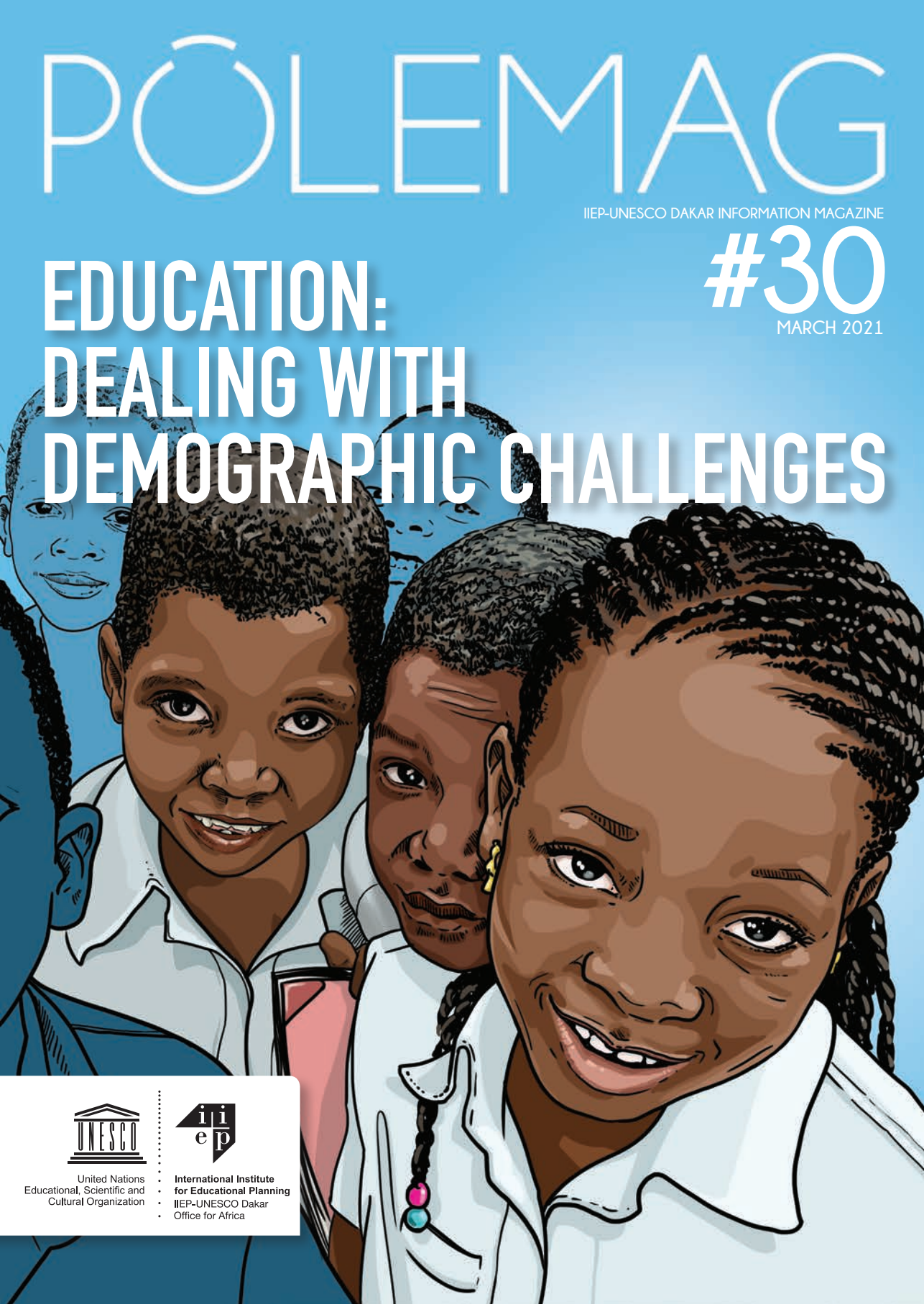
PÔLEMAG

IIEP-UNESCO DAKAR INFORMATION MAGAZINE

#30

MARCH 2021

EDUCATION: DEALING WITH DEMOGRAPHIC CHALLENGES



United Nations
Educational, Scientific and
Cultural Organization

International Institute
for Educational Planning
IIEP-UNESCO Dakar
Office for Africa

PÔLEMAG

IIEP-UNESCO Dakar
Almadies - Rte de la plage de Ngor - BP3311 Dakar Sénégal
Phone: + 221 33 859 77 30
https://dakar.iiep.unesco.org

IIEP-UNESCO Dakar is the African branch of UNESCO's International Institute for Educational Planning, a unique specialized United Nations institute with a mandate to strengthen the capacity of UNESCO Member States to plan and manage their education systems.

The articles contained in this publication express the point of view its authors and not necessarily those of IIEP or UNESCO. The information bulletin is published every six months in French and English.

Publication director: Koffi Segniagbeto
Conception and editing: Jonathan Jourde, Léonie Marin
Feature: Jean-François Kobiané, Professor of Demographics at the Higher Institute of Population Studies (ISSP) at the Joseph Ki-Zerbo University of Ouagadougou in Burkina Faso.
Translation: Atlantique-Traduction
Proofreading: Glynis Crook
Layout: Régis L'Hostis - www.designbyreg.dphoto.com

Contact : pdkcontact@iiep.unesco.org

contents #30

MARCH 2021

Revealing people's potential through universal schooling

BY **KOFFI SEGNIAGBETO** - HEAD OF IIEP-UNESCO DAKAR

In *Agenda 2063: The Africa We Want*, the African Union shares its vision for the future of the continent. Of the seven aims of this vast action plan, the sixth clearly calls for building on the '*potential of African people*'[1] and creating opportunities for youth.

In addition to addressing social and economic issues, Africa's master plan also focuses on education. Widespread access to quality education is a fundamental right for all, and is essential for the development of an African continent that is people-centred and people-driven.

Investing in education requires a good understanding of the potential demand. In sub-Saharan Africa, the population of 6 to 15-year-olds is projected to increase by 60% over the next 30 years, from just over 280 million in 2020 to approximately 450 million in 2050.[2] To ensure quality basic education for all children, it will be necessary to add some 9 million classrooms and recruit 9.5 million teachers.

This shows how important the study of demographics is. Through observations and analyses such as censuses, population projections, and population prospects, demographics can be employed to help plan for educational needs. When used from the start of an education planning cycle, population data are key metrics to achieving the goals set for 2030 and 2050.

Collaboration between education administrations, statistics agencies, and research institutions is essential. Alongside them, IIEP-UNESCO Dakar is working to develop sustainable education systems and credible policies that take demographic realities into account. Together, we will be able to better meet the needs of basic education in sub-Saharan Africa, and better prepare for the effects of future changes.

1 African Union Commission (2015), *Agenda 2063. The Africa We Want*. https://au.int/fr/agenda2063/aspirations

2 United Nations Population Division, World Population Prospects.

COVID-19: AN UNPRECEDENTED CRASH-TEST FOR AFRICAN EDUCATION SYSTEMS

© UNICEF/UNI319837/Kanobana

Maintaining quality education for all despite the health crisis caused by the Covid-19 pandemic has been a considerable challenge for education systems around the world, with schools closing almost overnight. UNESCO has reported that some 1.6 billion students, 300 million of them in Africa, were left without a school to go to.

In spite of this difficult context, all the countries in sub-Saharan Africa managed relatively quickly to set up various alternatives to traditional in-class teaching. IIEP-UNESCO Dakar drew on a survey of 34 countries in the region to report on these experiences.[3]

It was noted that not all initiatives were inclusive. Technological solutions were generally preferred over those using learning materials printed on paper. But in most countries, only the wealthiest families have access to the internet and television. The result is that too few students had access to these solutions. Distance education, as it is currently organized, is likely to amplify inequalities as many parents are not able to help their children with their studies.

However, there have also been a number of promising initiatives, such as 'École à domicile' in Congo, a programme for monitoring audiovisual and digital learning in the home, and for printing and delivering lessons and other teaching materials to families. The programme uses community radio, together with the national station, to broadcast lessons and provide corrections to exercises. Elsewhere on the continent, some teachers have taken the initiative to create WhatsApp or Facebook groups to stay in touch with their students and keep track of those who drop out.

Policymakers can also use these new experiences to redesign solutions to reach out-of-school children. If these children do not go to school, perhaps school can go to them. ■

THE PRICE TO PAY FOR EDUCATION

In the midst of the health crisis, 185 countries closed their schools at a time when most of the costs for the school year were already incurred. These expenditures, such as the purchase of goods and services or the payment of teachers' salaries, were not fully translated into learning.

Education financing in the aftermath of the crisis will almost certainly be impacted as well. The lockdowns imposed to halt the spread of the virus led to a major economic slowdown of -3.3% in sub-Saharan Africa in 2020 according to the World Bank[4], compared to a pre-crisis growth of 4.1%. As a result, revenue for governments will be impacted, as will the level of public expenditure. Projections[5] suggest that per capita education expenditure for the region could decline by 4.2% in 2020, and will stagnate in 2021.

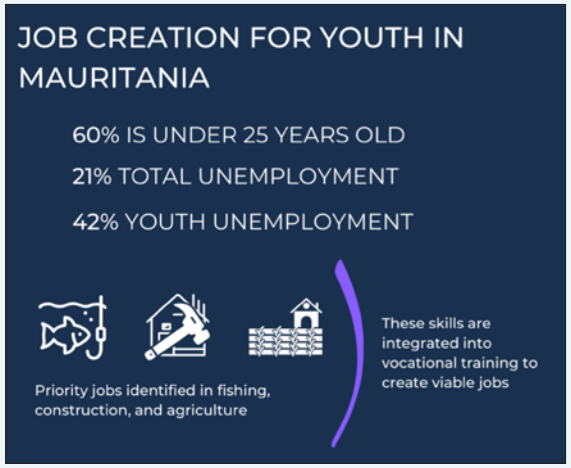
Low-income countries could suffer from a reduction in official development aid if donors redirect their budget priorities to meet their domestic needs, or to other sectors such as health. ■

3 Distance education in the context of COVID-19: Accomplishments and perspectives in sub-Saharan Africa

4 World Bank 2020

5 http://documents.worldbank.org/curated/en/479041589318526060/pdf/The-Impact-of-the-COVID-19-Pandemic-on-Education-Financing.pdf

MAURITANIA: CREATING NEW OPPORTUNITIES FOR YOUNG JOB SEEKERS



More than 60% of the population in Mauritania is under the age of 25. This age group is twice as likely to be unemployed than those over 25 (42% compared to 21%).[6] To improve young people's access to employment, IIEP-UNESCO Dakar worked together with the Government of Mauritania to develop vocational training policies and create a public-private partnership to promote youth employment and social inclusion. As part of the partnership, companies from three major economic sectors – mixed agriculture, construction and public works, and fisheries – have drawn up a list of 'priority jobs' in three regions of the country.

Construction companies have indicated a need for multiskilled construction workers. These companies typically hire three apprentices with different skills to execute construction contracts. Being able to hire apprentices with more than one skill could be beneficial, particularly for small companies, which are predominant in this sector in Mauritania. Other skill shortages identified include machine operators, artisan fishers, fishing gear operators, and outboard engine mechanics.

The next stage of the partnership will be to analyse the capacity of training centres to determine whether there are enough trainers in the fields in demand, if they have the right equipment, and so on. A similar analysis will also be carried out for the participating companies to determine how they too can contribute to the provision of training. ■

REGIONAL WORKSHOP ON THE IMPORTANCE OF QUALITY MANAGEMENT

Over the past decade, there has been little improvement in student achievement in sub-Saharan Africa. Questions remain unanswered concerning the practices of stakeholders at different levels of the system to make national education policies more effective. This is why it is essential to focus on education quality management, a new approach that has not been widely explored by programmes working on the subject of education quality.

To address the issue of improving education quality, IIEP-UNESCO Dakar launched a support programme for quality management in February 2018, in partnership with the French Development Agency. With the help of a network of experts, it developed and tested ways to assess the quality of management practices, support countries in identifying promising practices, and developed a pilot programme to support the implementation of the practices identified.

Two years after the programme got underway, IIEP-UNESCO Dakar organized the first regional sharing workshop on education quality management in Africa from 1-4 December 2020, in the form of a webinar. It brought together some 150 officials representing 15 African countries. They discussed the importance of including quality management issues in education policies and presented the initial results of the programme. ■

6 National Statistical Office of Mauritania

BRIEFS

Reports on the Sierra Leone and Nigeria sector analyses

In June 2020, the Sierra Leone Education Sector Analysis was reported remotely. It is the first country to have included a full chapter on assessing the enabling environment for gender equality in education.

The Nigeria ESA was reported in December 2020. In addition to the national analysis, the report also examines the OAK States (Oyo, Adamawa, Katsina), which will benefit from GPE funding.

Education quality in Niger: experimenting with innovative practices

Niger has adopted a roadmap to improve its education quality management. Developing the capacity of students to work independently is one of the first projects.

TVET Forum for vocational training stakeholders in Africa

A TVET Forum for vocational training stakeholders in Africa has been developed, where they can discuss key themes and activities in their field. Sign up on www.pefop.iiep.unesco.org

Regional workshop for stakeholders involved in the platform for the mutualization of vocational training tools and resources

Two webinars were held in November and December 2020 to support members of the mutualization network in WAEMU countries and Chad, in order to revitalize its operations and stabilize its development. ■

NUMEROUS TRAINING COURSES BEGAN IN AUTUMN

Launch of the 14th SAMES training course and completion of the 13th course

Thirty-five students from 8 countries in West, Central and Southern Africa began the 14th SAMES training course in October 2020. The opening ceremony and first group session were held online from 5 to 16 October 2020. In addition, the 26 students taking part in the 13th SAMES training began the last part of their course in November 2020.

Launch of a new training course on TVET management

The first class to take part in the TVET management course, consisting of 38 officials from 7 countries in Africa, attended the online opening ceremony on 19 October 2020. The objective of the seven-month course is to improve the planning, steering, and management capacities of African officials in the implementation of TVET strategies.

University 2020 on gender-responsive educational planning

In November 2020, IIEP-UNESCO Dakar launched a seven-week online training course, University 2020, on gender-responsive educational planning, to promote gender equality in educational decision-making, planning, and management. The 'Gender at the Centre Initiative' (GCI) brings together states, international organizations, and partners. IIEP is providing the technical leadership.

A short distance learning course in vocational training centre management

From 10 November to 12 December 2020, a training course on the management of vocational training centres was organized for directors of centres in Burkina Faso. This IIEP-UNESCO Dakar training course was developed in response to a request from the UNDP office with the aim of improving the employability of TVET graduates, including by developing entrepreneurship.

Demography: planning educational needs

Polycarp Omondi Otieno
is an educational policy analyst and planner based at the IIEP-UNESCO office in Dakar.

Governments should plan today, so that they can deliver adequate education services in the future. How can governments use population simulation models in planning for education?

A population is dynamic, it may increase through birth and immigration, or decrease through mortality and emigration. At any time, states should be able to quantify their population, and in particular, the numbers of their citizens eligible for education. Only then, can there be reasonable planning. Using appropriate simulation models, governments can project future populations, including school-age children, by applying necessary population parameters. Based on the results, states can propose education interventions such as the universalization of education or the capping of mandatory education, for example. These policies can be discussed and adjusted in order to determine the size of the population that is eligible for education. Policy parameters like access, retention, school participation, and so on, may be fed into the models and each one manipulated until the desired balance of cost and results is achieved.

What population-related policy trade-offs can governments make in simulation models?

The first policy that comes to mind is one regarding population and urbanization. Higher growth rates would yield higher population and consequently a higher school-age population. The implication is more students in schools, who would in turn need things like more instructors, pedagogical materials, and physical facilities. We should also take into account the share of urban population, who have better access to facilities like commerce, water, sewerage, and transport, and for whom it costs less to supply education services than to a dispersed rural population.

Within the sector, using parameters like the gross intake rate it is possible to make projections by selecting children from a projected school-age population and placing them into the education system. In a low GIR scenario, one will pick only a sub-population, and an entire age projected for school entry in the case of universal GIR. This choice is determined based on feasibility and sustainability. Lower GIR will lower the cumulative cost while higher GIR will increase it, but also key is the desire to have the entire projected population attend school. Another population parameter could be the redistribution of the population between private and public streams of education. States can simulate the amount of learners it wishes to allocate to the private sector, and apply its cost parameters on the complement. A high share for the private sector reduces the burden on government, while a low share means government takes almost full responsibility for education costs. ■

Modelling the impact of demographics on education systems

In Africa, people under 15 years of age now account for nearly 50% of the population. What are the future prospects and consequences for education systems?

To help governments plan for the future and take effective action today, economists and education planners use simulation models. This represents a country's current education system and simulates the possibilities for medium- and long-term development.

Population dynamics provide the basic data for simulation models. The principle is to compare the potential demand for education – the school-age population – to the supply of education – the resources available to the system. The school-age population is generally projected over a 10-year period, and the model forecasts needs at the different levels of education: pre-primary, basic education, secondary education, higher education and vocational training.

How many schools are needed to meet the demand for education over the next decade? How many teachers will the government have to recruit, and how many textbooks will be required? The model projections provide decision-makers with essential information on these and other important issues.

Different scenarios are developed to decide on the best options, in other words, those that are financially, socially, and materially sustainable. For example, in order to control a ministry of education's salary expenditure, decisions can be made in terms of the salary scale, or the compensation for contract and civil servant teachers. Contract teachers will cost the state less, but their non-permanent status may ultimately undermine the social balance of the system. The simulation model can estimate both the financial and social sustainability of the different options and help ministries make informed recruitment decisions.

The type of infrastructure to be built is also an important issue. In recent years, African states facing severe budgetary constraints have sharply reduced their investment in education infrastructure. These costs are now mainly supported by technical and financial partners. Basing their decisions on financial models, some states are now reversing this trend and adopting higher quality thatch classrooms with toilets and sports facilities. These structures cost half that of classrooms with solid walls.

Population dynamics also impact the organization of classes at school. In densely populated areas with poor infrastructure, countries sometimes have to resort to double shift systems in which students are split into two groups, with one coming in the morning and the other in the afternoon. In areas where there are not enough students, one option is to organize multi-grade classes. Simulation models can be used to make regional projections and to adjust school organization to the local school-age population.

Based on a detailed understanding of population trends, education simulation models help policymakers understand the cost implications and trade-offs associated with each policy decision. ■

FEATURE

DEMOGRAPHICS: REDOUBLING EFFORTS FOR EDUCATION AND TRAINING

©Régis L'Hostis

DEMOGRAPHICS: REDOUBLING EFFORTS FOR EDUCATION AND TRAINING

©Régis L'Hostis

IN 2021, MORE THAN A QUARTER OF AFRICA'S POPULATION IS OF SCHOOL AGE. BY 2035, THESE YOUNG PEOPLE WILL BE ON THE JOB MARKET. WE MUST INVEST NOW IN THE EDUCATION OF THOSE WHO HAVE THE FUTURE OF THE CONTINENT IN THEIR HANDS.

Because population trends have an effect over the long term, demographers and policymakers sometimes struggle to make their fellow citizens see the urgent need to mobilize resources today to impact the society of tomorrow. To help young people transition to the job market and join the workforce, African countries need to step up their investment in education and training to meet the demographic challenges ahead.

Countries on the continent could also benefit from the demographic dividend, which economists define as the increased productivity observed when the working population exceeds the dependent population. The demographic dividend is therefore a 'golden' period when children born during a population boom have become adults, have fewer children than their parents, and are active in the workforce.

*The term **demographic dividend** is used to describe accelerated economic growth that may result from a change in the age structure of the population.*

The demographic transition varies from region to region

In Africa, the potential demand for enrolment in basic education will continue to grow substantially over the next three decades. The population of 6 to 15-year-olds will grow at an average annual rate of 1.8% in the coming decade, and will then decelerate to 1.3% between 2030 and 2050.[7] Investment in education must therefore be commensurate with this growth.

However, these average estimates mask important regional variations. Central and West Africa are likely to experience higher growth rates, while rates should be lower in East Africa, North Africa and Southern Africa, given the differences in the *demographic transition* processes. As a result, West and Central Africa alone will account for more than two-thirds of the continent's school-age population in 2050.

*The **demographic transition** is the transition from high fertility and mortality rates to low birth and death rates, achieving a new balance*

Pay special attention to sub-Saharan Africa

Achieving the international goal of universal basic education depends largely on the progress that will be made on the African continent, since the weight of sub-Saharan Africa in the world's school-age population will continue to grow. By 2050, one-third of the world's children aged 6 to 15 will live in the region, compared to one-fifth today.

Niger and Cabo Verde

On the continent, population trends and the related needs vary significantly from one country to another. At the two extremes, Cabo Verde and Niger illustrate these disparities. Cabo Verde's current school-age population will decrease by 19% by 2050, while Niger's will more than double, even though the percentage of school-age children in the former is lower, and its demographic transition process is more advanced.

In 2017, the pupil/teacher ratio in post-primary education was 35 in Niger compared to 16 in Cabo Verde. As for the secondary completion rate, it was 17% in Niger compared to 72%

Studying demographics to inform strategies and anticipate costs

In 2018, 207 million children of all ages were enrolled in basic education in sub-Saharan Africa. Although this number represents a high enrolment rate, the completion rate (gross intake rate to the last grade) remains low: only 69% in primary school and 44% in lower secondary school. Ensuring access to and success in school for all school-age children and adolescents by 2050 will require the construction of 9 million additional classrooms and the training of 9.5 million new teachers. In financial terms, an additional US$19 billion will be needed over the next decade. This additional expenditure represents 46% of today's expenditure on basic education.

7 United Nations Population Division, World Population Prospects. 2019 Revision / https://population.un.org/wpp/

in Cabo Verde in 2016. These differences in school-age population dynamics place greater pressure on Niger's resources.

More than half of Africa's population will live in urban areas by 2035

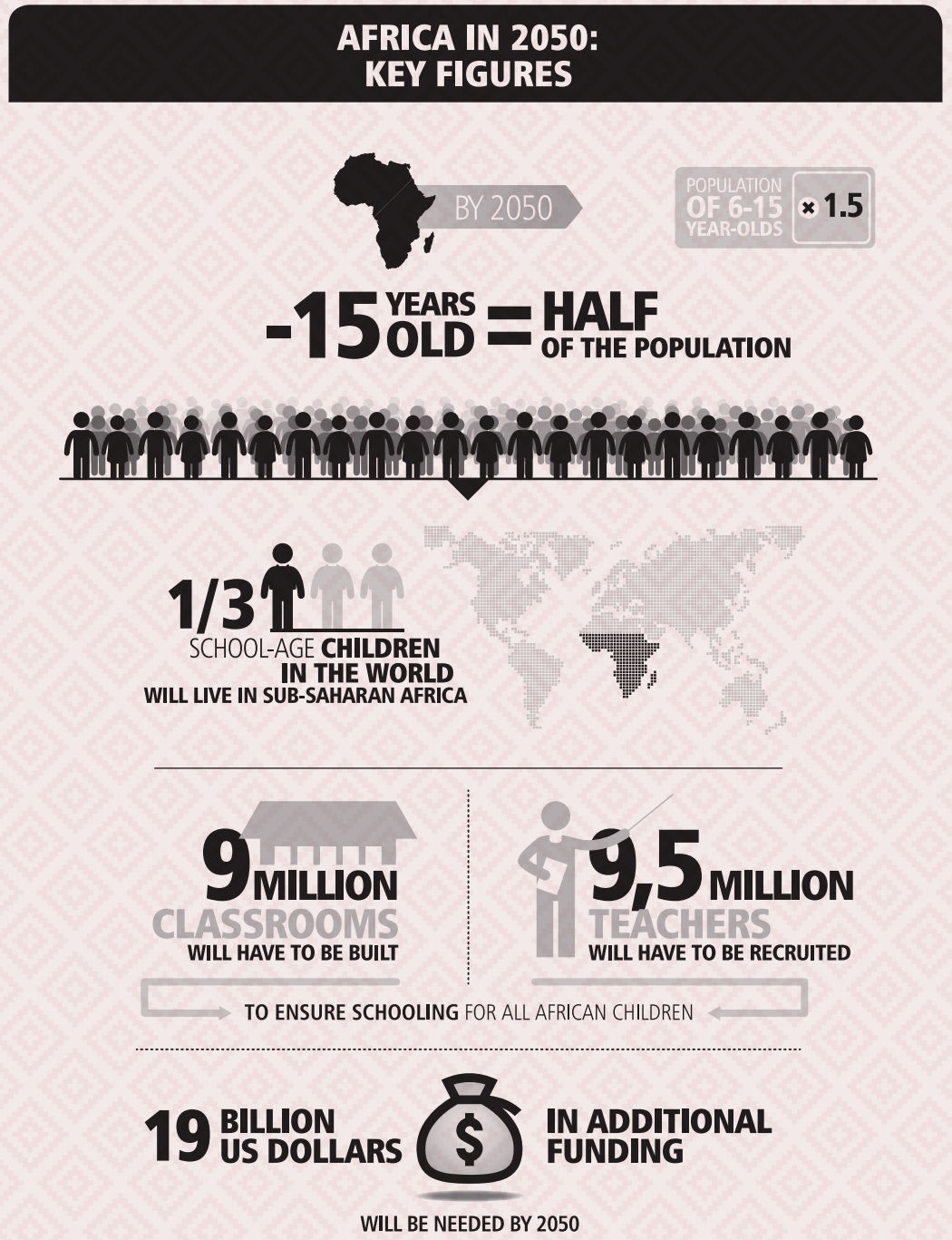
The growth of the urban population will undoubtedly be one of the major challenges facing the continent in the coming decades. Demographers estimate that sub-Saharan Africa will experience its urban transition by 2035, when more than half of its population will live in urban areas. At a time when the goals of universal education are far from being achieved in rural areas, the rapid urbanization of the continent poses immense challenges in terms of meeting educational needs in the cities, which are typically considered to be more advantaged.

The trend toward urbanization has led to the development of informal settlements and shantytowns on the outskirts of cities, which raises significant problems in terms of education. In some countries, access to education in these informal settlements is even lower than in the surrounding villages. Nevertheless, inequalities between urban and rural areas persist and educational needs remain greater in rural areas. While the relative share of the rural population is declining, the school-age population in rural areas will continue to increase sharply in absolute terms.

The other population trend in Africa is the young age of its population, raising the crucial issue of employability. Resolving this challenge will be essential if we hope to take full advantage of the demographic dividend. Investing today in skills development is clearly the best solution.

These demographic challenges, and their implications in terms of investment in education and training, are key policy issues in Africa. The theme chosen in 2017 by the African Union at its summit in Addis Ababa clearly demonstrated its importance: *Harnessing the Demographic Dividend by Investing in Youth*. A few months later, at its 72nd session, the United Nations General Assembly in turn launched the *Demographic Dividend Roadmap for Africa*. At the dawn of a new decade that will be crucial for achieving Sustainable Development Goal 4. It is time for these political commitments to be translated into action, at both regional and national levels. ■

IN FIGURES



Three questions for Jean-François Kobiané

PROFESSOR OF DEMOGRAPHICS AT THE HIGHER INSTITUTE OF POPULATION STUDIES (ISSP)
AT THE JOSEPH KI-ZERBO UNIVERSITY OF OUAGADOUGOU IN BURKINA FASO.

How can the analysis of population trends help achieve the goal of universal basic education, and why is this important?

In order to achieve quality universal basic education, we first need to know who the target population is. So, the first question to ask is 'for whom'? In demographic terms, we look at the *school-age population*, in other words, the population by age, gender, and other socio-economic factors for whom educational services will be planned.

In order to develop targeted strategies, we need data on the size of the population before breaking it down by socio-demographic and economic factors. Other key questions for planners and demographers include the total number of school-age children and how they are distributed geographically across the administrative divisions of the country.

It is particularly important to identify the educational needs of children in vulnerable situations so that no child is left behind. These include children with disabilities, children living in socially precarious circumstances or in isolated rural areas, refugees, and displaced children.

We use data from general population censuses and demographic surveys, and analyse population trends, prospects, and projections, to obtain the basic information required to design policy to meet the needs. Finding a balance between population growth and satisfying social needs has always been a core issue for demographics, making population studies a key knowledge base to inform policy decisions.

How can widespread access to quality education and training help harness the demographic dividend?

Education is a major lever at different stages of the demographic dividend process.

First of all, it is a lever for accelerating the *demographic transition*, in which both birth rates and death rates decline. While a number of socio-economic, environmental, and psychosocial factors contribute indirectly to the demographic transition, some determinants directly cause birth rates to drop, including contraception, abortion, and the age at which women enter marriage. And education, especially beyond primary school, allows girls to delay marriage and the age at which they have children. The level of education of individuals, especially women, goes hand in hand with their level of access to information and their ability to use health facilities and family planning. This makes it easier for families to use contraception to control the number and timing of children.

Furthermore, education enables children and young people to acquire skills for successful entry into the job market. Beyond the cost issue, the options chosen for designing education policies are particularly important, especially in terms of the balance between general education and technical and vocational education and training, but also in terms of matching training courses to the needs of the economy.

Finally, at a later stage of the demographic dividend, lifelong learning, and in particular in-service training, helps to increase the economic productivity of workers. To help the workforce adapt to constant change, institutional systems for continuous learning are needed, both at the public and private levels.

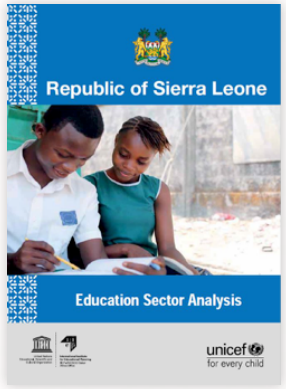
Is the continent's high population growth, particularly in sub-Saharan Africa, an advantage or a disadvantage?

Both. It is a disadvantage because it implies a large additional demand each year for quality social and educational services. For example, with a population of 20 million people and an annual natural growth rate of 3%, an additional 600,000 people need to be taken into account each year when planning various services. In education, the financial implications are enormous in view of the investments needed in infrastructure, school equipment, and staff recruitment.

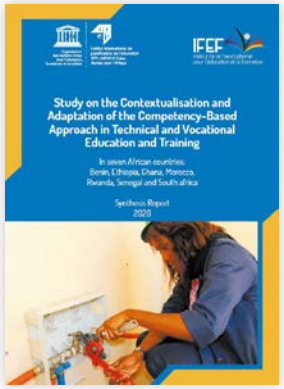
However, high population growth can also be an advantage, especially if we look at the population trends and related investments from a long-term perspective. Population trends are changing as a result of several factors, including the move towards universal education, but social and demographic inertia is strong. Hence, if we wish to harness this potential and want well-trained and skilled young people in the coming decades who will be able to drive GDP growth, we need to make urgent and appropriate investments for today's children and adolescents. ■

PUBLICATIONS

Methodological Guide
An Analysis of Quality Management in Basic Education, Regional Programme to Support Quality Management in Basic Education, IIEP-UNESCO Dakar, 2020. [In French]



Education Sector Analysis of the Republic of Sierra Leone
Assessment of the Enabling Environment for Gender Equality, Republic of Sierra Leone, UNICEF, IIEP-UNESCO Dakar, 2020.



Competency-based Approach in Technical and Vocational Education and Training in Africa
Studies from seven African countries: South Africa, Benin, Ethiopia, Ghana, Morocco, Rwanda and Senegal. Summary report. IFEF, IIEP-UNESCO Dakar, 2020. [In French]

Distance Education in the Context of COVID-19: Accomplishments and perspectives in sub-Saharan Africa, Regional Programme to Support Quality Management in Basic Education, IIEP-UNESCO Dakar, 2020.

The Challenge of Monitoring Quality in Basic Distance Education, Regional Programme to Support Quality Management in Basic Education, IIEP-UNESCO Dakar, 2020.

Find IIEP-UNESCO Dakar publications at
https://dakar.iiep.unesco.org

and all IIEP publications at
publications.iiep.unesco.org

> “More than three out of five Africans are under 35 years of age. Making the most of this tremendous asset means more investment in education, training, decent work, and engaging young people in shaping their future.”

ANTÓNIO GUTERRES
SECRETARY-GENERAL OF THE UNITED NATIONS

PÔLEMAG

IIEP-UNESCO DAKAR INFORMATION MAGAZINE

#30

MARCH 2021

https://dakar.iiep.unesco.org