



Tikly, L. P. (2019). *Education for Sustainable Development in the Postcolonial World: Towards a transformative agenda for Africa*. Routledge. <https://www.routledge.com/Education-for-Sustainable-Development-in-the-Postcolonial/Tikly/p/book/9780415792967>

Publisher's PDF, also known as Version of record

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Chapter one: Setting the Scene

Introduction

This book is about education for sustainable development (ESD) in Africa. It seems a timely juncture at which to write such a book. More than half a century after the euphoria following independence from colonial rule and despite the fact that the continent is blessed with immense natural and human resources as well as great cultural and ecological diversity, it continues to face enormous and apparently intractable challenges of unsustainable development that range from coping with the effects of deep rooted poverty and inequality to climate change. The advent of the Sustainable Development Goals (SDGs) as well as of regional development agendas such as the African Union's *Agenda 2063* have provided new impetus to tackle Africa's problems and to embark on new pathways of sustainable development. Education is centrally implicated in these agendas as demonstrated by the launch in 2015 of the *Continental Education Strategy for Africa* by the African Union. Yet, many learners are still excluded from access to a good quality education and training at all levels of the system. The upshot is that the continent faces a shortage of the skills and competencies required for realising sustainable development.

Africa is a particularly significant region from which to consider the opportunities and challenges for low-income, postcolonial countries in implementing ESD given the enduring colonial legacy, its position in relation to the global economy and politics and the extent of the sustainability challenges it faces. Thus, whilst the focus of the book is on sub-Saharan Africa, it is hoped that the analysis developed will have a wider resonance for considering ESD in other low-income, postcolonial settings. The aim of this introductory chapter is to provide some background context for the remainder of the book. It will start by providing an overview of global and regional agendas that impact on education whilst the second part of the chapter will outline the aims and main arguments developed in the remainder of the book. The chapter will commence, however, by introducing the reader to some of the key concepts that inform the book and will be developed in later chapters.

The 'postcolonial condition'

It is worth summarising briefly what is meant by the term 'postcolonialism' and the 'postcolonial condition' in the context of this book (for a fuller account see Tikly 1999, 2001; Tikly 2004; Crossley and Tikly 2004; Hickling-Hudson, Mathews, and Woods 2004; Rizvi 2007; Rizvi, Lingard, and Lavia 2006; Rizvi and Lingard 2006; Coloma 2009; Takayama, Sriprakash, and Connell 2017; Shizha and Makuvaza 2017). With its origins in the work of scholars such as Edward Said, Gayatri Spivak, Homi Bhabha, Stuart Hall and others, postcolonialism is often understood as a 'critical idiom' through which to consider issues of development.

Postcolonial analysis has been applied in diverse ways in the field of international and comparative education although it is possible to identify some central themes that run through the scholarship. These include a recognition of the importance of the colonial legacy in understanding global and regional education policy. In the context of the present book, it will be argued that much of what will be described as 'unsustainable development' on the continent including the persistence of extractive economic practices, the patrimonial nature of the post-colonial state, the many forms of social inequality and the marginalisation of

African cultures and languages, have their origins in the colonial period although they have been exacerbated under contemporary globalisation. Education systems, it will be suggested, have been instrumental in reproducing many of these dynamics and that key features of modern education systems including their elitist nature, the Eurocentric and content-driven nature of the curriculum, the prevalence of teacher centred pedagogy, the neglect and marginalisation of African languages and indigenous knowledge are complicit in this process. The identification of the postcolonial condition is not intended therefore to imply that colonialism is 'over' in a temporal sense. This is to acknowledge not only that some countries continue to experience 'direct' forms of colonisation but also that the dominance of the former colonising powers continues to manifest in new forms of what Nkrumah initially described as 'neo-colonialism' and that has elsewhere been understood as the 'new imperialism' (Harvey 2003; Tikly 2004).

Secondly, analysis of the postcolonial condition involves appreciation of Africa's position in relation to processes of contemporary globalisation and this is the focus of chapters three, four, five and six. Thirdly, like much Marxist, feminist, queer and other kinds of critical scholarship, postcolonial analysis is also intended to give voice to those groups who have been historically marginalised in economic, political and cultural terms. As will be suggested in chapter two, this involves understanding the co-evolution of intersecting 'regimes of inequality'. In particular this will involve consideration of inequalities based on class, gender, race, ethnicity, urban/rural location. In this regard postcolonial scholarship builds on and takes forward the ideas of many generations of anti-colonial activists on the continent both in the context of anti-colonial struggles and subsequently. Many of these such as Nelson Mandela, Stephen Biko, Julius Nyerere, Walter Rodney and others wrote a lot about colonial education as will be discussed in chapter five.

This is significant because these critical scholars were not simply content with providing an abstract analysis of injustices involved in colonial education but were also deeply committed to identifying solutions in the context of struggles for national liberation. It is in this spirit that the present book seeks to not only analyse the nature of education for unsustainable development but to propose how education systems in Africa can be transformed to support a vision of sustainable development linked to the idea of social and environmental justice. This vision will be set out in chapter seven. In developing the analysis of the postcolonial condition, however, the book parts company with some of the more overtly poststructuralist emphasis within much recent postcolonial scholarship linked to the 'cultural turn' in the social sciences during the 1970s and 1980s. Rather, it adopts what has been described in chapter two as a 'complex realist' approach that seeks to bring together materialist and discursive forms of analysis to understand complex reality (Bhaskar 2011). It is argued in this respect that the postcolonial condition itself needs to be understood both discursively, i.e. in terms of the constitutive effects of different discourses of development on the way that social reality and postcolonial identities are constructed but also materially, as an aspect of the impact of wider changes in relation to processes of economic and political globalisation.

[An overview of global and regional policy agendas](#)

Later chapters will seek to develop a more sustained analysis and critique of global and regional agendas that have as their focus achieving SD and ESD on the continent. For now, however, and by way of background to the book, it is important to provide an overview. In

particular, attention will focus at a global level on the *Sustainable Development Goals* (SDGs) including SDG 4 (the education SDG) and at a regional level on *Agenda 2063* and the *Continental Education Strategy for Africa* (CESA) which it has been suggested represent a regional response to the SDGs. For some, the focus on global and regional agendas might appear puzzling given that education policy remains primarily a national concern. As will be argued in later chapters, however, it is an aspect of the dynamics of contemporary globalisation that global and regional policy agendas have become increasingly influential in shaping national policy. Linked to this, and as discussed in chapter four, it is important to understanding how policy-making processes at different scales of the global, regional and national interact to 'produce' policy that is enacted at a local level. It is also important to recognise from the outset, however, the tremendous diversity in economic, political, cultural and environmental terms on the continent. Through focusing on the impact of global and regional policy agendas it is hoped to tease out some of the commonalities as well as differences with respect to understanding the challenges and possibilities for implementing ESD. In this respect, as Hoogvelt (1997) has argued, at a regional level Africa can be perceived to exemplify a distinctive 'postcolonial formation' in its attempts to engage with the effects of globalisation i.e. a distinctive mixture of economic, political and cultural dynamics linked to Africa's position in the world and to the distinctive nature of regional responses to globalisation.

The SDGs

A key point of reference for contemporary debates about sustainable development are the recently adopted SDGs. A brief history of the origins of the SDGs is given in chapter three. Originally proposed by the Colombian government, they were given impetus at the Rio+20 conference on sustainable development in 2012 which mandated the creation of an Open Working Group (OWG) to come up with a draft agenda.¹ Alongside the OWG discussions, the UN conducted a series of 'global conversations' the results of which were fed into the working group's discussions. Although the SDGs provide continuity on the preceding Millennium Development Goals (MDGs) they also signal a decisive break in recognising the inextricable links between economic and human development on the one hand and environmental protection on the other. The SDGs are also more expansive in scope than the more minimalist MDGs setting out a total of 169 targets compared to the 18 targets in the MDGs. For the first time, the SDGs are aimed at countries of the global North as well as the Global South which on the one hand recognises the global reach of issues such as poverty, inequality and climate change and on the other hand the role of rich industrialised countries both in perpetuating and in potentially overcoming these challenges.

From the perspective of this book, a key feature of the SDGs is that they set out what is described as a 'transformative' development agenda, (although it will be argued in subsequent chapters that they do not go far enough in this respect). Specifically, the *Transforming our World Report* (UN 2015c) identifies five 'Ps' that lie at the heart of a transformative agenda, namely:

¹ The OWG, with representatives from 70 countries, had its first meeting in March 2013 and published its final draft, with its 17 suggestions, in July 2014. The draft was presented to the UN general assembly in following September. The final wording of the goals and targets followed a period of member state negotiations, and the preamble and declaration that comes with them, were agreed in August 2015.

People

We are determined to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.

Planet

We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.

Prosperity

We are determined to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature.

Peace

We are determined to foster peaceful, just and inclusive societies which are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development.

Partnership

We are determined to mobilize the means required to implement this Agenda through a revitalized Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people. (UN 2015c, : 2)

The 17 SDGs can be seen to correspond to these principles. They are set out below:

Box 1.1: The Sustainable Development Goals

Goal 1. End poverty in all its forms everywhere
Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3. Ensure healthy lives and promote well-being for all at all ages
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5. Achieve gender equality and empower all women and girls
Goal 6. Ensure availability and sustainable management of water and sanitation for all
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Goal 10. Reduce inequality within and among countries
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 12. Ensure sustainable consumption and production patterns
Goal 13. Take urgent action to combat climate change and its impacts*
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

Source: United Nations (UN 2015c)

It will be argued in chapter three that the SDGs ‘quilt together’ a range of sometimes contradictory economic and political interests and that this is reflected in the contested nature of the goals and targets (Sayed, 2019). The SDGs have also been subject to criticism. For example, some wealthy governments initially criticised the number of goals which they claimed were unwieldy². They have also come in for criticism on account of their proposed cost³. On the other hand, the SDGs have been widely praised by many member states of the UN and NGOs for embracing environmental and human rights issues in particular. They are in the process of being incorporated into the development plans and visions of many governments including African governments. Indeed, although it will be argued in the book that Northern interests have predominated in global agendas about development including the SDGs, African governments have played a role in advocating for sustainable development and this is evident in *Agenda 2063*⁴. In this respect, Africa’s commitment to the SDGs was recently underlined by the opening in Kigali of the Sustainable Development Goals Centre for Africa by Paul Kagame, the Rwandan President.

The Education SDG

Education is accorded a central position in the SDGs. A recent analysis of UN flagship reports, for example, shows that education is implicated in realising all of the other SDGs as well as being affected by them. These relationships are summarised in figure 1.1 below. In later chapters it will be argued that the nature of the relationships between education and other domains of sustainable development are highly complex and there is a need to avoid seeing

² A more cynical view might be to suggest that the underlying reason for this was to seek to get rid of some of the more uncomfortable goals, such as those relating to the environment and to their own aid commitments.

³ *The Economist* (2015, : 1) estimated at about \$2-\$3 trillion USD per year for the next 15 years which they called ‘pure fantasy’.

⁴ Indeed, it will be suggested in chapter three that ideas about SD were implicit in pre-colonial economic and social arrangements and in the development of Pan-Africanism as a social movement. More recently, at the Rio + 10 summit held in Johannesburg, Sam Nujoma, who was then President of Namibia, warned of the importance of adhering to *Agenda 21* noting that as a semi-arid country, Namibia sets a lot of store in the United Nations Convention to Combat Desertification.

sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development'. The education goal along with its related targets and indicators are set out in box 1.2 below.

The box also contains data derived from the Global Education Monitoring Report (GEMR), which tracks progress in achieving SDG 4. It is worth indicating three points to emerge from an initial review of the data in box 1.2. Firstly, in relation to virtually all of the indicators, Africa lags behind other regions of the world. To this extent the data indicate the depth of the so-called 'learning crisis' on the continent (below). Secondly, the indicators are themselves limited in their scope. For example, the indicators relating to learning outcomes deal principally with measures of cognitive achievement. Measures of affective outcomes, including, for example, attitudes towards environmental protection, peace and global citizenship are not included. Further, the indicators also relate largely to the basic education cycle which was the focus for monitoring progress under the more restrictive MDG regime whereas the crisis in African education affects every sub-sector and level of the education and training system. Thirdly, at a more profound level, the figures themselves represent in the language of complex realism, a 'surface actuality' of the learning crisis. That is to say that they do not say anything about the underlying causes of the crisis. Here it will be suggested in subsequent chapter that understanding must involve getting behind the statistics to better comprehend the complex nature of causality including the effects of power and of intersecting regimes of inequality in determining outcomes for different groups of learners.

Box 1.2: Progress towards achieving SDG 4 in Africa

SDG 4 Target	Indicators	Progress towards target in SSA against selected indicators
<p>By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes</p>	<p>GLOBAL INDICATOR 4.1.1 Proportion of children and young people (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex</p> <p>THEMATIC INDICATORS 4.1.2 Administration of a nationally-representative learning assessment (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education 4.1.3 Gross intake ratio to the last grade (primary education, lower secondary education) 4.1.4 Completion rate (primary education, lower secondary education, upper secondary education) 4.1.5 Out-of-school rate (primary education, lower secondary education, upper secondary education) 4.1.6 Percentage of children over-age for grade (primary education, lower secondary education) 4.1.7 Number of years of (a) free and (b) compulsory primary and secondary education guaranteed in legal frameworks</p>	<p>Only 33% of countries in Sub-Saharan Africa guarantee free and compulsory education for nine years compared to 64% of countries globally. Regionally, out-of-school rates are highest in sub-Saharan Africa: 21% of primary school age children, 36% of lower secondary school age adolescents and 57% of upper secondary school age youth are not enrolled. A relatively high proportion of learners in African schools are over-age with more than 50% being over-age in Burkina-Faso, Burundi and South Sudan. Reliable, comparable assessment data are rare in many African countries. From available data 87% of primary school age children in sub-Saharan Africa did not reach minimum proficiency levels in reading compared to a global average of 56%.</p>
<p>By 2030, ensure that all girls and boys</p>	<p>GLOBAL INDICATORS</p>	<p>African countries lag behind other regions of the world in introducing pre-school education. The</p>

have access to quality early childhood development, care and preprimary education so that they are ready for primary education	<p>4.2.1 Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex</p> <p>4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex</p> <p>THEMATIC INDICATORS</p> <p>4.2.3 Percentage of children under 5 years of age experiencing positive and stimulating home learning environments</p> <p>4.2.4 Number of years of (i) free and (ii) compulsory pre-primary education guaranteed in legal frameworks</p> <p>4.2.5 Gross pre-primary enrolment ratio</p>	<p>gross enrolment ratio in pre-primary education in Africa is 32% compared to a global average of 49%. Children aged 36 to 59 months are more likely to lag behind their developmental age in Africa than in other regions. There is a strong correlation between the proportion of children lagging behind and income per capita. Pre-school children are much less likely to experience home activities that promote learning and especially father support for learning. Children from the poorest households are less likely to experience home activities that promote learning compared to children in other regions of the world. Many African countries also lag behind in introducing quality assurance processes in pre-school education.</p>
By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	<p>GLOBAL INDICATOR</p> <p>4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex</p> <p>THEMATIC INDICATORS</p> <p>4.3.2 Gross enrolment ratio for tertiary education by sex</p> <p>4.3.3 Participation rate in technical-vocational programmes (15- to 24-year-olds) by sex</p>	<p>Sub-Saharan Africa has the lowest levels of participation of 15-24 year olds in technical and vocational education than any other regions of the world and participation has stagnated since 2000. Sub-Saharan African countries also have the lowest gross enrolment ratios in higher education at 8% in 2015 compared to a global average of 36%. Enrolment ratios have increased more slowly in Africa than in other regions. Sub-Saharan Africa is the only region of the world where women do not enrol in higher education on a par with men. There are also very disparities between men and women in Science Technology, Engineering and Maths degrees compared to other regions.</p>

By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	<p>GLOBAL INDICATOR</p> <p>4.4.1 Percentage of youth/adults with information and communications technology (ICT) skills, by type of skill</p> <p>THEMATIC INDICATORS</p> <p>4.4.2 Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills</p> <p>4.4.3 Youth/adult educational attainment rates by age group, economic activity status, levels of education and programme orientation</p>	Most adults cannot perform even the most basic ICT functions. For example, from available data only 4% of adults in Sudan and Zimbabwe could copy and paste files.
By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations	<p>GLOBAL INDICATOR</p> <p>4.5.1 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated</p> <p>THEMATIC INDICATORS</p> <p>4.5.2 Percentage of students in primary education whose first or home language is the language of instruction</p> <p>4.5.3 Extent to which explicit formula-based policies reallocate education resources to disadvantaged populations</p> <p>4.5.4 Education expenditure per student by level of education and source of funding</p> <p>4.5.5 Percentage of total aid to education allocated to least developed countries</p>	Sub-Saharan African countries lag behind the rest of the world in achieving gender parity in enrolments at all levels of the education and training system. Thus only 49% of countries have achieved parity in pre-primary enrolment compared to a global average of 62% whilst 36% have reached parity of enrolment in primary compared to a global average of 66%. The picture at secondary level is even worse with only 26% and 9% of countries achieving parity compared to global averages of 45% and 25% respectively. No African countries have achieved gender parity in higher education enrolments compared to 4% of countries globally. Available data also suggest disparities in learning outcomes between boys and girls in mathematics at the end of primary school. Boys outperformed girls in mathematics in eight out of ten countries surveyed. Household wealth is also a major predictor of inequality. In SSA, only

		<p>34% and 31% of males and females from the poorest households completed primary education compared to global averages of 72% and 71%. At secondary level the figures were 17% and 13% compared to global averages of 54% for both sexes whilst in higher education the figures are 8% and 5% compared to global averages of 32% and 33% respectively. The majority of African countries pursue policies in which there is an early exit from mother tongue to a European language. As is discussed in chapter six, more sustained use of mother tongue is linked to improved learning outcomes. There is a poverty of data relating to inequalities with respect to disability.</p>
<p>By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy</p>	<p>GLOBAL INDICATOR 4.6.1 Percentage of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex THEMATIC INDICATORS 4.6.2 Youth/adult literacy rate 4.6.3 Participation rate of illiterate youth/adults in literacy programmes</p>	<p>More than one in four young people in SSA cannot read or write. However, in systems that privileged local languages, 69% of adults with five years of education could read a sentence compared with 41% of adults educated partly or wholly in colonial languages.</p>
<p>By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development,</p>	<p>GLOBAL INDICATOR 4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment</p>	<p>There is very limited data on the extent to which issues of global citizenship education, ESD, gender equality and human rights are mainstreamed in policies, curricula, teacher education and assessment. As is discussed in chapter five, most initiatives aimed at the above are provided in the</p>

including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	<p>THEMATIC INDICATORS</p> <p>4.7.2 Percentage of schools that provide life skills-based HIV and sexuality education</p> <p>4.7.3 Extent to which the framework on the World Programme on Human Rights Education is implemented nationally (as per the UNGA Resolution 59/113)</p> <p>4.7.4 Percentage of students by age group (or education level) showing adequate understanding of issues relating to global citizenship and sustainability</p> <p>4.7.5 Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience</p>	<p>form of extra-curricula activities by NGOs. The very limited evidence on the extent of sexuality education suggests that in ten African countries, fewer than half the curricula met global standards for all age groups with gender and social norms identified as the weakest areas. Recent studies in Ghana and Kenya provided evidence of inaccurate information on sexuality and sexually transmitted diseases in that 60% of teachers incorrectly taught that condoms alone can prevent pregnancy and 71% of teachers emphasised abstinence as the best and only method to prevent pregnancy and sexually transmitted diseases.</p>
Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, nonviolent, inclusive and effective learning environments for all	<p>GLOBAL INDICATOR</p> <p>4.a.1 Proportion of schools with access to: (a) electricity; (b) Internet for pedagogical purposes; (c) computers for pedagogical purposes (d) adapted infrastructure and materials for students with disabilities (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions)</p> <p>THEMATIC INDICATORS</p> <p>4.a.2 Percentage of students experiencing bullying, corporal punishment, harassment, violence, sexual discrimination and abuse</p> <p>4.a.3 Number of attacks on students, personnel and institutions</p>	<p>In sub-Saharan Africa, only 22% of primary schools have access to electricity, compared to 49% of lower secondary schools. Primary school access to clean drinking water is below 50% in at least four African countries whilst access to basic sanitation facilities was below 50% in 17 African countries. Although 69 per cent of schools have toilets, many still lack separate sanitation facilities for girls and boys.</p> <p>Based on data from 65 developing countries, the median value of the percentage of schools with access to computers and the Internet for</p>

		pedagogical purposes is above 70 per cent in both primary and secondary education. However, the proportion drops below 40 per cent for many countries in sub-Saharan Africa.
By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries	<p>GLOBAL INDICATOR</p> <p>4.b.1 Volume of official development assistance flows for scholarships, by sector and type of study</p> <p>THEMATIC INDICATOR</p> <p>4.b.2 Number of higher education scholarships awarded, by beneficiary country</p>	Only 17% of scholarship aid from OECD-DAC donor countries goes to sub-Saharan Africa. There is no available data relating to the BRICS economies.

<p>By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states</p>	<p>GLOBAL INDICATOR 4.c.1 Proportion of teachers in: (a) pre-primary education; (b) primary education; (c) lower secondary education; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country</p> <p>THEMATIC INDICATORS 4.c.2 Pupil-trained teacher ratio by education level 4.c.3 Percentage of teachers qualified according to national standards by level and type of institution 4.c.4 Pupil-qualified teacher ratio by education level 4.c.5 Average teacher salary relative to other professions requiring a comparable level of qualification 4.c.6 Teacher attrition rate by education level 4.c.7 Percentage of teachers who received in-service training in the last 12 months by type of training</p>	<p>Available data suggest that only 62% of primary school teachers in sub-Saharan Africa are trained compared to a global average of 86%. The situation is worse at pre-primary and secondary levels with 36% and 45% of teachers having been trained at these levels respectively. The percentage of trained teachers has decreased since 2000 in several African countries including Eritrea, Ghana and Niger.</p>
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Source: Adapted from UNESCO (2017b)

Agenda 2063

*Agenda 2063: The Africa we Want*⁶ adopted by the African Union sets out an aspirational 50-year programme of action for the continent framed within an over-arching commitment to pan-Africanism, inclusive growth, sustainable development and a vision of an African Renaissance. It can be treated as a regional response to the SDGs. The vision is for ‘an integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the international arena’ (iv). It is based on a recognition of the enormous wealth of the continent in natural resources and the resilience and cultural resourcefulness of African peoples themselves. In highlighting the opportunities as well as the challenges faced by the continent in developmental terms, *Agenda 2063* stands in contrast to some of the more pessimistic accounts on development in Africa prevalent in the international development arena.

Agenda 2063 provides an analysis of the sustainability challenges facing Africa. It is worth setting out the main points of the analysis here as it provides important background context for the remainder of the book. However, it will be argued in later chapters that the analysis provided by *Agenda 2063 Framework Document* whilst useful in flagging key issues for development is also partial and limited, particularly in identifying the underlying causes of Africa’s malaise and the nature of the global and indigenous interests that have shaped Africa’s past development trajectory. The analysis in later chapters will instead draw on a cultural political economy approach to seek to provide deeper insight. Secondly, the account provided below has been supplemented with material from other sources where this assists in portraying the full extent of the opportunities and challenges facing the continent.

The opportunities and challenges facing the African continent with respect to sustainable development as portrayed in Agenda 2063

The *Agenda 2063 Framework Document* (AUC 2015a) (herewith referred to simply as *Agenda 2063*) points out that African economies have been among the fastest growing in the world in recent decades but with variation within countries and regions. Growth according to *Agenda 2063* can be attributed to an expansion of foreign investment in extractive industries such as mining and oil and to a lesser extent by the growth in the agricultural⁷ and informal sectors, in information technologies and in remittances from the diaspora.⁸ Amongst the challenges, the document notes a decline in the export of manufactured goods and a very small proportion of high technology manufactured goods and a lack of productivity in the

⁶ *Agenda 2063* consists of three components, namely the vision for 2063 based on the Aspirations of the African People; a transformation framework or framework document which presents detailed milestones, goals, priority areas, targets and indicative strategies; and an implementation plan. It is the *Agenda 2063: The Africa We Want Framework Document* (AUC 2015a) that has provided the major focus for this and subsequent chapters as it sets out in some detail the nature of the development challenges and opportunities facing the continent.

⁷ The report goes on to state that in a small number of instances, such as Rwanda and Ethiopia, increased levels of growth have been attributed to increases in agricultural production.

⁸ The report cites statistics for example that show that during the 2002–2008 period, Africa’s economic growth rate averaged 5.6 per cent per annum. There has also been an increase in per capita income which more than doubled from US\$958 (2004) to US\$1878 (2012) although, economic growth has slowed on the continent subsequent to the publication of the report because of a fall in prices of raw materials on international markets and a slowdown in growth in emerging markets which imports raw materials from Africa (WBG 2017).

agricultural sector. This is attributed to a variety of factors including poor infrastructure (roads, transport, electricity etc.), the relatively small size of African enterprises, a shortage of inter-firm linkages and importantly for our purposes, skills.

Agenda 2063 considers the links between the economy and social development on the continent, focusing in particular on demographic change, poverty (particularly rural poverty), gender, health and education. The *Agenda 2063* notes dramatic changes in Africa's demographic profile.⁹ In the period to 2063, it is noted that the African population will increase far more rapidly than it will in the rest of the world population. A key feature of development in Africa is the rapid process of urbanisation. The document estimates that more than two-thirds of the projected population of 2.5 billion will be living in urban centres by 2063. It is also noted that Africa's population is young with a median age of about 20 years in 2014, compared to a world average of 30 years. This is seen in the report as both an opportunity and a challenge for education and training. A further demographic trend with implications is that of migration which is intense including rural-urban migration, opening up of borders, a growing trend of young Africans seeking a better life in Europe and elsewhere, and forced displacements, due to factors such as civil wars, droughts, water shortages and natural disasters.

In relation to poverty, *Agenda 2063* points out that there has been a reduction in absolute poverty in many African countries and that this is falling for the first time in a generation.¹⁰ However, the report notes that poverty has worsened in several other countries and that 'overall, the gains remain fragile and reversible due to rising inequalities and exposure to shocks (economic, political, social and environmental)' (AUC 2015a, 31).¹¹ Linked to poverty is the prevalence of disease.¹² The report highlights rural poverty as a particular challenge. It links rural poverty in part to patterns of economic growth and to the limited growth within the agricultural sector.¹³ Linked to the issue of rural poverty is the challenge of food insecurity. The report notes that with 60 per cent of the world's arable land, agriculture is Africa's greatest potential and can serve as the main engine to propel the continent's growth and transformation. However, 'due to her high population growth, low and declining agricultural productivity, policy distortions, weak institutions and poor infrastructure, among others,

9 *Agenda 2063* notes, for example, that since 1950, Africa's population size and growth has experienced an upward trend, growing from about 229 million to 1.2 billion in 2014, representing 9.1 and 15.1 per cent of the total world population respectively. This proportion is projected to increase to 19.7 and 35.3 per cent respectively by 2034 and 2100 (AUCa 2015a, 44).

10 The proportion of people living in extreme poverty (i.e. less than USD 1.25/day) fell from 56.5per cent in 1990 to 48.5per cent in 2010 (AUC 2015a, 31). Furthermore, it points out that a number of countries have reached, or are close to reaching, the MDG target of halving poverty by 2015.

11 Despite progress, the report states that Africa remains the continent with the highest concentration of poverty with the number of Africans living below the poverty line in fact increasing from 290 million in 1990 to 376 million in 1999 to 414 million in 2010.

12 The framework document notes that although infectious diseases as a cause of mortality and morbidity have declined in the rest of the world, these remain as the most frequent causes of deaths in Africa due to poor environmental management, weak water and sanitation systems and low knowledge of basic health household practices.

13 It is noted that 'agricultural/rural population in Africa stands at 530 million people, and is expected to exceed 580 million by 2020. About 48per cent of this population relies directly on agriculture for economic and livelihood needs. It is noted that 'agricultural performance is central in driving socio-economic transformation, especially in the traditionally economically marginalized and largely rural populations' (AUC 2015a, 45).

Africa has turned into a net food importer, is currently importing nearly a quarter of her food needs. Consequently, one in four undernourished people in the world live in Africa' (AUC 2015a, 31). The report identifies the development of the agricultural sector as the key means for addressing rural poverty and food insecurity.

Agenda 2063 points to increases in the number of democracies on the continent and in multi-party elections. It also points out that most elections are now violence-free. The report highlights some improvements in economic governance¹⁴ including success in tackling corruption¹⁵ which it considers has a bearing on the sustainability of economic performance of African countries. However, it notes that policy making and service delivery remain compromised due to poor public institutions and administration at central, municipal and local levels, leaving many citizens poorly served by their governments (AUC 2015a, 62). The report also argues that the quality of democracy remains a challenge with huge variability in the extent to which democratic norms are internalised and implemented¹⁶. In this context, *Agenda 2063* posits the notion of the 'developmental state' as a possible way forward for improving governance.

Significantly, the report addresses Africa's position in relation to processes of global governance. This is important because as an exporter of primary goods, the continent is exposed to externally imposed changes in the prices of commodities and is subject to a multitude of externally imposed agendas and initiatives. *Agenda 2063* is, however, relatively silent on the role of civil society in governance. It draws attention to the fact that 'civil society participation and contributions to democracy is frequently handicapped by their capacity and resources' (AUC 2015a, 62) but it does not delve more deeply into the issues involved. This is despite the fact that since colonial times, civil society organisations at national and global scales have played a prominent role in education as in other spheres (see chapter five).

Agenda 2063 goes some way towards highlighting major threats to Africa's peace and security. It notes increases in the propensity to resort to the use of violence within communities linked to 'cultural, political, social and economic gaps between the minority at the centre and the larger population – rural or urban and intergenerational disputes' and over 'failure to accommodate multiple community identities, especially at the local level, especially in fragile and conflict-affected areas'. At a state level, violence is linked in the report 'to ineffective credible and legitimate democratic governance institutions for the prevention of violent conflicts; such as the rule of law, democratic access to power and effective wealth distribution' and to 'limited state capacities leading to corruption lack of accountability and impunity, which restricts the provision of services' (AUC 2015a, 66). The report also highlights new forms of criminal activity such as piracy and of religiously inspired conflict that cuts across national borders and to the 'ease of trading, acquiring and circulating weapons' (AUC 2015a,

¹⁴ The report notes improvement in domestic resource mobilisation and public administration, modest progress in tackling corruption, significant improvements in the business climate and progress in stemming illicit capital outflows.

¹⁵ Although *Agenda 2063* notes that according to transparency international, four out of five African countries are below the world average (p. 64).

¹⁶ It points to detention without trial, arbitrary arrests, torture, forced disappearances and extra-judicial killings which it claims are still unfortunately widespread whilst access to justice and independence of the judicial system is a major concern. The report highlights pervasive weaknesses of institutions, especially in the field of human rights at national, regional and continental levels.

66). Once again, it will be suggested in later chapters that the report does not go far enough in identifying the causes of violence and of conflict which, it will be suggested, lie primarily in competing interests at a global and national level over access to state power, patronage and control over Africa's natural resources. Finally, the report draws attention to violence against women as a continent-wide problem. This is significant in the context of the book because it will be argued that violence needs to be understood in its full ontological depth, i.e. as encompassing not only state and civil society sponsored violence but violence at a personal and psychological level as well. In this regard, education systems have been strongly implicated in perpetuating violence against girls and women as well as other marginalised groups (chapter five).

The pan-African influence in *Agenda 2063* is perhaps most evident in relation to discussions about the cultural domain. The report notes the effects of cultural domination during the slave trade and colonial era which it is claimed 'led to the depersonalization on the part of African peoples, falsified their history, systematically disparaged and combatted African values and tried to replace progressively and officially their languages by that of the colonized' (AUC 2015a, 68)¹⁷. Education is singled out as having accelerated Africa's integration into a Western, global culture along with news media, music and art. The report argues that while Western influences can enrich the African cultural heritage, 'they can also be a source of erosion and ultimately can supplant and replace African values and ethics'. *Agenda 2063* goes on to state that 'language is at the heart of a people's culture and the acceleration of Africa's socio-economic transformation is impossible without harnessing in a practical manner the indigenous African languages' (AUC 2015a, 68). Significantly, it goes on to argue that a 'major threat to African culture and heritage is the educational system which is marginalizing African languages' although as we shall see in chapter eight, this is not carried through in the CESA document. The document identifies poor management of Africa's diversity – ethnic, religious, cultural – as being a source of conflict, on the continent. It also identifies religious extremism including *Boko Haram* in Northern Nigeria and the *Lord's Resistance Army* (LRA) in Uganda as examples of what can happen on account of this mismanagement.

Agenda 2063 identifies Africa's natural resources as playing a critical role for vast segments of Africa's population who depend on the continent's biodiversity, forests and land for their livelihoods directly or indirectly. The document points out that Africa is well endowed with biodiversity: both variety and abundance of species, ecosystems and genetic resources. The document highlights the blue/ ocean economy as having importance in environmental, economic and social terms¹⁸. The report identifies natural resources as playing a critical role for vast segments of Africa's population who depend on the continent's biodiversity, forests, land and waters for their livelihoods directly or indirectly. These natural resources, it is argued,

¹⁷ The document notes that work done by great African scholars and writers have contributed a lot to re-examining and restoring Africa's distorted and obscured place in the history of the world. The document also notes that despite her rich cultural heritage, Africa is poorly represented in the list of protected world cultural heritage sites and that this risks hastening the erosion of these sites.

¹⁸ It states, for example, that 'Africa's bodies of water are endowed with abundant flora and fauna and marine ecosystems including diverse fish and other aquatic life, coral reefs; and are also sources of livelihoods to many Africans including water, food, power generation and transportation. Coastal areas and lake basins have also emerged not only as major tourist attractions but also as important sources of minerals, including oil and gas. The sector creates jobs for 7.1 million fishers (2.7 million in marine fisheries and 3.4 million in inland fisheries and 1 million in aquaculture) and over 59 per cent of these people are women' (51).

also make a direct contribution to economic development through tourism, agriculture, logging, fishing and other activities. However, the *Agenda 2063* notes that the continent's biodiversity, land and forests are facing increasing challenges¹⁹. The report highlights unequal distribution of land, with small farmers pushed out to marginal areas by large investment programs, severe soil degradation, desertification and deforestation²⁰ accompanied by flooding and intermittent droughts. Significantly and in keeping with the analysis presented in chapter three, the document names the recent 'scramble for Africa's land' by big investors (mostly foreign) in bio-fuels, minerals and oil, as well as food production for consumption abroad as a major risk to environmental protection and sustainable economic development.

In relation to the blue/ ocean economy, the report states that the dumping of toxic waste, illegal trafficking, oil spills, degradation of the marine environment, transnational organized crimes, among others, have seriously threatened Africa's oceans, seas and lakes²¹. Finally, *Agenda 2063* draws attention to the abundance of energy sources on the continent including crude oil and natural gas with huge potential for hydropower, geothermal energy, solar and wind power²² but notes that Africa's energy profile is characterized by low production, low consumption, and high dependence on traditional biomass energy and that despite the huge energy resources²³.

Missing from the document, however, is more recent evidence of the impact of climate change. The major causes of climate change lie in patterns of over-consumption in the global North. However, as a region Africa is one of the most vulnerable to the effects of climate change (Masson-Delmotte 2018). Projections concerning climate change for the region point to a warming trend, particularly in inland subtropics. There is an increased likelihood of extreme heat events as well as increasing aridity and changes in rainfall which is predicted to have a particularly pronounced decline in southern Africa and an increase in East Africa. Already high rates of infectious disease and malnutrition can be expected to increase

¹⁹ These include habitat loss as the major factor behind biodiversity loss and accelerating erosion of the genetic resources of agricultural plants and animals. The erosion of genetic resources leads to growing genetic uniformity of agricultural plants and animals, which means an increased risk of food loss from major epidemics.

²⁰ Linked to these developments as well as to global warming are issues of land degradation and desertification which are believed to impact 43 per cent of Africa's land surface with serious environmental and socio-economic consequences. Similarly, the report notes that the continent lost over 4 million hectares of forests annually over the past two decades due to extensive agricultural practices, unregulated and unsustainable wood harvesting and illegal commercial logging.

²¹ These problems, it is argued are compounded by the aggravated effects of climate change, most notably the rising ocean temperatures and ocean acidification that is leading to the weakening of the capacity of the ocean carbon sink and loss of fishery resources, and also reduction in the size of water bodies, such as Lake Chad' (AUC 2015a, 51).

²² 'Crude oil reserves estimated at over 130 billion barrels - about 9.5 per cent of world's reserves; about 8 per cent of the world's total reserves of natural gas estimated at about 15 trillion cubic metres; about 4 per cent of the world's total proven reserves (about 95 per cent of these reserves found in Southern Africa); hydropower resources potential to generate over 1,800 TWh/yr of electricity; geothermal energy potential estimated at over 15,000 MW; and huge solar and wind power potential. Because of its proximity to the Equator, Africa has also the world's highest average amount of solar radiation each year. Africa's bioenergy potential is immense, particularly given rapid advances in research that have brought new energy crops into production and second-generation lingo-cellulosic technologies within reach in less than a decade' (51).

²³ The report argues that the continent faces enormous energy challenges including low generation capacity and efficiency, high costs, unstable and unreliable energy supplies, low access to modern energy, insufficient energy infrastructure, and lack of institutional and technical capacity to harness huge resources.

compared to a scenario without climate change. Rises in sea levels will affect the livelihoods of coastal communities.²⁴ Agricultural systems that rely on rainfall on which the livelihoods of a large proportion of the region's population currently depend are particularly at risk. The increasing vulnerability of rural communities is likely to increase the rate of rural–urban migration, adding to the already significant urbanisation trend in the region. The movement of people into informal settlements may expose them to a variety of risks, including flash flooding, outbreaks of infectious disease and increases in the price of food (Coumou 2016). Increasing competition over arable land has also been linked with increases in violent conflict.

Aspirations and priorities for sustainable development

In seeking to meet the above challenges, *Agenda 2063* sets out a number of aspirations for sustainable development on the continent. These are:

A prosperous Africa based on inclusive growth and sustainable development. Key to this priority is the eradication of poverty in one generation and building, sharing prosperity through social and economic transformation and with the means and resources to drive its own development. This includes sustainable and long term stewardship of its resources where African people have a high standard of living, and quality of life, sound health and well-being; well-educated and skilled citizens, underpinned by science, technology and innovation for a knowledge society and where no child misses school due to poverty or any form of discrimination; cities and other settlements are hubs of cultural and economic activities; economies are structurally transformed to create shared growth, decent jobs and economic opportunities; modern agriculture for increased production, productivity and value addition contributes to prosperity and Africa's collective food security; and, Africa's unique natural endowments, its environment and ecosystems, including its wildlife and wild lands are healthy, valued and protected, with climate resilient economies and communities.

An integrated continent, politically united and based on the ideals of Pan-Africanism and the vision of Africa's Renaissance. This involves creating a United Africa; a world class, integrative infrastructure that criss-crosses the continent; dynamic and mutually beneficial links with her Diaspora; and, a continent of seamless borders.

An Africa of good governance, democracy, respect for human rights, justice and the rule of law. Priorities here include Africa being a continent where democratic values, culture, practices, universal principles of human rights, gender equality, justice and the rule of law are entrenched; and, where there are capable institutions and transformative leadership in place at all levels.

A peaceful and secure Africa. Priorities include a culture of peace and tolerance nurtured in Africa's children and youth through peace education; the more effective management of diversity; developing an entrenched and flourishing culture of human rights, democracy, gender equality, inclusion and peace; prosperity, security and safety for all citizens; and, mechanisms to promote and defend the continent's collective security and interests.

²⁴ The region could also experience as much as one meter of sea-level rise by the end of this century under a 4 °C warming scenario.

An Africa with a strong cultural identity, common heritage, shared values and ethics. The *Agenda 2063* states that Pan-Africanism and the common history, destiny, identity, heritage, respect for religious diversity and consciousness of African people's and her diaspora's will be entrenched and the African Renaissance has reached its peak by 2063.

An Africa whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children. This is based on a vision that all the citizens of Africa will be actively involved in decision making in all aspects including social, economic, political and environmental and where Africa shall be an inclusive continent where no child, woman or man will be left behind or excluded, on the basis of gender, political affiliation, religion, ethnic affiliation, locality, age or other factors.

Africa as a strong, united and influential global player and partner. The *Agenda 2063* affirms the importance of African unity and solidarity in the face of continued external interference including, attempts to divide the continent and undue pressures and sanctions on some countries (AUC 2015a).

Continental Education Strategy for Africa

The *Continental Education Strategy for Africa 2016-2025* (CESA) (AU 2015) was developed under the auspices of the African Union. It provides continuity on the central role accorded to education in *Agenda 2063*. Developing the priorities identified by African Ministers of Education set out in the *Kigali Declaration* that fed into the SDG consultation process, it can also be seen as a regional response to the education SDG. The vision is expressed in the following terms:

Africa is ushering into an era that most observers and pundits are predicting will determine its destiny as the continent of the future. But to fulfil this promised bright future, the continent has to come to terms with its education and training systems that are yet to fully shed the weight of its colonial legacy and its own tribulations as a relatively new political and economic entity and player in the world arena. In the bid to "create" a new African citizen who will be an effective change agent for the continent's sustainable development as envisioned by the AU and its 2063 Agenda, the African Union Commission has developed an Africa comprehensive ten-year continental education strategy (CESA)(AU, 2015:7).

As will be discussed in chapter five, the vision seeks to re-articulate the idea of ESD in a way that is consistent with the Pan-African vision of an African Renaissance that underpins *Agenda 2063*. The document notes many of the challenges facing the education system identified in box 1.2 above. It sets out a series of guiding principles, pillars and strategic objectives that are intended to address these challenges and are summarised in box 1.3 below:

Box 1.3: CESA Guiding principles, pillars and strategic objectives

Guiding principles:

1. Knowledge societies called for by Agenda 2063 are driven by skilled human capital.
2. Holistic, inclusive and equitable education with good conditions for lifelong learning is a sine qua non for sustainable development

3. Good governance, leadership and accountability in education management are paramount.
4. Harmonised education and training systems are essential for the realisation of intra-Africa mobility and academic integration through regional cooperation.
5. Quality and relevant education, training and research are core for scientific and technological innovation, creativity and entrepreneurship.
6. A healthy mind in a healthy body - physically and socio-psychologically fit and well fed learners.

Pillars:

1. Strong political will to reform and boost the education and training sector.
2. Peaceful and secure environment
3. Gender equity, equality and sensitivity throughout the education and training systems
4. Resource mobilisation with emphasis on domestic resources
5. Strengthen institutional capacity building through
 - i. Good governance, transparency and accountability
 - ii. A coalition of actors to enable a credible participatory and solid partnership between government, civil society and the private sector.
6. Orientation and support at different levels and types of training
7. The creation and continuous development of a conducive learning environment.

The twelve strategic objectives are as follows:

- SO 1: Revitalise the teaching profession to ensure quality and relevance at all levels of education
- SO 2: Build, rehabilitate, preserve education infrastructure and develop policies that ensure a permanent, healthy and conducive learning environment in all sub-sectors and for all, so as to expand access to quality education
- SO 3: Harness the capacity of ICT to improve access, quality and management of education and training systems
- SO 4: Ensure acquisition of requisite knowledge and skills as well as improved completion rates at all levels and groups through harmonisation processes across all levels for national and regional integration
- SO 5: Accelerate processes leading to gender parity and equity
- SO 6: Launch comprehensive and effective literacy programmes across the continent to eradicate the scourge of illiteracy
- SO 7: Strengthen the science and math curricula in youth training and disseminate scientific knowledge and culture in society
- SO 8: Expand TVET opportunities at both secondary and tertiary levels and strengthen link ages between the world of work and education and training systems
- SO 9: Revitalise and expand tertiary education, research and innovation to address continental challenges and promote global competitiveness
- SO 10: Promote peace education and conflict prevention and resolution at all levels of education and for all age groups
- SO 11: Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication, and use
- SO 12: Set up a coalition of stakeholders to facilitate and support activities resulting from the implementation of CESA 16-25.

Global and regional agendas and the ‘learning crisis’

The term ‘learning crisis’ has been popularised by the World Bank amongst other organisations (Bank 2018). It will be argued, however, particularly in chapter ten, that it is often used rhetorically in policy discourse when describing education systems in Africa in a way that elides the nature and origins of the crisis (see also Sriprakash, Tikly, and Walker 2019). It is, therefore, important to be clear what is meant by the term in the context of this book. Documents such as the *Continental Education Strategy for Africa* and the annual Global Education Monitoring Reports provide a statistical picture of the extent of the learning crisis against key indicators. These are summarised in box 1.2 above. From here it can be seen that although there has been progress in improving access to primary education, learning outcomes (as measured in standardised tests of literacy and numeracy) remain very low across the continent. Worst affected are often learners from low socio-economic backgrounds, girls, minorities and rural dwellers. As global and regional agendas make clear, the nature of the crisis is multifaceted. Although many countries are in the process of moving towards competency-based curricula, many curricula remain heavily content driven, linguistically and cognitively too demanding and irrelevant to local contexts and the needs of learners. High stakes assessments aimed at filtering access to higher levels of education and to the limited opportunities in the labour market continue to drive both curricula and pedagogical processes which have, since colonial times, been formalistic, authoritarian and teacher centres in nature. A key issue is the availability of suitably qualified teachers on the continent and a mismatch between teacher education and the realities of classrooms and other learning spaces. These issues are compounded by often very large class sizes as well as issues of a poor infrastructure, textbooks and other teaching and learning resources.

Opportunities to progress to higher levels of education and training are limited by inadequate basic skills, which further entrenches inequities and exacerbates the crisis. There is a shortage, for example in technical and vocational skills that could potentially contribute to alleviating youth unemployment and assist processes of sustainable development in rural and urban areas (see chapter seven). Access to higher education continues to be very limited, particularly for women and other marginalised groups. This also limits the capacity of universities to contribute to processes of African-led development through research and innovation. A major challenge is a lack of coherence between various parts of the education and training system.

Educational institutions are often sites for reproducing rather than reducing inequalities and for perpetuating physical violence in the form of corporal punishment, gender and ethnically based violence as well as ‘epistemic’ violence through the marginalisation of local and indigenous languages and knowledge systems from the curriculum. Further, despite efforts to introduce forms of ESD into educational institutions, recent evaluations of the impact of the UN Decade of Education for Sustainable Development, for example, show that take-up has been partial and limited (UNESCO 2014b).

As with analysis of the wider sustainability challenges facing the continent, it will be argued that it is important to get behind the numbers, however, and to seek to better understand the causes of the learning crisis which, it will be suggested are deeply rooted and mutually implicated in wider processes of unsustainable development. For this reason, a key argument that will be advanced in the book is that education systems alone cannot be expected to either

‘solve’ the learning crisis or wider development challenges as is sometimes implied in global and regional agendas. Rather what is required are more fundamental and simultaneous processes of transformative change across all domains of development.

Aims and summary of main arguments

The book is motivated by a belief in the potential for environmentally sustainable and socially just development and of education’s role in achieving this. It is also driven by a belief that a future transformative agenda is possible but must be based on a realistic analysis of the very real challenges facing the continent in realising sustainable development and in transforming its education systems. The first aim of the book then is to better understand the nature of the challenges involved if education is to play a genuinely transformative role. This requires going beyond the focus of the present chapter on simple description of the nature and scale of the various challenges and delving deeper to identify the underlying causes of the challenges facing Africa in relation to SD. As Karl Marx stated, however: ‘The philosophers have only *interpreted* the world, in various ways; the point, however, is to *change* it. The second aim of the book then is to build on analysis and critique in order to set out a transformative agenda that can serve as a guide for policy makers, practitioners and civil society. It involves acknowledging the potential for social actors to transform their world in ways that are environmentally sustainable and socially just and identifying the conditions under which this might become possible. Rather than offering blueprints of magic bullets, however, the book will seek to sketch out an overall approach for re-conceptualising ESD.

Chapter two will set out the conceptual basis for the book. Specifically, chapter two will consider the implications of recent developments in complexity theory for understanding, at an ontological level, important characteristics of complex natural and social systems. It will present a view of education systems as complex, open, adaptive systems and of how education co-evolves in relation to other institutional domains that are traversed by power relationships and complex, intersecting regimes of inequality including those based on class, gender, race, ethnicity and rurality. The chapter will also set out the metatheoretical framework of complex realism. It will be argued that such a framework can underpin an approach to understanding education systems. This involves bringing together different kinds of evidence, including evidence derived from inter- and trans-disciplinary research and forms of analysis that can be used by policy makers and practitioners to tackle ‘wicked problems’ such as those posed by unsustainable development and the learning crisis.

Continuing in the same vein, chapter three will outline an approach for conceptualising the ethical basis for SD and ESD that informs the analysis and critique presented in the book. The chapter starts by providing a brief, critical overview of the genealogy of contemporary, dominant understandings of SD and ESD as they are portrayed in global and regional agendas. It then sets out an alternative means for conceiving the normative basis of SD and ESD. In so doing it pulls together insights from the capability approach of Sen and Nussbaum with Fraser’s views of social justice as well as work by Schlosberg that reinterprets the work of these authors through an environmentalist lens. Drawing on the capability approach and based on principles of social and environmental justice. Drawing together the ideas of these authors, the chapter provides a definition of SD as *socially and environmentally just development that supports the capabilities (i.e. opportunity freedoms) of existing and future generations and of natural systems to flourish*. Education for sustainable development is defined as *socially and*

environmentally just education that facilitates the capabilities of existing and future generations and of natural systems to flourish.

Chapter four seeks to set out an understanding of the postcolonial condition that forms the backdrop for the discussion of global and regional policy in subsequent chapters. Drawing on recent work on globalisation, the chapter will provide an understanding of complex globalisation that is relevant for understanding Africa's marginal position in relation to contemporary global flows and networks. The chapter will set out an understanding of development in Africa since colonial times in relation to the co-evolution of six inter-related domains of the economy, the polity, civil society, violence, culture and the environment. The chapter will consider how these domains are affected by the operation of different kinds of power that give rise to intersecting regimes of inequality. It is only through this kind of analysis it will be suggested, that it becomes possible to fully appreciate the roots of unsustainable development on the continent. Subsequent chapters will consider the relationship between education and each of the domains of development introduced in chapter four.

Chapter five will focus on the relationship between education and the domains of the global polity and civil society. It will trace changing patterns in the global governance of education since colonial times. This involves not only taking account of global regimes of education governance where policy is officially 'sanctioned' at different scales but also of the nature of the role of civil society waves including those of neoliberalism and pan-Africanism where much of the intellectual and moral energy for policy emanates. The chapter will analyse the changing patterns of global governance of education since colonial times. This involves consideration of changing regimes of global governance including education for all and, more recently the SDG regime as well as related regimes such as the aid, trade and security regimes that together constitute a regime complex that African governments must negotiate. The analysis will provide a basis for considering the emergence of contemporary global agendas. It will be argued that these agendas, although contested have been shaped largely by dominant global interests (including Western interests and increasingly, the Rising Powers) as well as by those of indigenous elites.

Building on the analysis in chapter five, chapter six will turn the spotlight on the regional and national levels of governance. The chapter will consider the legacy of colonial forms of governance under British and French rule for shaping the current fundamental nature or (in the language of complex systems), path dependency of education systems. Consideration will be given to the role of developmental regionalism and of the postcolonial state in the post-independence era in shaping the policy-making process in the interests of global powers and indigenous elites and limiting the potential for democratic governance at different scales. This will involve understanding the often-contradictory role of different actors in the state and civil society in governing education including not only policy makers and donors but NGOs, social movements of different kinds, teacher unions and the private sector. A focus for discussion is the increasing trend towards the privatisation of education at national level with implications for class and other regimes of inequality. The chapter will also consider the role of education and training systems in processes of political socialisation and in perpetuating violence. The chapter concludes by considering the possibilities for peace education in the context of the preceding analysis.

The focus of chapter seven is on changing discourses concerning the role of education in supplying the skills required for economic development. This, it will be argued, requires taking account of the changing relationship since colonial times between education systems and the domains of the economy as well as those of the environment and of culture. Drawing on the idea of 'skills formation' which emphasises the social nature of skills, the chapter traces the emergence of current discourses about skills for development as they have evolved in the context of contemporary globalisation. Attention will focus on the continuing influence of modernisation and human capital theories in shaping contemporary discourses relating to skills for development. It will be argued that current agendas are limited in their transformative potential. This is due to the contradictions inherent in the idea of 'inclusive growth' on which they are based and the predominance of neoliberal concerns with market-led growth over concerns for human development and the natural environment; through failing to fully acknowledge the implications of the causes of unsustainable development and of the learning crisis; and, through an emphasis on a narrow set of instrumentally defined skills and competencies that ignore the Eurocentric nature of global skills agendas and the need to develop skills that can support environmental protection.

Drawing on recent work on sustainable economic development, the chapter will present an alternative view of the economic domain that takes account of the environmental and social dimensions of economic production (including domestic labour) and seeks to balance meeting basic human needs with the need to operate within planetary boundaries. Drawing on the capability approach and on the idea of 'sustainable work', the chapter will present an understanding of skills and competencies that emphasises the social nature of skills and takes account of the barriers that prevent disadvantaged groups from developing skills and competencies that they have reason to value and that can assist in realising transformative SD. The chapter will illustrate the value of the approach through reinterpreting key priorities set out in regional agendas including the development of basic literacy and numeracy and STEM-related skills and drawing out the implications of the analysis for policy makers.

Chapter eight turns to a consideration of the relationship between education and the cultural domain. In particular it considers the implications of contemporary debates concerned with 'decolonising' the curriculum in Africa. It sets out two contrasting views from the literature on the nature of epistemic justice in education. The first, which draws on a long tradition of anti-colonial struggle argues for an overhaul of the Eurocentric basis of the existing curriculum whilst the second, drawing on the philosophy of social realism argues that epistemic justice implies facilitating access for disadvantaged groups to powerful knowledge represented by the disciplines. The chapter argues for a *rapprochement* between these two positions. Realising curriculum transformation in the interests of decolonisation, it will be suggested, requires a systemic approach. On the one hand, it involves reorienting and democratising the process of research in higher education to make it more relevant and meaningful for facing the challenges of sustainable development in Africa. This involves a role for researchers in promoting inter- and transdisciplinary research and drawing on indigenous as well as Western knowledge systems to facilitate social learning in the community. On the other hand, it involves democratising the processes by which specialised knowledge becomes codified in the school curriculum and translated into classroom practice. The chapter will use the case of the secondary school science curriculum in Africa to highlight the challenges and possibilities involved.

Chapter nine then goes on to consider some of the pedagogical implications for developing transformative agency in learners so that they are equipped to tackle problems of unsustainable development in their communities. The chapter sets out contrasting view of pedagogy in Africa based on progressive and formalistic frames. Drawing on insights from complexity theory as it has been applied to theories of learning the chapter argues the need to transcend the unhelpful binary between these two approaches. Drawing on recent scholarship that has sought to situate an understanding of pedagogy at the intersections of various complex systems encompassing the home and community background of the learner, the classroom, school and wider education system including the national curriculum frameworks, assessment system and teacher training, the chapter will argue for the need for coherence at a system level in terms of the overarching moral purpose of education and between the curriculum, assessment and teacher training but most especially at the 'pedagogical core'. This demands a focus on the specific activities facilitated by the teacher that enable the learner to engage with the content of the lesson and how these are evaluated. It will also be suggested, that pedagogy needs to take account of the operation of various intersecting regimes of inequality in the classroom and wider system that limit the opportunities for learning available to different groups. This in turn involves a systemic response including investment in the professional capabilities of educators and drawing on relevant, contextualised research in African classrooms.

The final chapter focuses on the need for transformation at a system level. Rather than providing hard and fast 'solutions' (which would run counter to the underlying view of complex systems informing the book), the chapter brings together evidence from earlier chapters and from the wider literature to articulate an overall approach towards system change. The first part of the chapter makes the case for the development of a counter-hegemonic movement organised around a vision of a transformative ESD. Such a movement must include not only policy makers and practitioners in the state but organisations based in civil society including social movements, NGOs, religious organisations and the private sector that despite representing different interests can nonetheless be mobilised around a common, transformative vision. Both traditional and organic intellectuals based in social movements have a key role to play in articulating a counter-hegemonic vision. Drawing on a critical reading of the international literature on system change, the second part of the chapter argues that education and training systems must themselves be made sustainable if they are to support transformative change. This, it will be suggested involves placing an ontology of learning at the centre of system reform that takes account of the capabilities of different groups to learn; developing systemic rather than fragmented responses to the learning crisis; facilitating system leadership at all levels of the education and training system and in civil society as a *sin qua non* for realising change; investing in educators as agents of transformative change; democratising the governance of education to include historically marginalised interests in the change process; creating learning systems that can act on a range of context relevant evidence to tackle the learning crisis; and, moving out of the dependency trap which has for so long acted as a break on African-led development

Conclusion

In this chapter a case has been made for the importance of focusing on ESD in the African context given the challenges facing the continent in relation to achieving SD and the central

role afforded to education in meeting these challenges. The chapter has also provided some detail as to the nature of the SDGs, including the education SDG, and of Agenda 2063 and CESA as a basis for more critical engagement with global and regional agendas in subsequent chapters of the book. Finally, the chapter has provided an overview of the key aims and arguments presented in the remaining chapters which, it is hoped will assist in orienting the reader to what is to follow. Having outlined the rationale, background aims and main arguments, the next chapter will consider how an understanding of complex systems can assist in conceptualising SD and ESD.