



BHUTAN LABOR MARKET PROFILE:

AN INCIPIENT
STRUCTURAL TRANSFORMATION
AMID DECENT WORK GAPS

NATIONAL STATISTICS BUREAU Royal Government of Bhutan

BHUTAN LABOR MARKET PROFILE 2024

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List of acronyms and abbreviations

ADB: Asian Development Bank

ALMP: Active Labor Market Programs

Nu: Bhutanese Ngultrum

Covid-19: coronavirus disease 2019

ERI: Employment-related Income

GDP: Gross Domestic Product

INGOs: International Non-Governmental Organizations

ILO: International Labour Organization

IMF: International Monetary Fund

ISCED-11: International Standard Classification of Education, 2011 version

ISCO-08: International Classification of Occupations, 2008 version

ISCO-1: Managers

ISCO-2: Professionals

ISCO-3: Technicians and Associate Professionals

ISCO-5: Service and Sales Workers

ISCO-6: Skilled Agricultural, Forestry, and Fishery Workers

ISCO-7: Craft and Related Trades Workers

ISCO-8: Plant and Machine Operators and Assemblers

ISCO-9: Elementary Occupations

ISCO-10: Armed Forces Occupations

ISIC: International Standard Industrial Classification of All Economic Activities

ISIC-1: Agriculture, forestry and fishing

ISIC-6: Construction

ISIC-7: Wholesale and retail trade; repair of motor vehicles and motorcycles

ISIC-8: Transportation and storage

ISIC-9: Accommodation and food service activities

ISIC-14: Administrative and support service activities

ISIC-15: Public administration and defense; compulsory social security

ISIC-16: Education

Lao P.D.R.: Lao People's Democratic Republic

LDC: Least Developed Country

LFS: Labor Force Survey

LMIS: Labor Market Information System

LU2: Combined Rate of Time-Related Underemployment and Unemployment

MolCE: Ministry of Industry, Commerce and Employment

NGOs: Non-Governmental Organizations

NSB: National Statistics Bureau

OECD: Organization for Economic Cooperation and Development

OLS: Ordinary Least Squares

PES: Public Employment Services

p.p.: percentage points

PPP: purchasing power paritySOEs: State-Owned Enterprises

TVET: Technical and Vocational Education and Training

US\$: United States Dollar

WB: World Bank

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Executive Summary

Bhutan's macroeconomic performance is on the proper track, growing at moderate but steady pace. Following a quick and sound recovery from the shock induced by the coronavirus disease of 2019 (Covid-19), Gross Domestic Product (GDP) per capita in purchasing power parity (PPP) is now higher than in most of the lower-middle-income South and Southeast Asian countries.

This has translated in a positive labor market outlook, with employment growing faster than the population and an employment-to-population ratio that is on-the-rise. The labor market shows clear signs of an incipient structural transformation. The share of urban employment is growing, the share of employment in the agricultural sector is decreasing, and informal work is declining. Additionally, there is a trend towards higher educational qualifications among the employed population to match the requirements of the more complex occupations demanded by the market.

The shift away from subsistence agriculture and informal household production has fostered employment creation in skilled services and an emerging manufacturing sector, led by the trade and automobile repairs industry, hospitality and education. Job creation in expanding industries is led by private operators in urban areas, following the government's efforts to liberalize the economy in sectors like construction, trade and automobile repairs, logistics, and hospitality.

Nevertheless, certain groups are not benefitting much from the structural transformation of the economy. Female employment in the agricultural sector has decreased, while men have been the main beneficiaries from employment growth in manufacturing and services. While the agricultural sector is characterized by lower educational attainment, the industrial sector sees a more balanced distribution across educational levels. The services sector is becoming more skilled and dynamic, featuring a higher demand for educated workers in urban areas.

There are significant gender disparities across occupations in Bhutan, with women being predominantly overrepresented among farmers, clerks, and sellers. Interventions are needed to encourage more women to enter and thrive in traditionally male-dominated occupations. Except for managerial occupations, most highly sought-after occupational profiles, such as crafters, operators, and professionals, remain dominated by men and concentrated in urban areas.

On the positive side, there has been a feeble trend towards employment formalization, driven by the private sector. The public sector has increased job security among public employees at the expense of reducing their number. In relative terms women have benefited more from the net creation of regular and casual wage employment, seeing a net reduction of those working as contributing family workers.

Bhutan needs to invest in creating skilled jobs and addressing qualification mismatches to accelerate structural transformation. The proportion of workers with tertiary and secondary education is lower among the employed workforce than among the unemployed and inactive. Thus, the labor market fails to generate enough jobs suited for highly educated workers.

Only a relatively small portion of the labor force has ever participated in training. Nevertheless, evidence suggests that training serves as both an effective activation tool and a steppingstone toward employment. To maximize this impact, it is important to ensure equal access to training opportunities, regardless of sex or area of residence.

Skill mismatches remain a significant challenge in the Bhutanese labor market. The agricultural sector exhibits the highest share of underqualified workers. Agriculture is a key economic activity in Bhutan, and the low level of human capital among its labor force can hinder economic growth through low labor productivity, low added-value, and lack of capital accumulation for other economic sectors.

Although the number of unemployed workers has increased during the period under analysis, there are signals of recovery following the 2020 Covid-19 shock. Unemployment is mainly motivated by lack of experience and skill mismatches. Consequently, it could be reduced if jobseekers were supported with professional training, job-attachment programs, or more quality information regarding vacancies and skills demanded by employers.

The number of long-term unemployed workers decreased over the last six years, with typical unemployment duration being between 1 and 5 months. Women and urban workers are more affected by unemployment, and they go through longer unemployment spells. Elderly male workers in Bhutan face a higher risk of long-term unemployment. In the absence of a robust welfare state, long-term unemployment can lead to extreme poverty, loss of human capital, chronic unemployment, and reduced productivity across the entire economy.

A general lack of market-demanded skills but not reservation wages appear to be driven long-term unemployment in Bhutan. The average reservation wage among the unemployed in Bhutan is 754 Nu/month, below the equilibrium salary. Nevertheless, highly educated men without occupational preferences looking for employment in a specific type of organization typically exhibit reservation wages above the market equilibrium, which can increase the duration of their unemployment spells.

Strengthening the capacity of Public Employment Services (PES) - at the Ministry of Industry, Commerce, and Employment (MoICE) - is a cost-effective policy to reduce unemployment and shorten its duration.¹ PES can be designed as one-stop shops to support jobseekers, whether they are looking for employment or trying to start their own business. In Bhutan, the demand for activation support varies significantly depending on the worker's profile. Thus, different PES staff and centers might specialize in different types of interventions based on their clients' needs.

In Bhutan, most workers in time-related underemployment are women, living in rural areas, over the age of 24 and with no formal schooling.² By 2023, the unemployment rate had returned to pre-Covid levels at 3.1 percent, but the time-related underemployment rate had risen to 2.3 percent, resulting in a LU2 rate of 5.6 percent — significantly higher than pre-pandemic levels.

Household duties and the length of the working week, but not gender, drive underemployment. Nevertheless, it should be considered that the burden of household duties disproportionately falls on women. Thus, policies supporting a fairer redistribution of household duties within societal agents would reduce underemployment for both women and men. Moreover, reducing the statutory working week to 40 hours could reduce underemployment and youth unemployment.

² Time-related underemployment is another aspect of labor underutilization, that expands the narrow concept of unemployment.

¹According to Devex, the Ministry is the amalgamation of the departments under the three former ministries – Ministry of Labour and Human Resources (MoLHR), Ministry of Information and Communication (MoIC), and Ministry of Economic Affairs (MoEA). https://www.devex.com/organizations/ministry-of-industry-commerce-and-trade-bhutan-231174

Some workers might resort to moonlighting to increase weekly working hours and get closer to – or above – the full-time rate. The main reason for moonlighting is to earn more income, with 90 percent of the employed workers being willing to work more hours to increase their income. Additionally, moonlighting effectively reduces labor underutilization, but also results in excessive over-time among not underemployed workers.

Although average monthly earnings from primary jobs have nearly doubled over the past six years, the earning gendered and territorial earning gaps remain large. The percentage of working poor in Bhutan is relatively low and shows a downward trend over the period of analysis. Nevertheless, the phenomenon has a large influence among rural workers and farmers, for whom it reaches 13.3 percent of the employed population.

Moonlighting is also a last resort strategy to escape working poverty, but it comes at the cost of widening decent work gaps. More than 50 percent of the employed workers in Bhutan faced overtime every year, except in 2020. The main reason for overtime is that the job requires it, indicating that it is a structural characteristic of the Bhutanese labor market, despite MoICE regulating a statutory working of 48 hours. Indeed, since employers are not generally obliged to pay a higher hourly rate for overtime, the regulation is scarcely effective.

Average hourly earnings equal to 71 Bhutanese Ngultrum (Nu), which is slightly below the minimum wage set for the highest category of workers, 75 Nu/hour. Several factors determine the actual hourly earnings of specific types of workers. Particularly, farmers face an earning penalty of 37 Nu less per hour than workers in elementary occupations, while rural workers in general earn 11 Nu/hour less than their urban counterparts. There is evidence of increasing returns to educations up to the undergraduate and TVET level.

Own-account and contributing family workers consistently account for more than 60 percent of total employment. More than 95 percent of agricultural workers are in one of these vulnerable employment relations. Moreover, vulnerable workers earn lower wages than their non-vulnerable counterparts, regardless of the length of the working week.

Less than one third of workers in vulnerable employment are covered by the social security and benefit from paid annual or sick leave, while nearly two thirds of non-vulnerable workers enjoy these rights. It is important to extend the legal coverage of minimum social protection floors to all Bhutanese workers to close decent work gaps, but also to enforce already existing social protection legislation and employment regulations.

A review of current industrial, employment, and social protection policies and interventions is necessary to address the microeconomic challenges that hinder the equitable distribution of economic growth and decent jobs among the Bhutanese population. Certain measures stand out due to their proven effectiveness, alignment with the country's institutional capacity, and their cross-cutting impact. These include:

- 1) Offering fiscal incentives to investors willing to start new businesses in rural and isolated areas, conditional on training and employing residents.
- 2) **Strengthening the capacity of PES** and equipping them with the necessary resources and instruments to close skills/qualification mismatches and enhance labor utilization.
- 3) **Supporting a fairer redistribution of household duties** between men and women, as well as between the government and communities.

- 4) Strengthening the enforcement of wage policies, promoting employment formalization, and allocating more resources to joint tax-labor inspections at the workplace.
- 5) Conducting an ad-hoc study to gain a deeper understanding of the relationship between moonlighting, labor income inequality, and the redistribution of work.
- 6) Expanding the legal coverage of minimum social protection floors to all Bhutanese workers to address decent work gaps, while also enforcing existing social protection laws and employment regulations (International Labour Organization [ILO] et al., 2019).

1) Bhutan's Macroeconomic Context and Labor Market Performance

1.1) Resilient Economic and Employment Growth Amid a Volatile Macroeconomic Environment (2018-2023).

Bhutan's economy has experienced steady and strong growth since 2018, with the only disruption occurring in 2020 due to the Covid-19 pandemic. Nevertheless, the resilience of the economy is evidenced by its quick recovery from this macroeconomic shock. After an initial drop in the GDP growth rate from 5.8 percent in 2019 to -10.2 percent in 2020, the economy rebounded in 2021 with a growth rate of 4.4 percent. Bhutan's annual GDP growth remained between 5.2 and 4.9 percent in 2022 and 2023 (National Statistics Bureau [NSB], 2024).

The country is also making significant progress in improving the living standards of its people. The GDP per capita, measured in PPP terms³, increased from US\$11,476.24 in 2018 to US\$12,147.93 in 2019. Despite falling to US\$11,888.44 in 2020 following the Covid-19 shock, the country is forecasted to reach a PPP GDP per capita of US\$13,989.03 in 2023.

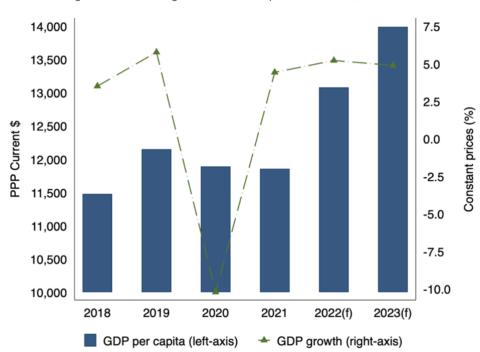


Figure 1: Economic growth and development in Bhutan, 2018-2023

Note: PPP GDP per capita from International Monetary Fund (IMF) World Economic Outlook, 2022. (f) Forecasted GDP growth from NSB National Accounts, 2024.

Nevertheless, Bhutan is experiencing slower growth compared to most South and South-East Asian countries. After Sri Lanka and Thailand, Bhutan had the lowest average annual GDP growth rate in the period 2018-2023. With an average growth of 2.1 percent, Bhutan is far behind top-performing peers, such as Vietnam (5.6%) and Bangladesh (6.5%).

On the other hand, **Bhutan has the highest PPP GDP per capita forecasted for 2023 among its South and Southeast Asian peers** classified as lower-middle-income economies, US\$14,774. Only Indonesia (US\$15,790), Thailand (US\$22,370), Maldives (US\$24,249), and Malaysia (US\$36,885)

³ https://www.imf.org/en/Publications/WEO/frequently-asked-questions

have higher PPP GDP per capita forecasts for 2023, but they are all classified as upper-middle-income economies.

In summary, Bhutan is growing at a moderate but steady pace, which translates into a leading position in terms of achieving higher developmental levels compared to its peers, despite being more sensitive to external macroeconomic shocks. Bhutan graduated from the Least Developed Country (LDC) category on December 13, 2023, and is already performing better in terms of PPP GDP per capita than other South and Southeast Asian lower-middle-income economies that never belonged to the LDC group, such as India, the Philippines, Vietnam, and Sri Lanka.⁴

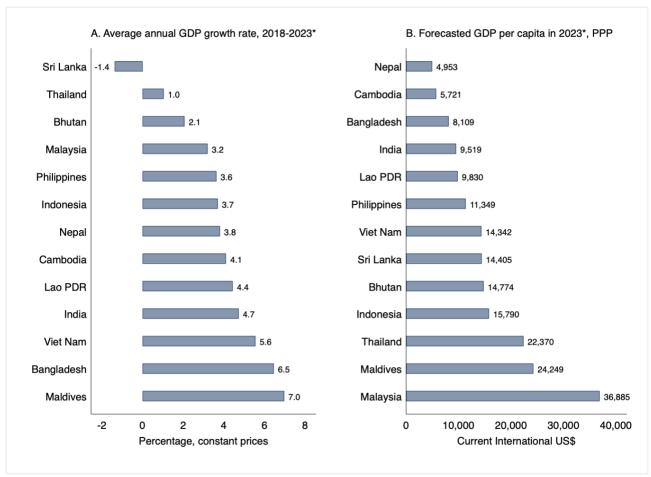


Figure 2: Economic growth and development in South and South-East Asia, 2018-2023

Note: Author's calculation based on the Asian Development Bank (ADB) Key Indicator Database and IMF World Economic Outlook.

Last year available for Sri Lanka is 2022.

Several factors contribute to Bhutan's resilient economic growth. Political stability, supported by democratic reforms, has laid the foundations for strong institutions based on the rule of law. This democratic framework not only has the potential to enhance the country's attractiveness for foreign investments but also promotes better management of natural and public resources for the benefit of the Bhutanese people (Roberts, 2018). This is especially important given the significant role of the hydroelectric sector in Bhutan's economy and the country's reliance on India as the main purchaser of its energy, as well as a key investor and supplier of goods and services (Shirgazina, 2022). Sustaining economic growth in the short term while diversifying the economy in the medium term is crucial for generating decent employment opportunities (Dizon et al., 2019).

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⁴ https://unctad.org/topic/least-developed-countries/list

Without delving into the analysis of quality, Bhutan has created a significant amount of employment over the last six years. The number of employed individuals in the country increased between 2018 and 2023, with the employment rate oscillating between 95.6% and 97.8%. Although the rate of employment growth is below the GDP growth rate, it has consistently been above the one percent population growth rate during the period 2018-2023.⁵ This has led to <u>higher employment-to-population ratios</u>, meaning that each worker is supporting fewer dependents.

In 2022, the deferred effect of the Covid-19 crisis resulted in a negative employment change rate of -10.7 percent and the net destruction of employment. Nevertheless, in 2023, total employment was already above the level reached in 2021, with an employment growth rate of 26.7 percent. This indicates two important **structural characteristics of the Bhutanese labor market**. Firstly, negative macroeconomic shocks result in a fall in employment levels, albeit with a lag. This is likely due to the effect of rigid labor market institutions and the activation of fiscal automatic stabilizers. Secondly, the elasticity of employment with respect to output is close to one during GDP downturns but becomes much more elastic during economic expansions. This increased elasticity during expansions might be associated with a deterioration in labor productivity (Ghazali & Mouelhi, 2018).

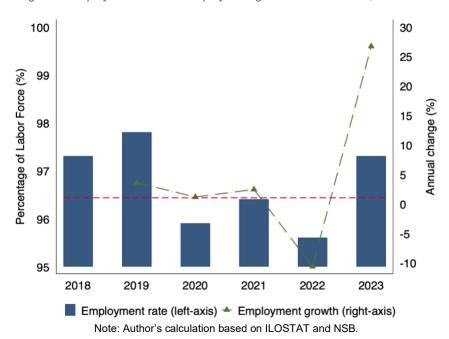


Figure 3: Employment rate and employment growth rate in Bhutan, 2018-2023

1.2) The Incipient Structural Transformation of the Bhutanese Labor Market: Catching Up with South and South-East Asian peers?

During the period 2018-2023, average annual employment growth in Bhutan (4.6%) has been higher than in most other South and Southeast Asian countries. Among peer countries, only Lao People's Democratic Republic (Lao P.D.R.) (5.5%) and India (6.4%) have been creating jobs faster than Bhutan. Nevertheless, it should be noted that Bhutan has a low employment-to-population ratio, at 62.7 percent, compared to other countries in the region. At the current average annual population and employment growth rates, Bhutan would need five years to catch up with Cambodia, which has the highest employment-to-population ratio in the region. ⁶ Besides,

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⁵ https://kidb.adb.org/

⁶ According to ADB Key Indicators Database the average population grow in Cambodia during the period 2018-2022 was 1 percent as well.

employment growth alone does not suffice to improve standards of living; the quality of the jobs created must also be considered (Rantanen et al., 2020).

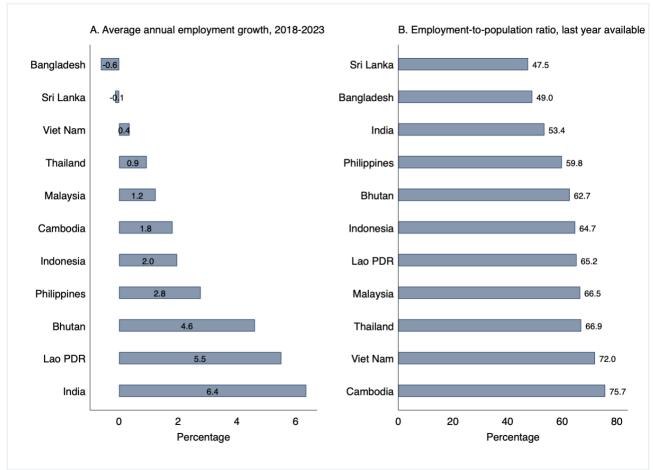


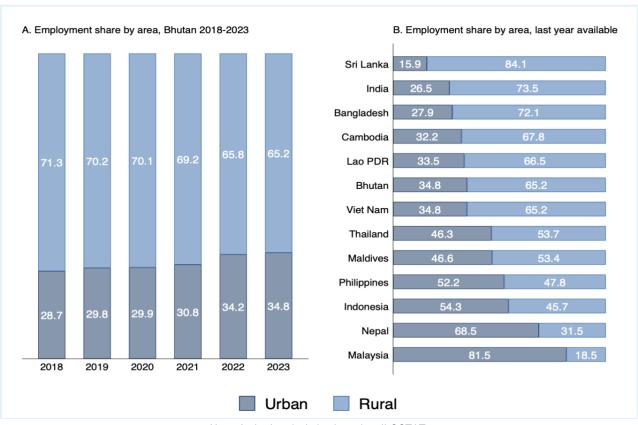
Figure 4: Employment growth rate and employment-to-population ratios in South and South-East Asia, 2018-2023

Note: Author's calculation based on ILOSTAT.

The share of urban versus rural employment can be considered a macroeconomic proxy for the quality of work in a country. Research highlights significant differences in labor force participation, labor underutilization, and employment quality between rural and urban areas (Shaikh et al., 2023). In this sense, total employment in Bhutan has not only grown, but the share of employment in urban areas has also steadily increased from 28.7 percent in 2018 to 34.8 percent in 2023. Nevertheless, Bhutan still displays a share of urban employment relatively low in the regional context. In South Asia, the Maldives (46.6%) and Nepal (68.5%) have much larger shares of urban employment, while Malaysia (81.5%) in Southeast Asia has the largest share in the group.

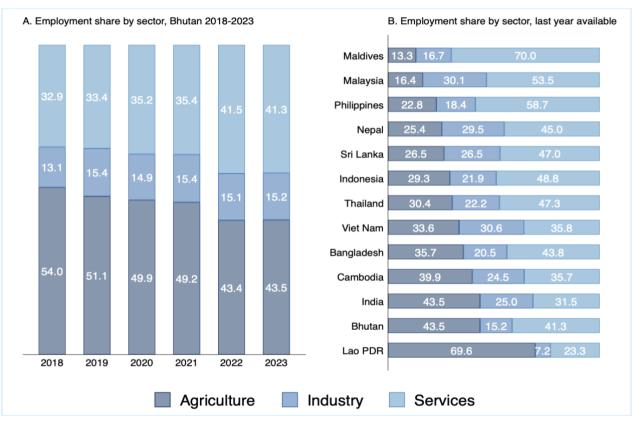
The share of non-agricultural employment is also used as a decent work indicator (ILO, 2013). In particular, the manufacturing sector typically provides high-quality jobs to low- and middle-skilled workers, although this vision has been recently contested (IMF, 2018, Chapter 3). In Bhutan, while the share of agricultural employment has fallen from 54 percent in 2018 to 43.5 percent in 2023, the share of industrial employment has remained steady at approximately 15 percent. Bhutan is the second country with the highest share of agricultural employment and the lowest share of industrial employment in the region, after Lao P.D.R., which has 69.6 percent and 7.2 percent, respectively.

Figure 5: Rural-urban employment shares in South and South-East Asia, 2018-2023



Note: Author's calculation based on ILOSTAT.

Figure 6: Employment shares by sector of economic activity in South and South-East Asia, 2018-2023



Note: Author's calculation based on ILOSTAT.

The nature of employment, or type of contractual relation, largely shapes working conditions regarding security, stability, level of authority, and more. Regular employees tend to enjoy the greatest protection, stability, and decent work conditions. Contract workers, on the other hand, do not receive a regular wage or salary; they are paid by percentage, by piece, on commission, or by fixed contract; and they are often connected with certain categories of informal employment (Maloney, 1999). The *Resolution concerning statistics of work, employment, and labour underutilization* (2023) pinpoints that own-account workers and family contributing workers typically endure more precarious working conditions, and even unpaid situations, which in many cases constitute examples of informal employment. The proportion of own-account and contributing family workers over total employment is another decent work indicator (ILO, 2013).

The employment structure in Bhutan reveals a dynamic labor market with distinct trends. Regular employees have increased their share of the total workforce, rising from 26.4 percent in 2018 to 30.9 percent in 2023. This might indicate that Bhutan has a stable core of secure employment. Nevertheless, casual employment, though minimal in earlier years, saw a significant increase to 8.3 percent in 2023. The proportion of non-agricultural own-account workers has also increased from 11.5 percent in 2018 to 13.9 percent in 2023, while agricultural own-account workers have seen a slight decline from 24.9 percent to 17.9 percent over the same period. Similarly, contributing family workers in agriculture have decreased from 28.9 percent in 2018 to 24.8 percent in 2023, while non-agricultural contributing family workers have slightly increased their share of the total workforce from 2.7 percent to 3.6 percent. This trend suggests a gradual shift away from traditional agricultural labor.

A. Employment share by nature, Bhutan 2018-2023 B. Employment share by nature, last year available Employee Employer Own-account worker Coperativist Contributing family worker 20.9 27.0 26.0 28.9 29.0 India 3.2 Lao PDR 3.6 3.8 3.0 2.7 3.1 Bhutan 21.9 17.9 Cambodia 22.4 22.6 21.7 24.9 Bangladesh 13.5 13.9 Indonesia 36 13.9 14.4 12.8 Thailand 5.1 13.1 8.3 Viet Nam 39 0 10 4.0 3.8 5.0 3.7 Nepal 34.6 Sri Lanka 30.9 28.4 28.6 28.1 26.4 **Philippines** Malaysia 2018 2019 2020 2021 2022 2023 Maldives Employer Casual Own-Account (No Agr.) Own-Account (Agr.) Family worker (No Agr.) 20 40 80 100 Family worker (Agr.) Intern/Apprentice Percentage

Figure 7: Shares of employment according to contractual relation in South and South-East Asia, 2018-2023

Note: Author's calculation based on ILOSTAT.

When compared to other Asian countries, Bhutan's employment structure shows a significant reliance on informal employment. With 32 percent of the workforce as own-account workers and 28 percent as contributing family workers, Bhutan parallels countries like India and Lao P.D.R. in terms of informal employment prevalence. Wage employment in Bhutan is relatively lower compared to many of its regional peers and far below highly formalized Labor markets like the Maldives and Malaysia. Nevertheless, between 2018 and 2023, there has been a progressive improvement in the quality of employment contracts, with the conversion of own-account and family contributing workers into regular and casual employees. Thus, Bhutan presents a mixed employment landscape, characterized by a blend of formal and informal employment, reflecting an ongoing transformation of economic and social structures.

The shift away from traditional agricultural labor is also reflected in the evolution of employment occupations based on the International Standard Classification of Occupations, 2008 version (ISCO-08).⁷ The share of farmers (ISCO-6), who dominated the employment landscape in 2018, representing 53.7 percent of workers, has gradually decreased to 42.9 percent by 2023. Meanwhile, the share of managers (ISCO-1), professionals (ISCO-2), technicians (ISCO-3), and clerks (ISCO-4) has seen a significant rise, from 17.4 percent in 2018 to 26.5 percent in 2023, which reflects a growing demand for more skilled and educated labor. The share of crafters (ISCO-7) and operators (ISCO-8) also rose from 12.1 percent in 2018 to 14.4 percent in 2023.

Bhutan's distribution of employment by occupation shows both similarities and differences with other countries in the region. Like Bhutan, countries such as India, Cambodia, and Bangladesh have a significant portion of farmers, with shares of 36, 35, and 32 percent, respectively. Nevertheless, Bhutan is unique in its rapid increase in managerial, professional, technical, and clerical occupations, which is less pronounced in other South and Southeast Asian nations, with the exception of the Maldives (45%) and Sri Lanka (24%). The high share of elementary occupations (ISCO-9) is also common across these regions but not in Bhutan, with countries like the Philippines (29%), Sri Lanka (25%), Vietnam (23%), and India (21%) having around one-quarter of their labor in these occupations. Bhutan's diversification into more skilled occupations contrasts with the high dependence on agriculture and elementary jobs seen in countries like Lao P.D.R. (72%) and India (57%). This indicates Bhutan's progressive shift towards a more varied and skilled employment landscape, aligning with the country's broader economic development goals.

⁷ In the following text, the official wording from ISCO-08 has been shortened and simplified to enhance readability. Please refer to the list of abbreviations and acronyms for the official terminology.

A. Employment share by occupation, Bhutan 2018-2023 B. Employment share by occupation, last year available 1.6 4.9 3.3 4.0 Philippines 5 5 4 7 23 12 8 8 5.4 4.7 4.8 6.2 4.6 5.1 Sri Lanka 4 7 9 4 11 14 15 10 6.7 8.6 8.8 8.6 8.2 8.2 Viet Nam 1 7 32 18 17 14 14 Nepal 1 8 4 3 23 17 19 Maldives 8 13 16 8 12 22 Indonesia 2 6 3 4 25 22 12 6 42.9 43.0 48.7 53.7 50.9 49.7 Bangladesh 2 6 5 1 17 Cambodia 14 31 19 10.3 India 4 6 22 12 14.0 10.1 12.9 3.1 11.0 10.9 Bhutan 11 7 5 3 10 8 6 5 1 2.2 1.9 6.2 2.2 4.7 5.0 7.4 Lao PDR 12 6 0 12 32 8 2 6.2 8.3 8.7 7.5 7.0 6.1 10.6 80 100 5.5 3.5 4.1 4.1 4.1 Percentage 2018 2020 2021 2023 Seller Manager **Professional Technician** Clerk Farmer Crafter Operator Elementary **Armed Force**

Figure 8: Shares of employment according to ISCO-08 in South and South-East Asia, 2018-2023

Note: Author's calculation based on ILOSTAT.

Bhutan's diversification towards a more skilled occupational landscape has been accompanied by a significant reduction in employed workers with a primary level of education or below, as well as a modest increase in those with post-secondary and tertiary education. Following the International Standard Classification of Education, 2011 version (ISCED-11), the share of workers who had only completed primary education at the most was the largest in the region, with 66.3 percent in 2018. Nevertheless, by 2023 it has decreased to 50 percent. Concurrently, the share of workers with upper secondary education has increased substantially from 17.1 percent in 2018 to 25.7 percent in 2023. Those whose level of education is beyond compulsory secondary education grew from 9 percent to 15.8 percent. This indicates a trend towards higher educational qualifications among the employed population to match the requirements of the more complex occupations demanded by the market.

When compared to other countries in South and Southeast Asia, Bhutan's shift is notable, but the country is still lagging behind in terms of the educational attainment of its workforce. Countries like Malaysia and Sri Lanka have much lower shares of employed individuals with only primary qualifications or below, 10 and 22 percent respectively. Bhutan's high share of workers with primary education and below is more comparable to countries like Lao P.D.R. and Cambodia, although in those countries, levels of primary educational attainment are much higher. Although Bhutan's increasing emphasis on post-secondary and tertiary education is a positive trend, the country still has a long way to catch up with the best-performing countries in South and Southeast Asia, like the Maldives (31%), Malaysia (30%), and the Philippines (27%).

A. Employment share by education, Bhutan 2018-2023 B. Employment share by education, last year available 3.0 3.9 4.5 4.6 0.4 5.0 0.8 4.4 0.5 Malaysia 2 8 9 6.5 0.1 6.9 7.6 6.8 8.9 7.9 Sri Lanka 1.8 2.4 2.1 2.3 17.1 Viet Nam 31 17.1 18.2 19.5 21.6 Maldives 6 10 25.7 7.0 7.6 8.2 Philippines 9 3 7.8 11.7 8.2 12.3 3 10 0 Indonesia 8.4 12.8 12.3 13.1 Nepal 13.7 Bangladesh 152 Lao PDR 23 54.6 50.3 46.4 45.4 Cambodia 42 41.1 36.3 Bhutan 0 20 40 60 80 100 Percentage 2018 2019 2020 2022 2023 2021 Below Primary **Primary** Lower Secondary Upper Secondary Short Cycle Bacherlor's Post Secondary Master's & PhD

Figure 9: Shares of employment according to ISCED-11 in South and South-East Asia, 2018-2023

Note: Author's calculation based on ILOSTAT.

In summary, Bhutan is experiencing an incipient structural transformation of its economy and labor market. The diversification away from traditional agricultural roles towards more skilled and educated labor is aligned with the increasing importance of the secondary and tertiary sectors as main sources of employment.

2) The Structural Transformation of the Bhutanese Labor Market: An Incipient Modernization amid Gender, Territorial, and Educational Imbalances

2.1) The Rise of Private Demand for Labor in Emerging Sectors and the Risk of Leaving Vulnerable Workers Behind.

The Bhutanese labor market is shifting away from subsistence agriculture and informal household production towards modern production systems based on skilled services and an emerging manufacturing sector. Following the International Standard Industrial Classification of All Economic Activities (ISIC), employment growth is mainly recorded in logistics (ISIC-8), public administration (ISIC-15), construction (ISIC-6), education (ISIC-16), hospitality (ISIC-9), and trade and automobile repairs (ISIC-7).8

The trade and automobile repairs industry leads with the highest net job creation, adding around 15,892 jobs, followed by hospitality with 10,975 jobs and education with 9,494 jobs. Conversely, net employment destruction has concentrated in the farming (ISIC-1) sector with 3,635 jobs lost. A few other industries have seen minor employment destruction, including 798 in administrative and support services (ISIC-14).

Examining the engines of employment growth, it is positive to observe that **job creation in expanding industries is led by the private sector in urban areas**, which is replacing some jobs that were previously held in the public sector. The predominance of State-Owned Enterprises (SOEs) in the productive sectors has been observed to hinder economic growth and job creation in Bhutan (Alaref et al., 2024). The conversion of public employment into private employment signals the government's efforts to liberalize the economy, particularly in construction, trade and automobile repairs, logistics, and hospitality.

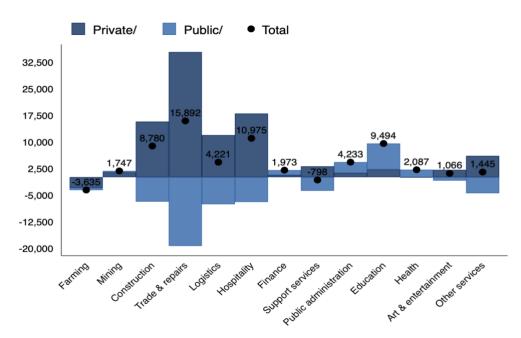


Figure 10: Net job creation by ISIC, Bhutan 2018-2023

23

Note: Author's calculation based on Bhutan Labor Force Survey (LFS) 2018-2023.

⁸ In the following text, the official wording from ISIC has been shortened and simplified to enhance readability. Please refer to the list of abbreviations and acronyms for the official terminology.

Despite Bhutan's positive macroeconomic performance and the incipient structural transformation of the labor market, not all societal groups are benefiting equally. There are concerns that, at the micro level, women, rural populations, and less educated workers may be left behind in the modernization of the Bhutanese economy. While facing most redundancies in declining sectors, these groups do not always find new employment opportunities in the emerging industries and services.

The employment contraction that occurred in 2022 was primarily related to the **loss of agricultural jobs**, that followed the phasing-out of the support provided to the sector in 2021 by the Economic Contingency Plan (Ngawang et al., 2022). During this period, male agricultural employment grew, while redundancies mainly affected women.

More than 95 percent of agricultural employment is concentrated in rural areas. The sector predominantly employs workers with primary education and below, although there is a trend towards increasing their educational attainment. The number of agricultural workers with a level of education below secondary schooling fell between 2018 and 2023, while those with an educational attainment equal to or above secondary education increased to approximately 31 thousands.

Conversely, **the industrial sector exhibits moderate growth**, despite a slight contraction in 2022. Industrial employment is balanced between urban and rural areas, with approximately 50 percent of workers residing in each area. Indeed, the agro-processing industry has a <u>large potential to support economic transformation</u>, fostering development and economic growth at the beginning of the industrialization process (Owoo & Lambon-Quayefio, 2018).

Men are disproportionately benefiting more than women from employment generation in manufacturing. Men employed in the secondary sector increased from 26 to 39 thousands between 2018 and 2023, while women increased from 14 to 16 thousands. Employment growth in the manufacturing sector has benefited mainly those with higher levels of educational attainment. While workers with secondary education and above increased from 18 to 30 thousands, those with lower educational attainment increased their numbers by only 3 thousands hires.

The structural transformation of the Bhutanese economy has been driven by the increase in male employment in the service sector. The tertiarization of the economy was resilient to the employment contraction that hit the labor market in 2022, with recovery led by an increase in hires in services. The service sector absorbs the majority of workers with higher educational attainment in Bhutan. Employment growth in the service sector has benefited almost exclusively those with secondary education and above. On the other hand, among those with lower educational attainment employment in the service sector barely increased in 2 thousands workers during this period.

Gender Male Female Headcount, thousands Agriculture Industry Services ISCED-11 None Primary □ Secondary Tertiary TVET Headcount, thousands Agriculture Services Industry

Figure 11: Evolution of employment by sector, Bhutan 2018-2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

None = below ISCED 1; Primary = ISCED 1; Secondary = ISCED 2 & 3; Tertiary = ISCED 5, 6, 7 & 8; TVET = ISCED 4.

2.2) Strengthening Gender Equality in Male-Dominated Occupations and Supporting the Transition to Stable Employment.

There are significant gender disparities across occupations in Bhutan, with women being predominantly overrepresented among farmers, clerks, and sellers. On annual average between 2018 and 2023, 82,825 (57.7%) women worked as farmers, while 69,395 (40.1%) men did so. Additionally, there were 4,229 (2.9%) women working as clerks and 19,096 (13.3%) as sellers, compared to 3,192 (1.8%) and 17,239 (10.0%) men, respectively. Nevertheless, the number of men employed as sellers is growing faster, while the number of women is decreasing. In the remaining occupations, women are consistently underrepresented compared to men. The gaps are significantly large among professionals, technicians, operators, and in the armed forces.

On the positive side, although on average men occupy most managerial positions, the number of female managers is progressively increasing. On average, 10,474 (6.0%) men worked as managers between 2018 and 2023, while only 6,792 (4.7%) women. Nevertheless, the number of female managers has rapidly increased from approximately 3 to 19 thousands in the period 2018 to 2023, while the number of male managers has risen from 8 to 20 thousands.

(54.7%) Female (143,598) (45.3%) Male (173,136) Rest of Female Clerk **599** (0.4%) 3,192 (1.8%) Professional Technician Clerk Elementary 8,488 4,533 Operator Crafter 4,229 (2.9%) (5.9%)(3.2%)8,623 Armed Force 15,916 14,218 Seller (9.2%)(5.0%)6,615 (8.2%) 19,096 (3.8%)(13.3%)Crafter ManageElementary 11.804 6,792 5,232 (8.2%)(4.7%)(3.6%)Technician Manager Professional Seller 10,474 17,239 15,254 (7.1%)(6.0%)(10.0%)(8.8%)Farmer 82,825 (57.7%)Farmer 69,395 (40.1%)

Figure 12: Average employment by occupation and gender, Bhutan 2018-2023

Interventions are needed to promote gender equality across growing occupational fields in Bhutan. Encouraging more women to enter and thrive in traditionally male-dominated occupations could help address these disparities and contribute to a more equitable workforce.

In recent years, there has been a significant net demand for female managers. However, aside from this exception, most highly sought-after occupational profiles, such as crafters, operators, and professionals, remain dominated by men. Between 2018 and 2023, these occupations have generated 9,742, 6,200, and 6,079 net new jobs, primarily filled by men. In other cases, such as technicians, 5,657 net jobs have been created for men, while the number of employed women has declined. Demand for these occupations largely comes from the private sector and is concentrated in urban areas.

On the other hand, only farmers and armed forces occupations (ISCO-10) have seen a reduction in labor demand, causing the net loss of 4,911 and 4,678 jobs, respectively. In the former case, employment destruction has mainly affected private businesses in rural areas, while in the latter, it has concentrated in the public sector and urban locations. This suggests that the demand for jobs in cities will continue to rise as industrialization and tertiarization of the economy move forward, with the private sector acting as a driver for employment growth, and the future of work shifting away from traditional agricultural occupations in rural areas.

Female/ Male/ Total 30,000 27,942 25,000 20.000 15,000 9.742 8,510 10,000 6,200 6,079 5,657 4,631 5,000 0 -4,911 -5.000 -10,000 Armed Force Crafter

Figure 13: Net job creation by ISCO-08, Bhutan 2018-2023

Regarding the nature of the jobs that have been created or destroyed in the last six years, wage employment is the category where net employment growth is concentrated, with 19,165 jobs created for casual employees and 33,389 for regular employees. In relative terms, women have benefited more from new hires as regular wage and salaried employees than under other contractual arrangements, although most new jobs under this modality have gone to men. Moreover, while more men are working as contributing family workers, the number of women engaged in this type of employment relation has slightly decreased. Employment loss has affected only other types of employment relations, such as traineeships and contractors, in line with the precarious and temporary nature of these types of contracts.

Regular wage employment has grown, driven by the private sector, which signals an appetite to invest in human capital development. Marginally, the public sector has also created net employment for regular wage and salaried employees while more than 40,000 jobs has been lost among own-account and casual workers. This trend will contribute to increased job security among public employees at the expense of reducing the size of public employment. Conversely, the private sector has created a large amount of employment by resorting to own-account and casual workers. Thus, the private sector is combining a strong demand for stable jobs, probably for key and strategic positions, while using more flexible work arrangements to fill temporary, seasonal, and/or non-strategic vacancies.

By location, regular wage and salaried employees have increased in both rural and urban areas, although predominantly in the latter. Conversely, rural areas resort more to casual employees than urban areas. This should not be understood as urban areas providing more stable work conditions than rural ones, since the number of own-account workers has increased in the former but decreased in the latter. Rather, it is the type of mechanism used to provide flexibility that changes.

Private/ Public/ Total 40,000 33,389 30,000 19,165 20,000 10,000 6,623 957 0 -10,000 -20,000 -30,000 -40,000 Casual Others

Figure 14: Net job creation by nature of contractual relation, Bhutan 2018-2023

3) Human Capital, Skill Profiles, and Qualification Mismatches in Bhutan: A Persistent Weak Demand for Skilled and Educated Labor

3.1) The Labor Market's Failure to Provide Sufficient and Adequate Employment Opportunities for an Increasingly Educated Population.

Human capital accumulation can have a multiplying effect on productivity and economic growth in the medium and long term (ADB, 2018). Bhutan must invest in the creation of skilled jobs and address qualification mismatches in order to accelerate the structural transformation of the economy and improve the performance of the labor market.

If the skills, competencies, and knowledge possessed by the labor force do not match those demanded by employers, human capital investment might not produce the expected returns. Overqualification and underqualification of the labor force can hinder socio-economic development by reducing firm productivity growth (Mahy et al., 2015). Thus, like in any other factor market, it is important that policies mitigate market failures by facilitating the matching between the supply of human capital and its demand (Adalet McGowan & Andrews, 2017).

The employed, unemployed, and inactive populations exhibit distinct educational profiles in Bhutan. Notably, the employed workforce has the lowest percentage of individuals with tertiary and secondary education. In contrast, the unemployed population shows a higher level of educational attainment, with a significant proportion holding tertiary degrees. Educational attainment is also higher among the inactive than the employed population, although both groups exhibit a similar proportion of tertiary-educated individuals.

Thus, the labor market fails to generate enough jobs suited for highly educated workers, leading to a significant pool of unemployed labor. The most concerning issue is that these highly educated workers may become discouraged after a prolonged, unsuccessful job search and eventually exit the labor force, joining the inactive population. This <u>discouragement effect</u> is even more pronounced among workers with less than secondary education, whose proportion is higher among the inactive than the unemployed.

On the positive side, the educational attainment of actively employed Bhutanese workers has improved over the past six years. The proportion of workers with tertiary education has risen from 9 to 14 percent, while those with secondary education have increased from 23 to 32 percent. Both men and women have seen a significant reduction in the number of employees with less than primary education, but this has particularly affected women. Moreover, although both urban and rural areas registered an increase in the human capital of the employed workforce, there is a persistent imbalance in favor of urban areas. Such imbalance can threaten territorial cohesion and foster geographical inequalities, increasing the gaps between rural and urban areas (Fratesi & Perucca, 2014; Jagódka & Snarska, 2023).

Following the Covid-19 pandemic, there has been a hike in the number of unemployed individuals, which still remains high, likely due to the hysteresis after the shock (Barbieri Góes & Gallo, 2021). The share of unemployed individuals with tertiary education increased from 27 to 35 percent between 2018 and 2023. Unemployment has increased similarly for men and women across the different levels of educational attainment. On the other hand, urban areas have a higher number of unemployed individuals, in general, and a higher proportion with higher education.

The educational profile of the inactive population has scarcely change over the past years. Most inactive women have not completed secondary school, while men typically possess a secondary education diploma. Inactive individuals are concentrated in rural areas. In urban areas, most inactive individuals possess secondary education. Nevertheless, most inactive individuals with graduate degrees are concentrated in rural areas.

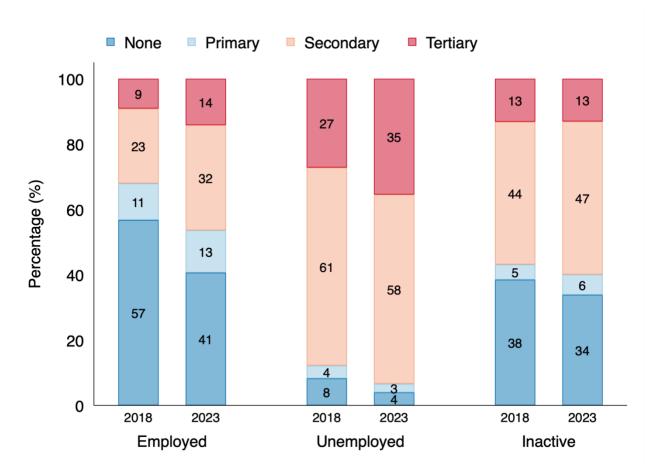


Figure 15: Share of workers by employment status and level of educational attainment, Bhutan 2018 vs. 2023

Note: Author's calculation based on Bhutan LFS 2018-2023. Individuals with TVET education have been excluded from the analysis.

None = below ISCED 1; Primary = ISCED 1; Secondary = ISCED 2 & 3; Tertiary = ISCED 5, 6, 7 & 8.

3.2) Professional Training as a Steppingstone Towards Employment.

Human capital is not only acquired through academic education, but also from formal and informal training. The unemployed population has the largest share of individuals who have either attended or are currently attending training programs. Among the actively employed, the share of those who have participated in training is nearly comparable to that of the unemployed. On the other hand, the inactive population has the lowest participation in training, although they show a higher percentage of individuals currently undergoing training than the employed population. This suggests that training serves as both an effective activation tool and a steppingstone toward employment.

Most employed individuals have never participated in a training program, and only a small proportion undergo training while actively employed. The share of employed individuals who have participated in training increased slightly from 14.6 to 14.9 percent between 2018 and 2023. In 2023, less than 1 percent of the actively employed were currently attending a training program. Employed men have more access to training programs in absolute and relative numbers than their

female counterparts, although the gap in relative terms has been reduced over the years. By area of residence, while in 2018 the number of employed workers who had participated in training programs was higher in rural than in urban areas, by 2023 the situation had reversed.

The share of unemployed individuals who have received training is significantly higher than that of the employed, rising from 17.3 to 20.7 percent between 2018 and 2023. Nevertheless, the total number of employed workers who have participated in training remains higher than that of unemployed workers. This suggests that <u>training enhances individuals' employability and serves as a protective factor against unemployment.</u>

In 2023, 4.9 percent of the unemployed were currently attending training programs, the highest percentage among the three population groups. On the other hand, men and women appear to have similar opportunities to access training while unemployed, with <u>little evidence of unequal access</u> between rural and urban areas.

Among inactive individuals, there has been an increase in the share of those who participated in training programs, rising from 3.3 to 4.5 percent. Nevertheless, the proportion of those currently attending training dropped from 1.8 to 1.2 percent between 2018 and 2023.

Within the inactive population, men and women exhibit similar patterns of participation in training programs, though a higher percentage of inactive men receive training compared to women. A similar trend is observed when comparing rural and urban areas, with a greater proportion of inactive individuals in urban areas participating in training. This disparity may indicate <u>unequal access to training opportunities based on sex and area of residence.</u>

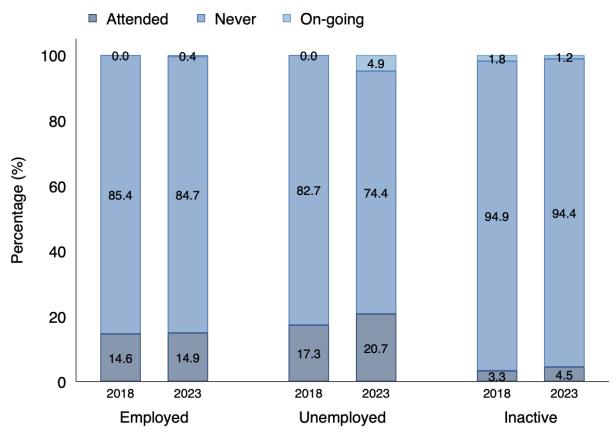


Figure 16: Participation in training by employment status, Bhutan 2018 vs. 2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

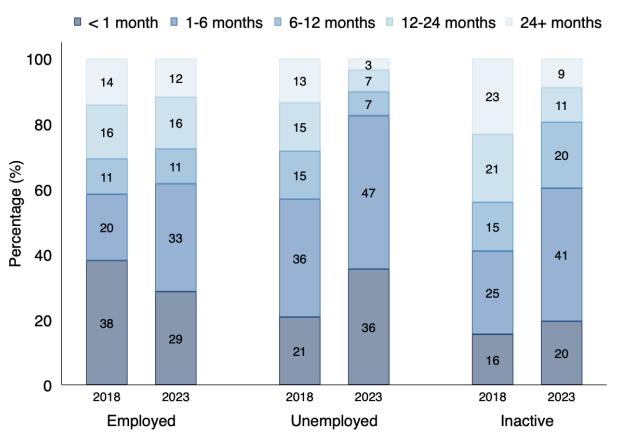
There are differences in the characteristics of training programs where employed, unemployed, and inactive individuals participated. The proper design of ALMPs, including training initiatives, is essential for improving participants' employability (Kluve et al., 2019).

Between 2018 and 2023, there was a noticeable change in the duration of training received by employed individuals in Bhutan. On average, training duration decreased from an estimated 9 months in 2018 to 8.5 months in 2023. The percentage of employed individuals who had received training for less than one month fell from 38 to 29 percent, while those having participated in training courses lasting between one and six months increased from 20 to 33 percent. Additionally, the percentage of employed individuals who participated in training courses lasting more than 24 months dropped from 14 to 12 percent. This indicates a trend towards shorter training durations, with a growing emphasis on medium-term training programs (one to six months).

The average duration of training among unemployed individuals has fallen from slightly above 9 months in 2018 to less than 4.5 months in 2023. The literature points out that effective ALMPs engage individuals for at least 5 months (Kluve et al., 2019; Escudero et al., 2020). Between 2018 and 2023, there has been a surge in training programs for the unemployed lasting less than one month, increasing from 21 to 36 percent, and in those with a duration between 1 and 6 months, rising from 36 to 47 percent. Training of longer duration is now rare among the unemployed.

Among inactive workers, there has also been a trend toward shorter training durations. The average duration of training among inactive individuals was higher than among employed individuals in 2018, reaching almost 13 months, but by 2023 it had decreased to less than 8 months. Remarkably, the percentage of inactive individuals participating in trainings lasting between 1 and 6 months increased from 25 to 41 percent, while those whose training lasted more than 24 months fell from 23 to 9 percent.

Figure 17: Participation in training according to duration and employment status, Bhutan 2018 vs. 2023



Between 2018 and 2023, the three most popular fields of training among employed individuals were farming (17%); health and education (14%); and public order and safety (13%). A total of 147,894 workers that participated in some training program were able to find employment.

The demand for trained workers in health and educational services and construction and engineering has remained stable. Nevertheless, the number of employed individuals with training in some specific fields varies considerably between 2018 and 2023. For example, in 2018 there were 7,909 employed individuals with training in farming, while in 2023 their number fell to 2,773. In the case of those trained in business management, the trend has been the opposite, with the number of employed individuals rising from 2,408 in 2018 to 6,353 in 2023. These changes reflect a shift towards an increased demand for modern and business-oriented skills in the labor market.

Nevertheless, there has been a considerable change in the fields of training selected by the unemployed and inactive between 2018 and 2023. While in 2018, farming, public order & safety or arts & crafts were popular training courses among these groups, by 2023 information & technology, business management, and cooking & tourism are the top picks. These changes might reflect a transition towards more modern and market-driven training among the unemployed and inactive populations, aligning their skills with current economic demands.

Table 1: Participation in training by field and employment status, Bhutan 2018-2023

Employed		Unemployed		Inactive				
Course	Total	Share	Course	Total	Share	Course	Total	Share
Farming	24.919	17%	Others	2.567	29%	Others	4.395	15%
Others	20.396	14%	Information & technology	1.532	17%	Public order & safety	4.087	14%
Health & education	20.032	14%	Cooking & tourism	1.031	12%	Information & technology	3.087	10%
Public order & safety	19.550	13%	Business management	808	9%	Health & education	2.976	10%
Business management	11.555	8%	Arts & crafts	637	7%	Arts & crafts	2.941	10%
Cooking & tourism	10.886	7%	Health & education	564	6%	Cooking & tourism	2.739	9%
Information & technology	9.021	6%	Mechanics	427	5%	Business management	2.414	8%
Construction & engineering	8.373	6%	Construction & engineering	404	5%	Farming	2.210	7%
Arts & crafts	6.823	5%	Farming	288	3%	Construction & engineering	1.700	6%
Mechanics	5.540	4%	Public order & safety	204	2%	Mechanics	1.350	5%
Admin & management	4.126	3%	Beauty & cosmetics	145	2%	Beauty & cosmetics	521	2%
Beauty & cosmetics	1.709	1%	Admin & management	79	1%	Admin & management	410	1%
Legal services	1.655	1%	Manufacture & mining	50	1%	Clerical support	350	1%
Manufacture & mining	1.307	1%	Legal services	46	1%	Entertainment & media	233	1%
Entertainment & media	1.147	1%	Clerical support	43	0%	Legal services	221	1%
Clerical support	855	1%	Entertainment & media	19	0%	Manufacture & mining	128	0%
All	147.894	100%	All	8.845	100%	All	29.763	100%

3.3) The Challenge of Skill and Qualification Mismatches.

In Bhutan, there has been a **trend towards increasing the skills acquired by the working-age population through the education system** between 2018 and 2023, but with marked differences depending on employment status.

Based on workers' occupations, ISCO-08 classifies four skill levels, where Level 1 represents the lowest skill requirement and Level 4 the highest. Although these skill levels are defined in terms of the ability needed to perform tasks associated with specific occupations, ISCO-08 also provides a

corresponding framework linking these skill levels to expected levels of educational attainment (ILO, 2023). Table 2 illustrates the relationship between occupational skill levels and levels of education.

For instance, occupations such as hospitality, retail, and other services managers—classified under ISCO sub-major group 1.4—require a middle-high level of skill to perform their associated tasks. Workers in these roles are typically expected to have completed a short-cycle of tertiary education. In other words, achieving this level of education should equip individuals with middle-high skill sets.

Conversely, workers employed in ISCO sub-major group 1.4 who possess lower educational qualifications than a short-cycle of tertiary education can be considered underqualified. Those with the expected level of education are deemed qualified, while individuals with higher educational attainment may be regarded as overqualified. Furthermore, it is clear that a retail manager who has only completed primary or early childhood education is significantly more underqualified than one who has attained secondary or post-secondary, non-tertiary education.

Table 2: Mapping of ISCO-08 skills levels to ISCED-11 levels of education.

Skill level	ISCO-08 (sub)major group	ISCED-2011 level of education			
	1.1 Chief Executives, Senior Officials and Legislators 1.2 Administrative and	8 Doctoral or equivalent			
4 High skill	Commercial Managers 1.3 Production and Specialized Services Managers	7 Master's or equivalent			
	2 Professionals	6 Bachelor's or equivalent			
	10.1 Commissioned Armed Forces Officers				
3 Middle-high skill	3 Technicians and Associate Professionals 1.4 Hospitality, Retail and Other Services Managers	5 Short-cycle tertiary education			
	4 Clerical Support Workers 5 Service and Sales Workers 6 Skilled Agricultural, Forestry, and Fishery Workers	4 Post-secondary, non-tertiary education			
2 Middle-low skill	7 Craft and Related Trades Workers 8 Plant and Machine	3 Upper secondary level of education			
	Operators, and Assemblers 10.2 Non-commissioned Armed Forces Officers	2 Lower secondary level of education			
1 Low skill	9 Elementary Occupations	Primary level of education Early childhood education			

Skill and qualification mismatches remain a significant challenge in the Bhutanese labor market. Nevertheless, some progress has been observed over the past six years. The percentage of employed individuals who are considered qualified has risen from 21 to 31 percent. Conversely, while the proportion of overqualified employed workers has slightly increased from 5 to

7 percent, the percentage of underqualified employees has decreased notably, from 74 to 62 percent.

On the other hand, qualification mismatch does not appear to be the primary reason for unemployment among Bhutanese workers. In fact, the proportion of unemployed individuals who were qualified for their previous job was higher than that of the employed population, increasing from 53 percent in 2018 to 58 percent in 2023. Conversely, overqualification has emerged as a growing issue within the unemployed population. In 2018, 12 percent of unemployed workers were overqualified, while 35 percent were underqualified for their last job. By 2023, this trend has reversed, with 24 percent of unemployed workers being overqualified and only 19 percent underqualified for their previous employment.

As far as the inactive population is concerned, underqualification seems to be the main issue, although there has been a positive trajectory in this regard. In 2018, 85 percent of the inactive population was underqualified for their last position, 13 percent were qualified, and 2 percent were overqualified. By 2023, 55 percent of inactive individuals were underqualified for their last position, 35 percent were qualified, and 10 percent were overqualified.

The evidence raises three concerns regarding qualification mismatches in Bhutan. First, the labor market may not be generating enough skilled jobs, or workers may lack the specific skills required for available positions, as indicated by the high proportion of qualified and overqualified individuals among the unemployed. Second, the majority of employed workers are underqualified for their positions, which is likely to contribute to low labor productivity and high employee turnover. Third, underqualification appears to have a discouraging effect, leading individuals to exit the labor force.

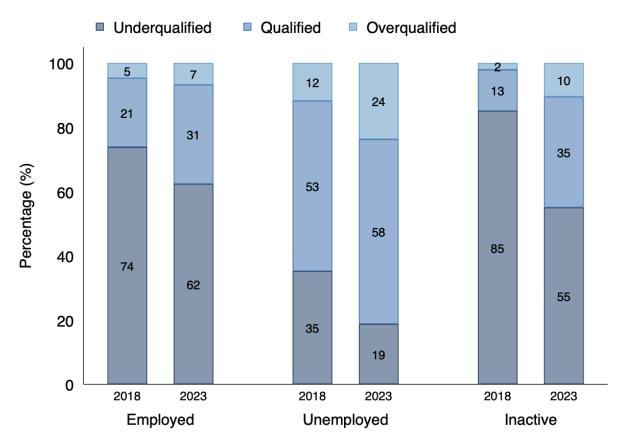


Figure 18: Qualification (mis)matches in the current/last occupation by employment status, Bhutan 2018 vs. 2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

The occupations with the highest shares of underqualified workers in Bhutan include managers, technicians, farmers, crafters, and the armed forces. Between 2018 and 2023, qualification mismatches have improved for technicians, with the share of qualified workers increasing from 0 to 29 percent, and for crafters, rising from 25 to 44 percent. Conversely, the situation has worsened for managers, with the proportion of qualified workers declining from 23 to 19 percent, while remaining largely unchanged among farmers. In the armed forces, the share of qualified workers has remained stable; however, the percentage of overqualified workers has decreased, while the proportion of underqualified workers has surged to 74 percent.

Qualification matching is more favorable among professionals, clerks, sellers, and operators. In all these occupations, the proportion of underqualified individuals has decreased between 2018 and 2023, with many also seeing a reduction in the share of overqualified workers. Clerks have the highest proportion of qualified workers, increasing from 77 to 85 percent, followed by professionals, rising from 63 to 65 percent. Nevertheless, the most significant improvement was observed among sellers, whose share of qualified workers increased by 13 p.p. between 2018 and 2023

Overqualification is primarily an issue in elementary occupations, where it has increased from 26 percent of workers in 2018 to 43 percent in 2023. In other occupations, overqualification remains below 10 percent, with some exceptions in the armed forces, clerks, and sellers. Notably, in 2023, there were no overqualified professionals or managers within Bhutan's employed population.

From 2018 to 2023, there was a general improvement in the matching of qualifications to occupations in Bhutan. Nevertheless, the issue of overqualification is becoming more evident, especially in elementary occupations, indicating a rise in workers possessing higher skills than required for their jobs. This trend suggests that while efforts to better align skills with job requirements have been somewhat successful, there remains a significant portion of the workforce whose skills exceed the demands of their current roles, highlighting a potential underutilization of human capital.

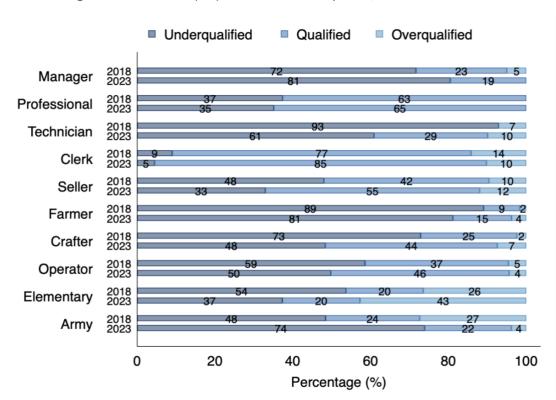


Figure 19: Qualification (mis)matches across occupations, Bhutan 2018 vs. 2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

There are significant differences in qualification (mis)matches across economic sectors. The agricultural sector exhibits the highest share of underqualified workers, 89 percent in 2018 and 81 percent in 2023, while overqualified workers represent a small portion of the population employed in agriculture, 2 percent in 2018 and 4 percent in 2023. Despite this timid improvement, the sector is very far away from catching up with the industrial and service sectors. This is particularly concerning in a country where most of the population works in the agricultural sector. Agriculture is a key economic activity in Bhutan, and the low level of human capital among its workforce can hinder economic growth through low labor productivity, low added-value, and failure to accumulate and transfer capital to the manufacturing and tertiary sectors.

Regarding the industrial sector, in 2018 more than half of the employed population within it was underqualified. Nevertheless, this situation has reversed by 2023 and now more than half of the industrial labor force is qualified or overqualified for their job. The share of qualified employees grew from 27 to 38 percent during the period under analysis, while the proportion of underqualified workers fell from 67 to 49 percent.

The service sector presents the better qualification matching, although still close to 50 percent of its employed population is underqualified for their current job position. The share of qualified workers increased from 39 to 45 percent in the period under analysis, while the share of overqualified employees remained stable around 8-9 percent.

Thus, from 2018 to 2023, there was a general improvement in the matching of qualifications in Bhutan, although progress seem to have been unevenly distributed across sectors of economic activity. **Underqualification of workers within economic sectors can be problematic** not only because it <u>reduces productivity, competitiveness</u>, and <u>slows down economic growth</u>, but also because it <u>reduces workers' capacity to bargain</u> for higher wages and better working conditions and can <u>undermine health and safety in the workplace</u>.

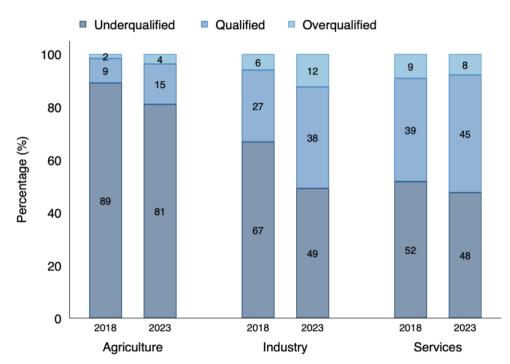


Figure 20: Qualification (mis)matches across sectors of economic activity, Bhutan 2018 vs. 2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

On the other hand, **overqualification within economic sectors can also slow down economic growth because it implies a suboptimal allocation of human capital**. This trend suggests that while efforts to better align skills with job requirements have been somewhat successful, it has also resulted in part of the workforce acquiring skills that exceed the demands of their current roles, leading to a situation where <u>human capital is underutilized</u>.

A **multinomial logistic regression** delves into the analysis of the correlation between demographic and human capital variables and the marginal probability of being employed, unemployed, or inactive.

Matching the skills and qualifications required for a job position significantly increases the marginal probability of being employed in that position by 3.48 p.p., while reducing that of being unemployed by 0.38 p.p. and being inactive by 3.11 p.p.

Compared to men, women are 7.54 p.p. less likely to be employed, while 0.56 p.p. more likely to be unemployed and 6.98 p.p. more likely to be inactive. Similarly, residing in a rural area increases employment probability by 8.17 p.p., while decreasing the probability of being unemployed by 0.81 p.p. and being inactive by 7.36 p.p. The probability of being employed decreases with age, at a rate of 0.6 p.p. per year. Age also reduces the probability of being unemployed, by 0.06 p.p. per year, while increasing the probability of becoming inactive by 0.66 p.p. per year.

Respect to the base category of not possessing any formal education, educated workers are less likely to be employed. Nevertheless, possessing a TVET diploma does not seem to significantly affect employment probability. Similarly, all levels of education are correlated with higher probabilities of being unemployed or inactive, with the exception of primary education and TVET, which are not significantly correlated with the probability of being inactive.

Nevertheless, participating in trainings of less than one month is correlated with a marginal increase in the probability of being employed equal to 3.18 p.p. These types of training also seem to be correlated with lower probabilities of being unemployed or inactive. Training of longer duration seems to reduce the probability of being employed while increasing those of being unemployed or inactive, or not being significantly correlated with being in one or another employment status.

Table 3: Multinomial logistic regression of employment status on individuals' socio-economic characteristics

	Employed	Unemployed	Inactive
Matching	0.0348	-0.0038	-0.0311
	(0.0000)***	(0.0000)***	(0.0000)***
Female	-0.0754	0.0056	0.0698
	(0.0000)***	(0.0000)***	(0.0000)***
Rural	0.0817	-0.0081	-0.0736
	(0.0000)***	(0.0000)***	(0.0000)***
Age	-0.0060	-0.0006	0.0066
	(0.0000)***	(0.0000)***	(0.0000)***
Primary Ed.	-0.0077	0.0050	0.0027
	(0.0143)**	(0.0000)***	(0.3701)
Secondary Ed.	-0.0734	0.0146	0.0588
	(0.0000)***	(0.0000)***	(0.0000)***
TVET	-0.0022	0.0107	-0.0086
	(0.8971)	(0.0218)**	(0.5972)
Undergraduate	-0.0509	0.0161	0.0348
	(0.0000)***	(0.0000)***	(0.0000)***
Graduate	-0.0236	0.0073	0.0163
	(0.0000)***	(0.0004)***	(0.0009)***
<1 Month	0.0318	-0.0047	-0.0270
	(0.0000)***	(0.0014)***	(0.0000)***
1-6Months	-0.0296	0.0053	0.0243
	(0.0011)***	(0.0451)**	(0.0055)***
6-12 Months	-0.0042	-0.0030	0.0072
	(0.7011)	(0.2734)	(0.5022)
1-2 Years	-0.0088	-0.0015	0.0103
	(0.3198)	(0.5170)	(0.2318)
>2 Years	0.0025	-0.0024	-0.0001
	(0.8003)	(0.2881)	(0.9934)
Adjusted R2	0.2424	0.2424	0.2424
N	105,511	105,511	105,511

Note: Author's estimation from pooled Bhutan LFS data (2018-2023).* p<0.1; *** p<0.05; *** p<0.01

4) The Drivers of (Long-term) Unemployment in Bhutan: Addressing Skill and Qualification Mismatches Through Strengthened Public Employment Services

4.1) Positive Trends in (Long-term) Unemployment Are Unevenly Reaching Vulnerable Workers.

The number of unemployed workers in Bhutan has increased during the period 2018-2023. In 2018, there were 10,414 unemployed individuals, while their number rose to approximately 11,822 by 2023. Nevertheless, the ranking of reasons for being unemployed remained stable. The main reason for unemployment is the <u>lack of professional experience</u>, which affected 5,270 (50.6%) unemployed workers in 2018 and 5,464 (46.2%) in 2023. The second most important reason behind unemployment is the <u>mismatch</u> between workers' skills and qualifications and those demanded by employers, affecting 3,476 (33.4%) workers in 2018 and 3,538 (29.9%) in 2023.

Moreover, more individuals become unemployed because they <u>resign</u> (2018: 1,036 [10.0%]; 2023: 1,172 [9.9%]) than because their contracts are <u>terminated</u> by employers (2018: 464 [4.5%]; 2023: 720 [6.1%]). Nevertheless, these are less important reasons behind unemployment than inexperience and skill mismatches. Other reasons, including <u>household duties</u> (2023: 159 [1.3%]) and <u>health issues</u> (2018: 168 [1.6%]; 2023: 350 [3.0%]), are less important drivers of unemployment. Despite growing in importance since 2018, these reasons still affect a small number of unemployed individuals.

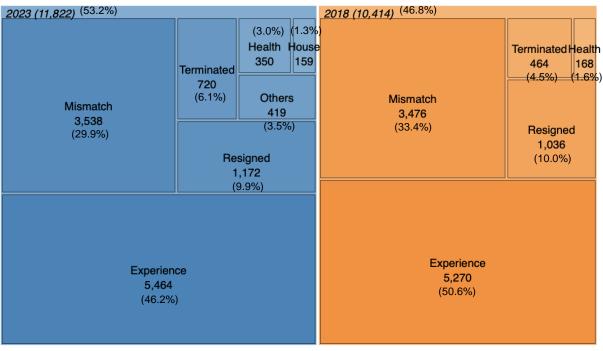


Figure 21: Reasons for being unemployed, Bhutan 2018 vs. 2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

Nevertheless, after the Covid-19 shock, there are positive signs in the Bhutanese labor market. Following a peak in 2022, there was a reduction in unemployment for both genders in 2023, particularly benefiting women.

Special consideration should be given to long-term unemployment – more than 12 months - due to the specific challenges encountered by workers in this situation. Long-term unemployment not only typically affects more vulnerable populations, but it also has more severe socio-economic implications than short-term unemployment, leading to <u>labor market detachment</u>, productivity losses, and deprivation (Krueger et al., 2014; Palát, 2009).

Gender differences reveal that there are more unemployed women than men throughout the years. Additionally, the duration of unemployment also differs by gender. At the beginning of the period, women experienced longer unemployment spells than men, but the situation seems to have reversed since 2022. For example, in 2018, 40 percent of unemployed women had been out of work for 2 years or more, while this situation affected only 32 percent of men. Nevertheless, by 2023, only 8 percent of both unemployed men and women had been unemployed for more than 2 years.

Overall there is a noticeable shift towards shorter periods of unemployment, with the percentage of individuals unemployed for more than 12 months decreasing substantially over the period. This indicates a certain improvement in the efficiency of the labor market, with fewer people struggling to find employment for extended periods. The number of long-term unemployed individuals decreased from 5,484 in 2018 to 2,600 in 2023, despite the general increase in the number of unemployed workers.

Typical unemployment duration seems to be between 1 and 5 months for both men and women. However, in 2018, the typical unemployed individual had been looking for a job for more than 2 years. Conversely, in 2022, most unemployed people reported to have been looking for work for less than one month.

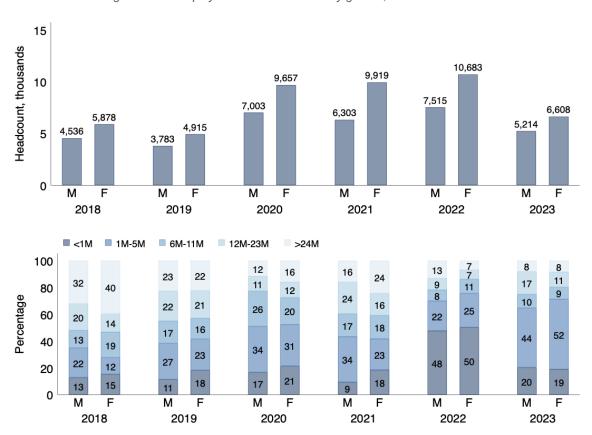


Figure 22: Unemployment and its duration by gender, Bhutan 2018-2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

Urban areas consistently have a larger number of unemployed individuals compared to rural ones. The difference in unemployment between urban and rural areas is greater than that between men and women. In 2018, there were 1.72 unemployed individuals in urban areas for each one in rural areas, with the ratio increasing to 1.81 by 2023. Conversely, in 2018, there were 0.77 unemployed men per woman, with the ratio moving towards equality, reaching 0.79 by 2023.

Unemployment also tends to last longer in urban areas than in rural areas, although there is a trend towards equalization. In 2018, 54 percent of unemployed workers in urban areas had been looking for employment more than one year, while this situation concerned 50 percent of those in rural areas. By 2023, the percentage of long-term unemployment in urban and rural areas is the same.



Figure 23: Unemployment and its duration by area of residence, Bhutan 2018-2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

4.2) Qualification Mismatches and not Reservation Wages as Main Determinants of Long-Term Unemployment.

Long-term unemployment typically responds to structural issues that are more difficult to address. Moreover, it is a more concerning issue than frictional unemployment because of several factors. First, in the absence of a developed welfare state that provides social assistance and insurance, being unemployed for a long period will likely lead individuals to a situation of extreme-poverty. Apart from the moral dilemma that this poses to society, long-term unemployment, particularly when individuals fall into poverty, leads to a loss of human capital, making it more difficult to find employment and causing a loss of productivity for the economy.

Some issues related to long-term unemployment include the structural mismatch between the skills and qualifications possessed by the labor force and those demanded by employers (Kahn, 2015; L'Horty & Sari, 2018). Moreover, if the reservation wage of workers is above the market equilibrium, they might not be able to find employment for longer periods (Brown & Taylor, 2011; Axelrad et al., 2017). Situations of vulnerability, like elderly age, gender inequality, and territorial inequality, might also increase unemployment duration for certain groups of workers.

A pooled logistic regression shows that in Bhutan, looking for a job for which one is underqualified increases the probability of falling into long-term unemployment by 8.02 p.p. Conversely, accepting jobs for which a worker is overqualified reduces the probability of long-term unemployment by 9.17 p.p. Relying on workers' self-assessment, those who believe they are unemployed because they do not possess the skills, knowledge, and qualifications demanded by the market are 21.16 p.p. more likely to be unemployed for more than one year than other workers.

Age is another factor that influences the probability of falling into long-term unemployment. For the average worker, increasing one year of age results in an increase of 0.89 p.p. in the probability of falling into long-term unemployment. Nevertheless, living in a rural area and being a woman do not increase, or even decrease, the probability of being in long-term unemployment. This is probably related to different coping mechanisms, where those in rural areas opt for informal employment in the face of long-lasting unemployment spells, and women leave the labor force.

Table 4: Logistic regression of probability of long-term unemployment on individuals' socio-economic characteristics

	Long-term
	unemployment
Underqualification	0.0802
	(0.0028)**
Overqualification	-0.0917
	(0.0001)**
Excess Reservation Wage	-0.0000
	(0.5370)
Age	0.0089
	(0.0000)**
Mismatch	0.2116
	(0.0000)**
Female	-0.0408
	(0.0313)*
Rural	-0.0133
	(0.6116)
N	3,879

Note: Author's estimation from pooled Bhutan LFS data (2018-2023).* p<0.1; ** p<0.05; *** p<0.01

Thus, reducing mismatches and increasing the levels of qualification of the labor force seem to be adequate strategies to reduce long-term unemployment. Nevertheless, a <u>restrictive</u> income policy does not seem to be relevant in the Bhutanese context since reservation wages above

the market equilibrium are not correlated with long-term unemployment. Finally, <u>policies aiming to reduce long-term unemployment should target elderly men</u>, who seem to be the segment of the population most affected by this phenomenon.

The graph below highlights the effects of skill mismatches on the probability of long-term unemployment and its relationship with age and reservation wages. Underqualification generally increased the probability of long-term unemployment. Although, according to the point estimates, the probability of long-term unemployment decreases among underqualified individuals as they age, the confidence intervals reveal that this trend is not statistically significant.

Individuals seeking employment for which they are overqualified are less likely to become long-term unemployed compared to their underqualified counterparts. This difference is statistically significant for those below 27 years old and above 45. Nevertheless, for those between 27 and 45 years old, the level of qualification relative to employment aspirations does not significantly affect their probability of being long-term unemployed. For overqualified workers, the risk of long-term unemployment increases from ages 15 to 32/33, decreasing after this peak. Moreover, the confidence intervals indicate that the trend is significant. ¹⁰

For reservation wages in line with the market equilibrium, overqualified workers have a lower probability of becoming long-term unemployed than their underqualified counterparts. Nevertheless, differences between under- and overqualified workers in terms of the likelihood of long-term unemployment become statistically insignificant when their salary aspirations are more than 20,000 Nu/month below the market equilibrium or 10,000 Nu/month above it.

Reservation wages exceeding the market equilibrium hinder the matching between labor supply and demand. An Ordinary Least Squares (OLS) regression shows the relationship between excessive reservation wages and correlated factors. The average reservation wage among the unemployed in Bhutan is 754 Nu/month below the equilibrium salary. This explains why reservation salaries do not pose an issue for long-term unemployment. Nevertheless, certain workers with specific characteristics might be bargaining for a wage above the market equilibrium, staying unemployed for longer periods of time.

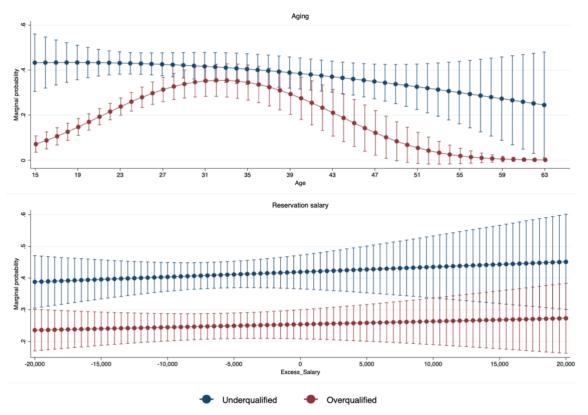
Excessive minimum salary expectations increase with educational attainment. Compared to having no schooling, unemployed individuals who have completed primary education expect 1,216 Nu/month above the market equilibrium, while those who have completed secondary school expect 2,728 Nu/month and those with TVET education expect 4,294 Nu/month. Salary expectations above the market equilibrium rapidly rise with tertiary education, reaching 7,576 Nu/month among those with undergraduate education and 9,518 Nu/month among those with graduate education.

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⁹ The reservation wage refers to the minimum level of remuneration a worker is willing to accept in order to move from unemployment to active employment. The LFS questionnaire includes a question on reservation wages for individuals who are not currently employed but are actively seeking work. The specific wording of the question is: "What is [NAME]'s expected minimum monthly salary?"

¹⁰ 15 years-old overqualified workers have the same probability of falling in long-term unemployment than their 16 years-old counterparts, but they are less likely than overqualified workers with 27 years of age.

Figure 24: Relationship between age and excessive wage claims on the probability of long-term unemployment by level of skill mismatching.



Note: Author's estimation from pooled Bhutan LFS data (2018-2023).

Looking for a specific occupation normally reduces excessive reservation wages compared to not having an occupational preference. This is the case among the unemployed seeking employment as managers (-15,351 Nu/month), professionals (-7,610 Nu/month), technicians (-2,628 Nu/month), clerks (-2,985 Nu/month), sellers (-5,244 Nu/month), operators (-4,885 Nu/month), and armed forces (-4,799 Nu/month). Only the unemployed looking for jobs as farmers (7,652 Nu/month), crafters (2,580 Nu/month), and in elementary occupations (1,914 Nu/month) present minimum salary expectations above the market equilibrium.

On the other hand, individuals seeking employment within a specific type of organization present higher excessive reservation wages than those without a clear preference. The only exception is individuals seeking employment within a household, where no significant correlation with excessive reservation wages is observed. The highest excess in reservation wages is observed among workers seeking employment on farms (8,445 Nu/month), followed by those seeking positions in Non-Governmental Organizations (NGOs) and International Non-Governmental Organizations (INGOs) (6,927 Nu/month), and in private companies (6,865 Nu/month). The unemployed with a preference for public sector organizations present lower excessive reservation wages, with 5,856 Nu/month in SOEs, 5,286 Nu/month in government agencies, and 4,753 Nu/month in the armed forces.

Finally, unemployed women undercut men by -1,683 Nu/month when negotiating salaries in the labor market. Age is also correlated with excessive salary expectations. Young unemployed workers have salary expectations below the market equilibrium, and between ages 15 and 30, they further reduce their expectations. Afterwards, workers start increasing their salary expectations, although they always undercut their employed counterparts.

Table 5: OLS regression of excessive wage claims on job preferences and individuals' socio-economic characteristics

	Excess of Reservation Wage
Primary Ed.	1,216
	(0.05)**
Secondary Ed.	2,728
	(0.00)***
TVET	4,294
	(0.00)***
Undergraduate	7,576
	(0.00)***
Graduate	9,518
	(0.00)***
Manager	-15,351
	(0.00)***
Professional	-7,610
	(0.00)***
Technician	-2,628
	(0.00)***
Clerk	-2,985
	(0.00)***
Seller	-5,244
	(0.00)***
Farmer	7,652
	(0.00)***
Crafter	2,580
	(0.00)***
Operator	-4,885
	(0.00)***
Elementary	1,914
	(0.01)***
Armed Force	-4,799
	(0.02)**
Female	-1,683
	(0.00)***
Government	5,286
	(0.00)***
Armed forces	4,753
	(0.00)***
Farm	8,445
	(0.01)***
SOE	5,856
	(0.00)***
Company	6,865
	(0.00)***
Household	1,806
	(0.11)
NGO/INGO	6,927
	(0.00)***

Age	-218
	(0.07)*
Age ²	4
	(0.04)**
Constant	-6,532
	(0.00)***
R^2	0.34
N	3,889

Note: Author's estimation from pooled Bhutan LFS data (2018-2023).* p<0.1; ** p<0.05; *** p<0.01

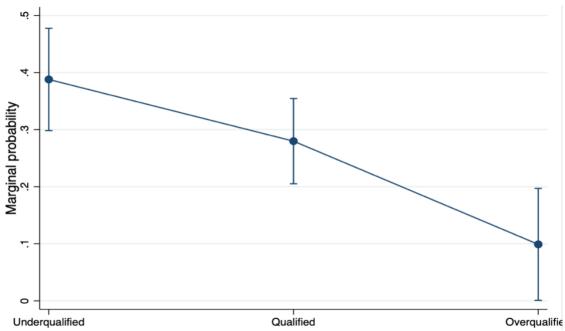
4.3) Strengthening the Capacity of PES and Enhancing Accessibility to Reduce Unemployment Incidence and Duration.

There are no significant differences in job-search strategies between men and women or between the unemployed in urban and rural areas. On average, most unemployed individuals try to find a job by sending applications and searching on social media. The third most common job search strategy involves registration with the PES at the MoICE. Women use this strategy slightly more than men. The difference is more pronounced between urban and rural areas. While 33 percent of the unemployed in rural areas registered with PES, the percentage rises to 36.2 percent in urban areas. Accessibility to PES might be behind these differences. Alternative strategies are less frequently employed by Bhutanese jobseekers.

Although all job-search strategies increase the likelihood of finding a job, combining them is recommended to maximize the probability of landing a new employment opportunity. Among these strategies, applying for jobs is of utmost importance. In this sense, registration with the PES increases the probability of applying for a job by 21.6 p.p., ceteris paribus. Particularly for underqualified individuals, registration with the PES can significantly boost job applications, increasing their probability by 38.8 p.p. The effect of registration seems to be lower for qualified individuals, although the difference with underqualified ones is statistically insignificant. Finally, registration has a milder effect on the probability of applying for a job among overqualified individuals, increasing it by only 9.9 p.p. The effect of registration with the PES is significantly lower for overqualified individuals than for the other two groups of workers.

Strengthening the capacity of PES is a cost-effective policy to reduce unemployment and shorten its duration. PES can be designed as <u>one-stop shops</u> to support jobseekers, whether they are looking for employment or trying to start their own business. PES can be equipped with various resources and policy instruments to support jobseekers. In Bhutan, the demand for support activation measures varies significantly depending on the worker's profile. Thus, different PES staff and centers might specialize in different types of interventions based on their clients' needs.

Figure 25: Relationship between the probability of applying for a job and registration with PES by level of skill mismatching



Note: Author's estimation from pooled Bhutan LFS data (2018-2023).

5) Labor Force Underutilization and Moonlighting in Bhutan: the Need for a Fairer Distribution of Household Duties and Working Hours

5.1) Time-Related Underemployment Hinders Optimal Labor Utilization Among Women, Rural Workers, Youth, and Less-Educated Workers.

The underutilization of the productive capacity of the labor force can be attributed to several factors and materializes in various situations. This section focuses on underemployment, a facet of labor underutilization that remains largely unexplored in the analysis of the Bhutanese labor market. Underemployment is broadly defined as an unsatisfactory employment situation characterized by insufficient hours, compensation, or use of one's skills (ILO, 2016). To operationalize this concept in a less subjective manner, only the visible component of underemployment—related to working hours—will be analyzed. Time-related underemployment is calculated as the number of employed persons whose hours of work in the reference period are insufficient relative to a more desirable employment situation in which the person is willing and available to engage (ILO, 2016).

To better analyze the level of undesired unemployment in the economy, particularly in the Global South, the ILO has developed combined indicators of labor underutilization, beyond the unemployment rate. Adding those in time-related underemployment to the unemployed, we obtain LU2. In what follows, LU2 and time-related underemployment are presented as a percentage of the labor force.

In 2018, Bhutan's LU2 rate stood at 4.8 percent, split between a 3.4 percent unemployment rate and a 1.5 percent time-related underemployment rate. By 2019, the LU2 rate decreased slightly to 4.5 percent, driven by a reduction in the unemployment rate to 2.7 percent, despite a marginal rise in the time-related underemployment rate to 1.9 percent.

The Covid-19 pandemic caused a sharp increase in the LU2 rate, reaching 7.5 percent, primarily due to the unemployment rate almost doubling to 5.0 percent, along with an initial increase in time-related underemployment. In the following years, unemployment remained high, while time-related underemployment began to decline, which helped moderate the overall LU2 rate. This trend likely reflects the <u>vulnerability of workers in time-related underemployment</u>, as they are often the first to be laid off during economic downturns.

By 2023, the unemployment rate had returned to pre-Covid levels at 3.1 percent, but the time-related underemployment rate had risen to 2.3 percent, resulting in a LU2 rate of 5.6 percent—significantly higher than pre-pandemic levels.

In Bhutan, the majority of people in time-related underemployment are women, living in rural areas, and over the age of 24. Regarding educational attainment, most of these workers have no formal schooling, with only a few having TVET or tertiary education. Throughout the period analyzed, women consistently outnumbered men in time-related underemployment. The female-to-male ratio increased from 1.43 in 2018 to 1.58 in 2022, before returning to 1.41 in 2023. Nevertheless, when considering the broader LU2 measure, the gender gap is more balanced, with 0.96 under- or unemployed women for every man in 2023.

2018 Unemployment Underemployment LU2 Unemployment Underemployment LU2 2020 Unemployment Underemployment LU2 Unemployment 2021 Underemployment LU2 Unemployment Underemployment LU2 Unemployment Underemployment LU2 0 2 4 8 Percentage of Labour Force (%)

Figure 26: Unemployment, time-related underemployment and LU2 rates, Bhutan 2018-2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

In Bhutan, workers are considered underemployed when they work less than 48 hours per week¹¹, they would like to work more hours, and they are available to do so. Thus, some workers are not categorized as underemployed despite working less than 48 hours per week because they do not want to work more or are not available to do so.

Men and women cite different reasons for working less than 48 hours per week. There are also differences in the reasons for not working more hours among the underemployed and other employed workers, even after controlling for gender. <u>Family duties</u> are the main reason for not working more hours among both underemployed women (61%) and other female workers (65%). In contrast, only 14 percent of underemployed men cite family duties as the main reason for not working more hours, compared to 26 percent among other employed men.

The primary reason for men to be underemployed is <u>work availability</u>, which affects 67 percent of them. Although this is the second most important reason among underemployed women and non-underemployed men, the percentage affected by this issue is much lower, at 25 percent and 19 percent respectively. Among non-underemployed women, only 6 percent cite the lack of work availability as the main reason for not working more hours.

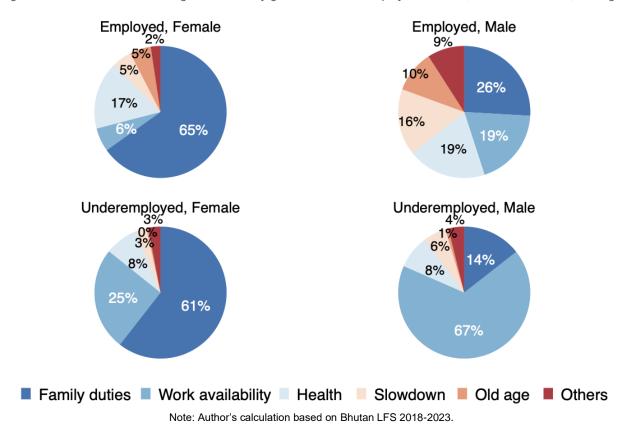
<u>Economic reasons</u> for not working more hours play a less important role among those not willing or not available to do so compared to the underemployed. Nevertheless, economic reasons are typically the cause for not working more hours among men, while social and family issues are the main driver for women. Work availability and the slowdown of economic activity explain why 29

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¹¹ According to Art. 161 of Regulation of Working Conditions, 2022. Department of Labor, Ministry of Labor and Human Resources.

percent of non-underemployed men work less than 48 hours, while only 11 percent of underemployed women do so. Among the underemployed, 73 percent of men do not work more hours because there are no jobs available or due to sluggish economic activity, while this affects only 28 percent of women.

Figure 27: Reasons for not working more hours by gender and underemployment status, Bhutan 2018-2022, average



A logistic regression allows for a better analysis of the correlation between socio-economic characteristics and the probability of being underemployed. Gender does not play a significant role in the probability of being underemployed. Nevertheless, having household duties correlates with an increase of 2.98 p.p. in the probability of being underemployed.

Table 6: Logistic regression of probability of underemployment on primary job and individuals' socio-economic characteristics

	l la de se se les ses est
	Underemployment
Female	-0.0015
Household duties	(0.20) 0.0298
Household duties	(0.00)***
Hours/week (Primary job)	-0.0012
riodis/week (Frinary Job)	(0.00)***
Youth	0.0054
	(0.02)**
Manager	-0.0193
	(0.02)**
Professional	-0.0159
	(0.06)*
Technician	-0.0069
	(0.41)
Clerk	-0.0085
Seller	(0.37) -0.0032
Sellei	(0.64)
Farmer	-0.0259
i aimoi	(0.00)***
Crafter	-0.0138
	(0.06)*
Operator	0.0032
	(0.67)
Armed Forces	-0.0204
	(0.01)**
Industry	-0.0106
Comingo	(0.12) -0.0108
Services	-0.0106 (0.10)*
Primary Ed.	0.0057
i imary La.	(0.00)***
Secondary Ed.	0.0096
•	(0.01)***
TVET	-0.0008
	(0.90)
Undergraduate	0.0197
0 1 1	(0.03)**
Graduate	0.0073
Underquelified	(0.18)
Underqualified	0.0049 (0.09)*
Overqualified	0.0020
Overqualilieu	(0.58)
N	94,002
· ·	0 1,002

Note: Author's estimation from pooled Bhutan LFS data (2018-2023).* p<0.1; ** p<0.05; *** p<0.01

A test of contrast of the correlation between household duties and the probability of being underemployed reveals that the relationship differs across genders. Not having household responsibilities significantly reduces the probability of women being underemployed compared to men, by approximately 0.3 p.p., ceteris paribus. Nevertheless, as women tend to bear household responsibilities more than men, these duties significantly increase the probability of underemployment for women by one p.p. more than for men.

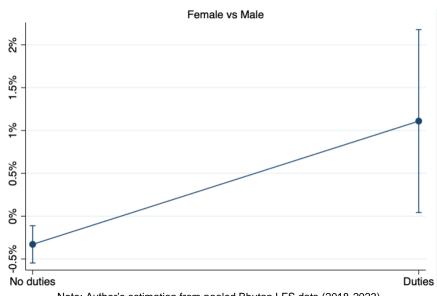


Figure 28: Contrast between sexes of marginal probability of being underemployed depending on household duties

Note: Author's estimation from pooled Bhutan LFS data (2018-2023).

The number of hours worked per week in the primary job is also strongly correlated with the probability of being underemployed. Not working any hours in the primary job during the past week increases the probability of being underemployed by approximately 2.5 p.p. As the average worker approaches 18 hours per week the probability of being underemployed reaches a peak of 25 p.p. Subsequent increases in the length of the working week reduce the probability of being underemployed, which becomes almost zero for lengths exceeding 40 hours. Reducing the statutory working week to 40 hours could positively affect underemployment and potentially reduce youth unemployment if part-time jobs on weekends are created to maintain service hours.

The probability of underemployment seems to increase with educational attainment. Workers who have completed primary education are 0.57 p.p. more likely to be underemployed than those with no schooling, while the probability increases in 0.96 p.p. for those with secondary education and in 1.97 p.p. for those holding an undergraduate university degree.

Nevertheless, workers who have completed TVET or graduate tertiary education do not have a higher probability of being underemployed than those with no schooling. Indeed, while <u>overqualification</u> does not increase the risk of being underemployed, <u>underqualification</u> does so by 0.49 p.p.

Some occupations present a higher probability than others of being underemployed. Using elementary occupations as a benchmark, the logistic regression indicates that managers (-1.93 p.p.); professionals (-1.59 p.p.); farmers (-2.59 p.p.); crafters (-1.38 p.p.); and the armed forces (-2.04 p.p.) have a lower probability of being underemployed. Nevertheless, there is no significant difference between laborers in elementary occupations, technicians; clerks; sellers; and operators.

There is also no significant difference in the probability of being underemployed among those working in the <u>primary and secondary sectors</u>, while it is 1.08 p.p. lower for those working in the tertiary sector compared to the former.

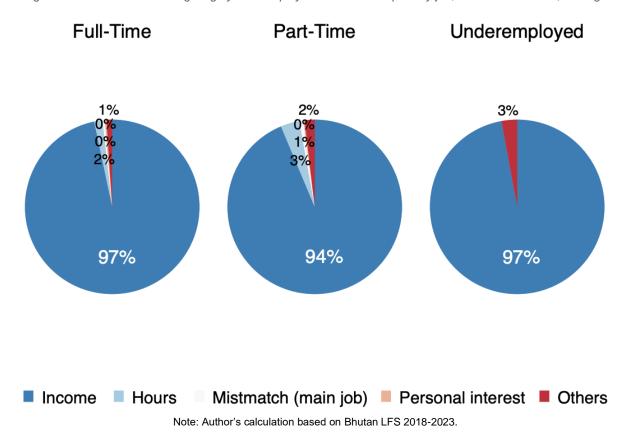
Figure 29: Relationship between the probability of being underemployed and weekly working hours in primary job

Note: Author's estimation from pooled Bhutan LFS data (2018-2023).

5.2) The Need to Strengthen Moonlighting Regulation.

Some workers might resort to moonlighting to increase their weekly working hours and, hence, their income. Not only underemployed workers practice moonlighting; workers who already have a full-time job might also engage in it. The reasons for moonlighting are essentially the same among workers who have a full-time primary job, a part-time primary job, or are underemployed. 94 percent of part-time workers who practice moonlighting do so to increase their income, while the percentage increases to 97 percent among those employed full-time and underemployed.

Figure 30: Reasons for moonlighting by time-employment situation in primary job, Bhutan 2018-2022, average



An OLS regression is used to analyze the correlation between the full-time equivalent rate and workers' socio-economic characteristics. The regression shows a <u>cubic relationship</u> between the ERI and the full-time rate, indicating that workers tend to increase their labor supply when their income is low, as the opportunity cost of spare time is low too. Nevertheless, after a certain threshold, the increase in the opportunity cost of spare time leads them to reduce their labor supply for subsequent income increases. For very high income, this relationship is reversed, and workers start increasing the hours they are willing to work. Nevertheless, in the sample, more than 90 percent of the workers are in the first section, increasing the number of hours they are willing to

Being a <u>woman</u> reduces the full-time rate by 5.33 p.p. compared to men, ceteris paribus. <u>Household duties</u> exert a stronger influence on the full-time ratio than gender. Having household duties reduces the full-time rate by 39.74 p.p. Nevertheless, household duties do not have a different influence on the full-time rate depending on workers' gender.

work if the ERI increases.

Moonlighting and underemployment, on the other hand, do not equally affect the full-time rate of men and women. While men practicing moonlighting observe, on average, an increase of 66.63 p.p. in the full-time rate, women see only an increase of 49.95 p.p. Moreover, underemployed men see a decrease of 59.24 p.p. in the full-time rate, while underemployed women see a decrease of only 33.91 p.p.

Table 7:OLS regression of full-time equivalent rate on employment and individuals' socio-economic characteristics

	Full-Time Rate
ERI ('000)	0.0025
	(0.00)***
ERI ² ('000)	-0.0000

	(0.00)***
ERI ³ ('000)	0.0000
,	(0.00)***
Female	-0.0533
	(0.00)***
Household duties	-0.3974
	(0.00)***
Moonlighting	0.6663
	(0.00)***
Underemployment	-0.5924
, ,	(0.00)***
Female#Household duties	-0.0312
	(0.19)
Female#Moonlighting	-0.1668
	(0.00)***
Female#Underemployment	0.2533
,	(0.00)***
Age	0.0062
	(0.00)***
Age ²	-0.0001
3	(0.00)***
Manager	0.0072
	(0.33)
Professional	-0.1342
	(0.00)***
Technician	-0.0892
	(0.00)***
Clerk	-0.0873
	(0.00)***
Seller	0.1505
	(0.00)***
Farmer	0.0202
	(0.00)***
Crafter	-0.0749
	(0.00)***
Operator	0.0032
·	(0.65)
Armed Forces	0.0094
	(0.26)
Primary Ed.	-0.0035
•	(0.32)
Secondary Ed.	-0.0378
•	(0.00)***
TVET	-0.0960
	(0.00)***
Undergraduate	-0.0854
	(0.00)***
Graduate	-0.0364
	(0.00)***
Intercept	0.9902
	(0.00)***
R2	0.29
N	94,037
Note: Author's estimation from pooled Bhutan LFS data (2018-20	123) * n<0 1· ** n<0 05· *** n<0 01

Note: Author's estimation from pooled Bhutan LFS data (2018-2023).* p<0.1; ** p<0.05; *** p<0.01

The graph below shows that while the average worker who is not underemployed presents a full-time rate slightly above 100 percent, underemployed workers do not reach 50 percent. Moreover, moonlighting effectively reduce labor underutilization, increasing the full-time rate of underemployed workers to 100 percent. Nevertheless, it also results in excessive overtime among non-underemployed workers, increasing their full-time equivalent rate above 150 percent, which might have a detrimental effect on labor productivity over the medium and long term.

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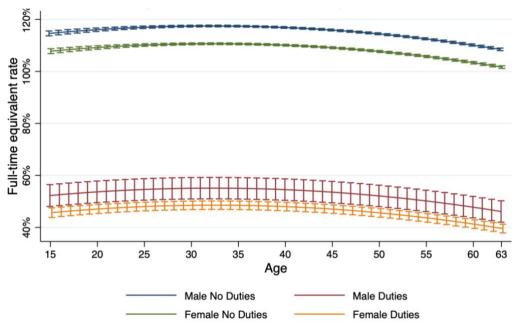
Figure 31:Contrast of the effect of moonlighting on full-time equivalent rate between underemployed workers and other employed workers

Note: Author's estimation from pooled Bhutan LFS data (2018-2023).

The graph below displays how the relationship between the full-time rate and age varies with workers' sex and household responsibilities. Men and women without household responsibilities present a full-time rate above 100 percent, with men having a higher rate than women at all ages, *ceteris paribus*. Moreover, the full-time rate for both genders peaks at approximately 35 years old and decreases afterward.

For <u>workers with household responsibilities</u>, the full-time rate is around 50 percent, with men having a higher rate than women at all ages. Nevertheless, confidence intervals for men and women with household responsibilities indicate that age does not play a significant role in determining their full-time rate.

Figure 32: Relationship between age and full-time equivalent rate by gender and household responsibilities



Note: Author's estimation from pooled Bhutan LFS data (2018-2023).

Certain occupations are correlated with higher or lower full-time rates. The OLS regression indicates that professionals (-13.42 p.p.), technicians (-8.92 p.p.), and clerks (-8.73 p.p.) present lower full-time rates that laborers in elementary occupations, the benchmark category. Conversely, sellers (15.05 p.p.) and farmers (2.92 p.p.) present higher than average full-time rates.

Educational attainment beyond the completion of primary education is correlated with reductions in the full-time rate compared to the benchmark category of workers with no schooling. For workers who have completed secondary school, the full-time rate is 3.78 p.p. less than that of those with no schooling. The reduction is larger among those who have completed TVET or undergraduate tertiary studies, at 9.6 and 8.54 p.p. respectively. Finally, workers who have completed graduate tertiary education have a full-time rate 3.64 p.p. lower than that of those with no schooling.

6) Decent Work Gaps and Vulnerable Employment in the Absence of Universal Social Protection and Effective Labor Regulation

6.1) Strong Labor Income Growth Amid Persistent Inequality and Working Poverty.

In Bhutan, the average monthly earnings from the primary job have almost doubled between 2018 and 2023, increasing from 11,570 to 22,220 Nu. Nevertheless, economic growth has not been equally distributed across all segments of the population.

Average earnings from the primary job are consistently lower for those residing in rural areas and women. In rural areas, earnings have grown from 8,737 Nu/month in 2018 to 16,249 Nu/month in 2023, while in urban areas, earnings have increased from 18,609 to 33,404 Nu/month. The absolute difference in average earnings between urban and rural areas has increased from 9,872 to 17,155 Nu/month, while the earnings gap has remained stable around 52 percent.

Average monthly earnings from the primary job are higher for men than for women. While average earnings for men have increased from 12,991 Nu/month in 2018 to 24,651 Nu/month in 2023, female earnings have grown from 9,845 to 18,748 Nu/month. Thus, the gender gap is lower than the area of residence gap. The difference in earnings has increased from 3,146 to 5,903 Nu/month over the period, while the gap has remained stable around 24 percent.

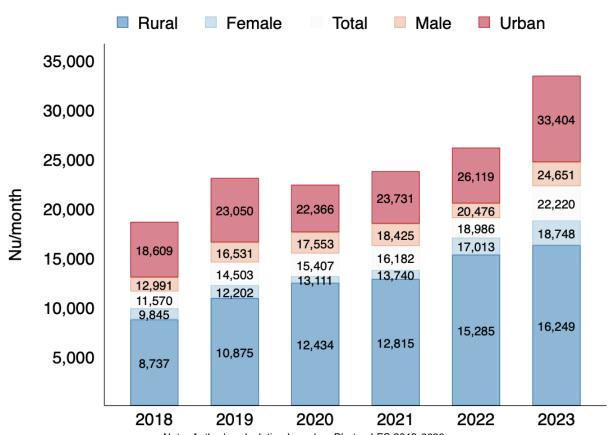


Figure 33:Average monthly earnings from primary job by location, gender, and age, Bhutan 2018-2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

Between 2017 and 2022, the national poverty line in Bhutan rose from 2,196 to 4,099 Nu/person/month (NSB & World Bank [WB], 2017, 2022).¹² The national poverty line for each year between 2018 and 2023 has been estimated by adjusting the last actual measurement using the percentage annual change in the consumer price index.¹³ Workers are categorized as working poor when their average monthly earnings from their primary job are below the national poverty line.

The percentage of working poor in Bhutan is relatively low and shows a downward trend over the period of analysis, despite some fluctuations. In 2018, 8.5 percent of those in active employment earned below the poverty line in their main job, with the share decreasing to 5.2 percent in 2020. The Covid-19 pandemic reversed this progress, and by 2022 the percentage of working poor had increased to 8.8 percent. In 2023, as the economy recovers, the percentage of working poor decreased to 6.9 percent.

There are not large differences in the share of working poor across genders, but this situation does affect more workers residing in rural areas. The percentage of female working poor went from 9.1 percent in 2018 to 8.3 percent in 2023, after peaking at 10.2 percent in 2022. Only in 2019 did the percentage of male working poor exceed that of female. The share of working poor among employed men went down from 8.1 percent in 2018 to 5.9 percent in 2023, highlighting that most of the progress made in this dimension has benefited men.

The share of working poor in urban areas is very low and stable, between 1 and 1.7 percent during the period of analysis. In rural areas, despite some progress before the Covid-19 recession, the share of working poor remains high, going from 11.3 percent in 2018 to 9.7 percent in 2023, after peaking at 12.5 percent in 2022.

The working poor are concentrated in the primary sector. Although the share of working poor in the agricultural sector decreased from 13.5 percent to 8.8 percent between 2018 and 2020, an astonishing 17.2 percent of those employed in the primary sector earned below the national poverty line in their primary job in 2022. In 2023, the situation improved slightly, with 13.2 percent of those employed in the primary sector being classified as working poor. In the industrial and service sectors, the share of working poor consistently remained below the national average between 2018 and 2023.

By occupation, the largest percentage of working poor can be found among farmers, and crafters. The share of workers affected by this vulnerable situation was almost the same in 2018 and 2023, with around 13.55 percent for the former and 7.2 percent for the latter. All other occupations present a share of working poor below the national average, with some reducing it between 2018 and 2023. Positively, in 2023 the percentage of working poor among professionals, clerks, and the armed forces was almost zero.

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¹² In 2022, the NSB and WB estimated both lower and upper bound poverty lines for Bhutan. This report takes a conservative approach by adopting the lower bound estimate.

¹³ https://kidb.adb.org/economies/bhutan

2018 Total 2023 2018 Male 2023 5.9 2018 9.1 Female 2023 2018 1.6 Urban 2023 1.7 2018 Rural 2023 9.7 2018 **Agriculture** 2023 13.3 2018 13.6 **Farmer** 2023 13.5 2018 7.0 Crafter 2023 7.4 5 7.5 0 2.5 10 12.5 15 Percentage (%)

Figure 34: Share of working poor (primary job), Bhutan 2018 vs. 2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

6.2) Moonlighting and Structural Excessive Overtime: The Trade-Off Between Low Earnings and Decent Working Conditions.

The percentage of working poor is between 0.1 and 0.5 percent over the period under analysis if the poverty line is compared to the ERI. This is related to the large share of the actively employed population that works overtime. Overtime in Bhutan seems to be a strategy to avoid situations of poverty. Over the period under analysis, more than 50 percent of the employed workers in Bhutan faced overtime every year. Only in 2020 was the percentage slightly lower, affecting 48.9 percent of the employed individuals.

Men consistently engage in overtime more than their female counterparts. Approximately, the share of men in overtime is 5 p.p. larger than that of women, except for 2020, when the difference exceeded 7.1 p.p. Between 2018 and 2023, the share of workers facing overtime decreased from 61.3 to 55 percent for men and from 56.7 to 50 percent for women.

Overtime is also more common in rural than urban locations. Despite fluctuations, there seems to be a trend towards reducing the percentage of workers engaging in overtime in rural areas, decreasing from 63.3 percent in 2018 to 55.3 percent in 2023.

This might be correlated to less stringent <u>enforcement of working conditions regulations</u> in the countryside than in urban areas, but also to the fact that the share of workers earning below the poverty line in rural areas is larger than in urban ones. Thus, rural workers might resort to moonlighting and overtime to avoid <u>situations of poverty</u>.

By occupation, managers have seen a significant rise in overtime. In 2018, 47.4 percent of managers worked overtime, which was below the national average of 59.2 percent. Nevertheless, by 2023, this figure surged to 66.9 percent, well above the national average of 52.9 percent. A similar trend was observed among **elementary workers**, whose overtime participation increased from 51.9 percent in 2018 to 58.7 percent in 2023. Farmers consistently worked overtime at rates above the national average, with 65.9 percent in 2018 and 56.8 percent in 2023. Despite this, they were not the occupation with the highest incidence of overtime. **Sellers** reported even higher rates, with 67.3 percent in 2018 and 63.0 percent in 2023.

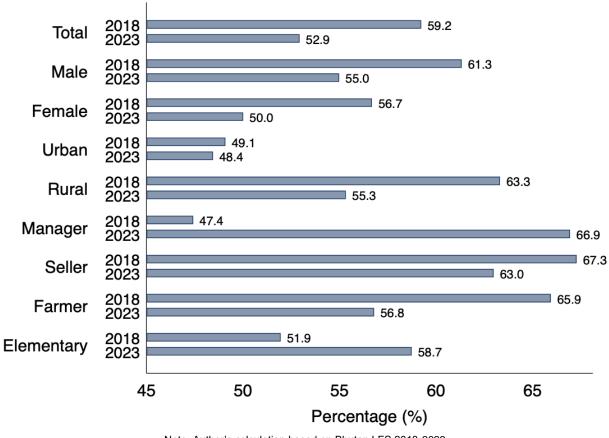


Figure 35: Share of workers facing overtime by gender, location, and age, Bhutan 2018 vs. 2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

The main reason workers cite for practicing overtime is that the job requires it, while income is the second most mentioned reason. Less than 2 percent of workers doing overtime mentioned that it was due to extraordinary circumstances in a particular week. Across subgroups of the population, the only significant differences in the reasons for overtime are found among urban workers. Approximately 35 percent of urban workers stated that they do overtime to earn additional income, while 63 percent said it was because the job required it.

Thus, overtime seems to be a structural characteristic of the Bhutanese labor market, despite MoICE regulating that the statutory working week shall not exceed 48 hours. Indeed, since employers are not obliged to pay a higher hourly rate for overtime hours except in very exceptional circumstances, the regulation is scarcely effective.¹⁴

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¹⁴ Only overtime performed during Public Holidays and between the 10:00 p.m. and 08:00 a.m. must be remunerated at 50 percent more of the normal worker's rate.

Men Women 1% 1% 42% 45% 54% 56% Urban Rural 2% 35% 46% 53% 63% Income Job required Exceptional week

Figure 36: Reasons for overtime by gender, location, and age, Bhutan 2018-2022, average

Note: Author's calculation based on Bhutan LFS 2018-2023.

An OLS regression provides further insights into the drivers of hourly earnings in the primary job. The intercept indicates the estimated hourly earnings for the reference category in the OLS regression. The reference category is composed of men employed in an elementary occupation in an urban center, with no schooling completed and in an employment situation not classified as vulnerable.¹⁵ The reference worker, corresponding to those unskilled, received an average of 298 Nu/hour, while the minimum wage in Bhutan is set at 50 Nu/hour for such workers. ¹⁶

Nevertheless, the reference worker is also 0 years old and did not work any hours in the reference week, which is an unrealistic situation. The average earnings per hour predicted in the sample by the OLS regression provide a more realistic approach to assess if minimum wage regulations are abided by in Bhutan. This average is equal to 71 Nu/hour, which is slightly below the minimum wage set for the highest category of workers, 75 Nu/hour.¹¹

Using elementary occupations as a benchmark, the OLS regression shows that some occupations pay an earnings premium. This premium is the highest for <u>managers</u> (91 Nu/hour), followed by <u>professionals</u> (38 Nu/hour) and <u>armed forces</u> (25 Nu/hour). The nature of this premium is likely related to the intrinsic characteristics of these jobs, with responsibility justifying it in the case of managers, specialized knowledge for professionals, and hazard and danger for the armed forces.

Other professions also receive a premium compared to elementary occupations, although smaller. Technicians earn 18 Nu/hour more than those in elementary occupations, followed by sellers (15 Nu/hour), clerks (12 Nu/hour), and operators (11 Nu/hour).

¹⁶ Ministry of Finance. Revision of National Workforce Wage Rates. November 22, 2023. MoF/DPBP/Rules/2023-24/373. https://www.mof.gov.bt/wp-content/uploads/2023/11/NotificationWageRates22112023.pdf

¹⁵ Own-account employees and contributing family workers are classified as being in vulnerable employment, as explained later.

On the other hand, traditional occupations face an earnings penalty compared to elementary ones, with <u>farmers</u> earning 37 Nu less per hour and <u>crafters</u> 9 Nu less per hour. Regarding economic sectors, no significant statistical evidence has been found to suggest differences in hourly earnings.

There is also significant evidence supporting that there are increasing returns to education up to the post-secondary level. Workers who have completed primary school earn 5 Nu more per hour than those with no schooling, while those who have completed the secondary cycle earn 15 Nu more per hour. Workers with <u>TVET</u> and <u>undergraduate</u> education benefit from a large rise in earnings per hour, equal to 59 and 56 per hour respectively.

Nevertheless, the Bhutanese labor market does not adequately reward further investments in education. Workers holding <u>tertiary graduate degrees</u> only earn 36 Nu/hour more than those with no schooling. This is likely related to the type of skills and qualifications demanded by employers. The TVET educational path seems to better equip Bhutanese workers to respond to the requirements of the growing national economy.

Finally, the lower productivity of the economy in rural areas is reflected in an earnings penalty for workers employed in the countryside. Compared to their peers working in urban centers, individuals in rural areas earn 11 Nu/hour less. Nevertheless, the OLS regression does <u>not show a significant gap between men and women</u>.

Table 8: OLS regression of hourly earnings on primary job and individuals' socio-economic characteristics

Hours/week (Primary job)		Hourly Earnings
Hours/week2 (Primary job) O.1362 (0.00)*** Hours/week3 (Primary job) Vulnerable Employment Vulnerable Employment#Hours/week (Primary job) Vulnerable Employment#Hours/week2 (Primary job) Vulnerable Employment#Hours/week2 (Primary job) Vulnerable Employment#Hours/week3 (Primary job) Vulnerable Employment#Hours/week3 (Primary job) O.0512 Vulnerable Employment#Hours/week3 (Primary job) Female 4.7553 (0.53) Age 4.0994 (0.00)*** Female#Age -1.0471 (0.00)*** Female#Age -0.0430 (0.00)*** Manager Professional 38.3989 (0.00)*** Technician 17.4582 (0.00)*** Clerk	Hours/week (Primary job)	-12.0890
Hours/week3 (Primary job) -0.0005 (0.00)*** Vulnerable Employment 12.8547 (0.15) Vulnerable Employment#Hours/week (Primary job) -1.5429 (0.00)*** Vulnerable Employment#Hours/week² (Primary job) 0.0512 (0.00)*** Vulnerable Employment#Hours/week³ (Primary job) -0.0003 (0.00)*** Female 4.7553 (0.53) Age 4.0994 (0.00)*** Female#Age -1.0471 (0.00)*** Female#Age² 0.0138 (0.00)*** Female#Age² 0.0138 (0.00)*** Professional 38.3989 (0.00)*** Technician 17.4582 (0.00)*** Clerk Clerk		(0.00)***
Hours/week3 (Primary job) -0.0005 (0.00)*** Vulnerable Employment 12.8547 (0.15) Vulnerable Employment#Hours/week (Primary job) -1.5429 (0.00)*** Vulnerable Employment#Hours/week² (Primary job) 0.0512 (0.00)*** Vulnerable Employment#Hours/week³ (Primary job) -0.0003 (0.00)*** Female 4.7553 (0.53) Age 4.0994 (0.00)*** Female#Age -1.0471 (0.00)*** Age2 -0.0430 (0.00)*** Female#Age² 0.0138 (0.00)*** Female#Age² 0.0138 (0.00)*** Professional 38.3989 (0.00)*** Technician 17.4582 (0.00)*** Clerk Clerk	Hours/week2 (Primary job)	0.1362
Vulnerable Employment 12.8547 Vulnerable Employment#Hours/week (Primary job) -1.5429 Vulnerable Employment#Hours/week² (Primary job) 0.0512 Vulnerable Employment#Hours/week³ (Primary job) -0.0003 Vulnerable Employment#Hours/week³ (Primary job) -0.0003 Female 4.7553 Query (0.53) Age 4.0994 Query (0.00)*** Female#Age -1.0471 Query (0.00)*** Female#Age² 0.0138 Query (0.00)*** Female#Age² 0.0138 Query (0.00)*** Female#Age² 1.7.4582 Query (0.00)**** Professional 38.3989 Query (0.00)*** Clerk 12.4352		(0.00)***
Vulnerable Employment 12.8547 (0.15) (0.15) Vulnerable Employment#Hours/week (Primary job) -1.5429 (0.00)*** (0.00)*** Vulnerable Employment#Hours/week³ (Primary job) -0.0003 (0.00)*** (0.00)*** Female 4.7553 (0.53) (0.53) Age 4.0994 (0.00)*** (0.00)*** Female#Age -1.0471 (0.00)*** (0.00)*** Female#Age² 0.0138 (0.00)*** (0.00)*** Manager 90.5548 (0.00)*** (0.00)*** Professional 38.3989 (0.00)*** (0.00)*** Clerk 12.4352	Hours/week3 (Primary job)	
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Seller	14.8776
	(0.00)***
Farmer	-36.4854
	(0.00)***
Crafter	-9.3338
	(0.00)***
Operator	10.7512
	(0.00)***
Armed Forces	24.4841
	(0.00)***
Primary Ed.	4.5506
	(0.00)***
Secondary Ed.	14.9833
	(0.00)***
TVET	59.4005
	(0.00)***
Undergraduate	55.9377
	(0.00)***
Graduate	35.9301
	(0.00)***
Rural	-11.0141
	(0.00)***
Intercept	298.5166
	(0.00)***
R2	0.17
N	93,974

Note: Author's estimation from pooled Bhutan LFS data (2018-2023).* p<0.1; ** p<0.05; *** p<0.01

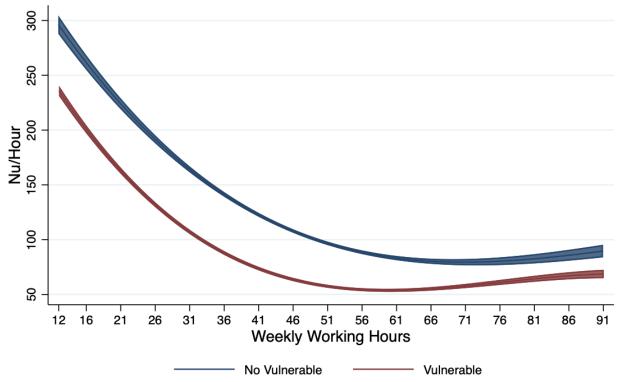
Regarding the relationship between the hourly rate and working hours, the analysis uncovers two important facts. Firstly, there is a <u>cubic relationship</u> between weekly working hours and the hourly earning rate. Secondly, this relationship is significantly <u>different between workers in vulnerable employment situations and others</u>. Nevertheless, there is no statistical evidence supporting that workers in vulnerable employment face an earnings penalty. Altogether, this could be interpreted as the productivity of those in vulnerable employment being lower than that of other workers.

6.3) The Challenge of Quality Employment in Bhutan: Significant Decent Work Gaps, Widespread Vulnerable Employment, and the Lack of Universal Social Protection.

The graph below shows how the hourly earning rate varies with weekly working hours for 99 percent of workers in the sample. Non-vulnerable workers consistently obtain a higher rate. Moreover, the tightness of the confidence intervals indicates that differences in weekly working hours result in significant differences in the hourly earnings rate.

The hourly rate for an average worker in a <u>non-vulnerable</u> situation decreases from a maximum of 296 Nu/hour for those working 12 hours per week to a minimum of 80 Nu/hour for those working 72 hours per week. On the other hand, for workers in a <u>vulnerable</u> situation, the hourly rate goes from a maximum of 236 Nu/hour for those working 12 hours per week to a minimum of 54 Nu/hour for those working 61 hours per week. After this point, vulnerable workers start catching up with non-vulnerable ones as they increase their labor supply. Nevertheless, the graph indicates that for very long working weeks, the rate gap starts increasing again in favor of non-vulnerable workers.

Figure 37: Relationship between weekly working hours and hourly earning rate in the primary job by employment vulnerability



Note: Author's estimation from pooled Bhutan LFS data (2018-2023).

Own-account and contributing family workers are typically at the highest economic risk and possess less authority than workers with other employment arrangements. These two employment relations are often characterized by a <u>lack of social protection</u>, <u>unregulated working conditions</u>, excessive hours, low or no pay, and short-term nature. Thus, a large proportion of workers in these categories might indicate that in Bhutan there are important decent work deficits (ILO, 2013).

The share of individuals employed as own-account or contributing family workers is consistently above 60 percent of total employment during the period of analysis. The highest share was recorded in 2018 with 68.0 percent, while in the last two years, there has been a small improvement, falling to approximately 60.2 percent. Women and workers in rural areas have the largest concentration of own-account and contributing family workers.

The lack of modernization in Bhutan's primary sector is exemplified by the high rates of own-account and contributing family workers that it employs, despite a timid reduction from 98.9 percent in 2018 to 97.4 percent in 2023. The lowest share of vulnerable employment has traditionally been in the <u>tertiary sector</u>, partly due to the large public sector presence. Only in 2023 did the <u>industry</u> employ fewer own-account and contributing family workers than the tertiary sector, reaching a minimum of 25.1 percent.

By occupation, most farmers are own-account or contributing family workers. Other occupations with high rates of own-account and contributing family workers include sellers, crafters, and operators. In the <u>remaining occupations</u>, the share of vulnerable workers is below the national <u>average</u>. Professionals, technicians, and clerks exhibit the lowest share of own-account and contributing family workers. Thus, promoting employment creation within those occupations is a policy that could contribute to the closure of decent work gaps.

2018 2023 68.0 Total 2018 2023 58.8 Male 2018 2023 79.1 Female 2018 2023 29.6 Urban 32.8 2018 2023 Rural 2018 98.9 Agriculture 2023 97.4 2018 2023 Professional 3.7 2018 2023 2.4 Technician 2.7 2018 Clerk 2023 3.7 40 100 0 20 60 80 Vulnerable workers, percentage (%)

Figure 38: Proportion of own-account and contributing family workers, Bhutan 2018 vs. 2023

Note: Author's calculation based on Bhutan LFS 2018-2023.

A logistic regression provides further explanation of the drivers of employment vulnerability. <u>Female</u> workers are 11.14 p.p. more likely than their male counterparts to be employed as own-account or contributing family workers. Similarly, workers in <u>rural</u> areas are 2.16 p.p. more likely to be in a situation of employment vulnerability than those in urban centers, *ceteris paribus*.

Some occupations are more likely to be performed as own-account or contributing family workers compared to elementary occupations, the reference category in the logistic regression. Farmers are 80.73 p.p. more likely to be in one of these employment relations than those employed in an elementary occupation. Other occupations, such as managers (47.69 p.p.), operators (46.75 p.p.), crafters (45.61 p.p.), and sellers (41.19 p.p.), also present higher probabilities of being in a vulnerable employment relation than those in elementary occupations.

Conversely, as previously inferred, clerks (-8.87 p.p.), professionals (-7.60 p.p.), and technicians (-6.47 p.p.) are less likely to be employed as own-account and contributing family workers than those in elementary occupations.

By sector of economic activity, workers in the <u>manufacturing</u> sector are 6.87 p.p. less likely to be employed as own-account or contributing family workers than those in the <u>primary sector</u>. The probability is 3.15 p.p. lower for those in the tertiary sector than in the primary sector.

The probability of being in a vulnerable employment relation decreases for all levels of educational attainment compared to having no schooling at all. The lowest probability is found among workers with a <u>TVET</u> background (-6.92 p.p.), while the smallest difference is among those who have completed primary school (-2.02 p.p.).

Figure 39: Logistic regression of probability of employment vulnerability on primary job and individuals' socio-economic characteristics

	Employment vulnerability
Female	0.1114
	(0.00)***
Age	0.0028
	(0.00)***
Manager	0.4769
	(0.00)***
Professional	-0.0760
	(0.00)***
Technician	-0.0647
	(0.00)***
Clerk	-0.0887
	(0.00)***
Seller	0.4119
	(0.00)***
Farmer	0.8073
	(0.00)***
Crafter	0.4561
	(0.00)***
Operator	0.4675
	(0.00)***
Rural	0.0216
	(0.00)***
Industry	-0.0687
Comicos	(0.00)***
Services	-0.0315
Drimon, Ed	(0.11) -0.0202
Primary Ed.	-0.0202 (0.00)***
Secondary Ed.	(0.00) -0.0281
Secondary Ed.	(0.00)***
TVET	-0.0692
1 V L 1	(0.00)***
Undergraduate	-0.0235
Shadigiadaate	(0.00)***
Graduate	-0.0314
Ciadalo	(0.00)***
N	91,621
• •	01,021

Note: Author's estimation from pooled Bhutan LFS data (2018-2023).* p<0.1; ** p<0.05; *** p<0.01

Aging also affects the probability of being in a situation of vulnerable employment, although the relationship between these variables varies across genders, as the graph below shows. For the average <u>female</u> worker, the probability steadily increases from 64.95 percent at the age of 15 to approximately 80 percent at the age of 45. Afterward, marginal increases in age have almost no significant effect on the probability of being employed as own-account or contributing family worker.

For the average <u>male</u> worker, the probability of being in a vulnerable employment relationship remains relatively stable at around 55 percent between the ages of 15 and 50. Nevertheless, as men approach retirement age, the likelihood of being employed as own-account or contributing family workers rises, peaking at 62.24 percent at age 63.

%06 80% %02 %09 20 25 35 15 30 40 45 50 55 60 63 Age Male Female

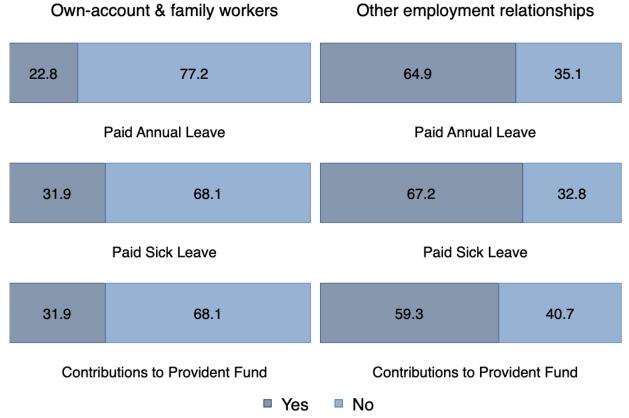
Figure 40: Relationship between probability of employment vulnerability and age by gender

Note: Author's estimation from pooled Bhutan LFS data (2018-2023).

Own-account and contributing family workers enjoy a lower effective social security coverage than workers in less vulnerable employment relations. While only 31.9 percent of the former pay contributions to the Provident Fund, 59.3 percent of the latter do so. Moreover, even though some vulnerable workers are contributing to the social security system, they do not seem to benefit from paid annual leave (22.8%). Conversely, some workers in less vulnerable employment relations might not be contributing to the Provident Fund – or their employers more probably – but they still benefit from paid annual leave (64.9%) and paid sick leave (67.2%). Only 31.9 percent of own-account and contributing family workers benefit from paid sick leave.

The evidence reveals a significant gap in the effective provision of benefits to own-account and contributing family workers compared to those in less vulnerable employment relationships. This underscores the importance of extending legal coverage of minimum social protection floors to all Bhutanese workers to close decent work gaps. Additionally, over 40 percent of workers in regulated employment relationships still do not contribute to the Provident Fund, and approximately one-third do not receive minimum benefits. Government policy must prioritize enforcing existing social protection legislation and employment regulations for those already covered under legal provisions.

Figure 41: Coverage of social security and benefits by type of employment relation, Bhutan 2023



Note: Author's calculation based on Bhutan LFS 2018-2023.

7) Addressing Microeconomic Challenges to Promote the Equitable Distribution of Economic Growth and Employment Among the Bhutanese Population: Main Findings and Policy Recommendations

Main Finding 1: In the last six years, Bhutan has displayed a good macroeconomic performance and started an incipient structural transformation of its economy and labor market.

Bhutan's good macroeconomic performance has translated in a positive labor market outlook over the last six years. The employment-to-population ratio is increasing and there are clear signs of an incipient structural transformation in the labor market towards a more educated workforce, employment growth in skilled occupations, and a shift away from traditional agricultural labor. Nevertheless, there are several issues at the micro level that require policy attention to accelerate the structural transformation of the economy and ensure a fair distribution of its benefits.

Main Finding 2: Employment growth in emerging services and industries has been unevenly distributed among the different layers of the population.

The Bhutanese labor market is shifting away from subsistence agriculture and informal household production towards modern production systems based on skilled services and an emerging manufacturing sector. The industries that are leading employment growth are mainly logistics, public administration, construction, education, hospitality, and trade and automobile repairs.

Nevertheless, there are concerns that, <u>at the micro level, women, rural populations, and less educated workers may be left behind in the modernization of the Bhutanese economy</u>. While facing most redundancies in declining sectors, these groups do not always find new employment opportunities in the emerging industries and services. Women are largely underrepresented among professionals, technicians, operators, and in the armed forces, although their representation among managers is increasingly more balanced.

Policy recommendation:

- 2.1.- Adopting new labor regulations or amending existing **labor legislation to introduce positive discrimination** in favor of women and other marginalized groups, particularly in access to public employment, could mitigate the uneven distribution of emerging jobs. Specific measures could include a <u>certification system for socially responsible businesses</u>, which could be linked to <u>awarding points in tenders for public contracts</u>.
- 2.2.- Encouraging more women to enter and succeed in traditionally male-dominated occupations could help reduce these disparities and contribute to a more equitable workforce. Specific measures could include introducing soft quotas for women in TVET and tertiary education programs that lead to careers in these fields, running sensitization campaigns through social and mass media, and offering publicly subsidized internships and traineeships for women starting careers in these occupations.
- 2.3.- Offering **fiscal incentives to national and foreign investors** willing to start new businesses in rural and isolated areas, conditional on training and employing residents.

2.4.- Providing less-educated workers with lifelong learning opportunities, remedial education, upskilling programs, and job placement opportunities in emerging sectors and occupations could foster a more inclusive economic growth. A portion of the less-educated workforce displaced by the structural transformation of the economy can be temporarily absorbed through <u>public works programs</u>, prioritizing their hiring for <u>local government projects</u> (Salvini & Bolits, 2021).

<u>Main Finding 3: The demand for skilled labor is not creating enough employment opportunities for an increasingly educated labor force.</u>

Bhutan must invest in the creation of skilled jobs to accelerate the structural transformation of the economy and improve the performance of the labor market. The employed workforce has the lowest percentage of individuals with tertiary and secondary education. In contrast, the unemployed population shows a higher level of educational attainment, with a significant proportion holding tertiary degrees. Educational attainment is also higher among the inactive.

Thus, the labor market fails to generate enough jobs suited for highly educated workers, leading to a significant pool of unemployed labor with secondary and tertiary education. The most concerning issue is that highly educated workers may become discouraged after a prolonged, unsuccessful job search and eventually exit the labor force, joining the inactive population. This discouragement effect is even more pronounced among workers with less than secondary education, whose proportion is higher among the inactive than the unemployed.

Policy recommendations:

- 3.1.- Developing and strengthening the enforcement of a **qualification framework linked to a national classification of occupations** so that employers must hire workers with the proper skills and competences for a certain position.
- 3.2.- Enhance the **collaboration and dialogue between higher education centers and industry/business associations**, for example creating <u>membership-based skill networks</u> and establishing <u>Industry Sub-Commissions</u> with representative from higher education centers and the world of work (Agarwal, 2006).
- 3.3.- Facilitate the school-to-work transition through the introduction of compulsory **job-attachment programs and internships in higher education curricula**. It is advised that these programs are managed by higher education centers and paid, although <u>stipends</u> might be subsidized and below the minimum wage to facilitate screening by potential employers.

Main Finding 4: Skill and qualification mismatches remain an important challenge for the optimal allocation of labor.

If the skills, competencies, and knowledge of the labor force do not match those demanded by employers, human capital investment might not produce the expected returns. Overqualification and underqualification of the labor force can hinder socio-economic development by reducing firm productivity growth (Mahy et al., 2015).

Human capital is not only acquired through academic education, but also from formal and informal training. In Bhutan training serves as both an effective activation tool and a steppingstone toward employment. While unemployed workers seem to have equal access to training opportunities regardless of sex or area of residence, the inactive population face some barriers. On the other hand, the unemployed workers and the inactive are transitioning towards more modern and market-driven training, aligning their skills with current economic demands.

Only 31 percent of employed individuals were considered qualified for their job position in 2023. Moreover, underqualification appears to have a discouraging effect, leading individuals to exit the labor force. Underqualification of workers can be problematic not only because it reduces productivity, competitiveness, and slows down economic growth, but also because it reduces workers' capacity to bargain for higher wages and better working conditions. On the other hand, overqualification implies a suboptimal allocation of human capital that also slows down economic growth.

Policy recommendations:

- 4.1.- **Improving the design of ALMPs**, including training programs, by conducting regular and robust impact evaluations, ensuring that they effectively equip workers with the skills and qualification demanded by the labor market, at the lowest possible cost.
- 4.2.- Providing **subsidized integrated re-skilling training programs to the unemployed** registered at PES, which will not only reduce skill mismatches but also increase the size of the labor force. ¹⁷ Complementary interventions, such as <u>business counseling</u>, <u>start-up grants</u>, <u>hiring subsidies</u>, and other measures, should support trained workers in applying their newly acquired skills in the labor market (Palmer, 2017)
- 4.3.- **Strengthening the capacity of PES** to monitor the current and future demand for skills and occupations, as well as employment shortages within economic sectors, and disseminate this information among the working-age population. Specific intervention in this area includes the development of an <u>employment and skill forecasting model</u>, strengthening <u>career counselling and couching</u> at PES, and <u>employment fairs</u> inside and outside education centers.
- 4.4.- Recognizing the skills acquired in the informal economy is crucial for addressing skill mismatches, as many of these may result from the system's inability to identify skills gained through apprenticeships, informal employment, unpaid care work, and similar experiences (Palmer, 2017). In this sense, the Ministry of Education and Skills Development could establish a <u>system of evaluation and certification</u> that acknowledges an individual's competencies based on occupational standards, regardless of how those competencies were obtained (Maurer, 2021).¹⁸

Main Finding 5: Unemployment and long-term unemployment affect a small and decreasing number of active workers, mainly the most vulnerable ones.

More than 75 percent of unemployed workers cannot find a job because of lack of experience or skill/qualification mismatches. Unemployment in Bhutan disproportionately affects women, elderly men, and unskilled and underqualified workers. Special consideration should be given to

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¹⁷ Integrated programs combine income and employment support.

¹⁸ Commonly referred to as the Recognition of Prior Learning (RPL) system.

<u>long-term unemployment</u> because of its consequences in terms of <u>labor market detachment</u>, <u>productivity losses</u>, <u>and deprivation</u> (Krueger et al., 2014; Palát, 2009). Positively, the number of long-term unemployed individuals decreased from 5,484 in 2018 to 2,600 in 2023, despite the general increase in the number of unemployed workers.

Reservation wages exceeding the market equilibrium hinder the matching between labor supply and demand. The average reservation wage among the unemployed in Bhutan is 754 Nu/month below the equilibrium salary, not posing an issue for unemployment duration. Nevertheless, certain workers might bargain for wages above the market equilibrium, staying unemployed for longer periods of time. In particular, highly educated men without occupational preferences looking for employment in a specific type of organizations exhibit reservation wages above the market equilibrium.

There are no significant differences in job-search strategies between men and women, or between unemployed individuals in urban and rural areas. On average, most unemployed people seek jobs by submitting applications and searching on social media. The third most common job-search strategy is registering with the PES, though registration rates are lower in rural areas. This could indicate the presence of barriers to accessing these services in rural communities.

Policy recommendations:

- 5.1.- Implementing the **policy recommendations 4.1, 4.2, 4.3, and 4.4** should enhance skill matching and increase the levels of qualification among jobseekers, leading to a reduction in (long-term) unemployment. In this sense, the <u>PES should prioritize support for the long-term unemployed and other vulnerable workers,</u> like women and the elderly, designing interventions tailored to their needs.
- 5.2.- Although, <u>a restrictive income policy does not seem to be relevant</u> in the Bhutanese context, the government could study the possibility of expanding the **multi-tier minimum wage system** to consider also age, educational attainment, residence, and/or occupation.
- 5.3.- Strengthening the capacity of PES is a cost-effective policy to reduce unemployment and shorten its duration. PES can be designed as <u>one-stop shops</u> to support jobseekers, whether they are looking for employment or trying to start their own business. In Bhutan, the demand for activation support varies significantly depending on the worker's profile. Thus, different PES staff and centers might <u>specialize</u> in <u>different types</u> of interventions based on their clients' needs.

Main Finding 6: Time-related underemployment is still above pre-pandemic levels, disproportionately affecting most vulnerable workers and those with household duties.

The underutilization of the productive capacity of the labor force can be attributed to several factors and materializes in various situations beyond the narrow concept of unemployment. Time-related underemployment, for example, refers to employed persons whose hours of work in the reference period are insufficient relative to a more desirable employment situation in which the person is willing and available to engage (ILO, 2016). In Bhutan, most people in time-related underemployment are women, living in rural areas, over the age of 24 and with no formal schooling.

Family duties are the main reason for not working more hours among underemployed women (61%), while for underemployed men is work availability (67%). Household duties and not gender is the

<u>factor that drives underemployment, increasing its likelihood by 2.98 p.p.</u> Nevertheless, it should be considered that the burden of household duties disproportionately falls on women.

Policy recommendations:

- 6.1.- Introducing time-limited **hiring subsidies** for particularly vulnerable workers conditional on recruitment under <u>full-time contracts</u> with a duration above the subsidized period (Brown & Koettl, 2015).
- 6.2.- **Operationalizing a functional LMIS** to provide information to jobseekers, young people still in education and training, and those looking for a career change can facilitate a <u>transition towards</u> sector and occupations where quality jobs are more common and the rates of time-related underemployment is lower.
- 6.3.- Supporting a **fairer redistribution of household duties** between men and women, as well as between the government and communities. Interventions in this area can include the universalization of accessible and affordable <u>childcare and education</u>, the expansion of <u>day care centers</u> for the elderly, incentives to promote the <u>formalization of unpaid care work</u> embedded in a new domestic work act, and the implementation of <u>social and behavioral change communication</u> campaigns (Organization for Economic Cooperation and Development [OECD], 2019).

Main Finding 7: Moonlighting effectively reduces labor underutilization, particularly among men, but it may lead to excessive overtime for workers who are not experiencing time-related underemployment.

Some workers might resort to moonlighting to increase their weekly working hours and get closer to – or above – the full-time rate. The main reason for moonlighting is to earn more <u>income</u>, regardless of whether workers have a full-time primary job, a part-time primary job, or are underemployed. In Bhutan, <u>90 percent of the employed are willing to work more hours to increase</u> their income.

Men who engage in moonlighting experience a greater increase in their full-time rate compared to women, but they are more severely affected by underemployment. Additionally, moonlighting effectively reduces labor underutilization, raising the full-time rate of underemployed workers to 100 percent. Non-underemployed workers may also engage in moonlighting, with their full-time rate increasing, on average, to 150 percent.

Policy recommendations:

- 7.1.- Offering **fiscal incentives** for hiring underemployed workers in a second part-time job, while disincentivizing full-time workers—and/or their employers—to engage in moonlighting. In this way the government could <u>enhance labor utilization</u> and promote a <u>fairer distribution of employment</u>.
- 7.2.- Promote the regulated introduction and expansion of the **shared and gig economy** by adopting a <u>legal framework</u> that balances flexibility, security, and competition among platforms (Oranburg, 2018). At the same time, the framework should penalize abuses, prohibit exploitation, and prevent tax and social security evasion. Additionally, the government should invest in developing the <u>physical and digital infrastructure</u> necessary to support the growth of platform economies.

Main Finding 8: Average earnings from the primary job have almost double from 2018 to 2023 but working poverty and earning gaps are still matters of concern.

Although average monthly earnings from primary jobs have nearly doubled from 11,570 Nu to 22,220 Nu over the past six years, the earning gaps between men and women, as well as between rural and urban workers, have seen little improvement. The earnings gap between rural and urban workers stands at 51.4 percent, while between men and women at 23.9 percent.

The percentage of working poor in Bhutan is relatively low, around 6.9 percent in 2023, and has shown a downward trend over the last six years. Nevertheless, this issue heavily affects rural workers and farmers, for whom it reaches 13.3 percent of the employed population. The share of the working poor has decreased more among men, from 8.1 percent to 5.9 percent, compared to women, whose rate declined from 9.1 percent to 8.3 percent.

Policy recommendations:

- 8.1.- Implementing **social protection programs** to reduce working poverty.
- 8.2.- Setting **nationally binding salary grids** depending on occupations, experience, and qualifications to reduce gendered and territorial earning gaps.
- 8.3.- Strengthening the **enforcement of wage policies**, promoting **employment formalization**, and allocating more resources to **joint tax-labor inspections** at the workplace.
- 8.4.- Implementing **policy recommendation 2.3** might <u>foster economic and employment growth in rural areas</u> contributing to bridge the earning gap between rural and urban workers.

Main Finding 9: Moonlighting and overtime boost the income of Bhutanese workers, significantly reducing the incidence of working poverty and rising hourly earnings above minimum wages.

When the ERI from all jobs is considered, the percentage of working poor fluctuates between 0.1 and 0.5 percent during the period under analysis. Thus, <u>moonlighting</u> is not only a strategy to avoid time-related underemployment and supplement income but also a last resort for many workers attempting to escape poverty.

Nevertheless, this strategy comes at the cost of widening decent work gaps, resulting in overtime among the not underemployed, as previously seen. More than 50 percent of the employed workers in Bhutan faced overtime every year, except in 2020. Men, rural workers, farmers, and sellers consistently exhibit a proportion of individuals working overtime above the national average.

Policy recommendations:

- 9.1.- Conducting an **ad-hoc study** to gain a deeper understanding of the relationship between moonlighting, labor income inequality, and the redistribution of work.
- 9.2. Implement limits on the **maximum allowable overtime hours**, over which employers must pay **higher hourly rates**, to prevent worker fatigue.

- 9.3. Promote the **development of full-time jobs** with <u>fair working hours</u> and <u>competitive pay</u>, particularly in high-demand sectors or through public employment programs.
- 9.4. Enact legislation that supports **flexible workplace arrangements**, enabling individuals to manage moonlighting more effectively through options like <u>remote work</u>, <u>flexible schedules</u>, and <u>jobsharing initiatives</u>.

Main Finding 10: Decent work gaps in Bhutan remain a pressing concern, driven by the prevalence of involuntary and structural overtime, widespread vulnerable employment, and lack of universal access to social protection

The main reason workers cite for doing overtime is that the job requires it. Thus, overtime seems to be a <u>structural characteristic</u> of the Bhutanese labor market, despite MoICE regulating that the statutory working week shall not exceed 48 hours. Indeed, since employers are not obliged to pay a higher hourly rate for overtime hours except in very exceptional circumstances, the <u>regulation</u> is scarcely effective.

Own-account and contributing family workers, who are in more vulnerable employment relations, earn lower wages than their non-vulnerable counterparts, regardless of the length of the working week. Vulnerable workers consistently accounted for more than 60 percent of total employment during the period of analysis, with their share in agricultural employment exceeding 95 percent.

Less than one third of workers in vulnerable employment are covered by the social security and benefit from paid annual and sick leave, while nearly two thirds of non-vulnerable workers enjoy these rights. It is important to extend the legal coverage of minimum social protection floors to all Bhutanese workers to close decent work gaps, but also to enforce existing social protection legislation and employment regulations.

Policy recommendations:

- 10.1.- Implementing the policy recommendations 9.2 and 9.3.
- 10.2.- Amending **employment protection legislation** to ensure that workers in vulnerable employment have the same rights as those in regular employment.
- 10.3.- Increasing **fines and blacklisting companies** from public procurement opportunities if they fail to meet social security obligations or engage in the use of bogus self-employed workers (ILO et al., 2019).
- 10.4.- Expanding the legal coverage of **minimum social protection floors** to all Bhutanese workers to address decent work gaps, while also <u>enforcing existing social protection laws and employment regulations</u> (ILO et al., 2019).

References

Adalet McGowan, M., & Andrews, D. (2017). Skills mismatch, productivity and policies: Evidence from the second wave of PIAAC. OECD Economics Department Working Papers, No. 1403, OECD Publishing, Paris. https://doi.org/10.1787/65dab7c6-en.

Agarwal, P. (2006). Higher Education in India: The Need for Change. Working Paper, No. 180, Indian Council for Research on International Economic Relations (ICRIER). New Delhi.

Alaref, J., Martinoty, L., Viollaz, M., Bartl, E., Leite, P., & Ndip, A. E. (2024). Bhutan Labor Market Assessment Report. World Bank. License: Creative Commons Attribution CC BY 3.0 IGO.

ADB. (2018). Human Capital Development in South Asia: Achievements, Prospects, and Policy Challenges. https://www.adb.org/sites/default/files/publication/385696/hcd-sa.pdf.

Axelrad, H., Luski, I., & Malul, M. (2017). Reservation Wages and the Unemployment of Older Workers. Journal of Labor Research, 38, 206–227. https://doi.org/10.1007/s12122-017-9247-6.

Barbieri Góes, M. C., & Gallo, E. (2021). Infection Is the Cycle: Unemployment, Output and Economic Policies in the COVID-19 Pandemic. Review of Political Economy, 33(3), 377–393. https://doi.org/10.1080/09538259.2020.1861817.

Brown, S., & Taylor, K. (2011). Reservation wages, market wages and unemployment: Analysis of individual level panel data. Economic Modelling, 28(3), 1317-1327. https://doi.org/10.1016/j.econmod.2011.01.009.

Brown, A.J., & Koettl, J. (2015). Active labor market programs - employment gain or fiscal drain? IZA Journal of Labor Economics, 12 (4). https://doi.org/10.1186/s40172-015-0025-5

Dizon, F., Jackson, C., Adubi, A., & Taffesse, S. (2019). Bhutan Policy Note: Harnessing Spatial Opportunities in Agriculture for Economic Transformation. © World Bank, Washington, DC. http://hdl.handle.net/10986/31530.

Escudero, V. (2018). Are active labour market policies effective in activating and integrating low-skilled individuals? An international comparison. IZA Journal of Labor Policy, 7(4). https://doi.org/10.1186/s40173-018-0097-5.

Fratesi, U., & Perucca, G. (2014). Territorial Capital and the Effectiveness of Cohesion Policies: an Assessment for CEE Regions. INVESTIGACIONES REGIONALES - Journal of REGIONAL RESEARCH, 29, 165-191.

Ghazali, M., & Mouelhi, R. (2018). The Employment Intensity of Growth: Evidence from Tunisia. Journal of Economic Development, 43(3), 85-118.

ILO. (2013). Decent work indicators: guidelines for producers and users of statistical and legal framework indicators (2nd ed.). Geneva: International Labour Office.

ILO. (2016). Key indicators of the labour market (9th ed.). Geneva, International Labour Office.

ILO. (2023). The International Standard Classification of Occupations (ISCO-08) companion guide, Geneva: International Labour Office, 2023.

ILO, UNICEF, & UN Women (2019), Fiscal Space for Social Protection: a Handbook for Assessing Financing Options. Geneva: International Labour Office, 2019.

IMF. (2018). World Economic Outlook, April 2018: Cyclical Upswing, Structural Change. Washington, DC: IMF. https://www.imf.org/en/Publications/WEO/Issues/2018/03/20/world-economic-outlook-april-2018.

Jagódka, M., & Snarska, M. (2023). Regional disparities as a result of differences in human capital and innovativeness on the example of Poland. Technological and Economic Development of Economy, 29(2), 696–716. https://doi.org/10.3846/tede.2023.18536.

Kahn, L. M. (2015). Skill Shortages, Mismatches, and Structural Unemployment: A Symposium. ILR Review, 68(2), 247-250. https://doi.org/10.1177/0019793914564960.

Kluve, J., Puerto, S., Robalino, D., Romero, J., Rother, F., Stöterau, J., Weidenkaff, F., & Witte, M. (2019). Do youth employment programs improve labor market outcomes? A quantitative review. World Development, 114, 237-253. https://doi.org/10.1016/j.worlddev.2018.10.004.

Krueger, A. B., Cramer, J., & Cho, D. (2014). Are the Long-Term Unemployed on the Margins of the Labor Market? Brookings Papers on Economic Activity, 2014(1), 229-299. https://doi.org/10.1353/eca.2014.0004.

L'Horty, Y., & Sari, F. (2018). The role of spatial and skill mismatches: explaining long-term unemployment in Paris. Regional Studies, 53(2), 283–296. https://doi.org/10.1080/00343404.2018.1462480.

Mahy, B., Rycx, F., & Vermeylen, G. (2015). Educational Mismatch and Firm Productivity: Do Skills, Technology and Uncertainty Matter? IZA Discussion Papers, No. 8885, Institute for the Study of Labor (IZA), Bonn.

Maloney, W. F. (1999). Does Informality Imply Segmentation in Urban Labor Markets? Evidence from Sectoral Transitions in Mexico. World Bank Economic Review, 13(2), 275-302. https://doi.org/10.1093/wber/13.2.275.

Maurer, M. (2021). The 'recognition of prior learning' in vocational education and training systems of lower and middle income countries: An analysis of the role of development cooperation in the diffusion of the concept. Research in Comparative and International Education, *16*(4), 469-487. https://doi.org/10.1177/17454999211061244

MoLHR. (2022). Regulation on Working Conditions. Department of Labour, 4th Edition.

NSB. (2024). National accounts statistics 2024. Royal Government of Bhutan. https://www.nsb.gov.bt

NSB & WB. (2017). Bhutan Poverty Analysis Report.

NSB & WB. (2022). Bhutan Poverty Analysis Report.

Ngawang, L., & Sariyev, O. (2022). Impacts of COVID-19 on Agri-Food Value Chains in Bhutan. Bhutanese Journal of Agriculture. https://doi.org/10.55925/btagr.22.5105.

OECD. (2019). "How can promoting shared responsibility within the household address women's unpaid care work?", in Enabling Women's Economic Empowerment: New Approaches to Unpaid Care Work in Developing Countries. OECD Publishing, Paris, https://doi.org/10.1787/ec90d1b1-en.

Oranburg, S. C. (2018). Unbundling Employment: Flexible Benefits for the Gig Economy. Drexel Law Review, 11(1).

Owoo, N. S., & Lambon-Quayefio, M. P. (2018). The Agro-Processing Industry and its Potential for Structural Transformation of the Ghanaian Economy. In R. Newfarmer, J. Page, & F. Tarp (Eds.),

Industries without Smokestacks: Industrialization in Africa Reconsidered (pp. 1-20). Oxford University Press. https://doi.org/10.1093/oso/9780198821885.003.0010.

Palát, M. (2009). Marginalization on the labour market: the case of long-term unemployment. Acta Universitatis Bohemiae Meridionalis, 12(2), 23-31. https://doi.org/10.32725/acta.2009.019.

Palmer, R. (2018) Jobs and skills mismatch in the informal economy. International Labour Office, Geneva, Switzerland.

Rantanen, J., Muchiri, F., & Lehtinen, S. (2020). Decent Work, ILO's Response to the Globalization of Working Life: Basic Concepts and Global Implementation with Special Reference to Occupational Health. International Journal of Environmental Research and Public Health, 17(10), 3351. https://doi.org/10.3390/ijerph17103351.

Resolution concerning statistics of work, employment and labour underutilization, ICLS/21/2023/RES. II, 21st ICLS-ILO (2023).

Roberts, T. (2018). Economic Policy, Political Constraints, and Foreign Direct Investment in Developing Countries. International Interactions, 44, 582-602. https://doi.org/10.1080/03050629.2018.1448806.

Salvini, A., & Bolits, G. (2021). Labour market policies. In E. Schüring & M. Loewe (Eds.), Handbook on social protection systems (pp. 90–104). Edward Elgar Publishing Limited.

Shaikh, P. A., Shaikh, A. A., & Muhammad, F. (2023). Decoding the challenges of promoting decent work in rural and urban labor markets. Pakistan Journal of International Affairs, 6(2). https://doi.org/10.52337/pjia.v6i2.779.

Shirgazina, E. (2022). Bhutan's Hydropower: the Economy Sector and One of the Foundations of the State's Foreign Policy. Problemy Dalnego Vostoka (2), pp.123-135 DOI: 10.31857/S013128120019304-5

