

TEN YEARS LATER

United Nations Country Team in the occupied Palestinian territory

July 2017

4 THE ECONOMY

Over the past decade, the Gaza Strip has seen a significant decline in key socio-economic indicators, reaching an estimated poverty level of about 40%, and faring much worse than the West Bank.

In terms of real GDP, the ten-year average growth rate for Gaza reached only 2.8% compared to 6.9% in the West Bank, causing a growing divergence between the two regions. Critically, since Gaza's average GDP growth rate has been lower than its population growth rate therefore per capital real GDP in Gaza has actually decreased over the last decade. Per capita real GDP in Gaza declined by 5.3% from 2006 to 2016, while it grew by 48.5% in the West Bank, during the same period, increasing the gap in living standards between the two regions significantly.²⁰

Gaza's economic performance suffered a heavy blow initially due to the events of 2005-2008, from the disengagement, through the Hamas take-over, the tightening of the closure, and the escalation of hostilities. It suffered another major setback following the 2014 escalation. The contraction of economic activity was particularly significant in 2014 when real GDP fell by over 15%. Inflow of foreign aid for reconstruction after each escalation of hostilities in 2008-09, 2012 and 2014 have helped boost Gaza's growth rates temporarily.

Indicator	Value		
Gaza Real GDP per capita	2006: US\$1,096 2016: \$1,038 2020 (projected): US\$1,058		
Unemployment rate	2011: 29% 2016: 42% 2020 (projected): 44.4%		
Poverty rate	2004: 30% 2007: 50% 2016: ~40%		
Food insecurity	2012: 44% 2017: 47%		

As Gaza's real GDP per capita failed to demonstrate significant growth, poverty has increased. In 2004, Gaza had a poverty rate of 30%. The rate increased sharply to more than 50% immediately after the intensification of the closures in 2007²¹. The poverty rate then declined to 39% in 2011.²² In the past few years poverty has stabilized at around 40%.²³

The impact of the economic contraction in Gaza is also reflected in the unemployment rate. Gaza's unemployment rate increased from 34.1% in the first quarter of 2006 to 40.6% in the last quarter of 2016, translating into 203,000 unemployed persons at the end of 2016.²⁴ Gaza's unemployment rate has been highly volatile over the past decade reflecting changes in the level of restrictions, periodic rounds of hostilities and reconstruction, and fluctuations in demand for seasonal labour in the farming and fishing sectors. Unemployment peaked in the third quarter of 2014 – exceeding 47% at the height of the hostilities.

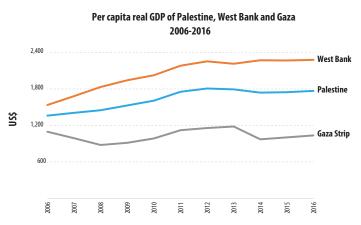


The increase in unemployment has been particularly stark among youth and women. Between the first quarter of 2006 and the last quarter of 2016, the unemployment rate for 20-24 year olds increased by nearly 10 percentage points (from 50.6% to 60.3%) while that of 25-29 year olds increased by close to 16 percentage points from (36.3% to 52.1%). In the same period, the unemployment rate for women increased from 35.1% to 64.4%, with the gap between men and women steadily increasing over the decade.

With increasing poverty and unemployment as well as high food prices, affordable food is out of reach for many families in Gaza. Over one million Palestinians in Gaza are moderately-to-severely food insecure, despite many of them already receiving food assistance or other forms of social transfers. As an example, the number of refugees requiring food assistance has been continuously increasing. The increase started already in the early 2000s, and in the past decade the number of people relying on UNRWA food assistance increased by 27% to more than 960,000 people in 2016, with projections of one million recipients in 2017.²⁵ An additional 25,000 food insecure non-refugees in Gaza rely on food assistance through WFP.

FORECAST:

In the Gaza 2020 report, it was projected that between 2012 and 2015 the annual growth rate of real GDP would reach 4% to 5% in a low-growth scenario, or 9% to 10% in a highgrowth scenario, based on a "significant easing of trade and other restrictions". Given the high annual population growth rate of 3.37%, real GDP per capita was thus projected to grow at between 0.6% and 1.5% annually in the low-growth scenario, and by 5.7% to 6.6% in the high-growth scenario. However, in large part due to the economic contraction in connection with the 2014 hostilities, real GDP instead



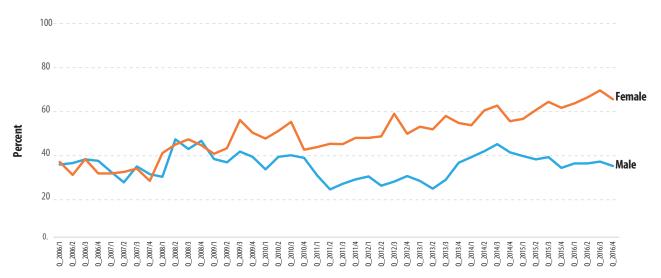
declined in this period - by nearly 5% - while real GDP per capita decreased by over 13% between 2012 and 2015.

Assuming the current energy crisis is resolved by the end of 2017 and the economy recovers in due course, Gaza's real GDP is expected to be around US\$2,327 (with 2004 as the base year) in 2020, which would translate into a real per capita GDP of US\$1,058. Even in 2020, real per capita GDP in Gaza will continue to be lower than pre-2014 levels.

Moreover, due to the high population growth in the Gaza Strip, the labor force is projected to increase significantly. Even to keep the current high unemployment rate from deteriorating further-still, 24,000 new jobs will have to be created each year. This figure will increase to 27,000 new jobs per year in 2020-2025 and to 30,000 new jobs per year by 2025-2030²⁶. If employment growth in Gaza continues at the rate of the historical trend over the last 10 years, by 2020 the unemployment rate in Gaza will exceed 44%.

Gaza's economic trajectory over the past decade is a strong indicator of the ongoing de-development in the Strip. The gap between Gaza and the West Bank also continues to widen.

Unemployment rate in Gaza disaggregated by gender: 2006-2016



IMPACT ON GAZA'S PRODUCTIVE SECTORS

Gaza's productive sectors have been particularly hard hit by the events of the last decade and their share of the Strip's GDP has been declining steadily. Between 2006 and 2016, the share of agriculture, forestry and fishing in GDP declined from 6.1% to 4.1% and the share of mining, manufacturing, electricity and water declined from 11.9% to 8.4%. According to the Palestinian Central Bureau of Statistics, GDP growth rate during these 10 years was driven largely by construction, wholesale and retail trade, services as well as public administration and defence. Public administration and defence accounted for nearly a third of Gaza's economy in 2016.

Private businesses

Most businesses in Gaza are traditionally family-owned and family-operated, and largely engaged in trade and services activities. Businesses are mostly small in size, with the majority only employing 1-4 workers²⁷ and having asset values under US\$30,000²⁸. Gaza firms compare far less favourably than their counterparts in East Jerusalem and the West Bank in terms of productivity and cost-effectiveness. According to the World Bank, Gaza's private sector businesses are characterized by a low-level of labour productivity (i.e. value-added per worker), capital intensity (capital units per worker) and total factor productivity (a measure of firms' technical efficiency).²⁹

Gaza's private sector is the engine of any future economic growth but remains highly constrained by the impact of the restrictions on movement and access to natural resources and markets, in addition to recurrent destructive outbreaks of hostilities. During the 2014 hostilities, Gaza's productive sector incurred direct damages estimated at US\$418 million while indirect losses due to lost income and business opportunities as a result of the conflict reached an additional \$451 million. Two years after the latest round of hostilities, Gaza's private sector still report a 50-60% decline in terms of capital assets, production and sales, employment and exports, compared to pre-2014 levels.³⁰ This has been exacerbated by inadequate international financial support to address the extensive damage and losses caused by the escalation in hostilities and to help initiate recovery.

For the past 10 years the international community has been providing financial and technical support to Gaza businesses to alleviate the adverse impact of the stringent conditions under which they operate. This support has mainly been provided through projects that either target specific productive sectors or business segments with the purposes of repairing damages, promoting new jobs, enhancing quality and performance, or supporting expansion. Generally, the overall strategy of these projects aims to help Gaza recover part of the productive capacity it possessed before the blockade or to compensate for the damages that resulted from the recurrent hostilities. This project-by-project approach has however provided only limited success in bolstering Gaza's private sector



when coupled with the ongoing limited access to external markets, raw materials, and public infrastructure, and a weak international and national appetite for business investment as a result of political instability and security challenges.

A fresh approach is needed to create a more sustainable private sector that can boost Gaza's resilience. Investments are needed for developing new business sectors and ideas that can survive under the current situation and which can capitalize on the comparative advantages of Gaza in relation to its rich human capital, knowledge sectors and servicing capacity. This new approach would aim to improve the ability of the private sector to cater better to the domestic market with quality and affordable services and goods, and simultaneously offer services to external markets, especially in areas that already show potential such as offering business solutions, e-work, research, and business design and development. This requires a fundamental long-term strategic shift and substantial investment in education, skilling, technological advancement, enabling infrastructure and market promotion for Gaza.

Agriculture and Fisheries

In the agricultural sector the annual average value of agriculture trade during the years 2000-2006 reached \$18 million. In 2014 agricultural trade had dropped to a paltry US\$2.2 million. Progress since, has seen exports valued at \$13.3 million by 2016 but still well below the levels 10 years before. As the predictability of trade flows has improved over the past decade, farmers have returned to or expanded

their cultivation of export-oriented crops, which generate a much higher return than selling on the local Gaza market. Continuing to build on these gains depends on easing restrictions that affect overall agricultural production as well as specifically those which govern trade, particularly on the types of crops that can be exported to Israel.³¹

The growth of the agricultural sector has also been hindered by restrictions on import of raw material for the productive sectors. Certain fertilizers and a range of common pesticides feature on the Israeli 'dual-use' list. Limited access to these has restricted Gaza's agricultural yields, as the fertilizer concentrations currently being used are lower than those used by farmers in nearby countries, preventing farmers from maximizing their yields. Certain chemicals which increase the shelf life of agricultural produce also feature on the 'dual-use' list. Similarly, inputs necessary for even basic manufacturing like spare parts for lathes and machinery for milling, screwing or iron rolling also feature on the 'dualuse' list. Moreover, access restrictions are not only limited to movement in and out of Gaza. As noted above, Israel has also designated Access Restricted Areas (ARAs) on both land and at sea; up to 35% of Gaza's agricultural land and as much as 85% of its fishing waters have been affected at various points³².

At sea, the "allowed" fishing area agreed in the Oslo accords extended to 20 nautical miles (NM), but never exceeded 12NM and since 2006, has varied between 3 and 6NM, occasionally extending to 9NM for a few weeks at a time. These restrictions have heavily impacted sardine fishing,



Gaza's most important catch. Sardines flourish at the 6 NM boundary and have consistently accounted for over 50% of the annual catch except during the period when access restrictions were limited to 3 nautical miles (2009-2012).³³ A sustained extension of the current fishing limit to 12 NM (and eventually to 20 NM as agreed in Oslo) would significantly boost the sardine catch, increasing it from the current 350 tons to at least 2,500 tons, with a potential revenue of hundreds of millions of shekels. It would also allow fishermen to exploit high-value "bottom fish" leading to higher incomes and an increase in fish catch. Ongoing restrictions limit fishing activities to shallower zones inhabited by juvenile fish. This is leading to overfishing of resources further endangering the sustainability of fishing livelihoods in Gaza.

WOMEN AND YOUTH

The women's labour force participation in Gaza is amongst the lowest in the world. Their economic activity is largely concentrated in unpaid agricultural work or informal employment. Thus while 18.3% of economically active women work in agriculture – constituting 30% of agricultural employees in Gaza³⁴ - they are often classified as "unpaid family members" and do not have access to an independent income or control over agricultural assets³⁵. Strict social codes of segregation between men and women mean that women and girls are confined to the private sphere of their homes and are mainly reliant on male family members for their livelihoods as well as access to critical information about the security situation, work opportunities, humanitarian assistance and services. The gendered division of roles and social restrictions on women and girls often translate into

their exclusion and limited role in decision-making within the household and beyond.

Gaza has one of the youngest populations in the world, with 43% below the age of 15. This has many implications on the structure of society as well as on the demand for services and on the economy. Youth in the Gaza Strip face many challenges. They are deprived of basic necessities and face social and economic marginalization, isolation and limited access to social and cultural facilities. For economic and social reasons, some youth drop out of school, leave their jobs, or marry at an early age in exchange for protection or a shelter for them and their families. This has negative effects, both short and long-term, on the entire society.³⁶

On the one hand, the 'youth bulge' presents an opportunity as these young people reach working age resulting in an increased participation in the labor market. However, for this to happen, there needs to be significant investment in their future. An investment that includes adequate education and above all an investment in developing their knowledge, skills and ambition. Currently, those opportunities are highly constricted in Gaza, and youth lack any meaningful prospects for professional growth.

However, education alone will not create additional job opportunities. Currently, even higher education in Gaza does not protect from unemployment and poverty. In 2016, the unemployment rate for graduates with an Associate Diploma Certificate or above reached 42.9%. This is even more pronounced for women, with a 65% unemployment rate for women with more than 13 years of education, while the unemployment rate was actually lower for women with fewer years of education.



5 BASIC INFRASTRUCTURE

Gaza's infrastructure has suffered significantly from a lack of investment affecting key areas such as water, energy and communications networks³⁷. Basic services are simply unable to keep up with demand.

ELECTRICITY

Indicator	2012	2017	2020 (projection)
Electricity Supply	210 MW	120-142 MW	210-360MW
Electricity demand	350 MW	450 MW	550 (low-growth) 850 (high-growth)

Gaza's chronic energy shortages continue to impact everyday-life, while at the same time undermining the functioning of other infrastructure and services, such as water treatment and health care facilities, as well as adversely impacting Gaza's productive sectors.

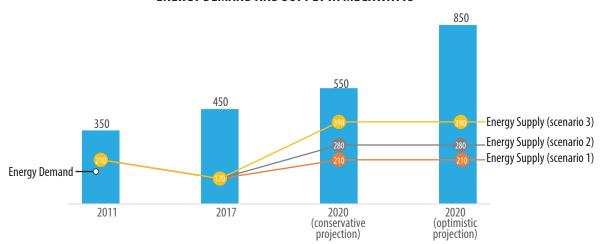
The daily demand for electricity in Gaza, which was estimated to be 350MW in 2011, is currently estimated at 450 MW. Meanwhile, the supply of energy has remained stagnant at a maximum of 210MW³⁸ since 2006. In early 2006, the 210MW consisted of about 90MW from the Gaza Power Plant (GPP) and 120MW from the Israeli Electricity Company (IEC) paid by the PA. As the GPP production reduced following an

Israeli bombardment of the Plant in 2006, reaching only half capacity of 60MW, Egypt began providing 17MW which later increased to 20-30MW³⁹. However, the power supply from Egypt is regularly interrupted due to maintenance issues.

Recent months have seen a significant decline in energy supply due to the latest stand-off between the PA and Hamas. As the PA refused to waive taxes on fuel for the GPP, and the de facto authorities refused to purchase the taxed fuel, the operation of the power plant came to a halt in April 2017. As a result, Gaza's energy supply reduced to only 120MW, received through Israeli lines (increasing to 142MW when the Egyptian lines are operational), and daily blackouts reached 20 hours per day. Subsequently, in June 2017 the PA decided to reduce its payments by 25% for electricity supplied from Israel to the Gaza Strip. At the time of writing, the Israeli supply has also been reduced to around 80MW, following the PA's decision to reduce payments for Israelisupplied electricity. This reduction has partially been offset by the import of Egyptian fuel, paid by Hamas, enabling the GPP to produce some 55MW. Thus the total supply again is up at 127MW (155MW when the Egyptian lines are functioning)



ENERGY DEMAND AND SUPPLY IN MEGAWATTS



FORECAST:

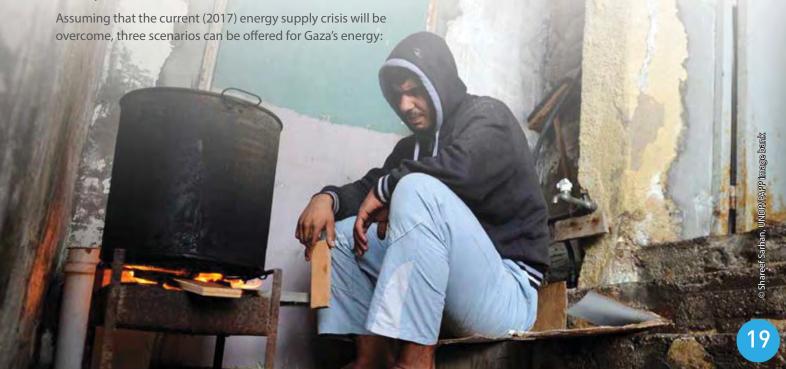
Based on population growth, a conservative projection will see the demand for energy increase to 550MW by 2020. However, in a more optimistic scenario, the next few years would see the completion of a number of critical water and wastewater facilities as a well further progress in Gaza's economic recovery. In this scenario, the energy demand would increase to 850MW.

Projecting future supply is much more difficult. Several key projects, which have been in the pipeline for years, including the establishment of a 161Kv line from Israel and conversion of the GPP to natural gas, are moving forward, albeit slowly, despite broad agreement on the urgent need to address the Strip's energy shortages. Seeing these projects reach fruition also requires agreement on, inter alia, new arrangements for revenue collection, payment and management, project financing and import permits given much of the equipment required is considered 'dual use' by the Israeli Defense Ministry.

Scenario 1: A pessimistic estimate would be that the energy supply in 2020 remains at similar levels to recent years, i.e. 210 MW. In this case, only 38% of Gaza's energy needs would be met by 2020, assuming a low-growth in demand, while only 25% would be met if demand increases to 850 MW.

Scenario 2: A more optimistic projection would see the completion of the 161kV line from Israel leading to an increase of 70MW. However, even in this scenario, total supply would only increase to 280MW by 2020, covering 56% of Gaza's energy needs (or 36% if the demand increases according to the higher-growth scenario).

Scenario 3: The current best-case scenario would see, in addition to the 161kV line, the conversion of the GPP to run on natural gas and the installation of a gas pipeline, increasing the power plant's capacity to 140MW by 2020 and potentially more at later stages, as well as a doubling of Egyptian supply to 60MW. In this scenario, total supply could reach 390MW by 2020 meeting 71% of demand (or 46% if demand follows the high-growth scenario).



WATER AND SANITATION

Indicator	2012	2017	2020 (projection)
Share of aquifer water that is safe for drinking	10%	3.80%	00%
Year when the aquifer may become unusable	2016	2017	Aquifer will be irreversibly damaged
Amount of untreated or partially treated waste water that is pumped in the ocean	90,000 CM/ Day	100,000 - 108,000 CM/ Day	120,000 CM/Day

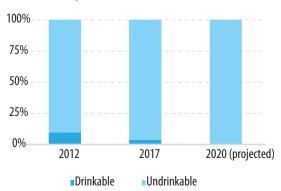
Access to safe drinking water in Gaza through the public water network plummeted from 98.3% in 2000 to a mere 10.5% in 2014, compared to almost 97% in the West Bank. As a result, reliance on water tanks, containers and bottled water rose from 1.4% to 89.6% during the same period.

For other domestic use (ie. not for drinking), currently 50% of the population receives water for only 8 hours every four days, 30% receives water for 8 hours every three days, and the remaining 20% receives water for 8 hours every two days.

Having to rely on water trucking comes at a high cost on consumers, as trucked water is 15-20 times more expensive than water from the network. This particularly impacts the most vulnerable who are often poor and unemployed and do not have access to piped network water. Trucked water is also unregulated and unreliable in terms of quality.

The increasing population and unsustainable demands on Gaza's sole water source due to systematic over-extraction of the underlying coastal aquifer has resulted in the intrusion of seawater and in 96.2% of the groundwater in Gaza becoming unfit for human consumption – up from 90% in 2012. Due to the deployment of new fresh water sources of good quality, particularly an additional 5 MCM of water supplied by the Israeli water company Mekorot and paid for by the PA (bringing this to a total of 10 MCM), and 3 MCM of desalinated seawater that has been developed in the recent past, the projection made in 2012 that the coastal aquifer would become unusable by 2016 has been shifted to the end of 2017. It is still expected that the damage to the

SHARE OF AQUIFER SAFE FOR DRINKING



aquifer will become irreversible by 2020 unless additional measures are implemented immediately.

At the same time, the amount of untreated or partially treated waste-water which is released into the ocean each day has increased from 90,000 CM per day in 2012 to 100,000 CM per day in 2016, which recently increased further to 108,000 CM per day due to the electricity crisis. This equates to 43 Olympic-size swimming pools of poorly treated sewage being dumped into the Mediterranean every day.

This is in large part due to the lack of electricity to operate waste-water treatment facilities as well as the continued delays in completing and making operational the three central waste-water treatment plants, in Gaza and Middle area Governorates, Khan Younis Governorate and North Gaza Governorate. Due to electricity shortages, the Coastal Municipalities Water Utility (CMWU) is currently prioritizing the operation of 55 sewage pumping stations to avoid localized flooding in residential areas. Those stations are pumping the sewage to the waste-water treatment plants, which have reduced functioning due to energy crisis, and thus dumping poorly or untreated sewage to the sea.

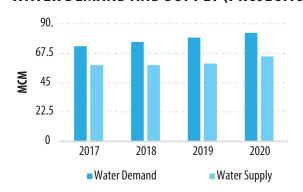
Of particular concern is the delay in implementation of the Northern Gaza Emergency Sewage Treatment Plant (NGEST), which upon completion would be able to treat 36,200 CM of waste-water per day. The plant was due to start operations by the end of 2012. However, restrictions on delivery of equipment and materials, access to the site, and the lack of provision of a 3MW power supply has delayed operation up to the present day. The plant's operational delay is exposing 10,000 households in Beit Lahia to public health and environmental health risks.

To address the water and waste-water crises it is critical that additional water treatment facilities are constructed. Since 2012, work has started on three Short Term Low Volume (STLV) desalination plants, which will produce an additional 13MCM water, as well as on sewage treatment plants in both the North, Middle and South areas of Gaza. However, the construction of the facilities have been delayed in large part due to restrictions on imports of the necessary dual-use material, and only 23% of the planned STLV interventions forecast to be completed by 2016 were achieved. The completion date for the remainder is now expected in 2019 at the earliest. The recent opening of the Seawater Desalination Plant for the Southern Gaza Strip, designed to provide safe drinking water to 75,000 people, with plans for expansion to serve 150,000 people is a welcome development, but can only be sustained if a solution is found to the ongoing energy crisis. This STLV inaugurated in January 2017 is only operated for a limited number of hours, depending on the availability of fuel, pending the supply of 1.5 MW of electricity from the grid

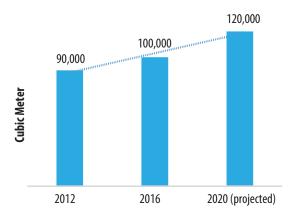
FORECAST:

It is forecast that by 2020 Gaza's coastal aquifer will be irreversibly damaged. The impact of this will be catastrophic. Already the supply of water in Gaza does not meet the global WHO standards of 100 liters per person per day. In order to meet this standard, 73MCM would currently be required in Gaza – but the supply is only 58.32MCM, or 80% of demand. Even assuming that the Mekorot supply will remain stable and that there are no further obstacles to implementation of or energy supply for water facilities, this gap is expected to grow by a couple of percentage points by the year 2020, given rapid population growth.

WATER DEMAND AND SUPPLY (PROJECTION)



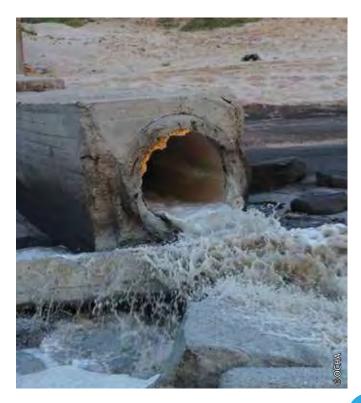
SEWAGE DUMPED IN THE SEA EACH DAY



With the supply of water too low to meet the demand, the living and health conditions of the people of Gaza can only further deteriorate, exposing the population to water-borne illnesses, and other threats.

Without further progress towards improvement of waste-water treatment, most urgently through increased electricity supply, the amount of sewage pumped into the ocean is also expected to increase by another 20% to 120,000 CM per day by 2020, with significant environmental consequences, not only for Gaza.

A large number of projects are currently underway to avert this disaster, including through increased desalination and waste water treatment facilities. However, these projects are progressing very slowly and facing continued obstacles in the import of essential equipment. Moreover, all of these facilities, once completed, will depend on a reliable electricity-supply.



GAZA TEN YEARS LATER 2

6 SOCIAL SERVICES

Throughout most of the period, Gaza has shown remarkable resilience in the areas of primary health and basic education, in large part due to services provided by UNRWA and other international partners. However, in neither area have services been able to keep up with the growing demand. Restrictions on import of construction material and equipment, damages sustained in multiple rounds of conflict, low human resources and morale are leading to a gradual decay in the quality of services.

At the same time, providers of humanitarian assistance and other social services are heavily impacted by the long-standing electricity crisis. To maintain a minimum level of critical services, providers rely on back-up generators, which are constantly at risk due to funding shortages for fuel, limited fuel storage capacity, recurrent malfunctioning due to overuse, and challenges in procuring spare parts and new generators due to import restrictions. Since December 2013, emergency fuel supplies from the international community to the most vital health, WASH and municipal facilities have prevented the collapse of these services. Currently, 186 critical facilities receive emergency fuel: 32 in the health sector, 124 in the water and wastewater sector and 30 in the solid waste sector.

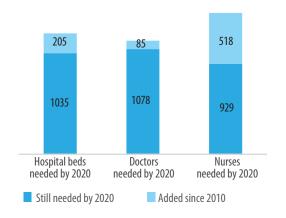
HEALTH

Indicator	2010	2016	2020 projection (requirements to maintain 2010 service level)
Number of hospital beds per 1,000 people	1.8	1.58	Over 1,000 hospi- tal beds needed
Number of doctors per 1,000 people	1.68	1.42	Over 1,000 doctors needed
Number of nurses per 1,000 people	2.09	1.98	Almost 1,000 nurses needed

The Israeli closures compounded by the Palestinian divide directly affect the sector's ability to ensure quality staff training, medical supply and equipment, and maintenance of infrastructure. Several hospitals and clinics were also damaged or destroyed during the three rounds of hostilities in Gaza. As a result, while the population has doubled since 2000, the number of functioning primary health care clinics has decreased from 56 to 49 (note UNRWA currently runs an additional 22 health centers), resulting in crowded conditions, decreased doctor-patient time and further reduced quality of services. In addition, an insufficient and intermittent supply of electricity has contributed to difficulties in the provision of health care particularly with



PROJECTED HEALTH CARE SYSTEM REQUIREMENTS



regard to the effectiveness of immunization (vaccines) programmes which are dependent on uninterrupted functioning of the cold chain.

While there has been a slight increase in the numbers of hospital beds, doctors and nurses between 2010 and 2016, high population growth has meant that their availability per capita has actually decreased over the same period. Thus, while the absolute number of hospital beds in Gaza increased from 2,769 in 2010 to 2,974 in 2016, the rate of beds per 1,000 people declined from 1.80 to 1.58 over the same period. Similarly, the number of doctors in Gaza increased slightly from 2,578 in 2010 to 2,663 in 2016, but the rate of doctors per 1,000 people declined from 1.68 to 1.42. For nurses, the increase in numbers has been slightly greater, with an additional 518 nurses added to the 3,207 nurses in Gaza in 2010 translating nevertheless into a slight decline in the rate of nurses per 1,000 people from 2.09 in 2010 to 1.98 in 2016.

The reduction in the structural capacities and human resources of the health care system in Gaza has worrying implications for the quality and overall capacity of services. These problems are further compounded by chronic shortages in essential drugs and medical disposables and the lack of regular payment of Ministry of Health staff.

While some basic health indicators in Gaza have remained relatively high – in large part due to services provided with international assistance, particularly through UNRWA - many of these indicators have now started to stagnate or even decline. For example, studies of Gaza's refugee population revealed no significant reduction in Gaza's infant mortality

rate in recent years.^{40&41} The rate of breast cancer survival declined from 59% in 2006-2010 to 46% in 2010-2014. This sensitive marker illustrates the need for improved breast cancer services for effective detection and treatment.

At the same time, the rising burden of non-communicable diseases has resulted in increased and unmet needs for prevention and treatment measures, while tertiary health care services in Gaza lag behind the standard expected in the region, including for mental health care, metabolic diseases, cancer treatment and trauma rehabilitation.

As a result of the poor quality of healthcare and the lack of many services, many patients look for medical assistance and treatment in West Bank and beyond, which is challenging due to limitations in movement and obtaining permits. The annual number of MoH referrals of patients for care outside of Gaza tripled in the past ten years from 8,276 in 2006 to 24,616 in 2016. Over the same time period the approval rate of permits granted by Israel to patients to exit Gaza for medical treatment dropped from 90% to 62% of applicants.⁴²

FORECAST

In 2010, the UN projected that by 2020, Gaza would require almost 800 additional hospital beds; more than 1,000 additional doctors and more than 2,000 additional nurses. Since then, more accurate data has become available and the UN has therefore subsequently adjusted these requirements to 1,240 additional hospital beds, 1,163 additional doctors and 1,447 additional nurses.⁴³

However, since 2010, only 205 additional hospital beds have been provided and 85 additional doctors have been registered, while 518 additional nurses were registered in the same period. As a result the number of hospital beds, doctors and nurses per capita has further decreased.

In order to revert to the already low 2010 levels of beds, doctors and nurses per 1,000 people, it is now projected that an additional 1,035 hospital beds, 1,078 additional doctors and 929 additional nurses will be needed in Gaza by 2020.

While these additional staff would help to improve services, there were significant gaps in the availability and quality of health care for people in Gaza in 2010, with a reliance on external referral for specific areas of hospital care, including many cancer treatments. The deterioration in the availability of health services, as expressed by these indicators, points to a worrying trend for the future health of Gaza's population.

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EDUCATION

Indicator	2012	2017
Number of teachers per 1,000 students	38.7	36.7
Number of class rooms per 1,000 students	26.3	26.4
Number of class room hours per student	4 Hours	4 hours

In the education sector, Gaza also has a high-level of basic educational attainment, in large part due to UNRWA and other international organizations, providing primary schooling. Over the past decade, the literacy rate in Gaza increased from 94% in 2006 to 97% in 2016. At the same time, the average years of schooling increased from 9.17 to 10.66 years, and remained higher than in the West Bank.

Meanwhile, the infrastructure and the quality of learning in non-UNRWA schools have deteriorated significantly over the past ten years. In addition, many schools were damaged or destroyed during successive rounds of hostilities, further increasing the pressure on education facilities. During the 2014 hostilities, 547 educational facilities, including 259 schools, 274 kindergartens, and 14 tertiary education institutions were damaged or destroyed, affecting 350,000 students. To date, most of the affected schools have been repaired, however 181 kindergartens and 11 higher education institutions are yet to be repaired due to lack of funds.

The shortage of infrastructure – and in the case of UNRWA schools, the agency's financial challenges - also has an

an average of 38.9 students in public schools and 39.3 in UNRWA schools. Moreover, 61.7% of government schools and 70.4% of UNRWA schools currently operate on a double shift system, limiting student access to the classroom to only four hours per day. ⁴⁴ The internal political division also means that public education services in the Strip do not have a regular budget for running costs and budget shortfalls have left many teachers unpaid for months.

As a result, there is a growing risk that the high-level of educational attainment cannot be sustained.

FORECAST

By 2020, it is estimated that 665,000 students will be enrolled in schools and 100,000 will be enrolled in universities. Keeping pace with the growth of pupils and students in the Gaza strip will be one of the major challenges for the sector of education in the coming years as at least 900 new schools will be required in Gaza Strip by 2030. In the Gaza 2020 report, it was projected that 250 additional schools were needed immediately, and another 190 schools would be needed by 2020 to meet the demands of a rapidly expanding population. However, between 2012 and the end of 2016, only 33 governmental schools and 24 UNRWA schools were built, i.e. well below the actual need.

In addition to the problem of ensuring adequate facilities, equipment and personnel to keep up with the high growth in the student population and the quality of the services in the education sector will be difficult to sustain. This will require increased opportunities for training of teachers and educational advancement, which requires a relaxation on the restrictions of travel to the West Bank and abroad.



PROTECTION AND HUMAN RIGHTS

INTERNATIONAL HUMANITARIAN LAW

As the occupying power⁴⁵, Israel has obligations to the population and in particular to facilitate rapid and unimpeded passage of humanitarian relief for civilians in need.⁴⁶

Provisions of international law relating to the conduct of hostilities are also relevant within the context of Gaza, and must be respected by all parties to the conflict, including Hamas and other Palestinian armed groups. In particular, all parties have to respect the principles of distinction, proportionality and precaution.⁴⁷

The independent commission of inquiry established by the Human Rights Council to investigate all violations of IHL and international human rights law in the oPt in the context of the 2014 military operations concluded that both the IDF, Hamas and other Palestinian armed groups may have committed war crimes.⁴⁸ Alleged violations during the 2014 hostilities in Gaza are similar to those documented and investigated in 2008/09 and 2012, underscoring the recurrent nature of the violations in Gaza and the failure of efforts to prevent their repetition.⁴⁹ However, almost three years after the 2014 escalation in hostilities, serious concerns persist regarding the degree of accountability by the Israeli authorities and the absence of investigations by Palestinian authorities concerning alleged violations of international humanitarian law and international human rights law, including allegations of war crimes.

HUMAN RIGHTS

Substantial human rights violations are also taking place in Gaza under Hamas's control. These occur not only during times of heightened tensions or when hostilities escalate but have also become a feature of daily life.

Following its take-over of Gaza in June 2007, Hamas launched a broad campaign aimed at consolidating power by reforming security apparatuses and neutralizing opponents. Since then Hamas has committed human rights violations, including restrictions on freedom of expression, association and assembly as well as a campaign of arbitrary arrests, harassment, torture that even lead to death in custody. Certain associated armed groups, such as members of the Qassam Brigades, were also responsible for extrajudicial kidnappings, beatings and murders of political opponents.⁵⁰ In recent years violations by the de facto authorities in Gaza have continued, albeit at lower-scale, including restrictions on the freedom of expression and assembly, arbitrary detention and ill-treatment targeting in particular dissenting voices, journalists and social media activists, members of Salafi groups and political opponents considered as "collaborating" with Israel or the Palestinian Authority.⁵¹ Between 2007 and 2017, a total of 28 civilians sentenced to death were executed by the Hamas in Gaza without the Palestinian President's ratification, as required by the Palestinian law.



The past decade has also witnessed an increasing trend of restricted freedom of expression in Gaza, with the de facto authorities reportedly arbitrarily detaining and torturing civilians, including journalists and social media activists, for expressing views that are perceived as favouring the PA. The de facto authorities also restricted right to freedom of assembly by requiring permission from the Ministry of Interior.⁵²

The State of Palestine is also responsible for implementing its human rights obligations in the entirety of the oPt, including Gaza.⁵³ The de facto authorities in Gaza also bear human rights obligations given their exercise of government-like functions and territorial control,⁵⁴ and the State of Palestine, which is legally bound by its ratification of human rights treaties, also has human rights obligations towards individuals in the Strip.

Meanwhile, the numerous restrictions imposed by Israel on both movement of people and goods into and out of Gaza impede the enjoyment of a range of human rights such as the right to freedom of movement and a number of economic, social and cultural rights, including the right to health, education, work, adequate standard of living, and family life.⁵⁵ As highlighted below, concerns persist as to the right to life and security of persons following the apparent use of excessive force in law enforcement operations within the ARA, including at sea. Given its jurisdiction and effective control exercised as the occupying power, Israel is bound by human rights obligations towards the population of Gaza.⁵⁶

VIOLATIONS IN THE ACCESS RESTRICTED AREAS (ARAS)

Israel's methods of enforcement of access restrictions also impact the right to life and security of person in Gaza. When Israel announced its intention to withdraw from Gaza in 2003, it embarked on a campaign to establish wide "buffer areas" along Gaza's perimeter areas and to restrict access to these by fishermen. These security zones have come to be known as access-restricted areas (ARAs), unilaterally determined by Israel to address security concerns, including the digging of tunnels. In order to enforce these limits, Israel regularly uses force through daily shootings in the direction of fishermen at sea and by the perimeter fence towards farmers, bystanders and demonstrators. Palestinians entering the Access Restricted Areas (ARAs) on land and sea risk being shot even if they present no imminent threat.

On the land border, the size of the ARA has been shifting and there is a lack of clarity on the exact scope of the area. According to available information, the ARA was set at 150 meters from the fence in 2000, extended to 300 meters in May 2009, and reduced back to 100 meters for farmers only with the 2012 ceasefire understanding.⁵⁷ Another UN study found that in 2010, the "no-go area" reached up to 500 meters from the fence⁵⁸. The absence of clear criteria for distinguishing between farmers and ordinary residents who are present in the areas between 100-300 meters from the fence, has added to the uncertainty surrounding the access



restrictions to these areas. The ISF uses firearms almost on a daily basis in the context of protests or clashes along the fence, risking the life of civilians living or present there. The OHCHR chaired Protection Cluster together with a number of Palestinian NGO's documented the killing of 389 people (including 10 women, and 60 children), amongst whom 23 fatalities occurred in the context of protests, and the injury of 2,829 others (including 401 children, and 53 women) by Israeli fire in these areas between 2007 and 2017. ⁵⁹

At sea, the scope of ARA has also fluctuated over the last ten years.60 To enforce access restrictions at sea, the Israeli Security Forces use live and rubber bullets, shells, conduct limited incursions, detain fishermen, confiscate, damage, and sink their fishing boats and equipment. During this period, Israel has claimed that militant groups in Gaza have made continuous efforts to smuggle weapons and materials for weapons production through the sea, including by using fishing boats.61 However under international law, unless there is a credible suspicion that a fishing vessel is being used to commit a hostile act, the use of force against these carriers is only considered as lawful when used in accordance with the principles of necessity and proportionality. The use of lethal force is only justified in instances where there is an immediate threat to life or injury. The majority of the fishermen arrested at sea are never charged or convicted of a crime.

GENDER-BASED VIOLENCE AND CHILD PROTECTION

Over the past decade, Gaza has also seen rising levels of gender-based violence, and child protection violations. While accurate reporting on these issues remains difficult, a recent report suggests that more than 148,000 women in Gaza are exposed to gender-based violence⁶². Between 2011 and 2014 UNRWA identified 3,160 survivors of gender-based violence in Gaza and provided a range of different services including psychosocial support and legal assistance.⁶³ Moreover, the Women's Centre for Legal Aid and Counselling has documented 27 killings of women and girls in 2014, 15 cases in 2015 and 18 cases in the first eight months of 2016.

Due to the war, displacement and impoverishment in Gaza, adolescent boys and girls are especially vulnerable to significant protection concerns, including physical and emotional violence, sexual abuse, arrest and detention, child labour, recruitment and use by armed groups, as well as early marriage. Adolescent boys are also subject to direct protection threats either as a result of their involvement with Hamas and armed groups or their targeting by the IDF in the ARAs. Similarly, boys are more at risk of being injured from ERWs⁶⁴.



GAZA 2020: THREE YEARS UNTIL THE UNLIVEABLE?

Over the past decade, Gaza's economy has weakened, with real GDP per capita largely stagnant and the unemployment rate increasing over time. At the same time, Gaza's infrastructure, basic services and private sector have been gradually debilitated.

As a result, there has been a steady deterioration in living standards and an increase in the vulnerability of the Strip's 2 million people. This vulnerability is further amplified in times of crisis when hostilities have escalated. Consequently, Gaza has been facing a downward spiral of de-development, while the people in Gaza are caught in a cycle of humanitarian need and perpetual aid dependency. Over the past decade, the number of people in humanitarian need has remained above 1 million, with 1.2 million people in need of humanitarian assistance in 2017.

The United Nations and our partners continue to spare no effort to provide emergency humanitarian assistance, while facilitating longer-term projects. However, the current restrictions on the operating environment in Gaza, the fact that the Strip remains beyond the reach of the legitimate Palestinian Authorities and under Hamas control, essentially mean that most of the focus remains on short-term humanitarian and reconstruction projects. The measures needed to move towards more sustainable recovery and development remain elusive if not off-limits.

The costs of inaction are great. Indicators for basic health and education are already starting to decline, and provision of basic services are only kept afloat by humanitarian service-providers. This year, the United Nations and humanitarian partners are requesting \$371 million to provide humanitarian assistance for Gaza – to address vulnerabilities stemming from the critical shortages of basic services and high protection needs. Without these services, Gaza would have been deemed unliveable years ago.

We have less than three years until 2020. It remains essential that the people of Gaza are enabled to live dignified, healthy and productive lives in peace and security and that the current downward spiral is reversed. That requires immediate action by all parties; by Israel, the PA, Hamas and by the international community towards more sustainable development, reinvigoration of Gaza's productive sectors, improvement of freedom of movement for both people and goods, as well as respect for human rights and international humanitarian law.

Without such steps, Gaza will become more isolated and more desperate, the threat of a renewed, more devastating escalation will increase, and the prospects for intra-Palestinian reconciliation will dwindle – and thus so will the prospects for peace between Israel and Palestine.

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