THE AFRICAN SOCIAL DEVELOPMENT INDEX
Measuring Inclusive Development for Structural Transformation

United Nations Economic Commission for Africa
THE AFRICAN SOCIAL DEVELOPMENT REPORT
A tool for assessing inclusive development in Africa
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Executive summary

Despite two decades of fast and sustained economic growth, Africa has yet to translate its economic gains into meaningful social development outcomes. Considerable inequalities persist in many countries, and growth has not been sufficiently inclusive and equitable for all segments of the population. As a result, exclusion has become a challenge for Africa’s future development. The continent’s transformation will only be successful and sustainable if it is also inclusive, that is if each and every individual reaps the benefits of growth and participates in social and economic development.

The construction of an index to measure exclusion in Africa is the outcome of a special request by member States to have an African tool capable of capturing the continent’s current and specific social challenges, while helping member States to develop more inclusive and equitable policies. The proposed African Social Development Index is built on the important premise that social development should be reflected in improved human conditions. Too often, the focus is on measuring contextual elements, such as improved service delivery or increased investments in social sectors, which are expected to enhance livelihoods. However, it is a challenge to translate contextual factors directly into concrete outcomes at individual level. Following a life-cycle approach, the Index aims to measure the impact of social policies on human exclusion in six key dimensions of well-being: survival, health, education, employment, productive income and quality of life. One of the key features of the Index is that it can be measured across time and disaggregated by gender and geographical location. This helps to capture patterns of exclusion and inequality within and between countries.

The Index has been developed for and with African member States through a consultative process, taking into account Africa’s current and emerging social challenges. It is a simple, intuitive policy tool that African countries can use to plan and improve the effectiveness of their social policies. As such, the Index is intended to enhance Africa’s capacity to develop policy options that can help to build more inclusive and equitable societies on the continent.

In this sense, the Index provides an effective policy tool for African countries to accelerate the path towards inclusive development and set the agenda for social transformation on the continent. As a monitoring mechanism, the Index could be instrumental in strengthening regional and global commitments to social development, including the African Social Policy Framework and the New Partnership for Africa’s Development (NEPAD) programme for social and human development. It also resonates well with the priorities spelled out in the new African Union Agenda 2063 and the Common African Position beyond 2015, which give prominence to issues of inequality and exclusion.
Chapter I. Introduction

A. Background

Over the past decade or so, African countries have experienced unprecedented economic growth and shown resilience to the global downturn affecting most of the world’s economies. Growth on the continent has averaged over 5 per cent, with some countries posting 7–11 per cent growth in gross domestic product (GDP) in recent years. Despite this remarkable stride, however, the continent is yet to transform its economies and achieve the level of social development registered in other regions. The continent is still fraught with vertical and horizontal inequalities caused by differences in income, ethnicity, gender, age and disability. Unemployment, especially among young people, is deepening, while basic social services remain highly inadequate and inaccessible to many people across the continent.

The dominant view is that Africa has for a long time focused on economic growth, with the expectation that improvements in social development would follow. Human and financial constraints have led to huge capacity gaps. At the same time, limited social protection in many countries has exacerbated the exclusion of the poorest and most marginalized population groups. Apart from having limited access to social and economic opportunities, these groups are also more vulnerable to external shocks, such as food insecurity and climate change. This has reduced their productive capacities, pushing them further into poverty and exclusion.

Ensuring equitable and inclusive growth in Africa has therefore become an urgent development priority, and a condition for building more sustainable and cohesive societies. However, there is a technical gap in measuring the impacts of policy actions and strategies on individual livelihoods. Policy interventions based on aggregate figures are not conducive to optimum decision-making, and the absence or inadequacy of relevant data and monitoring mechanisms in social areas lead to weak policy formulation and planning.

B. Rationale behind the 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 (United Nations, 2013). On the continent, this takes on further resonance in the context of Agenda 2063 and the emerging development framework beyond 2015, whose vision is anchored on sustainability and reinforces the priorities of inclusion and transformation.

Inclusive growth is a key driver of social development. 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, social exclusion and participation. At the United Nations Conference on Sustainable Development in 2012, global leaders renewed their commitment to promoting social integration through more cohesive and inclusive societies. Following the Conference, the need to tackle social exclusion as an objective per se started to gain much resonance in development discourse.

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).
At the regional level, African Governments have also become increasingly aware of the centrality of social inclusion in the continent’s development agenda. This is reflected in their commitment to the 1995 Copenhagen Declaration and Programme of Action, underscored by the Windhoek Declaration on Social Development and Social Policy Framework for Africa, which was adopted in 2008 by the African Union Conference of Ministers in charge of Social Development, and subsequently endorsed by the African Union Heads of State and Government Summit in January 2009. The African Social Policy Framework has been instrumental in advancing the NEPAD priorities in terms of social and human development across the continent. African countries have also taken action to tackle specific social issues, 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.

For a number of reasons, however, the implementation of these commitments has not led to the desired outcomes. First, until recently, only a few people had a clear understanding of the challenge of social inclusion, and how it could be addressed and incorporated into national development plans and strategies (ECA, 2009). Secondly, so far none of the internationally agreed development goals, including the Millennium Development Goals, have explicitly dealt with social inclusion. Capacity gaps persist and there is a lack of mechanisms to assess social inclusion in Africa, leading to inadequate statistical follow-up and social policy formulation.

To respond to these challenges, at the second session of the Committee on Human and Social Development, in 2011, member States called upon the Economic Commission for Africa (ECA), to develop an index to monitor social outcomes, with a view to improving the capacity of States to implement appropriate inclusive policies. The Index also responds to ongoing debates on the global and regional development agenda beyond 2015, with prominence given to the role of social inclusion and equality in development.
Chapter II. A focus on human exclusion

A. Introduction

Over the past decade, progress towards more inclusive development in Africa has been the expectation rather than the norm. Some countries, such as Botswana and Mauritius, have succeeded in translating economic development into more integrated and inclusive societies. In others, a number of factors, including food insecurity, population displacement, armed conflict and other disruptions, have led to increased marginalization of individuals and groups in society. This is also true of countries already undergoing social progress.

While Africa is among the fastest growing regions – catalysed by rapid economic and social transformation – meeting the needs of its most vulnerable and excluded population groups remains its greatest challenge. Poverty is still rampant in many areas and vulnerable employment is widespread, especially among women and young people. In 2012, youth unemployment in Africa reached 84.9 per cent for women and 70.6 per cent for men, a gap that has widened over the past two decades (ILO, 2013). Poor children in Africa are more than twice as likely to be underweight than children from the wealthiest 20 per cent of households. Additionally, young adolescents from the poorest households are up to three times more likely to be out of school than those from the richest households. Girls of lower secondary-school age are also more likely to be out of school than boys, regardless of the wealth or location of the household (United Nations, 2012). Such forms of inequality need to be tackled, as they are likely to impair development and fuel social unrest and conflict, creating a vicious circle of poverty and exclusion.

B. Defining human exclusion

Exclusion is a complex, multidimensional phenomenon that generally involves the inability of individuals to participate fully in the economic, social and political aspects of life. This is often because of constraints rather than by choice (Lee and Murie, 1999). Many attempts have been made to define exclusion without reaching a general consensus. The International Labour Organization defines exclusion as "a state of poverty in which individuals cannot access the living conditions that would enable them to both satisfy essential needs (food, education, health, etc.) and participate in the development of the society in which they live" (Smelser and Baltes, 2001). Others have emphasized the right-based approach to exclusion by defining it as the "disintegration and fragmentation of social relations and hence a loss of social cohesion" due to "the denial of civil, political, social, economic and cultural rights" (Room, 1995; UNHCR, 2005).

Exclusion is strongly associated with poverty and deprivation. However, while poverty is generally understood as the lack of material resources needed to participate in society, exclusion goes beyond the economic dimension by emphasizing its relational aspects of participation in society (Sen, 2000). Also, it is understood that "income poverty is neither a necessary nor a sufficient condition for exclusion, as non-poor may be excluded from participation and some poor may not necessarily be or feel excluded" (Klasen, 1998). Just like poverty, however, exclusion is a relative concept, as it deals with social relationships and people's opportunities to alter their situation.

In this sense, the construct of exclusion may differ from country to country, as social patterns and processes are strongly influenced by cultural and social norms. In developed countries, for instance, patterns of social inclusion are generally institutionalized and often defined in relation to...
formal employment and participation. In developing countries, however, defining what is considered the norm and what is not is more complicated, as many social relations are still embedded in cultural oral traditions. In Africa, the absence of well-defined welfare states and formal labour markets make the interpretation of social exclusion more problematic (Saith, 2007). Therefore, to understand the underlying causes and dimensions of social exclusion in Africa, there is a need to take into account the specific social, economic and cultural contexts.

The present report suggests a relatively new definition of human exclusion. The intention is to focus on the impact that a range of contextual factors and their interactions with social policies and programmes have on individual well-being. In this sense, human exclusion can be defined as the reflection of economic, political, institutional and cultural barriers that are manifested in deprived human conditions and that limit the capacity of individuals and societies to grow with equity and to participate in the social and economic transformation of their continent.

C. Determinants of human exclusion in Africa

As mentioned earlier, exclusion is a complex multi-faceted phenomenon that can be the cause as well as the consequence of poverty. It can also be the result of discrimination and stigmatization targeting a specific population group.

Several studies have tried to identify the main causes of exclusion in Africa. Some of the causes are direct, ranging from inadequate income and material resources to unequal access to services and the distribution of productive assets, such as land. Other intermediate or underlying factors have more to do with unequal rural-urban development; discrimination based on gender, race, disability, ethnicity and HIV/AIDS status; limited social protection mechanisms; internal and persistent conflicts; market failures; and unenforced rights (Adato and others, 2005).

Poverty undoubtedly plays a vital role in exclusion. Poor people are more vulnerable to external shocks, and are more likely to be excluded from access to basic social services and economic opportunities. Poorer households also suffer from different levels of deprivation in terms of education, food security, safe drinking water and sanitation, adequate housing and health care. Additionally, poverty can also be a consequence of exclusion from economic opportunities and productive assets. The reason is that to a large extent communal systems of land tenure and inheritance still determine access to land and property in Africa.

The poverty and exclusion in Africa are not gender neutral. Cultural and social norms make women and girls more likely than men to be excluded from access to productive resources, social services and participation in decision-making processes (ECA, 2012a). In employment for instance, women are generally low-paid, part-time or subsistence workers. Meanwhile, gender discrimination is entrenched through recruitment, promotion, working conditions and workplace dynamics, including harassment. Gender biases also exist in the eligibility rules for unemployment benefits and other social protection measures. Such gender inequalities, often compounded by lower health and educational outcomes, result in higher incidences of poverty and exclusion among women, who endure lifelong effects.

Unemployment can be another major cause of exclusion on the continent. The share of youth unemployment is soaring in many countries: young people account for up to three fifths of the total unemployed population (African Development Bank, 2012). Education and training opportunities are still limited for many young Africans; as a result they lack the skills and resources needed to meet the demands of formal labour markets and are therefore excluded from them.
With increasing urbanization, largely driven by the rural-urban drift and demographic growth, the proportion of those socially excluded in large cities is also rising. Many poor people live in shantytowns or slums devoid of infrastructure, and lack access to secure tenure and basic social services. The impacts are indeed greater for vulnerable groups such as the elderly, young people, children and people with disabilities. In some countries, racial discrimination continues to cause exclusion from decent work opportunities. A case in point is South Africa, where the rate of unemployment among black Africans is six times higher than for white people (ECA, 2008).

Conflicts and instability are a cause and consequence of exclusion, especially for people who are displaced as a result. Children in conflict situations are likely to be deprived of education, healthcare and protection and are highly exposed to abuse, violence and exploitation (UNICEF, 2006). Destruction of physical infrastructure, including roads, health and education facilities, as well as increased personal insecurity and reduced personnel and supply of social services, all exacerbate the risk of exclusion for internally displaced people and refugees.

Finally, stigmatization on the basis of disability, race or HIV/AIDS status continues to be a major cause of exclusion in Africa. This is particularly true of sub-Saharan Africa, which remains the subregion with the highest incidence of HIV/AIDS in the world. In sub-Saharan Africa, individuals with HIV remain largely marginalized from society and their own families, and have difficulty finding or keeping a job.
Chapter III. A new paradigm for inclusive development

A. Introduction

As described in chapter II, exclusion is a multidimensional phenomenon, whose contours are difficult to define without a clear framework on the aspects of human exclusion to be assessed and the manner in which to do that. It is acknowledged that, despite strong economic growth, an “excluded” society runs the risk of deterring human and social development. Indeed the continent is experiencing this, with its sustained economic growth unable to ensure inclusive and equitable distribution of its benefits across populations. There is evidence that progress towards inclusive development in Africa is too slow and its drivers too limited to meet the needs of its populations. This state of affairs increases exposure to economic volatility and vulnerability to external shocks, particularly for the poorest population groups. It is critical to ensure that these groups assume their active role in the development process, so as to accelerate the transition towards a more sustainable, inclusive and equitable growth.

Figure 1: From basic structural transformation to growth with equity

B. A paradigm shift

Recent debates have brought to the fore the lack of a transformative effect of economic growth on social and human development (ECA, 2013). In its latest report, the United Nations High-level Panel on the Post-2015 Development Agenda recommended that the new agenda should be guided by the vision of “eradicating extreme poverty once and for all in the context of sustainable development”. While envisioning the development agenda beyond 2015 as universal, the Panel has proposed that it should be driven by five major transformative shifts. These are: (a) leave no one behind; (b) put sustainable development at the core of the agenda; (c) transform
economies for jobs and inclusive growth; (d) build peace and effective, open and accountable institutions for all; and (e) forge a new global partnership (United Nations, 2012).

This new paradigm is also reflected in regional initiatives that have placed sustainability and inclusiveness at the core of a development agenda for Africa, including Agenda 2063 and the common African position on the development agenda beyond 2015 (AUC and ECA, 2013). In this context, the economic transformative agenda seems to be well defined with four essential and interrelated processes, namely: a declining share of agriculture in GDP and employment; a rural-urban drift that stimulates the process of urbanization; the rise of a modern industrial and service economy; and a demographic transition from high to lower rates of births and deaths, associated with better health standards in developed and urban areas (ECA, 2013b). However, there is recognition that the human and social development impacts underpinning this process require further elucidation.

One of the key components of this framework is the need to address the excluded groups that underpin a balanced transformative agenda. This would provide the basis for redressing country-specific exclusion patterns, through effective policy formulation, at both national and sub-national levels. As part of this effort, ECA has proposed a new paradigm for the social transformation of Africa, where eliminating human exclusion is at the centre of inclusive development. In this context, human exclusion can be defined as “the reflection of economic, political, institutional and cultural barriers that are manifested in deprived human conditions and that limit the capacity of individuals and societies to grow with equity and foster social and economic transformation.”

C. 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 effects, exclusion, whether based on income, gender, spatial, political or other social factors, has critical social costs. Indeed, the drivers of exclusion are often determined by the interaction of a series of contextual elements, as illustrated in figure 2.2

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2 For more details, see also ECA (2014).
• Social factors include elements associated with access to basic social services, including health, education, and social security, among others.

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

• Political-institutional factors encompass government policies and programmes aimed at solving instability and insecurity, ensuring political participation and access to civil and human rights.

• Cultural factors define the norms and surroundings in which a person lives in terms of cultural-based or gender-based barriers.

Within this framework, the overall depth of human exclusion can therefore be defined as a function of the levels of socio-economic, institutional, political and cultural exclusion, which manifest themselves in different forms and outcomes, as described in chapter IV.
Chapter IV. African Social Development Index

A. Conceptual framework

The new paradigm for inclusive development presented in chapter III is based on the premise that exclusion can have different manifestations at different stages of a person’s life. This is built on the assumption that: the risk of being excluded is not static but rather dynamic, and; that countries need to define and implement policies that address the various dimensions and manifestations of exclusion to help reduce particular vulnerabilities faced by individuals in a lifetime.

Adopting this life-cycle perspective to exclusion, the first vulnerability that an individual can face in their lifetime is survival, which also depends on what occurs from conception through pregnancy. A child’s survival during the first critical 28 days of life depends on the provision of adequate health care and nutritional requirements, which can have major impacts on its physical and cognitive development during the first years of life. Indeed, child malnutrition largely depends on factors such as limited access to food (both in terms of quantity and quality), health services, water, sanitation as well as inadequate feeding practices. Evidence confirms that malnutrition suffered during childhood has irreversible consequences on educational achievements as well as on future opportunities and aspirations in life (ECA, 2013a).

By the age of six, children vulnerable to exclusion are deprived of services ranging from health care to education. The formative age of children, between 6 and 14 years, is critical to their future development. Children who are unable to obtain basic numeracy and literacy skills during those years will find themselves disadvantaged in their access to productive employment and income-generating activities later in life.

This is most likely to result in the inability to find a decent, well-paid job, and is the most critical vulnerability that a young person can face after the formative years. Levels of unemployment and underemployment in Africa are soaring, largely due to the absence of the skills required to match the labour market demand (International Labour Organization, 2012b). Yet, the contribution that a young person can bring to the economy goes beyond the individual, as there are many important spill-over effects on his/her social and political participation in life that transcend generations (Pieters, 2013). This is particularly important for Africa where countries can reap the benefits of a large demographic dividend.

The income generated by productive employment is critical in ensuring a sustainable livelihood for individuals and their families, as it enables them to satisfy the basic need for food, shelter and access to social services, etc. The absence of these basic means is likely to exclude an individual from development and from reaping the benefits of growth during the most productive period of their life.

Finally, when an individual reaches 65, his or her capacity to participate in social and economic activities and live a decent life will depend on the effective provision of health and social services, whose coverage should increase as individuals get older. Although it is very difficult to assess the quality of life based on life years, it is commonly assumed that an increase in life expectancy after 60 is associated with higher living standards.
Table 1: Exclusion throughout the life cycle

<table>
<thead>
<tr>
<th>Birth to 28 days</th>
<th>Birth</th>
<th>Survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 days to 5 years</td>
<td>Early childhood</td>
<td>Nutrition/health</td>
</tr>
<tr>
<td>6-14 years</td>
<td>Formative years</td>
<td>Quality basic education</td>
</tr>
<tr>
<td>15+</td>
<td>Entering the labour market</td>
<td>Access to productive employment</td>
</tr>
<tr>
<td>25+</td>
<td>Productive life</td>
<td>Maintaining household out of poverty</td>
</tr>
<tr>
<td>60+</td>
<td>Old age</td>
<td>Living a decent life in advanced age</td>
</tr>
</tbody>
</table>

These six phases of life and the corresponding dimensions of exclusion – as illustrated in table 1 – provide a clear understanding of the minimum requirements that an individual should enjoy to be part of the development process of their country or society. To make this framework operational, each dimension has been associated with one indicator that best captures the aspects of exclusion described above (see figure 3).

Figure 3: Indicators that measure human exclusion in Africa using a life-cycle approach

The decision to select the indicators during the consultative phase was based on two main criteria: (a) readily available data from African countries, possibly at various tiers of administration; and (b) impact rather than output indicators. It is therefore important to note that while some variables 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.

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3 The selection of indicators has followed a strong participatory process and consultations with experts from member States. The methodological foundations of the Index are detailed in annex 1.
B. Differential impacts of exclusion on women and men

In each phase of life, women and girls are affected by vulnerabilities in different ways from their male counterparts and to a different extent. This stems from the differences in the roles that men and women play in society, in their access to and control over resources, and in interests and concerns that can determine their inclusion or exclusion from the development process.

Some of these differences are intrinsic to gender, while others are the results of cultural biases and social factors. Gender-based discriminations affect women and girls throughout their life cycle. As such, women and girls generally bear the responsibility of unpaid care work; 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 affect their future development and ability to participate in society. The effects can vary across dimensions and stages in life. For instance, girls in developing countries who survive early life stages and reach adulthood have a life expectancy that approaches that of women in developed countries. The gap will 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, because of their lower social status girls are more at risk of malnutrition than boys (Smith and Haddad, 2000).

Early marriage and other traditional practices have a significant bearing on girls’ educational achievements, lowering their social and economic opportunities and aspirations in life. Whether they are based on contextual factors or intrinsic to gender, there is a need to tackle these differential outcomes through more targeted interventions because policies that do not adequately address such differences tend to perpetrate gender inequalities over time (Hedman, 1996; UNECE, 2010).

C. 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 often lack the minimum social and economic infrastructure – including adequate basic social services (education, health and sanitation) and decent job opportunities – that would allow an individual to develop to their full potential. The latest findings also point to higher rural poverty rates in Africa (ECA and others, 2014b). At the same time, African cities are 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 Index seeks to address these differential impacts of exclusion based on gender and location. This will make it possible to capture inequalities within countries and social groups that would otherwise remain unaccounted for. The findings should guide and improve policy targeting and development planning processes at the local level and on different population clusters.
D. Implementation strategy for the Index

The application of the Index is led by national implementation teams put in place in each implementing country, with members drawn from key government institutions – including ministries of planning and those in charge of social sectors, and national statistical offices, under the leadership of ministries of economy and finance. Five countries (Cameroon, Kenya, Morocco, Senegal and Zambia) are currently piloting the tool in the region and a rollout phase was initiated in 2014. National and subregional reports will be produced on a regular basis, depending on the availability of up-to-date statistics and relevant information in each country.

The project also comprises a strong capacity-building component as the teams receive training on the methods and utilization of the tool before processing data and country results. As such, the Index not only offers a simple policy tool to measure human exclusion over time, but also strengthens national capacities for ensuring that the tool is sustainable.
A question that seems to recur in development circles in Africa and beyond is: Why another index? We have sought to respond to this question by highlighting the value addition that the African Social Development Index can bring, compared to two other composite measures: the Human Development Index and the Multidimensional Poverty Index. Noted below are prominent features and comparative advantages of each of these indices.

**Human Development Index (1990)**

The Human Development Index ranks countries globally according to health, education and material resources. First developed in 1990 by the United Nations Development Programme (UNDP), it is now considered by some as outdated and insufficient to reflect the country specificities and multi-faceted nature of human development. The Index achieved great popularity over the last two decades or so, largely because of its simple, intuitive approach to development and the possibility of ranking countries, given that it uses standardized and easily comparable data. However, failure to capture inequalities within countries and excessive emphasis on rankings are major drawbacks of the Index.

**Multidimensional Poverty Index (2011)**

The Multidimensional Poverty Index was developed by the Oxford Poverty and Human Development Initiative and UNDP, as a successor of the Human Development Index. It is a composite index that combines income and non-income based measures, using an approach pioneered by Townsend (1979) and later by Sen (1985). It has been applied to 91 countries globally and is considered as the main metrics for the implementation of the emerging sustainable development goals and the post-2015 development agenda. The Index aims to provide an overarching framework, whose dimensions, indicators and aggregate methods can be adjusted to reflect national priorities. Like the Human Development Index, it can be used to study changes over time. However, the Multidimensional Poverty Index includes a large number of indicators, which results in data gaps, particularly in the case of developing countries, and this may be its main drawback.

**African Social Development Index (2013)**

To ensure sustainable and equitable development, the Index focuses on human inclusion over the life cycle. Its calibration to Africa’s development challenges makes it possible to capture the specific manifestations of exclusion faced by African countries today as they undergo transformation. The indicators were selected through high-level consultations with member States, and robust statistical methods were used to define weights (principal component analysis (PCA) and factor analyses). While the Index resists setting an arbitrary cut-off point for defining excluded groups, it is based on an ordinal score normalized of zero to one. The main purpose of the Index is to: measure existing inequalities and exclusion patterns within countries and different population groups, and; assess national efforts and the effectiveness of social policies in reducing human exclusion over time.
Conclusion and way forward

Preliminary results of the Index have pointed to the need for African countries to refocus their development agenda in order to address human exclusion more effectively and deal with its underlying as well as structural causes. Exclusion is a multidimensional phenomenon, and therefore, its extent and determinants can be better understood by examining the wide range of its dimensions and manifestations throughout the life cycle (Sen, 2000).

Exclusion is clearly a major hindrance to accelerating progress towards social and human development in Africa. Evidently, people’s living conditions will not improve much without a more inclusive approach to growth and development. There is a need to tackle exclusion as it can be a recipe for social unrest and threaten peace and political stability in the region.

Through its various applications, the Index provides an important policy tool for member States to identify policy gaps and formulate appropriate interventions to ensure that every individual is part of the development process. Through disaggregation by social group and across dimensions, the Index can also deepen the analysis and understanding of human exclusion, and thereby help identify the key drivers of exclusion in each country. Additionally, the application of the Index at subnational level will be critical in capturing within-country inequalities, thereby reorienting key policy options and placing social protection strategies at the centre of national and subnational planning.

Indeed, achieving inclusive development is not simply about increasing the size of national economies, but about learning and shaping enduring opportunities that take the rights of individuals into consideration. Global and regional frameworks, such as the post-2015 development agenda and Agenda 2063, offer an opportunity to move beyond growth, integrate social dimensions and include every individual in the development process.

The piloting of the Index in five African countries has made it possible to test and further refine the tool, making it more responsive to the needs of member States. With the conceptual and methodological frameworks of the Index defined, a policy-mapping framework is being developed as part of the follow-up strategy to help identify and assess the effectiveness of social policies in reducing human exclusion. This exercise will be a major step forward in using the Index for development planning and effective policy targeting. It will also ensure the critical buy-in of member States and the involvement of other relevant stakeholders, including development partners, non-state actors and regional strategic institutions concerned with social protection and inclusive social policies.
References


Annex 1: Methodological foundations of the African Social Development Index

The purpose of this annex is to present the equations and calculation process for estimating the Index in each country.

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

\[ [dE^x] = \frac{\alpha \times P^v_x}{1 - \alpha \times P^v_x} \]

Where,

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

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

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

\[ \alpha \times P^v_x = 1 - (\alpha \times P^v_x); \]

Hence the "distance" in the depth of exclusion can be calculated by applying the following equation:

\[ [dE^x] = \frac{1 - \alpha \times P^p_x}{\alpha \times P^p_x} \]

As described above, if \( P^p_x < 0.5 \), the formula will establish a maximum value of 1.

After normalization, the depth of exclusion will result in a score that will range between \( 0 > dE^x \leq 1 \), which will provide the proportional distance between those fully participating in key dimensions of development and those excluded from development 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 should be applied to estimate the distance to a desired or expected situation, as follows:
Where, 

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

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

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

**Six dimensions of analysis of the Index**

This section reviews the six indicators selected to assess a dimension of exclusion as well as the model for estimation.

**Dimension 1 – Survival**

The number of infants who do not survive the neonatal period, or 28 days 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\(^4\). This situation is often a reflection of exclusion from health facilities. It is an important variable that mirrors conditions of health systems and respected institutions use it regularly to measure the adequacy of health systems (WHO, 2002). As such, the measurement of human exclusion in this area is given by the following distance function:

\[
[dE_x^{\text{ne}}] = \frac{Nm_{0-27d}^r - Nm_{0-27d}^n}{Nm_{0-27d}^n}
\]

Where,

\[ dEx^{\text{Nm}} \] = Depth of exclusion in neo-natal mortality

\[ Nm^r_{0-27d} \] = Reference value for neonatal mortality

\[ Nm^n_{0-27d} \] = National estimation for neonatal mortality

**Dimension 2 – Child malnutrition**

The second dimension of exclusion identified in this model 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 a basic human and social exclusion from the equitable delivery on basic services and health (ECA, 2013a). Hence, chronic malnutrition has been identified as a relevant indicator for measuring limited access to early child development. The equation to estimate the depth of exclusion in this dimension may be presented as follows:

\[
[dEx^{\text{ChM}}] = \frac{\propto \ ChM^n_{28d-59m}}{1 - \propto \ ChM^n_{28d-59m}}
\]

Where,

\[ dEx^{\text{ChM}} \] = Depth of exclusion in child nutrition

\[ \propto \ ChM^n_{28d-59m} \] = Proportion of children aged between 28 days and 59 months who are affected by chronic malnutrition, \( \propto \) at national \( n \) level.

---

5 As Africa is aiming to become a middle-high income region, the reference value considered here is the average for middle-high income countries.
**Chronic malnutrition**

The prevalence of child malnutrition is the percentage of children under five, whose height for age (stunting) is more than two standard deviations below the median for the international reference population aged 0-59 months. For children up to two years old, height is measured by recumbent length. For older children, height is measured by stature while standing. The data are based on the World Health Organization’s new child growth standards released in 2006.


**Dimension 3 – Functional literacy**

A third manifestation of exclusion in the life cycle may be associated with the access to basic education needed to increase opportunities for work and social integration later in life. In order to obtain a proxy of the effectiveness of educational efforts in a given country, it is appropriate to use indicators, such as literacy rates observed during educational years, which measure exclusion at the impact level. Africa still faces major challenges in addressing educational outcomes, the overall rate of illiteracy on the continent having increased from 52 percent in 1990, to 63 percent in 2008. Nevertheless, for the specific age group (15 to 24 years), illiteracy rates have dropped by 6 per cent over the same period.

The equation to estimate the depth of exclusion in literacy may be written as follows:

\[
[dEx^{Lr}] = \frac{1 - \alpha \frac{Lr^{v}_{15-24}}{} }{\alpha \frac{Lr^{v}_{15-24}}{}}
\]

Where,

\[dEx^{Lr} = \text{Depth of exclusion in education}\]

\[\alpha \frac{Lr^{v}_{15-24}}{} = \text{Literate proportion of the population from 15 to 24 years of age}\]

**Literacy rate, youth total (percentage of people aged 15-24) - (Lr)**

This measures the number of people aged 15 to 24 years who can read, write and understand a short simple statement on their everyday life, divided by the population in the same age group. Generally, “literacy” also encompasses “numeracy” – the ability to make simple arithmetic calculations.


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**Dimension 4 – Youth unemployment**

Another form of exclusion faced by individuals when they complete their educational cycles is often reflected in their capacity to access labour market opportunities. The focus here is on youth employment as a reflection of the capacity of a state to generate job opportunities for this key age group. The capacity to access labour market opportunities is of particular importance in Africa, where 40 percent of the population is under 15 years old, with the vast majority excluded from productive jobs. Governments must therefore endeavour to give the African youth the chance to access productive employment and income-generating activities. The equation to estimate the depth of exclusion in employment for the youth may be written as follows:

$$dE^Y_u = \left(1 - \alpha \frac{Yu_{15-24}}{1 - Yu_{15-24}}\right)$$

$Yu_{15-24}$ = Unemployed proportion of the population aged 15 to 24 years, at national level

**Total youth unemployment, (percentage of total labour force aged 15-24) - (Yu)**

According to international standards, youth unemployment is defined as the share of the labour force aged 15 to 24 that is without work but available for and seeking employment. Definitions of labour force and unemployment differ by country.

*Source: ILO, Key Indicators of the Labour Market (KILM) database, 7th edition*

**Dimension 5 – Sustainable livelihoods**

An economic determinant of exclusion can be reflected in the inability of an individual or a group to ensure the minimum requirements for them and their families to have a decent and healthy life. In this sense, the focus is on a household’s capacity to address its basic economic needs in a sustainable way, while also providing for its elderly members. To some extent, this approach reflects the interrelationship between exclusion and income poverty.

Several indicators are used to measure poverty in Africa. Indicators based on an absolute poverty line (US $1.25 or US $2 a day) are useful for comparability between countries and across time. However, as this type of indicator is often unable to capture the specific circumstances of each country, a relative measure of poverty, based on a national poverty line is recommended. This is generally a proportion of the median or mean level of household expenditures in each country, which better reflects the country’s priorities in the fight against poverty. The equation to estimate the depth of exclusion in decent livelihood may be presented as follows:

$$dE^P = \left(1 - \alpha \frac{P_{15-24}}{1 - P_{15-24}}\right)$$

Where,
\[ Np^n_{n} \] = Depth of household poverty estimated at the national poverty line, over the of total households

\[ Np^n_{n} \] = Proportion of households \( n \) living below the national poverty line, at national level

**Dimension 6 – Decent life for older people**

Finally, a critical form of exclusion in Africa concerns the ability of the elderly to be included in economic, social and political life. In this regard, life expectancy after 60 years of age may be a good indicator of social service delivery that can ensure a decent life for older people. The measurement of exclusion in this area is computed using national life expectancy after 60, as compared to the average life expectancy after 60 in middle-high income countries. This makes it possible to position Africa’s efforts within the global context. In contrast, a comparison limited to the regional average tends to gloss over the reality at the national level, which, in fact, might still be lagging far behind, from a global perspective. The equation to estimate the depth of exclusion among the elderly is presented as follows:

\[
[dEx^{60}] = \frac{Le_{60} - Le^n_{60}}{Le^n_{60}}
\]

Where,

\( dEx^{60} \) = Depth of life expectancy exclusion after 60

\( Le^{60} \) = Reference value for life expectancy after 60

\( Le^n_{60} \) = National average life expectancy after 60
**Aggregation of the Index**

In order to assess the overall likelihood or degree to which individuals can be affected by exclusion throughout their life cycle, it is necessary to aggregate the factors that determine exclusion in each of the six dimensions identified. Using weights obtained by Principal Component Analysis, and aggregating each selected indicator, one can define total Human Exclusion as:

\[ HEx = dEx^{N,M} + dEx^{C,M} + dEx^{Y,F} + dEx^{Y,R} + dEx^{N,F} + dEx^{N,R} \]

As each indicator can have a maximum value of 1, the compounded depth of exclusion will take a value between 0 < \( HEx \) = 6, reflecting the degree of aggregate exclusion of an individual throughout his or her life cycle. The total value of the Index will therefore represent – for each country – an absolute value of exclusion, reflecting the likelihood of an individual being excluded from development, as measured by the six dimensions and indicators described above. In case of missing values for one of the dimensions, an expansion factor will be applied to facilitate the computation of results. Missing information for two or more factors will prevent proper assessment of exclusion, making it necessary to eliminate the country concerned from the exercise.

**Estimations at subnational levels and across time**

The same conceptual and methodology frameworks may be applied to assess patterns of exclusion at subnational levels and across periods of time. Data can be used at different tiers of government to estimate exclusion and capture inequalities across subregions. The approach can also be used with different time sets to identify the main drivers of exclusion across time for each subregion. These outcomes will provide powerful information on the type of policies that have helped lessen or exacerbate exclusion in a specific period of time and location.

**Exclusion between subgroups of population**

In addition to assessing trends of exclusion across time and subnational levels, the Index can easily be applied to different groups of population or locations, for instance to estimate differences between men women, or urban and rural locations. Maintaining the same decomposition of the Index 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 chapter IV.
Annex 2: Methodological note on the application of principal component analysis to the African Social Development Index

The aim of this note is to build a composite index obtained from the six indicators of the Index. The method used is a Principal Component Analysis – a statistical approach based on the analysis of factors. Data and Index estimations from Morocco are used to make estimates on two sub-periods 2000-2003 and 2010-2013.

Why the Principal Component Analysis?

The PCA was first used in 1999 to combine a series of socioeconomic indicators into a single index (Boelhouwer and Stoop, 1999). The idea is that the relative contributions of each of the factors used in explaining their overall variance are used as weights.

Strengths

One of the main advantages of this approach is its ability to explain and capture inequalities between areas. In addition, the PCA avoids most of the problems associated with traditional methods, such as aggregation, normalization, and nonlinear relationships of the variables that affect socioeconomic inequalities (Vyas and Kumaranayake, 2006; Saltelli and others, 2004). Indeed, when the PCA is used, each component is a weighted linear combination of the original variables.

Weaknesses

The disadvantage of these methods is that they are sensitive to changes in the database. Data revisions and updates (including additional observations such as the integration of new countries), can change the set of weights that are used to calculate summary indicators. The results are also likely to be sensitive to the presence of outliers, which can introduce a “bad” variability in the data. Finally, insufficient data may make it difficult to identify the statistical and economic interpretation of unobserved factors. The robustness of the results presented here was largely checked by the sensitivity analysis.

---

7 The weights for each principal component are given by the eigenvectors of the correlation matrix or the covariance matrix, if the data were standardized. The variance for each principal component is represented by the eigen value of the corresponding eigen vector.
Key steps in the construction of a composite indicator using the CPA method:

The construction of composite indicators entails a number of steps, including: the selection of sub-indicators, choice of model and indicators, as well as weighting the treatment of missing values. These steps should be transparent and based on statistical principles. Specifically, analysis of PCA results seeks to answer three main questions:

- Are data factorizable?
- How many factors hold?
- How are the result to be interpreted?

The composite indicator that we present here – the African Social Development Index – will be constructed as an average of main components, weighted by their own values. Generally, if \( k \) main factors were selected through factor analysis, the indicator is defined as:

\[
ASDI = \frac{1}{k} \sum_{a=1}^{k} l_a F_a
\]

where:

- \( l_a \) is the order proper value \( a \);
- \( F_a \) is the order principal component \( a \) such as \( F_a = X_c U_a \)

Along with:

- \( X_c \): the matrix of centered and reduced data;
- \( U_a \): the Eigen vector associated with the order proper value \( a \)

The value of the index can be positive or negative, which makes interpretation difficult. Therefore, a standardized index (SI) was developed, whose value may range from 0 to 100, according to the following formula:

\[
SI = \frac{Index - \text{Min Index}}{\text{Max Index} - \text{Min Index}} \times 100
\]

---

Table B.2: Estimating the African Social Development Index: case of Morocco

<table>
<thead>
<tr>
<th></th>
<th>Values of the African Social Development Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morocco</td>
<td>0.920</td>
</tr>
<tr>
<td>Urban</td>
<td>0.068</td>
</tr>
<tr>
<td>Rural</td>
<td>2.157</td>
</tr>
<tr>
<td>Men</td>
<td>0.824</td>
</tr>
<tr>
<td>Women</td>
<td>1.129</td>
</tr>
<tr>
<td>South Regions</td>
<td>0.018</td>
</tr>
<tr>
<td>Souss - Massa - Drâa</td>
<td>1.412</td>
</tr>
<tr>
<td>Gharb - Chrarda - Béni Hssen</td>
<td>1.378</td>
</tr>
<tr>
<td>Chaouia - Ouardigha</td>
<td>1.037</td>
</tr>
<tr>
<td>Marrakech - Tensift - Al Haouz</td>
<td>1.697</td>
</tr>
<tr>
<td>Oriental</td>
<td>0.850</td>
</tr>
<tr>
<td>Grand Casablanca</td>
<td>-0.283</td>
</tr>
<tr>
<td>Rabat - Salé - Zemmour - Zaër</td>
<td>0.336</td>
</tr>
<tr>
<td>Doukkala - Abda</td>
<td>1.577</td>
</tr>
<tr>
<td>Tadla - Azilal</td>
<td>1.436</td>
</tr>
<tr>
<td>Meknès - Tafilalet</td>
<td>1.100</td>
</tr>
<tr>
<td>Fès - Boulemane</td>
<td>1.102</td>
</tr>
<tr>
<td>Taza - Al Hoceïma - Taounate</td>
<td>1.704</td>
</tr>
<tr>
<td>Tanger - Tétouan</td>
<td>0.826</td>
</tr>
</tbody>
</table>

Source: ECA estimates.
Annex 3: Review of social development and exclusion indices

For a very long time, per capita GDP was used as the sole indicator of economic growth in most countries and regions in the world. In 1990, UNDP made a major breakthrough in the measurement of human development with the publication of its first Human Development Report (UNDP, 1990). The Human Development Index was then introduced on the assumption that economic growth, using traditional income-based measures such as GDP per capita is not sufficient to reflect progress in human and social development. The index comprises three main dimensions of well-being, namely, life expectancy at birth, educational attainment and real GDP per capita. UNDP has since refined some of these components and developed supplementary measures, such as the Gender-related Development Index and the Gender Empowerment Measure, which reflect the degree of gender equality and women’s empowerment in development across countries.9

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

At the Millennium Summit in 2000, global leaders made another breakthrough with the adoption of the Millennium Development Goals (MDGs) as a major global framework to help countries monitor and accelerate progress towards economic and social outcomes by the year 2015. Each of the eight internationally agreed goals includes a list of quantifiable and time-bound targets and indicators for monitoring progress in the areas of poverty (Goal 1), universal primary education (Goal 2), gender equality (Goal 3), child and maternal mortality, health and major diseases (Goals 4, 5 and 6), environmental sustainability (Goal 7) and global partnership for development (Goal 8). Since their adoption, the MDGs have probably become the most important framework for development cooperation worldwide, 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 (EIU)** 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, 2006).

- **The ILO decent work indicators** (ILO, 2012a) are based on 10 substantive elements of decent work, including equal opportunities at work, adequate earning, productive work,

9 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, 2006).
social security and social dialogue. Elements of social inclusion exist, but refer to the legal framework underpinning employment conditions and opportunities.

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

• The European Union indicators of social inclusion (EC, 2006) are a series of measures, clustered in five key dimensions, that measure poverty, inequality, employment, education and health outcomes among EU countries.

• The Multidimensional Poverty Index (MPI, 2010)\(^\text{10}\) 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.\(^\text{11}\)

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. 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 between different groups of population, both at the national and sub-national levels, makes it possible to capture inequalities within and between countries, as detailed in chapter III.

\(^{10}\)\[http://hdr.undp.org/en/content/multidimensional-poverty-index-mpi.\]

\(^{11}\) See chapter III for a comparative analysis of the HDI, MPI and the African Social Development Index.