



► ILO Brief

September 2026

Employment implications of the floods in Nepal: A preliminary rapid assessment

Key points

- **The floods have caused a major shock to employment and livelihoods in the affected corridor.** Destruction of homes, workplaces, roads, bridges and energy infrastructure has interrupted economic activity and affected workers' ability to reach jobs, markets and essential services. Around 21,400 employed people are estimated to live within 4 km of the mapped flood footprint, although this should not be interpreted as the number of workers directly affected or jobs lost.
- **Employment effects extend beyond the directly flooded areas.** Damage to transport and electricity infrastructure can transmit the shock through supply chains, market access and connected services, affecting enterprises and workers whose workplaces were not themselves damaged.
- **Tourism, agriculture, transport and small enterprises face particularly important livelihood pressures.** Workers dependent on the Rasuwa-Langtang tourism corridor, smallholders and agricultural workers, transport workers, and micro and home-based enterprises may face reduced earnings, interrupted work and difficulties accessing markets, inputs and customers.
- **Disruption to Nepal-China trade could affect employment and incomes beyond the flood-affected areas.** Rasuwa and Tatopani accounted for around 22 per cent of Nepal's imports from China in 2025-26, while Rasuwa handled nearly half of its exports to China. An estimated 392,400 people work in selected industries and occupations in Bagmati Province potentially exposed to these trade disruptions. This includes workers who may not depend on the affected crossings and does not represent expected employment or income losses. Actual effects will depend on the duration of disruption, alternative trade routes and enterprises' capacity to adapt.
- **Recovery and reconstruction provide an opportunity to protect livelihoods while generating decent employment.** Immediate income and enterprise support should be combined with employment-intensive reconstruction, job matching and skills development, occupational safety and health, and measures to strengthen social protection and resilience to future shocks.

► Introduction

Flood context and scope of the brief

On 26 August 2026, a catastrophic flash flood swept down the Bhote Koshi–Trishuli corridor from the China border into Rasuwa, Nuwakot and Dhading and farther downstream, causing severe human and economic damage: significant loss of life, the displacement of tens of thousands, and the destruction of roads, bridges, hydropower plants, formal and informal businesses and the main overland trade route to China. As of 24 September, the Government of Nepal reported 1,451 casualties, 5,786 people still missing and 13,784 rescued.¹ The Government's Rapid Damage and Needs Assessment (RDNA) puts physical damage at about US\$ 1.8 billion, economic losses at US\$ 883 million, and reconstruction needs at approximately US\$ 4.78 billion. The disaster affected some 7,570 houses and 32,933 people, 55 km of roads, 105 bridges, about 1,806 hectares of agricultural land, and 13 hydropower projects, one solar plant and two transmission lines representing 783 MW of generation capacity.²

The most immediate and direct channel of impact on the labour market is the direct loss or disruption of jobs and livelihoods within the flood-affected areas. At the same time, the flood struck several sectors important for productive employment and local livelihoods: the cross-border trade corridor and the transport and logistics jobs built around it; the Langtang and Kailash tourism economy and its hotels, guides and small enterprises; and a cluster of hydropower projects that had been driving the country's industrial growth and electricity-export ambitions. Damaged power generation, a severed trade corridor, or lost tourism activity can transmit employment and income effects through supply chains, electricity

supply and connected services to workers elsewhere in the country.

This disaster has occurred at a time when the economy was only beginning to stabilise. After several difficult years, Nepal had regained a measure of macroeconomic stability: inflation had eased to a record low of about 1.7 per cent, foreign-exchange reserves covered more than 18 months of imports, and the immediate crisis conditions of earlier years had receded.³ But that stability had not yet translated into stronger growth or job creation, and the flood now threatens to dampen a still-fragile recovery, with growth already projected at only about 2.3 per cent in FY2025/26.

This brief provides a preliminary assessment of the disaster's impact on employment and livelihoods and assesses it in the context of the pre-existing structural vulnerabilities of Nepal's labour market. The analysis presented in this brief considers potential labour market impacts in and around the flood-affected areas, as well as potential impacts through disruptions to cross-border trade. Impacts through other channels are assessed and discussed qualitatively.

Flood footprint and population exposure

The distinctive feature of this flash flood is the distance it travelled through the valley floor, originating in a sparsely populated mountainous region and extending into more densely populated areas. The flash flood travelled nearly 100 km, from the glacier to the municipality of Kalleri.⁴

As the flood moved through the narrow valley, the flooded area remained relatively limited in size. The total flooded area covers 37 km² including 31 km² in Nepal alone. Of that area, Rasuwa accounts for 19.5 km², Nuwakot 11 km² and Dhading 0.5 km². The population permanently residing in the flooded area amounts to about 6,700

¹ Government of Nepal, Ministry of Finance, *Rasuwa–Bhotekoshi Flood Update: Rescue & Relief*, updated 24 September 2026 <https://mofnepal.github.io/rasuwa-flood-update/en/rescue/>

² Government of Nepal, Ministry of Foreign Affairs, Daily Situation Update on Bhote Koshi River Floods – 06 September 2026, <https://mofa.gov.np/content/1878/daily-update-6-september-2026/>

³ World Bank, *Nepal Development Update*, April 2026, <https://www.worldbank.org/en/country/nepal/publication/nepaldevelopmentupdate> ;

International Monetary Fund (IMF), IMF Executive Board Concludes the 2026 Article IV Consultation with Nepal and Completes the Seventh Review under the Extended Credit Facility, Press Release No. 26/188, 8 June 2026, IMF 2026 Article IV / ECF review (June 2026): <https://www.imf.org/en/news/articles/2026/06/08/pr26188-nepal-imf-exec-board-concludes-2026-article-iv-consult-completes-seventh-review-ecf>

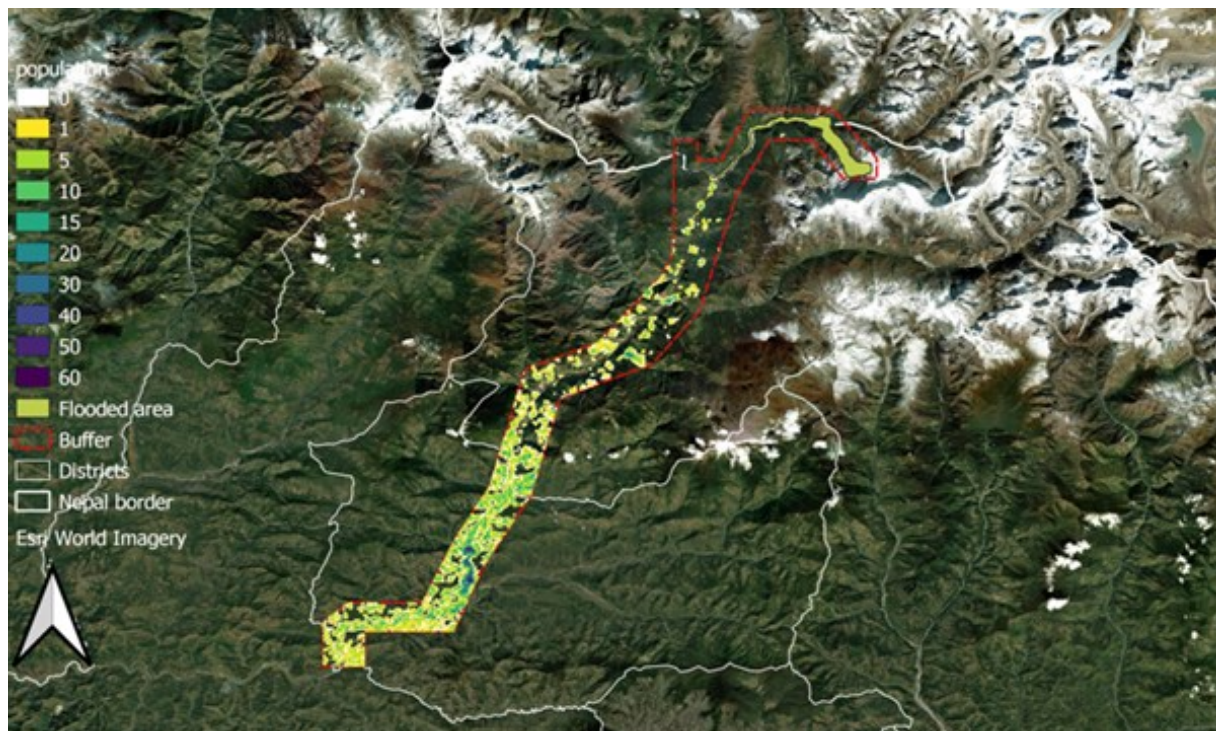
⁴ The main characteristics of the area impacted is based on the flood extent produced by UNOSAT product 4258: <https://unosat.org/products/4258>

people: 5,100 in Nuwakot, 1,500 in Rasuwa and 40 in Dhading.⁵ However, the number of people present at the time of disaster is likely to have been higher, including workers on hydropower construction sites, as well as tourists.

Beyond those residing within the mapped flood area, the population in the surrounding area is significantly larger, reaching approximately 73,000 inhabitants living within a

4-kilometer buffer around the flooded area.⁶ The distribution across the three districts is 52,460 in Nuwakot, 19,400 in Rasuwa and 1,040 in Dhading. This surrounding area is used below to provide an indicative measure of potential local employment exposure; it should not be interpreted as the number of people or workers directly affected by the flood (see Figure 1, where the dashed-red polygon represents the surrounding area, and the colored pixels represent the population).

► **Figure 1: Area and population impacted**



Note: This figure displays gridded population data at a resolution of 100m as well as both the flooded area and a 4km buffer around the flooded area.

Source: Flooded area: UNOSAT 4258, population: WorldPop gridded-population data at 100m resolution for the year 2026.

⁵ The population residing in the flooded area comes from the combination of UNOSAT layer of flooded area (<https://unosat.org/products/4258>) and WorldPop gridded-population data at 100m resolution for the year 2026 (<https://hub.worldpop.org/geodata/listing?id=135>). Details about WorldPop methodology can be found here: Bondarenko M., Priyatikanto R., Tejedor-Garavito N., Zhang W., McKeen T., Cunningham A., Woods T., Hilton J., Cihan D., Nosatiuk B., Brinkhoff T., Tatem A., Sorichetta A.. Constrained estimates of 2015-2030 total number of people per grid square at a resolution of 3 arc (approximately 100m at the equator) R2025A version v1. Global Demographic Data Project - Funded by The Bill and Melinda Gates Foundation (INV-045237). WorldPop - School of Geography and Environmental Science, University of Southampton. DOI:10.5258/SOTON/WP00839. There are minor discrepancies in the count of affected people between the reports by UNOSAT and the RDNA published by the Government. These are due to methodological differences.

⁶ The surrounding area is defined by a 4km buffer around the flooded area and is similar to the UNOSAT analysis extent. The main populated places in the vicinity of the flooded fall within this 4km buffer given the mountainous relief of the region.

Labour market context before the flood

Nepal entered the disaster with structural labour-market vulnerabilities that heighten workers' and households' vulnerability to employment and income shocks. The Nepal Living Standards Survey IV (NLSS-IV) 2022/23, the latest available source of comprehensive labour market information for Nepal, reports an employment-to-population ratio of 32.4 per cent, with a wide gender gap: 46.7 per cent for men and 20.8 per cent for women (see Figure 2).⁷ For comparison, the employment-to-population ratio for Asia and the Pacific was 57.6 per cent in 2022.⁸

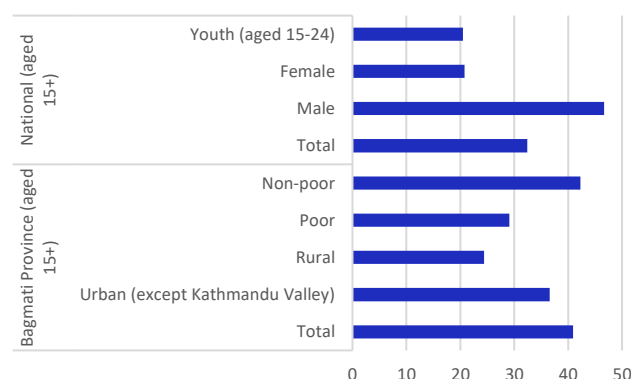
The NLSS-IV reports that 86.7 per cent of employment is non-agricultural and that self-employment accounts for about 24.5 per cent of employment. The relatively low measured share of agriculture in employment partly reflects changes in statistical definitions: under the current international definition, subsistence own-use production is not classified as employment. These figures are therefore not directly comparable with older estimates showing a larger role for agriculture in livelihoods.⁹

Informality remains a central vulnerability. The most recent dedicated Nepal Labour Force Survey 2017/18 estimated that 84.6 per cent of employed people were in informal employment, rising to 90.5 per cent among women. Although this estimate predates the flood by several years, it remains useful for understanding the limited contractual, social-insurance and income buffers available to many workers.¹⁰ As a result, interruptions to

economic activity can translate rapidly into lost earnings even where they do not result in job losses.

Labour-market conditions also vary considerably within and across provinces. Bagmati Province, which includes the flood-affected districts as well as Kathmandu Valley, has a higher employment rate (40.9 per cent) and higher labour force participation rate (45.1 per cent) than the national average (NLSS-IV, 2022-23). However, provincial averages mask substantial heterogeneity: employment rates differ markedly between poor (29.1 per cent) and non-poor (42.3 per cent) populations and between rural (24.4 per cent) and urban (35.3 per cent) areas. This heterogeneity should be borne in mind when applying provincial labour-market indicators to the population surrounding the flood-affected area.

► **Figure 2: Employment-to-population ratio, Nepal and Bagmati province, 2022/23**



Source: Nepal Living Standards Survey IV 2022/23.

► Direct employment and livelihood exposure

Local employment exposure

Based on the population estimate of about 73,000 people living within 4 km of the mapped flood footprint, together with the national age structure to estimate the population aged 15 years and above, and employment-to-population ratios for Bagmati Province, roughly 21,400 employed people are estimated to live within this surrounding area,

comprising approximately 12,840 men and 8,560 women. The estimate provides an indication of potential local employment exposure; it should not be interpreted as the number of jobs directly exposed to the flood or as an estimate of jobs lost.

Actual direct employment effects may differ from this estimate in both directions. The estimate may include

⁷ Nepal - Nepal Living Standards Survey 2022-2023, Fourth round

⁸ Source: ILO modelled estimates, November 2025.

⁹ NLSS-IV uses the current employment definition adopted from the 19th International Conference of Labour Statisticians: employment covers production for pay or profit and does not count subsistence own-use production as employment. The report itself cautions that indicators using the new concepts are not directly comparable with earlier NLSS rounds. For more info, see <https://microdata.nsonline.gov.np/index.php/catalog/149/related-materials>

¹⁰ Nepal - Nepal Labour Force Survey 2017-2018, Third Round

residents whose workplaces and incomes were unaffected, while excluding non-resident workers present at hydropower sites, construction sites, transport hubs, hotels and pilgrimage routes.

Infrastructure damage as an amplifier of employment impacts

The estimate of local employment exposure presented above provides an indication of the number of workers living in the area surrounding the flood footprint, but it does not capture the full scale of the flood's potential effects on employment and livelihoods. The destruction of buildings and critical infrastructure creates additional channels through which the shock can affect economic activity. Damage to commercial premises removes workplaces and productive assets; damage to power infrastructure can disrupt production and services beyond the directly affected settlements; and the loss of roads and bridges constrains the movement of workers, goods and customers. Infrastructure damage therefore acts as an amplifier of the initial shock, transmitting the effects of the flood from directly affected households and enterprises to the wider local and regional economy.

These effects are particularly important in the Bhote Koshi-Trishuli corridor, where settlements, enterprises and critical infrastructure are concentrated along a narrow valley with limited alternative access. The consequences of physical destruction therefore extend beyond the value of the assets lost: they affect whether businesses can reopen, workers can reach jobs, producers can access markets and inputs, and economic activity can resume.

Buildings and commercial premises: destruction of workplaces and livelihood assets

The scale of physical destruction is evident in the damage to buildings. Of the 4,458 buildings located within the flooded areas have been reported as damaged, 4,021 – around 90 per cent – were reported as damaged: 3,490 in Nuwakot, 506 in Rasuwa and 25 in Dhading. Some settlements were particularly severely affected, including Syapru Besi, south of the Chinese border (Figure 3a). In larger settlements such as Bidur, buildings close to the river sustained extensive damage, particularly in the northern area of the city (Figure 3b).

► **Figure 3: Buildings damaged**

a. Syapru Besi



b. Bidur



Note: Figures 2a and 2b illustrate buildings damaged by the flash flood. Panel a shows damage in Syapru Besi while panel b shows damage in Bidur. Red dots indicate damaged buildings as reported by UNOSAT. The light green polygon represents the flooded area. Source: Flooded area UNOSAT 4258, damaged buildings: COPERNICUS EMSR 927.

Most buildings within the flooded area are residential, but commercial buildings were also affected, including banks, hotels and restaurants, and retail shops, as well as public facilities such as police stations and schools. At least seven schools were located within the flooded area.¹¹

The employment implications therefore extend beyond the loss of housing. For many households and small enterprises, the same buildings also constitute workplaces, stores of inventory and productive assets. Their destruction can interrupt business activity immediately and, particularly where enterprises lack

¹¹ Based on open street maps points of interests <https://download.geofabrik.de/>.

insurance, savings or access to finance, prolong the loss of income well beyond the duration of the flood itself.

Damage to commercial premises can also generate wider local effects. The closure of shops, accommodation establishments, restaurants, banks and other services reduces demand for wage and casual labour and interrupts the networks of suppliers, customers and service providers on which surrounding economic activity depends. Destruction of public facilities can further slow recovery by constraining access to the services required by households and businesses.

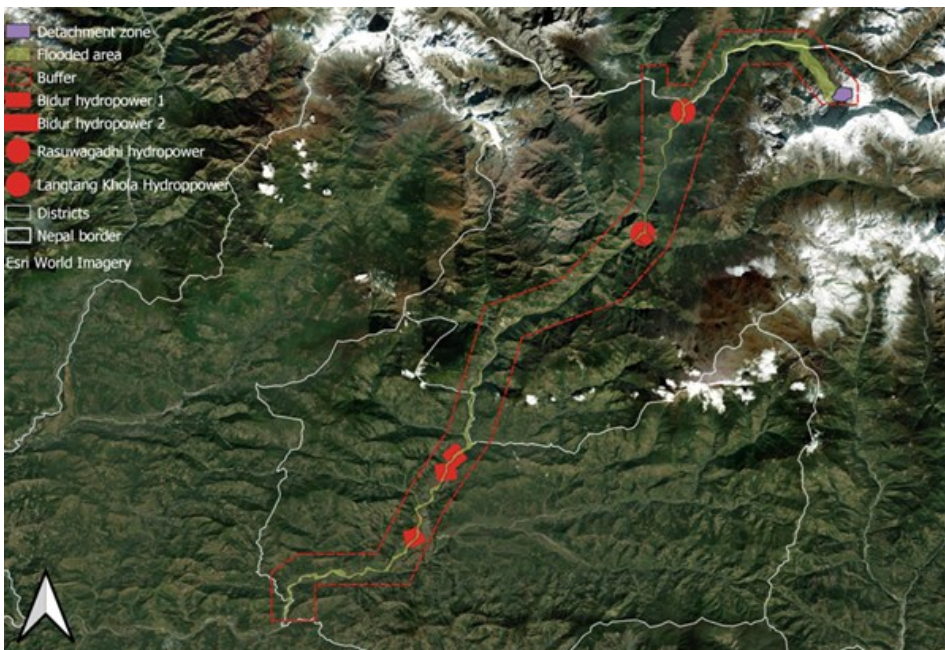
Hydropower and electricity infrastructure: disruption to production and connected economic activity

Hydropower is both Nepal's main source of electricity and an increasingly important source of export earnings. The Bhoite Koshi–Rasuwa corridor is among the country's important hydropower production zones, meaning that flood damage to generation and transmission infrastructure can have effects beyond the affected

districts. Situation reports indicate that several hydropower facilities, including Rasuwagadhi, Rasuwa–Bhotekoshi, Chilime, Langtang Khola and several Trishuli projects, were damaged (see Figure 4). In total, hydropower and solar facilities with a combined installed capacity of 783.385 MW, together with substations and transmission lines, were affected.

Because these plants feed Nepal's integrated national grid rather than dedicated local users, disruptions can have system-wide effects rather than being confined to the affected districts. Estimates of the generation capacity lost range from approximately 360 MW to 550 MW prompting the Government to suspend electricity exports and arrange imports from India to cover domestic shortfalls.¹² The employment relevance is therefore twofold: the direct disruption of work at the damaged facilities and among their contractors, and the wider risk that reduced or less-reliable national electricity supply constrains electricity-dependent enterprises across the economy until capacity is restored. This second-order effect is potentially important but not readily quantified.

► **Figure 4: Hydropower stations impacted**



Note: This figure displays the location of the dams and hydropower stations damaged by the flash flood based. Source: Flooded area UNOSAT 4258, damaged hydropower stations: COPERNICUS EMSR 927

¹²Reported estimates of the generation capacity affected vary. Nepal's Ministry of Energy put the figure at roughly 360 MW, or about 8 per cent of installed capacity (Outlook Business, "Nepal May Turn to India for Power after Floods Wreck Hydropower Projects", 27 August 2026, <https://www.outlookbusiness.com/news/nepal-may-turn-to-india-for-power-after-floods-wreck-hydropower-projects>), while officials from India's Ministry of Power cited a 550 MW reduction in Nepal's domestic generation (Business Standard, "India Geared Up to Supply More Power to Nepal amid Flash Floods", 30 August 2026, https://www.business-standard.com/india-news/india-to-supply-advance-power-to-nepal-to-cope-with-flash-flood-tragedy-126083000415_1.html). The figures should therefore be read as a range (roughly 360–550 MW, or 8 per cent–13 per cent of installed capacity) reflecting evolving, still-preliminary assessments rather than as conflicting precise estimates.

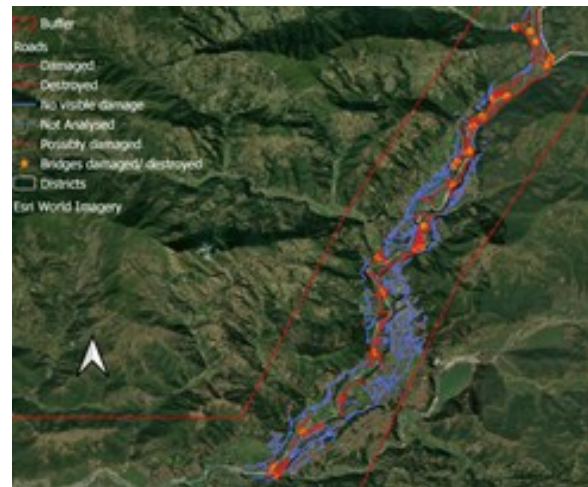
Roads and bridges: connectivity, market access and mobility

Damage to roads and bridges is likely to be one of the most persistent channels through which the disaster affects livelihoods. Transport infrastructure is not simply another damaged sector: it determines whether workers can reach workplaces, firms can obtain inputs, farmers can reach markets, tourists can access destinations and traders can move goods. The loss of connectivity therefore magnifies employment and income effects across multiple sectors simultaneously.

Direct effects fall on drivers, freight handlers, transport operators and other workers whose earnings depend on movement along the corridor. Indirect effects are considerably broader. Businesses cut off from suppliers or customers may operate below capacity or suspend activity; producers may face higher transport costs or be unable to market perishable output; workers may lose working days because workplaces cannot be reached; and tourism and cross-border trade can remain constrained even where individual establishments themselves escaped physical destruction. The flood caused extensive damage to the road network, with potentially significant consequences for connectivity, trade costs and economic activity. The scale of transport damage is illustrated by three areas: Bidur, Syapru Besi and Rasuwagadhi at the Chinese border.¹³

In Bidur, around 50 km of roadways within the flooded area were identified as damaged or destroyed, accounting for 41 per cent of the city's main road network. Bridge damage may pose a particular constraint to recovery because replacement can be more costly and time-consuming than road repairs and the loss of key crossings can severely restrict local connectivity. In Bidur, 24 bridges were reported destroyed and two damaged. In Syapru Besi, 7.6 km roads were damaged, accounting for 66 per cent of the main road network. The flash flood also destroyed five bridges in this locality. In Rasuwagadhi, where the flash flood first entered Nepal, all 9.5 km of mapped roads were identified as destroyed, together with the bridge over the Trishuli River.

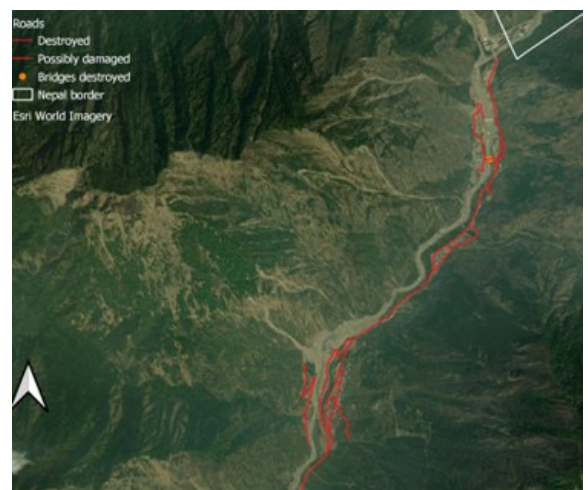
► Figure 5: Roads and bridges impacted
a. Bidur



b. Syapru Besi



c. Rasuwagadhi



Source: Flooded area UNOSAT 4258, damaged roads/bridges: COPERNICUS EMSR 927

¹³ Damaged roads are based on Copernicus EMSR927: <https://mapping.emergency.copernicus.eu/activations/EMSR927/>

Taken together, the destruction of buildings, energy infrastructure and transport networks means that the employment effects of the flood cannot be inferred from the number of workers physically located within the flood footprint alone. Some workers have lost their workplace or productive assets directly; others may retain their workplace but face interruptions to electricity, inputs, transport, customers or market access. The resulting adjustment may take the form of temporary work stoppages, fewer hours worked, reduced earnings and sales, weaker demand for casual labour or, where disruption is prolonged, employment losses. These transmission channels provide the basis for examining the sector-specific effects on trade, tourism, agriculture and other economic activities in the sections that follow.

Early indicators of economic contraction

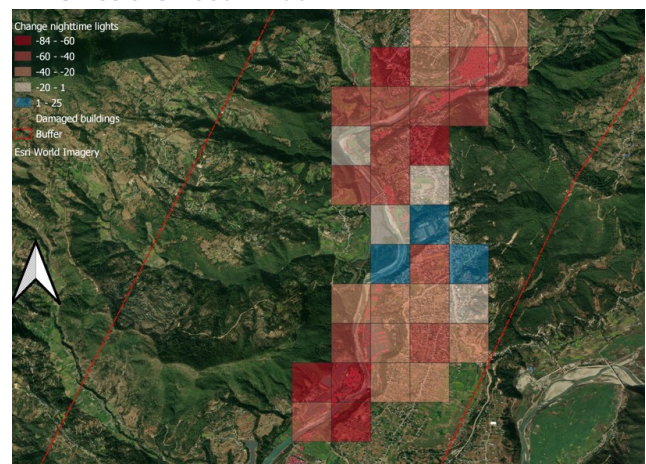
It is challenging to track the economic impact of the flood in near real time, given the difficulty of producing economic indicators quickly and the costs involved. However, daily satellite imagery can provide a useful alternative, as it may detect changes that reflect economic activity as it unfolds. In particular, nighttime light intensity is widely used as a proxy for economic activity in development economics and is available at a daily frequency.

There are 15 available nighttime light images since the flood occurred. We illustrate below the percentage decline in nighttime light intensity before and after the flood for the city of Bidur. The decline ranges from -10 percent to -80 percent (shown in red in Figure 6). The decline in

nighttime light intensity across most pixels is broadly consistent with the pattern of building destruction. This variation is indicative of changes in electricity consumption and, potentially, economic activity. While most pixels show a decline in light intensity, three pixels show an increase in light intensity (shown in blue), maybe due to population movement.

The short time span over which this decline is measured does not imply that local GDP will decline by a similar magnitude. In particular, while we can expect a sharp decline in economic activity immediately after the event, the medium- and long-term consequences will depend on the pace and shape of the recovery, as well as on reconstruction efforts.

► **Figure 6: Percentage variation in nighttime light since the flood - Bidur**



Source: Blackmarble VNP46a2

► Sectoral and worker-level exposure

Tourism and related services

The flood damaged the access corridor through Syabrubesi, the principal gateway for the Langtang and Gosaikunda trekking areas and the Tamang Heritage Trail, and disrupted the overland Kailash-Manasarovar route through Rasuwagadhi. Employment exposure is therefore concentrated among workers and enterprises dependent on tourism along the affected corridor, including guides, porters, lodge and teahouse workers, hotels, restaurants, homestays, shops and local transport providers.

The impact should not be interpreted as a national tourism shutdown. Other major destinations lie outside the affected corridor, and some Langtang-area trekking may be possible through alternative approaches as safety and access permit. The main employment risk is therefore concentrated among workers and enterprises that depend specifically on access through Rasuwa and Langtang, particularly where disruption coincides with the autumn tourism season.¹⁴

¹⁴ The Kathmandu Post, "Oft-battered Langtang Valley cut off after Rasuwa floods", 2 September 2026, <https://kathmandupost.com/national/2026/09/02/oft-battered-langtang-valley-cut-off-after-rasuwa-floods>

Agriculture, livestock and food supply chains

The RDNA estimates that around 1,806 hectares of agricultural land were affected. Beyond direct farm losses, employment and livelihood exposure can arise through disrupted access to inputs, markets and transport. Disruption to cross-border trade may affect the availability or cost of agricultural inputs (as discussed further below), while damaged local roads can prevent farmers and traders from moving products to market. For smallholders, agricultural labourers and own-account workers, losses of standing crops, livestock, irrigation or productive equipment, together with disrupted market access, can translate rapidly into income and food-security stress. Recovery support should therefore distinguish replacement of productive assets from restoration of input and marketing supply chains.

Micro and small enterprises and local services

Local shops, hotels, transport businesses, workshops, traders and other micro and small enterprises face a combination of physical asset loss, reduced customer demand, higher logistics costs and working-capital pressures. For firms dependent on traded goods and inputs, these pressures may be compounded by disruption to the cross-border corridors (as discussed further below). Some surviving businesses may also face labour shortages where workers have been displaced or migrated.

The Government's Business Recovery Plan - Phase 1 has already introduced 18 measures covering customs relief, tax concessions, loan restructuring and concessional finance, and insurance claims and compensation.¹⁵ An important employment consideration is the extent to which these measures reach affected firms and workers, particularly unregistered and home-based enterprises, and support job retention as well as asset replacement.

Public services, care and gendered impacts

Damage to government offices, education, health and local infrastructure affects public-service workers and can increase unpaid care demands on households. The labour-market consequences are therefore not fully captured by changes in paid employment. Women may experience

losses in paid or home-based work at the same time as higher caregiving and household-recovery burdens, while access to cash assistance, finance, documentation and employment programmes may differ by sex and household status.

These effects underline the importance of considering employment and earnings alongside unpaid care constraints and access to recovery support when assessing the distribution of the flood's labour market impacts.

Workers and livelihoods at heightened risk

The consequences of these disruptions are likely to be uneven across different groups and workers. Daily-wage, casual and informal workers may face immediate earnings losses when economic activity is interrupted, while own-account workers and micro- and home-based enterprises may have limited savings, insurance or working-capital buffers. Internal migrant and foreign workers employed at hydropower, construction and transport sites may face additional vulnerabilities, particularly where they are not captured in residence-based data or local registries. Workers and enterprises dependent specifically on the Rasuwa-Langtang corridor may face concentrated seasonal income losses. Women workers may face the combined effects of lost paid work and increased unpaid care responsibilities. Young workers and others displaced from their usual labour markets may face difficulties accessing alternative employment. Severe household income losses may also increase the risk of child labour as a negative coping strategy, underscoring the importance of maintaining adequate income protection and continuity of schooling during the recovery period.

¹⁵ Government of Nepal, Ministry of Finance, "Government initiatives – MoF Rasuwa–Bhotekoshi Flood Update", updated 22 September 2026, <https://mofnepal.github.io/rasuwa-flood-update/en/initiatives/>

► **What previous floods did to livelihoods**

Nepal's National Climate Change Survey 2022 found that flood-affected households reported an average of 5.4 working days lost, rising to 9.6 days in the mountain belt; 40.9 per cent reported an economic loss; and 18.7 per cent reported food scarcity. These are household self-reports over a five-year recall period, not estimates of current job losses. They nevertheless illustrate the channels through which flood shocks can reduce work and income.¹⁶

terms, disruption to cross-border trade permits a more detailed assessment of potential employment exposure. The following section therefore examines the employment base in activities through which disruption to the Rasuwa and Tatopani corridors could be transmitted.

While the sectoral and worker-level effects described above can currently be assessed mainly in qualitative

► Potential employment and livelihood exposure from disruption to Nepal-China trade

The disaster severely affected Nepal's northern transport infrastructure, disrupting trade through key overland corridors with China, with potential economic and labour-market consequences extending beyond the areas directly affected. Disruption along the Rasuwa corridor, combined with constraints at Tatopani, affects two important overland gateways for Nepal's trade with China. Beyond the immediate effects on workers and enterprises involved in transport, cargo handling and border-related activities, the shock can be transmitted to other parts of the economy through delayed shipments, shortages or higher costs of imported goods and production inputs, and reduced access to the Chinese market for Nepalese exporters.

The two crossings are particularly important for bilateral imports from China. Together, they accounted for 4.45 per cent of Nepal's total imports and 21.93 per cent of imports from China in 2025-26. On the export side, Rasuwa accounted for around 0.28 per cent of Nepal's total exports but 47.27 per cent of Nepal's exports to China, while the available Tatopani data indicate no exports through that crossing.¹⁷

Trade through the affected crossings encompasses a diverse range of goods, creating several channels through which disruption may affect employment. Imports include electrical and telecommunications equipment, garments

and footwear, construction materials, machinery, vehicles and agricultural products. Exports through Rasuwa include carpets, handicrafts, woollen textiles, medicinal herbs, instant noodles, copper utensils and agricultural products. Disruption to these flows could therefore affect not only transport and border-related employment, but also workers and enterprises involved in wholesale and retail trade, construction, manufacturing, agricultural processing and other activities linked to imported inputs and export markets.

Identifying potentially exposed activities

To identify employment potentially exposed to this disruption, the analysis links the composition of trade through Rasuwa and Tatopani to corresponding industries and occupations. Three broad transmission channels are considered: (i) direct exposure among transport, warehousing, cargo-handling and related logistics activities; (ii) import-side exposure among selected trade and downstream activities potentially dependent on goods and production inputs entering through the two crossings; and (iii) export-side exposure among selected activities associated with products exported to China through Rasuwa. The Annex provides details of the methodology and its limitations.

¹⁶ Government of Nepal, National Statistics Office, Analytical Report of National Climate Change Survey, 2022, 18 April 2024, <https://microdata.nsonline.gov.np/index.php/catalog/157/related-materials>

¹⁷ ILO calculations based on Nepal Department of Customs foreign-trade data and customs-point trade values in 2025-26. See Government of Nepal, Department of Customs, *Foreign Trade Statistics, FY 2082/83*.

Estimating potential employment exposure

Applying this approach to Nepal Living Standards Survey 2022/23 (NLSS-IV) microdata identifies employment in selected activities in Bagmati Province equivalent to approximately 5.2 per cent of total employment in Nepal, or about 392,400 workers when expressed in terms of estimated 2026 employment. Of this total, around 9,800 workers are associated with direct transport and logistics activities, 291,200 with import-related activities and 91,400 with export-related activities (see Annex, Table 1).

These figures measure potential exposure, not employment impacts. They should not be interpreted as estimates of job losses or as the number of workers actually dependent on trade through Rasuwa or Tatopani. Because the analysis includes workers in selected industries and occupations without adjusting for the share of their activity dependent on China or the affected crossings, the estimates include workers whose employment may have little or no connection to these trade corridors. Conversely, workers outside Bagmati or the selected activities may also be exposed. The figures therefore indicate the scale of employment in potentially exposed activities, rather than the number of workers likely to experience adverse effects (see Annex).

The disruption of Rasuwa and Tatopani does not necessarily imply an equivalent reduction in Nepal-China

trade. Some cargo may be diverted through alternative border crossings or other routes, or may be held up temporarily. However, not all trade can be diverted immediately or at the same cost. The feasibility and cost of rerouting will depend on alternative corridors' connectivity, border and customs capacity, cargo-handling infrastructure and the characteristics of the goods.

Even where goods reach their destination, rerouting can increase transport and transaction costs and delay shipments. Importers may face temporary shortages of merchandise or production inputs, while exporters may experience delays in fulfilling orders, potentially disrupting production and sales and reducing enterprise margins.

These enterprise-level effects can translate into adverse outcomes for workers without necessarily resulting in job losses. Adjustment may instead occur through fewer hours or days worked, temporary interruptions to work, reduced overtime, lower earnings, delayed wage payments, weaker demand for casual and daily labour, or reduced hiring. Own-account and other self-employed workers may similarly experience fewer customers, lower sales or reduced income.

The extent of these effects will depend on the duration of disruption, the availability and cost of alternative trade routes, and enterprises' capacity to adapt. Prolonged disruption could result in more substantial employment and livelihood losses.

► Next steps: Supporting employment and livelihood recovery

The employment response should be sequenced around the recovery timeline and use existing delivery systems wherever feasible. The Government's Business Recovery Plan is already in force, while the UN and humanitarian partners have launched a four-month US\$ 49.6 million appeal to support more than 84,000 people.¹⁸ On 11 September, the Government of Nepal released the Rapid Damage and Needs Assessment (RDNA) for the Rasuwa-Bhotekoshi Flood 2026, estimating total recovery and reconstruction needs at more than US\$ 4.7 billion. If effectively linked to local labour demand, reconstruction

at this scale could provide an important source of employment during the recovery period.

Against this backdrop, the employment and livelihood response should combine immediate income and livelihood protection with measures to support employment-intensive recovery, enterprise continuity and longer-term resilience.

Immediate response

1. Protect household income: Use the Social Security Allowance (SSA) system as one established

¹⁸ [Nepal floods: UN and partners launch \\$49.6 million emergency appeal | United Nations in Nepal](https://mofnepal.github.io/rasuwa-flood-update/en/initiatives/); <https://mofnepal.github.io/rasuwa-flood-update/en/initiatives/>

payment channel where feasible, but do not rely only on the existing beneficiary roster. Temporary geographic expansion, relaxed eligibility where legally possible, and mobile registration/verification teams can reduce exclusion of newly affected households and informal workers. The registration of workers who have lost work or income, including informal, own-account, displaced and migrant workers are crucial in this regard. |

2. Protect workers and responders during emergency operations through adequate risk assessment, safe work procedures, and a strong supervision system.
3. Provide rapid livelihood and enterprise continuity support in form of grants or asset kits, particularly for MSMEs. Assist affected firms and workers to access the Government's tax, credit and insurance measures and simplify documentation where records have been lost. Additional measures to protect employment in MSMEs, such as wage subsidies could be explored.

Early recovery

4. Turn reconstruction spending into local employment. Use the NEPP minimum-employment window and municipal Employment Service Centres, where appropriate, to support debris clearance, local recovery works and other labour-intensive works.¹⁹
5. Build decent-work safeguards into every public work and contract. Recovery employment should include fair and timely wages, clear employment/contractor arrangements, social-protection and compensation referrals, appropriate worker accommodation, protection of migrant and subcontracted workers, child-labour safeguards, and OSH requirements embedded in procurement and supervision.
6. Match displaced workers to recovery demand. Recovery will create demand for construction workers, drivers, electricians, mechanics, hospitality workers and other skills. Employment

Service Centres can support job matching, skills recognition and short-cycle training, including for returnee migrants and workers displaced from the affected corridor.

7. Restore sector-specific livelihood systems. For agriculture, prioritise irrigation, tools, livestock shelters and supply chains for seeds, fertiliser and other inputs. For tourism, support safe access, local enterprise reopening and alternative work during the lean period. For transport and trade, target workers and small firms whose earnings remain constrained even as traffic is rerouted.

Medium-term recovery and resilience

8. Institutionalise shock-responsive social protection. Establish pre-agreed triggers, financing and delivery protocols for vertical top-ups and temporary horizontal expansion after disasters, while improving interoperability across social assistance, employment and disaster registries.
9. Rebuild infrastructure and enterprises for resilience and safer work, promoting employment-intensive reconstruction²⁰. Integrate climate and disaster risk reduction, accessibility and OSH into engineering design, procurement, contractor management and maintenance rather than treating them as add-ons after works begin.
10. Strengthen labour inspection and preventive capacity for reconstruction. Risk-based inspection, preventive guidance and coordination with disaster-management and health authorities can help ensure that the rapid scale-up of construction does not produce new occupational injuries and labour-rights violations.
11. Strengthen business continuity and formalisation incentives. Recovery support can help enterprises adopt basic continuity plans, safer workplaces, bookkeeping, insurance where viable, worker registration and social-security coverage without making formal registration a precondition for emergency assistance.

¹⁹ The NEPP directive approved in December 2025 provides a nationwide framework across all 753 local levels. <https://ceslam.org/news-media/new-employment-directive-implemented/>

²⁰ ILO's Employment Intensive Investment Programme (EIIP): <https://www.ilo.org/publications/creating-jobs-through-public-investment>.

► Annex: Estimating employment exposure to disruption of the Rasuwa and Tatopani trade corridors

The estimates presented in Table 1 identify workers in activities through which disruption to the Rasuwa and Tatopani trade corridors could affect employment and incomes. They are not estimates of workers actually affected or jobs lost.

Identification of trade-related activities

Activities were selected based on the goods traded through the affected crossings. Information from the Rasuwa Customs Office identifies imports including electrical goods, ready-made garments, footwear, construction materials, agricultural products, telecommunications equipment, vehicles and industrial machinery. Exports through Rasuwa include carpets, handicraft products, woollen textiles, medicinal herbs, instant noodles, copper utensils and agricultural products. For Tatopani, customs data identify imports of manufactured goods, machinery and equipment, consumer products, and agricultural and food commodities.

These trade categories were mapped to selected industry–occupation combinations based on ISIC Rev. 4 and ISCO-08 at the four-digit level. Combining industry and occupation classifications allows the analysis to focus on specific activities rather than entire industries. For example, the direct transport and logistics category includes selected industries and occupations such as drivers, freight handlers and logistics-related clerical occupations. Similarly, the category covering construction materials and machinery includes selected construction, trade, repair and related industry–occupation combinations rather than the entire construction sector.

Three broad transmission channels are distinguished in Table 1:

1. Direct transport and logistics: selected road freight, warehousing, cargo handling and related logistics activities;
2. Import-related activities: selected trade and other activities potentially affected by disruption to imported merchandise, machinery, materials and other production inputs entering through Rasuwa and Tatopani; and
3. Export-related activities: selected activities associated with products exported to China through Rasuwa.

Estimating potential employment exposure

The employment estimates are derived from the Nepal Living Standards Survey 2022-23 (LSS-IV) microdata. For each transmission channel, workers in Bagmati Province were identified in the specific four-digit ISIC Rev. 4 × ISCO-08 combinations shown in Table 1. Bagmati was selected because the affected corridors connect directly to the province, which includes Kathmandu and important distribution, consumption and production activities linked to these trade flows.

Employment in each selected industry–occupation combination in Bagmati was then expressed as a share of total employment in Nepal. These shares were applied to ILO modelled estimates of national employment for 2026 (November 2025) to express the results in terms of estimated 2026 employment. The calculation assumes that these shares remained unchanged between 2022-23 and 2026.

As shown in Table 1, workers in the selected industry–occupation combinations within Bagmati represented 5.21 per cent of total employment in Nepal, equivalent to approximately 392,400 workers in 2026. Of these, around 9,800 workers were in direct transport and logistics activities, 291,200 in import-side activities and 91,400 in export-side activities. Import-side exposure is concentrated particularly in agricultural and food goods and in construction materials, machinery and construction-related activities, while the largest export-side categories are agricultural and food products and carpets, woollen goods and textiles.

► Table 1. Employment in selected activities potentially linked to trade through Rasuwa and Tatopani

Transmission channel	Activity	Selected ISIC Rev.4 × ISCO-08 combinations	Share of Nepal employment (%)	Employment in selected activities (No.)
Direct	Transport and logistics	4923×8332; 5210×4321/9333; 5224×9333; 5229×3331/4323/9333	0.13	9,781
Import-side	Garments and footwear	4641×3322/4321/9334; 4771×5221–5223	0.40	29,775
	Electrical, electronic and telecommunications goods and services	4652×3322/4321; 4741/4742×5221–5223; 6110/6120/6190×7422	0.06	4,522
	Construction materials, machinery and construction activity	4659×3322/4321; 3312×7233; 3314×7412; 3320×7233; 4663×3322/4321/9333; 4752×5221–5223; 4100×7111–7115/7121–7127/9313; 4210×7119/7129/9312; 4220×7411/7412/9312; 4290×7119/7129/9312; 4321×7411/7412	1.60	120,573
	Agricultural and food goods	4620/4630×3322/4321/9333; 4711/4721–4723×5221–5223	1.67	125,660
	Vehicles and parts	4510×3322/5221–5223; 4520×7231; 4530×5221–5223	0.14	10,637
Export-side	Carpets, woollen goods and textiles	1311–1313/1392/1393×7318; 1399×7318/8159; 1410×7531–7533	0.44	33,159
	Handicrafts	1629×7317/7522/7523; 2393×7314; 2399×7314/8181; 3211×7313; 3290×7319	0.12	8,838
	Copper and metal goods	2420×7211/7221; 2599×7211/7213/7221–7224	0.15	11,020
	Agricultural and food products, including medicinal herbs and noodles	0111–0116/0119×6111/9211; 0121–0127/0129×6112/9211; 0128×6114/9211; 0230×6210/9215; 1074×7512/8160/9321	0.51	38,406
Total			5.21	392,371

Note: Employment shares are based on workers in Bagmati Province observed in the selected four-digit ISIC Rev. 4 × ISCO-08 combinations in LSS-IV, expressed as a share of national employment. These shares are applied to estimated national employment in 2026 (ILO modelled estimates, November 2025). Some selected combinations have no observations in the survey and therefore contribute zero to the estimates. Totals may differ from the sum of displayed figures because of rounding. The figures do not represent actual employment losses.

Interpretation and limitations

The estimates require careful interpretation. The 5.21 per cent figure represents employment in the selected activities within Bagmati, not the proportion of Nepal's workers affected by the disruption. LSS-IV identifies workers' industries and occupations but does not establish whether their employers trade with China, where they source their inputs or which border crossings they use. Workers in the selected activities may therefore have little or no dependence on trade through Rasuwa or Tatopani.

Because no adjustment is made for actual dependence on China or the affected crossings, the estimate counts all workers in the selected activities. It therefore provides a broad measure of potential employment exposure, rather than an estimate of the number of workers who will lose work or income.

The selection of industry–occupation combinations also involves judgement, as the relationship between traded goods and employment activities is not always clear-cut. Some activities have direct links to the goods traded through the affected crossings, while others may be connected more indirectly through distribution, production or the use of imported inputs. The selection therefore reflects plausible channels through which trade disruption could affect employment, rather than an exhaustive or definitive classification of exposed activities. It includes some broad activities, particularly agriculture, general food retail and construction, in which many workers may have little or no connection to trade through the affected crossings. Conversely, potentially exposed workers in other activities are not captured.

The estimates are based on workers observed in Bagmati Province in 2022–23 and scaled to 2026 using national employment estimates. They are therefore not direct counts of workers in Bagmati in 2026. The analysis also excludes workers in other provinces who may be affected through trade and supply chains.

Finally, disruption of the two corridors does not necessarily translate into an equivalent reduction in trade. Some goods may be diverted through other border crossings or routes. The extent to which rerouting limits employment effects will depend on the availability and cost of alternative routes, the goods being transported, firms' inventories and the duration of disruption. Even where goods are successfully rerouted, delays and higher costs may affect firms and workers.

The estimates should therefore be interpreted as an indication of the scale and composition of employment potentially exposed to trade disruption, not as a forecast of employment or income losses.

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► Disclosure on the use of Artificial Intelligence tools

During the preparation of this work, the authors utilized ChatGPT (OpenAI) to assist with generating an initial and preliminary list of relevant ISIC Rev. 4 and ISCO-08 industry-occupation combinations for the trade analysis, as well as copy-editing and improving the clarity of the text. Following the use of this tool, the authors carefully reviewed, revised and validated all content as necessary and assume full responsibility for the final content of the publication. No material subject to intellectual property rights, including third-party material, was used without appropriate acknowledgment and permission.



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