


# Chapter 7

## Sustaining Africa's Blue and Digital Economy Transition: Emerging Skills and Job Roles

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### ABSTRACT

*Africa's economic landscape is being reshaped by the Blue and Digital Economies (BDE), which offer new opportunities for job creation, growth, and sustainable development. This chapter examines emerging job roles in sectors such as coastal tourism, fisheries, aquaculture, marine biotechnology, and non-living resource extraction, as well as opportunities in desalination, renewable offshore energy, and maritime transport. In the digital economy, impact sourcing, online work, local content innovation, and e-public goods are growing rapidly. However, gaps in education and skills development hinder full participation in these sectors. The chapter explores how innovative educational approaches and supportive policy frameworks can bridge these gaps and drive workforce readiness for Africa's economic transition. Policymakers, governments, and institutions must collaborate to invest in human capital and align educational systems with the demands of the Blue and Digital Economies.*

### 1.0 INTRODUCTION

Africa has the youngest population in the world, with 70% of sub-Saharan Africa under the age of 30 (United Nations, 2024). By 2030, young Africans are expected to make up 42 per cent of the world's youth (World Economic Forum, 2022) and account for 75 per cent of those under age 35 in Africa (PRB, n.d). Howbeit, Africa's youth face disproportionate challenges in the global labour market, exacerbated by the COVID-19 pandemic, which has heightened existing risks and uncertainties (ILO, 2022). Before the pandemic, global youth unemployment was already a pressing issue, with rates standing at 16.4%,

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rising to 18.4% by 2022, compared to a less accelerated increase in adult unemployment (ILOSTAT, 2022). This disparity underscores a widening youth employment crisis, particularly acute in developing regions like Sub-Saharan Africa, where youth unemployment reached 18.4% in 2022 (World Bank, 2023).

Addressing these challenges is crucial for meeting SDG target 8.6, aiming to reduce the proportion of young people not in employment, education, or training. This requires concerted efforts to foster inclusive economic growth while preserving environmental sustainability. The shift towards sustainable economic structures is imperative, necessitating investments in sectors like the Blue and Digital Economy (BDE). These sectors not only offer the potential for rapid job creation but also contribute to sustainable development goals by integrating natural resource management with economic growth strategies (World Bank, 2019).

Africa, despite generating significant employment opportunities in recent years, has struggled to meet the demand, particularly for its youth population. A staggering 60% of Africa's unemployed are young people, with 72% living below the poverty line (Dalberg, 2024). The Digital Economy, with its capacity to generate formal employment and higher wages, presents a promising pathway out of poverty for many youths. Digital jobs, characterized by their use of information technology to deliver services, are pivotal in providing stable employment and fostering economic inclusion (World Bank, 2019).

Similarly, the Blue Economy, which encompasses maritime industries like fishing, tourism, and transport, holds immense potential for job creation and economic growth in coastal states. By 2030, the Blue Economy is projected to grow significantly, contributing billions to global GDP and supporting millions of jobs (UNCTAD, 2018). This growth presents a unique opportunity for Africa to leverage its coastal resources and address youth unemployment through sustainable development initiatives.

Empowering young people with the skills and opportunities necessary to thrive in the evolving job market is essential for building a resilient workforce. The potentials inherently laden in Africa's BDE remain pivotal in this regard, it is within this premise that this chapter provides valuable insights for policymakers, educators, and business leaders seeking to empower Africa's youth and drive sustainable economic growth. This chapter attempts to uncover the emerging skills and job roles essential for creating a resilient, future-ready workforce while providing innovative strategies for harnessing Africa's BDE to ensure a sustainable and inclusive future for its youth population.

## **2.0 THE BLUE AND DIGITAL ECONOMY: AN OVERVIEW**

The sustainable management of Blue Economy sectors presents a significant opportunity to lift millions out of poverty. Coastal urbanization in Africa is increasing at an accelerated pace, offering immense job opportunities linked to climate-smart and resilient urban development within the Blue Economy. This is particularly crucial given that Africa's working-age population is projected to increase by 450 million people—nearly 70%—by 2035. Without strategic policy interventions, only about 100 million new jobs will be available to meet this demand. Blue Economy jobs thus play a critical role in targeted capital investments and policies designed to support Africa's growing and youthful workforce.

However, while the Blue Economy holds tremendous potential for Africa's job market, climate change poses a significant threat to these gains. Coastal erosion, driven by more frequent and severe storms, could devastate key sectors such as fisheries, coastal agriculture, and tourism. Ocean warming and acidification further endanger marine species that provide food and livelihoods for coastal communities. The impacts of climate change are already being felt across Africa's coastlines. For instance, in Morocco, coastal

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