularly in the less developed regions of the country.
4.4. Morocco

Socioeconomic conditions

Economic growth in Morocco has remained positive, although decreasing since 2006, with a significant drop projected in 2016 (at 1.5 per cent of GDP), as a result of a reduced agricultural production and a deceleration of bank lending – signifying a slowing dynamism in domestic demand (Figure 4.4.1). In fact, the agricultural sector continues to be highly exposed to climate variations and to international food prices, which have led to a drop in the agricultural value addition (-2.3 per cent in 2014 and -11 per cent in 2016). The new industrial acceleration plan for 2014-2020 is intended to boost the industrial sector, particularly the processing industry, which alone contributed up to 16 per cent of GDP in 2015, with an added value of 3.3 per cent, providing 1.2 million jobs, or 11.1 per cent of the working population. The tertiary sector (trade and services), the heavyweight of the national economy, recorded modest advances, with growth of 2.3 per cent in 2014 and 1.2 per cent in 2015 and a 50 per cent share in GDP in 2015 (High Commission for Planning, HCP, 2016).

Figure 4.4.1: GDP growth in Morocco

From the demand front, consumer spending contributes to over three quarters of GDP (77.5 per cent in 2015) – sustained by consumer price stability, pay rises and the gradual increase in remittances by 2.9 per cent in 2015 (HCP, 2015).

Overall, Morocco has managed to build the foundations of its economic development through robust political commitment and dramatic investments in basic social infrastructures and in sectors with high added value (such as phosphates and automotive) and comparative advantage (such as food industry, tourism, fishery, etc.). The Moroccan economy has also benefited from social and political stability, notwithstanding the security risks affecting the subregion. The current challenge is to support this growth in an uncertain and increasingly competitive global context.
To achieve this, the Government is pursuing reforms to promote the private and other key strategic sectors in an effort to speed up the structural transformation that is underway. The Green Morocco Plan and the Industrial Acceleration Plan clearly reflect the Government’s will to boost industrial production and to reduce agricultural exposure to climate variations. Six identified industrial sectors currently constitute innovation hubs for the country, with robust potential for growth and ITC.

Concerning regional integration, Morocco is leading the way in the Arab Maghreb Union in terms of increased trade activity within and beyond Africa. The country has signed free trade agreements with 53 countries across the globe and has consolidated its links with the rest of Africa, opening up opportunities to strengthen its market share in the continent.

Social development

The country has made remarkable strides in social development over the past two decades. The poverty rate declined by more than two-thirds in 15 years, from 15.3 per cent in 2001 to 4.8 per cent in 2014, with the almost complete eradication of extreme poverty, according to the most recent data. Nevertheless, there are still marked disparities across locations, with a poverty rate of 1.6 per cent in urban areas, compared with 9.5 per cent in rural areas (HCP, 2016).

The dramatic poverty decline in Morocco is the result of good economic performance and a strong political will to eradicate poverty. There is indeed a strong correlation between economic growth and poverty reduction in Morocco (World Bank, 2004). Even a low growth rate in individual household consumption over a short period of time has shown to have a remarkable impact on poverty at national level. The most notable sign of this policy direction was the establishment of the National Human Development Initiative (INDH) in 2005, which in recent years has led to a 35 per cent reduction of poverty in targeted households in rural areas.

This initiative and other targeted policy interventions have helped to ensure significant advances in overall human development. In 2014, the country ranked 129th worldwide, with a human development index (HDI) of 0.617, compared with 0.351 in 1990 (UNDP, 2015). Morocco has also achieved over 90 per cent of the Millennium Development Goals, notably in health, education, access to basic social services and eradication of extreme poverty. The current Government’s priorities focus on improving the qualitative and quantitative aspects of social development, and on reducing inequalities across the different geographical areas. In Morocco, the arid and mountainous regions of the interior have not benefited from economic growth in the same way as the coastal areas, particularly those of Rabat-Salé-Kenitra and Casablanca-Settat. The latter alone accounted for 32.2 per cent of GDP in 2015, although it covers only 7 per cent of the country and 20.3 per cent of the Moroccan population (HCP, 2016).

Total unemployment rate has fallen slightly, from 10.2 per cent to 8.7 per cent between 2014 and 2015, but it still affects one in five young people nationally and one in three in urban areas, according to the latest data available (Table 4.4.1). A more in-depth analysis also shows two characteristics common to the majority of the countries in the subregion: two thirds of unemployed young people are aged between 15 and 29 and one third are university graduates.

Furthermore, notwithstanding the efforts made in recent years to achieve gender equality, there are still glaring discrepancies when it comes to access to employment and participation in political life. Still today women account for only 17 per cent of parliamentarians and the female participation rate in the labour market is 26.9 per cent, compared with 75.8 per cent for men, according to the latest available data (HCP, 2015, ILO, 2015).

 Defined as the percentage of individuals living on less than US$ 1.25 per day/PPP, the extreme poverty threshold was raised to US$ 1.90 in 2015, mainly to take inflation into account.
Measuring human exclusion in Morocco

Morocco is one of the five countries that piloted the ASDI in Africa in 2014, along with Cameroon, Senegal, Kenya and Zambia.

Overall, the human exclusion score in Morocco, as measured by the ASDI, is relatively low and has dropped by more than 40 per cent, from 1.68 to 0.98 between 2000 and 2013 (Figure 4.4.2).

Table 4.4.1: Socioeconomic indicators

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>(as a percentage of the population)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment rate (as a percentage of the total</td>
<td>11.3 (2002)</td>
<td>9.8 (2007)</td>
<td>9.9 (2014)</td>
</tr>
<tr>
<td>working population)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(percentage of the total working population 15-24)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life expectancy at birth (in years)</td>
<td>69</td>
<td>71</td>
<td>74</td>
</tr>
</tbody>
</table>

Sources: High Commission for Planning (HCP), Morocco; World Bank Development Indicators.

Measuring human exclusion in Morocco

Morocco is one of the five countries that piloted the ASDI in Africa in 2014, along with Cameroon, Senegal, Kenya and Zambia.

Overall, the human exclusion score in Morocco, as measured by the ASDI, is relatively low and has dropped by more than 40 per cent, from 1.68 to 0.98 between 2000 and 2013 (Figure 4.4.2).

Figure 4.4.2: ASDI in Morocco

Source: Computed using national statistics (HCP), Morocco.

One interesting result is the reduction of gender disparities in terms of exclusion, which clearly reflects the Government’s efforts to improve the lives and provide opportunities to women across the country (Figure 4.4.3). Indeed, female exclusion decreased by over 50 percent between 2000 and 2013, while male exclusion fell more slowly, such that the latter outpaced female exclusion by 2013.
The differences in the levels of exclusion are particularly significant when disaggregated by location. In fact, the ASDI fell by 50 per cent in the rural areas from 2.46 to 1.25 in the period 2000-2013, while the fall in the urban areas was much more moderate, thereby reducing spatial disparities with respect to exclusion (Figure 4.4.4).

These differences are even more notable in the regions characterized by high levels of economic development, with a reduction of exclusion of up to 50 per cent over the period under consideration, particularly in the regions of Marrakech-Tensift-Al Haouz (53 per cent), Grand Casablanca (51 per cent) and Rabat-Salé-Zemmour-Zaer (48 per cent), as shown in Figure 4.4.5.
The analysis based on the drivers of exclusion reveals the changes that have occurred over the period under consideration in human exclusion. While in 2000, the illiteracy rate accounted for more than one third of total exclusion, in 2013 child mortality seemed to be relatively preponderant in total exclusion (Figure 4.4.6). This outcome highlights the remarkable efforts made by the Government over the last decade to improve basic education throughout the country.

**Figure 4.4.5: Human exclusion trends by subregion (percentage)**

![Human exclusion trends by subregion](image)

**Source:** Computed using national statistics (HCP), Morocco.

The analysis based on the drivers of exclusion reveals the changes that have occurred over the period under consideration in human exclusion. While in 2000, the illiteracy rate accounted for more than one third of total exclusion, in 2013 child mortality seemed to be relatively preponderant in total exclusion (Figure 4.4.6). This outcome highlights the remarkable efforts made by the Government over the last decade to improve basic education throughout the country.

**Figure 4.4.6: Drivers of human exclusion**

![Drivers of human exclusion](image)

**Source:** Computed using national statistics (HCP), Morocco.

**Note:** By 2013, Morocco has achieved the reference value for indicator 6, that is the average life expectancy at 60 for upper-middle income countries.

Disaggregated by gender, the analysis shows that girls are almost three times more likely than boys to be excluded from the development process due to a lack of basic education, while boys continue to be more
exposed to child mortality, which accounts for over half of total exclusion in boys at that stage of their life (Figure 4.4.7).

Figure 4.4.7: Drivers of human exclusion by gender (2013)

Source: Computed using national statistics (HCP), Morocco.

Note: When disaggregated by gender, Morocco has surpassed the reference value for indicator 6, which is the average life expectancy at 60 for upper-middle income countries.

The role of child malnutrition and youth unemployment in total exclusion has also increased, reflecting the current challenges in terms of employment and access to basic health services, particularly in the rural areas. In fact, the national pattern of exclusion factors is repeated when human exclusion is disaggregated by location, with a significant contribution of child mortality and malnutrition to human exclusion in the rural areas (55 per cent), whereas unemployment remains the dominant exclusion driver in urban areas (Figure 4.4.8).

Figure 4.4.8: Drivers of human exclusion by location (2013)

Source: Computed using national statistics (HCP), Morocco.

Policy considerations

Notwithstanding the remarkable advances in social development achieved in recent years, Morocco is still facing structural challenges, especially in terms of quality of education, job creation for young people...
and spatial inequalities, particularly in its southern and central regions. The Government is attempting to respond to these challenges by launching a series of comprehensive social programmes, particularly through investment in basic infrastructures (health, education, social welfare).

These initiatives include a programme to strengthen infrastructures in rural areas, a medical assistance scheme (Ramed), which in the long term should provide free health care to over 25 per cent of the population, and the Tayssir programme aimed at combating school drop-outs in rural areas, strengthened by a support social fund set up in 2012 (ECA, 2015).

The Government has also rolled out an emergency plan for education and allocated 25 per cent of the national budget to education and vocational training, in an attempt to reduce the illiteracy rate (which still affects 64.7 per cent of women living in the rural areas), and the mismatch between education and skills needed in the labour market.

One of the priorities is to resolve the structural problem of youth unemployment in Morocco. Incentive measures have been put in place, including the agreement on employment promotion signed in 2015 and a national employment strategy for the period 2015-2025, in an effort to promote the creation of productive jobs and rectify the disconnect between the education system and the demand from the labour market. The main objective of the strategy is to create 200,000 jobs annually in order to reduce total unemployment to under 4 per cent over ten years. The new 2014-2020 industrial acceleration plan has also made provisions to create up 500,000 jobs by 2020 (Government of Morocco, 2014).

The implementation of the second phase of the National Human Development Initiative (INDH, 2011-2015) and the allocation of 55 per cent of state resources to poverty reduction and employment promotion programmes clearly demonstrate the Government’s commitment to social development. These public policies are the first step in reducing the existing disparities between regions and population groups, towards a more inclusive and sustainable development path in Morocco.
4.5. Sudan

Socioeconomic conditions

Sudan presents an interesting case of post-conflict development, particularly since the peace accord of January 2005. In the aftermath of the 30-year civil strife, the exogenous shocks resulting from the secession of South Sudan and the loss of oil revenues, seriously affected growth patterns. This caused a steep drop in growth from 5.2 percent in 2010 to 1.9 percent in 2011 and 1.4 percent in 2012 (Figure 4.5.1). However, the economy picked up, with GDP registering a 4.4 and 3.6 percent growth in 2013 and 2014 and expected to increase to 6.4 percent by the end of 2016.

![Figure 4.5.1: GDP growth in Sudan](source: Central Bank of Sudan reports)

The economic challenges in a country affected by years of civil conflict remain an important framework under which Sudan functions. Maintaining economic stability has been seriously challenged by conflicts in eight of the country’s states that have stemmed development efforts and social policy implementation. These have been exacerbated by the international sanctions on Sudan. Indeed, public policies, including expanding education and health expenditures, are challenged by the fiscal consolidation phase, resulting from current slumps in export revenues.

Inflation in Sudan, hovering at 36.9 percent in 2014, and one of the highest in Africa, was due to exchange-rate devaluations, partial removal of subsidies and supply disruptions owing to civil conflict. However, appropriate monetary policies have succeeded in dropping the inflation rate to 17.6 percent in 2015.

Social development

The social outcomes, although on average improving, show significant inequalities. From 1980 to 2013, the Human Development Index in Sudan rose from 0.331 to 0.473, although improvements have stalled since 2010 (UNDP, 2013). The two areas that recorded the most dramatic changes were health (assessed according to life expectancy at birth), and education (measured by mean and expected years of schooling). Over the last three decades, life expectancy increased from 48 years to 62 but remains lower than the subregional average of 68 years. Primary school enrolment improved from 58 percent in the 1990s to 67 percent in 2012, resulting in a youth literacy rate of 87 percent in urban areas. However, the increase in
enrolment has a significant urban and gender bias – with primary enrolment standing at 60 percent in rural areas and and 64 percent for girls, against 69 percent for boys (ECA 2016).

Improvements in several social indicators are connected to rapid urbanization that has contributed to better public service delivery (ECA, 2016). During the past decades, cities in Sudan experienced high population growth, as a result of a number of factors among which conflicts that triggered a mass exodus from rural areas. Khartoum is by far the largest city, with a population of 7 million in 2015, from only 850,000 in 1980. According to a 2010 MICS survey, 66.6 per cent of households had access to water in the urban areas and 46.9 percent to efficient sanitation. These figures drop in rural areas to 57.7 per cent and 17.9 per cent for water and sanitation respectively.

According to the same survey, the poverty rate stands at 46.5 percent \(^\text{11}\) nationwide, while large variations between rural and urban areas (57.6% versus 26.5%, respectively). These variations take on increased importance in the 8 conflict prone local states, registering over 50 percent of poor among their populations. This is driven also by lower education enrolment and retention rates across the poorer states (UNDP 2015). An important observation that has emerged from the 2010 survey is 60 percent of all poor households have no education, against only 9 percent of poor households with a higher education. This highlights the critical role of education in keeping people out of poverty. Further, there are important variations in poverty across the States, with Darfur registering 69.4 percent of poor households, against 26 percent in Khartoum and 32.2 percent in the River Nile region (Ahmed, 2015).

According to the Sudan Labour Survey 2012 unemployment stands at 18.6 percent with major variations across gender, age and location (Table 4.5.1). Unemployment rate for men stood at 13.3 percent in 2014, against 32.1 percent of women and 33 percent for young people.

The differences in development outcomes across gender and location are informed by the results of the African Social Development Index (ASDI) for Sudan, which points to the exclusion patterns across the individual life cycle.

### Table 4.5.1: Socioeconomic indicators

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Total population, (in thousands)</td>
<td>29,569</td>
<td>33,637</td>
<td>39,350</td>
</tr>
<tr>
<td>Total GDP in millions of SDG *</td>
<td>38,976</td>
<td>92,534</td>
<td>427,015</td>
</tr>
<tr>
<td>Per capita GNI (Atlas method in current US dollars)</td>
<td>360</td>
<td>880</td>
<td>1,710</td>
</tr>
<tr>
<td>Population below the poverty line of US$ 1.9 per day (percentage of the population)**</td>
<td>...</td>
<td>...</td>
<td>46.5</td>
</tr>
<tr>
<td>Gini Index</td>
<td>...</td>
<td>35.4 (2009)</td>
<td>...</td>
</tr>
<tr>
<td>Unemployment (percentage of the total working population)</td>
<td>14.8</td>
<td>14.7</td>
<td>18.6 (2012)**</td>
</tr>
<tr>
<td>Youth unemployment, total young people (percentage of the total working population 15-24)</td>
<td>23.1</td>
<td>23.2</td>
<td>23.3</td>
</tr>
<tr>
<td>Population growth (annual percentage)</td>
<td>2.6</td>
<td>2.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>59</td>
<td>61</td>
<td>63 (2013)</td>
</tr>
</tbody>
</table>

Source: World Development Indicators (World Bank).


** National data

\(^{11}\) The national poverty line is defined as persons with the value of total consumption below 114 Sudanese pound (SDG) per month (World Bank database).
Measuring human exclusion in Sudan

Human exclusion in Sudan has declined by 7 percent over the period 2007 to 2015. This improvement in inclusion is important as the period coincides with the loss in oil revenues and a new state structure in Sudan. The drop in oil revenues of approximately 75 percent in 2012 compelled a fiscal consolidation plan, which most likely resulted in reduced allocation to social sectors, including reduced subsidies on basic food items and petroleum products over the period 2012-2014. To forestall possible social tensions that emerged, budget spending in 2015 re-instated the wheat and petrol subsidies (ECA, 2016).

The gender disparities in employment mentioned above are also reflected in the sex-disaggregated ASDI (Figure 4.5.3). The overall reduction in human exclusion was not equally distributed across gender, with women registering a 1.3 percent drop in exclusion, whilst exclusion among men decreased by 13 percent over the same period. Yet, according to the latest population census of 2008, women’s share in paid non-agricultural employment rose to 30 percent – from 18 percent in 1993 – and women occupy today 30 percent of parliamentary seats. The higher exclusion for women seems to lie in lower participation in the labour market and reduced access to education (Turkawi, 2015).

Human exclusion across location demonstrates the significant urban bias in Sudan’s development (Figure 4.5.4). Indeed, results indicate an overall reduction in exclusion, but levels in rural areas almost double of those observed in urban areas. This has partly fueled a rural-to-urban migration in search of improved...
welfare through more inclusive urban social policies. The low level of development in rural areas due to political instability has seriously hampered improvements towards higher inclusion. Hence, policies interventions to ameliorate the spatial differences needs to recalibrate towards poorer and more excluded rural areas.

**Figure 4.5.4: Human exclusion by location**

![Human exclusion by location](image)

*Source:* Computed using national data.

*Note:* Human exclusion by location is based on 5 indicators.

Whilst at the aggregate level, there was some decline in human exclusion, the sub-national trends in the ASDI present a much more complex picture (Figure 4.5.5). Indeed, the disaggregation at sub-national level shows a clear link between significant reductions in exclusion in the Northern urbanized region of the country where political stability has improved. On the other hand, the regions of Red Sea and West Darfur have registered an increase in exclusion. Kassala and River Nile have also seen an increase in overall exclusion partly driven by reduced access to education and health, namely in terms of proportion of vaccinated children (Omer et al, 2008).

Overall, the spatial differences in the levels of exclusion as a reflection of the distance from central areas, particularly Khartoum, are driven by the inequitable distribution of oil resources (ECA, 2016).

**Figure 4.5.5: Change in ASDI at sub-national level (percentage)**

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

*Source:* Computed using national data
The drivers of human exclusion in Sudan have remained largely the same over the period 2007 to 2015, with a slight increase in the contribution of stunting and infant mortality to overall exclusion (Figure 4.5.6). The large inflow of rural migrants has possibly exacerbated the situation. On the other hand, the contribution of illiteracy to overall exclusion has decreased over time. This can be attributed to the wider access to education in Sudan, which remains largely public, and equitable access has become less problematic, particularly for low-income groups (ECA, 2016).

**Figure 4.5.6: Drivers of human exclusion**

Source: Computed using national data

An important aspect of the ASDI is the disaggregation by gender, which can assist in improving social policy targeting (Figure 4.5.7). Illiteracy and youth unemployment are large contributors to human exclusion among women. However, the largest risk factor of exclusion in Sudan across both women and men appear to be infant mortality, contributing to 27.5 and 38.3 percent of total exclusion respectively. The need to implement gender-sensitive active labour policies for women and addressing cultural and social norms in the country is essential to advance women’s integration in development.

**Figure 4.5.7: Drivers of human exclusion by gender (2015)**

Source: Computed using national data.

Note: Human exclusion by gender is based on 5 indicators.

An important feature is the inequitable spatial distribution of such services. Indeed, Figure 4.5.8 highlights the relative contributions of education and poverty in rural areas, as possibly a consequent of spatial disparities in public service deliveries. Infant mortality captured under the survival indicator has also a
serious urban bias, whilst poverty in rural areas remain substantial. Indeed, almost a third of total exclusion in rural dwellers is explained by the lack of means of subsistence during adulthood.

**Figure 4.5.8: Drivers of human exclusion by location (2015)**

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

Source: Computed using national data.

Note: Human exclusion by location is based on 5 indicators.

**Policy considerations**

There are two important policy instruments that the Sudanese Government has put in place in recognition of the spatial inequality and exclusion features of social outcomes. The Interim Poverty Reduction Strategy Paper (IPRSP) (2012-2014), now being converted into a final PRSP has identified four pillars: strengthening governance and institutional capacity; resettlement of Internally Displaced Persons (IDP’s) development of human resources and the promotion of shared rapid and sustainable economic growth and employment creation.

Other Government measures of social protection and safety nets, such as the Pension and Social Security Funds complemented by cash transfers and Zakat fund (compulsory religious tax on Moslems), have also been introduced, however coverage remains low and spatially variant.

The rural-urban dichotomy is recognized by the government, which has introduced positive discrimination to conflict areas – for example special admission quotas of least developed states in national higher education institutions, complemented by an increase in federal transfers of resources.

Between 2012 and 2014, the Government of Sudan also introduced a consolidation plan to streamline public finances by cutting public expenditures, including social spending. This has led to an austerity plan that has reduced subsidies of basic food items and petroleum products, which was reversed for social development outlays in the 2015 budget.

Currently, public spending is challenged by fiscal restrictions. However, a reprioritization of social development expenditures from subsidies towards investments in pro-poor, pro-equity policies, including gender equality and access to education and health, is a useful policy direction for addressing exclusion throughout the individual lifecycle.

Expanding coverage through private sector providers of health services should be matched with targeting measures to ensure equitable access. This is particularly important for infant and maternal health. Nutritional policies have proved to have a positive and cumulative effect on future life chances,
and need to be strengthened. Tackling child stunting, particularly in urban areas, through targeted infant and child support policies results in improved educational performance, productivity gains and reducing health costs for the economy as a whole (AUC et al., 2014). This takes on importance in urban areas, where adequate nutrition is possibly dependent on household income, more than in rural areas.

Finally, the variation in the levels and patterns of human exclusion across subregions requires policy attention. Institutional development and capacity at local state level need to be strengthened through targeted training programmes that complement positive discrimination for laggard regions. The increased transfer of resources to conflict States, as envisaged by the Government’s current PRSP, should prioritize enrolment and retention in education cycles, in order to provide poorer households with the basic human capital foundation and become active agents of change.
4.6. Tunisia

Socioeconomic context

The economic downturn in Tunisia coincided with the beginning of the global financial crisis of 2007-2008 (Figure 4.6.1). This crisis resulted in significant job losses in the country, following the fall in the global demand and foreign direct investments. The 2011 Arab Spring brought with it a critical recession and significant losses in key economic activities, such as tourism, a sector whose earnings fell by 36 per cent in the same year. A notable recovery has been registered after 2011, although it did not achieve pre-crisis growth levels due to continued political instability, underpinned by external shocks.

Figure 4.6.1: GDP growth in Tunisia

The Tunisian economy is historically well integrated in the global value chains (GVC), particularly in the three industrial sectors of textiles and clothing, food processing, and the electrical sector, which collectively account for 75 per cent of exports and over 65 per cent of employment. Although the export-focused policy has resulted in a diversified growth pattern and a relatively competitive manufacturing sector, it remains confined to the export sector, without any significant knock-on effects in the rest of the economy.

The most significant economic transformation in Tunisia occurred in the early 2000s. Thanks to the development of automotive and aeronautical components, exports increased by an annual average of 18 per cent between 2000 and 2012. Tunisian integration into the global value chains was also strengthened by free trade agreements with the European Union (EU). Nonetheless, the sluggish growth in the euro zone has affected the exports and tourism flows of Tunisia in recent years (AfDB and others, 2015).

Social development

Tunisia has recorded remarkable improvements in social indicators over the last three decades. Between 1980 and 2014, life expectancy at birth increased by 12.8 years, while the average and expected length of school attendance increased respectively by 4.8 years and 6.3 years (UNDP, 2014). This has had a positive impact on growth and earnings, with an increase in per capita gross national income (GNI) of 101.8 per cent over the same period. Poverty, measured by the proportion of individuals living beneath the national poverty line, fell from 32.4 per cent in 2000 to 15.5 per cent in 2010, according to the latest survey data (INS, 2012).
The Human Development Index (HDI) of Tunisia also increased from 0.486 in 1980 to 0.721 in 2014, an improvement of 1.17 per cent per annum, which places Tunisia among the countries with a high level of human development in Africa. The provision of quality education and health services has a central role in the country’s development, although there are still major disparities across sub-regions.

Indeed, the overall positive social development outcomes conceal several inequalities and exclusions of different groups, which have probably contributed to the recent social and political instability in the country. The quality of governance also declined severely between 2000 and 2010, especially in the sphere of participation and political responsibility (Kaufman and others 2010).

**Table 4.6.1: Socioeconomic indicators**

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Total population (in thousands)</td>
<td>9 748</td>
<td>10 225</td>
<td>10 996</td>
</tr>
<tr>
<td>Total GDP in billions of TND*</td>
<td>32 901</td>
<td>49 857</td>
<td>82 562</td>
</tr>
<tr>
<td>Per capita GNI (Atlas method in current US$)</td>
<td>2 210</td>
<td>3 560</td>
<td>4 230</td>
</tr>
<tr>
<td>Population below the national poverty line (percentage of the population) **</td>
<td>32.4 (2000)</td>
<td>...</td>
<td>15.5 (2014)</td>
</tr>
<tr>
<td>Gini Index***</td>
<td>...</td>
<td>37.7 (2005)</td>
<td>35.8 (2010)</td>
</tr>
<tr>
<td>Unemployment (percentage of total working population)</td>
<td>15.3</td>
<td>12.4</td>
<td>13.3</td>
</tr>
<tr>
<td>Youth unemployment, total young people (percentage of the total working population 15-24)</td>
<td>32.6</td>
<td>27.8</td>
<td>31.8</td>
</tr>
<tr>
<td>Population growth (annual percentage)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>73</td>
<td>74</td>
<td>74 (2013)</td>
</tr>
</tbody>
</table>

**Source:** Development indicators (World Bank). IMF data base 2015 (accessed 25 January 2016)

**The extreme poverty line is set at 757 TND per annum and per person in the big cities compared with 571 TND in the non-municipal areas (source: INS, 2012).*** Source INS (2012).

**Human exclusion in Tunisia**

The overall social progress in Tunisia is also reflected in a relatively low level of human exclusion. Notwithstanding the economic and political difficulties faced by Tunisia in recent years, the human exclusion level improved by 18 per cent during the period 2005 to 2015 (Figure 4.6.2).

**Figure 4.6.2: ASDI in Tunisia**

**Source:** Computed using national data.
Disaggregated by gender the level of female exclusion appears lower than that of men, and this difference has persisted over time (Graph 4.6.3). Recent studies reveal, however, that the major gender inequalities are of a political nature, mainly concerning female representation in parliament – a dimension that is not taken into account in the ASDI (Government of Tunisia, 2014).

Figure 4.6.3: Human exclusion by gender

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

Source: Computed using national data.
Note: Human exclusion by gender is based on 5 indicators.

The concentration of economic activities in the coastal areas in Tunisia also explain some of the spatial difference in human exclusion, with higher levels observed in rural areas, notwithstanding a significant improvement outside the main cities (Figure 4.6.4).

Figure 4.6.4: Human exclusion by location

![Graph showing human exclusion by location](image)

Source: Computed using national data.
Note: Human exclusion by location is based on 5 indicators.

The analysis based on the drivers of exclusion shows the predominant role of youth unemployment in total exclusion. In 2015, one third of exclusion throughout the life-cycle was explained by difficulties transitional years between school and access to the job market. This represents an important challenge for Tunisia, particularly as currently almost half of individuals (between 43 and 50 per cent) work in the informal sector (Government of Tunisia, 2014). Furthermore, the increasing contribution of child mortality in overall exclusion indicates that the quality of health services in Tunisia has probably deteriorated over
time. This could be due to limited access to health care for certain groups of the population, or to cost-sharing systems, which were introduced following a recent review of public spending.

**Figure 4.6.5: Drivers of human exclusion in Tunisia**

![Figure 4.6.5: Drivers of human exclusion in Tunisia](image)

*Source:* Computed using national data.

The results disaggregated by gender confirm the relative contribution of unemployment and child mortality in overall exclusion, with a higher contribution among young women (Figure 4.6.6). In fact, while women account for 67 per cent of university graduates (2008-2009), only 25 per cent have access to productive employment opportunities. A recent study shows that 26 per cent of unemployed women do not seek to enter the labour market, and only one in five Tunisians thinks that women have the right to work (Ben Salem, 2011). Even among young women aged 20-29, only one in three has been able to obtain a decent employment in recent years. This trend shows that women are still victims of strong discrimination in the labour market and access to life opportunities (AfDB and others, 2011).

**Figure 4.6.6: Drivers of human exclusion based on gender (2015)**

![Figure 4.6.6: Drivers of human exclusion based on gender (2015)](image)

*Source:* Computed using national data.

*Note:* Human exclusion by gender is based on 5 indicators.

The human exclusion factors disaggregated by location confirm the results observed in overall exclusion (Figure 4.6.7). Youth unemployment, particularly in the urban areas, represents however a huge challenge to ensure inclusive development in Tunisia. The relative contribution of child mortality and poverty in rural...
areas reflect the more inequitable provision of public services – most likely exacerbated by the current downturn in the overall economy.

**Figure 4.6.7: Drivers of human exclusion by location (2015)**

![Figure 4.6.7: Drivers of human exclusion by location (2015)](image)

*Source:* Computed using national data.

*Note:* Human exclusion by gender is based on 5 indicators.

**Policy considerations**

Although an active gender equality policy is currently in place to enforce the principles enshrined in the new Tunisian Constitution of 2014, the persistence of social and cultural norms appears to be hindering the implementation of this policy, particularly with respect to women’s participation in the labour market. Awareness-raising programmes, complemented by specific pro-equality measures - at both the legislative and institutional levels - are being put in force, in order to ensure the success of this policy.

The regional variations in exclusion levels, particularly in the rural areas and in the western and southern regions, are significant challenges facing Tunisia today. A more equitable distribution and implementation of development initiatives is needed to combat human exclusion across all regions, particularly in access to employment, education, health services and improvement of living conditions.

The 2016-2020 national development plan supports the vision anchored on the fight against human exclusion by focusing on advancing human development and inclusion, reducing the gaps across sub regions and protecting fundamental rights, particularly for the poorest and most vulnerable groups of population.

The goal of this new vision is to establish a national social protection platform, which enshrines the principles of fairness and social justice for each individual without discrimination. This platform should guarantee the rights to basic social services, including access to universal healthcare, a guaranteed minimum income for specific groups, especially the elderly, the disabled and the children, and decent housing for low income families. Another priority will be to guarantee the supply of appropriate social services and infrastructure in the health and education sectors in every region of the country.
Conclusion

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

In this context, the ASDI provides an important tool for member States to identify policy gaps and formulate appropriate interventions to reduce exclusion. Through its disaggregation by dimensions and groups of population, the Index can deepen the analysis of exclusion, helping to identify in each country the key drivers and most affected groups. Further, the application of the Index at sub-national level is critical in capturing within-country inequalities, reorienting and placing inclusive policies at the center of national and sub-national planning.

Preliminary results from North Africa have shown that, despite high levels of economic growth, countries are still coping with the challenge of making growth more inclusive and equitable. Many individuals are still excluded from development at different stages of life. Unequal access to social and economic opportunities limits their capacity to become productive and effective agents of change – undermining their potential and the overall social progress. The analysis of the drivers of human exclusion provides critical insights on the structural causes in each country (Table 5). Infant mortality (survival), youth unemployment and poverty are key contributors to human exclusion in five of the six countries. Egypt is the only country where illiteracy represents a high risk of exclusion, which is likely to reflect in a reduced access to productive employment. This emphasizes the need to place child malnutrition, youth unemployment and sustainable livelihoods at the center of development strategies in the respective countries. The sub-national disaggregation of the ASDI has also highlighted important gaps between locations and groups of population, which can guide governments in designing more targeted and effective social policies.

Table 5: Drivers of human exclusion in North Africa

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Infant mortality</th>
<th>Stunting</th>
<th>Literacy</th>
<th>Unemployment</th>
<th>Poverty</th>
<th>Life Expectancy at 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mauritania</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Morocco</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudan</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Tunisia</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* These drivers together contribute more than 50 percent of human exclusion in each of these countries.

Source: ECA, based on country analyses in this report and using latest data.
Achieving inclusive development is not simply about increasing the size of national economies, but also about expanding opportunities that take the rights of individuals into consideration. Global and regional frameworks, such as the 2030 Agenda for Sustainable Development and the AU Agenda 2063, offer an important window of opportunity to move beyond economic growth and place human and social dimensions at the center of the development process.
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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:

\[
[dExv] = \frac{aP_x^y}{1 - aP_x^y}
\]

Where \((P_v^x)\) 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 \(P_v^x > 0.5\), the formula will establish a maximum value of 1, as more than 50 per cent 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 (\(aP_x^v\)), as is the case of literacy rate, the indicator is transformed by applying:

\[aP_x^v = 1 - (aP_x^v)\]

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

\[dExv = \frac{I - aP_x^v}{aP_x^v}\]

Similarly, if \(P_v^x < 0.5\), 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 < \(dEx\) ≤ 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:

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

Where \(P_r\) 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:

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

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Infant mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension of exclusion:</strong></td>
<td><strong>SURVIVAL</strong></td>
</tr>
</tbody>
</table>

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.\(^{13}\) 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:**
\[
[dEx^{Im}] = \frac{Im_{0-1}^{n} - Im_{0-1}^{r}}{Im_{0-1}^{n}}
\]

\([Im^{n}_{0-1}]: \text{Degree of exclusion from basic health services}\)

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

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

Applying the formula:
\[
[dEx^{Im}] = \frac{Im_{0-1}^{n} - Im_{0-1}^{r}}{Im_{0-1}^{n}} \quad (*)
\]

In Excel, use the following condition IF:
- If \(Im_{0-1}^{n} < Im_{0-1}^{r}\), give the value 0
- If NOT apply the formula (*)

**Sub-National Level**

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

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

OR

\[\min(Im_{0-1}) = Im_{0-1}^{\text{subRef}}\]

Hence, the new formula becomes:
\[
[dEx^{Im}] = Im_{0-1} - \min(Im_{0-1}) / Im_{0-1}^{\text{subRef}} \quad (**)\]

Where
\(\min(Im_{0-1})\) is the minimum reference value for infant mortality at the sub-national level.
And \(Im_{0-1}\) is the sub-national estimates of infant mortality [0 – 1] year for each subregion i.

In Excel, use the following condition IF:
- If \(Im_{0-1} < Im_{0-1}^{\text{subRef}}\), give the value 0
- If not, apply the formula (**)
Table A.2: Child stunting

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Child stunting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension of exclusion:</td>
<td>Nutrition</td>
</tr>
<tr>
<td></td>
<td>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).</td>
</tr>
<tr>
<td>Definition:</td>
<td>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).</td>
</tr>
<tr>
<td>Formula:</td>
<td>$[dEx_{ChM}] = \frac{ChM_{28d–59m}^n}{1 – ChM_{28d–59m}^n}$</td>
</tr>
<tr>
<td></td>
<td>$[dEx_{ChM}]$ : Degree of exclusion from health/nutrition</td>
</tr>
<tr>
<td></td>
<td>$ChM_{28d–59m}^n$ : Proportion of children between 28 days and 59 months suffering from chronic malnutrition at the national level</td>
</tr>
<tr>
<td>Computation:</td>
<td>National/sub-national, rural/urban, women/men:</td>
</tr>
<tr>
<td></td>
<td>In Excel, use the following condition IF:</td>
</tr>
<tr>
<td></td>
<td>If $ChM_{28d–59m}^n &gt; 50$, give the value 1</td>
</tr>
<tr>
<td></td>
<td>If not, apply the formula (*):</td>
</tr>
<tr>
<td></td>
<td>$[dEx_{ChM}] = \frac{ChM_{28d–59m}^n}{1 – ChM_{28d–59m}^n}$ (*)</td>
</tr>
</tbody>
</table>
### Table A.3: Literacy rate (15-24 years)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Literacy rate (15-24 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension of exclusion: Education</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Definition:</td>
<td>Percentage of population between 15 and 24 years of age who can read and write (UNESCO)</td>
</tr>
<tr>
<td>Formula:</td>
<td>[ dEx_{15-24}^{Lr} = 1 - \frac{Lr_{15-24}}{Lr_{15-24}} ]</td>
</tr>
<tr>
<td>[ dEx_{15-24}^{Lr} ] : Degree of exclusion from access to quality education</td>
<td></td>
</tr>
<tr>
<td>( Lr_{15-24} ) : Literacy rate among 15-24 years old</td>
<td></td>
</tr>
<tr>
<td>Computation: National and sub-national:</td>
<td></td>
</tr>
<tr>
<td>In Excel, use the following condition IF:</td>
<td></td>
</tr>
<tr>
<td>IF ( Lr_{15-24} ) &lt; 50 give the value 1</td>
<td></td>
</tr>
<tr>
<td>IF NOT apply the formula (*):</td>
<td></td>
</tr>
<tr>
<td>[ dEx_{15-24}^{Lr} = 1 - \frac{Lr_{15-24}}{Lr_{15-24}} ] (*)</td>
<td></td>
</tr>
</tbody>
</table>
Table A.4: Youth unemployment (15-24 years old)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Youth unemployment (15-24 years old):</th>
</tr>
</thead>
</table>
| 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 without work but available for and seeking employment (ILO definition). 14 |
| Formula: | \[
\text{[dEx}^n_{Yu}] = \frac{Yu^n_{15-24}}{1 - Yu^n_{15-24}} \\
\text{[dEx}_n^{Yu}] : \text{Degree of exclusion from access to the labour market} \\
Yu^n_{15-24} : \text{Proportion of individuals aged 15-24 years who are unemployed, measured at national level} |
| Computation: | National and sub-national  
In Excel, use the following condition IF:  
IF \(Yu^n_{15-24} > 50\), give the value 1  
IF NOT, apply the formula (*):  
\[
\text{[dEx}^n_{Yu}] = \frac{Yu^n_{15-24}}{1 - Yu^n_{15-24} (*)} 
\]

---

14 Definitions of unemployment and youth age group differ across countries.
<table>
<thead>
<tr>
<th>Indicator</th>
<th>National-based poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension:</strong></td>
<td>Means of subsistence</td>
</tr>
<tr>
<td>A major form of exclusion during adulthood can be reflected in the inability of an individual to ensure the basic needs for them and their families to live a decent life. This is reflected in the level of poverty, based on consumption, calorie in-take or income (according to the poverty line set at national level).</td>
<td></td>
</tr>
<tr>
<td><strong>Definition:</strong></td>
<td>Proportion of population below the national poverty line</td>
</tr>
<tr>
<td><strong>Formula:</strong></td>
<td></td>
</tr>
</tbody>
</table>

\[
[dEx_{Np}] = \frac{Np^n_h}{1 - Np^n_h}
\]

\[
[dEx_{Np}] : \text{Degree of exclusion from basic means of subsistence}
\]

\[
Np^n_h : \text{Proportion of population living below the national poverty line}
\]

<table>
<thead>
<tr>
<th>Computation:</th>
<th>National and sub-national</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Excel, use the following condition IF:</td>
<td></td>
</tr>
<tr>
<td>IF ( Np^n_h &gt; 50 ) give the value 1</td>
<td></td>
</tr>
<tr>
<td>IF NOT apply the formula (*):</td>
<td></td>
</tr>
</tbody>
</table>
| \[
[dEx_{Np}] = \frac{Np^n_h}{1 - Np^n_h} \quad (*)
\] |
## Table A.6: Life expectancy at 60

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Life Expectancy at 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
<td>A key form of inclusion in later stages of life deals the ability of the elderly to remain socially integrated and live a decent life. In this regard, life expectancy at 60 may be a good proxy of their quality of life and a reflection of the social security provided to them by the state. The measurement of exclusion in this area is computed using national life expectancy at 60, as compared to the average life expectancy at 60 in lower middle-income countries.</td>
</tr>
<tr>
<td>Definition</td>
<td>Average number of years that a person of that age can be expected to live, assuming that age-specific mortality levels remain constant. (WHO)</td>
</tr>
</tbody>
</table>
| Formula | \[ dEx^{Le} = \frac{Le^{Ref}_{60} - Le^{n}_{60}}{Le^{Ref}_{60}} \]  
\[ [dEx^{Le}] : \text{Degree of exclusion from surviving at old age} \]  
\[ Le^{Ref}_{60} : \text{Reference value of life expectancy at 60 years} \]  
\[ Le^{n}_{60} : \text{National average life expectancy at 60 years} \]  
| Computation: National Level | Applying the formula: \[ dEx^{Le} = \frac{Le^{Ref}_{60} - Le^{n}_{60}}{Le^{Ref}_{60}} \]  
\[ \text{In Excel, use the following condition IF} \]  
\[ \text{IF } Le^{Ref}_{60} < Le^{n}_{60} \text{ give the value 0} \]  
\[ \text{IF NOT apply the formula (*)} \]  
| Computation: Sub-National Level |
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)\textsuperscript{15}. 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 $\text{Xydis}$;
Determine the median ($m$) of this proportion, for a given year.
Then, apply the following criteria:
If $\text{Xydis} > m$, then $\text{Lei} = \text{Len} \times [1 + (\text{Xydis} / 100)]$
If $\text{Xydis} < m$, then $\text{Lei} = \text{Len} \times [1 - (\text{Xydis} / 100)]$
If $\text{Xydis} = m$, then $\text{Lei} = \text{Len}$
Once the life expectancy at 60 has been determined for each sub-region, the formula for computing the ASDI for Indicator 6 at sub-national level is the following:
After having obtained the estimations for life expectancy at 60 at sub-national level, the computation of the ASDI at sub-national level is as follows:
We determine the maximum value of life expectancy at sub-national level, which becomes our new reference value, in a given year. It is called $\text{Max}\left(\text{Le}_{\text{Sub}60}\right)$ and the new formula becomes:
$$\text{[dEx}^{\text{Le}}_{\text{i}}]_i = \frac{\text{Max}\left(\text{Le}_{\text{Sub}60}\right) - \text{Le}_{\text{Sub}60}^{\text{i}}}{\text{Max}\left(\text{Le}_{\text{Sub}60}\right)} \ (*)$$
where $\text{Max}\left(\text{Le}_{\text{Sub}60}\right) = \text{LSubRef}_{60}$ is the maximum reference value of life expectancy at 60 at the sub-national level
And $\text{Le}_{\text{Sub}60}$: are the sub-national estimates of life expectancy at 60 for each sub-region.
In Excel, use the following condition IF:
IF $\text{LSubRef}_{60} \lesssim \text{Le}_{60}^{\text{Sub}}$, 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:

\[ H_{Ex}^v = d_{Ex}^{im} + d_{Ex}^{chm} + d_{Ex}^{Le} + d_{Ex}^{Yu} + d_{Ex}^{np} + d_{Ex}^{Le} \]

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

Estimations at sub-national levels and across time

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

Exclusion between subgroups of population

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

For a very long time, per capita GDP was used as the sole indicator of economic growth in most countries and regions in the world. In 1990, UNDP made a major breakthrough in the measurement of human development with the publication of its first Human Development Report (UNDP, 1990). The Human Development Index was introduced on the assumption that economic growth, using traditional income-based measures such as GDP per capita, was not sufficient to reflect progress in human and social development. The index comprises three main dimensions of well-being: 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.12

While the Human Development Index has had much resonance in the development discourse over the years, some people believe that the indicators of the index are still too broad and 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 Human Development Index 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 simplicity of the index 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 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 a global partnership for development (Goal 8). Since their adoption, the Goals have probably become the most important framework for development cooperation worldwide, catalysing 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** 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).

- **The International Labour Organization’s decent work indicators** 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 (ILO, 2012a).

12 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).
• The Organization for Economic Cooperation and Development’s social indicators 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 (OECD, 2011).

• 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\(^1\) 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 (MPI, 2011).\(^2\)

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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\(^1\) See http://hdr.undp.org/en/content/multidimensional-poverty-index-mpi.

\(^2\) See box 1 for a comparative analysis of the Human Development Index, the Multidimensional Poverty Index and the African Social Development Index.