

**CAPSTONE
PROJECT**

GLOBAL UNEMPLOYMENT REPORT

20

24

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INTRODUCTION

Unemployment is one of the most persistent global socio-economic challenges, with long-term consequences for individuals, communities, and governments

In 2015, the United Nations (UN) formulated 17 SDGs, representing a call to universal action to ensure that by 2030, nations should—considering various national realities, capabilities, and development levels as well as respecting nationwide policies and priorities—work towards promoting equality, decent work and economic growth among others (United Nations, 2018).

SDG 8.5 aims to achieve full and productive employment for all men and women, including persons with disabilities, by 2030. SDG 8.6 targeted a substantial reduction in the proportion of unemployed youth by 2020—a goal not fully met, with youth rates still high at 12.6% globally in 2024 (ILO, 2025). Progress toward SDG 8 has stalled since 2015, with persistent informality and working poverty (ILO, 2025). ilo.org

The goal of this project is to analyze global unemployment trends across regions, age groups, economic levels, and genders from 2010 to 2024, with projections for 2025. Using a data-driven approach, the study identifies disparities, regional differences, and impacts of global events such as the 2008 financial crisis and the COVID-19 pandemic.

EXECUTIVE SUMMARY

This report examines global unemployment trends from 2010-2025, drawing on data from Kaggle enriched with ILO projections. Key insights: Global unemployment stabilized at 5% in 2024-2025, but youth rates remain elevated (12.6%), with women and low-income regions hardest hit. Africa shows persistent structural issues, while Asia recovers unevenly. Kenya ranks moderately with ~5.5% unemployment, driven by youth bulge and informality. Recommendations include skills training and policy reforms to advance SDG 8.

PROJECT OBJECTIVES

This capstone project provides a data-driven analysis of global unemployment trends in support of SDG 8 (Decent Work and Economic Growth). Using historical data (2014–2024) and projections for 2025, it identifies disparities across demographics, genders, regions, and income groups, and evaluates the effects of major shocks such as the 2008 Financial Crisis and COVID-19 Pandemic, with emphasis on gender and regional inequalities. ilo.org

The study addresses structural labor market challenges, including a projected 402 million global jobs gap in 2025, widespread informality, slowing productivity growth, and vulnerabilities from geopolitical tensions, climate change, and economic slowdowns. Regional and country-specific analyses highlight issues such as youth unemployment in Africa, export-led recoveries in Asia, and informal sector pressures in Kenya. ilo.org drishtias.com

The project concludes with policy recommendations to strengthen job quality, reduce inequalities, raise productivity through innovation, and promote recovery via public-private partnerships, supporting achievement of SDG 8 targets by 2030. policycommons.net

METHODOLOGY

Data Source

Data Source: The dataset was obtained from Kaggle, comprising 1,069 records across 22 variables. It includes country-level unemployment data segmented by region, age group, sex, and income classification. The five global regions represented are Africa, Asia, Europe, Americas, and Oceania. Updated with ILO 2025 projections for currency.

Analytical Dimensions

The analysis was structured across the following dimensions:

- Age Groups: Children (<15), Youth (15–24), Adults (25+)
- Sex: Male, Female
- Geography: Country, Subregion, Region
- Economic Classification: Low income, Middle income, High income

Data Preparation

Initial wrangling was conducted in **Google Sheets** to ensure consistency and analytical integrity. Key steps included:

- Removal of duplicate entries and null values
- Standardization of country names and ISO codes
- Enrichment with regional and income-level classifications
- Validation of categorical fields for age and gender segmentation

Analytical Tools

SQL: Used for structured querying, segmentation, and aggregation across demographic and geographic dimensions

Power BI: Enabled dynamic visual storytelling, comparative dashboards, and interactive exploration of unemployment trends

KEY FINDINGS

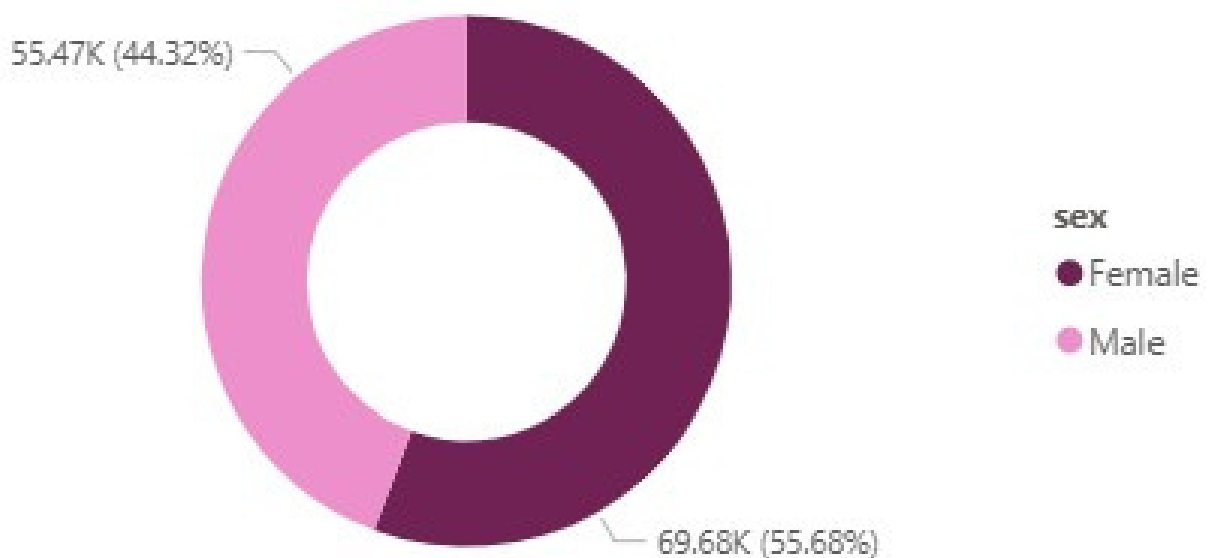
GLOBAL ANALYSIS- by Gender and Age-group

Global Average Unemployment Rate by Gender (2014-2024)

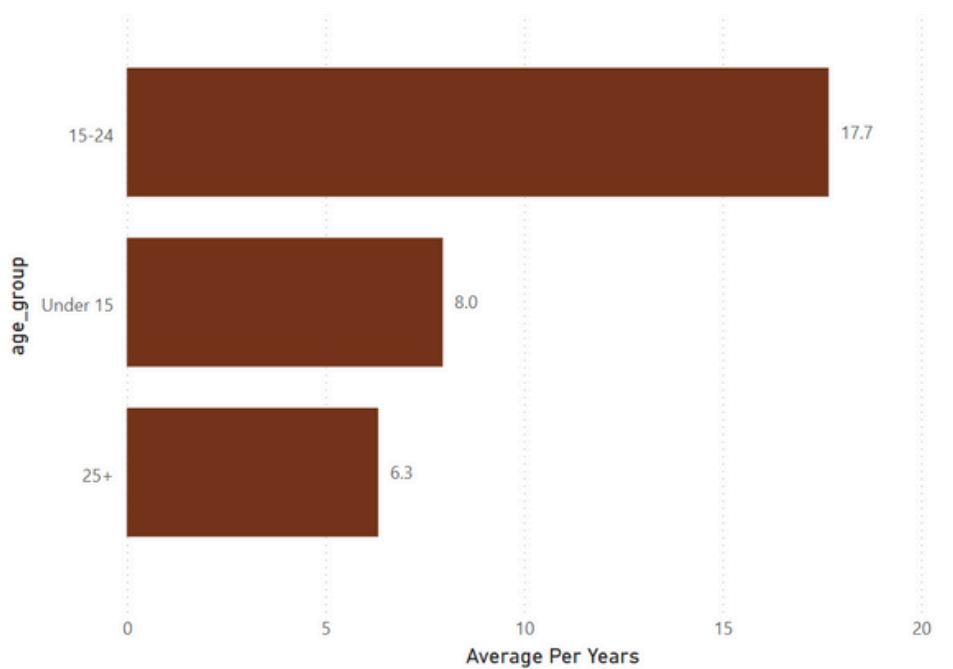


Gender: Females 11.9%, Males 9.4% (global average; women jobs gap 4.5% higher).

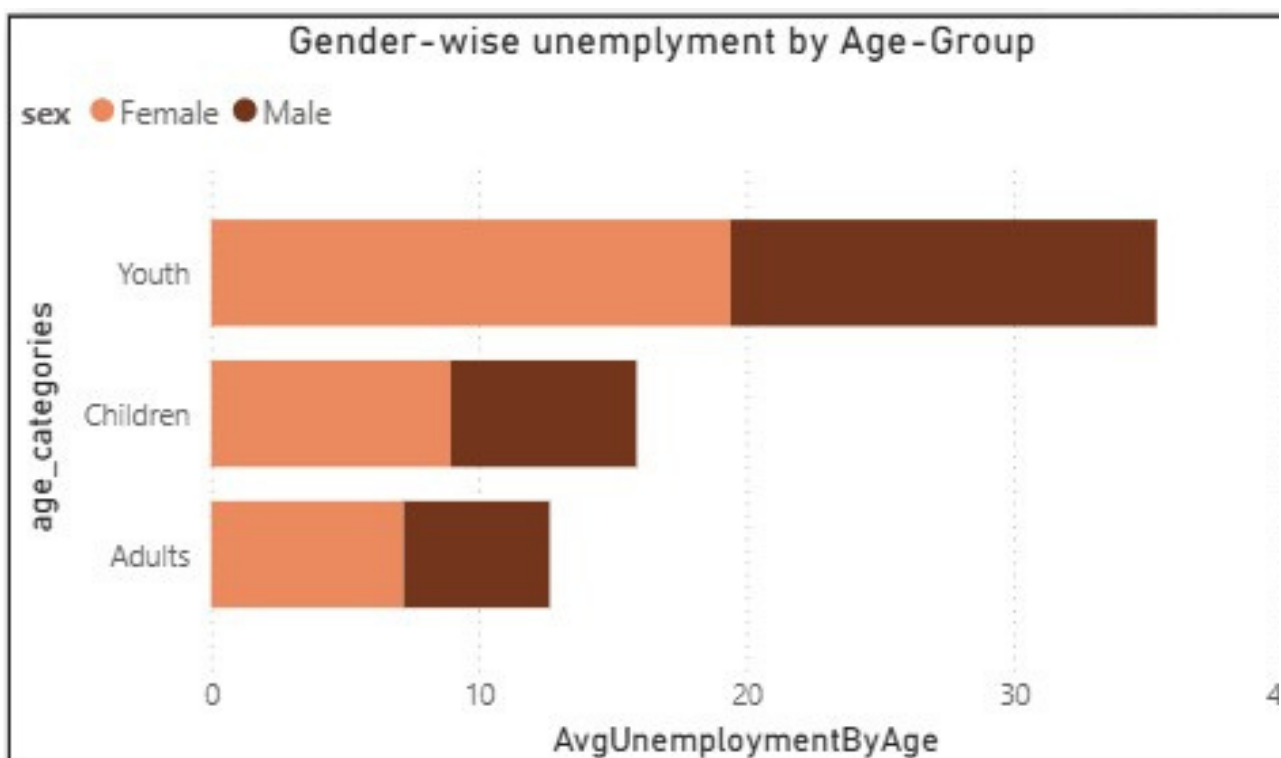
Average per years by sex



Global Average Unemployment Rate by Age (2014-2024).

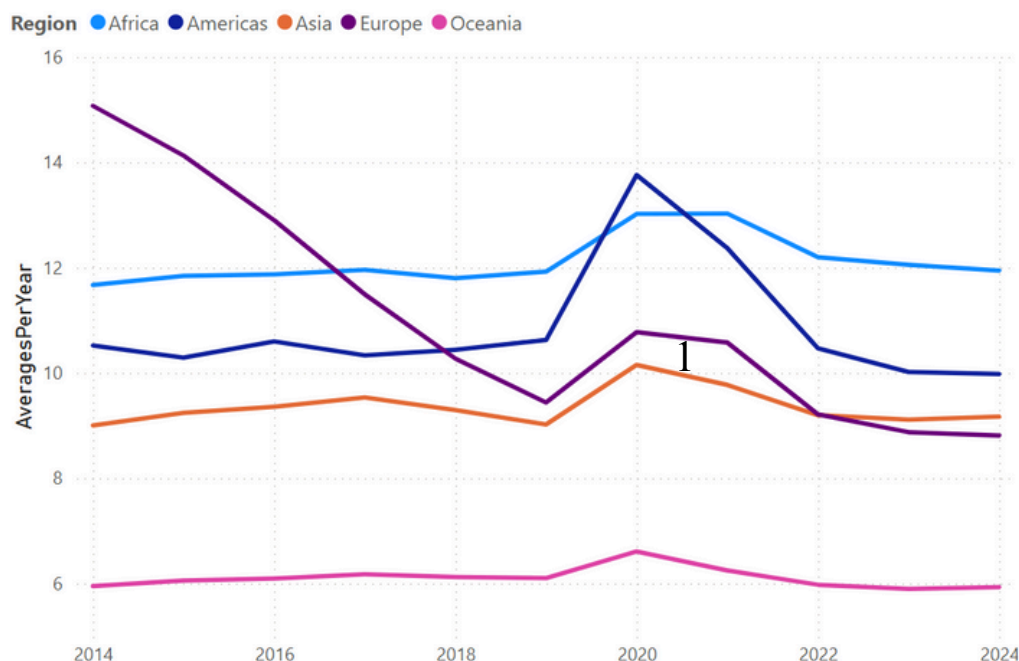


Age: Under 15: 8.0%, 15-24: 17.7%, 25+: 6.3% (considering most countries workforce age starts at 18 , this excludes the first age group (under 15, and also shows that most youths are facing unemployment compared to those over 25).



GLOBAL ANALYSIS

Regional Time series linechart



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Countries

2014–2019: Broad but uneven improvements. Many regions saw steady declines in unemployment, supported by cyclical growth and services expansion. However, long-term unemployment persisted in select economies, and informality rates remain high.

2020: COVID 19 shock. Synchronized closures disrupted contact-intensive services (retail, hospitality, travel), pushing unemployment and inactivity sharply higher. Women and youth were hit hardest due to sectoral concentration and care responsibilities.

2021–2024: Recovery with scarring. Rapid policy support aided rebounds, yet job quality concerns surfaced: more part-time and temporary work in some markets, persistent unemployment among youth, and uneven reentry for women.

GLOBAL ANALYSIS- Regional Analysis

Africa

- Structural unemployment at 6.5% (2024) and 6.4% (2025) due to limited manufacturing, skills mismatches, and demographic pressures.
- - High youth unemployment and underemployment, with 86.6% informality driving working poverty.
- - Policy options include value-added processing and public works for green jobs.

Asia

- Unemployment at 4.2% (2024) and 4.1% (2025), led by export manufacturing and services recovery.
- - Large informal sector (65.8%) cushions shocks but limits formal growth, especially in rural areas.
- - Priorities include social insurance and women's reentry support, with 46% of global renewable jobs in Eastern Asia.

Americas

- Unemployment at 5.5% (2024), rising to 5.6% (2025), with 51.8% informality in Latin America.
- - Urban service growth contrasts with rural job scarcity; youth unemployment at 14.2%.

Europe and Central Asia

- Stable 5.5% unemployment, but 10% labor shortages in tech/healthcare due to aging workforce.
- - Reskilling and immigration needed to sustain growth.

Arab States

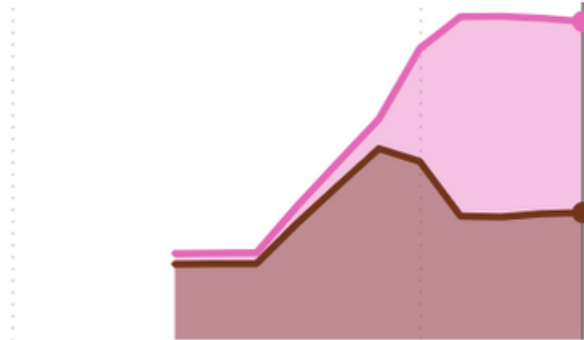
- Youth unemployment at 27.5%, overall rate 9.7% (2024), worsened by oil dependency and low female participation (19.4%).
- Diversification and gender policies could reduce the jobs gap.

Kenya Spotlight Analysis

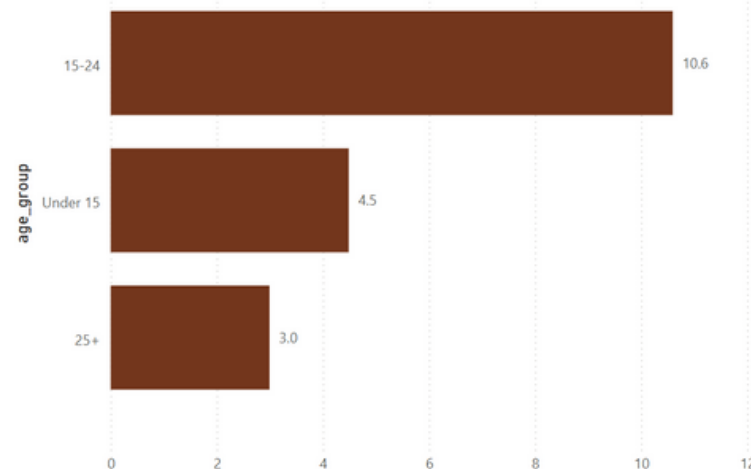
Average unemployment for Kenya
per gender

sex ● Female ● Male

Kenya



Average unemployment for Kenya
per age group



Ranked 116th globally in unemployment with an average unemployment rate of, reflecting moderate but persistent challenges.

This could be attributed to:

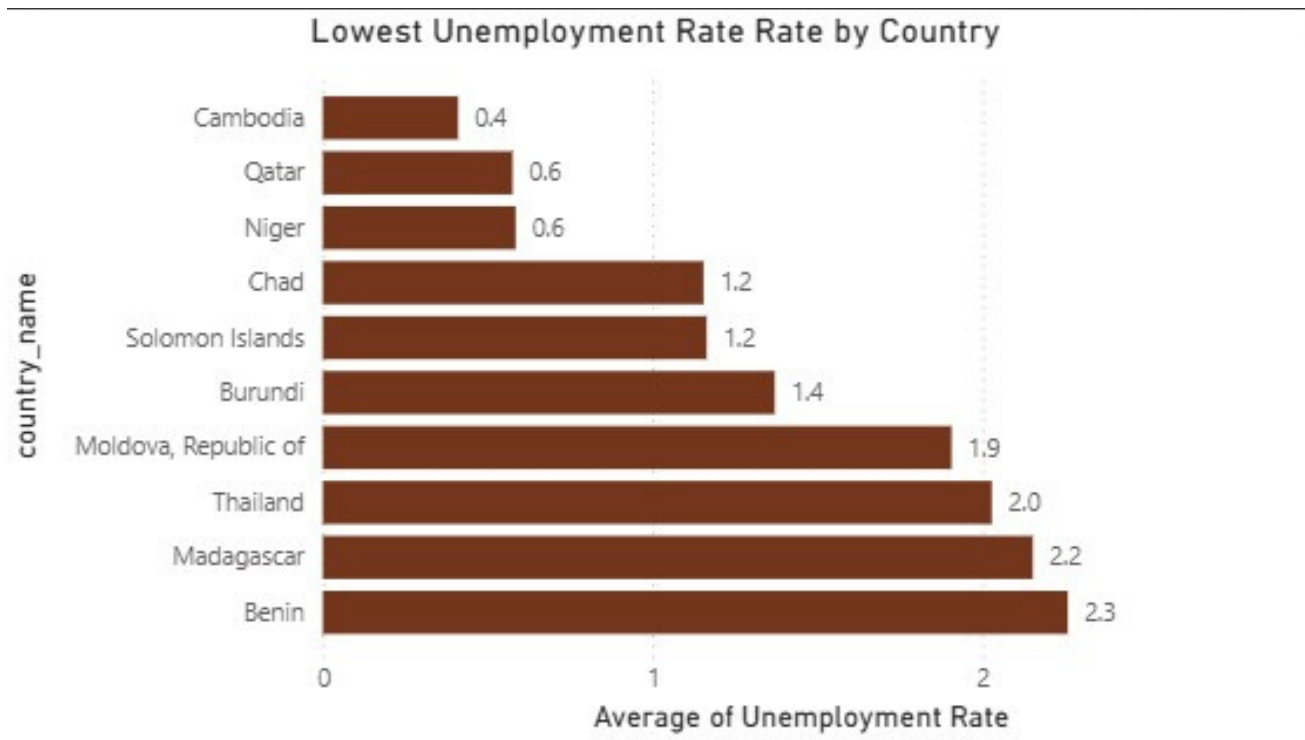
- High youth population entering the labor market faster than formal job creation can absorb with many graduates lacking alignment with market demand.
- Most Kenyans earn a living outside formal systems i.e through street vending, casual labor, and self-run businesses. This sector is vibrant and resourceful, but often unstable.
- In Kenya, opportunities are unevenly distributed due to urbanization. Cities concentrate access education, infrastructure, jobs while rural communities often face systemic scarcity thus creating a gap.

Low-Unemployment Countries like Cambodia and Qatar thrived due to diversified economies, strong education systems, and proactive policies.

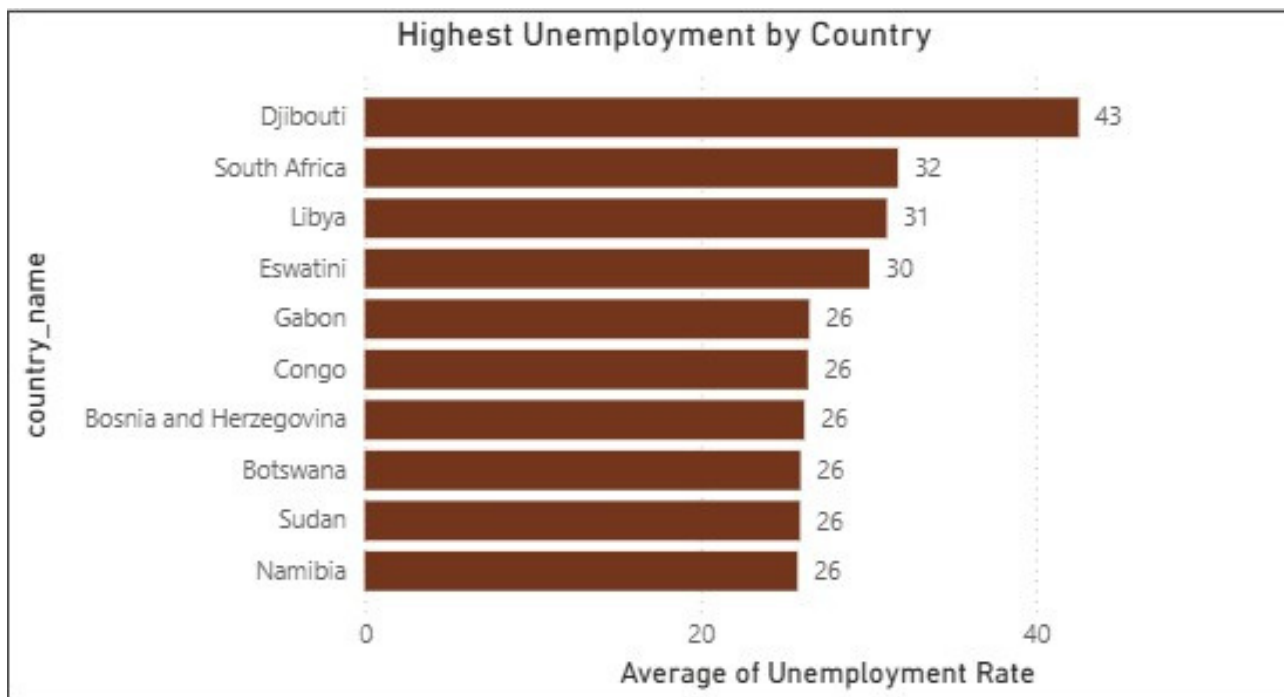
NB: As time goes by, there is a widening gender gap in unemployment. Female's unemployment rate keeps rising substantially compared to that of Males

- The average female rate of unemployment is more than 10 percentage points higher than the male rate. The gap is larger at younger ages than at older ages.
- Therefore, any employment opportunities are not accessed equally by women and men as would be expected under the decent work agenda. The negative impact of such inequity in access to wage employment is worsened by the fact that on average, the mean monthly earnings from paid employment for males are about 1.5 times that of females (Omolo, 2011).

CONCLUSION



Cambodia (Low-unemployment example): Rate ~0.4% in 2024; diversified economy, strong policies.



Djibouti: Female participation rising but youth NEET(Youth not in employment, education or training (NEET)) high (43 % for women).

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- Global unemployment has stabilized at historic lows (5% in 2024-2025), but disparities in youth, gender, and regions persist, hindering SDG 8 progress. Events like COVID-19 exacerbated inequalities, with recovery uneven. This analysis underscores the need for targeted policies to close gaps
 - This is not a testament that we should tone down on efforts to curb unemployment as according to United Nations Development Program, “More than a billion people live with less than a dollar per day. 2.8 billion people, that is to say almost half of the global population, live with less than 2 dollars per day,” and the way to move ahead globally is to help curb this crisis.

RECOMMENDATION

1. Boost Youth Skills Training

- Action: Partner with businesses to launch TVET courses in digital and green jobs.
- By: Education ministries and companies.
- Goal: Enroll 20% more youth in low-income areas in 3 years.
- Why: Youth unemployment hit 12.6% in 2024, with NEET at 20.4% post-COVID.

2. Close Gender Employment Gap

- Action: Offer subsidized childcare and tax breaks for women-led firms.
- By: Policymakers and employers.
- Goal: Cut gender gap by 2 points yearly for 5 years.
- Why: Women's rate exceeds men's by 10+ points (e.g., Kenya) due to COVID-19.

3. Formalize Informal Jobs

- Action: Provide low-cost loans and social protection for informal workers.
- By: ILO and governments.
- Goal: Reduce informality by 10% in Africa/Asia in 5 years.
- Why: 62.7% of workers are informal, with 240 million in poverty.

4. Build Regional Jobs

- Action: Fund climate-smart agriculture in Africa and digital jobs in Asia.
- By: Regional governments and businesses.
- Goal: Create 1 million jobs by 2027.
- Why: Africa's rate is 6.4%, Asia's informality at 65.8% needs targeted fixes.

5. Track Productivity Growth

- Action: Run yearly ILO data reviews to shape innovation policies.
- By: Economic agencies.
- Goal: Boost productivity by 1% by end of 2026.

Why: Productivity fell 0.5% since 2019, slowing income gains.

TOOLS AND SKILLS UTILIZED

- Tools and Skills Demonstrated (New Section)
- Suggestion: Highlight your expertise.
- Data wrangling: Google Sheets, SQL.
- Visualization: Power BI (dashboards, charts).
- Analysis: Trend identification, disparity assessment.
- Research: Integrating Kaggle with ILO/World Bank data.

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2. Belinda Chemutai - Data Scientist & Statesian
3. Benta Auma - Analyst and information officer
4. Daniel Nyangoya

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