



GAZA ECONOMIC IMPACT ASSESSMENT

SUMMARY REPORT FOLLOWING
THE MAY 2021 HOSTILITIES

The report covers the assessment of economic damages resulting from the May 2021 hostilities on the Gaza Strip



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Background

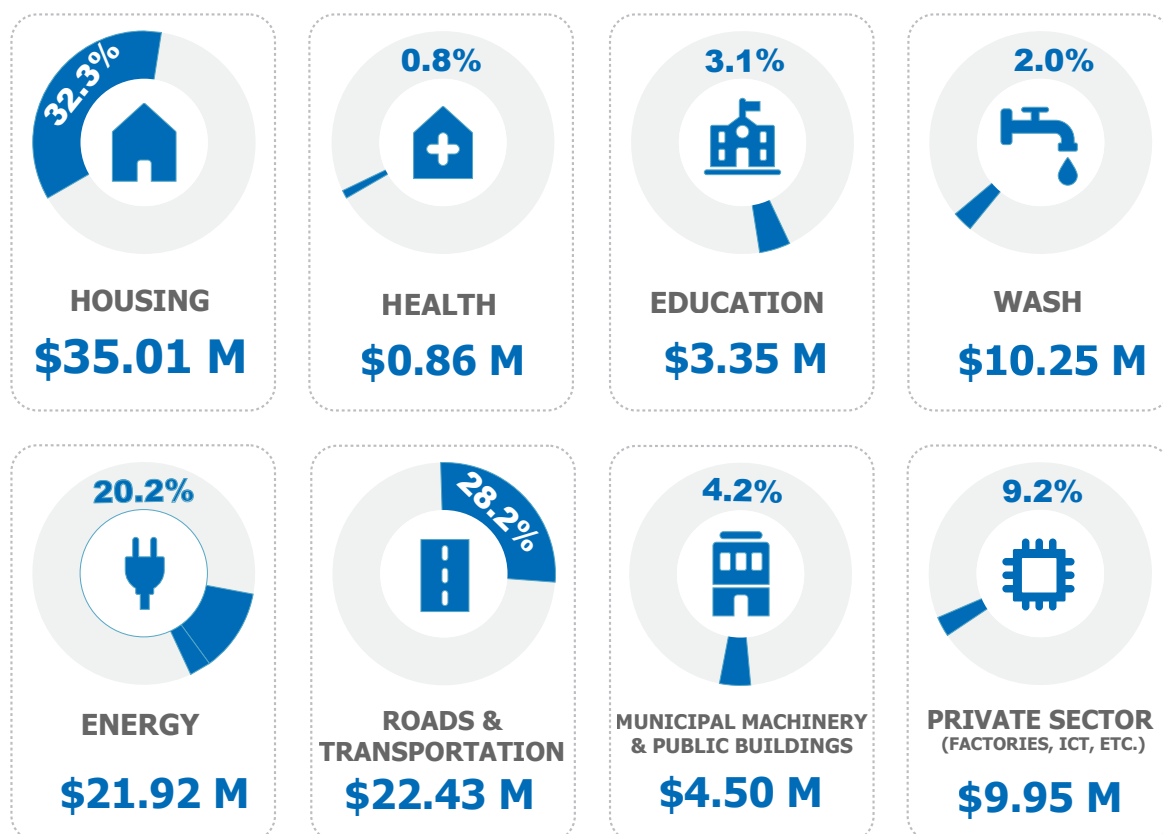
The Gaza Strip is among the most densely populated regions in the world, where almost 2.1 million Palestinians – with the majority (66%) being refugeesⁱ - live on only 365 square kilometres of land. The year 2021 marks not only 54 years of the Israeli occupation, but also 14 years of air, land, and sea blockade of the Gaza Strip. The multiple rounds of hostilitiesⁱⁱ have caused significant casualties, disrupted the already fragile livelihoods and severely worsened socio-economic conditions of the almost 2.1 million people living in Gaza.

Due to a recurrent cycle of escalations, as well as the enduring intra-Palestinian political divide, Gaza is caught up in a trajectory of de-development, with deepening vulnerabilities affecting an overwhelming majority of the population. Around 45.5% of households in the Gaza Strip are severely or moderately food insecureⁱⁱⁱ, 53% of the population live below the poverty line^{iv}. The overall unemployment rate is around 48%^v, with youth - which represents a significant and growing demographic group - accounting for the highest unemployment rates (i.e. 71.6% among the 15 – 25 age group and 56.5% for the 25 - 34 age group^{vi}, while the long-term unemployment rate^{vii} for the 15 – 29 age group reaches a staggering 79.2% among young women^{viii}). In 2021, about 2.45 million Palestinians are in need of humanitarian assistance, with the majority of them – 1.6 million - being in the Gaza Strip^{ix}. Out of those 1.6 million Gaza residents, an alarming 1.1 million were found to be suffering from severe humanitarian needs.

The latest round of hostilities, which hit Gaza between 10-21 May 2021, was the gravest since 2014. It claimed the lives of 261 Palestinians^x – including 67 children - and left over 2,200 injured^{xi}. In addition to the tragic human losses, the escalation caused serious damage to vital civilian infrastructure, including housing, health and education facilities, commercial establishments, and productive assets, as well as roads, electricity lines and sewage networks. According to the Infrastructure Damage Assessment, commissioned by UNDP following the May 2021 hostilities, the overall damage and reconstruction costs for critical infrastructure across different sectors reach US\$ 108,278,756, including the costs of Building Forward Better (BFB). These new reconstruction costs are further deepening the funding gap for Gaza, adding up to the impact from previous bouts of hostilities.

Overall, the May 2021 escalation aggravated the Strip's dire economic predicament, compounding the negative impact of COVID-19 on the local economy, which contracted by 12% in 2020^{xii}.

Figure 1. Overview of infrastructure damage and BFB costs per sector





Scope and Purpose

Against the backdrop of the May 2021 hostilities and the worsening socio-economic conditions, UNDP's approach in supporting the people of Gaza has been to assess and address urgent priority needs, immediately following the ceasefire, while taking into consideration and building in measures for medium - to longer - term recovery.

In line with its long-standing engagement and expertise in fostering early recovery, as well as promoting the Humanitarian-Development-Peace (HDP) Nexus approach, UNDP undertook an economic impact assessment, in close collaboration with its key local stakeholders. The assessment focused on the latest hostilities' impact on the private sector across key sectors of Gaza's economy, namely **manufacturing, trade (wholesale and retail), services**, as well as on **private ICT facilities**. It covered the overall impact of the May 2021 hostilities, consisting of **damages** in terms of buildings, infrastructure, machinery, and office equipment, as well as **losses** of raw materials, goods, and finished products. In addition, the assessment estimated the impact of the latest hostilities in terms of job **losses** across the four targeted sectors. The analysis of the impact is largely limited to the four key sectors listed above, complementing similar analysis for the agricultural sector, prepared by FAO in cooperation with the Ministry of Agriculture^{xiii}.

Key findings from UNDP's economic impact assessment shall feed into and inform the economic recovery plan and economic stimulus package for the Gaza Strip, while providing options and recommendations towards fostering inclusive and sustainable economic recovery and resilience.



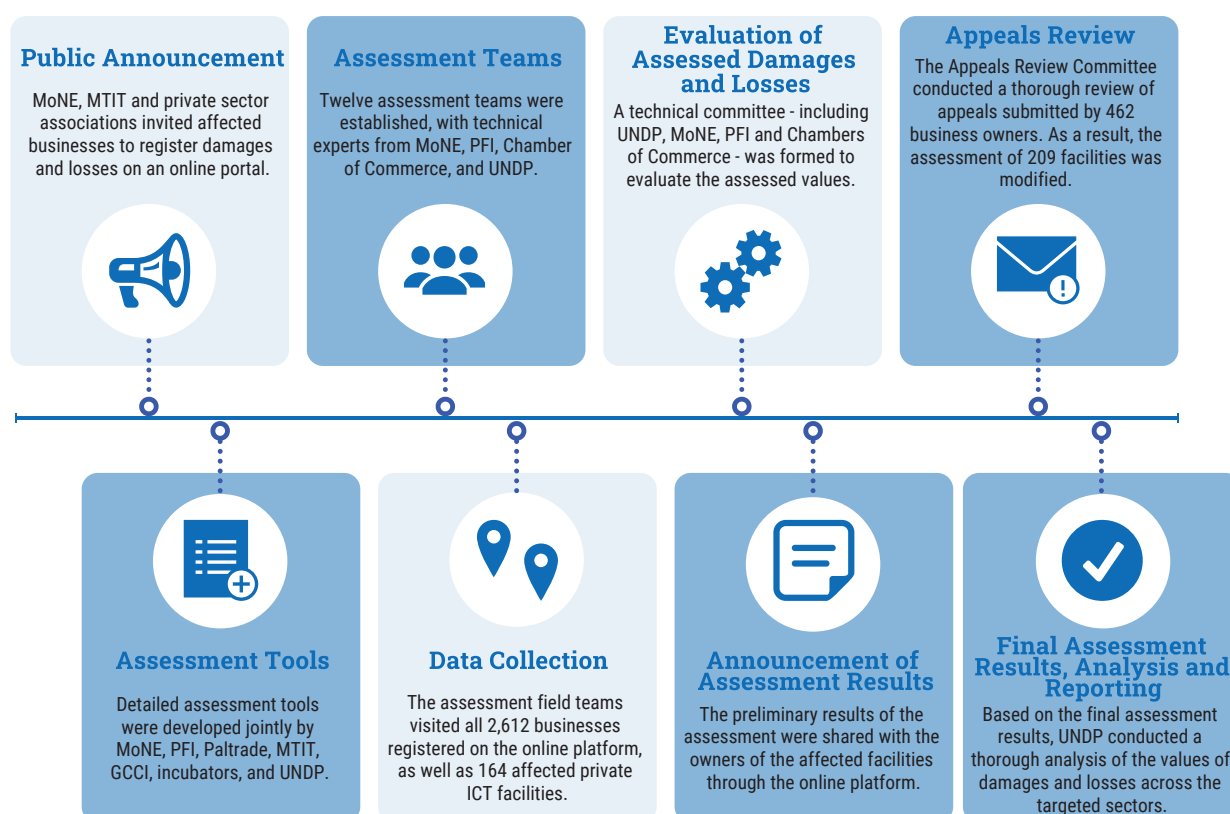
Methodology

UNDP's economic impact assessment focused on damages and losses in the selected economic sectors and was undertaken through a participatory and inclusive approach, actively engaging key stakeholders. The assessment team included UNDP, the Ministry of National Economy (MoNE), the Ministry of Telecommunications & Information Technology (MTIT), the Palestinian Federation of Industries (PFI), Gaza Chamber of Commerce and Industry (GCCCI), as well as other business service providers.

The assessment's methodology included a combination of quantitative and qualitative data collection tools, namely:

- i. A desk review of available statistical data and research.
- ii. A total of 23 semi-structured Key Informant Interviews (KIIs) with key stakeholders, including government officials, private sector institutions, and business owners.
- iii. Focus Group Discussions (FGDs) with relevant stakeholders, including line ministries' representatives (MoNE, MTIT, and MoL), executive managers of industry unions, and private sector associations (PFI, Paltrade, GCCCI). This includes a final FGD, held on 21 October 2021, to validate the results of the assessment and discuss recommendations with all key stakeholders.
- iv. A detailed field assessment of affected economic establishments (carried out between 22 May - 17 July 2021) to assess damages and losses across infrastructure, physical assets, raw materials, goods, and labour. The field assessment team visited 2,612 facilities registered with MoNE and found that 2,254 had been affected by the latest hostilities. In addition, the field assessment team surveyed 164 damaged private ICT facilities.
- v. A private sector businesses survey, rolled-out between 19 - 31 August 2021, targeting a representative sample of affected enterprises. In total, 320 targeted businesses responded to the survey. Statistically, the collected sample of data has a 5.07% margin of error. The survey allowed for a participatory identification of priorities and key private sector needs, with a view towards the resumption and recovery of economic activities.

Figure 2. Field Assessment Process





Main Findings

Snapshot of field assessment results

The field assessment teams visited the facilities of all 2,612 businesses that had registered on the MoNE online platform and found that 2,254 facilities were affected, while 209 establishments had incurred no damages. The remaining 149 sites were not relevant to the economic sectors targeted by the assessment. Of the 2,254 damaged facilities, 52% belong to the trade sector, 34% to the services sector and 14% to the manufacturing sector. In addition, the field assessment teams visited 164 affected private ICT facilities.

Figure 3. Surveyed economic facilities registered on MoNE platform, disaggregated by sector and severity of damage

Sector	Severity of Damage			Number of affected establishments
	Complete	Severe	Partial	
Manufacturing	51	60	212	323
Trade	226	136	808	1170
Services	184	88	489	761
Total	461	284	1,509	2,254

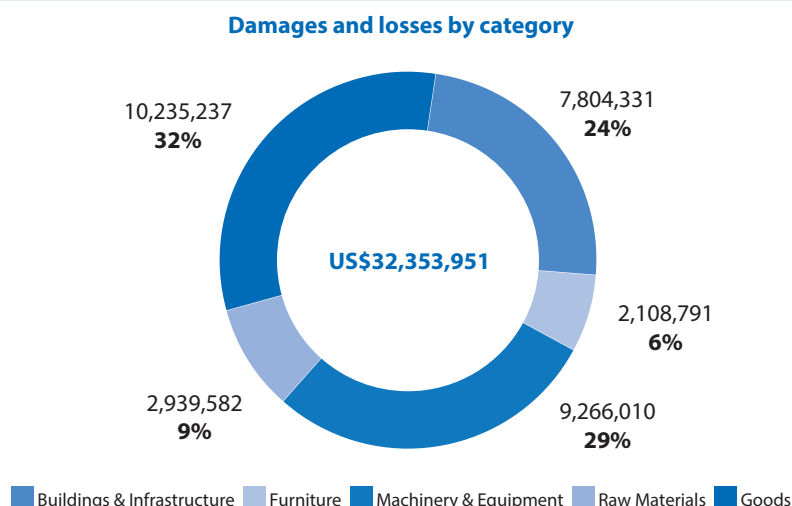
Figure 4. Surveyed private ICT facilities with MTIT, disaggregated by severity of damage

Sector	Severity of Damage			Number of affected establishments
	Complete	Severe	Partial	
Private ICT	53	29	82	164

According to the assessment results, the total value of impact across the manufacturing, trade and services sectors reached **US\$ 32,353,951**, which encompasses damages to infrastructure, machinery, equipment, and furniture, as well as losses of raw materials and goods. The value of damages to infrastructure, equipment and furniture amounts to **US\$ 19,179,132**, corresponding to **59.3%** of the total value of impact. Considering these findings, it is important for any intervention aimed at enabling rapid private sector and economic recovery to prioritize the provision and/or repairing of needed machinery and equipment, as well as rehabilitation and reconstruction of damaged buildings and other infrastructure.

In addition, the assessment found that the total value of losses across the four targeted economic sectors amounts to **US\$ 13,174,819**, or 40.7% of the total value of impact. Most losses were incurred by goods and finished products, which account for 77.7% of total losses, followed by losses in raw materials (22.3% of total losses).

Figure 5. Damages and losses by category (in US\$ and % of total value of damages and losses)



The costs incurred by trade sector enterprises account for 49% of the total value of impact across all assessed sectors, which is due to significant losses in finished products (US\$ 8.7 million).

Figure 6. Damages and losses by economic sector (in US\$ and % of total value of damages and losses)

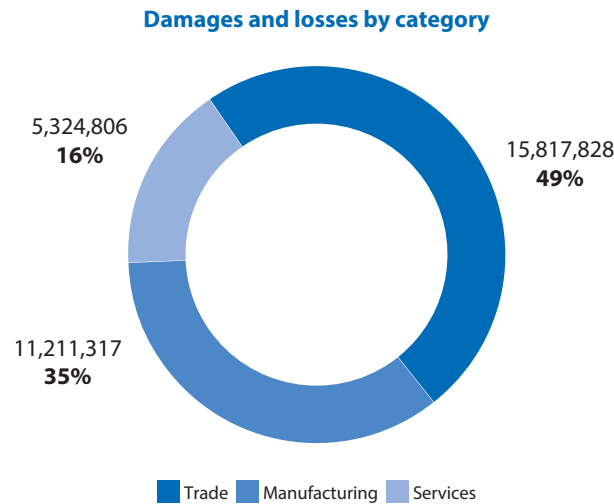


Figure 7. Damages and losses by economic sector and category

Sector	Damages (US\$)				Losses (US\$)			Grand Total US\$
	Buildings & Infrastructure	Furniture	Equipment & Machinery	Total	Raw Materials	Goods	Total	
Manufacturing	2,510,425	126,230	4,883,505	7,520,160	2,310,302	1,380,855	3,691,157	11,211,317
Trade	3,750,513	779,398	2,042,445	6,572,356	538,980	8,706,492	9,245,472	15,817,828
Services	1,543,393	1,203,163	2,340,060	5,086,616	90,300	147,890	238,190	5,324,806
Grand Total	7,804,331	2,108,791	9,266,010	19,179,132	2,939,582	10,235,237	13,174,819	32,353,951

With regards to the assessed value of impact, the overwhelming majority of affected enterprises (77%) incurred lesser costs (up to US\$ 7,000 per unit). At the same time, a smaller group of 51 enterprises – only 2% of the total number of affected businesses - accounted for about 55% of the total value of impact across all targeted sectors, as they incurred high damage costs and losses (between US\$ 100,000 and US\$ 2.250 million).

While damages to Paltel ICT infrastructure have been covered by the Infrastructure Damage Assessment, commissioned by UNDP, this assessment evaluated the impact on 164 private ICT facilities – including media companies, satellite channels, radios, internet providers and ICT start-ups. The related total value of damages and losses amounts to **US\$ 8,878,805**.



Private sector survey findings

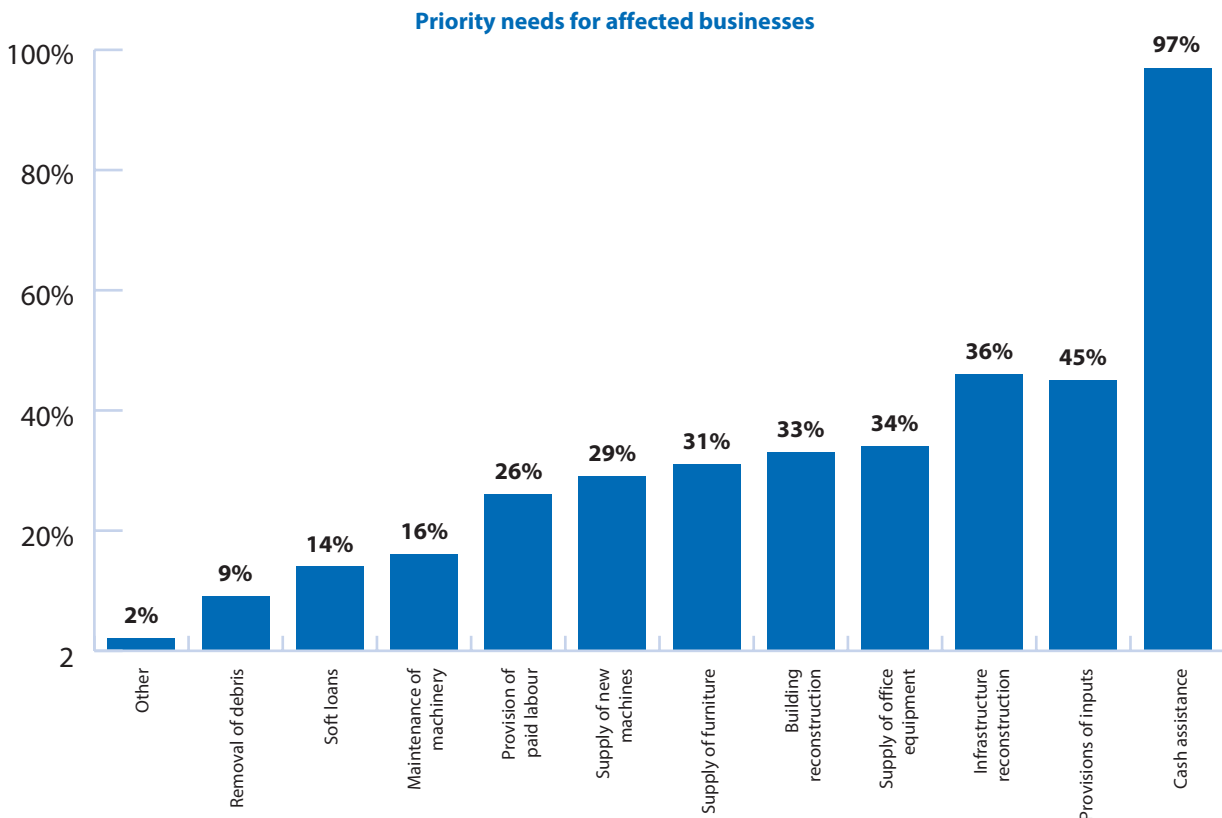
The private sector survey, undertaken by UNDP three months after the end of the May 2021 hostilities in cooperation with PFI, Paltrade, and GCCI, targeted a representative sample of 320 affected businesses. The trade sector accounted for 51% of survey respondents, followed by the services sector (35%) and manufacturing (14%).

The survey results highlighted that **33% of the employees lost their jobs as a result of the May 2021 hostilities**, while most enterprises (62%) are currently working with limited operational capacity. Only 7% of surveyed respondents were able to re-establish their productivity. Damages to equipment, machinery, and infrastructure, as well as limited cash availability, are key factors crippling the full resumption of economic activity.

The survey has also identified priority needs, critical for the recovery of economic activity from the impact of the May 2021 hostilities. These factors – as prioritized by surveyed businesses – include access to finance and availability of inputs, including raw materials.



Figure 8. Priority needs identified by surveyed businesses (as % of total survey respondents)



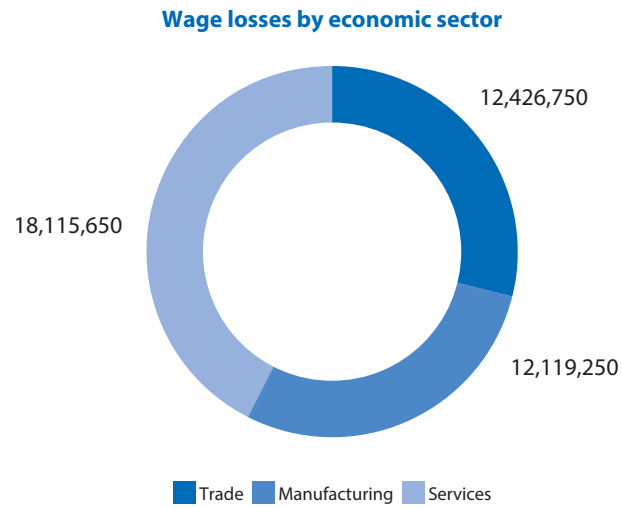
Snapshot of the hostilities' impact on jobs across targeted sectors

The assessment revealed that a total of **12,749** workers across the trade, manufacturing and services sectors have been negatively impacted by the hostilities, with a **total loss in wages** reaching at least **US\$ 42,661,650**. The value of the losses in wages was calculated considering MoL's indicated minimum monthly wage (US\$ 450 in the trade and services sector, and US\$ 550 in the manufacturing sector). In addition, calculations took into account different recovery periods based on the severity of damages incurred by the affected facilities, ranging from 18 months (total damage), to six months (severe damage), to three months (partial damage).

In addition, for the affected private ICT facilities, the assessment found that the total loss in wages amounted to **US\$ 429,394**.



Figure 9. Estimated wage losses by sector (in US\$ and % of total wage losses)





Recommendations

The recommendations, developed as part of the economic impact assessment, are based on the field-based evaluation of damages and losses, as well as on stakeholder consultations, focus group discussions and interviews with key informants (line ministries, private sector institutions, and business owners). These recommendations aim to respond to urgent needs and boost private sector recovery, while addressing systemic issues and strengthening resilience. They outline short-term (18 to 24 months) and medium to long-term (2 to 5 years) priority interventions.

Figure 10. Guiding principles to recovery and resilience



Short-term priorities – employment protection and private sector recovery

Against the backdrop of a local Gazan economy that has been crippled by a 14-year long blockade and multiple rounds of hostilities, the proposed short-term priority interventions aim to provide an immediate stimulus to the local economy, by supporting the recovery of affected economic establishments, supporting job retention for affected businesses, and providing income generation opportunities to the people of Gaza.

To enable a **rapid private sector recovery and resumption of activities of existing businesses at full operating capacity**, interventions shall address:

- Provision of financial support to affected MSMEs, allowing them to rebuild their infrastructure, as well as to purchase critical equipment, raw materials and goods.
- Provision of critical equipment required for the recovery of the operating capacity, coupled with support in terms of maintenance of production lines and re-stocking of inputs and merchandise necessary to resume business activities.
- Support to MSMEs in pursuing an inclusive and equitable approach in rebuilding their workforce, accessing the untapped potential of women's participation in the private sector recovery.
- Provision of technical assistance and business development services, to support affected businesses in adapting and improving their business models in light of the impact of the May 2021 hostilities and the COVID-19 pandemic, strengthening their capacity to cope with future shocks and crises, and enhancing their resilience and sustainability.
- Provision of financial and technical assistance adequately tailored to women-led MSMEs, which shall be coupled with complementary support services aimed at reducing the gendered burden of unpaid care work – which disproportionately affect women – and facilitating improved work-life balance.

At the same time, complementary interventions are required to ensure **employment protection** and to **restore and improve access to decent jobs**, while prioritizing workers who lost their jobs following the May 2021 hostilities, as well as those who have been unemployed since before the hostilities.

- Subsidize wages for workers who lost their jobs as a result of damages and losses incurred by economic establishments affected by the May 2021 hostilities. For instance, subsidizing wages for the almost 12,800 workers affected in the establishments covered by this assessment would require a total estimated budget of US\$ 23 million (assuming a duration of four months, with a wage subsidy of US\$ 450 per month per worker).
- Deploy additional workers across key economic sectors to secure their access to decent jobs, while further supporting private sector recovery and reducing operational costs. For example, subsidizing wages for 20,000 additional workers across different economic sectors would require an estimated budget of US\$ 36 million (assuming a duration of four months, with a wage subsidy of US\$ 450 per month per worker).
- Provide technical and financial support to emerging entrepreneurs, start-ups, and social enterprises, prioritizing those that have been affected by the hostilities and whose business viability is significantly at risk.
- Roll-out training and apprenticeship placement programmes that address the issue of skills deficit in the private sector, enabling youth to access on-the-job skills development opportunities. Such programmes shall prioritize sectors playing a crucial role in the post-hostilities' rehabilitation and reconstruction process (e.g., construction) and shall encourage the adoption of relevant approaches to enhance a gender-sensitive perspective, enhancing employability of women, as well as sustainability and resource efficiency (e.g. rubble re-use in construction).
- Support capacity development of TVET institutions through rapid interventions, including provision of modern equipment and resources, as well as ToTs in line with market demand. In the short-term, such interventions shall prioritize those TVET streams that are most relevant for the post-hostilities' rehabilitation and reconstruction process, with a view to facilitate TVET graduates' rapid transition into the labour market.

In line with the Leave No One Behind principle and with a view to reduce inequalities, all priority interventions should include tailored strategies and actions to ensure the inclusion of vulnerable groups, including persons with disabilities (PWDs), youth and women, and support them in accessing safe, decent, and productive jobs. This cross-cutting principle also applies to interventions geared towards boosting rapid private sector recovery, where affected businesses led by women, PWDs and/or youth shall be prioritized.



Medium to long-term priorities – private sector development and sustainable employment

Several policy and programmatic interventions shall be prioritized in the medium to long-term, with a view to promote an **enabling environment for private sector development and market integration** in the Gaza Strip, supporting businesses' sustainable growth, improved market access and increased competitiveness.

While the need for these interventions is not directly stemming from the most recent hostilities, these recommendations are critical if Gaza's economy is to recover from a downward spiral of systemic de-development, generated by a relentless cycle of blockade and escalations.

They are aimed at fostering inclusive and sustainable private sector development and employment, in line with the Build Forward Better approach. These longer-term initiatives are geared towards improving the enabling business environment despite structural challenges posed by the protracted blockade and the intra-Palestinian divide, as well as towards sustainable solutions for the chronic high rates of unemployment – and particularly youth unemployment - in the Gaza Strip.

- Support capacity development of MSMEs, focusing on the following key elements:
 1. Technical assistance: support and scale-up the National MSMEs Helpdesk and facilitate coordination and complementarity with other existing programmes providing business development services and technical assistance to MSMEs. Technical assistance and business development services shall also include a focus on supporting MSMEs in increasingly adopting green and environmentally sustainable business models, to support a gradual transition towards a green economy.
 2. Access to Finance: support and expand the coverage and outreach of existing programmes providing grants and/or soft loans to MSMEs, such as the PMA's Istitidama Fund.
 3. Access to Markets: support MSMEs access to local, national, regional, and international markets, including through e-commerce.
 4. Technology and Digitalization: support MSMEs access to relevant technology and digital tools to improve their operational capacity, support business development, and facilitate improved market access and competitiveness.
 5. Access to skilled workers: support MSMEs' access to skilled workers – including through wage subsidies and consultancy programmes – to cover the growing demand for skilled labour and new competencies, improving MSMEs' operational capacities, know-how and competitiveness.
- Support capacity development of MoNE, including through:
 1. Digitalization and automation of MoNE services and operations through ICT solutions and web platforms, ensuring efficient institutional operations and support to private sector stakeholders.
 2. Re-activation of the Palestinian Standards Institute (PSI) to ensure compliance with quality standards, conduct testing for imported goods, and provide quality certifications for locally manufactured goods.
 3. Support MoNE and other relevant governmental institutions in developing, adopting and rolling-out policy and regulatory mechanisms that provide incentives for businesses towards ensuring greater women inclusion in the private sector.
- Support capacity building of private sector associations, namely the Palestinian Federation of Industries, Gaza Chambers of Commerce and Industry, and The Palestine Trade Center (PALTRADE):
 1. Strengthen the capacity of private sector associations to ensure quality service delivery to Gazan businesses, as well as support their capacity to effectively represent and advocate for private sector needs and priorities vis-à-vis relevant institutions and actors.

2. Assist private sector associations in linking Gaza-based private sector leaders and business professionals with their counterparts in the West Bank, as well as in the MENA region and internationally. This should include facilitating businesses' participation in relevant trade fairs and exhibitions, high-level workshops and conferences, as well as visits to regional and global businesses and business-related councils and chambers.
- Enhance economic and market integration by supporting trade facilitation with the West Bank, as well as with regional and international markets, through several complementary interventions. The successful implementation and scaling-up of trade-oriented interventions is contingent on a gradual ease of restrictions on the movement of goods and people into and from the Gaza Strip.
 1. Increase the capacity of Kerem Shalom and Rafah commercial crossings to facilitate smooth flow of goods and materials, pending an ease of restrictions by Israel and potential positive developments on the Egyptian side.
 2. Support and facilitate export of local products and goods, focusing on economic sectors with significant exporting potential (garments, agriculture, furniture, and food industries). Export promotion interventions shall include developing and enhancing the quality of local products, enabling local export to have international certificates (e.g., ISO, HACCP), improving packaging and labelling, organizing exhibitions and trade missions overseas, and support market intelligence to identify strategic entry points for market penetration.
 3. Develop Industrial Zones, as export-oriented industrial production, to create sustainable employment and stimulate overall economic growth. The industrial zones would serve as hubs for the local industry by providing the needed infrastructure for businesses to operate. More resources are to develop additional industrial estates outside Gaza City, as well as to improve existing ones and ensure they are affected by the May 2021 hostilities operational (e.g., Rafah industrial estate).
 - Support the development of the ICT sector (e.g. equipment), prioritizing broadband internet connect relevant streams, development of infrastructure (including the ongoing efforts of building an ICT tower/IT development zone in the Gaza strip), as well as promoting Gazan IT enterprises' access to the global IT markets.

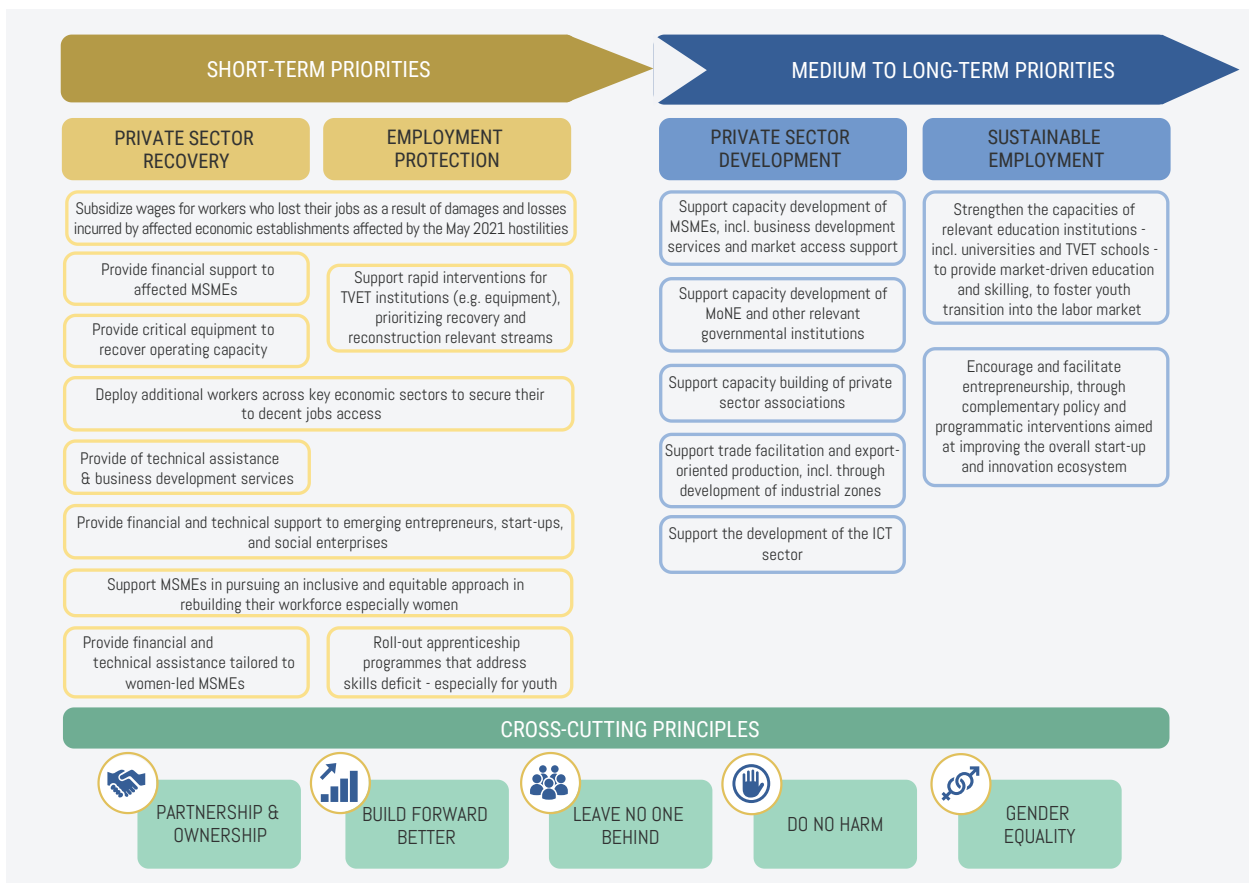
In parallel with these interventions focused on private sector development and market integration, complementary efforts and interventions shall be channelled towards tackling the chronically high rates of unemployment in the Gaza Strip and fostering **sustainable employment**, with a key focus on youth.

- Improve the capacities of relevant education institutions – including higher education and TVET institutions – to provide quality and market-driven education and skilling, with an end view to enhance youth employability and facilitate smooth transition into the labour market. Interventions in this area shall include, but not limited to, the following:
 1. Support rapid interventions for TVET institutions to provide market-driven and quality skilling, including through curriculum development and improvement of existing TVET streams, development of new market-relevant TVET streams, and training of trainers.
 2. Support capacity development of higher education institutions to provide market-relevant and quality education, and complementary skilling opportunities to enhance youth employability upon graduation, including activities focused on life and skills development.
 3. Support and incentivize traineeships and on-the-job training programmes for skilled graduates (including TVET and university graduates).
 4. Support and scale-up existing programmes that facilitate skilled youth's access to e-jobs and freelancing opportunities

- Encourage and facilitate entrepreneurship and innovation, through several complementary policy and programmatic interventions aimed at improving the overall start-up and innovation ecosystem, including:
 1. Support and scale-up the technical and financial capacities of existing business incubators, enabling them to provide quality and effective incubation assistance (including pre-seed/seed funding, prototype development and market testing and validation of MVPs) to start-ups (including social enterprises).
 2. Support connectivity and knowledge exchange between Gaza-based emerging entrepreneurs and start-ups and those based in the West Bank and East Jerusalem, as well as those in the MENA region and globally.
 3. Develop and advocate for the adoption of policies and regulations aimed to improve the enabling environment for entrepreneurship and innovation (including fiscal incentives for entrepreneurs and start-ups) and provide technical and financial support to relevant institutions in the implementation phase.

While all recommendations have a clear potential to effectively mitigate the impact of the May 2021 hostilities on businesses and livelihoods in the short-term, and to foster socio-economic recovery and resilience in the medium to long-term, they cannot be decoupled from the political and structural challenges hindering the path towards sustainable development for the people of Gaza. Complementary advocacy efforts must be sustained and scaled-up to revive meaningful peace negotiations between Israeli and Palestinian political leadership, as well as to foster real progress towards bridging the intra-Palestinian political divide.

Figure 11. Short and medium to long-term priority interventions





References

- i PCBS: Statistical Yearbook of Palestine, December 2020
- ii These hostilities and military escalations include Operation Summer Rains and Operation Autumn Cloud (2006); Operation Hot Winter (2008); Operation Cast Lead (2008-9); Operation Returning Echo and Operation Pillar of Defense (2012); Operation Protective Edge (2014) and Operation Wall Guardian (May 2021).
- iii PCBS, 2019, Socio-Economic & Food Security Survey 2018
https://fscluster.org/sites/default/files/documents/socioeconomic_food_security_survey_sefsec_2018_full_repor_02.09t.pdf
- iv PCBS, 2017,
<https://www.pcbs.gov.ps/site/881/default.aspx>
- v PCBS, January – March 2021, Press Release on The Results of The Labour Force Survey First Quarter
<https://www.pcbs.gov.ps/post.aspx?lang=en&ItemID=3987>
- vi PCBS (2021). Palestinian Labor Force Survey 2020 – Annual Report. Retrieved from:
<https://www.pcbs.gov.ps/Downloads/book2562.pdf>
- vii Youth long-term unemployment rate refers to young people (aged 15 – 29) being unemployed for at least 12 months or more.
- viii Ibid.
- ix OCHA. Humanitarian Needs Overview 2021. Retrieved from:
https://www.ochaopt.org/sites/default/files/hno_2021.pdf
- x Death toll in Gaza includes those who died due to indirect consequences of the hostilities, such as cardiac arrest or falling while running during an attack.
- xi OCHA (2021). Humanitarian Bulletin – Gaza after the May escalation. November 2021. Retrieved from:
<https://www.ochaopt.org/content/overview-november-2021#ftn1>
- xii World Bank (2021). Economic Monitoring Report to the AHLC, 17 November 2021
- xiii FAO (2021). Impact of the May conflict escalation on the agricultural area in the Gaza Strip. Retrieved from:
<https://www.fao.org/3/cb7167en/cb7167en.pdf>



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