International Labour Organization

▶ ILO brief

▶ Factsheet

Impacts of heat stress on jobs and productivity in Lebanon

Climate trends in Lebanon over the past three decades

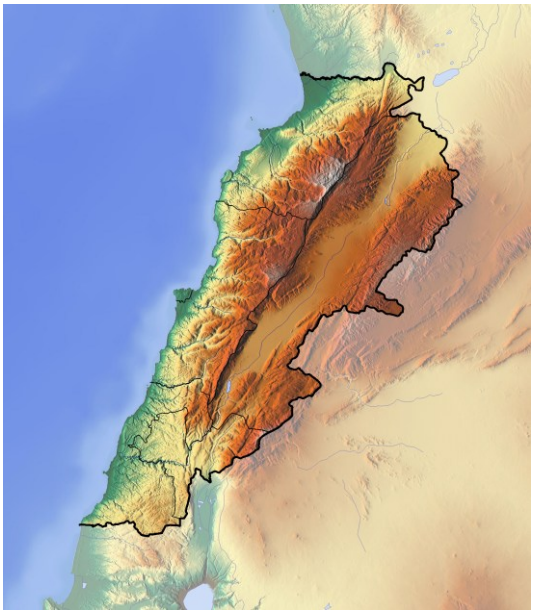
Country background

Situated at the crossroads of the Mediterranean Basin and the Arabian Peninsula, Lebanon has a population of nearly six million and an area of 10,452 square kilometres. The capital and largest city is Beirut, while other significant cities include Tripoli, Sidon, and Baalbek (Fig. 1). Lebanon is currently facing significant socio-economic challenges, exacerbated by ongoing political and security instability and a deepening economic crisis. This political deadlock, alongside economic stagnation, has resulted in a continuous increase in unemployment and underemployment, particularly among vulnerable groups such as women and youth. The service sector is the largest contributor to the economy, providing about 77% of GDP and employing about 75% of the workforce.[i] Manufacturing, construction, and agriculture historically played significant roles in Lebanon's economy but have drastically declined in recent years.

Climate

Lebanon's climate is typical of the Mediterranean region, characterized by hot, dry summers and cool, wet winters. Along the coastal areas, average summer temperatures frequently exceed 35°C, while inland areas experience more extreme temperature variations due to the lack of the sea's moderating influence. The majority of precipitation falls between November and March, primarily in heavy bursts of rain or storms. During the first quarter of the year, heat levels are low, particularly in inland areas (Fig. 2). From March through August, both average maximum environmental temperature and Wet-Bulb Globe Temperature (WBGT)[ii] values are notably higher across the country, indicating significant heat stress. This results largely from strong solar radiation, limited rainfall, and consistently warm air masses, creating conditions conducive to higher heat stress. Between October and December, heat levels are reduced substantially across much of the country.

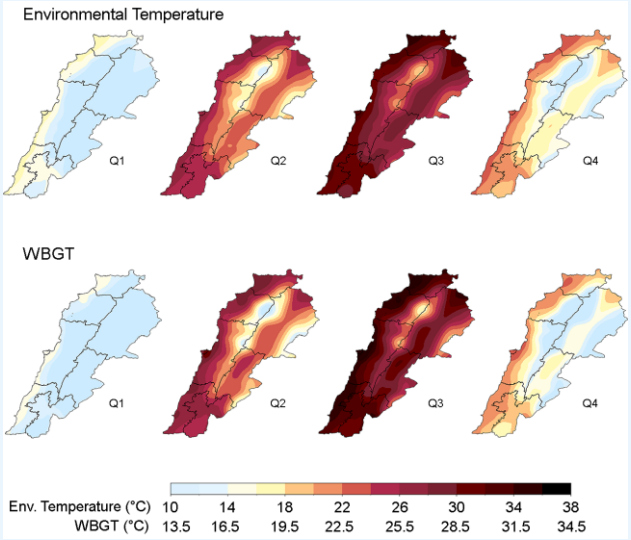
Figure 1. Lebanon physical map.[iii]



▶ **Temperature vs. WBGT:** From March through August both indicators show high heat stress along the coast and interior basins. Environmental temperature is lower at higher altitudes. While elevation moderates WBGT, this index shows heat stress remains present even at altitude, suggesting higher humidity and solar radiation can intensify overall heat risk.

- **Policy implications:** Relying solely on environmental temperature data may understate heat risks in some regions. Employing WBGT as a heat assessment measure can provide a more accurate foundation for developing occupational safety guidelines, especially in labour-intensive sectors such as agriculture, construction, and transport.

Figure 2. Quarterly average maximum environmental temperature (top) and WBGT (bottom) across Lebanon during the reference historical period (1985-2014).



Climate Lebanon's topography, which includes coastal plains, mountains, and valleys, plays a crucial role in shaping its climate patterns, but also contributes to its vulnerability to climate change. The projections from reports of the Intergovernmental Panel on Climate Change (IPCC)[iv] for the eastern Mediterranean region indicate rising temperatures, more frequent and intense extreme weather events such as heatwaves and floods, as well as more irregular rainfall patterns. Given Lebanon's dependency on agricultural production, including sectors like wine, fruits, vegetables, and livestock, the projected shifts in temperature and precipitation patterns are likely to disrupt key economic activities.[v] Also, the projected changes in climate will have significant implications for water resources, further straining the country's already fragile infrastructure and ecosystems.

Lebanon is a highly urbanized, middle-income country with a thriving tourism industry. Tourism contributes 20% to the country's GDP and is highly weather dependent and vulnerable to higher temperatures.[i] Climate change, manifested through increasing temperatures, more frequent extreme weather events, and rising sea levels is expected to impact the densely populated coastal urban areas that host infrastructure and industry critical to the economy. Over 85% of Lebanon's residents live in urban areas concentrated along a coastline that is vulnerable to sea level rise.[i]

These climate challenges emphasize the need for robust adaptation strategies to protect both the environment and the livelihoods of communities dependent on agriculture and tourism.

A previous report on Lebanon's labour inspection system, conducted under the auspices of the ILO, provides a thorough evaluation of Lebanon's labour inspection framework, highlighting the strengths and weaknesses in its legal and organizational structure, as well as its human resource and logistical capacities.[vi] It underscores gaps in Occupational Safety and Health (OSH) legislation, insufficient training and staffing for inspectors, and inadequate mechanisms for documenting occupational injuries and diseases. These limitations, combined with a focus on machinery licensing instead of broader workplace hazards, reflect the need for a more cohesive national OSH strategy and an expansion of inspection activities beyond the small percentage of enterprises currently monitored. Although the report comprehensively examines the relevant legislative and policy landscape, there is no mention of heat stress as there is no specific legislation or framework to address this hazard in Lebanon.

Impacts to Economic Development

Heat stress, exacerbated by rising temperatures and more frequent heatwaves, poses a significant challenge to Lebanon's development. The main impacts on key industries are:

- **Services:** The service sector is the dominant component of Lebanon's economy.[i] Tourism contributes 20% to GDP and is highly weather dependent and vulnerable to higher temperatures.[i]
- **Manufacturing:** The industrial sector historically played a significant role in Lebanon's economy but has drastically declined since 2019.[i] The sector focuses primarily on food processing, metal products, and construction materials.

Extreme weather and power shortfalls undermine output, which relies on inputs from agriculture and extractives as well as robust infrastructure.[i]

- **Agriculture:** The contribution of this sector to GDP is relatively small, at around 8%, but it provides vital food security for many Lebanese households, especially during economic downturns.[v] Concentrated in the production of fruits, vegetables, and other agri-food products, its rain-fed outputs are affected by heatwaves and droughts.[v]

Future heat exposure and impacts on productivity

Climate projections

To understand how future heat conditions might affect working people in Lebanon, this analysis uses four "storylines" known as Shared Socioeconomic Pathways (SSPs). These scenarios were used by the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report[iv] to describe how different levels of greenhouse gas emissions might impact our world. In simple terms, they help us imagine a range of possible futures: from a sustainable world with clean energy (SSP1-2.6) to one that continues heavy use of fossil fuels (SSP5-8.5).

By considering these global SSPs, Lebanese policymakers can better understand the potential risks and opportunities that different climate futures may bring. For instance, adopting policies aligned with a more sustainable scenario (e.g., SSP1-2.6) could help mitigate the severity of heat stress, protect worker health, and reduce economic losses from reduced productivity. Conversely, inaction or insufficient adaptation measures (e.g., SSP5-8.5) might expose Lebanon to extreme heat conditions, with significant repercussions for labour productivity and overall economic resilience. In essence, the global SSPs enable Lebanon to tailor its climate adaptation and economic policies to protect its citizens and secure a more stable, sustainable future.

Table 1. Characteristics of the global SSPs used in the present study.

SSP	Scenario	Estimated warming (2041-2060)	Estimated warming (2081-2100)	Very likely range in °C (2081-2100)
SSP1-2.6 (Sustainability Pathway)	**Low GHG emissions** CO_2 emissions cut to net zero around 2075	1.7	1.8	1.3 – 2.4
SSP2-4.5 (Middle of the Road Pathway)	**Intermediate GHG emissions** CO_2 emissions around current levels until 2050, then falling but not reaching net zero by 2100	2.0	2.7	2.1 – 3.5
SSP3-7.0 (Regional Rivalry Pathway)	**High GHG emissions** CO_2 emissions double by 2100	2.1	3.6	2.8 – 4.6
SSP5-8.5 (Fossil-fueled Development Pathway)	**Very high GHG emissions** CO_2 emissions triple by 2075	2.4	4.4	3.3 – 5.7

Key: GHG = greenhouse gas.

Future heat exposure

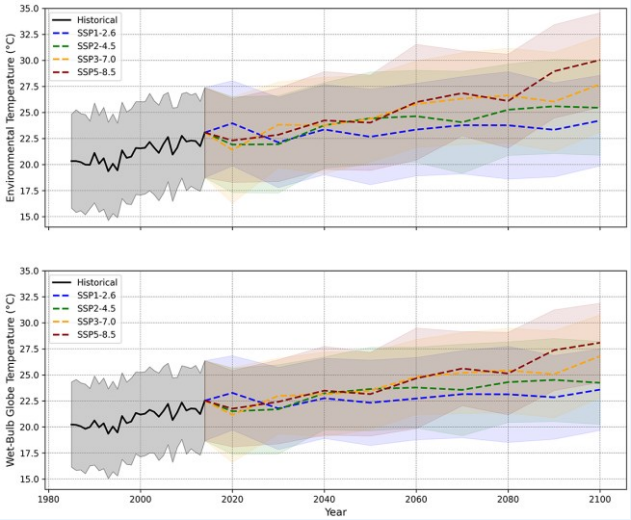
The analyses conducted in the main part of the report indicate that Lebanon is projected to experience a significant rise in both ambient temperature and WBGT compared to historical conditions (1985-2014). Even under the lower-emission scenarios (SSP1-2.6 and SSP2-4.5), Lebanon faces increases of about 2-3°C. Under SSP3-7.0 and SSP5-8.5, environmental temperature may rise up to 7.5°C, while WBGT may rise up to 6°C by late century.

These projections emphasize that the level of warming that Lebanon will face depends largely on global emissions and that more ambitious mitigation leads to less severe impacts. But, even lower-emission scenarios (SSP1-2.6 and SSP2-4.5) pose a substantial risk to health and labour productivity, necessitating the adoption of adaptation measures and strategies to protect workers from rising heat.

Future climate in Lebanon

Across all SSPs, the analyses for Lebanon suggest a clear warming trend, with varying degrees of severity depending on the scenario (Fig 3). Even in the most optimistic scenarios (SSP1-2.6 and SSP2-4.5), Lebanon will face increases of 2°C to 3°C. The high emission scenarios (SSP3-7.0 and SSP5-8.5) suggest more significant warming of up to 7.5°C. Without effective adaptation strategies, these would lead to significant health impacts and severely reduce the capacity to perform manual labour.

Figure 3. Average maximum environmental temperature (top) and WBGT (bottom) with 95% confidence intervals across the different SSPs in Lebanon.



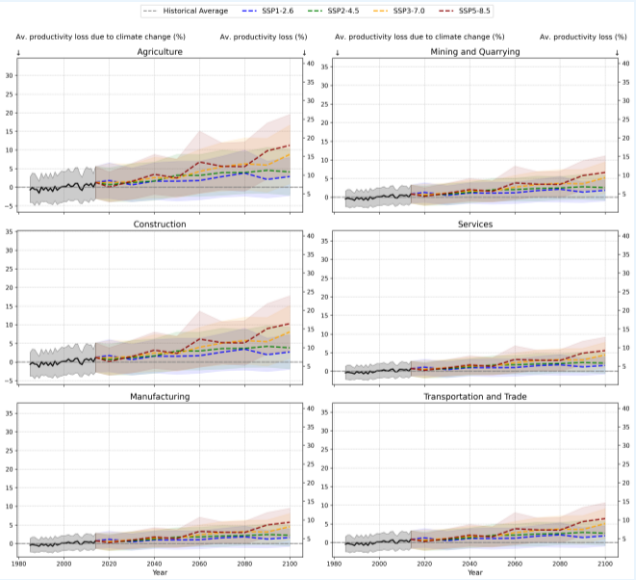
Loss of productivity due to rising heat stress from climate change

The physical effort required for high-intensity work naturally increases the body temperature and produces metabolic heat.[vii,viii] When this internal heat generation combines with external (environmental) heat stress, the body's cooling mechanisms can be overwhelmed.[viii] Workers engaged in physical work are, therefore, at a greater risk of experiencing the negative effects of heat.[ix] As the body becomes stressed by the combined internal and external heat loads, it responds by slowing down work pace as a protective mechanism. This slowdown can lead to significant loss of labour productivity.[x,xi,xii]

Reduced labour productivity under high heat stress is not only a matter of slower movement; it also includes reduced work output, and increased error rates. This occurs because workers must take more frequent breaks, reduce their pace, or even stop working to avoid heat-related health risks.[x,xi,xii] The cumulative effect of these adjustments is a measurable loss in productivity, as well as increased risks of accidents and long-term health impacts.[x,xi,xii] This also has particular implications for workers in the informal economy, as well as for micro, small and medium enterprises, which often have limited adaptation capacities.[xiii]

The analysis of productivity loss due to rising heat stress from climate change is illustrated in Fig. 4 (for the average, experienced, and acclimatized worker performing their typical shift). In agriculture and construction, productivity loss fluctuated between 5% and 8%, during the historical period. Under SSP1-2.6 and SSP2-4.5, climate change is expected to further increase productivity loss by 3-5%, reflecting milder impacts due to climate change mitigation. Under SSP3-7.0 and SSP5-8.5, productivity loss increases gradually, reaching as high as 12% toward the end of the century. Agriculture and construction are thereby particularly vulnerable sectors to productivity loss. In manufacturing, mining and quarrying, services, as well as transportation and trade, productivity loss remained stable at about 4% to 6% during the historical period. Under SSP1-2.6 and SSP2-4.5, climate change is anticipated to further increase productivity loss by 2-3% by the end of the century. This will be higher under SSP3-7.0 and SSP5-8.5, resulting in additional productivity loss of up to 7% in these scenarios by 2100.

Figure 4. Average productivity loss in Lebanon during the reference historical period (1985-2014) and until 2100 across the different SSPs. Vertical axes in each graph show productivity loss in a given year (right hand side axis) and productivity loss due to climate change, calculated as a change from the baseline historical period 1985-2014 (left hand side axis). Shaded areas represent 95% confidence intervals.



The key findings of this analysis are as follows:

- **Vulnerability is unequal:** agriculture and construction show the highest productivity losses due to rising heat stress from climate change, reaching 12% higher by the end of the century in the worst-case scenario. Manufacturing, mining and quarrying, services, transportation, and trade are also heavily impacted, but at a lesser degree.
- **Scenario divergence:** under more optimistic scenarios (SSP1-2.6, SSP2-4.5), productivity losses remain relatively low across all intensity levels. However, in scenarios where climate action is delayed or absent (SSP3-7.0, SSP5-8.5), losses increase significantly, particularly for agriculture and construction.
- **Long-term trends:** regardless of the SSP, productivity losses generally increase towards the latter half of the century, reflecting the long-term effects of climate change on productivity in Lebanon.

Economic and labour market impacts of climate change

Current economic impacts

Economic production relies on the total available work hours, and when those hours diminish due to rising heat stress from climate change, the overall contribution of the workforce to production is reduced.[x,xi,xii] Thus, climate change affects not only individual workers but also has far-reaching implications for national economies. When workers are exposed to higher levels of heat due to climate change, they tend to slow down, take more frequent breaks, or may even be unable to work at all – all of which reduce productivity.[x,xi,xii] This reduction in labour input directly translates into lower economic output, which is reflected in a decrease in GDP.[x,xi,xii]

The economic impacts of rising heat stress due to climate change in Lebanon are significant. The country lost 326 million USD more from heat stress in 2023 compared to the average year during the reference historical period (1985-2014) (Table 2). The added GDP losses in the service and the agriculture sectors far outweigh those from all other sectors, representing 91.6% and 32.5% of the climate change-induced GDP losses, respectively.

Table 2. Change in the contribution of each sector to GDP due to rising workplace heat stress caused by climate change, between 2023 and the reference historical period 1985-2014.

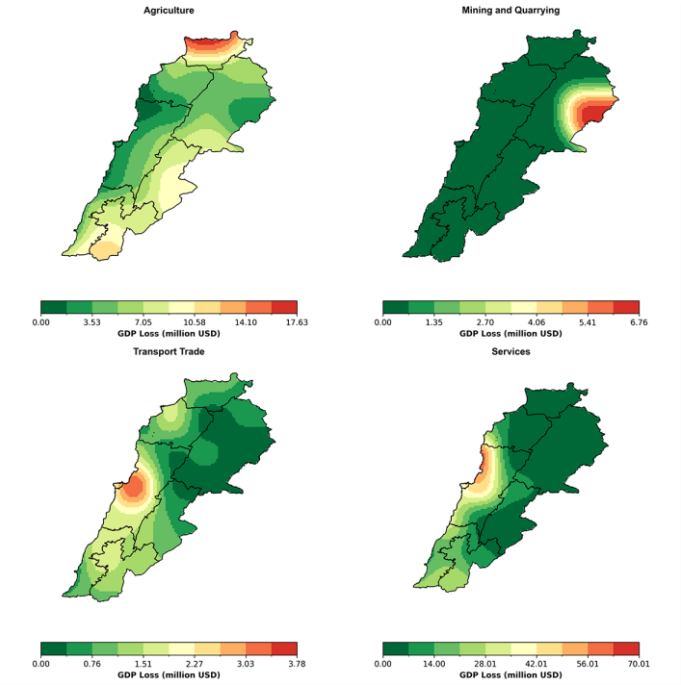
Sector	Change in GDP	
	(million USD) *	*(distribution; %)*
Agriculture	-106.1	32.5
Construction[1]	60.2	-18.5
Manufacturing[2]	44.9	-13.8
Mining and Quarrying	-6.9	2.1
Services	-298.8	91.6
Transport and Trade	-19.7	6.1
Total GDP change	-326.3	

* fixed 2015 prices.
Note: regardless of climate change, the economic impact of workplace heat stress was less in 2023 than in historical period due to:
[1] construction industry shrinking by 813 million USD (50%);
[2] manufacturing industry shrinking by 1,047 million USD (40%).

The regional distribution of the impact of rising workplace heat stress due to climate change on each sector of economic activity is illustrated geographically in Fig. 5. There is a clear hotspot of economic loss in Beirut, Jounieh, and Byblos and the area connecting the three cities as well as the surrounding region. This area is home to a high concentration of tourism-related businesses, resorts, and other service-oriented activities. The proximity to the Mediterranean Sea has made this area prime location for international tourism, with many businesses reliant on stable, favourable weather conditions for year-round activity. The key findings are as follows:

- **Agriculture** losses are predominantly concentrated in the northern regions, parts of the Bekaa valley, and pockets along the south, reflecting high vulnerability where farming is both extensive and weather-exposed.
- **Mining and quarrying** shows localized losses in the north-eastern region of Lebanon.
- **Services** – which dominate Lebanon's economy – show more substantial absolute losses, particularly around Jounieh and Byblos.
- **Transport and trade** show significant losses in the Beirut metropolitan area and in southern Lebanon, illustrating impacts on key transport corridors and hubs.

Figure 5. GDP loss across Lebanon due to rising workplace heat stress caused by climate change, between 2023 and the baseline historical period 1985-2014, in each sector of economic activity.



Current labour market impacts

The impact of rising heat stress from climate change on Lebanon's labour market is significant, with varying degrees of productivity and jobs lost across all key economic sectors:

- **Over 10,000 more full-time jobs were lost** due to workplace heat stress during 2023 compared to the average year during the historical period.
- Overall, **73% of the jobs** lost occurred during the summer. The analysis reflects a seasonal pattern where the highest impacts occur during the third quarter of the year, mirroring the period of most intense heat.
- Climate change impacts are industry-specific. The full-time jobs lost were:
  - **62% in services**
  - **15% in construction**
  - **9% in manufacturing**
  - **8% in transport and trade**
  - **6% in agriculture.**

- These results highlight the urgent need for adaptive policies, such as regulated work-rest cycles, access to cooling measures, and the integration of heat mitigation into occupational safety standards, to safeguard worker productivity and health in Lebanon.

Table 3. Annual impact of rising heat stress due to climate change on full-time equivalent jobs lost (proxied from work hours lost) in each sector of economic activity and across the entire economy in Lebanon, calculated as the change between 2023 and the reference historical period 1985-2014.

Sector	Available Work Hours	Change in Work Hours		Change in Jobs
	(n)	(n)	(% FTE)	(FTE)
Agriculture	113,042,057	-1,193,764	-1.06	-595
Construction	238,944,754	-3,047,690	-1.28	-1,519
Manufacturing	297,716,194	-1,847,281	-0.62	-921
Mining and quarrying	1,016,897	-3,088	-0.30	-2
Services	1,918,431,617	-12,600,843	-0.66	-6,282
Transport and trade	200,763,977	-1,566,582	-0.78	-781
TOTAL	2,769,915,497	-20,259,248	-0.73	-10,099

n: number; FTE: full-time equivalent.

Future economic and labour market impacts

Lebanon's macro-economic exposure to rising workplace heat stress is set to intensify between 2040 and 2060, with outcomes highly sensitive to global emissions scenarios (Table 4). Even on a Paris-aligned trajectory (SSP1-2.6), heat-related productivity losses will reduce GDP by about 4.2% and 5.1% more in 2040 and 2060, respectively, relative to the losses during the average year within the 1985-2014 baseline. This is equal to an annual loss of 2.6 billion USD in 2040 and 5.6 billion USD in 2060. Under a "middle-of-the-road" scenario (SSP2-4.5), the contraction deepens from 4% (2.1 billion USD) in 2040 to 5.9% (5.6 billion USD) in 2060. A regional-rivalry world (SSP3-7.0) will drastically increase the burden to 5.6% by 2060. Given the slow economic growth foreseen in SSP3, this higher percentage loss is equal to 3.2 billion USD. Should fossil-fuel development continue unabated (SSP5-8.5), rising workplace heat stress could cut 8.4% (12.9 billion USD) off annual national output by 2060, eliminating the cumulative GDP value of several medium-sized manufacturing subsectors.

The projected labour market impacts attributable to heat stress rise from climate change will grow markedly with the global emissions trajectory and become substantial for Lebanon by 2040 (Table 5). Relative to the 1985-2014 baseline, the economy will lose the equivalent of 21,700 full-time jobs under a low-emissions pathway (SSP1-2.6). The losses rise to 25,500 full-time jobs under SSP2-4.5, and almost 35,000-36,500 under the high-emissions scenarios (SSP3-7.0 and SSP5-8.5). In proportional terms this represents a 2.1% contraction in total labour force under the most optimistic scenario and 3.5% under unabated fossil-fuel development.

By 2060, the rise in heat stress driven by climate change will remove the equivalent of 21,000-65,000 full-time jobs from Lebanon's economy each year, depending on the global emissions pathway (Table 5). Under the Paris-consistent trajectory (SSP1-2.6), Lebanon will lose 21 thousand full-time jobs, or about 2% of total labour force. The toll rises sharply to over 38 thousand full-time jobs under SSP2-4.5, 55 thousand under SSP3-7.0, and peaks at nearly 65 thousand under SSP5-8.5, where heat cuts more than 6% of work hours.

Table 4. Annual impact of rising workplace heat stress caused by climate change on GDP in Lebanon during 2040 and 2060 across different SSPs, compared to the historical period 1985-2014.

	Change in GDP			
	2040		2060	
	(M USD)[1]	*(%)*	*(M USD)*[1]	*(%)*
SSP1-2.6	-2,625.24	-4.17	-5,608.85	-5.14
SSP2-4.5	-2,136.79	-3.97	-5,640.13	-5.86
SSP3-7.0	-1,347.58	-3.46	-3,206.99	-5.63
SSP5-8.5	-4,218.75	-5.54	-12,898.27	-8.39

[1] million USD, fixed 2015 prices.
SSP: shared socioeconomic pathway; negative percentages indicate a GDP reduction compared to an average year during the baseline historical period 1985-2014.

Table 5. Annual impact of rising heat stress during 2040 and 2060 due to climate change on full-time equivalent jobs lost across different SSPs, calculated as the change from the historical period 1985-2014.

Scenario	Period	Change in Work Hours		Change in Jobs
		(n)	(% FTE)	(FTE)
SSP1-2.6	2040	-43,463,472	-2.05	-21,667
	2060	-42,048,641	-1.99	-20,961
SSP2-4.5	2040	-51,225,160	-2.42	-25,536
	2060	-76,330,761	-3.61	-38,051
SSP3-7.0	2040	-70,022,723	-3.31	-34,907
	2060	-111,200,999	-5.25	-55,434
SSP5-8.5	2040	-73,177,574	-3.46	-36,479
	2060	-129,818,698	-6.13	-64,715

SSP: shared socioeconomic pathway; n: number; FTE: full-time equivalent.

Key recommendations per sector

Rising heat stress is already undermining worker health, productivity, and overall economic resilience in Lebanon. In light of the evidence presented in this analysis, it is imperative to adopt sector-specific adaptation strategies that not only protect workers but also support continued economic activity. The following recommendations outline targeted measures for each key economic sector, integrating the sector-specific vulnerabilities in this analysis with practical, evidence-based adaptation strategies, ensuring that policy-makers and stakeholders have clear guidance on protecting workers and supporting economic stability in the face of rising workplace heat stress. Importantly, these recommendations should be applied in addition to – not in place of – the general occupational safety and health protection framework for heat stress recommended by the ILO.[xiii] A comprehensive list of recommendations is available in the main text of the country study.

Agriculture: In agriculture, where the majority of work is performed outdoors and workers are directly exposed to the sun and natural environment, adaptation strategies must focus on minimizing heat exposure. Adjusting work schedules to avoid the hottest parts of the day is essential, alongside implementing on-site measures such as the installation of shade structures, provision of adequate hydration, and cooling stations. Additionally, adapting crop management practices by shifting planting cycles and choosing heat-tolerant crop varieties can reduce the vulnerability of agricultural production to extreme heat. Worker training on recognizing the signs of heat stress and on implementing first-aid measures further enhances resilience in this critical sector.

Construction: Construction work is characterized by intense physical labour and significant exposure to outdoor heat. To protect construction workers, employers should consider rescheduling work to cooler periods, such as early mornings or late afternoons, and enforcing regular, scheduled breaks during the day. The deployment of portable shading, misting systems, and on-site hydration stations is critical to reducing heat exposure. Engineering controls, such as using reflective materials or temporary insulation, can further mitigate the thermal load on construction sites. In addition, worker acclimatization programs and ongoing risk assessments are vital to ensure that adaptation measures remain effective as environmental conditions evolve.

Manufacturing: Manufacturing facilities, whether operating indoors or in partially exposed environments, must address both process-generated and environmental heat. Enhancing indoor climate control through improved ventilation and energy-efficient air conditioning systems is a key priority. Implementing structured work-rest cycles and staggered shifts can help manage cumulative heat exposure. In addition, installing real-time monitoring systems to track WBGT levels enables a proactive response to emerging heat stress risks. Employee education and training on the importance of hydration and heat stress symptom recognition can further support a healthier and more productive workforce.

Mining and quarrying: For mining and quarrying operations, which often occur in environments with high ambient temperatures or in confined underground spaces, robust environmental controls are crucial. Recommendations include upgrading ventilation and cooling systems to maintain safer working conditions, as well as scheduling operations to reduce exposure during peak heat periods. Establishing mandatory rest breaks with access to cooled rest areas can help mitigate the physiological strain experienced by workers. Regular monitoring of WBGT, paired with comprehensive risk assessments, will ensure that protective measures are effectively tailored to fluctuating conditions. Where feasible, increased mechanization may reduce the need for direct human exposure to hazardous thermal conditions.

Services: Although the formal services sector is predominantly indoor, many subsectors (including retail, hospitality, and tourism) and the large informal street vendors are vulnerable to environmental and work-related heat stress. Especially in facilities with inadequate climate control or in areas where outdoor work is required heat stress reduces productivity. Employers should consider fitting workplaces with efficient cooling and ventilation systems, to ensure that indoor temperatures remain within safe limits during heat waves. Social protection programs for informal service sector jobs, notably street vendors, small outdoor shops, and hawkers, are required to allow workers to shift work hours, protect lost income, and potentially search for less exposed job opportunities. Flexible scheduling and remote work options can also help mitigate risks for employees, particularly those performing heat-vulnerable jobs/tasks. In addition, service providers are encouraged to develop contingency plans and to conduct regular training and awareness campaigns about the risks of workplace heat stress. Such measures not only protect worker health but also support uninterrupted service delivery during periods of extreme heat.

Transportation and trade: The transportation and trade sector, which encompasses both outdoor activities and logistics operations, faces unique challenges from heat stress. It is recommended that work schedules be modified to avoid extreme heat, with the establishment of climate-controlled rest areas and loading docks. Equipping drivers and logistics personnel with cooling equipment and appropriate personal protective gear is essential. Moreover, infrastructural improvements, such as installing shading and misting systems at key transport hubs, can reduce heat exposure and maintain the efficiency of supply chains. These measures are critical to ensuring that the sector's operational continuity is not compromised by rising heat levels.

Collectively, the above recommendations provide a framework for tailoring climate adaptation measures to the unique challenges and opportunities within each economic sector. By implementing these strategies, Lebanon can protect its workforce, sustain productivity, and enhance the resilience of its economy in the face of a warming climate.

This factsheet is based on a study (Impacts of heat stress on jobs and productivity in Lebanon: Quantitative and qualitative employment estimates for evidence-based decision-making) commissioned by the ILO with support from the Climate Vulnerable Forum and the Vulnerable 20 Finance Ministers (CVF–V20), and with funding provided through the CVF–V20 Joint Multi-Donor Fund.

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[i] Credit Agricole Group (2024). Lebanon: economic and political overview. https://international.groupecreditagricole.com/en/international-support/lebanon/economic-overview.
[ii] WBGT is an important measure of heat stress, considering not only temperature but also humidity, wind speed, and solar radiation, which makes it particularly useful in assessing the risk of heat stress for working people.
[iii] The map was made using http://www.maps-for-free.com
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