Highlights

- Gaza is affected by one of the most serious energy crises in recent years, with potentially serious humanitarian ramifications.
- Since 1 November, following the shutdown of the Gaza Power Plant as a result of a lack of fuel, households are experiencing power outages of up to 16 hours per day.
- The operation of all 291 water and wastewater facilities has been affected, leading to sewage spills of tens of thousands of cubic meters in various locations, including in a residential area of Gaza City.
- Shortages of affordable fuel used to operate backup generators have severely disrupted the normal functioning of critical hospital functions, such as emergency rooms, operating theatres, and neo-natal care.
- While immediate mitigating measures are being sought to support the most critical functions, medium and longer-term solutions are urgently needed to avoid even greater humanitarian risks and improve the living conditions of average households.

<table>
<thead>
<tr>
<th>1.7 million</th>
<th>40%</th>
<th>At least 3,000</th>
<th>1.7 million</th>
<th>1.1 million</th>
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<tbody>
<tr>
<td>people (entire population) affected by fuel shortages</td>
<td>receive water once every three days for six to eight hours</td>
<td>people affected as a result of one sewage spill in Gaza city</td>
<td>people affected by disruptions to health facilities</td>
<td>people receive food aid</td>
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Situation Overview

Measures adopted by the Egyptian authorities since June 2013 in the context of military operations in the Sinai, have resulted in an almost total halt in the smuggling of goods into Gaza via the illegal tunnels. This has triggered a severe fuel shortage. In recent years, the smuggling tunnels under the border between Gaza and Egypt became the main source for the supply of fuel to the Gaza Strip, due to the lower cost of Egyptian fuel, which is subsidized by the Egyptian government, compared to the Israeli fuel. This has been reinforced by the lack of an agreed mechanism between the Palestinian authorities in Ramallah and Gaza allowing the purchase of fuel from other sources, including Israel.

The current fuel crisis has compounded an already fragile humanitarian situation generated by the longstanding Israeli restrictions on the movement of people and goods to, from and within the Gaza Strip, as well as by the recent Egyptian restrictions on the movement of passengers via the Rafah Crossing.

It is estimated that in November, less than 20,000 liters of fuel per week entered Gaza via the tunnels, compared to nearly 1 million liters per day until June 2013. The Gaza Power Plant (GPP), which until recently supplied 30 percent of the electricity available in Gaza, has been exclusively dependent on Egyptian diesel smuggled through the tunnels, since early 2011. On 1 November, after depleting its fuel reserves, the GPP was forced to shut down triggering power outages of up to 16 hours per day, up from 8-12 hours prior to that.
Additionally, the fuel shortage has severely disrupted the delivery of essential services, which depend on the operation of backup generators during the electricity outages.

Hardest hit is the water and sanitation sector, in which none of its facilities are functioning adequately. On 13 November, one of the main sewage pumping stations in Gaza City (which previously handled 60 percent of the city’s sewage) failed and discharged over 35,000m³ of untreated sewage over a large area in the neighborhood of Az-Zeitoun, south of Gaza City. Approximately 3,000 people were directly or indirectly affected and exposed to public health risks, including diarrhea. The sewage spill has not yet been addressed and clean-up operations have not started. Six school compounds located in the vicinity of sewage pumping stations are at risk of being flooded if there are additional overflows.

All health facilities in Gaza, including 30 hospitals and over 135 health clinics, are affected because of the electricity and fuel shortages. The impact on a range of essential health services, including kidney dialysis, infant incubators, operating theaters, blood banks, intensive care units, and laboratories, is of particular concern. Access to health care is further impacted by the chronic shortage of drugs, caused by the lack of sufficient funding and the poor coordination between the Gaza and Ramallah authorities.

The provision of basic services has been also affected by the shortage of construction materials, impeding the maintenance and rehabilitation of affected infrastructure. Due to Israeli restrictions on the import of construction materials via the Kerem Shalom crossing, the tunnels under the border with Egypt also became the main channel for their supply smuggled into Gaza. The reduction in smuggling activities since June 2013 resulted in a severe shortage of such materials. This has been compounded since mid October, due to the total halt in the entry of building materials from Israel, including for international projects, following the discovery of a tunnel running from Gaza into Israel. In the construction sector alone, this shortage has also resulted in the loss of income for some 30,000 people previously employed.

**Funding**

Both structural and emergency solutions need to be found to address the rapidly deteriorating fuel crisis in Gaza. Fuel is needed immediately to restore the operation of critical services, most urgently health and WASH facilities. Medium-term solutions are required to guarantee the functioning of these essential services, but also to restore power supply to households, including through restarting the Gaza Power Plant.

While addressing the current fuel crisis is an immediate priority, the population of Gaza suffers from chronic vulnerabilities related to the longstanding restrictions on the movement of people and goods and the internal Palestinian divide, which need to be addressed as well. Areas of particular concern include increased unemployment (particularly among construction workers, fishermen, small farmers and small businesses), increasing food insecurity, depletion of stocks of medicine and medical disposables, and access to clean water.

Overall funding for the Consolidated Appeals Process (CAP) 2013 is at 62 percent ($247 million received of a total request of $401 million). In Gaza specifically, funding coverage for 2013 CAP projects stands at 57 percent and some of the critical sectors have received very little financial support. In particular:

- WASH: 27 percent
- Health and Nutrition: 35 percent
- Shelter and Non-Food Items: 47 percent

The 2013 CAP projects in these sectors focus on providing immediate relief and sustaining minimal standards of living by ensuring affordable access to basic services. A number of unfunded projects do not depend on access or on the entry of materials and could be implemented or scaled up immediately.

Additionally, partners have applied to the Emergency Response Fund (ERF), however, the ERF can only fund amounts up to $250,000 which is unsuitable for more costly interventions, such as fuel procurement.
Humanitarian needs and response

Water, Sanitation and Hygiene

Needs
There is an acute shortage of fuel to power standby generators at 291 WASH facilities across Gaza, including water wells, ground tank pumps, booster stations, desalination plants, sewage pump stations and wastewater treatment plants.

This has resulted in reduced water supply to households. Only 15 percent of the population is supplied every day, while 25 percent are supplied once every four days, 40 percent once every three days, and 20 percent every two days; supply cycles last 5-6 hours. Additionally, there has been a 75 percent drop in the volume of water produced by 25 desalination units operated by the Coastal Municipalities Water Utility (CMWU), which supplies approximately 160,000 people. This has forced the latter to purchase water from unregulated water vendors and distributors, raising concerns over quality of purchased water.

The failure and increasing inability to operate generators have also resulted in flooding from sewage pumping, and the release of 90 million liters of untreated wastewater into the sea every day. In addition to the flood of sewage in Gaza City, there have been at least ten incidents, where sewage pumping stations were unable to pump to their respective treatment plants and were forced to divert sewage to open channels, the sea or storm water lagoons.

The increasing dependence on backup generators, due to the longer electricity outages, has augmented the need for their maintenance at all WASH facilities. However, the Coastal Municipalities Water Utility (CMWU) and the municipalities have expressed concern about their ability to meet the growing maintenance needs due to the irregular supply of spare parts, as well as the shortage of basic building materials (cement, gravel and steel bars) needed to repair WASH infrastructure. The lack of fuel to run trucks has also disrupted the collection of solid waste from the streets.

The lack of fuel and other essential items comes at a time where the systems in Gaza are already fragile due to years of blockade and closure and there is limited capacity of service providers to be able to respond to the onset of similar shocks.

Response
- The Government of Turkey has pledged funds to purchase 280,000 liters of fuel to run essential WASH facilities for four months (another 240,000 liters were pledged by Turkey to the health and solid waste sectors).
- The first installment of the Turkish-funded fuel, consisting of 10,000 litres, is being distributed by UNRWA to a number of sewage treatment facilities.
- The Emergency Relief Fund (ERF) approved a project submitted by UNICEF on behalf of the WASH cluster to fund the purchase of 210,000 liters of fuel to support the operation of the most critical water and sewage facilities during five months.

Gaps
- In the absence of electricity supply from the GPP, Gaza’s WASH facilities require approximately 400,000 liters of fuel per month to run backup generators and maintain a minimum level of operations.
- Additional funding is urgently required for the purchase of spare parts and engine oil for the maintenance of generators.
- Additional human resources, as well as fuel to run trucks, are required to clean areas affected by sewage overflow.
- Construction materials are needed to reinforce the embankments of waste water treatment plants.
- Public awareness campaigns addressing the health hazards of sewage overflows are also required.
Health

Needs
The shortage of fuel needed to properly run backup generators has disrupted the delivery of a range of essential health services, including kidney dialysis, infant incubators, operating theaters, blood banks, intensive care units, and laboratories. All health facilities, including 30 hospitals and over 135 health clinics are affected.

Access to health care is further affected by the chronic shortage of drugs. The main factors behind this shortage have been the lack of sufficient funding and the poor coordination between the Gaza and Ramallah authorities. These were recently exacerbated by the restrictions imposed by the Egyptian authorities on the Rafah Crossing, which served as the main entry point for most medical donations. At present 30 percent of the essential drugs and 52 percent of medical disposables are at zero stock (141 types of medication and 469 types of medical disposables).

Response
- The Government of Turkey has pledged funds to purchase 320,000 liters of fuel to run essential health facilities for four months, of which a first installment of 10,000 litres was distributed.
- Approximately 100 tonnes of medical supplies, donated by the Egyptian Physicians Syndicate, entered Gaza via the Rafah Crossing for the first time since June 2013.

Gaps
- In the absence of electricity supply from the GPP, Gaza health facilities need at least 500,000 liters of fuel per month to run generators.
- $2 million worth of essential drugs and medical disposables are immediately required to support the treatment of cardiac diseases, cancer, primary health care, chronic diseases and neo-natal diseases.
- Spare parts for generators and medical equipment affected by overuse and fluctuations in power supply.

Shelter and NFIs

Needs
As a result of the sewage spill in Gaza City, sewage water entered the ground floors of at least eight homes causing damage to furniture and creating health hazards. It is estimated that several other pumps, including in North Gaza and in the Middle Area are on the verge of failure due to fuel shortages, which will result in other sewage overflows.

Response
NTR

Gaps
- Provision of NFIs including mattresses, blankets and hygiene kits for the families whose homes were flooded.
- Prepositioning of NFIs for an estimated 300 households at-risk of flooding.

Food Security

Needs
The shortages of electricity and fuel, as well as of building materials, have further undermined people's livelihoods, particularly those employed in construction, agriculture and fishing. Additionally, the almost total halt in the smuggling of food products via the tunnel has triggered an increase in food prices – 11 percent for bread, 33 percent for rice, and seven percent for vegetable oil. These factors combined are expected to be reflected in an increased number of families affected by food insecurity. Figures for 2012 indicate that 57 percent of the population is affected by food insecurity, up from 44 percent in 2011. About 1.1 million people (about 65 percent of the population) are already receiving food aid.
Response
NTR

Gaps
- Food assistance in the form of commodities, food vouchers, cash for work, unconditional cash assistance
- Support to low resilience food producers including farmers, herders and urban and peri-urban producers.
- Fuel to run agricultural wells and for fishing boats.
- Cash-for-work opportunities in support of the WASH sector to clean streets affected by sewage flooding.

Education

Needs
Fuel and electricity shortages have had a pervasive impact on the functioning of Gaza’s schools and educational institutions, which included, among others, the following:
- Decreased ability to teach and learn due to lack of lighting in some schools, and noise, fumes and smell from generators, in others.
- Classes in science and technology have been canceled at schools without generators.
- Food for school canteens cannot be stored adequately as refrigeration cannot be maintained.
- The reduced water supply has resulted in dirty latrines and a lack of water for hand washing.
- The more frequent electricity cuts have damaged electronic equipment used in schools.
- The shortage of fuel is undermining the transportation of children from and to schools.

Response
NTR

For further information, please contact:
Katleen Maes, maes@un.org, Tel: +972 2 582 9962, Mobile: +972 54 331 0554
Hayat Abu-Saleh, abusaleh@un.org, Tel: +972 2 582 9962, Mobile: +972 (0)54 3311816

For more information, please visit www.ochaopt.org