Guinea-Bissau Human Capital Review





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Abbreviations

Solidariedade Social)

CECOME	Central Drug Purchasing Agency	MICS	Multiple Indicator Cluster Survey		
	(Central de Compras de Medicamentos Essenciais)	NGO	nongovernmental organization		
DALY	disability-adjusted life year	PASEC	Program for the Analysis of Education		
EHCVM	Harmonized Survey on Household Living		systèmes éducatifs de la Confemen)		
	Standards (Enquête Harmonisée sur le Conditions de Vie des Ménages)	SAB	Bissau autonomous sector (Sector Autó- nomo de Bissau)		
GDP	gross domestic product	TVET	technical and vocational education and		
HCI	Human Capital Index		training		
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome	UNICEF	United Nations International Children's Emergency Fund		
IDA	International Development Association	WASH	water, sanitation, and hygiene		
INSS	National Social Security Institute (Insti- tuto Nacional de Segurança Social)				
MMFSS	Ministry of Women, Family, and Social Solidarity (Ministério da Mulher Família e				

All dollar amounts are US dollars unless otherwise indicated.

Executive summary

Human capital comprises the knowledge, skills, and health people accumulate over their lives, enabling them to realize their potential as productive members of society. Human capital is a central driver of sustainable growth and poverty reduction. It is measured using the Human Capital Index (HCI), which quantifies the contribution of health and education to the productivity of the next generation of workers. The HCI quantitatively illustrates the key stages in a child's human capital trajectory and the consequences for the productivity of the next generation of workers. Measurement of the HCI involves three components: (1) survival from birth to school age, measured using under-five mortality rates; (2) expected years of learning-adjusted schooling, which combines information on the guantity and quality of education; and (3) overall health, which is captured by two proxies: adult survival rates, defined as the fraction of 15-year-olds who survive until age 60, and the rate of stunting for children under age five.

This report presents the findings of a study to analyze Guinea-Bissau's HCl indicators and its human capital policies across three sectors health, education, and social protection. The report highlights a deep analysis of sociodemographic variables such as age, sex, income, and geographical disparities, based on the available data. It identifies critical gaps and constraints in the development of human capital and provides policy recommendations for improving human capital outcomes; these will inform upcoming World Bank operations in the country's social sector.

The study entailed several activities and methodologies:

- Discussions with Guinea-Bissau authorities around the human capital agenda
- A workshop to identify government priorities for the human capital review to ensure alignment with the government's human capital vision and facilitate dissemination of the resulting report
- A desk review of the literature, existing analytical work, and data specific to Guinea-Bissau

During the workshop, consultations with stakeholders conducting their own assessment of human capital in Guinea-Bissau were made; these findings were compared with the preliminary results of this study.

The review was guided by the life-cycle approach. This is in line with the 2020 World Bank HCl update and the International Development Association's IDA20 approach to and focus on human capital. The review examined HCl indicators across all stages of the life cycle, highlighting investments in health, education, and social protection and their contribution to human capital accumulation, use, and protection across age groups. This process is useful in identifying necessary actions at each step of the life cycle to build and develop human capital.

Investments in health, nutrition, and education are key for the accumulation of human capital—a period spanning ages 0 to 18 years—to enable individuals to reach their full potential as future workers. The current metrics of the HCl in Guinea-Bissau reveal irreversible losses to human capital, leading to reduced economic productivity. Early mortality has improved, and the survival rate of children from birth to school age (five years old), as measured using under-five mortality rates, was 94.4 percent in 2018. The rate of live births has also improved since 2001, dropping from 116 deaths per 1,000 live births to 56 deaths per 1,000 in 2018. However, nearly 33 percent of children between the ages of 6 and 11 have never attended school, and primary school completion rates are low (27 percent on average) mainly due to high repetition. While the rate of stunting for children under the age of five is 27.7 percent overall, this masks important socioeconomic and regional disparities. Both the survival rate of children under age five and school performance are directly affected by malnutrition, which also has a direct impact on labor productivity. Forty-three percent of the working-age population suffered from stunting before the age of five.

Although the mortality rate in Guinea-Bissau decreased from 18.7 to 13.6 per 1,000 person-years between 2000 and 2019, the adult survival rate is a low 83 percent and maternal mortality is high. The adult survival rate is higher among women (86 percent) than men (79 percent). In 2019, the

most significant health burdens among individuals age 15 years and older were HIV/AIDS, followed by tuberculosis and road injuries. A particular area of concern among women is the maternal mortality rate, which was estimated at 667 per 100,000 live births in 2017. This rate is closely linked to female genital mutilation; 52 percent of girls and women ages 15 to 49 years and 29.7 percent of girls under age 14 have been subjected to the practice. The high adolescent birth rate—84 births per 1,000 women between ages 15 and 19—is also thought to be associated with early marriage. Thirty percent of girls marry before they turn 18, which drags down school completion rates.

Guinea-Bissau's economy relies heavily on agriculture as the primary economic sector and on self-employment. The former makes the country susceptible to shocks and external factors; the latter is highly informal and labor intensive. The country's unfavorable business environment results in a relatively small private sector that fails to support capital-intensive labor (since firms face obstacles in terms of access to finance, informality, corruption, and lack of adequate infrastructure) and offers limited employment opportunities. Even highly educated individuals struggle to find high-quality employment opportunities in Guinea-Bissau. This pattern becomes more pronounced when taking gender into account, and leads to the emigration of many educated individuals. Jobs created are predominantly of low quality, and offer low wages. A significant portion of the labor force is engaged in informal sector activities, which lack job security, stability, and access to essential benefits.

The combination of low wages and limited job opportunities has led to a widespread poverty crisis, which is worse in rural areas and largely unmitigated by social protection. As of 2018, 21.7 percent of the Guinea-Bissau population lives in extreme poverty, which limits investment in human capital for children and leads to intergenerational impacts. In addition, there are significant disparities between urban and rural areas. Regardless of labor market status, poverty rates are higher in rural areas than urban. The poverty rate among workers in rural areas is 60.0 percent, compared with 23.5 percent in urban areas in 2018. A substantial disparity also exists in educational attainment between urban and rural areas. Social protection mechanisms in Guinea-Bissau have limited coverage relative to the size of the population groups they aim to assist. The coverage of contributory social protection devices is extremely low, mainly due to the small size of the formal sector in the economy. Social assistance programs are extremely limited-complementary donor financing is essential-causing low coverage, fragmentation, and the potential for duplication. The availability of state social assistance is constrained, and it struggles to reach the poorest households in rural areas, where the incidence of poverty is higher.

Cross-cutting constraints such as climate challenges, gender, fragility, and governance hinder the

strengthening and preservation of human capital.

The effects of climate change are already visible in Guinea-Bissau, with notable impacts including sea level rise, temperature increase, changing precipitation patterns, shorter cool seasons, longer drought spells, and heat waves. These changes have negative consequences for human capital across multiple dimensions all over the country, particularly in vulnerable communities. Climate change dramatically affects areas such as food security, clean water and sanitation, health, and education. Gender inequality is pervasive in Guinea-Bissau, with major implications for women's and girls' health, education, and economic opportunities. Factors contributing to fragility and governance challenges include an ongoing political transformation driven by elite fragmentation and noninclusive institutions and poor public administration; an endemic lack of governance and dysfunctional institutions, leading to fragmentation in decision-making and weak planning and coordination; and lack of human resources.

To improve human capital and accelerate economic growth and development, Guinea-Bissau must prioritize efforts to ensure children's health and education. A strategy to achieve this goal involves the following actions: (1) sustained efforts to improve access to quality health care and enhance the quality of care in order to decrease the high maternal and neonatal mortality rates; (2) further progress in improving nutrition for pregnant women and children under the age of five to prevent negative effects on their physical and cognitive development; (3) expanded integrated early childhood development programs to increase children's readiness for elementary school; (4) greater access to quality basic education through improved teacher performance and the availability of teaching and learning materials; (5) income support to vulnerable households through cash transfers, along with accompanying measures to increase households' ability to invest in health and education and to cope with shocks; and (6) economic inclusion measures to support unemployed educated youth to promote self-employment and for poor households in rural areas to foster diversification by promoting off-farm income-generating activities, through a package of training, cash start-up grants, and coaching.

Government leadership and institutional alignment and coordination, as well as targeted mechanisms to reach priority groups, are essential. These efforts are interconnected and involve multisectoral interventions, raising the risk of duplication and wasted resources. To achieve these objectives, the government should (1) reactivate the National Council for Social Protection (CNPS) to facilitate strong coordination among stakeholders; (2) increase local and community participation in service delivery; and (3) establish a national social registry.



Introduction

Country context

Human capital accounts for two-thirds of total wealth globally and remains a central driver of inclusive economic growth (Lange, Wodon, and Carey 2018). Human capital is the knowledge, skills, and health people accumulate over their lives, enabling them to realize their potential as productive members of society. Countries like Singapore have demonstrated that economic growth can be accelerated, equity enhanced, and poverty alleviated by building human capital through robust investments in education, health, and social safety net systems—utilizing human capital in concert with other types of capital investments (World Bank 2021c).

Healthy, well-educated people free of poverty promote positive social externalities such as social cohesion and environmental protection (World Bank **2021b).** The World Bank Human Capital Index (HCI) captures the impact of human capital on future growth prospects and is a useful starting point for considering human capital challenges. The 2020 HCI shows that, worldwide, before the COVID-19 pandemic, a child could expect to attain an average of 56 percent of his or her potential productivity as a future worker (World Bank 2021b). Serious disparities in human capital outcomes exists across high- and low-income countries and are largely driven by gaps in access to quality social services. Consequently, a child born in a low-income country can expect to attain only 37 percent of his or her potential productivity, versus 70 percent for a child born in a high-income country (World Bank 2021b).

Guinea-Bissau's political and socioeconomic context since independence in 1974 has not been conducive to building, protecting, and utilizing human capital. The small West African state with a population of approximately 1.9 million continues to grapple with low economic growth, high levels of poverty, and long-standing political instability and fragility. Since independence, pervasive fragilitydriven mostly by conflicts and political turmoil-has been conducive to neither stability nor growth, with devastating consequences for the economy and human development. Per capita income remains low, with a gross domestic product (GDP) per capita of \$832.70 in 2022, showing only marginal growth over a span of 40 years; the 1981 GDP per capita was \$606.

Poverty continues to be widespread in Guinea-Bissau, increasing by 2.8 percentage points between 2018 and 2021. Data from the 2018–19 and 2021–22 Harmonized Surveys on Household Living Standards (EHCVM) show that poverty increased from 47.7 percent in 2018 to 50.5 percent in 2021—the equivalent of more than 80,000 additional poor. The surveys indicate that other measures of poverty also increased in Guinea-Bissau over the 2018–21 period. The poverty gap (which measures the extent to which individuals on average fall below the poverty line) increased from 13.7 percent in 2018 to 15.2 percent in 2021. Similarly, the poverty severity index (which puts more weight on the poorest households, measured by squaring the poverty gap) also increased, from 5.2 to 6.2 over the same period. The rise in these indicators illustrates an increasing intensity of poverty in Guinea-Bissau during the period. Recovery from the COVID-19 pandemic has been constrained by additional shocks—notably spillover effects from the war in Ukraine, resulting in disruptions in global supply chains and rising food prices.

Despite a volatile political situation, Guinea-Bissau demonstrated a willingness for strategic reforms and investments to drive economic recovery following the pandemic and to build resilience against future shocks. Given its central role in fostering sustained economic growth, improving human capital outcomes has emerged as a core pillar of the government's post-COVID development strategy.

This Guinea-Bissau human capital review was developed to inform the human development priorities of the World Bank's engagement in the country under the new Country Partnership Framework FY2024– 28. The study has two main objectives:

- To conduct a diagnostic of human capital outcomes in Guinea-Bissau across the health, education, and social protection sectors, and identify existing gaps and constraints in human capital development, protection, and utilization.
- To propose policy recommendations to the government of Guinea-Bissau that will enable the country to achieve the human capital aspirations set out in its National Development Plan 2020–2030.

Methodology and data: a life-cycle approach

This report analyzes human capital outcomes in Guinea-Bissau using a life-cycle approach. As shown in figure 1.1, it looks at key challenges and outcomes at different points in human capital development and utilization. Both quantitative and qualitative methods were used to assess human capital challenges and solutions in Guinea-Bissau and to compare them to the country's regional peers, structural peers (fragile and nonfragile countries with similar structural characteristics; i.e., Burundi, the Central African Republic, The Gambia, and Sierra Leone), and aspirational peers (countries setting a good development precedent; i.e., Lao People's Democratic Republic, Rwanda, and Tajikistan).¹

The work was co-shaped by stakeholders. Several strategic discussions were held with Guinea-Bissau authorities regarding the country's human capital agenda. At the study's launch, a World Bank team engaged with key stakeholders to present the human capital review concept, including the HCI, and its objectives in Guinea-Bissau. A workshop was held to identify the government's human capital priorities. During this session, a national focal point for human capital was identified to facilitate coordination across sectors, aid in data collection, and ensure the study's alignment with the government's human capital vision. Sectoral focal points were identified to assist the World Bank team in obtaining sector-specific data. The study's preliminary results were presented to experts from the government and donor organizations at a May 2023 workshop, with the aim of reaching consensus on key findings and recommendations.

The desk review conducted involved a comprehensive examination of existing literature, studies,

¹ See World Bank (2020) for a fuller discussion of these three peer groups.



Source: Adapted from World Bank Human Capital Project.

and data sources to evaluate the status of human capital in Guinea-Bissau. Key sources used in the review include national and regional reports. Additionally, collaboration with United Nations agencies including the World Food Programme, the World Health Organization, the United Nations Development Programme, and UNICEF was instrumental in gaining a comprehensive understanding of the local challenges and needs. It is important to note that the findings and conclusions presented here are subject to the limitations of the available data and the reliability of the sources utilized.

Framing the review through a life-cycle lens aligns with the orientation of both the 2020 World Bank HCI report and the IDA20 approach of the International Development Association (IDA). This approach links human capital to the special themes of IDA19, which include climate change; fragility, conflict, and violence; gender; and jobs and economic transformation. According to IDA20, investments must be made in people as well as in systems, with the goal of ensuring universal access to quality social services including health care, basic education, and social protection. In addition, investments are needed to make service delivery systems more resilient and inclusive in building, protecting, and utilizing human capital.

Investments across the life cycle have cumulative and complementary effects on enhancing productivity and building resilience to shocks. Figure 1.1 illustrates HCI metrics across every stage of the life cycle to indicate human capital accumulation across age groups. It also shows the different investments in health, education, and social protection across the life cycle and depicts outcomes as potential consequences of shocks—which can quickly reverse gains made in human capital. The prioritization of investments includes (1) expanding access to primary health care and to reproductive, maternal, and neonatal health and nutrition; (2) making early-years investments beginning in utero, including promoting health, nutrition, early stimulation, and early learning; (3) achieving better learning outcomes in primary education; (4) expanding access to and completion of secondary education; and (5) improving access, quality, and relevance of tertiary education, technical and vocational education and training (TVET), and adult learning.

Using the life-cycle approach helps identify actions needed at different stages to build and develop human capital by (1) promoting equity (e.g., reducing poverty and inequality, improving equality of opportunities, and addressing exclusion); (2) ensuring opportunity (e.g., promoting investments in human capital and helping men and women access productive work); and (3) building resilience (e.g., providing insurance against, and building the capacity to manage, shocks).

The following section of the report uses the life-cycle approach to review the status of human capital in Guinea-Bissau; this is followed by an analysis of cross-cutting constraints that impede the building, utilization, and maintenance of human capital in Guinea-Bissau. Both sections present data and findings as well as highlight recommendations for future actions. Key recommendations to enhance human capital in Guinea-Bissau, as substantiated and suggested in sections 2 and 3, are captured in the final section.

Assessing human capital across the life cycle in Guinea-Bissau

Accumulation of human capital in early childhood (ages 0–5)

The accumulation of human capital starts before a child is born and during the first stages of life, when investments in health, nutrition, and education play a crucial role in enabling individuals to realize their full potential. This section takes an in-depth look at factors that are strongly associated with child development and at the opportunities available for young children in Guinea-Bissau to develop as healthy and strong individuals. First, it analyzes health outcomes relevant for young children, including survival, immunization rates, and pre- and postnatal care. It then takes a closer look at nutritional outcomes, including stunting and malnutrition. This is followed with an examination of early learning opportunities, as well as access to and participation in preschool programs, and the challenges related to language of instruction. Lastly, it covers social protection programs targeting early years that can help children access what they need to survive and thrive, despite financial limitations.

Child health

Child health plays a pivotal role in driving economic development, as it directly affects human capital formation and long-term productivity. Maternal health before and during pregnancy, coupled with the child's health status and the attention and cognitive stimulation provided during the first two years of life (the first 1,000 days), are critical to child growth and development (Likhar and Patil 2022). During a child's first five years of life, the brain is highly malleable and matures faster than at any other time. Positive or negative development during this period has implications for well-being, school readiness, and later success in life. In addition to brain development, the child's first 1,000 days are crucial for the development of the body, the immune system, and the metabolism. Consequences can play out years or decades later; numerous epidemiological and clinical data indicate that poor maternal health and nutrition increase susceptibility to chronic diseases in adulthood (Gluckman et al. 2008).

Children under age five in Guinea-Bissau experience high morbidity and mortality, with more than 73 percent of deaths attributed to five preventable conditions.¹ By expanding access to essential maternal and child health services, the country reduced the rate of child mortality by half between 2011 and 2021—from 169.1 to 74.3 deaths per 1,000 live births (figure 2.1). This rate is still high, however, compared to the average for low-income countries (67.4 deaths per 1,000 live births), and it is almost double the rates reported by Guinea-Bissau's aspirational peers (figure 2.2). Neonatal conditions

¹ The data in this paragraph are from the World Bank, World Development Indicators.



Figure 2.1 Trends in child mortality rate, 2001–21

Sources: World Health Organization, Institute for Health Metrics and Evaluation, and World Development Indicators.

Figure 2.2 Child mortality, 2021



Sources: World Health Organization, Institute for Health Metrics and Evaluation, and World Development Indicators.

account for the largest share of child deaths (35 percent; <u>figure 2.3</u>) and disabilities (182 disability-adjusted life years [DALYs]; <u>figure 2.4</u>) in Guinea-Bissau.² Other leading causes of death

Figure 2.3 Top causes of death in children under age five in Guinea-Bissau



Sources: World Health Organization, Institute for Health Metrics and Evaluation, and World Development Indicators.

Figure 2.4 Top causes of DALYs in children under age five in Guinea-Bissau



Sources: World Health Organization, Institute for Health Metrics and Evaluation, and World Development Indicators.

include diarrheal diseases (14 percent), measles (11 percent), malaria (7 percent), and lower respiratory infections (6 percent); together with neonatal causes, these four account for more than 73 percent of all child deaths in Guinea-Bissau.

In Guinea-Bissau, child survival does not appear to be influenced by socioeconomic or geographic factors. According to UNICEF's Multiple Indicator

² Source: World Health Organization, <u>Global Health</u> <u>Observatory</u>.

<u>Cluster Survey</u> (MICS) conducted in Guinea-Bissau for 2018–19, similar child mortality rates were observed across wealth quintiles (the richest and poorest quintiles registered 59 and 60 deaths per 1,000 live births, respectively) and among urban and rural households (55 and 57 deaths per 1,000 live births, respectively). There is regional variation, however: the highest number of child deaths occur in Gabú (106 deaths per 1,000 live births), followed by Biombo (73), Quinará (72), and the Bissau autonomous sector (59). The lowest rate occurs in Bafatá (28).

Neonatal deaths are largely driven by limited access to quality prenatal and intrapartum care for pregnant women. While 81 percent of pregnant women in Guinea-Bissau attend at least four prenatal visits, less than half (43 percent) attend their first visit during the first trimester, according the 2018–19 MICS. Moreover, according to the 2018 Service Delivery Indicator survey, the quality of prenatal services remains a challenge, with only 23 percent of health care workers attending to pregnant women adhering to prenatal guidelines (World Bank 2019a). Regarding the intrapartum period, almost half of all pregnant women in Guinea-Bissau (49 percent) give birth at home; only 50 percent give birth in health facilities under the care of a skilled birth attendant. Moreover, according to the MICS 2018–19, only 52 percent of newborns receive a postnatal health checkup before being discharged. The Service Delivery Indicator survey also confirmed significant gaps in the quality of intrapartum and postpartum care, with only 24 percent of health care workers having knowledge of how to manage maternal and neonatal complications during the perinatal period.

The high rate of home-based deliveries observed among pregnant mothers is largely driven by socioeconomic and cultural factors, as well as supply-side barriers. The 2018–19 MICS found that women with higher educational attainment and from wealthier households were more likely to give birth at a health facility under the care of a skilled birth attendant (100 percent of those who had completed tertiary education, 90 percent of those who had completed secondary education, and 92 percent of those in the richest quintile), compared to their less educated and poorer counterparts (35 percent of those who had only completed preschool or had no education, and 35 percent of those in the poorest quintile). Moreover, compared to those in urban areas, women in rural communities were more likely to give birth at home, with up to 60 percent of women in rural areas giving birth at home in 2019. Distance to facilities also plays a part, as almost 70 percent of the population lives more than an hour's walk from the nearest health center. Adding in the poor road guality-further degraded during the rainy season-pregnant mothers are hard pressed to access services when needed.³ Cultural practices have also been shown to block access to life-saving care. Most women need their partner's permission to give birth in a clinic; such permission can be difficult to obtain because of taboos surrounding women's treatment by male doctors (TNH 2008).

Less than one in every five children (19 percent) under the age of 2 in Guinea-Bissau is fully vaccinated. This low incidence contributes to the high rate of under age five deaths linked to vaccine-preventable diseases such as diarrhea, pneumonia, and measles.⁴ In 2019, only 4 percent of 12-month-olds had received all their required vaccinations. Because 65 percent of unvaccinated children in Guinea-Bissau live in urban areas,⁵ the community is exposed to the risk of disease and death from vaccine-preventable diseases. Since 2019, immunization services have further deteriorated amid disruptions in essential health services due to the COVID-19 pandemic, vaccine stockouts,

³ Source: UNICEF, <u>Child Survival and Development</u> webpage.

 $^{^{\}rm 4}$ Source: MICS 2018–19, based on children's vaccination cards.

⁵ Source: UNICEF, <u>Child Survival and Development</u> webpage.

health worker strikes, and inadequate planning and financing of outreach services by the World Health Organization's Expanded Program on Immunization. Consequently, the country experienced polio and measles outbreaks in 2021 and 2022—placing additional pressure on an already fragile health system and claiming the lives of 12 children.

Most families have limited access to water, sanitation, and hygiene (WASH) services. Almost 90 percent of diarrhea-related deaths globally are attributable to unsafe drinking water and to poor hygiene and sanitation (CDC 2012). Rotavirus is the leading cause of acute diarrhea globally and contributes to around 40 percent of hospitalizations for diarrhea in children under five years old (CDC 2012). In Guinea-Bissau, only 67 percent of the population has access to an improved water source: 87 percent in urban areas and 55 percent in rural areas. Water quality remains a serious problem. According to the MICS 2018-19, an estimated 55.4 percent of water sources are contaminated with fecal material (Escherichia coli), with Tombali (82.5 percent) and Bolama/Bijagos (78.6 percent) being the most affected. Around 75 percent of the population does not have access to improved sanitation, including 43 percent in urban and 93 percent in rural areas. Only 26 percent of the population has access to hygiene facilities for hand washing (soap and water). These factors contribute to the high prevalence of WASH-related deaths and disability (especially associated with diarrheal conditions) observed in children in Guinea-Bissau.

To accelerate the decline in preventable child deaths, the government should roll out a prioritized benefit package of high-impact, cost-effective public health interventions at scale, and increase demand for these services, particularly among pregnant women and mothers. A study conducted in 2022 by the Child Health and Mortality Prevention Surveillance (CHAMPS) identified 10 health and public health improvements, tailored to health system challenges in Sub-Saharan Africa and South Asia, that could prevent the most deaths in children under age five (Madewell et al. 2022). <u>Table 2.1</u> summarizes these interventions. Given that five conditions contribute to more than 70 percent of under-five deaths in Guinea-Bissau (<u>figure 2.3</u>), a minimum essential package of interventions aimed at improving prenatal and obstetrics care, health-seeking behavior, health education, and the use of existing vaccinations could yield significant results. While most of these interventions have been prioritized in the government's National Health Development Plan (2018–2022), they remain poorly implemented because of weaknesses in the health system (e.g., human resources, health financing, governance, and other factors).

Nutrition and stunting

Malnutrition-particularly in very young children-, leads to increased mortality, higher risk of illness, and weaker cognitive development. These consequences bring irreversible damage to human capital and contribute to reduced productivity. Undernutrition is an underlying cause of about half of all under age five child mortality and one-fifth of maternal mortality in developing countries. Children who are malnourished early in life are more likely to experience cognitive deficiencies and poor schooling outcomes. In the long term, stunting can lead to a loss of up to 20 percent of potential lifetime earnings (Kakietek et al. 2017). Furthermore, because of the increased risk of child illnesses associated with chronic malnutrition, households incur additional health care expenses in the short term.

The results of a study led by the World Food Programme highlight the significant socioeconomic impacts of hunger compounded by malnutrition in Guinea-Bissau (WFP 2022). Malnutrition accounted for 23.5 percent of deaths among children under age five between 2008 and 2013. Additionally, 93.2 percent of children who repeated a year of primary school had experienced some form

Health system improvement	Example of public health action
Improved clinical management and quality of care	Advanced respiratory support, improvements in medical records, properly trained staff for parturition and health care
Improved prenatal and obstetric care and management	Ultrasonography, timely cesarean delivery, management of pre-eclampsia
Improved health-seeking behavior	Regular antenatal checkups, early recognition of illness, early referral for treatment at a health care facility
Improved infection prevention and control	Personal hygiene, environmental sanitation, appropriate use of antibiotics
Improved health education	Immunizations, malnutrition prevention, bed nets to prevent malaria
Improved nutritional support	Management of malnutrition
Improved HIV prevention and control	Maternal access to testing and antiretroviral therapy, therapy for neonatal infections
Improved family planning	Prevention of unwanted pregnancies
Improved use of existing vaccinations	Pneumococcal conjugate vaccine, Haemophilus influenzae type b vaccine
Improved transport system	Road infrastructure, availability of public transportation, availability of resources (e.g., oxygen on ambulances)

Table 2.1 Priority health care strategies shown to prevent most deaths among children under age five

Source: Madewell et al. 2022.

of malnutrition. Given that 43 percent of the working-age population suffered from stunting before the age of five, it was estimated that child malnutrition caused a loss equivalent to nearly 10 percent of gross domestic product (GDP) in 2014. Halving the prevalence of child malnutrition by 2025 could result in annual savings of \$148.5 million.

Disparities in child undernutrition across wealth quintiles are pronounced in Guinea-Bissau. While the prevalence of wasting globally has remained relatively stable at around 7 percent since 2010,⁶ many countries have seen an increase in wasting due to the food security crisis and the impacts of the COVID-19 pandemic. In Guinea-Bissau, stunting prevalence has declined gradually from 32 percent in 2010 to 27.7 percent in 2019, according to the MICS 2018–19. When compared to other countries with similar income levels, Guinea-Bissau performs moderately well in terms of not stunted rates, as shown in figure 2.5. Socioeconomic and regional disparities in child stunting continue. Stunting rates in the poorest households are more than twice those in the richest households: 30.4 percent compared to 13.2 percent (figure 2.6). Although stunting rates are high across the three lowest wealth quintiles, stunting is prevalent even in the wealthiest households. In other words, while stunting is associated with poverty, other factors also put children at risk of chronic malnutrition. These factors include the high prevalence and incidence of disease, in particular diarrhea, as well as inappropriate feeding and caregiving practices (Black et al. 2013).

The national prevalence of stunting at 27.7 percent, as per the latest MICS, masks dramatic geographic differences within the country. The Gabú, Bafatá, and Oio regions, for example, have a stunting prevalence above 30 percent, whereas the Bissau autonomous sector and the Bolama/Bijagós regions have much lower rates—14.3 percent and 17.1 percent, respectively. On average, southern regions have fewer cases of stunting than the northern and eastern regions.

⁶ Source: <u>UNICEF-World Health Organization-World</u> Bank: Joint Child Malnutrition Estimates, 2023.



Figure 2.5 Global comparison of not stunted rates, circa 2020

Source: Adapted from World Bank 2021b.

Figure 2.6 Wealth inequalities in child stunting in Guinea-Bissau, 2018–19



Source: UNICEF <u>Multiple Indicator Cluster Survey</u> 2018–19.

Poverty and malnutrition in Guinea-Bissau are compounded by chronic food insecurity. Rice is the main staple food, and many families in Guinea-Bissau struggle to complement their diet with other more nutritious foods. Food security is reduced by irregular rainfall, volatile prices of imported rice, and an economy based on undiversified local cashew nut production. According to the World Food Programme's Fill the Nutrient Gap study, only 28 percent of the country's population can afford a diet that meets minimum energy requirements, which is estimated to cost about \$2.35 per day for an average household of seven people (WFP 2022). More than two-thirds of the population (68 percent) cannot afford a healthy and nutritious diet, which is estimated to cost about \$4 per household per day. The limited affordability, availability, and accessibility of key nutritious foods are barriers to achieving healthy diets.

Improving nutrition and addressing the drivers of malnutrition require a multisectoral approach. Central to achieving success in multisectoral nutrition programs is a strong governance system that focuses on advocacy, leadership, institutional support, management capacity, financing, results measurement, monitoring, and accountability (Subandoro, Holschneider, and Ruel-Bergeron 2021). Many countries have successfully coordinated efforts across sectors to improve nutrition. In Rwanda, for example, existing social protection platforms are used to target cash transfers to pregnant women who attend prenatal care, thereby driving demand for quality health and nutrition services. Inputs and performance-based financing from the health sector have also contributed to improved coverage and quality of nutrition services. Indonesia has adopted a strong advocacy, governance, and convergence approach at all levels, from the highest levels of government to grassroots nutrition programming (Subandoro, Holschneider, and Ruel-Bergeron 2021).

The Guinea-Bissau government, together with its national and international partners, revised the country's 2011 nutrition policy in 2014 using a multisectoral approach. The aim is to ensure more productive human capital to contribute to the development of the country by 2025. The main objective of the nutrition policy is to improve the nutritional status of the population, with a particular focus on vulnerable people. It addresses reduction of low birthweights, stunting, wasting, and anemia in children, the reduction of overweight and anemia in women of reproductive age, and the elimination of vitamin A and iodine deficiencies. Establishment of a national nutrition multisectoral committee is planned to ensure effective coordination and effective monitoring and evaluation of the national nutrition policy.

Guinea-Bissau developed a National Nutrition Strategic Plan for the period 2016-20 to operationalize the national nutrition policy. A set of nutrition-specific and nutrition-sensitive strategies were outlined in the plan targeting several population categories (children 0–23 months and 24–59 months, adolescents, pregnant and lactating women, women of reproductive age, general population, and households). These strategies included the promotion of adequate nutrition for women of reproductive age, optimal feeding and nutrition for young infants and school-age children, interventions to address micronutrient deficiencies, community-based nutrition, balanced and diversified diets, and micronutrient-rich food production. Based on each of these strategies, a set of interventions/ activities were planned for implementation during the 2016-20 period. These interventions/activities included educational programs on infant and young child feeding, provision of locally sourced complementary food baskets for vulnerable children at health centers, supplements of vitamin A and deworming for children age 6–59 months, provision of zinc for diarrhea treatment, early diagnosis and treatment of acute malnutrition and common infections associated with malnutrition, iron and folic acid supplements for pregnant and lactating women, free distribution of long-lasting insecticide-treated bed nets, intermittent preventive treatment for malaria in pregnant women, and iron and folic acid supplements for preschool and schoolchildren as per national guidelines.

Data on key nutrition interventions suggests that current coverage falls short of that required to significantly reduce malnutrition, particularly among infants and women. There is near-universal coverage of vitamin A supplements for children 6-59 months old-an important intervention to reduce child mortality and the risk of adverse nutritional impacts. This high coverage is likely due to intense, semiannual community-level mass campaigns. Similarly, community campaigns supported by the Global Fund and the United Nations Development Programme to distribute insecticide-treated bed nets has resulted in high coverage of this intervention-which is key to malaria prevention and the reduction of the associated risk for anemia in women and children. However, there are notable gaps in the coverage of other important interventions. Only about one-quarter (24 percent) of pregnant women receive intermittent preventive treatment for malaria. Furthermore, only 14 percent of pregnant women and caregivers of children under 24 months of age received counseling on proper infant and young child feeding practices, and only 22 percent of children with diarrhea are treated with both zinc and oral rehydration salts. While there is substantial coverage for women to receive iron and folic acid supplementation during prenatal care services at health facilities, the lack of a community-based program impedes reaching pregnant women whose attendance at prenatal care services may be inadequate.

Prioritizing the most impactful interventions could result in significant gains in nutrition outcomes in Guinea-Bissau. Over a modeled five-year period, prioritizing and scaling up these interventions could result in up to 1,100 fewer child deaths, 5,100 fewer stunted children, and 4,100 fewer wasted children when compared with the current level and allocation of funding for nutrition interventions.⁷ Additionally, there would be significant reductions in maternal anemia, with an estimated 16,000 fewer cases over the five-year period.

Early learning

During the first 1,000 days of life, nutrition and health are necessary for survival, but to thrive, children also need stimulation. This early stimulation is as simple as parents and caregivers playing with and talking, singing, and reading to infants and toddlers. While stunting is associated with deficits in cognition and school attainment, early stimulation improves children's development and strengthens mother-child bonding. It also leads to improved feeding practices and dietary intake of infants and young children and is associated with improved nutritional status (Attanasio et al. 2022). Children vulnerable to multiple risk factors for stunting are the same children most at risk for long-term disadvantages in learning and human capital associated with poor early childhood development, which further contributes to the intergenerational transmission of poverty.

A significant body of research confirms that proper early childhood development leads to better learning, health, and socioemotional outcomes. Investing in the earlier years of education has been shown to have high returns that often materialize in the future after the completion of higher levels of education. In Guinea-Bissau, results from a modified learning assessment—the Program for the Analysis of Education Systems (Programme d'analyse des systèmes éducatifs de la Confemen—PASEC)—in 2014 showed that children in grades 2 and 5 who had attended early childhood education scored 4 and 11 percent higher, respectively, than their peers who had not had any preprimary education (Ministry of Education and Pôle de Dakar 2015).

According to the MICS 2018-19, a growing percentage of children in Guinea-Bissau are acquiring some level of early learning at home. Participation of adults in their children's learning and early cognitive stimulation at home (i.e., reading children's books with them, singing, taking them for a walk outside the home, drawing, etc.) increased from 2014 to 2019, although such participation remains relatively low. Support from fathers increased from 3 percent to 7 percent, that from mothers increased from 3 to 24 percent, and support from any household members increased from 34 percent to 43 percent. The study also noted that only 1 in every 100 children under the age of five in Guinea-Bissau has three or more children's books in the household.

Similar to the improvements in early cognitive stimulation at home, enrollment in preschool has increased, but remains low. According to the MICS 2018–19, the adjusted net attendance rate is around 14 percent for ages 36–59 months; the rate is higher in urban areas (40 percent) (<u>table 2.2</u>). Net attendance increases to 45 percent for the year before primary school, but remains lower than the Sub-Saharan Africa average of 59 percent and the least developed country average of 54 percent (figure 2.7). Two-thirds of preschools are in the

⁷ The modeled estimates assume that the priority interventions would be scaled up to 95 percent coverage.

Attendance	National	Urban	Rural	Male	Female
Preschool net attendance (36-59 months)	14	40	5	12	17
Year before primary school	45	77	31	45	44

Preschool net enrollment rates in Guinea-Bissau (%)
Preschool net enrollment rates in Guinea-Bissau (%

Source: UNICEF Multiple Indicator Cluster Survey 2018–19.

Figure 2.7 Comparison of adjusted net attendance rates for year before primary school



Source: UNICEF global database on <u>adjusted net</u> <u>attendance rates</u>.

Bissau autonomous sector, Cacheu, and Oio. Most are privately managed (about 55 percent), followed by community schools (26 percent) and public schools (17 percent). There is a gender gap of about 5 percent, with 17 percent of girls attending preschool compared to 12 percent of boys. Disparities also exist in terms of household income and education level of parents. Of the children who attend preschool, about 66 percent have mothers who obtained at least a secondary-level education, and 73 percent come from the highest two income quintiles. Because of this low level of preschool attendance, children in Guinea-Bissau enter primary school unprepared, which pushes them into a cycle of underperformance, grade repetition, and dropout (Bendini and Devercelli 2022).

Language of instruction continues to be a significant barrier to improving learning outcomes in Guinea-Bissau. Many children arrive at school not able to speak any Portuguese—the official and main language of instruction—which hampers their ability to learn. Linguistic diversity is a major barrier to learning in Guinea-Bissau, as many children cannot speak or understand Portuguese. In fact, only an estimated 5 percent of the population speaks Portuguese as their mother tongue (UNICEF 2018). The majority of the population speaks Creole, either as their mother tongue (15 percent) or as a second language (30-40 percent), while there are more than 20 other indigenous languages. Among these, the main languages spoken are Balanta (27 percent); Fula (23 percent); and Mandinca, Manjaco, and Papel (10–12 percent each) (Benson 2010). Research shows that children learn better in their first language than in a second language, and those who learn in their first language are more likely to become proficient in their second language over time (World Bank 2022b). They are also more likely to remain in school. Although language of instruction policy reforms may not be possible in primary and secondary education, countries similar to Guinea-Bissau have successfully used preschool education to help children transition from Creole to Portuguese to ensure children enter school ready to learn.

The World Bank's Investing in the Early Years Conceptual Framework outlines possible interventions that can help both individual children and Guinea-Bissau as a whole. Figure 2.8 highlights (1) the interventions children need to reach their full potential, and (2) how improved development in the early years can contribute to countries' prosperity. Guinea-Bissau has yet to develop a national strategy around the early years. This framework could provide a starting point to consider the

Figure 2.8 World Bank's Investing in the Early Years Conceptual Framework 2016



Source: World Bank n.d.

cross-sectoral landscape that influences children's development in their early years. It is grounded in three pillars to help children reach their full potential:

Services

- Children are well nourished and healthy, espe-cially during the first 1,000 days.
- Children receive early stimulation and learning opportunities from birth onwards.
- Children are nurtured and protected from stress.

Social protection

Social protection programs can improve children's access to good nutrition, health care, and education services, and reduce the lifelong consequences of poverty. Global coverage of these programs remains low, mostly due to a lack of financing, with almost

three out of every four children worldwide not benefiting from any form of social protection.8

In Guinea-Bissau, government financing for social assistance programs is extremely limited, making complementary donor financing essential. A review of the general state budget's public investment programs for 2020 and 2021, and other programs supported by international partners and nongovernmental organizations (NGOs), confirms the existence of social assistance programs specifically targeting the early years-including food transfers, in-kind transfers, fee waivers, and targeted subsidies (table 2.3). Regular cash transfer programs also provide income support to some households. These transfers increase household consumption, leading to enhanced food security and better nutrition for

⁸ Source: UNICEF, Social Protection webpage.

Category	Project	Description	Ministry responsible	Fund
Food transfers	Program to treat moderate acute malnutrition	Provides nutritional support to children under age 5 and pregnant and lactating women	MSP	Government of Japan (implementing partner: WFP)
	Program supporting complementary food supplies for children	Provides super cereal food complements to children in Oio, Bafatá, and Gabú	MSP	Sweden and Norway (implementing partner: WFP)
Food + in-kind transfers	Support to Aldeias Infantis SOS	Provides housing, food, education, and health services to orphans in Bissau, Canchungo, and Gabú	MMFSS	Netherlands/ government of Guinea-Bissau
Fee waivers + targeted subsidies	Integrated Program for the Reduction of Maternal and Infant Mortality (PIMI)	Target: children under age 5/pregnant women Benefits: doctor consultation fees; cost of basic medicines and medical analyses; technical assistance and equipment to improve maternal and neonatal care; and creation of a national network of community health workers to promote health awareness and good practices	MSP	European Union (implementing partners: UNICEF/ NGOs)
	Vaccine Supply Support ProgramMinimum immunization package for children under 9 months; pentavalent vaccine for children under 1 year; polio vaccination for children under age 5		MSP	GAVI/UNICEF (implementing partners: UNICEF/ Expanded Program on Immunization)
	Project to Strengthen Maternal Infant Health Services	Essential health, nutrition, and population services to 73,000 beneficiaries; allows 65,000 children under 1 year to be fully vaccinated; finances basic nutrition services for 10,000 women and children; and provides health care consultations to 150,000 children between ages 1 and 5 years	MSP	World Bank (implementing partners: government of Guinea-Bissau, UNICEF/NGOs)

Table 2.3	Social	assistance	programs	targeting	early y	ears in	Guinea-	-Bissau,	2020	-21
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Source: World Bank.

Note: MMFSS = Ministry of Social Action, Family, and Women's Promotion (Ministério da Acção Social, Família e Promoção da Mulher); MSP = Ministry of Public Health (Ministério da Saúde Pública); WFP = World Food Programme.

children. These measures are especially impactful when cash transfers are combined with accompanying measures that help households acquire the tools and knowledge needed to invest in the health and education of their children. However, these programs are highly fragmented and implemented by different ministries, with no clear leadership to coordinate all the efforts, which affects the effectiveness and efficiency of these programs.

Accumulation of human capital among school-age children and youth (ages 6–18)

This section takes an in-depth look at human capital outcomes during childhood and adolescence and associated challenges during this phase of life. It is organized into four subsections covering primary education and foundational skills; secondary education, technical and vocational education and training (TVET), and job-relevant skills; adolescent and reproductive health; and social protection.

Investments in the school years are needed to support learning and future productivity. Opportunities to acquire skills and access to jobs are primary pathways out of poverty. Extensive evidence has established that in the primary years, the quality of education is critical for providing students with the foundational literacy and numeracy skills necessary for lifelong learning. Offering learning opportunities that enhance students' potential to work and thrive in a world that is becoming increasingly more digital is especially important for young girls and women (e.g., digital/tech education, gender-sensitive learning environment, and other measures).

Health-related investments during the school years are equally critical, given the effects of ongoing demographic and epidemiological transitions. As shown in figure 2.9, Guinea-Bissau's population of approximately 1.9 million is forecast to increase to 3.2 million by 2043 (Aikins 2023). The population is young, with a median age of 18.7 years as of 2019; and 42.2 percent of the population is below the age of 15 years. If current rising trends in the adoption of birth control methods are maintained, the fertility rate is expected to decline from 4.6 births per woman in 2019 to 3.0 births in 2043, and the proportion of people below age 15 is projected to decline to 34 percent by 2043. The large cohort of children under the age of 15, coupled with the limited proportion of skilled working-age adults (16-65 years) and low life expectancy (58 years, 2020),⁹ constrains materialization of a demographic dividend. Given the significant youth bulge in Guinea-Bissau, ignoring the health and well-being of

⁹ Source: World Bank, World Development Indicators.



Figure 2.9 Guinea-Bissau population structure, 1990–2043

Source: Adapted from Aikins 2023.

this large segment of the population and the demographic dividend it can contribute to the country's future welfare, could lead to serious adverse societal and economic consequences for Guinea-Bissau in the immediate and long term.

Primary education and foundational skills

Low educational attainment remains a major obstacle to improving human capital in Guinea-Bissau. Despite improvements in access to primary education in recent decades, a considerable percentage of the population remains underserved. Today, nearly one-third (21 percent) of children between the ages of 6 and 11 have never attended school, and universal primary education is still far from becoming a reality (World Bank 2020). Primary school completion rates remain low: 27 percent on average.

Out-of-school children are disproportionately from rural areas and from poor households. As shown in

figure 2.10, about 43 percent of 6- to 11-year-olds from households in the poorest quintile have never attended school, compared to only 11 percent of children from the wealthiest quintile (World Bank 2020). School dropout rates are also higher among children from the poorest quintile for both ages 6–11 and ages 12–14. The gap is also large between urban and rural areas: 36 percent of rural 6- to 11-year-olds have never attended school, compared to 11 percent in urban areas.

The high incidence of out-of-school children and low educational attainment is largely driven by interlinked sociocultural, economic, and geographic barriers (UNICEF 2018). Key sociocultural barriers include low parental education level and awareness, teen pregnancy, violence against girls, and safety concerns. The most pressing economic demand-side barriers are school affordability, opportunity costs of schooling, and loss of income of a parent. Serious supply-side barriers include inadequate infrastructure, school distance, insufficient teacher supply, teacher strike/absenteeism, and



Figure 2.10 Out-of-school rates for children in Guinea-Bissau, by age and demographic

Source: World Bank 2020.

lack of learning materials. Some of these barriers are summarized in figure 2.11.

The prevalence of out-of-school children is also due to children entering school underprepared, which pushes them into a cycle of grade repetition that affects all levels of education. About one-third of students repeat grade 1, as shown in <u>figure 2.12</u>. The repetition rates remain around 10 percent for all subsequent grades (World Bank 2023). Persistently high repetition rates, particularly in grades 1 and 2, exacerbate primary school net enrollments. As shown in <u>table 2.4</u>, net enrollment is around 69 percent at the national level, with higher rates in urban areas (84 percent) compared to rural areas (61 percent).

The underperformance in grade progression reflects various challenges around quality of education in the country and demonstrates significant inefficiencies within the system, with many late-age entries. Factors likely influencing late entry into

Figure 2.11 Contributing factors to out-of-school incidence and low educational attainment in Guinea-Bissau

Sociocultural barriers

- Negative values toward education
- Negative attitudes toward girls' education (early marriage)
- Teenage pregnancy
- Violence and safety concerns

Demand-side barriers

- Affordability
- Opportunity cost of schooling for family
- Child hunger in the classroom
- Negative image of public schooling

Supply-side barriers

- Distance to an adequate school
- Inadequate school infrastructure
- Teacher's strike/ absenteeism
- Competencies of teachers
- Lack of teaching and learning materials
- Language age of instruction
- Insufficient teacher supply, allocation and deployment

- Political, financial, and governance barriers
- Lack of power of school management committees
- Weak involvement of parents and communities in the school
- Lack of accountability at all levels
- Weak monitoring and evaluation capacity
- Lack of communication at all levels
- Inequitable and insufficient resource allocation

Source: UNICEF 2018.



Figure 2.12 Repetition rates in Guinea-Bissau

Source: World Bank 2023.

Outcome	National	Urban	Rural	Male	Female
Primary school net enrollment rate	69	84	61	68	70
Primary school completion rate	27	47	14	29	25
Grade 1 repetition rate	33	24	41	34	32
Grade 2 repetition rate	16	15	17	17	16
Basic skills in reading	12	24	6	12	13
Basic skills in numeracy	8	8	7	8	7

Table 2.4 Summary of key primary education outcomes in Guinea-Bissau (%)

Sources: UNICEF Multiple Indicator Cluster Survey 2018–19; World Bank 2023.

school are a cultural belief that young children are unable to learn and the instability of the education sector in recent years (Ministry of Education and Pôle de Dakar 2015). Late enrollment in primary schools leads to a higher likelihood of dropping out in adolescence. Guinea-Bissau's Ministry of Education has estimated that, due to internal inefficiencies, nearly 47 percent of the resources allocated to the education sector is lost (Ministry of Education and Pôle de Dakar 2015). Additionally, poor learning outcomes keep students from advancing through the system.

Guinea-Bissau's expected years of schooling are among the lowest in the world, and significantly lower than the average for Sub-Saharan Africa.¹⁰ A child in Guinea-Bissau who enters the educational system at the age 4 can expect to complete only 4.94 years of schooling by his or her 18th birthday, which is even less than the full primary school cycle. The Sub-Saharan average is 8.3 years. **Figure 2.13**, which shows country-level averages for years of expected schooling against GDP per capita in purchasing power parity (PPP), illustrates how length of schooling increases as economies become richer. High-income economies are bundled at the top of the distribution, and low-income economies are at the bottom (World Bank 2021b). The number of years a child can expect to complete in Guinea-Bissau is comparable to that of other low-income countries ranked at the bottom of the World Bank's 2020 Human Capital Index (HCI). Guinea-Bissau is 171 out of 174, with only South Sudan, the Central African Republic, and Liberia registering lower scores.

Children in Guinea-Bissau are failing to master basic literacy and numeracy skills, underscoring the urgency of increasing access to quality basic education. Acquiring these foundational skills is critical to improving Guinea-Bissau's human capital. Guinea-Bissau has not yet been included in the World Bank's HCl due to a lack of reliable, internationally comparable, data on learning outcomes. However, evidence from the MICS 2018–19 on a learning assessment conducted among children ages 7–14 shows that only 17 percent of children can correctly read 90 percent of a basic text in Portuguese, and less than 1 out of every 10 children have basic numeracy skills.

When adjusted for learning outcomes, expected years of schooling drop even further.¹¹ For example,

¹⁰ The expected years of schooling (EYS) component of the Human Capital Index captures the number of years of school a child born today can expect to obtain by age 18, given the prevailing pattern of enrollment rates in his or her economy. Conceptually, the EYS is the sum of enrollment rates by age from ages 4 to 17 (World Bank 2021b).

¹¹ Learning-adjusted years of schooling is a metric used by the World Bank that combines information on the quantity and quality of schooling in a single metric of progress (World Bank 2021b).





Source: Adapted from World Bank 2021b.

in Angola, the number of expected years of schooling is 8.1; when adjusted for learning, it is only 4.2; in Ghana, the gap is even wider—from 12.1 to 6.0 years (World Bank 2021b). Although not internationally benchmarked, the learning outcome data available for Guinea-Bissau indicate that, once years of schooling are adjusted for quality, the actual years of learning would make the current situation even more severe—and even less than four years overall. Only 7 out of 174 countries have learning-adjusted years of school this low: Liberia, South Sudan, Mali, Niger, the Central African Republic, Chad, and Rwanda.

In Guinea-Bissau, poor learning outcomes are directly related to the capacity of the teaching work-

force. Nearly 70 percent of full-time teachers in Guinea-Bissau have benefited from some previous training and are considered qualified. However, only a small portion of teachers possess the requisite content knowledge and pedagogical skills needed to teach effectively. According to the 2014 PASEC, students taught by teachers considered qualified and who have attended preservice training did not

perform any better than those taught by teachers with no preservice training at all. National-level estimates mask regressive regional disparities. The poorest regions have significantly higher student-teacher ratios and fewer trained teachers. The capital and Biombo have the highest percentages of teachers who have attended university or teacher training schools, while up to 50 percent of teachers in Gabú and Oio have no formal qualifications or have only attended a technical course.

Guinea-Bissau recently adopted a new school curriculum for grades 1–4 with the aim of improving learning outcomes in the early grades. The previous school curriculum was from 1984; the new curriculum integrates subject areas and encourages more active teaching pedagogies. While the student textbooks and teacher guides have been prepared, just over half of grade 1–4 teachers have been trained on how to effectively teach the new curriculum. To ensure the new curriculum results in better learning outcomes, there is a serious need to train teachers on the new curriculum and provide

additional support during its implementation. Given the limited capacity of teachers in Guinea-Bissau, the resources provided to teachers should not only include manuals but additional aids like scripted teaching lessons and step-by-step teachers' guides.

Limited access to learning materials negatively affects student learning outcomes. The last time the country purchased any learning materials was in 2016, with UNICEF support. While donor-financed initiatives have aimed to provide textbooks to schools, dissemination is weak. During previous distributions, many textbooks never reached their intended classrooms. Instead, they were sold on the black market, remained in central-level warehouses due to poor planning, or remained in unopened boxes in school administrators' offices.

Various urgent measures are needed to improve teaching and learning. The World Bank's Western

and Central Africa Education Strategy 2022–25 (World Bank 2022b) delineates five interventions to address teacher quality, children's readiness to learn, and the effectiveness of pedagogy in basic, primary, and secondary education. Some cost-effective interventions include structured pedagogy combined with teacher training and learning resources, programs to teach children at the right skill level, and preprimary education. Other interventions, such as providing early stimulation to young children and involving communities in school management, also offer promising results (table 2.5).

Secondary education, TVET, and job-relevant skills

Gross enrollment rates at the secondary and tertiary levels remain low, despite improvements in access

Intervention (what)	Reason (why)	Activity (how)
Transform the teaching profession	Students of skillful teachers learn more and attain more years of schooling	 Improve the quality of new teachers in the pipeline Attract more women to teaching Recruit teachers based on merit, deploy based on needs, strengthen career management Support teachers with structured pedagogy
Enhance students' readiness to learn	Students without proper early nutri- tion and stimulation are not well prepared to learn	 Invest in nutrition, health, early stimulation, and other cross-sectoral areas Encourage reading at home Involve nonstate actors, including those in community-based early childhood development
Provide learning resources and EdTech tools	Shortage of learning materials is pervasive, and students cannot learn without them	 Provide a set of core learning resources/minimum package of learning materials (textbooks, readers, and scripted lesson plans)
Teach at the right level and in a language children understand	Learning in a first language promotes better learning outcomes and devel- opment of other cognitive abilities, and targeting instruction to a child's learning level provides quick results	 Instruct in local languages in first few years of schooling and transition to second language in later years Target instruction to children's level, focusing on foundational reading and mathematics skills
Foster a culture of regular learning assessments	Regular assessments keep the focus on learning, provide timely informa- tion on student performance, and allow for adjustments to improve student learning	 Institutionalize periodic, rigorous, large-scale assessments (national or international) Support frequent in-class formative assessments using technology

Table 2.5 Interventions to improve teaching and learning

Source: World Bank 2022b.

to basic education in recent years.¹² As shown in figure 2.14, gross enrollment rates increased across all levels of education between 2014 and 2018. The largest gains were registered at the first cycle of the basic education level (EB1), where the gross enrollment rate increased from 132 percent in 2014 to 156 percent in 2018 (World Bank 2020). Access at the secondary level also increased from 45 percent to 66 percent over the same period but remains low, indicating that gains at the primary level have not yet spilled over into the secondary level. Access at

the tertiary level registered a 3 percentage point increase—from 1 percent to 4 percent—over the same period.

Access to secondary education differs significantly across regions as well as between urban and rural areas. Although regional basic gross enrollment rates are relatively high, three regions (Gabú, Bafatá, and Oio) registered gross attendance rates below the national level in 2018 (World Bank 2020). In terms of disparity in access to secondary education, the same three regions have gross attendance rates below 25 percent, whereas the Bissau autonomous sector recorded a ratio of 142 percent (figure 2.15). Furthermore, gross basic education attendance in rural areas is 46 percentage points lower than in urban areas. This gap further increases to 88 percentage points in secondary education.





Source: World Bank based on data from UNICEF <u>Multiple Indicator Cluster Survey 2014</u> and <u>Harmonized Survey on</u> Household Living Standards (EHCVM) 2018-2019.

Note: Basic education is broken into three cycles: EB1, EB2, and EB3. The gross enrollment rate is the ratio between all students enrolled in primary education, regardless of age, and the population of the official primary education age. The Gender Parity Index indicates parity between girls and boys. A GPI of less than 1 suggests girls are more disadvantaged than boys in learning.

¹² The gross enrollment rate is defined as the number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education (see e.g., <u>UNESCO glossary</u>). The gross enrollment rate can exceed 100 percent due to the inclusion of overage and underage students because of early or late entrants, and grade repetition.



Figure 2.15 Disparities in gross enrollment rates across Guinea-Bissau

Source: World Bank based on data from UNICEF <u>Multiple Indicator Cluster Survey 2014</u> and <u>Harmonized Survey on</u> Household Living Standards (EHCVM) 2018–2019.

Note: The gross enrollment rate is the ratio between all students enrolled in primary education, regardless of age, and the population of the official primary education age.

The dropout rate is significant at the secondary

level. According to the MICS 2018–19, the completion rate for children who attend secondary school is only around 42 percent. Among other factors, the high repetition rates from earlier grades and late-entry enrollments—which affect students' ability to complete their education cycle on time—increase the likelihood of dropping out and delay students' ability to join the labor market. This in turn reduces their lifetime potential earnings.

Despite progress in closing gender gaps at the primary level (figure 2.14), significant differences in gender are apparent at the secondary level. Guinea-Bissau continues to have some of the lowest secondary education enrollment and completion rates in the region, with females particularly disadvantaged. At the primary level, the net enrollment of girls (70 percent) was slightly higher than of

boys (68 percent) in the MICS 2018–19, suggesting relative gender parity. Net enrollment drops considerably for both boys and girls (both 9 percent) in lower secondary school and decreases further to 7 percent for girls and 6 percent for boys in upper secondary school. The gap widens, however, in terms of completion rates at the secondary level, with 14 percent of boys completing secondary school compared to 8 percent of girls. Significant differences in learning outcomes are also evident when analyzing the adult literacy rate, which was only 32.6 percent for females compared to 52.3 percent for males in 2019, according to the 2018–19 MICS.

While some constraints to stay in school are common to both boys and girls, girls face difficult odds due to entrenched patterns of gender inequality. In Guinea-Bissau, girls face social pressures to marry early and are at risk of early pregnancy. Girls also have more responsibilities at home than boys-including cooking and taking care of siblings-reducing the time available for study. Simply going to school may not be safe for girls, given the high levels of gender-based violence; moreover, families often may not support their continued education. All these factors lead girls to drop out of school early. About 8.4 percent of women of all ages marry before the age of 15, and 30 percent of women between the ages of 20 and 49 had married before the age of 18, according to the 2018–2019 MICS. Child marriage is closely related to low educational attainment for girls, as it increases the likelihood of dropping out, which limits education and employment opportunities. Table 2.6 suggests that after a certain age, many girls may have to choose between marriage and schooling. The percentage of girls ages 15–19 who are both married and in school is less than 1 percent.

Delaying marriage and childbearing and improving educational attainment for girls would have numerous benefits. Girls who marry or drop out of school early are more likely to have poor health outcomes and to earn less in adulthood, which makes it more likely that their households will be poor. They are also at risk of intimate partner violence and lack decision-making power within the household. Fundamentally, girls who marry, have children, or drop out of school early are disempowered in ways that deprive them of their basic rights,

Table 2.6 Girls' marital, childbearing, andeducational status, 2018–19

Status	Percentage of girls ages 15-19
In school, not married	52.6
Out of school, not married	31.2
Out of school, married	15.5
In school, married	0.7
Total	100.0

Source: World Bank based on data from UNICEF Multiple Indicator Cluster Survey 2018–19.

which not only affects them but also their children. For example, children of young mothers are often at higher risk of dying by age five due to malnutrition, and of doing poorly in school.

Guinea-Bissau's Basic Law of the Educational System and the Education Sector Plan (2017-2025) include strategies aimed at addressing gender disparities. Some of the strategies include raising awareness among community members and school directors to identify and mitigate obstacles to girls' school attendance; strengthening reporting on gender-based violence; and reducing late entry and age-related school abandonment by sensitizing parents and improving school facilities to foster a better learning environment. Operationalizing these gender strategies, however, is often limited by technical and human resource constraints.

Beyond gender inequities, the learning crisis in Guinea-Bissau means that people are entering the labor market without adequate skills, which is worsened by limited access to training oppor**tunities.** According to a report produced by the European Union (EC 2022), Guinea-Bissau has 22 TVET centers, concentrated primarily in the capital and with a wide gender gap among participants. About 63 percent of the training centers are in Bissau. Overall, they tend to attract more males (63 percent) than females (37 percent). Sixteen of the 22 centers are operated by private providers, five are public led, and one is community led. The courses offered are mainly in traditional areas such as civil construction, electrical installation, welding, car mechanics, carpentry, and areas related to small urban trades (e.g., refrigeration and air conditioning, plumbing, hairdressing/aesthetics, secretarial skills, and project management). Centers in rural areas offer courses in agriculture and agribusiness.

The absence of either a central TVET strategy or a system of standards and accreditation undermines the credibility and quality of existing centers. The TVET sector in Guinea-Bissau is characterized by
training programs that are disconnected from labor market demands. The lack of a regulatory and institutional framework calls into question the legal value of trainee certifications and qualifications; the same reasoning applies to internships and apprenticeships (EC 2022). Moreover, a small private sector and political instability disincentivize prolonged private sector investment in TVET, leading to a mismatch between skills training offerings and labor market needs.

The Education Sector Plan identifies several strategies to help diversify and improve the supply of quality TVET programs in the country. These strategies include implementing a qualifications and certification framework for TVET; developing new courses that align with the demands of the labor market; upgrading equipment and other pedagogical resources needed for practical training; strengthening the use of apprenticeships, including for the informal sector; and developing quality preservice and in-service training programs for trainers.

Adolescent and reproductive health

Adolescence is a critical transitional phase in which youth are expected to gain the physical, cognitive, social, and emotional capacities needed to ensure well-being in adulthood. This includes skills to engage effectively in work, leisure, family life, and the community. Failure to acquire these skills can have long-term detrimental effects. To this point, Sheehan et al. (2017) identify seven specific factors affecting the health and social development and capabilities of adolescents: physical, mental, and sexual health; secondary school education; child marriage; violence against women; and road accidents. These factors-except for secondary school education and associated gender-related considerations, which are discussed above-are examined further in the next paragraphs.

In Guinea-Bissau, communicable diseases and road accidents have consistently been ranked as the leading causes of death and disability in children ages 5-14 since the early 1990s (figure 2.16 and figure 2.17). Like children under age five, young children, preteens, and adolescents ages 5-14 die from vaccine-preventable diseases (e.g., measles were responsible for 14 percent of all deaths in 2019, making it the leading cause of death for this age group); diseases associated with poor WASH services (e.g., diarrhea, accounting for 10 percent of all deaths among this age group), and conditions that either can be managed (HIV infection, 8 percent of age group deaths) or treated with modern medicine (lower respiratory infection, 7 percent of age group deaths). The burden of deaths related to road traffic accidents has remained consistent since the early 1990s, accounting for 9-10 percent of all deaths in this age group between 1990 and 2019. Conditions related to poor nutrition, measles, and WASH constitute the leading causes of disability among adolescents.

The burden of HIV infection among adolescents in particular is a serious problem. The burden of HIV has increased significantly among adolescents since the early 1990s. HIV rose between 1990 and 2019 as the 65th to the 4th leading cause of death among the 5- to 14-year-old age group (UNAIDS 2022). In 2019, HIV infection ranked as the third leading cause of death among girls ages 5-14 in Guinea-Bissau, after measles and diarrheal conditions (figure 2.18). Several countries, including Guinea-Bissau, cite HIV risk factors as including women's social dependence and submission, difficulties in negotiating condom use, cultural and/or traditional practices, prostitution, and male refusal to take tests and/or disclose their HIV status to partners.

According to the 2018–19 MICS, the adolescent birth rate is high in Guinea-Bissau (84 births per 1,000 women between the ages of 15 and 19), which contributes to the high maternal mortality rate. Births

1990		2019
1. Measles		1. Measles
2. Diarrheal diseases		2. Diarrheal diseases
3. Road injuries		3. Road injuries
4. Lower respiratory infection		4. HIV/AIDS
5. Meningitis		5. Lower respiratory infection
6. Hemoglobinopathies		6. Hemoglobinopathies
7. Malaria		7. Meningitis
8. Tuberculosis		8. Malaria
9. Protein-energy malnutrition		9. Congenital defects
10. Drowning		10. Drowning
11. INTS		11. INTS
12. Congenital defects		12. Tuberculosis
13. Whooping cough		13. Interpersonal violence
14. Yellow fever		14. Whooping cough
15. Chronic kidney disease		15. Chronic kidney disease
16. Stroke		16. Stroke
17. Cirrhosis		17. Cirrhosis
18. Tetanus		18. Leukemia
19. Acute hepatitis		19. Falls
20. Falls		20. Animal contact
21. Interpersonal violence		23. Protein-energy malnutrition
22. Animal contact		35. Yellow fever
25. Leukemia	7	42. Acute hepatitis
65. HIV/AIDS		44. Tetanus

Figure 2.16 Leading causes of death in children ages 5–14 in Guinea-Bissau, 1990 and 2019

Source: World Bank based on data from Institute for Health Metrics and Evaluation.

Legend: communicable, maternal, neonatal, and nutritional diseases; noncommunicable diseases; nipuries.

Figure 2.17 Leading causes of DALYs in children ages 5–14 in Guinea-Bissau, 1990 and 2019

1990	2019
1. Measles	1. Dietary iron deficiency
2. Diarrheal diseases	 2. Measles
3. Road injuries	3. Diarrheal diseases
4. Lower respiratory infection	4. Road injuries
5. Malaria	5. HIV/AIDS
6. Meningitis	6. Hemoglobinopathies
7. Hemoglobinopathies	7. Lower respiratory infection
8. Dietary iron deficiency	8. Meningitis
9. Tuberculosis	 9. Malaria
10. Congenital defects	10. Congenital defects
11. Protein-energy malnutrition	11. Neonatal disorders
12. Drowning	12.Headache disorders
13. INTS	13.Conduct disorder
14. Intestinal nematode	14. Anxiety disorders
15. Vitamin A deficiency	15. Idiopathic epilepsy
16. Asthma	16. Drowning
17. Headache disorders	17. Asthma
18. Idiopathic epilepsy	18. Other NTDs
19. Conduct disorder	19. INTS
20. Whooping cough	20. Intestinal nematode
22 Anxiety disorders	23. Tuberculosis
25. Other NTDs	25. Vitamin A deficiency
61. Neonatal disorders	28. Whooping cough
94. HIV/AIDS	45. Protein-energy malnutrition

Source: World Bank based on data from Institute for Health Metrics and Evaluation.

Legend: 📃 communicable, maternal, neonatal, and nutritional diseases; 📕 noncommunicable diseases; 📕 injuries.

Figure 2.18 Leading causes of death in children ages 5–14 in Guinea-Bissau disaggregated by sex, 1990 and 2019

	remaies
1990	2019
1. Measles	1. Measles
2. Diarrheal diseases	2. Diarrheal diseases
3. Road injuries	3. HIV/AIDS
4. Lower respiratory infection	4. Road injuries
5. Meningitis	5. Lower respiratory infection
6. Malaria	6. Hemoglobinopathies
7. Hemoglobinopathies	7. Meningitis
8. Protein-energy malnutrition	8. Malaria
61. HIV/AIDS	19. Protein-energy malnutrition
	Males
1990	2019
1. Measles	1. Measles
2. Road injuries	2. Road injuries
3. Diarrheal diseases	3. Diarrheal diseases
4. Lower respiratory infection	4. HIV/AIDS
5. Meningitis	5. Lower respiratory infection

67. HIV/AIDS

Source: World Bank based on data from Institute for Health Metrics and Evaluation.

Legend: 🧧 communicable, maternal, neonatal, and nutritional diseases; 📕 noncommunicable diseases; 📕 injuries.

among 15- to 19-year-olds accounted for 16 percent of all births over the period 2015–20 (table 2.7). The main causes of the high adolescent fertility rate in Guinea-Bissau are thought to be associated with early marriage (30 percent of girls marry before they turn 18), early sexual intercourse, limited access of young people to adequate sexual and reproductive health and rights services, and low utilization of contraceptive methods by couples in general (see, e.g., May 2017; Djoufelkit, Rabier, and Koba 2019; and Zoetyande, Yameogo, and Kenkou 2020). Very few young people are reported to be adequately prepared for sexual life, due to deeply rooted traditional norms and the lack of inclusion of women and girls in the decision-making process-both of which factors limit access to adequate information and services. Contraceptive prevalence (both traditional and modern methods) and the prevalence of women with unmet needs for contraceptive methods were both estimated to be 21 percent in 2019, according to the MICS.

6. Hemoglobinopathies

7. Malaria

8. Drowning

Globally, road traffic injury, suicide, and other noncommunicable diseases as a cause of death in adolescents is increasing; Guinea-Bissau is no exception. While the burden of infectious diseases is declining globally, adolescent morbidity remains high and has barely declined since 1990. A study published by the Lancet in 2017 showed that improving the physical, mental, and sexual health of adolescents by scaling 66 low-cost, high-impact health interventions-including sexual and reproductive health care; HIV prevention and treatment; improved nutrition; and care for depression, anxiety, and alcohol dependence-could avert up to 12.5 million adolescent deaths and prevent 30 million unintended pregnancies in low- and middle-income countries at a cost of \$4.60 per person per year. Tens of millions of young people would be able to contribute to their communities and economies, producing a tenfold-plus return on investments. Moreover, investing in adolescents

6. Hemoglobinopathies

7. Meningitis

8. Malaria

Sociodemographic	Adolescent birth rate ^a	P-value
Total	84	-
Place of residence		-
Urban	42	0.0561
Rural	119	-
Region		-
Tombali	123	0.8568
Quinará	87	-
Oio	118	-
Biombo	88	-
Boloma	69	-
Bafatá	102	-
Gabú	113	-
Cacheu	100	-
SAB	35	-
Mother's level of education		-
Preschool or none	164	0.0838
Basic	77	-
Secondary	18	-
Wealth index quintile		-
1st quintile (poorest)	121	0.07
2nd quintile	115	-
3rd quintile	110	-
4th quintile	70	-
5th quintile (richest)	34	_

 Table 2.7 Adolescent birth rate by residence, region,

 mother's education, and wealth quintile

Source: World Bank, based on data from UNICEF Multiple Indicator Cluster Survey 2018–19.

Note: SAB = autonomous sector of Bissau. For variables with 2 categories, a t-test was performed. For variables with more than 2 categories, an ANOVA was performed (one-way and two-way).

a. per 1,000 live births to women ages 15–19).

yields numerous benefits that can significantly enhance human capital development.

Guinea-Bissau's pervasive gender inequality has major implications for women's and girls' health, education, and economic opportunities. Low educational achievement and poor health outcomes are major obstacles to promoting human capital development, particularly for women and girls. While some progress has been made—particularly with the adoption of laws, policies, and programs that aim to promote human capital development—there has been limited improvement in overall outcomes and in closing significant and persisting gender gaps.

A key objective of the National Policy on Gender and Equality 2016–2025 (PNIEG) is to adopt an agenda on gender equality in social sectors. The Reproductive Health and Family Planning Law (L 11/2010) guarantees the right to reproductive health and family planning without discrimination, as well as women's access to health services toward safe pregnancy, delivery, and pre- and postnatal care.

Violence against women and girls is widespread in Guinea-Bissau, with compounding impacts on their health. Recently published data from UNICEF on female genital mutilation indicates that 52 percent of girls and women between the ages of 15 and 49 have been subjected to this practice before the age of five (Silva 2022). Prevalence is highest in the regions of Gabú and Bafatá. These girls and women are at risk of both short- and long-term negative health consequences including gynecological, obstetric, urological, mental, and sexual complications. Additionally, they may experience immediate health complications arising from the procedure itself and encounter challenges during future childbirths.

Social protection

In Guinea-Bissau, various social assistance programs have been implemented to cater to school-age children and youth. These programs offer support in the form of food transfers, in-kind transfers, fee waivers, and targeted subsidies; examples are provided in <u>table 2.8</u>. Through regular cash transfer initiatives, households receive income support, which enhances household consumption and enables investments in the health and education

Category	Project	Brief description	Ministry responsible	Fund
Food	School Feeding Program	Provides agricultural commodities and financial and technical assistance to support school feeding	Ministry of Education/ Ministry of Public Health	US Department of Agri- culture (implemented by CRS; Plan International and Caritas)
transiers	Project to Support School Canteens and Nutrition	Provides daily meals at schools to encourage school enrollment and attendance	Ministry of Education	Japan and China (imple- mented by World Food Programme)
Other	Child-Friendly Schools/Inclu- sive Schools and Out-of-School Children Programs	Establishes national school stan- dards, the rehabilitation and construction of primary schools (including latrines), teacher training, and basic school materials; iden- tifies children with disabilities and provides them with education; provides life skills and vocational training to out-of-school adolescents	Ministry of Education	UNICEF

 Table 2.8 Examples of social assistance programs targeting school-age children and youth

Source: Bahiaoui, Auffret, and López 2022.

of their children. Notably, the short- and long-term impacts of cash transfers on the urban population in Guinea-Bissau presents compelling evidence of the positive effects achieved by combining cash transfers with complementary measures aimed at equipping households with the necessary tools and knowledge to invest in their children's human capital (Bahiaoui, Auffret, Rúa López 2022). Moreover, cash transfer programs can be customized to establish specific targeting criteria or utilize conditional cash transfers to promote children's health and education.

It should also be noted that the prevalence of child labor disrupts investments in early childhood and the school years that are crucial for learning and future productivity. Over half of Guinea-Bissau's children between the ages of 5 and 17 are engaged in some form of work, according to MICS6.¹³ These children often face hazardous and exploitative work conditions, compromising their well-being and hindering their long-term prospects. The consequences of child labor extend beyond immediate implications, perpetuating the cycle of poverty and impeding the country's overall development. When children are deprived of education and forced into labor, they miss out on acquiring the essential skills and knowledge necessary for a better future.

Utilization of human capital and productivity (ages 19–60+)

This section examines the utilization of human capital and productivity among Guinea-Bissau's working-age population. It is organized into three subsections covering work, employment, and productivity; adult survival rates and overall health; and social protection programs for working-age and elderly populations.

Human capital utilization takes place from ages 19–65, when individuals use their accumulated knowledge and skills to participate in the labor

¹³ Results from Guinea-Bissau's sixth MICS, released October 2020, report on data collected in 2018–19 on over 250 250 indicators for a sample of more than 7,000 families.

market, while still developing their human capital via education and on-the-job experience. This stage is particularly critical, given the macroeconomic situation and labor market conditions in Guinea-Bissau. The country faces significant economic challenges, characterized by prolonged stagnation and a fragile economy. With a per capita GDP below \$800 in 2021,14 Guinea-Bissau ranks among the poorest nations globally. The labor market is constrained by a small private sector, and job opportunities are limited-leading to high unemployment rates, especially among the youth. In this context, the effective utilization of human capital, which is crucial for personal income generation and contributes to breaking the cycle of poverty, remains restricted. By aligning investments in human capital with market dynamics and the potential returns of different professions, individuals are incentivized to acquire the necessary skills that are in demand, creating an intergenerational dependence on the utilization of human capital and paving the way for the development of future human capital stock. This cyclical process of investing in human capital and reaping its benefits generates positive feedback, leading to important intergenerational effects. Given the current economic challenges and limited labor market opportunities in Guinea-Bissau, it is crucial to address the structural constraints to enhance the utilization of human capital and create sustainable economic growth and development.

Human capital utilization: work, employment, and productivity

Guinea-Bissau, one of the poorest nations in the world, has faced prolonged economic stagnation characterized by sluggish growth that worsens labor market conditions for youth and adults. The

¹⁴ Sources: World Bank national accounts data; Organisation for Economic Co-operation and Development national accounts data. country's per capita GDP is among the lowest globally, and its economic performance has remained poor over the past two decades, with an average growth rate of only 0.46 percent.¹⁵ Fragile political institutions and low investment have contributed to the economic challenges. Guinea-Bissau has a history of political instability and weak governance, leading to a lack of confidence among investors and limited private investment opportunities. The country's institutions are concentrated among the elites, resulting in widening inequalities. Furthermore, Guinea-Bissau relies heavily on agriculture as a primary economic sector, with more than 45 percent of its GDP coming from the agri-food sector.¹⁶ The high dependence on agriculture makes the economy vulnerable to climate change, pests, disease, and natural disasters, which reduce agricultural production and farmers' income. Fluctuations in international prices further contribute to the country's economic volatility. The combination of economic stagnation, political instability, weak institutions, and heavy reliance on agriculture poses significant challenges to Guinea-Bissau's overall economic stability and labor market conditions.

The country's weak business environment leads to a relatively small private sector with limited employment opportunities. Figure 2.19 highlights the degree to which opportunities in the private sector are limited. A little more than half of employed individuals ages 18–64 are self-employed, and another 20 percent are family workers. This means that almost 75 percent of those employed do not work as wage earners in the private sector, probably due to nonexistent opportunities or unattractive wages. An additional 13 percent are nonqualified salaried workers, meaning that most of those working in the private sector are nonqualified (i.e., without specialized training or skills). Only a small percentage of

¹⁵ Source: World Bank, World Development Indicators.

¹⁶ Sources: World Bank, <u>World Development Indicators;</u> World Bank (2020).





Source: <u>Harmonized Survey on Household Living</u> Standards (EHCVM) 2018–2019.

the working-age population is employed in qualified work—for instance, as skilled labor, supervisors, senior executives, and managers. In sum, most people are self- or family-employed, and the private sector offers few employment opportunities.

The jobs available in Guinea-Bissau are predominantly characterized by low quality and low wages. Many individuals in the labor force are engaged in informal sector activities, which often lack job security, stability, and access to essential benefits. These jobs are primarily found in the agricultural sector, encompassing activities such as crop cultivation, livestock rearing, and fishing (figure 2.20). Subsistence agriculture remains a prevalent form of work for many individuals. Labor-intensive sectors including fishing, construction, and small-scale manufacturing also contribute to the labor market. These industries often offer limited job security, low wages, and poor working conditions. The absence of significant investments in technology, skills development, and modernization further perpetuates the prevalence of low-quality jobs in the country (Goldin



Source: <u>Harmonized Survey on Household Living</u> Standards (EHCVM) 2018–2019.

and Katz 2007; Gregory, Salomons, and Zierahn 2016; World Bank 2019b).

Most jobs do not guarantee good living standards.

Figure 2.21 shows that the most widespread forms of employment—self-employment and family work—yield the lowest levels of per capita consumption. Almost 75 percent of all employed individuals (self-employed plus family workers) have jobs that result in low levels of per capita consumption. Nonqualified workers have similarly low levels of per capita consumption. On the other hand, certain types of employment are associated with higher levels of per capita consumption, such as qualified workers, supervisors, managers, and senior executives. However, less than 10 percent of all employed individuals can access these kinds of jobs (World Bank 2020).

Enterprises in Guinea-Bissau are typically characterized by their small size, with an average age of around 10 years, and are predominantly privately owned.¹⁷ On average, firms have 10.6 workers, most of whom are permanent workers (95.8 percent). The 10.4 year average age for firms is younger than both

Figure 2.20 Distribution of Guinea-Bissau workers by sector

¹⁷ The data on enterprises discussed here are from Guinea-Bissau's <u>Enterprise Survey;</u> the data are from 2006.



Figure 2.21 Per capita consumption by profession/employment category in Guinea-Bissau

Source: <u>Harmonized Survey on Household Living Standards (EHCVM) 2018–2019</u>. Expenditure consumption was used as a proxy for income due to a high nonresponse rate on income questions in the survey.

the Sub-Saharan Africa average (15.1 years) and the global average (19 years).¹⁸ Most firms are privately owned (91 percent); however, 9.2 percent of firms have a minimum of 10 percent foreign ownership, and 1.2 percent of firms have a minimum of 10 percent government or state ownership. Ownership is generally male, as only 19 percent of firms have female participation in ownership.

Constrained access to credit limits growth opportunities and capital-intensive production. The percentage of firms in Guinea-Bissau identifying access to finance as a major constraint is 71.6 percent—much higher than the Sub-Saharan Africa average (38.3 percent)—because firms can almost never finance their investments through banks. The proportion of investments financed internally is 85.3 percent; the proportion financed by banks is only 0.8 percent. Just 2.7 percent of all firms have a bank loan or line of credit, with some differentiation by firm size—2.1 percent of small firms, and 7.8 percent of medium firms. However, only 6 percent of all firms claim not to need a loan, suggesting they need banks but have difficulties in obtaining bank loans or lines of credit.

Firms in Guinea-Bissau face multiple obstacles including access to finance, informality, corruption, and lack of adequate infrastructure. These deficits hinder businesses from acquiring the modern machinery, technology, and equipment necessary for capital-intensive operations, stifling their productivity and competitiveness. The prevalence of informalityoften due to the absence of formal regulations and weak enforcement-further exacerbates these issues, limiting firms' access to formal credit and impeding their growth. Corruption acts as a significant deterrent to investment, introducing uncertainty, distorting fair competition, and undermining the rule of law, which discourages both domestic and foreign investors. Furthermore, the lack of adequate infrastructure, such as reliable electricity, transportation networks, and telecommunications systems, poses significant hurdles to businesses in Guinea-Bissau, impeding their ability to operate efficiently and engage in value-added activities.

¹⁸ Regional and all country averages of indicators are computed by taking a simple average of country-level point estimates. For each economy, only the latest available year of survey data are used in the computation. Only surveys posted during the years 2013–23 and adhering to the Enterprise Surveys Global Methodology were used in computing these averages.

Addressing these obstacles through targeted policies and reforms is crucial for creating an enabling environment that promotes capital-intensive labor and fosters sustainable economic growth in Guinea-Bissau. Enhancing the availability of financial resources is particularly critical to bolster private sector investment and improve public infrastructure. The current financial constraints limit the capacity of businesses to make the advancements crucial to increasing productivity and maintaining a competitive stance. For instance, addressing frequent power outages is a significant operational challenge that needs to be tackled. With the right policy actions and reforms, Guinea-Bissau's business climate can be reformed to support robust industrial activity and promote long-term economic growth.

The labor force participation rate for individuals ages 15–64 has been declining consistently for the last 25 years.¹⁹ Data from 2018 on the characteristics of the working-age population show that 42 percent had less than a basic education level (no primary school), while only 3 percent had an advanced level (higher than upper-secondary education). More than half of this population (52 percent) resided in rural areas. When analyzing labor force participation rates by education level, it becomes evident that individuals with less than basic education levels exhibit higher participation rates than those with basic and intermediate levels of education. Moreover, the data show that labor participation for individuals ages 15–64 is higher in rural than urban areas.

Highly educated individuals struggle to find high-quality employment opportunities. Unemployment rates tend to be higher among individuals with higher levels of education (i.e., those completing upper secondary education and above) than those with primary education: 9 percent compared to 3 percent.²⁰ This phenomenon can be attributed to the previously mentioned factors of limited job opportunities; a lack of industry diversification; and insufficient investments, especially in sectors that require higher skills.

The pattern becomes more pronounced when considering gender differences. The unemployment rate for women with higher education attainment is 15 percent-significantly higher than that of men (5 percent; figure 2.22). Similar trends are observed for tertiary education, with women facing an 8 percent unemployment rate compared to 5 percent for men; and for secondary education, with women experiencing a 10 percent unemployment rate versus 7 percent for men. When comparing individuals with no education-particularly those residing in rural areas-women conversely have lower unemployment rates than men. These disparities in unemployment rates, which are influenced by gender and educational attainment, highlight the challenges faced by highly educated women in accessing suitable employment opportunities.²¹



Figure 2.22 Unemployment rates in Guinea-Bissau by sex and highest level of education attained

¹⁹ Source: International Labour Organization, <u>ILOSTAT</u>.

²⁰ Source: International Labour Organization, ILOSTAT.

²¹ Note that the labor force participation rate for women is lower than that of men—51.8 percent versus 66.6 percent. Women also tend to have lower educational attainment

Source: Harmonized Survey on Household Living Standards (EHCVM) 2018–2019.

Most high-skilled workers find themselves working longer hours compared to their unskilled counterparts (figure 2.23). Data from the 2018-19 Harmonized Survey on Household Living Standards (EHCVM) indicate that, due to the scarcity of high-quality employment opportunities, highly educated individuals are compelled to work more hours to compensate for the limited availability of well-paying jobs rather than rely on the creation of new job opportunities. This reliance on the intensive margin of work, involving longer work hours, rather than the extensive margin of hiring more workers highlights the challenges faced by educated individuals in accessing suitable employment. It also suggests that the traditional notion of higher education leading to better job prospects and shorter working hours may not hold true in Guinea-Bissau due to the lack of employment opportunities.

levels: approximately 28 percent of men have completed secondary education, compared to only 16 percent of women; and 4.6 percent of men have achieved higher education compared to 2.5 percent of women.

Figure 2.23 Hours worked in Guinea-Bissau by level of education and worker location



Source: Harmonized Survey on Household Living Standards (EHCVM) 2018–2019.

Note: The dotted red line indicates the national median of worked hours.

Another challenge is the scarcity of quality education and skills development opportunities. The lack of access to quality education, vocational training, and technical skills hinders the workforce's ability to participate in more advanced and skill-intensive sectors. The most recent assessment of learning outcomes shows poor performance and a declining level between grades 2 and 5 (Ministry of Education 2015; World Bank 2017), indicating that education quality is worsening at higher levels. The low level of education and skills among the workforce exacerbates the problem of low-quality jobs, as limited access to quality education and training programs hinders the ability of individuals to acquire the skills needed for higher-paying and more productive employment opportunities. The mismatch between the skills available in the labor market and the requirements of emerging industries limits the country's ability to attract investments and promote economic diversification

Employment in Guinea-Bissau follows a clear sectoral distribution. The 2018–19 EHCVM found that individuals with secondary education and below are mainly employed in the agricultural sector; those with higher educational attainment tend to work in education, health, and other service sectors. For instance, among all employed individuals, 68 percent of those with no education are employed in the agricultural sector. This trend reflects a higher labor demand in agriculture and lower educational requirements for agricultural jobs—potentially leading to reduced incentives for pursuing higher education.

Most household businesses rely heavily on labor-intensive operations rather than capital-intensive investment. This characteristic of the country's economic landscape has significant implications for its productivity and growth potential. Most household-owned businesses tend to be small in scale and primarily managed by families. Approximately 64 percent of households own at least one nonagricultural enterprise, according to the 2018–19 EHCVM. On average, these businesses do not have salaried workers; 89 percent do not demand wage employment. Instead, they are mainly managed by family members (94 percent), with an average of 1.3 family members engaged in the business.

Self-employment is highly informal and labor intensive. Informality among household-owned businesses is striking, as 96 percent of them lack formal records or accounting practices, and 97 percent operate without being officially registered. Additionally, 99 percent of workers are not registered as formal workers. Only 6 percent of businesses own machinery, indicating their labor-intensive nature. Over three-quarters (78 percent) of these businesses were initially funded using their own resources, highlighting the extremely limited access to credit, as discussed earlier. The widespread lack of credit for firms hampers investment and the adoption of new technologies.

Access to credit is one of the main constraints reported by businesses in Guinea-Bissau, together with excessive competition and a lack of clients. The 2018-19 EHCVM delved into the problems faced by enterprises during their operations (figure 2.24). The prevalence of responses citing excessive competition (65 percent) and a lack of clients (48 percent) indicates that family workers struggle to provide products or services that are demanded in the economy. These problems frequently lead to interruptions in business operations. Access to credit was identified as a problem by 40 percent of all surveyed enterprises. Only 9 percent of those surveyed said they had a bank account, and only 0.7 percent had sought credit from a financial institution in the previous 12 years. Among those who did not apply for credit because they claimed they did not need it, the reasons cited included not meeting the necessary conditions (47 percent), concerns about being unable to repay loans (19 percent), and not knowing how to apply (15 percent).

Figure 2.24 Main problems faced by enterprises in Guinea-Bissau



Share of firms facing problem (%)

Source: <u>Harmonized Survey on Household Living</u> Standards (EHCVM) 2018–2019.

Given this scenario, many educated individuals are unable to secure quality employment, and thus choose to emigrate. As noted earlier, unemployment is higher among the most educated (people with upper secondary education and higher education). The lack of employment opportunities, inadequate health systems, and limited access to quality education often drive young individuals to undertake perilous migratory journeys in pursuit of improved livelihoods (Black and Sward 2009; Browne 2017; Eggert, Krieger, and Meier 2010; Hermans and Garbe 2019; Kristensen and Birch-Thomsen 2013).

Migration trends reflect predominantly economically motivated movements, with a significant **impact on the country's youth population, particularly those between 18 and 28 years old.** According to estimates,²² the number of migrants in 2021 was 117,478, which accounted for 5.7 percent of the population. The brain-drain of qualified personnel, especially in the health and education sectors, is a persistent problem.

Personal remittances sent back to Guinea-Bissau have increased over the past 30 years. These remittances represent a significant share of the country's GDP (<u>figure 2.25</u>). In 2021, remittances accounted for 12.6 percent of the GDP.

The potential for congestion within markets and sectors where household businesses operate is significant. A thorough analysis of the existing business landscape would help identify areas that are already saturated with similar enterprises, allowing for a more informed allocation of resources and support. Aspiring entrepreneurs also need help with market research. Equipping individuals with the tools to assess market demand and identify opportunities will enable informed decisions about their business orientation, help prevent clustering of similar businesses in already saturated markets, and encourage

²² Source: KNOMAD.





Economic inclusion programs can support poor households in building sustainable sources of income and improving resilience, thereby benefiting the human capital development of all household

troubles in the start-up phase).

the human capital development of all household members. Economic inclusion programs can help create employment opportunities for educated but unemployed youth (people with upper secondary education and higher education) and facilitate the development of income-generating activities for self-employed households operating in the primary sector, which have very limited access to credit. Self-employment can provide young educated individuals with a means to earn a living and avoid unemployment. This approach has its limits, however. Two-thirds of all self-employed individuals identify excessive competition as a major constraint, and half of the self-employed individuals identify a lack of clients as a significant issue.

the creation of ventures that cater to unmet needs.

Unemployed educated youth develop small busi-

nesses with training (small business management,

financial education, and professional training), cash

start-up grants, and coaching (to help them resolve

Economic inclusion programs can help foster diversification among households that mainly rely on agriculture. Households involved in agriculture, particularly cashew production, are extremely vulnerable to market fluctuations and climate change. Economic inclusion programs can focus on diversifying off-farm income-generating activities or on adding value to agricultural production. The economic inclusion package should consist of building capacity, improving skills (training), cash start-up grants, and coaching. Given the fragility of government institutions and the limited availability of services from central ministries, the involvement of NGOs in economic inclusion interventions is essential.

Social protection for working-age and elderly populations

With a median age of 18.7 years in 2019, the composition of Guinea-Bissau's population results in a high dependency ratio. This ratio indicates that for every 100 active persons (ages 15–64 years), there are 80.5 inactive persons (under age 15 and 65 years and older). Population projections for Guinea-Bissau indicate that the younger age groups will be larger than the working-age adult population by 2050.²³ The country's total population could reach 3.5 million by 2050, accompanied by a decline in the proportion of youth under the age of 15.

Contributory social protection (social security) in Guinea-Bissau is almost nonexistent outside the public sector. Two contributory social protection schemes exist: one for civil servants, military personnel, and other state employees; and one for the rest of the workforce, including the private sector and public enterprises (general regime). However, less than 4 percent of the working-age population is enrolled in pension schemes and pays contributions (OPM 2023). The public administration regime only provides old-age pensions and disability benefits. There is no autonomous pension fund; revenues and expenses are integrated in the general state budget.

The coverage of contributory social protection devices is extremely low, mainly due to the small size of the formal sector in the economy. The general regime for employees is managed by the National Social Security Institute (Instituto Nacional de Segurança Social—INSS). Under this regime, the contribution rate for salaried employees is set at 22 percent of gross pay, with 8 percent contributed by the employee and 14 percent by the employer. The benefits provided are relatively comprehensive, as they cover eight of the nine benefits outlined in Convention 102 of the International Labour Organization and are not limited to unemployment benefits.

The population over age 60 represents 5 percent of Guinea-Bissau's total population; only 6 percent of this group receives a contributory pension.²⁴ Again, the large informal sector affects the outcome. This pension covers only retirees from the civil service and thus excludes most of the elderly, who worked in the informal sector and are therefore not included in the social insurance system. Relatedly, less than 4 percent of disabled people receive disability pensions.

Less than 2 percent of the population ages 15–49 is covered by health insurance. The MICS 2018–19 found that 1.8 percent of men, 1.0 percent of women, and 1.0 percent of children are covered by health insurance mechanisms. This includes INSS social security (29.3 percent of insured women), community mutual health organizations (37.4 percent), employer-provided insurance (26.2 percent), and private insurance (9.0 percent).

The main benefit funded by the general state budget, a noncontributory program, is a social pension for former combatants managed by the Ministry of Defense. Although most veterans of the war of independence are dead, this benefit accrues to their heirs, which places a significant financial burden on the state budget, accounting for 12 percent of the social protection expenses in 2023 (OPM 2023). The Ministry of Women, Family, and Social Solidarity (Ministério da Mulher Família e Solidariedade Social-MMFSS), which is responsible for assistance to families and people in need, receives resources from the state budget to support those who face extreme need or who are victims of a disaster. There are no available data on the actual beneficiaries of this support. Aside from these pensions and benefits, the remaining noncontributory social

²³ Sources: United Nations, Department of Economic and Social Affairs, <u>World Population Prospects 2022</u>; UNFPA (2021).

²⁴ Pension Watch website, Guinea-Bissau country profile.

protection interventions are financed by external partners (96 percent) and include cash transfers, food distribution, and public works.

External partners have been supporting targeted cash transfer programs since 2018 (table 2.9). Accompanying measures to support nutrition, health, and education have complemented the cash transfers. There is no national program for regular cash transfers over the long term and at a sufficiently large scale to effectively reduce poverty and strengthen resilience to shocks. Notably among these partner initiatives, the Social Safety Nets and Basic Services Project referenced in the table laid the groundwork for a future single social registry by preparing a unified social registry survey form jointly with the National Institute of Statistics; and developing a management information system that allows

registration of potential beneficiaries, targeting of beneficiaries (using a combination of a new household survey and a special index to measure access to basic social services), and payment.

Public works enable the provision of temporary employment and the development or maintenance of labor-intensive infrastructural projects and social services. In Guinea-Bissau, public works programs focus on strengthening and rehabilitating agricultural infrastructure, with a strong focus on environmental protection and improving access to basic social services for rural communities. Public works can combine cash for work and food for work components, paying wages via mobile money and/ or vouchers.

Program	Year	Number of beneficiaries (households)	Region	Amount	Duration	Implementing institution	Fund
Rural Community Development Project	2018–19	387	Bissau City	CFAF 10,000 monthly per member	2 years	Ministry of Planning and	
Social Safety Nets and Basic Services Project	2019-22	5,000	Gabú, Cacheu, Oio	~CFAF 70,000 each quarter	2 years	Regional Inte- gration	World Bank
Civil Protection	July-Oct. 2020	851	Buba sector,	CFAF 40,000	4	Ministry of	Govern- ments of
Project (shock response)	June– Aug. 2021	59	Quinará region	monthly	months	Interior	Japan and Italy
COVID-19 Rapid Response Program	OctDec. 2020	1,587	Gabú, Oio, Cacheu, Biombo	CFAF 40,000 monthly	3 months	Ministry of Women, Family, and Social Soli- darity	UNICEF, WFP, UNDP
Cash transfers for vulnerable households with at least one child enrolled in school	May-Oct. 2021	1,400	Gabú, Bafatá, Oio	CFAF 40,000 monthly	6 months	UNICEF	Global Part- nership for Educa- tion and Camões
Food Security Project	2022-23	3,000		CFAF 85 million	1 payoff		FAO/World Bank

Table 2.9 Cash transfer programs in Guinea-Bissau, 2018-22

Source: World Bank.

Note: FAO = Food and Agriculture Organization of the United Nations; UNDP = United Nations Development Programme; WFP = World Food Programme.

level

Transfers of productive assets, along with additional support, can also play an important role in enhancing productivity and thus improving income in the long run. The impact evaluation of the Social Safety Nets and Basic Services Project highlighted that regular cash transfers not only increase consumption but also stimulate investments and purchases of agricultural inputs and livestock (Bahiaoui, Auffret, and López 2022). However, programs incorporating productive asset transfers (especially the distribution of seeds, fertilizers, and tools to small farmers) accompanied by other forms of support (such as agricultural extension services and training) have the potential not only to improve food security but also to enhance productivity and improve income in the long run.

The combination of low wages and limited job opportunities in Guinea-Bissau has led to widespread poverty. Rural areas have been particularly affected by the country's economic stagnation and fragility. Poverty is especially pronounced in these regions, where more than half of the population is poor. The incidence of poverty increased by 5.7 percentage points between 2018 and 2021 to reach 67 percent. In the capital city of Bissau and other urban areas, poverty increased by 2.7 and 4.6 percentage points, respectively, between 2018 and 2021, accounting for 21 and 42 percent of the respective populations (World Bank 2020). The rural economy relies heavily on agriculture, livestock rearing, and fishing, accounting for nearly 85 percent of economic activities. Additionally, 55.7 percent of rural adults are self-employed, 29.7 percent engage in family work, and only 10.9 percent of adult workers are engaged in wage-based employment. This vulnerability leaves rural families susceptible to climate fluctuations and price shocks, further exacerbating their hardships.

There are significant disparities in access to services and time allocation at different welfare levels. Households with higher welfare levels have more access to basic services, on average, than those below the median welfare level. Figure 2.26



Figure 2.26 Services and owned goods by welfare

Source: <u>Harmonized Survey on Household Living</u> Standards (EHCVM) 2018–2019.

shows that only 4.8 percent of households below the median welfare level have access to electricity, compared to a significantly higher percentage of households above the median (21.7 percent). Also, households below the median welfare level dedicate a relatively larger amount of time each week to activities such as collecting water and firewood compared to households above the median welfare level. On average, low-welfare households spend approximately 1.8 hours per week looking for water; high-welfare households spend an average of 1.7 hours on this task. This pattern extends to the allocation of time for domestic tasks and childcare as well.

State social assistance is limited and fails to effectively target the poorest households. The most impoverished rural areas receive nearly equivalent levels of social protection as urban areas, where comparatively wealthier households live (figure 2.27). This disparity raises concerns about the equitable distribution of resources and suggests a significant gap in addressing the specific needs and challenges faced by the rural population.

A similar pattern arises when considering social protection across households with different levels

Figure 2.27 Social protection targeting and poverty in Guinea-Bissau



Source: Harmonized Survey on Household Living Standards (EHCVM) 2018-2019.

of consumption. Figure 2.28 shows that the rates of social protection among the wealthiest households are comparable to those of the poorest households. Among the poorest 20 percent of households, only 56 percent receive any form of social assistance from the government; among the wealthiest 20 percent, no less than 54 percent receive some form of support. This lack of correlation between

Figure 2.28 Social protection targeting by consumption in Guinea-Bissau



Source: Harmonized Survey on Household Living Standards (EHCVM) 2018–2019.

Note: Quintiles are ranked from lowest to highest, indicating relative wealth.

consumption and regional poverty rates with social assistance highlights a significant disconnect between government support and the needs and circumstances of vulnerable individuals.

Cash transfer programs can tackle constraints that hamper socioeconomic inclusion and human capital enhancement of the poorest and most vulnerable. Timely cash transfers provide household income support, enabling smooth and increased consumption, improved food security, enhanced nutrition for children, safeguarding of household assets, and the building of resilience to shocks. Given the high poverty rates among agricultural sector workers and the lack of income for the unemployed, predictable transfers allow households to maximize the use of their financial resources, and plan and invest for the future—particularly in resilient livelihoods and the human capital of their children.

Receiving regular transfers with accompanying measures over a period may help households acquire the tools and knowledge needed to invest in the health and education of their children. A good strategy to improve the effectiveness of the accompanying measures is to increase local and community participation in service delivery by selecting community health workers or teachers from within the communities themselves. Such individuals are more likely to be motivated, accountable, and trusted by the communities they serve. Because nearly one-third of children between the ages of 6 and 11 have never attended school, cash transfers could be (partly) conditional upon children's schooling to encourage on-time entry and primary school enrollment. The consistent implementation of cash transfers and the integration of recipients into a social protection system is a potential game-changer in the design of economic inclusion programs.

Targeting mechanisms that help reach vulnerable groups and households will help improve cost-effectiveness and impact. Targeting is currently inadequate. The coverage of social protection programs is similar across all five quintiles of per capita consumption and across all levels of education. Three targeting mechanisms could be considered and implemented simultaneously: (1) self-targeting; (2) community-based targeting; and (3) household survey-based targeting, using household survey data to determine eligibility, such as proxy means testing.

All these options can be enhanced by establishing a national social registry. A national social registry would enable rapid and accurate identification and targeting of potential beneficiaries for social assistance programs; reduce opportunities for fraud, benefit duplication, and access to benefits by illegitimate actors; and improve social assistance program monitoring and coordination. As noted earlier, the Social Safety Nets and Basic Services Project has established a registry for beneficiaries that includes a basic information system with modules to track payments, prepare reports on cash payments, and monitor attendance at accompanying measures. It would be beneficial to continue and expand development of this registry. To enable broader usage of the national social registry and enhance coordination, it should be led at a high/central level.

Adult survival rates

Based on the latest data (World Bank 2021b), the survival rate of 15-year-olds to age 60 in Guinea-Bissau is estimated to be 83 percent. This percentage is higher among women (86 percent) than men (79 percent) and exceeds that of countries with similar structural characteristics; it is similar to that of Lao People's Democratic Republic (Lao PDR) and Rwanda, but lower than that of Tajikistan (87 percent; figure 2.29). In 2019, the most significant health burdens among individuals 15 years and over were HIV/AIDS (with 56.8 DALYs per 1,000 people), followed by tuberculosis (50.9 DALYs per 1,000) and road injuries (34 DALYs per 1,000; figure 2.30). These suboptimal indicators can be

Figure 2.29 Survival rate of individuals age 15 years in Guinea-Bissau and its peers



Source: World Bank 2021b.

Figure 2.30 Top 10 causes of DALYs among people 15 years and older in Guinea-Bissau



Source: World Bank, using data from the World Health Organization, Global Health Observatory.

attributed, in part, to health system challenges related to children.

The maternal mortality ratio in Guinea-Bissau is very high: 667 deaths per 100,000 live births in 2017.

This ratio was higher than that of all aspirational peer countries, which varied between 17 deaths per 100,000 live births in Tajikistan, to 248 deaths per 100,000 live births in Rwanda (figure 2.31). The country's mortality rate was also higher than that of



Figure 2.31 Maternal mortality ratio in Guinea-Bissau and its peers, 2000–17

Source: WHO et al. 2019.

two of its structural peers: The Gambia (597 deaths per 100,000 live births) and Burundi (548 deaths per 100,000 live births). From 2000 to 2017, the maternal mortality rate in Guinea-Bissau decreased by 45 percent. However, this decrease was lower than that of all its aspirational peers (Rwanda at 79 percent, Tajikistan at 68 percent, and Lao PDR at 66 percent) and one of its structural peers, Sierra Leone at 55 percent. The decrease was almost identical to that of Burundi (46 percent).

Over the period 2015–20, Guinea-Bissau's life expectancy at birth was 58 years (figure 2.32**).**²⁵ This life expectancy was lower than that of all its aspirational peer countries, which ranged from 67 years (Lao PDR) to 71 years (Tajikistan). Guinea-Bissau's life expectancy was also lower than that of two of its structural peers: The Gambia (62 years) and Burundi (61 years).

From 2000 to 2019, the overall age-standardized mortality rate decreased from 18.7 to 13.6 per 1,000 person-years but remains high.²⁶ This ratio of 13.6

Figure 2.32 Life expectancy at birth in Guinea-Bissau and its peers, 2015–20



Source: United Nations Department of Economic and Social Affairs, Population Division.

in 2019 was higher than that of all the aspirational peers, where it ranged from 9 to 10 deaths per 1,000 people (figure 2.33). Guinea-Bissau's mortality rate was also higher than that of two of its structural peers: The Gambia (10.9) and Sierra Leone (12.1). It was also higher than the average for the world (7.19) and for African countries (7.13).

²⁵ Source: United Nations Department of Economic and Social Affairs, Population Division.

²⁶ Source: World Health Organization, <u>Global Health</u> <u>Observatory</u>.



Figure 2.33 Age-standardized mortality rate in Guinea-Bissau and its peers, 2000–19

Source: World Bank, using data from the World Health Organization, Global Health Observatory.

B Human development systems required to strengthen human capital

This section complements and supplements the preceding one by evaluating the cross-cutting constraints that hinder the formation, utilization, and maintenance of human capital in Guinea-Bissau. It focuses on five cross-cutting constraints that need to be addressed in the context of Guinea-Bissau; these relate to

- The country's fragility and governance;
- Financing for human capital;
- Human resources;
- Data pertaining to the human capital sector; and
- The negative effects of climate change on human capital in Guinea-Bissau.

Fragility and governance

Decades of political instability, military coups, and armed conflicts have contributed to a shortage of investments in Guinea-Bissau's social sectors. The absence of social and economic infrastructure—including hospitals, schools, and roads—in the country has hindered access to health care and education, thereby exacerbating the human capital deficits. Several critical drivers of fragility hinder Guinea-Bissau's development trajectory, including the following:

- Weak governance and dysfunctional institutions, fueled by political instability and low accountability in the use of public services
- An urban-rural divide, evidenced by the lack of infrastructure and access to basic services
- A lack of investment in human development and capital, which has left a large proportion of youth unemployed
- An inherent vulnerability to the impacts of climate change due to the coastal geography, with frequent flooding in inland and coastal areas, which affects the livelihoods of vulnerable communities.

Fragility in Guinea-Bissau has resulted in weak institutions unable to fulfill their core functions and deliver services to the population. With most institutions and systems concentrated in the central government and the lack of political and fiscal decentralization, public services outside of the capital city are extremely deficient, and standards of living are much lower in rural areas. Frequent changes in government foster a climate of uncertainty, and the cost of political instability has been considerable on economic growth and development prospects.

Lack of investment in human development is a major driver of fragility in Guinea-Bissau, and this intersects with other factors to further marginalize a **large proportion of the population.** The country's fragility affects the delivery of essential public goods and services and exacerbates the rural-urban divide. Higher poverty rates are compounded by deprivation of social services, human capital, and infrastructure. Where these services are present, nonstate actors are often the main providers, frequently operating with donor funding. This high dependence on donor funds results in donor-driven interventions and fragmentation across the social sectors.

Addressing the critical drivers of fragility in Guinea-Bissau could have a significant impact on human capital development. Improving financial management at the regional level in the three key sectors focused on in this review-education, health, and social protection-would help address the issue of weak public financial management, which creates opportunities for rent-seeking behavior and poor budgeting practices. In light of the limited administrative decentralization and service deconcentration and the weak state presence at the local level, key measures to support the delivery of services for human capital development can include (1) reinforcing the capacity of regional structures to deliver services and better track the transfer of resources; and (2) improving the management of public resources in social sectors (health and education) allocated to other regions outside the capital city. This approach would strengthen the state's presence at the local level and build trust through improvements in service delivery.

The social sectors have been unable to adequately respond to shocks and crises. A recent example is the inability of the health and education sectors to effectively respond to the COVID-19 pandemic (box 3.1). Schools were closed, and few programs were implemented to ensure continued learning for children, especially outside of the capital. In the health sector, access to overall health care was further reduced, exacerbating other non-COVID-related health issues. Weak coordination also negatively affected the country's ability

Box 3.1 Fragmentation in decision-making highlighted during COVID-19

Weak coordination between the Ministry of Health and the High Commission for COVID-19 hampered the country's response to COVID-19. According to data from the Ministry of Public Health, the average case fatality in Guinea-Bissau reached 20.3 deaths per 1,000 infected persons in April 2022-higher than for all regional peers, except The Gambia-with peak rates in Biombo, Bafatá, and Gabú. Multisectoral coordination was limited, and frequent staff turnover hindered the retention of institutional knowledge-affecting the coordination of government and donor-led activities, as well as continuity of services. Coordination between line ministries and the planning directorate of the Ministry of Economy was inconsistent.

to make decisions in a timely manner, leading to higher-than-average COVID-19-related deaths compared to the country's neighbors.

The COVID-19 pandemic disrupted learning, particularly in rural areas. Data collected through a phone survey implemented in October 2020 shows that overall, only 53 percent of households with children age three years old and above who were enrolled in school were able to engage in educational activities. Children in rural areas were more affected by school closure, with only 39 percent of households with school-going children able to pursue educational activities compared to 59 percent in other urban areas and 73 percent in the Bissau autonomous sector (figure 3.1). The inability to respond to crises like COVID-19 may further widen the educational attainment gap between rural and urban areas in the medium to long term.

Access to health care in Guinea-Bissau worsened during the pandemic, driven in part by a lack of funds and an overstretched system. Overall, as of October 2020, 10.3 percent of households were unable to access health services (figure 3.1). Access was a. Education



Figure 3.1 Effects of COVID-19 on education and health in Guinea-Bissau



b. Health-reasons for not

much lower in rural areas (15.3 percent) compared to other urban areas (8.4 percent) and the Bissau autonomous sector (3.0 percent). Lack of funds was the most common reason cited by households for not being able to access health care (84 percent), probably due to the contraction in household income after labor market disruptions triggered by the pandemic. In Bissau, 33.3 percent of households cited insufficient hospital capacity as a major reason for not being able to access health care. In other urban areas, 16.8 percent of households cited the absence of medical personnel as a constraint.

Financing for human capital

Government expenditure across the social sectors is relatively low (figure 3.2) and negatively affects the quality of services, especially because the resulting dependence on donors leads to erratic policy and spending. Social protection spending increased from 3.5 percent of gross domestic product (GDP) in 2010–13 to 5.7 percent in 2014–20. Education

Figure 3.2 Shares of total government spending by function, 2020





spending improved by 1 percent between 2010 and 2020, driven by an increase in the number of teachers and higher remuneration—although it still falls far behind global benchmarks. Health spending increased by almost 2 percent. It should be noted, however, that over half of all social spending was financed with external grants and loans, and nearly all capital was donor funded. This high dependence on donor funds results in donor-driven interventions and fragmentation among the actors involved in managing noncontributory social protection programs, projects, and measures. This consequently hampers the government's ability to exercise leadership and achieve institutional alignment in social assistance interventions. <u>Figure 3.3</u> presents an at-a-glance summary of the various social assistance interventions implemented in Guinea-Bissau between 2020 and 2021 across the different age groups throughout the life cycle. Social assistance was provided as either cash transfers (including noncontributory social pensions), food transfers, in-kind transfers, public works, fee waivers and targeted subsidies, and other social assistance. 47

HUMAN CAPITAL DEVELOPMENT **Building human capital** Protecting human capital Utilizing human capital 18-65 years 0-5 years 6-18 years 65+ years Individual health outcomes Functional ability Intrinsio capacity Youth and adulthood (prime Birth, neonatal Early and late childhood Older adulthood employment and reproductive years) period, and infancy and adolescence Family Support Package

Support to families: Cash transfer programs (regular and emergency to respond to COVID-19 or natural disasters)—despite cash transfer being unconditional, it prioritizes families with children enrolled in school and/or with disabilities (inclusive education); nutrition-related accompanying measures for cash transfer beneficiaries

Health and nutrition: Testing, prevention, and treatment for HIV/AIDS and malaria; medical assistance and medicines for vulnerable families; vaccines for COVID-19; food, medicines, and hygiene kits

Maternity Package	School Package	Productive Package	Reform Package	
Nutritional and food support; vaccines and consultation fees; testing and treatment for HIV/ AIDS; birth registration	In-kind transfers (school feeding programs); scholarships for girls and children of low-income HIV/AIDS patients; inclusive education	Public works (cash or food); cash transfers and economic inclusion (grants and microcredits to finance income-generating	Social pensions; medical assistance (including medicine, surgical operations, orthopedic prosthesis, wheelchairs) and funerals for former	
Child Health and Development Package Child care services; specific support (food, education, health services) for street chil-		activities) to socially excluded groups and women victims of violence	combatants and their descendants; cash transfers for former combatants or their dependents	

Figure 3.3 Social assistance packages in Guinea-Bissau, 2020–21

dren and children suffering abuse; cash and in-kind transfers for orphans and children

with disabilities

The 2007 Social Protection Framework Law defines the overall framework for social protection in Guinea-Bissau. It divides social protection into two categories: social insurance, which is contributory and corresponds to the formal sector; and social assistance, which is not. It also establishes the National Council for Social Protection (CNPS) as a coordinating body, together with the prime minister. The Ministry of Women, Family, and Social Solidarity (Ministério da Mulher Família e Solidariedade Social-MMFSS) is responsible for providing social assistance to civilians. The ministry's stated objective is "to formulate, propose, coordinate, and execute government policies to promote integration, solidarity, social cohesion, the protection of women and families, and poverty reduction."1 However, the ministry's low level of human and financial resources limits its leadership and influence. Consequently, social assistance strategies and initiatives are almost entirely driven by donors, outlined in broad strategic documents, but not particularized by sector.

Donor partners continue to provide almost all financing for both social protection and nutrition programs. The government finances a very small share of total social assistance expenditures (only 3.0 percent in 2020 and 4.4 percent in 2021) relying on donor funds for the remainder (World Bank 2021a). The planned amount for social assistance in the 2023 general state budget is 1 percent of GDP, which is just below the average for low-income Sub-Saharan African economies (1.1 percent of GDP). In the area of nutrition, current financing is insufficient (Kakietek et al. 2017). Donor partners, which also provide most resources for nutrition, spent \$0.55 per child under five years of age for nutrition-specific interventions (2015-17), compared with \$0.15 of government resources per child (2014). These amounts are well below the median spending

in other Scaling Up Nutrition (SUN) movement countries, where donor and government resources account for \$3.16 and \$1.13 per child, respectively (SUN 2019).² Available data show significant declines in donor funding for nutrition (figure 3.4).

The social protection scheme is one of the main pillars used to achieve universal health coverage in Guinea-Bissau. The scheme is implemented through a fund managed by the National Social Security Institute (Instituto Nacional de Segurança Social-INSS) under the Ministry of Public Administration, Work, Employment, and Social Security. This mechanism allows for the reimbursement of medical assistance, hospitalization, medical evacuation abroad, and drugs. The reimbursement of health care expenditures amounts to 75 percent of total cost for recipients and 50 percent for household members. Although deductions are made from civil service payrolls, these are not always channeled to the INSS due to mismanagement, and reimbursements are often very slow, affecting the number of subscriptions to the scheme. Even though enrollment to



Figure 3.4 Donor funding for nutrition in Guinea-Bissau, 2012–21

¹ Guinea-Bissau <u>Decreto-Lei n. 3/2020 - Estrutura do</u> <u>Governo.</u>

² The <u>SUN movement</u> is a country-driven initiative led by 66 countries and 4 Indian states united in their mission to end all forms of malnutrition by 2030.

INSS is compulsory, no mechanisms are in place for enforcing employers or employees to join the scheme. The security scheme concerns only a small fringe of the population—namely state and collective wage earners, public and private contractual wage earners, and pensioners. The small number of taxpayers enrolled in the scheme is economically related to the predominance of the informal sector.

Household out-of-pocket costs for health care is the largest source of financing, accounting for 65 percent of current expenditure in 2019, largely for medicine and user fees. This amount is well above the World Health Organization (WHO) benchmark of 15–20 percent. The government and donors are exploring alternative and more sustainable health financing models to ensure equitable access to quality services for the population, especially the most vulnerable, without risk of financial hardship (i.e., universal coverage).

Although expenditures in the education sector have been increasing (World Bank 2018, 2022a), the sector continues to be underfunded. Total education expenditure accounts for 2.2 percent of GDP and 11.1 percent of government spending—which is the lowest spending on education as a share of GDP within the eight West African Economic and Monetary Union (WAEMU) countries. It is also lower than the average for Sub-Saharan Africa countries, and far below the standard recommended 4–6 percent of GDP or 20 percent of government spending. As a result, the sector continues to be heavily reliant on donor support for all nonrecurring expenditures; the lion's share of the national budget (between 90 percent and 95 percent) goes toward salaries.

A significant portion of the limited resources for education are lost due to disruptions in service and poor financial controls. School fees collected from grade 7 onwards are intended to be an important source of internal revenue, but there is little information about the actual amounts collected and how they are used. In theory, 50 percent of fees are retained at the school level, while 10 percent are transferred to the regional directorates for education; 40 percent is to go back to the central ministry. However, there is no financial reporting and a lack of transparency as to what actually happens and how the funds are used. Most schools—especially those with only grades 1–6, where there are no student fees—receive no operating budget and rely on community support to operate. The most significant losses are due to frequently absent teachers and weak systems to manage human resources.

The absence of formal administrative and financial processes in the health sector allows for gaps in oversight and a lack of transparency in spending and decision-making. Expenditure reporting is weak, with at least a delay of five years in the validation of national health accounts, leaving little room for accountability. Although data are limited, evidence shows that budget transfers to subnational health entities and to the regional directorates for health remain low or nonexistent. The regional directorates are supposed to receive a percentage of monthly incomes from regional hospitals and health centers to cover their operating costs, but here too no control mechanisms are in place to monitor such transfers properly. Apart from two hospitals in Bissau, no health centers or hospitals receive funding for operational expenses. Transfers planned in the budget-such as the allocation of 40 percent of tax receipts from sales of cigarettes, alcohol, and sugary drinks (a "sin tax") for the health sector-are not being executed. Similarly, the education sector is not receiving its allocated 60 percent share of the tax.

Centralized tendencies and weak budgetary planning lead to inefficiencies and bad outcomes, particularly in the health sector. Geographically, most health-related spending occurs in the Bissau autonomous sector, where health outcomes are better than for the rest of the country. With a little less than a third of the country's population, the autonomous sector receives 60 percent of the national health expenditure. Except for Gabú and Cacheu, which receive an allocation in line with their population shares, the remaining regions—which account for 46 percent of the population-receive less than 18 percent of the national health expenditure. The diseases causing the most deaths are the least well funded. Expenditures favor curative over preventive health care, including a preference for hospitals over health centers. (Preventive health care financing is generally more efficient, because it is less costly and has more impact than curative care.) The absence of a reference model, along with the poor infrastructure and human resource conditions of health centers, drives individuals to seek health care in hospitals at high costs, even when their needs could be met in health centers at reduced costs

Due to donor dependence and a lack of regular financing, key inputs to improve outcomes in both health and education are often missing entirely. Two examples of this are (1) the lack of learning materials required to support learning and (2) the lack of medicines to prevent and treat diseases. The last time any learning materials were purchased was in 2016 with the support of UNICEF. As a result, nearly all students in most schools across the country lack access to learning materials. To tackle this issue, the Ministry of Education is developing a new textbook policy that addresses sustainable financing. In terms of health care, a recent Service Delivery Indicator survey revealed that none of the health facilities had all essential medicines and vaccines in stock (World Bank 2019a). The Central Drug Purchasing Agency (Central de Compras de Medicamentos Essenciais-CECOME) had been entirely dependent on donor financing and nongovernmental organizations and had not been able to purchase any essential drugs for the national health system since 2018. Due to years of financial mismanagement, the agency was dissolved in 2022, and a new structure with a new legal status and access to regular financing is under development.

Human resources

Weak planning and management in both the education and health sectors has had significant impacts on the overall wage bill. Over the past five years, employment in both the education and health sectors has grown rapidly. Between 2017 and 2023, the civil service recruited 7,600 new workersprimarily in the education sector, which grew from around 8,700 to some 14,800 workers, accounting for 71 percent of civil service sector growth. The health sector grew at the same rate as the civil sector (62 percent), but with much smaller absolute numbers (figure 3.5) While there is a need for more trained and gualified health workers and teachers, poor planning, recruitment, deployment, and oversight raise doubts about the impact these investments will have on improving human capital outcomes.

The ability to plan effectively is hampered by the lack of basic statistics and weak institutional structures to oversee human resource management within the ministries for education and health. For example, the Education Management Information System is basically nonoperational due to the extremely low submission rates of annual statistics by schools.



Figure 3.5 Employment in Guinea-Bissau, 2017 and 2023

Source: World Bank based on SIGRHAP data.

Even basic statistics such as the number of schools/ classrooms, teachers by grade level, and student enrollment are unavailable for effective planning. Strong institutional structures to oversee human resource management and incorporate technology and tools to improve planning within both ministries are essential. One option would be directorates for human resources within the central ministries and corresponding structures at the regional and sector levels, particularly for education.

Poor human resource management has led to frequent strikes, severely undermining efforts to improve health and education systems. Teacher and health worker strikes have been a significant means to demand the payment of salary arrears and push for pay and benefit reforms. One of the major complaints of the teachers union, which led to months-long strikes and potential cancellation of entire school years, was nonimplementation of the Teacher Career Law. A full revision of the law was approved by Parliament in October 2018. The government has since been actively working on implementing the reforms, which have had a notable impact in preventing teacher strikes. The revised Teacher Career Law sets out a new and more generous payment structure for public sector teachers, along with other policies. This new payment structure assigns higher salaries to teachers with more gualification and experience, gives monetary incentives to accept positions in rural areas, includes a subsidy for teaching supplies, and will eventually include teacher performance evaluations.

A centralized, fully integrated human resource management information system—ideally covering both the health and education sectors—is critical. Such a system could, for example, ensure effective implementation of the Teacher Career Law and prevent strikes among health workers. This centralized system would need to be linked to the information systems of the Ministry of Public Administration (which is responsible for contracting of all civil servants) and the Ministry of Finance (which is responsible for payments); this will demand strong coordination between these ministries.

Cumbersome recruitment processes, coupled with the lack of a human resource planning framework, lead to high opportunity costs. Currently, the Ministry of Health and the Ministry of Education propose a list of professionals to be hired to the Ministry of Public Administration. The list includes the type of staff to be hired (teachers, nurses, doctors, specialists, etc.) and suggestions for their deployment. The Ministry of Public Administration handles the administrative processing of new hires, verifies their credentials, and forwards the information to the Court of Accounts for validation. Once validated, the data are sent to the Ministry of Finance for inclusion in the payroll. This process is lengthy and relies on paper-based documentation, leading to delays and errors. For example, new teacher contracts are seldom in place at the beginning of a school year, resulting in students without teachers in their classrooms for several months. The lack of comprehensive data hampers discretionary decision-making at the local level, making it challenging to determine staffing needs based on student enrollments, number of classrooms, and other factors. There are disparities between policy intentions and actual practices in planning and recruiting new staff in the health and education sectors (figure 3.6). Staff allocation often fails to align with actual needs, resulting in an inequitable distribution of personnel across health centers and schools.

An uneven distribution of the workforce in both the health and education sectors favors the capital. There are generally few health care professionals across the country, averaging 1.7 physicians and 6.1 nurses and midwives per 10,000 inhabitants (World Bank 2022a). Regions such as Bolama and Bissau have a comparatively larger number of physicians (4.3 and 5.2 per 10,000 inhabitants) compared to regions like Farim (0.8 per 10,000 inhabitants).



Figure 3.6 Human resources planning in the health and education sectors

Source: World Bank elaboration.

Similarly, the ratio of nurses in Bijagós and Bolama is 10.7 and 13.5, respectively, per 5,000 inhabitants; in Oio and Bafatá, it is 2.8 and 2.9, respectively. This uneven distribution of health workers mirrors allocative inefficiencies and inequities in access to services. Similarly, pupil-teacher ratios vary significantly by region, which has implications for educational equity. A recent study revealed a large variation in student-teacher ratios among schools. On average, there are 64.2 students per teacher, but the bottom 10 percent of schools have ratios below 37, while the top 10 percent have ratios exceeding 102 (World Bank 2023). The lack of a recent school census, which would enable adequate estimation of demand and better planning, further exacerbates the situation.

High rates of absenteeism among teachers and health workers demonstrate the need for better

monitoring and oversight in the education and health sectors.

A UNICEF study found that the percentage of teachers absent once a week or more-even when schools are in session—is as high as 28 percent (UNICEF 2021). Of those present, more than one in four are not in their classrooms, and a majority of those in the classrooms are not fully engaged in teaching. The top reasons for absences and for not being fully engaged in teaching are strikes, poor health, administrative or official duties, and lack of teaching materials. While collecting payments used to be a significant factor for teacher absences, only 6 percent of teachers gave this as a reason for being absent from school in the UNICEF study. In the past, public school teachers would receive salaries automatically, regardless of their presence

or participation in strikes. A more decentralized system would give local school officials greater control to monitor and incentivize teacher attendance. outcomes suggest that few teachers possess the requisite knowledge and skills to teach effectively.

Absenteeism among health workers is a chronic problem undermining delivery. Data from 2019 suggest that absenteeism reached 34 percent across all health facilities in the country (World Bank 2019a). The highest rates of absenteeism were observed in Bissau (55 percent) and Quinará (50 percent), and the lowest rate in Gabú (19 percent). The main reported reasons for absenteeism were dissatisfaction with salaries; payment arrears, particularly regarding the nonpayment of various incentives and bonuses, including isolation allowances (for those living in remote areas) and top-ups for long shifts; and long commuting times. To reduce absenteeism within the two sectors, key stakeholders need to be engaged to monitor attendance.

Well-trained, equitably distributed, and motivated health workers and teachers are essential for improving human capital outcomes in Guinea-Bissau. The country especially lacks doctors, both generalists (290 total to cover the entire population) and specialists (28 in total) (World Bank 2022a). More than 40 percent of all health care workers, including all specialist physicians, are concentrated in the capital. Recurring payment arrears discourages staff from working in remote regions and compounds existing allocative inefficiencies. The Service Delivery Indicator survey also revealed significant gaps in provider knowledge; very few health care workers could accurately diagnose the leading causes of child mortality (e.g., only 2 percent of health care workers could diagnose a case of malaria with anemia), and less than a third of health care workers could correctly manage cases of postpartum hemorrhage, the leading cause of maternal death in Guinea-Bissau. In the education sector, opportunities for continuous professional development are limited. Extremely poor learning

Data for informed decision-making and planning

A lack of reliable and timely data severely inhibits planning, coordination, and resource management across social sectors. The most recent education data are from 2014–15. Even the most basic statistics, such as the numbers and locations of schools, teachers, students, are not available. While collection instruments have been developed, the high turnover of school and regional directors has hampered the government's ability to collect reliable school-level data. Various donors are working to resolve bottlenecks by leveraging technology and conducting rapid surveys to bridge existing gaps.

The national health data information system (DHIS2) only captures partial data from the Ministry of Health. Although a real-time monitoring program, supported by external donors including the World Bank and the Global Fund, has been introduced, the government is not using it. Data collection, notably for maternal and child health, is frequently undertaken by implementing agencies (nongovernmental organizations, UN entities) associated with Ministry of Health primary financial partners.

Weaknesses plague the health information system due to insufficient human and financial resources. The government has turned to nongovernmental organizations for help in collecting specific health data. Communication breakdowns between central, local, and regional levels result in missing or delayed information recording, preventing real-time health data availability. Additionally, key indicators like fertility rates, maternal and child mortality, and immunization records are inadequately updated. The lack of data has significant implications for estimating public expenditures on social assistance, assessing the impact of interventions, and determining appropriate targeting. The lack of a standard classification of the functions of government introduces uncertainty regarding the actual levels of expenditure on social assistance.³ Data from the two national surveys conducted in 2018–19—the Harmonized Survey on Household Living Standards (EHCVM) and the Multiple Indicator Cluster Survey (MICS)—do exist, but without comprehensive household-level data, effective targeting of social programs relies on self-assessment, community approaches, and proxy variables.

Climate change

The visible effects of climate change are already hindering human capital development in Guinea-Bissau. Most prominent are sea level rise, increased temperature, changing precipitation patterns, shorter cool seasons, longer drought spells and heat waves, and frequent extreme weather events—all of which are expected to increase in severity and frequency. Currently, 70–80 percent of the population lives in coastal zones and inland hydrographic basins. The rising sea level and risk of flooding continuously threaten access to essential services including health care, education, and food security.

On its Children's Climate Risk Index, UNICEF ranks Guinea-Bissau among 33 countries classified as "at extremely high risk."⁴ Globally, Guinea-Bissau ranked fifth in 2021, following the Central African Republic, Chad, Nigeria, and neighboring Guinea-Conakry. The occurrence of climate-related extreme weather events like floods and droughts has increased significantly in Guinea-Bissau since 2000. Recently, inland cities including Bafatá have experienced a rise in the frequency of heavy storms during the rainy season. Annual droughts have been affecting another 74,000 people in the eastern part of the country, leading to severe impacts on health, agriculture, and livestock.

Approximately one-third of the population in Guinea-Bissau experiences insufficient food consumption every year. Climate change further exacerbates the risk to the overall well-being and nutritional status of the population—especially children. It is projected that, by 2050, most child deaths resulting from climate change will be attributable to undernutrition (WFP 2021).

Floods and droughts are both highly detrimental to agricultural production and productivity. Drought is the number one cause of yield loss; and rice is particularly vulnerable to droughts, since it has a higher water requirement than other crops. In Guinea-Bissau, more than 100,000 households in coastal areas depend on the productivity of rice paddies for their livelihood. Increased flooding and saltwater encroachment into rice paddies are already affecting these communities, resulting in many subsistence farmers abandoning their fields. Rising sea temperatures and changes in the oceans are gradually but adversely affecting fisheries.

Climate change worsens the already precarious situation in most African public health systems, including that of Guinea-Bissau. Direct effects include injuries from extreme events; infectious diseases associated with water, vector biology, and food contamination; allergies; air pollution-related acute respiratory illnesses and cardiovascular diseases; and malnutrition due to food insecurity. The percentage of the population dying from communicable diseases such as diarrheal diseases and lower respiratory

³ The <u>Classification of the Functions of Government</u> was developed by the Organisation for Economic Co-operation and Development in 1999 and published by the United Nations Statistical Division as a standard classifying the purposes of government activities.

⁴ Source: UNICEF, <u>Children's Climate Risk Index Interactive</u> <u>Atlas</u> webpage.

tract infections—is only expected to increase due to more frequent flooding. Rising temperatures and humidity will increase malaria transmission, flooding will facilitate the spread of waterborne diseases, and droughts will escalate the risk of meningitis. Moreover, the likelihood of essential health services being disrupted by flooding is very high. Damage to poor infrastructure, equipment, and medicine due to flooding will result in even less consistent health care—particularly in rural areas—leading to higher disease and mortality rates, especially among children.

Schools are highly exposed to flood risk. Increasing sea levels, higher temperatures, and erratic rainfall are expected to exacerbate the effects of recurring natural hazards in the country such as flooding, especially in coastal regions.⁵ Table 3.1 presents a 2021 estimate of the flood risks for schools and populations by region. Approximately 20 percent of schools are categorized as having a high risk of exposure to flooding; an additional 48 percent are considered as being at medium risk. The data

Guinea-Bissau.

suggest that the majority of Guinea-Bissau's schools are in vulnerable areas.

Flooding could severely affect school infrastructure in vulnerable areas and increase the number of out-of-school children and school dropouts. Damaged school infrastructure has compounding negative effects, as it exposes the educational community to severe physical and mental stress, and interferes with school operations, teaching, and learning (World Bank 2011). The potential for disruption of education could have adverse effects on learning outcomes, particularly in nonresilient or low-income communities. Climatic shocks also threaten livelihoods and force families to coping mechanisms-such as diverting household expenditure away from education toward other basic needs-that reduce human capital.⁶ Children, especially girls, often leave school to engage in time-consuming subsistence farming activities and other household chores due to flooding.7

Guinea-Bissau should adopt various measures in the short to medium term to mitigate the negative

⁵ World Bank, Climate Change Knowledge Portal. ⁶ World Bank Group AFW Education Strategy.

⁷ World Bank Group. Safer Schools Program.

Region	Number of schools	Population
Autonomous Sector of Bissau (SAB)	229	523,387
Biombo	183	105,944
Cacheu	285	235,078
Oio	311	233,786
Quinará	153	82,658
Tombali	145	126,204
Bolama-Bijagós	81	38,873
Bafatá	318	299,613
Gabú	313	286,452

Table 3.1 Flood risk associated with schools and population count, by region 2021

Source: Ministry of Education, High Commission of COVID-19.

Legend: high risk; medium risk; low risk.

impact of climate change on education outcomes.

The Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector recommends the following measures, among others: (1) strengthening the capacities of teachers to deliver risk reduction and resilience education content and respond to the mental health and psychosocial needs of children; (2) developing high-quality teaching and learning materials for students and teachers that cover topics such as risk reduction, safety, and climate change action; and (3) developing and promoting action-oriented messages for households and schools to reduce risks and prepare for and respond to the impacts of hazard (GADRRRES 2022). As part of the primary school curricula, it would be beneficial to incorporate a basic module on flooding, droughts, and storms. This module should provide clear guidance to students on appropriate actions and behaviors, such as preserving the supply of drinking water and understanding escape strategies.

The extreme level of poverty in Guinea-Bissau, particularly in rural areas, further exacerbates the impacts of climate change. Moreover, climate change hazards are likely to undermine poverty reduction and development gains, with enormous repercussions for human capital development; and drastically increase demand for social protection measures and support. Social safety nets provide opportunities to reach the most vulnerable individuals, helping them withstand shocks and build resilience. Despite the recent development of some social safety net programs in Guinea-Bissau, coverage in general has been insufficient.

Considering the increasing frequency and severity of climate change hazards and other covariate shocks, it will be important for Guinea-Bissau to adopt an adaptive social protection approach. Adaptive social protection strengthens social protection systems and enhances their preparedness for significant shocks. The focus is on building the resilience of poor and vulnerable households before, during, and after such events. In line with the adaptive social protection approach, Guinea-Bissau should consider, among other options, establishing a regular cash transfer program, creating a national registry that prioritizes the inclusion of high-risk households residing in "hot-spot" areas, and establishing a climate change recuperation fund to ensure timely and accessible funding for response programs.

Key recommendations

Challenge	Recommendation			
 Access to health care limited, with high neonatal mortality rates and only 60 percent of children under 2 years fully immunized Almost 30 percent of children stunted, and poor nutrition is prevalent Limited early stimulation and early learning opportunities, leading to deficits in cognitive development, literacy and numeracy, and socioemotional skills Geographic and financial barriers to early childhood development programs for children from rural areas and the poorest households 	 Strengthen primary health care, especially for vaccinations, family planning, and reproductive health services Ensure food security and scale up nutrition interventions for young children and women by (1) increasing awareness about malnutrition and its management; and (2) providing complementary foods and nutrient supplements for the most vulnerable Expand access to early childhood development and preschool programs, including appropriate languages of instruction, to increase children's readiness for school, on-time entry, and improved learning outcomes Provide cash transfers with accompanying measures to enhance food security, better nutrition, and access to early childhood development programs 			
School-age	School-age children/youth (ages 6–18)			
 Extremely low expected years of schooling (4.9 years) with high numbers of out-of-school children and low completion rates Outdated curricula and poorly trained teachers, leading to poor learning outcomes in early grades Low enrollments in technical and vocational education and training (TVET) programs 	 Finalize curriculum reform (grades 1–6) and include scripted lessons and high-quality in-service teacher training to improve learning outcomes in basic literacy and numeracy Expand TVET and training opportunities relevant to the labor market and opportunities for employment Develop targeted programs for adolescent girls, including life skills and knowledge of reproductive health, to reduce child marriage and early childbearing, lower fertility rates, 			
 and limited training opportunities to gain job-relevant skills Child marriage and early childbearing, limited knowledge of reproductive health leading to maternal and child health issues High adolescent mortality and morbidity rate, specially linked to infectious disease and noncommunicable disease 	 and improve enrollments and completion rates in secondary schools Provide support to households through cash transfers and accompanying measures to enhance knowledge needed to invest in their children's health and education and encourage primary school enrollment Integrate a low-cost, high-impact focus on adolescents in essential primary care services, addressing adolescent sexual and reproductive health, HIV prevention and treatment, improved nutrition, and care for mental health conditions 			

Challenge	Recommendation			
Adults (ages 19–60+)				
 Economy highly dependent on agriculture and susceptible to shocks and external factors Labor force primarily engaged in low-wage jobs and informal sector activities that lack job security, sufficient income, and access to essential benefits High unemployment rates among educated youth Low life expectancy compared to aspirational peer countries Low health care worker productivity 	 Promote economic inclusion for poor households and foster diversification by promoting off-farm income-generating activities or adding value to agricultural production, including skills training, cash start-up grants, and coaching Promote self-employment for unemployed educated youth including training, cash start-up grants, and coaching to develop small businesses Improve affordable access to essential health services, particularly at the community and primary levels, to increase life expectancy Improve working conditions of health care workers to improve performance 			
Human	development systems			
 Low expenditures in social sectors lead to poor system quality and high donor dependency Weak human resource management and poor planning worsen service delivery and lead to frequent teacher and health worker strikes Limited supply of trained health workers Lack of data to guide investments in social sectors and planning, leading to inefficiencies and loss of limited critical resources needed to improve human capital outcomes Weak monitoring and lack of incentives to improve service delivery Lack of a unified system to target the poorest households and most vulnerable groups Extreme vulnerability to effects of climate change, especially droughts and floods, putting investments in human capital at significant risk Weak supply chain leading to frequent stock-outs of essential inputs (drugs, vaccines, consumables, etc.) 	 Prioritize investments in human capital by increasing government expenditures in social sectors Adopt national policies and financing mechanisms to ensure medicines and basic equipment (in health) and teaching and learning materials (in education) are available Accelerate the establishment of the human resource database to consolidate all data on civil servants, including teachers and health professionals, and use information to improve management (i.e., recruitment, deployment, monitoring) Devise and implement an effective community health strategy to address the limited supply of professional health workers Invest in data collection and information systems across all social sectors to improve efficiency, planning, and decision-making, while prioritizing technology and rapid surveys to produce timely, reliable statistics Establish a national registry (expanding the registry initiated under the Social Safety Nets and Basic Services Project) to prioritize vulnerable groups and target resources Strengthen institutional coordination, particularly for multisectoral interventions (i.e., early childhood development, nutrition, and social protection) Make schools and health facilities more climate resilient and build climate resilience into agricultural production through new heat- and drought-resistant rice crops and diversification 			

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