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Research article

Building new social contracts: a critical review of ideas and actions to fulfill African aspirations through education

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Abstract: This article proposes a theoretical framework for constructing a new social contract through education based on three levers—affordability, accessibility, and applicability—focusing on Africa. The article argues that if governments make education more affordable, accessible, and applicable, they can ensure a virtuous cycle of trust between the government and people, resulting in policies that deliver equal opportunities, create intergenerational mobility, and reduce poverty. The contribution of the framework lies in providing a foundation for new public policy research on the interaction between sector development (like education) and social contract building. The framework is designed to be sufficiently general to systematically investigate broad trends in public policies and sufficiently flexible to accommodate specific micro-contexts in developing countries.

1. Introduction

The coronavirus disease (COVID-19) pandemic laid bare inequities that already existed in societies around the world, including in Africa. Such inequities were evident in the fact that access to

healthcare, education, and social protection was not universal. Healthcare facilities were stretched and could not meet the enormous needs to fight the pandemic. Vast digital divides meant that school closures were particularly devastating to children from poorer households, who could not attend online classes because they did not have access to the internet. Strict lockdowns around the world left most of those working in the informal sector with no livelihood. Containment measures had a disproportionate impact on the services sector, in which more women than men were employed and in which opportunities to work from home were limited.

In the aftermath of the COVID-19 pandemic, there is a renewed commitment to building forward a world that is fair for all, in which everyone has equal access to opportunities to live to their full potential. This means ensuring that Sustainable Development Goals 1–5 (related to people—no poverty, no hunger, education and healthcare for all, and gender equality) are achieved by 2030 (United Nations, 2015). As of 2021, the progress made on these goals had been too slow for them to be achieved by 2030. The time is right to rethink how more effective policies can be developed. Although it can be argued that investment in social programs could have been greater, it is clear that the investment that did take place did not have the desired effects. With many countries in debt distress, increased spending is not an option for all. It is therefore important to determine why economic and social spending policies to date have not had their intended impact, and what remedies can be applied to achieve greater returns as economies are rebuilt following recent shocks (the pandemic, the war in Ukraine, more frequent natural disasters, and tighter global financial markets).

In such circumstances, governments need to step up their commitment to forge new social contracts to ensure equal rights and opportunities for all, while integrating employment, sustainable development, and social protection—an idea that the Secretary-General, António Guterres, supported in a speech in which he proposed a "new social contract for a new era" (United Nations, 2020a).

In this paper, it is explained that African countries can use the education sector to foster more inclusive development and manage global and regional megatrends. Using recent literature and evidence, the paper also contains a discussion of how a focus on affordability, accessibility, and applicability in the education sector can serve as the basis for defining new social contracts in Africa.

2. Megatrends and regional paths in Africa: an overview

The world can change enormously over a period of 25 years. At present, the world is at a set of crossroads, and the decisions made now will have a lasting effect over the next quarter of a century. The main megatrends and regional dynamics affecting people's lives in Africa are highlighted in the present section. Whether the trends and dynamics are beneficial or detrimental will depend on how they are managed.

2.1. Demographic shift

Developed countries and many emerging and developing countries are experiencing declining fertility rates and extended life expectancy. Worldwide, the 60-year-old or older population is expected to double from 1 billion in 2020 to 2.1 billion by 2050, when 80% of older people will be living in low- and middle-income countries (World Health Organization, 2022).

Given its high fertility rates, according to projections, Africa will provide more than half of the world's population growth between 2022 and 2050. By 2050, more than half of the population of Africa will be below the age of 25. The region will thus have a large working-age population that can help support the aging population in the rest of the world. However, in 2020, 1 in 5 young people was not in employment, education, or training in Africa; as such, policymakers need to prepare young people for the jobs of the future if Africa is to take advantage of the youth bulge within a new social contract (International Labour Organization, 2022). A proper focus on education for all (Goal 4) is, therefore, needed, and new jobs need to be created for the millions of young people entering the labor force each year.

2.2. Urbanization

By 2050, the global population is projected to increase to about 9.8 billion, with more than twice as many people living in urban areas (6.7 billion) as in rural areas (3.1 billion). In Africa, 6 in 10 people will live in urban areas. In 50 years, the number of African cities with a population of at least 1 million will have increased from 60 to 134, while the number with a population of at least 5 million will have increased from 6 to 28. Preparations for the growing urban population need to start immediately. African countries need to adopt a new social contract in which they build adequate infrastructure, provide public goods and services, and respond to the growing demand for employment (United Nations Human Settlements Programme, 2022).

Cities can act as engines of sustainable development. In many African countries, however, urbanization is occurring among people with lower income levels, which means that additional or supplementary public services are needed for people who are less self-sufficient. Urbanization in Africa is also taking place amid rising unemployment, increasing poverty and inequality, the proliferation of slums and other forms of vulnerability, financially weak municipal authorities, and weak systems of governance. Given the situation, preparing young people for future jobs means not only providing education for all but also ensuring equal accessibility to schools under a new social contract.

2.3. Digital transformation

The COVID-19 pandemic has accelerated the pace at which digital technology, artificial intelligence, and the Internet of Things are being adopted, and has shown that such technological developments are essential and have great potential. Lockdowns would have been unbearable for many if the internet had not allowed them to work, shop, and attend school lessons from home.

At the same time, however, the pandemic highlighted the huge digital divide. In 2021, 2.9 billion people in the world were still offline—approximately 37% of the world's population. In Africa, only 33% of the population were internet users in 2021, leaving 871 million people who were not realizing digital dividends (Munga, 2022).

To benefit from digitalization in the future, Africa needs to leverage the great potential of its skills and human capacity. The region should pay more attention to digital opportunities for women. According to recent estimates, 47% of science, technology, engineering, and mathematics undergraduate and postgraduate students at African universities in 2021 were women, but they are still

kept out of the labor market by structural barriers; in the technology, information, and communication technology sectors, women are severely underrepresented (UNESCO, 2022). A new social contract should address this mismatch between skills and employment.

2.4. Climate change

As greenhouse gas emissions continue to increase owing to anthropogenic activities, extreme weather patterns will continue to beset the world, with Africa being the largest victim. According to the International Rescue Committee (2023), 7 of the 10 countries most vulnerable to climate change are in Africa. In the past 50 years, drought-related hazards in Africa have claimed the lives of over half a million people and led to economic losses of more than $70 billion. Up to 118 million extremely poor Africans could be exposed to drought, floods, and extreme heat by 2030. Furthermore, many African countries remain locked in conflict, adding to the complexity of compounding risks. Such events often disrupt education. For instance, in June 2022, 2.9 million children in Ethiopia were out of school (17% of the school-age population) owing to conflict, drought, flooding, and other natural emergencies (Ethiopia Education Cluster, 2022).

The effects of climate change, the increased frequency and intensity of natural disasters, and the drivers of conflict can be addressed through education. Education improves one's understanding of the risk, thereby increasing the likelihood of climate adaptation and mitigation and encouraging dialogue toward peace, both of which require transboundary negotiations with a view to addressing shared risks. Climate change literacy remains much lower in Africa (37%) than in Europe and North America (80%) (National Oceanic and Atmospheric Administration, 2023; Johnston, 2020). Education that emphasizes shared responsibility within a new social contract can raise awareness of the nexus between climate change, disasters, and conflict, which will, in turn, influence individual and collective behaviors and inform development-related decision-making. Some African countries are already doing this by including climate change information in school, college, and university syllabuses.[1]

2.5. Social spending

Fiscal situations have worsened since the pandemic, but social spending on health and education has historically been below the levels prescribed by the World Health Organization and the United Nations Educational, Scientific and Cultural Organization (UNESCO) in their guidelines (see Figures 1 and 2). Furthermore, only 17% of the African population is effectively covered by at least one social protection benefit (see Figure 3). Large inefficiencies in taxation and spending in Africa constrain the fiscal space. For instance, illicit financial flows deprive Africa of more than 3.7% of gross domestic product (GDP) per year, while inefficient tax incentives take away 2.6% of GDP (United Nations, 2020b). In addition, there are large inefficiencies in spending that cost Africa more than 2.5% of its collective GDP per year, which also affects socioeconomic outcomes. Between 2000 and 2017, Africa

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[1] Several countries have already introduced climate change modules in the education system, including Benin, Cameroon, Egypt, the Gambia, Ghana, Kenya, Seychelles, South Africa, and Zimbabwe.

lost more than $40 billion per year in education and infrastructure spending and $28 billion in health spending (United Nations, 2022).

Given the current financial climate (public debt is increasing, an additional investment of $850 billion is needed to achieve the goals related to people, global financial markets are tightening, and official development aid is dwindling), policymakers need to improve policy coherence by leveraging synergies between various Sustainable Development Goals to enhance the effectiveness of their socioeconomic policies.
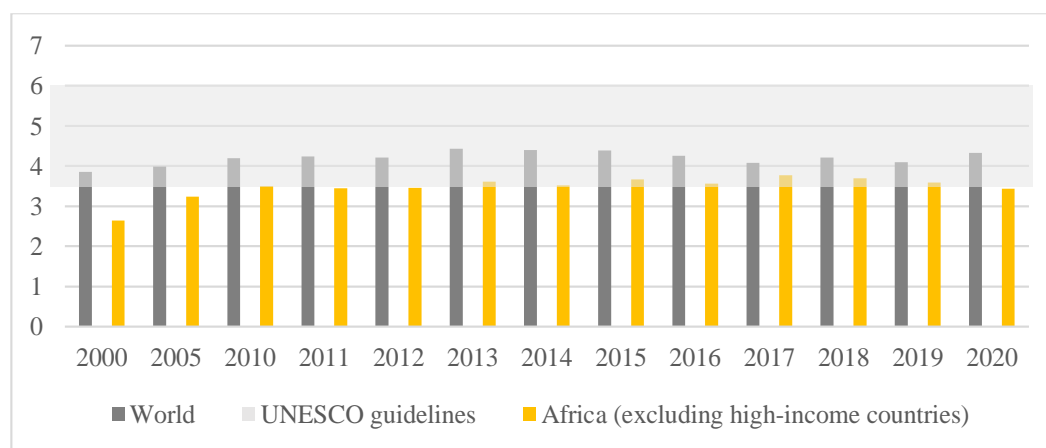

Figure 1. Public spending on education in Africa and the world (percentage of gross domestic product). Source: Economic Commission for Africa (ECA) estimates based on World Bank data.
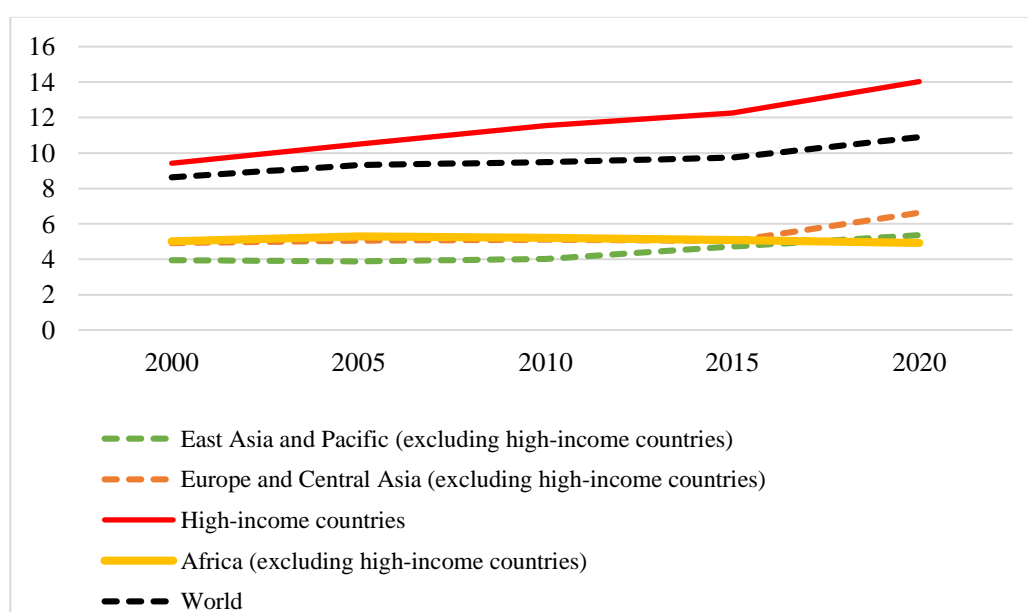

Figure 2. Spending on health in Africa (percentage of gross domestic product). Source: Economic Commission for Africa (ECA) estimates based on World Bank data.
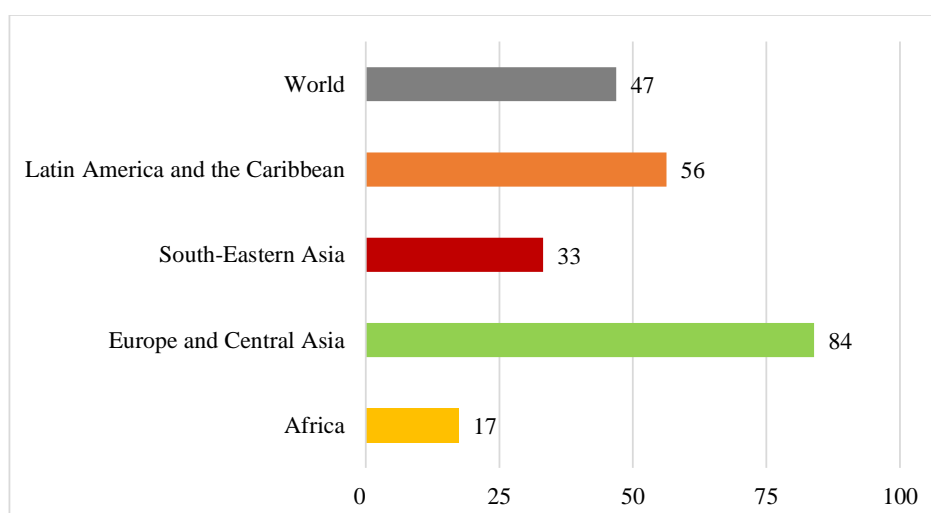
Figure 3. Social protection coverage by area (percentage). Source: Economic Commission for Africa estimates based on International Labour Organization (2020).

3. Why education matters in building a new social contract: a critical reflection

Sustainable Development Goal 4, on access to high-quality education and lifelong learning, can be a catalyst in advancing other goals. Equipped with the right knowledge and skills, people can make informed decisions, pursue healthy lives, and respond to national and global development challenges (UN Secretary-General, 2020). Education is therefore a smart entry point for tackling other goals, as is made clear in Figure 4.
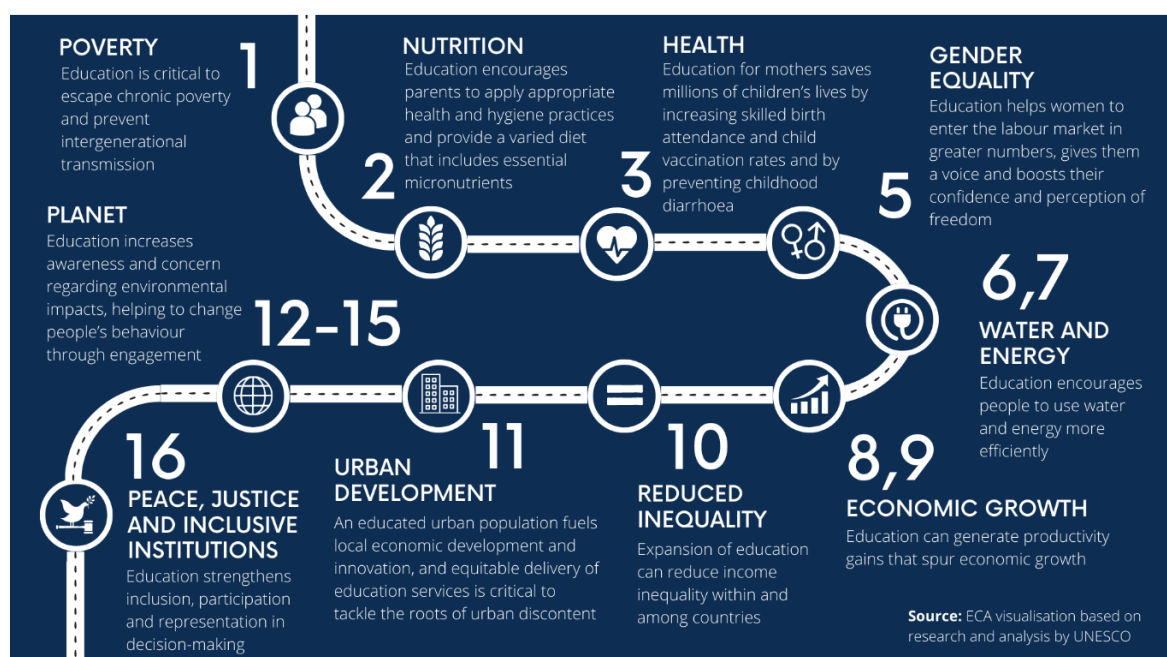

Figure 4. Education as an anchor for other Sustainable Development Goals. Source: ECA, adapted from UNESCO, 2014.

Given the catalytic role of education in enabling the attainment of the 2030 Agenda for Sustainable Development, it is imperative to ensure that government spending is efficient, inclusive, and equitable. Affordability, accessibility, and applicability are being addressed in some African countries, as shown in the examples in Table 1. Nevertheless, in most African countries, spending on education is lower than the levels prescribed by UNESCO, and the money that is spent does not reach the right people. For instance, according to UNESCO data on public spending, 37% of educational resources reach the richest 20% of children, while only 10% reach the poorest 20% (Figure 5). In addition, many geographic and socioeconomic inequities prevent the full potential of many people from being harnessed. For instance, the odds of completing any of the three levels of education are stacked against rural dwellers and the poor (Figure 6)[2]. There is room to design inclusive and equitable high-quality education policies that can improve the efficiency of these limited resources and help bridge the gap between rich and poor by ensuring lifelong learning opportunities for all. If directed correctly, education spending can also improve intergenerational mobility (Figure 7).

Table 1. Efficiency of spending on education: examples from African countries.

Country	Actions	Outcome
Benin	School Construction through Community-Drive Development	+1,8000 school –20% of unit cost
Gambia	Progressive financial incentives program for teachers in rural areas	95 percent of trainees would accept a rural posting
Kenya	Girls' Scholarship Program for school fees and supplies	30 percent drop in absenteeism among girls
Zimbabwe	Increased Access to Secondary Education through Government-Community Partnership	Increase in the number of secondary school from 200 to more than 1,600

Note: Source: ECA visualization based on Majgaard and Mingat (2012), Education in Sub-Saharan Africa: A Comparative Analysis, (Washington, D.C., World Bank, 2012).

[2] The bars show how many times boys, urban dwellers, and the richest quintile of schoolchildren are more likely to complete each of the three stages of schooling than girls, rural dwellers, and the poorest quintile, respectively.
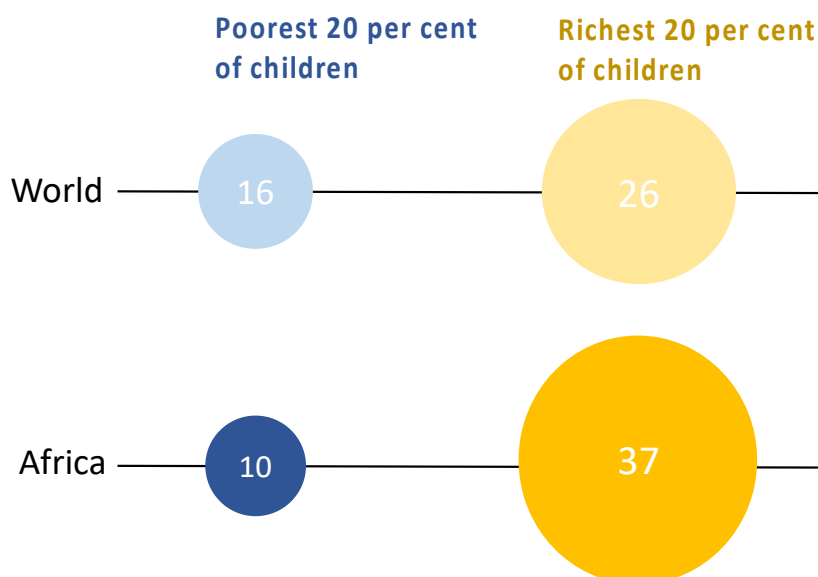
Poorest 20 per cent of children   **Richest 20 per cent of children**

World ——— 16   26

Africa ——— 10   37

Figure 5. Percentage of public education resources reaching the richest and poorest, 2019. Source: ECA, adapted from the World Inequality Database on Education and the UNESCO Institute for Statistics.
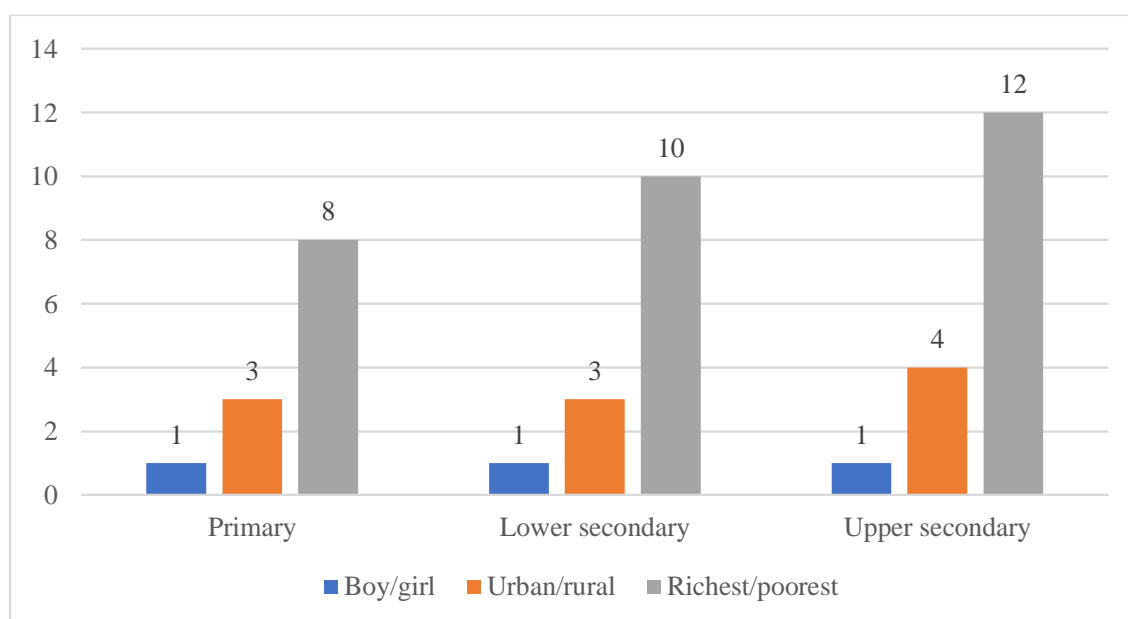

Figure 6. School completion likelihood ratios in Africa. Source: UNICEF, 2021.
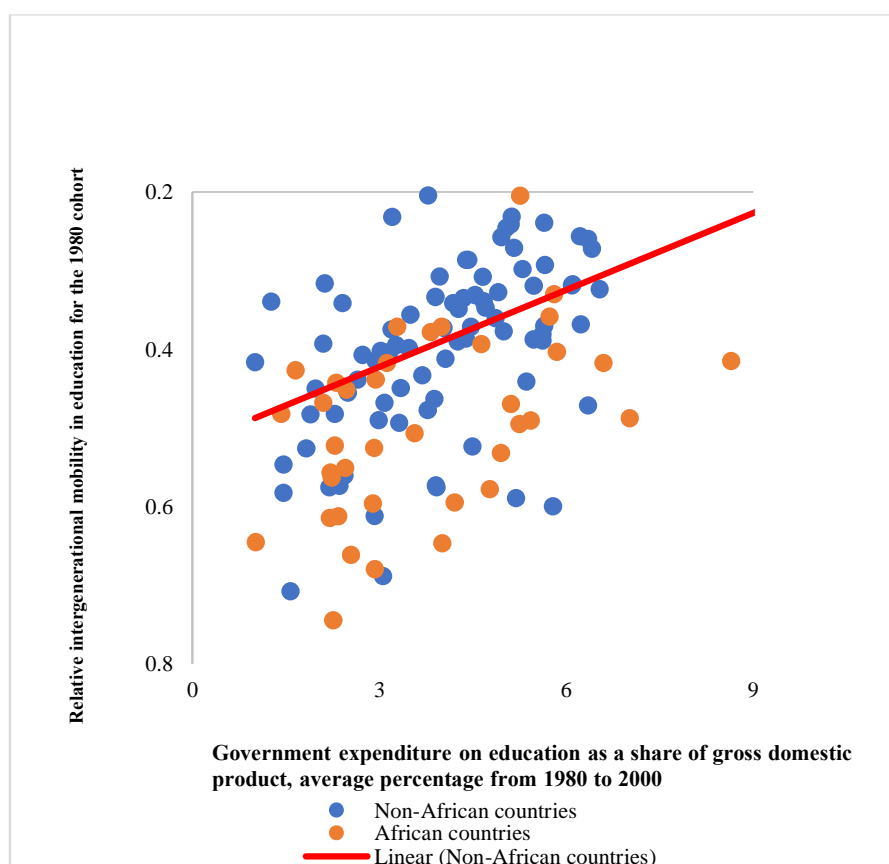
Figure 7. Relative intergenerational mobility in education and government expenditure on education as a share of gross domestic product. Source: ECA estimates based on World Bank Open Data[3] and the Global Database on Intergenerational Mobility (World Bank, 2023).

While there is evidence that education spending can have positive social impacts, not all spending is equally impactful. Policymakers should therefore target spending toward their intended goals. Research shows that if the goal is to reduce poverty and inequality, spending should be geared toward access to preschool and primary education because of its formative role and lifelong benefits (see Table 2). These early experiences shape childhood development, including cognition, comprehension, and socialization. In addition, inclusive primary education aids secondary and tertiary education (UNESCO, 2021). Finally, given that most African countries have a primary school enrolment rate of 90%, the focus should be on the quality of education and the causes of high dropout rates, especially for girls (African Development Bank, 2014).

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[3] Available from: https://data.worldbank.org/.

Table 2. Nexus between education policy and poverty and inequality reduction: evidence from literature.

	Research suggests that spending on education can reduce poverty and inequality in the following ways:
Evidence from Literature	An increase in the proportion of gross national product allocated to education (1 per cent), such as basic social infrastructure, reduces the proportion of people living below the national poverty line by 2.54 per cent and the international poverty line by 3.89 per cent.
	Spending on primary education tends to be pro-poor, whereas tertiary education spending tends to have an equalizing impact (Tunisia). Social spending on education includes in-kind transfers (universal free public education), cash transfer programmes for families in need, scholarship assistance for students (0.3 per cent of GDP in 2010), youth activities, grants to local communities and non-governmental organizations, and special treasury funds (0.5 per cent of GDP).
	An increase in public expenditure on primary education was linked to the largest reduction in income inequality. This occurred in Egypt, where targeted policies enhanced the affordability of education, with about a quarter of public spending directed to the poorest quintile of the population.
	The largest decline in inequality, in Ghana, was driven by primary education. Increases in schooling attainment (at primary and secondary level) not only increased wages, but also improved attainment at higher levels of education.

Note: Source: ECA, based on Arimah (2004); Jouini et al. (2018); and Lara Ibarra et al. (2019).

Policymakers also need to assess the importance of building their labor force for future jobs. Since the Fourth Industrial Revolution is already underway, policymakers should emphasize equipping the labor force with the requisite skills (Schwab, 2017). Alternative forms of education or skill acquisition can play a vital role in bypassing structural barriers faced by disadvantaged groups, strengthen the social capital of those groups, and help to expand their social networks beyond poorer neighborhoods.

Initiatives to enhance skills are needed to help a new generation of young people navigate structural, spatial, and temporal challenges and gain employable skills and certification in new and emerging areas, such as digitalization. Retraining is needed for graduates whose skills are no longer in demand. By adopting a purpose-driven approach involving technical and vocational education and training, countries can enhance people's skills, retrain workers in new functions, which traditional education often fails to do, and help workers to find decent employment. In Eswatini, 73% of students who graduated from one specialized technical and vocational education and training program between 1995 and 2015 found productive employment immediately after graduating, with 48% employed formally (Swaziland Economic Policy Analysis and Research Centre, 2019). An additional advantage of technical and vocational education and training is that it supports lifelong learning. Although lifelong learning is deeply rooted in many African cultures, through education and apprenticeships, opportunities for formal adult learning and education need to be further developed, especially given their unique capacity to empower the most vulnerable people.

Finally, policymakers need to be cognizant of spatial dimensions and ensure that where somebody lives does not determine their future. Research shows that living in a neighborhood with a high concentration of poverty can have negative effects on individual outcomes in education, income, health, and well-being (van Ham et al., 2012). In one study, children who moved from a high-poverty hotspot to a low-poverty hotspot before the age of 13 earned 31% more as adults than those who did not move (Chetty et al., 2016). In another study, in South Africa, significant relationships were found between housing conditions (type of building and number of rooms) and home duties on one hand and academic achievement on the other (Pillay, 2017).

4. How to establish a new social contract through education policies: affordability, accessibility, and applicability at a glance

The effectiveness of education in building new social contracts will depend on the intended outcomes (deliverables by the government that benefit society overall), scope (key players and geographic scope), and temporal dimensions (start, dynamic, and duration) of the contracts. In the present paper, a consolidated framework from the UNESCO Global Education Monitoring report has been used to identify the main factors that can influence people's behaviors and make education policy more efficient, equitable, and inclusive so that it addresses the structural barriers posed by poverty and inequality (UNESCO, 2024). The report sheds light on their instrumental role in fostering key actions in making education more inclusive by advocating for the right to affordable education, encouraging accessible education, and critically reviewing the purpose of education for future generations.

Based on UNESCO's framework, affordability, accessibility, and applicability are explored as crucial in guiding the current and next generations of education policies. Further, the OECD program on the Future of Education and Skills, particularly its Learning Compass 2030, provides a holistic view of learning, identifying the need for attitudes, knowledge, values, and skills as pillars, centered on competencies as a core foundation, where a whole-of-society approach is needed in addressing education as part of well-being (OECD, 2019). The framework, while well-suited in the context of OECD countries, perhaps does not highlight the pertinent contextual issues faced by many African countries, including developing countries, where the cost of education, access to learning, and its relevance among market and labor dynamics are integrated and overlapping; and where agricultural, non-manufacturing, low-end service, resource-rich, highly informal, or rapid digitalization are distinguishing hallmarks of many African economies. Therefore, access, affordability, and applicability are not only factors of education and learning within the African context but also of labor, markets, technology, resources, and their associated institutions and structures and the inequalities that persist in addressing the 3As.

4.1. Affordability: the impact of hidden costs and high burden for households

More than 1 in 5 children in Africa between the ages of 6 and 11 do not attend school, and 3 in 5 children between the ages of 15 and 17 are not enrolled. The onus is, therefore, on policymakers not just to build schools but to institute policies that increase enrolment, attendance, and completion rates.

Social and economic factors are linked to school dropout rates. Even though many African countries have made primary and secondary education free, other constraints keep children from poor families at home. The constraints include the costs of meals, uniforms, books, and menstrual hygiene supplies, which make school unaffordable for many poorer households. Household and other private spending contribute 40% to education expenditure (Maddison and Micah, 2022). Such prohibitive costs and the perceived poor quality of education are the main reasons for school dropout in West Africa (World Bank and UNESCO, 2022).

The opportunity costs of attending school also affect people's behavior. For example, they may decide to work because of the immediate and short-term gains rather than investing in schooling for long-term gains. This can be a particularly difficult decision for poorer families that rely on income for their sustenance and day-to-day expenditure, families who live from hand to mouth, families in which school-age children are the only potential earners, and child-headed households.

To overcome these barriers, governments can make education more affordable by abolishing tuition fees, providing free school meals, uniforms, books, and laptops, and offering scholarships to encourage attendance and increase completion rates. The introduction of free primary education in Kenya in 2003 increased school enrolment rates, and the introduction of free school uniforms and sanitary and other hygiene supplies reduced school dropout rates and absenteeism among girls (Igadwah, 2017; Owuor et al., 2018; Maddison and Micah, 2022).

Other interventions include providing cash transfers to poorer households to send children to school. In a study in Cameroon, a 1% increase in household income led to a 30% increase in the likelihood of children enrolling in school, suggesting that a higher income reduces the burden of education costs for poor families (Mutisya et al., 2021).

4.2. Accessibility: the effect of school location and travel mode options

Researchers have found that children's school enrolment, education attainment rates, and their ability to read and write are correlated with factors such as distance to school and travel mode options. The location of schools (urban versus rural), travel time, and travel mode options affect access to education and quality of education, particularly in developing countries where schools are not easily accessible, and transportation options are limited or costly (World Bank, 2003; de Armas et al., 2022).

Location influences the quality of education. Urban schools have more resources (e.g., number of schools, quality of teachers, access to electricity, school-based support, and leisure activities) and better facilities. Additional efforts should therefore be dedicated to closing urban-rural learning gaps to ensure a high-quality education for all (Sumida and Kawata, 2021). In two studies, in urban areas in Mozambique and Nigeria, it was found that the distance traveled had a direct relationship with school attendance rates, with lower attendance rates observed among primary and secondary school students who lived further away from their school. In a Mozambique study, reducing the travel time to the nearest school led to a 17–20% increase in enrolment rates (Duze, 2010; Handa, 2002). The ability to read and write is also correlated with the distance traveled to school. For instance, in both rural and urban areas in Ghana, it was found that a longer travel time had a negative impact on children's ability to read and write and their ability to perform written calculations. It was also found that children who walked longer distances to and from school were more likely to arrive late to school and more likely

to miss class owing to illness. Specifically, a one-minute increase in a student's travel time to school was associated with 3 minutes of missed lesson time per month, a 0.30-point increase in the likelihood of a student visiting a health practitioner, and a 0.4-point increase in the likelihood of a student being hospitalized. School travel time started to have an impact on learning outcomes from 17 minutes. The negative effect increased substantially for children who traveled more than 30 minutes to school (Afoakwah and Koomson, 2021). This threshold was also found in research in the United Republic of Tanzania (Pezzulo et al., 2022).

The above research provides four key lessons that policymakers can use to improve the accessibility of schools. First, the distance to school and travel mode may affect enrolment and attainment and reduce children's acquisition of reading and writing skills. Second, although children living in both urban and rural areas are negatively affected by school travel time, the effect on learning outcomes is more pronounced among those in urban areas. Third, children whose travel time to school is more than 30 minutes have poorer learning outcomes. Fourth, the channels through which travel time affects children's learning outcomes are missed class hours and health issues. School locations should therefore be chosen to minimize travel time for children, to where there is good access to transport to reduce travel time, or to where a means of transport is provided to reduce school commuting time.

4.3. Applicability: improved credibility of African educational institutions to meet demands and match aspirations

UNESCO describes the right to education as a basic human right designed to lift people out of poverty, reduce inequality, and ensure sustainable development (UNESCO, 2023). The purpose of education, therefore, is to prepare people for employment, enterprise, and other income-generating activities and to make them cognizant of their individual and collective history.

However, the skills of most young Africans do not match the local job market. In surveys conducted in 11 African countries, 35% of young graduates reported that they felt overqualified for their job, while 6% felt underqualified (African Union Commission and Organisation for Economic Co-operation and Development, 2021). Although 47% of science, technology, engineering, and mathematics graduates in Africa are women, in sub-Saharan Africa only about 30% of employees in the tech sector are women (Bothwell et al., 2022; United Nations Development Programme, 2019). This might explain why more than three-quarters of young graduates (between the ages of 15 and 29) across Africa are forced to begin their careers in informal activities, either by starting their own businesses or by working in fields unrelated to their formal education or certification (out of necessity rather than by choice) (OECD, 2017). With such high numbers engaged in informal business and enterprises, governments should ask whether provisions are in place to retrain people in new functions or formalize their entrepreneurial endeavors through recognized management and business administration courses and certifications.

This mismatch between the education systems and economic activity across African countries is one of the many reasons why African students choose to pursue tertiary education abroad. For example, in Côte d'Ivoire and Ghana, the number of tertiary education students studying abroad has increased sharply since 2011. Between 2016 and 2021, it increased by 62% in Ghana and 87% in Côte d'Ivoire

(Campus France, 2022). Many African students are successfully completing overseas education programs, but many cannot because of structural barriers, a lack of funding, and discrimination and racism toward Africans.

Another reason for the low esteem in which African educational institutions are held is the perception that domestic education is of poor quality, especially in rural areas, with irrelevant syllabuses and poorly qualified teachers. Students prefer the credibility of foreign institutions, many of which, in addition to traditional education, have moved toward profit-based business models and even operate like businesses, focusing on soft skills, personal development, and social skills as a parallel form of education, which African educational institutions often overlook. Despite such business-like operations and real-world applications, educational institutions still lack the purpose-driven approach to business that is needed to make societies more sustainable, as they remain siloed and traditionally conservative at their core, rather than agile and responsive to trends, the economy, and people's needs.

Twinning strategies have been found to help increase the credibility of domestic institutions (UNESCO, 2013). Under such strategies, institutions affiliate themselves with well-established foreign entities and begin to adopt the foreign entity's working procedures and administration to bring their own standards up to those of the foreign entity[4]. This can include strategies to promote the cross-pollination of people and ideas through secondments, itinerant lecturers, well-established student exchange programs, and joint research.

Clustering is another industrial development strategy that can be adopted to align education with industry (Ethiopia Education Cluster, 2022). This includes the co-location of various educational institutions in industrial and technology parks to strengthen the value chain as well as the labor and skills supply pipeline. For example, tertiary and specialized educational institutions can be co-located with research and development facilities, incubators, and commercial companies so that ideas, skills, and people have a more organic route to market and a link with industry. While some countries, such as Ethiopia, are making headway in developing industrial and technology parks to create jobs, many are yet to incorporate education and training facilities into such clusters (World Bank, 2019).

Another option is to offer more vocational or hybrid programs, in which time is allocated for students to work in industry, often in paid jobs. Such programs are known as industrial placement programs or as sandwich courses or degrees. Students are expected to work during part of their course and bring back industrial knowledge and skills to complement the remainder of their academic studies. The placements give students valuable experience in the workplace. They also strengthen links between academia and industry and help students to find a job once they graduate. This differs from technical and vocational education and training in that the focus of placements is on highly specialized sectors and involves highly skilled programs, often linked directly with industrial and economic demand.

These strategies are all worth exploring to make African institutions credible and equivalent to their foreign counterparts. The strategies give students early exposure to higher standards of quality

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[4] One such example is the University Twinning and Networking Programme. Established by UNESCO, the program promotes international cooperation and networking to enhance institutional capacity among universities through collaboration and knowledge-sharing.

and to professional and commercial environments, helping them to see the links between theory, practice, and career progression more clearly, and ensure a more demand- and purpose-driven approach to education.

Figure 8 shows a summary of evidence on the drivers of behaviors and expected outcomes, as identified in the literature.
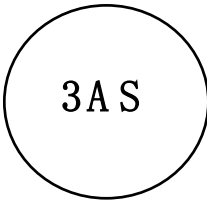

3AS	Variable	Metrics	Outcomes
Affordability	The cost of airtime, mobile data and broadband services	Currency	Expanded access to online learning resources for all children, including the most disadvantaged and vulnerable children[a]
	Provision of borrowing options for education	Currency	Lower financial burdens and obligations and higher enrolment rates at various levels[b]
Accessibility	Reduced walking time to and from school – below 30 minutes	Km	Improved enrolment and attainment rates Less illness[c]
	Investments to improve travel mode options (school bus, public transport, bicycle lane)	Currency	Improved literacy and numeracy performance[d]
Applicability	Education on puberty and on sanitation and menstrual hygiene products for girls	Number of products	Lower absenteeism among girls[d]
	Developing scholarship and outreach and mentorship programmes for women to stimulate participation in growth sectors[b]	Number of activities	More women working in the information and communications technology sector[e]

Figure 8. Outcomes from policies related to affordability, accessibility, and applicability: evidence from literature. Source: (a) UNICEF and African Union Commission (2021); (b) Saavedra and Brixi (2021); (c) Afoakwah and Koomson (2021); (d–e) De Armas et al. (2022).

5. Conclusions

5.1. *Revitalizing the education system and unlocking the potential of curricula*

In considering education as a lever to reduce poverty and inequality, it is essential to consider whether education curricula are fit for the job market of the future. A United Nations policy brief stated that another structural challenge is to ensure that education curricula are "responsive to the national development vision, relevant to the times and in line with the needs of the population" (United Nations, 2022). The policy brief then notes that "African countries have been conscious of the need to significantly change their curricula since the beginning of African unity". This has been recalled again

in the African Union roadmap and in the theme of education for the thirty-seventh session of the Assembly of Heads of State and Government of the African Union, which was held in 2024.

The policy brief also notes that at the first pan-African conference on education, in 1960, African leaders questioned whether colonial education was relevant for the development needs of Africa and called for action to be taken to ensure that education produced "human-level expertise" and graduates that could use technology "for social economic development and wealth creation". To achieve this, the teaching and learning of the sciences would need to be strengthened, and mindsets would need to be developed for social economic development (United Nations, 2022). The policy brief acknowledges the difficulty of the task, noting that it required investment in teacher development programs, the review of school curricula at all levels, and new school infrastructure, including internet access.

The time is right for policymakers to overhaul education and re-evaluate education policies. As discussed earlier, inclusive preschool and primary school education can set children up for success, improving social outcomes and reducing poverty and inequality. In addition, with the advent of the Fourth Industrial Revolution, it is imperative that governments provide lifelong learning programs to enhance workers' skills and retrain workers for the jobs of the future. This is being done through technical and vocational education and training. It is also time to change curricula so that they match skills with future job profiles and improve education quality through twinning strategies that enhance the credibility and quality of domestic institutions, with education centers located in industrial towns to increase on-the-job training.

For greater policy coherence and systems thinking, more attention should be paid to the kind of jobs that will be created through the structural transformation of Africa. The African Continental Free Trade Agreement will generate 10 million new jobs by 2035. The sectors with high development and job-rich potential are agrifood, services and industry, and energy and mining. National strategies for education, skills development, and training should therefore be tailored to ensure an adequate labor supply in the coming decades. The required skills will range from job-neutral digital skills (for example, data analysis) and job-specific digital skills (for example, robotics) to "soft skills" such as managerial, collaboration, communication, and analytical skills.

Demographic changes in Africa will mean that more jobs will be needed than are projected to be created. Innovative approaches will, therefore, be necessary. For example, smart urban planning will be needed, in which the accessibility of public services and barriers to affordability and the applicability of skills and labor match the economic demand; highly skilled labor will need to be exported from African countries while foreign direct investment will be needed to connect African businesses to global markets and global demand for labor and skills.

5.2. Rethinking education under a new social contract

Although there is no one-size-fits-all blueprint for building a new social contract through the education sector, it is quite clear that a symbiotic relationship is needed between the government and the people. Governments are responsible for ensuring that people have the requisite skills for jobs. People, for their part, should pay their taxes to provide their government with the means to deliver the services that enhance their well-being. Such a social contract would hinge on inspirational leadership, inclusive institutions, and targeted policies. A robust social contract would involve all sectors of

society, from children and young people to parents, from employers to teachers and researchers, and from activists to cultural and religious leaders. A whole-of-society approach will ensure a virtuous cycle of trust between each government and the people, resulting in policies that deliver equal opportunities, create intergenerational mobility, and reduce poverty.

To ensure success, policymakers need to account for people's behaviors when designing policies (see Figure 9). For instance, education policies should be formulated in a way that gives due attention to affordability, accessibility, and applicability. This will ensure synergies in the management of the megatrends discussed above. In essence, a well-educated, young workforce will help African countries to reap the potential benefits of their growing working population while harnessing the opportunities afforded by the megatrends.
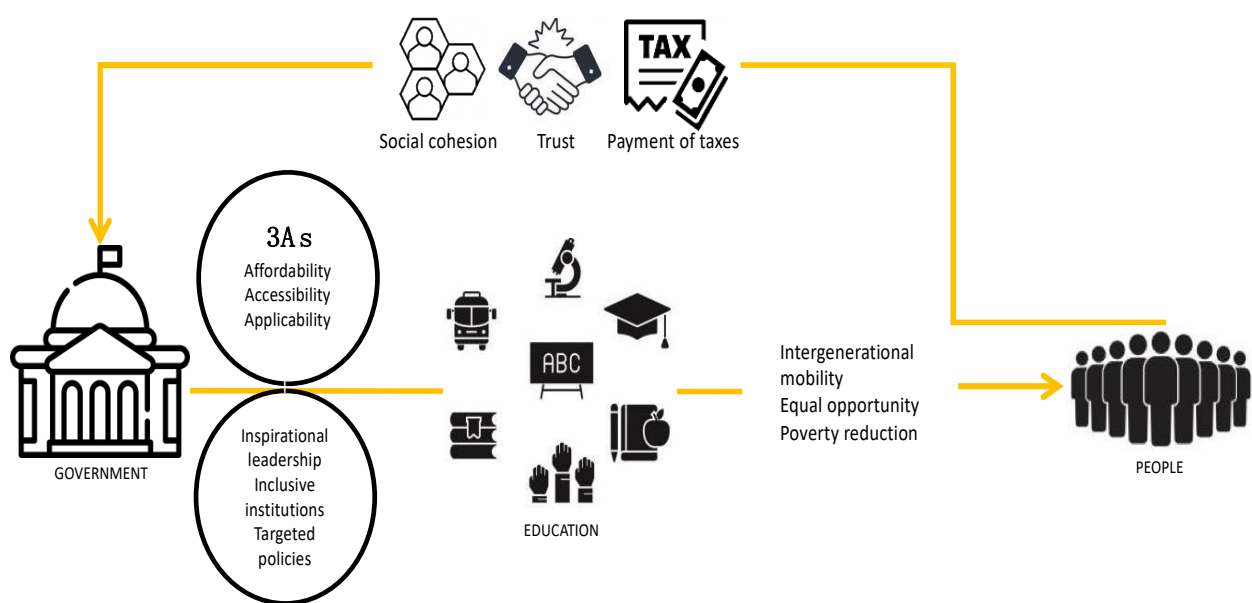

Figure 9. Examples of dynamics for the redesign of the social contract in the education sector. Source: ECA visualization of key elements, based on the present research.

Use of AI tools declaration

The authors declare they have not used Artificial Intelligence (AI) tools in the creation of this article.

Author contributions

All authors contributed to the study's conception and design. Material preparation, data collection and analysis were performed by all authors. All authors wrote different parts of the first draft, and also read and approved the final manuscript.

Disclaimer

This paper represents the views of the authors and does not necessarily carry the endorsement of the United Nations.

Conflict of interest

All authors declare no conflicts of interest in this paper.

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