



International  
Labour  
Organization

# Impact of the February 2023 Earthquakes on Employment and the Labour Market in Syria

## Technical Note

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## Introduction

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After 12 years of civil war, Syria was struck by two huge earthquakes that rocked the region on 6 February 2023, killing thousands of people and causing major structural and economic damages. The initial 7.8-magnitude quake was located at a depth of 11 miles (17.9 km) near Nurdagi in Gaziantep province, Türkiye, and was followed by thousands of aftershocks that were felt across the region.

This note seeks to estimate the effect of the recent earthquakes on the employment and livelihoods sector in the affected areas in Syria and aims to understand the current situation and identify areas of need that require immediate action in order to support quick and inclusive recovery.

The note focuses on the five governorates identified as most affected by the earthquakes, namely, Aleppo, Idlib, Hama, Latakia and Tartous. Both Government and non-Government controlled areas are taken into consideration.

In view of the limited baseline employment and labour market data and statistics and the lack of sufficient field observations, estimates presented herein should be carefully interpreted with reference made to the different assumptions and the methodology used for the purpose of this exercise.

## Labour Market Context: Pre-Earthquakes

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The labour market in Syria has been battered by years of protracted conflict and war. Prior to the conflict, the Syrian economy was heavily reliant on the oil and gas sector, agriculture, and tourism. However, the conflict has led to a significant decline in economic activity, causing massive job losses and displacement of workers. With the displacement of millions of Syrians to neighbouring and non-neighbouring countries, Syria has also faced a shortage of skilled and unskilled labour in many areas.

Women have been particularly affected, with many facing increased barriers to accessing the labour market due to the conflict, cultural and social norms, as well as the disruption of public services and infrastructure.

The informal economy has also grown in response to the conflict, with many Syrians forced to work in the informal economy as a means of survival, in view of the lack of social protection. While data on informal employment are lacking in Syria, estimates from 2021 suggest that 92 per cent of MSMEs in the country operate in the informal sector.<sup>1</sup>

The dire economic and labour market situation in Syria has been further compounded by the devastating 7.8-magnitude earthquake that struck Türkiye and Syria in the early hours of Monday 6 February 2023 and the aftershocks that followed. Five governorates have been particularly impacted, namely Aleppo, Idleb, Hama, Lattakia and Tartous. It is estimated that these governorates, combined, are home to 43.4 per cent of the total population in Syria; some 7.1 million individuals are of working age (15+), of whom an estimated 2.7 million are in employment. Women represented 22.8 per cent of total employment in the five affected governorates.

**Table 1: Distribution of population, working age population, and employment by governorate, 2021**

|                           | Total population |           |           | Working age population |           |           | Total employment |         |           |
|---------------------------|------------------|-----------|-----------|------------------------|-----------|-----------|------------------|---------|-----------|
|                           | Male             | Female    | Total     | Male                   | Female    | Total     | Male             | Female  | Total     |
| <b>Aleppo</b>             | 2,030,779        | 2,087,191 | 4,117,970 | 1,399,920              | 1,494,814 | 2,894,734 | 874,195          | 128,371 | 1,002,566 |
| <b>Hama</b>               | 1,058,707        | 1,088,116 | 2,146,823 | 734,805                | 777,630   | 1,512,435 | 452,696          | 198,828 | 651,524   |
| <b>Lattakia</b>           | 663,709          | 682,146   | 1,345,855 | 472,793                | 526,768   | 999,562   | 267,773          | 114,141 | 381,914   |
| <b>Idleb</b>              | 578,016          | 594,073   | 1,172,089 | 401,178                | 424,558   | 825,736   | 276,397          | 70,983  | 347,380   |
| <b>Tartous</b>            | 577,875          | 593,927   | 1,171,802 | 427,486                | 440,042   | 867,528   | 233,589          | 110,799 | 344,388   |
| <b>All 5 governorates</b> | 4,909,085        | 5,045,454 | 9,954,539 | 3,436,182              | 3,663,813 | 7,099,996 | 2,104,649        | 623,122 | 2,727,771 |

**Source:** ILO Calculations based on CBS data

<sup>1</sup> United Nations, "Syria 2021 - Socio-Economic Impact Assessment (SEIA)"

## Effects of the Earthquakes on the Labour Market in Affected Governorates

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The earthquakes have had a devastating impact on the local economy in Syria, compounding an already dire situation for its people. To assess the effect of this disaster on workers and their families, this note estimates the extent of *disemployment*, defined as the temporary loss of employment caused by the destruction of the land, structures, capital equipment and/or tools normally used by people in the course of their working day.

Estimates of physical damage to buildings as provided by the Housing, Land and Settlements Sector of the Syria Earthquake Recovery Needs Assessment (SERNA) were used, along with national data and statistics provided primarily by the Syrian Central Bureau of Statistics (CBS).<sup>2</sup> The resulting estimates suggest that, in the five affected governorates, some 170,000 workers were disemployed. This is the equivalent of 6.2 per cent of all employed persons pre-earthquake.

*Around 170,000 workers have been disemployed, leaving some 154,000 households and more than 725,000 individuals directly affected.*

*At least USD5.68 million are lost per month as a result of disemployment.*

Assuming that the sex distribution of disemployment and pre-earthquake employment is linear, approximately 139,000 men and 31,000 women are estimated to have been disemployed. In relative terms, this is the equivalent of 6.6 per cent of pre-earthquake male employment in the affected governorates and 5 per cent of female employment.

*Around 35,000 micro and small enterprises are assumed to be impacted.*

With an average of 1.103 workers per household, 154,000 families are found to be directly impacted by disemployment, leaving some 725,000 individuals affected, assuming an average household size of 4.7 persons per household.<sup>3</sup> In terms of income lost, estimates suggest that the average income in Syria is SYP 241,157.<sup>4</sup> For every

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<sup>2</sup> For more information about methodology, pls refer to the section on data sources and methodology

<sup>3</sup> CBS, Socio-demographic survey, 2017-2018

<sup>4</sup> This is a conservative figure as it accounts for the average wage of wage employees but excludes employers and self-employed individuals.

month that unemployed workers remain out of employment, at least USD 5.68 million are lost.<sup>5</sup> These losses have an impact not only on the lives of workers themselves but also on the lives of those who depend on them.

Further to the impact on workers, the earthquakes have also severely affected micro and small enterprises, with the activity of an estimated 35,000 micro and small establishments disrupted. The loss of these businesses goes beyond the loss in incomes and encompasses the cost of the physical damage to their infrastructure, such as buildings, equipment, and inventory.

## Disemployment and income loss at the governorate level

To assess the size of disemployment in the different governorates, and in the absence of sufficient field data and information, the distribution of damages by governorates reported by the World Bank was used.<sup>6</sup> The impact on workers is assumed to follow the same distribution, as presented in table 2, below.

**Table 2: Distribution of disemployment and monthly income lost, by sex and governorate**

|                           | Disemployment  |                |                | Monthly income loss (USD) |                  |                  |                |
|---------------------------|----------------|----------------|----------------|---------------------------|------------------|------------------|----------------|
|                           | % Distribution | Total          | Male           | Female                    | Total            | Male             | Female         |
| <b>Aleppo</b>             | 46.5           | 79,132         | 68,999         | 10,132                    | 2,679,967        | 2,417,171        | 262,796        |
| <b>Idleb</b>              | 38.1           | 64,853         | 51,601         | 13,252                    | 2,151,388        | 1,807,677        | 343,711        |
| <b>Latakia</b>            | 11.0           | 18,798         | 13,180         | 5,618                     | 607,445          | 461,728          | 145,717        |
| <b>Hama</b>               | 3.3            | 5,684          | 3,949          | 1,735                     | 183,346          | 138,356          | 44,990         |
| <b>Tartous</b>            | 1.1            | 1,849          | 1,254          | 595                       | 59,364           | 43,935           | 15,429         |
| <b>All 5 governorates</b> | <b>100.0</b>   | <b>170,316</b> | <b>138,984</b> | <b>31,332</b>             | <b>5,681,510</b> | <b>4,868,867</b> | <b>812,643</b> |

**Source:** ILO Estimates based on the WB GRADE report and CBS data

<sup>5</sup> The exchange of the SYP to USD is assumed to be at 7,500 SYP/USD

<sup>6</sup> World Bank, Syria Global Rapid Post-Disaster Damage Estimation (GRADE) Report. 2023

## Impact Analysis

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With the destruction of their dwellings and places of work, individuals are likely to resort to several coping mechanisms to sustain their livelihoods and restore their incomes, in view of the very difficult situation in Syria. Positive and negative coping mechanisms could arise until the situation improves. Many of those who have been disemployed will move to other forms of informal, lower-paid activities to sustain themselves and their families. Informality and working poverty are likely to increase until more sustainable solutions are crafted.

Labour supply is expected to increase as households strive to survive, with many previously inactive men, women and children becoming compelled to join the labour force and seek work to mitigate the income loss of their households. With the destruction of school buildings and disruption of education, child labour is at high risk of proliferation. While it is not a new phenomenon in Syria, many more families may turn to their children's labour as a negative coping strategy. Concerted efforts are required to prevent this and facilitate the return of children to education as soon as possible.

Finally, and with the reconstruction work underway, it is also likely that more individuals become involved in emergency infrastructure and construction projects, with heightened concerns about the occupational safety and health of those workers.

## Recommendations for Effective Recovery

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The aftermath of the earthquakes can have severe and long-lasting effects on the labour market. If not properly addressed, such events can force businesses to permanently close and keep disemployed workers without jobs for a prolonged period of time, severely disrupting economic activity. Recovery efforts after an earthquake must focus on building forward better and on providing support to

workers and businesses, with a particular focus on those that have been directly affected by the earthquake, at least in the short-term.

Below are some of the recommendations to support recovery in Syria. These are classified as emergency/short-term recommendations and medium- to longer term recommendations.

In the short-term, **emergency employment programmes** are key to providing incomes to displaced workers and helping them support themselves and their families. ILO's Employment Intensive Infrastructure Programmes, that also embed decent work principles, help achieve this objective while at the same time ensure the reconstruction of damaged and destroyed infrastructure.

Providing emergency **grants to micro and small entrepreneurs** that have been affected by the earthquakes is also key to restoring economic activity and facilitating local economic recovery.

**Skills development** in the short- and medium- to long- term should further be provided to upgrade the skills of workers and those looking for jobs and help in addressing the demand for labour during the recovery process.

**Localised data collection and local labour market assessments in affected areas** are equally important to inform programme design and support the crafting of adequate interventions that can effectively respond to the needs of the populations in the affected areas. Such interventions must be prioritized **taking into consideration the different intersectional vulnerabilities** and the needs of the various groups at risk including IDPs, people with disabilities, children, women, youth and informal workers and economic units, among others.

In the medium- to longer term, the focus should shift towards the creation of more sustainable employment opportunities and a recovery strategy to build forward better. **Strengthening institutional capacities** to make informed decisions for a job-rich recovery is key, especially in a country that has been challenged by years of economic hardship and a quasi-institutional paralysis. **Data collection, including through national labour force surveys**, is the cornerstone of policy reform, providing the evidence needed for effective policy development, monitoring and evaluation. Re-iterating the principles of **decent work**, promoting **social dialogue**, **coordinating efforts** among the different stakeholders that have a role to play in



the labour market and re-emphasizing the **role of the private sector** as a main generator of decent and productive jobs, are critical for building resilience and speeding up recovery efforts.

## Data Sources and Methodology

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In view of the very limited baseline labour market data available, this note was developed based on informative assumptions and the most recent available international and national data sources. The resulting figures are estimates based on ILO internal calculations.

For population distribution and estimates, the national population data as published by the Syrian CBS was adopted as a reference. Distribution of gender disaggregation was assumed to be the same in all governorates.

The figures related to the effect of the earthquake on the Syrian labour market were estimated based on the national data as shared by the CBS. It should be noted that the detailed survey methodologies including adopted definitions and implemented classifications are not available.

Based on the national population data disaggregated by governorate and gender, and the available data on labour force (employed population, labour force, labour force participation rate, and working age population), the ILO computed the employment-to-population ratio and recalculated the working age population and employment figures taking into account the total population count in the country.

In relation to damage or destruction of buildings, according to the SERNA Housing, Land and Settlements Sector, the earthquake left 15,633 buildings fully damaged. Full damage indicates total collapse or severe damage. To compute disemployment figures, it is assumed that 30% of the total fully damaged buildings have collapsed, and 70% were severely damaged. Taking into account overall results of the 2019/2020 Establishment Census published by CBS and the general distribution of establishments in Syria, the distribution of buildings is assumed to be the following:

### Percentage distribution of buildings

|   |           |
|---|-----------|
| <b>Standalone enterprises</b>           | <b>20</b> |
| <b>Buildings/ compounds with shops*</b> | 70        |
| <b>Buildings without shops</b>          | 10        |
| <b>Total</b>                            | 100       |

*\*An average of 4 shops per building is assumed*

Taking into account various sources, including the 2019/2020 Establishment Census published by CBS, the following distribution of enterprises is assumed:

### Percentage distribution of enterprises

|                                    |             |
|------------------------------------|-------------|
| <b>Micro enterprises (1-5)</b>     | <b>93.5</b> |
| <b>Small enterprises (6-20)</b>    | 5.0         |
| <b>Medium enterprises (21-100)</b> | 1.0         |
| <b>Large enterprises (101+)</b>    | 0.5         |
| <b>Total</b>                       | 100         |

To estimate the total number of jobs in each enterprise size, the average number of workers was adopted as follows:

### Average number of workers by enterprise size

|                                    |          |
|------------------------------------|----------|
| <b>Micro enterprises (1-5)</b>     | <b>3</b> |
| <b>Small enterprises (6-20)</b>    | 13       |
| <b>Medium enterprises (21-100)</b> | 60.5     |
| <b>Large enterprises (101+)</b>    | 150      |

The average number of employed individuals per households (1.103) was estimated based on information on the distribution of employed household members as indicated in the “Humanitarian Needs Overview” report published in February 2022 by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA).

With regard to income data, average 2023 income was estimated using the dispersion formula based on the available 2020 average income and minimum wage. As for income loss, the indicated monthly income loss represents the average monthly income lost by all those who have been disemployed, assuming they remain as such for the whole period of the month.



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