

Gaza WASH Contingency Plan



November 2022



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Acronyms

AAH	Action Against Hunger
ACTED	Agency for Technical Cooperation and Development
BLDA	Beit Lahia Development Association
CRS	Catholic Relief Services
DCA/NCA	DanChurchAid/Norwegian Church Aid
ESDC	Economic and Social Development Center
FCU	Field Coordination Unit
H.H	House Hold
HCF	Health Care Facility
HCT	Humanitarian Country Team
ICRC	International Committee of the Red Cross
IDRF	International Development and Relief Foundation
IR	Islamic Relief
l/c/d	Leter per Capita per day
MOE	Ministry of Education
MOH	Ministry of health
MOLG	Ministry of Local Government
MOSD	Ministry of Social Development
NRC	Norwegian Refugee Council
NRW	Non-Revenue of Water
O&M	Operation and Maintenance
oPt	Occupied Palestinian territory
PA	Palestinian Authority
PARC	Palestinian Agricultural Relief Committees
PEF	Palestinian Environmental Friends
PENGON	Palestinian Environmental NGOs Network – Friends of Earth Palestine
PHG	Palestinian Hydrology Group
PRCS	Palestine Red Crescent Society
PWA	Palestinian Water Authority
QC	Qatar Charity
SAG	Strategic Advisory Group
SCI	Save the Children
SIF	Secours Islamique France
UAWC	Union of Agricultural Work Committees
UN OCHA	The United Nations Office for the Coordination of Humanitarian Affairs
UNICEF	The United Nations Children's Fund
UNRWA	The United Nations Relief and Works Agency
WASH	Water, Sanitation and Hygiene
WBWD	The West Bank Water Department
WHO	World Health Organization
WSP	Water Service Provider
WSRC	Water Sector Regulatory Council
WVI	World Vision International
YEC	Youth Empowerment Center

1. Background

Water and sanitation services are one of the main basic requirements. Communities and households require safe, free and adequate access to WASH services to maintain their hygiene practices, health and livelihood. Whereas, emergencies that interrupt WASH services in a community will severely impact all the community's life aspects. Thus, maintaining and recovering WASH services for the emergency-affected population should be the main priority of any emergency response initiative.

Moreover, the preparedness, planning and coordination of any WASH response require time to identify and design the appropriate actions, coordinate the activities with stakeholders, and measure the WASH partners' capacities in responding to the WASH needs. Therefore, forecasting the expected crises and emergencies and measuring their impact on the WASH services will allow the WASH actors and stakeholders to define the required actions, response capacities and communication procedures that will enable them to provide an efficient response in a timely manner.

In Palestine, particularly the Gaza strip, the WASH sector is already suffering from chronic vulnerability. The escalation of violence, Israeli restrictions against the entry of WASH materials to Gaza, climate change, and local authorities limited capacities are contributing to the severe fragility in the sector. According to the 2023 Humanitarian overview, more than 648,000 Palestinians in Gaza suffer limited access to WASH services. Therefore, many communities and households are unresilient to any crisis that could affect their access to sufficient WASH services. Therefore, crises could shift them to a severe vulnerability that could threaten their lives.

To identify the expected risks that could affect the WASH sector in Gaza and propose the appropriate WASH response toward these risks, the WASH Cluster has facilitated the development of a contingency plan for the WASH sector in Gaza. The WASH Cluster coordinated with the Palestinian Water Authority (PWA), Coastal Municipal Water Utilities (CMWU), WASH Cluster strategic advisory group members (SAG), Gaza WASH areas focal points and the International Committee of the Red Cross (ICRC).

The WASH Cluster has engaged all the active Cluster partners in the response capacities identification phase; therefore, cluster partners updated their response capacities to the proposed risks based on the pre-identified actions.

This contingency plan will be the technical and coordination reference for the WASH humanitarian actors during the planning, design and implementation of their WASH emergency

response. It will also allow the humanitarian country team to advocate for mobilizing the required resources to operationalize this plan when needed.

2. Objectives

The Gaza strip WASH contingency plan's main objective is to *“Define the expected risks that could affect access to WASH services in the Gaza strip and identify the appropriate WASH response to address the emerging WASH needs”*.

The WASH Cluster has identified several specific objectives to achieve the main goal of the Gaza strip contingency plan:

- Identify the communication, coordination and technical references for WASH Cluster partners during the planning and implementation of their WASH emergency response actions.
- Identify and develop the required preparedness actions to support WASH Cluster partners during the implementation of their WASH response.
- Support the WASH Cluster in advocating for allocating and mobilizing the required resources to respond to the defined risks.
- Update the Humanitarian country team and Local authorities about the WASH partners' capacities in responding to the defined risks.

3. Methodology

The WASH Cluster adopted several tools and mechanisms during the development of the Gaza WASH contingency plan, including:

- Disk review for the available contingency and response plans, including PWA response plans, ICCG Gaza contingency plan, Gaza WASH contingency plan and the 2019 WASH contingency plan.
- Establishing a WASH contingency planning working group from the Cluster SAG members and, Cluster areas' focal points.
- Workshops with the established working group to identify the expected risks, the likelihood and impact of each risk, and the required preparedness response actions.
- Partners capacities survey to identify each partner's technical and operational capabilities to respond to the identified risks.

This comprehensive methodology allowed the WASH Cluster to:

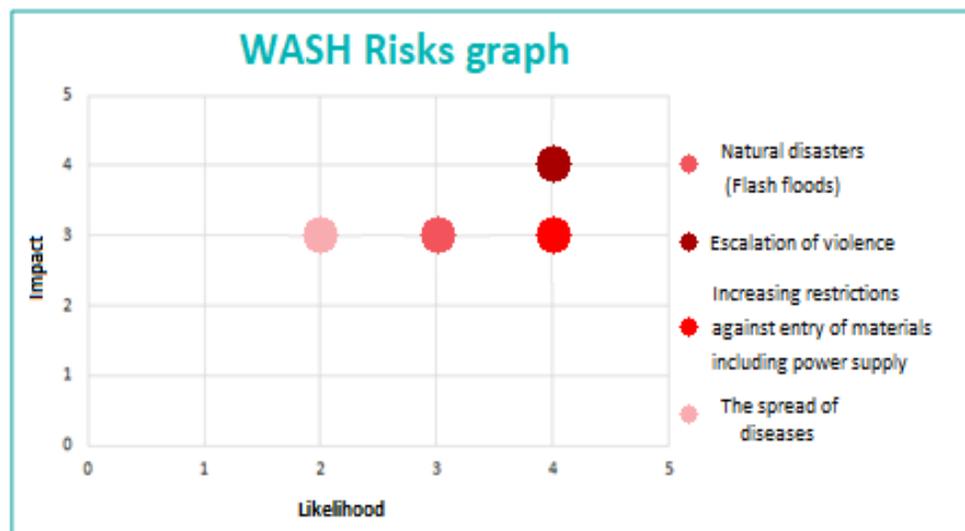
- Define and measure the likelihood and impact of the risks and hazards that could affect WASH services' flow for the affected populations.
- Identify the actions required to maintain the minimum WASH services for the affected population.
- Measure WASH Cluster partners' technical and operational capacities to respond to the defined risks.
- Measure the WASH Cluster caseload and required budget to execute the proposed actions.

4. Risks scenarios

Based on risk analysis, the WASH Cluster contingency planning group identified four main risks that could affect access to WASH services in the Gaza strip:

- Natural disasters (Flash floods),
- Escalation of violence,
- Increasing restrictions against entry of materials, including WASH items and fuel for the power supply,
- The spread of diseases,

Each of the risks mentioned above is expected to impact the affected population's access to water and sanitation services and create severe vulnerability on institutional, community and household levels leading to serious humanitarian consequences.



4.1 Natural disasters (Flash floods)

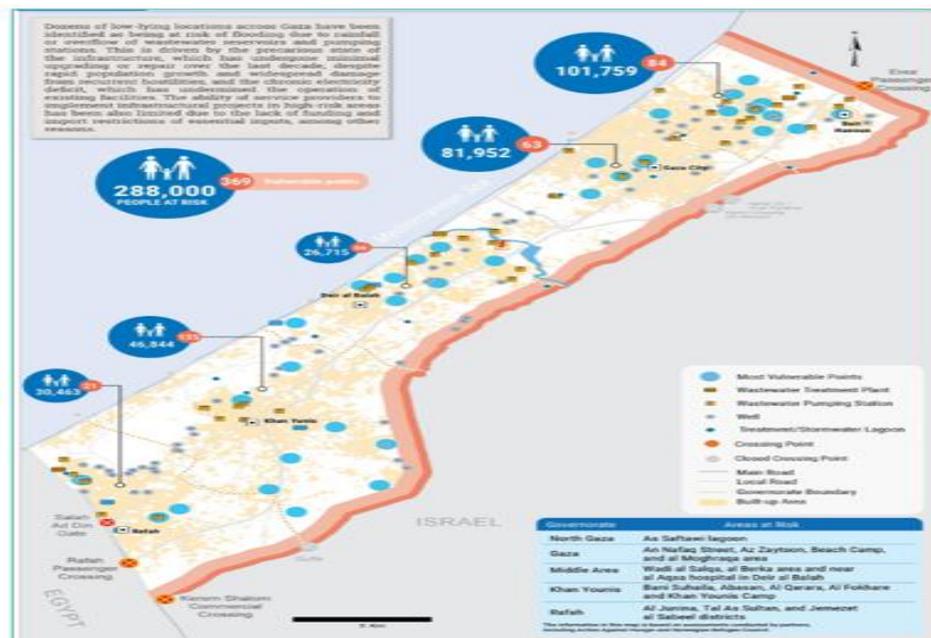
4.1.1 Overview

According to the MSNA 2022, more than 550,000 people suffer from flash flooding and more than 280,000 persons live in 360 flooding zones in Gaza. These families are being exposed to different levels of flooding events during winter, therefore experiencing several risks, including but not limited to:

- Communities/ households are being isolated due to road damage and flooding.
- The flooding of wastewater facilities and sewage networks in the residential areas.
- Lack/Limited access to essential services (water, sanitation, education, health...etc) due to partial or total damage to communities' public structures (water networks, sewage networks, schools, clinics, roads).
- Partial or total damage to households' assets (shelters, WASH facilities, livelihood structures).

The WASH Cluster has classified the severity of the flooding events as follows:

- Mild (water covered the streets and affected the movements).
- Medium (HH and markets suffered water leaking to their internal spaces).
- Sever (Significant private and public assets loss).



Areas at risk of flooding in Gaza

4.1.2 Humanitarian consequences

The WASH-related humanitarian consequences of the flooding risks include but are not limited to:

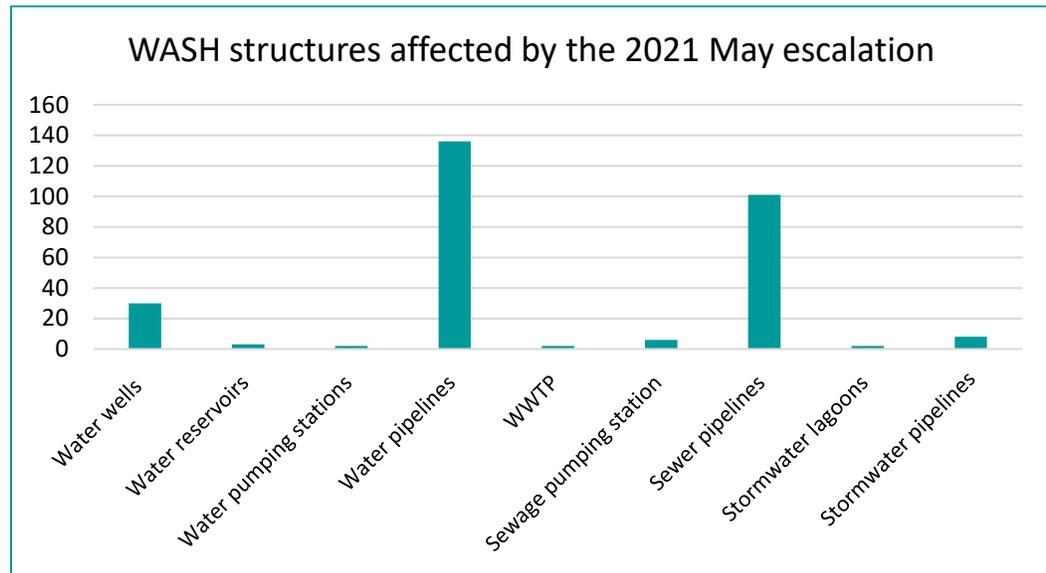
- Losing sufficient access to drinking and piped water exposes the affected population to several health and social complications.
- Losing access to sanitation services on household and community levels will expose the affected population to environmental and health problems.
- Losing access to WASH facilities in institutions (schools and HCFs) will affect these institutions' services during emergencies. Moreover, these institutions could be used as emergency shelters during emergencies.

4.2 Escalation of violence

4.2.1 Overview

The WASH sector in the Gaza Strip has been severely affected by the recent escalation. According to the WASH Cluster, including due to more than 100 incidents resulting in damage to water and sanitation infrastructure were recorded. These incidents have directly affected access to WASH services forcing more than 1.2 million Palestinians.

According to the WASH Cluster, CMWU and PWA June 2021 records, more than 290 WASH infrastructures were exposed to complete or partial damage during the May escalation.



In the Gaza Strip, the WASH sector is composed of more than 590 WASH facilities and 5000 km of water, sewer and stormwater networks that provide WASH services for 2.1 million persons. Thus, any escalation of violence could affect the WASH structures and the WASH services for the Gaza population.

4.2.2 Humanitarian consequences

Therefore, the WASH Cluster has identified the following risks associated with a significant increase in the coercive environment:

- Losing access to WASH services due to the partial or total demolition of communities' and households' WASH structures (water and sewer networks, WASH facilities in schools and clinics, cisterns, latrines, PE tanks...etc.).
- Losing access to water due to the demolition of main water resources (filling points and pumping stations) affects the operation's water distribution systems.
- Limited capacities to maintain WASH services due to the Israeli restrictions against rehabilitating/replacing the expired, outdated, unfunctional WASH structures.
- Due to access restrictions and materials confiscation, WASH actors face challenges in providing the required WASH humanitarian assistance.

The WASH responses to the escalation of violence scenario will aim to:

- Restoring/ maintaining the operation of WASH infrastructure damaged by attacks through rapid repair and the provision of critical maintenance materials and tools.
- Supporting WASH service providers in restoring the operation and productivity of the WASH facilities and services affected by the power supply shortage and the lack of operation materials.
- Improving access to basic WASH services for vulnerable households by providing emergency supplies, including drinking water, hygiene materials and essential items such as water tanks, handwashing stations and sanitation fittings.

4.3 Increasing restrictions against entry of WASH materials, including WASH items and fuel for the power supply

4.3.1 Overview

The entire water and wastewater service provision infrastructure in the Gaza strip comprises 590 WASH facilities and 5000 km of water, sewer and stormwater networks. This WASH infrastructure requires regular operation and maintenance to provide sufficient services for more than 2,1 million persons in Gaza. 290 water wells , 53 water booster stations, 44 water reservoirs, 102 wells head brackish water desalination plants, three short-term low volume STLV seawater desalination plants and 3500km water supply and distribution networks with the present, 62 wastewater pumping stations, 1400Km wastewater networks, five wastewater treatment, where 82% of the population have been served with wastewater collection and treatment service and more than 97% of the population served by domestic water network supply.

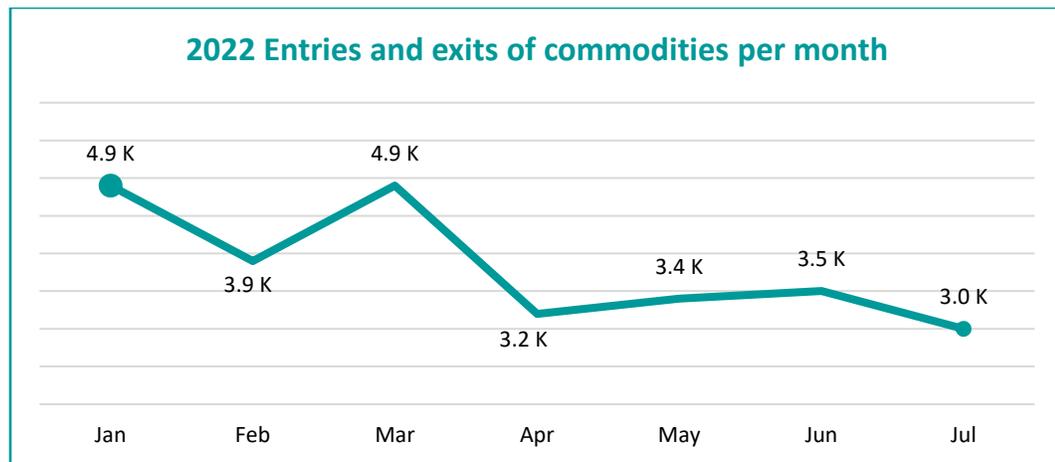
Therefore, the blockade, the frequent closing of the Gaza crosspoints and the Israeli restrictions on the entry of materials to Gaza are affecting the service providers' capacities to maintain sufficient operation and maintenance of the WASH infrastructure. According to UNOPS, more than 109 WASH items are defined as dual-use items and are not allowed to enter Gaza. Moreover, the average time to enter WASH materials into Gaza through the Gaza Reconstruction Mechanism (GRM) varies based on several technical and political conditions.

Despite of all operational and financial constraints and difficulties, system records for the year 2021 showed that the average daily domestic water supply quantities pumped

in the system was 300000 m3/day from all available water resources, with 42% unaccounted for water and about 180,000 m3/day of wastewater was collected back and treated.

To ensure the WASH service continuity, free WASH materials entry is necessary. Noting that WASH partners have identified 109 WASH items considered as dual use and it has a very complicated coordination system to get them in to Gaza. In addition, WASH Cluster observed from time to time the closure of crossing points which affects the provision of humanitarian responses.

Moreover, the primary goods crosspoint in Gaza (Kerem Shalom) is subjected to frequent closing due to political, technical or administrative reasons. Therefore the number of materials and commodities passing through this crosspoint is out of Palestinians' control or expectations. During the recent escalation, the Israeli side closed the crosspoints for one week. As a result, the lack of fuel in Gaza led to a power supply shortage of more than 40%, which affected the operation of the WASH facilities and caused a severe decrease in WASH services.

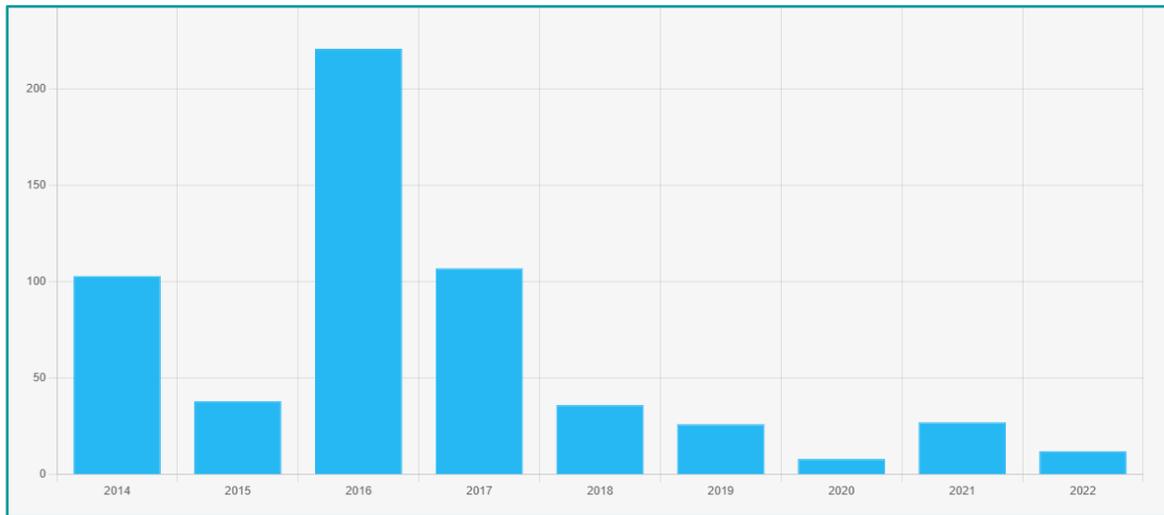


If such closing and restrictions last longer, the WASH service providers in Gaza would experience severe lacking operational and maintenance materials (including fuel) for operating the WASH facilities. Therefore, the WASH services, including water supply and wastewater treatment, will be hardly affected.

Therefore, the WASH Cluster listed the following risks associated with restricted access for the entry of WASH materials to Gaza, including the fuel required for power supply:

- The fluctuation of water supply and sanitation services to vulnerable people in Gaza,

- The limited capacities of water service providers to operate and maintain their water infrastructures, considering that many of these service providers are vulnerable municipalities with limited technical and operational capacities of WASH infrastructure.



The average amount of time taken (days) for a processing decision on Project submissions on the GRM

4.3.2 Humanitarian consequences

All mentioned risks and challenges will directly affect the WASH services to the Palestinian communities, which will lead to public health/environment crises that impose the following humanitarian consequences:

- Limited water supply will force communities to adopt negative coping mechanisms such as reducing water consumption to less than 30 l/c/d, exposing these communities' households to several health and hygiene problems.
- Reduction in sewage collection, treatment, and disposal, will lead to sewage overflow from the sewerage collection system and increase pollution levels of wastewater flows into the sea, which puts the most vulnerable people at a high of being displaced and in direct contact with water born diseases associated with inappropriate sanitation management
- Many families will try to compensate for the water shortage by purchasing expensive trucked water considering this additional financial burden and or depending on other unreliable and poor water quality resources.

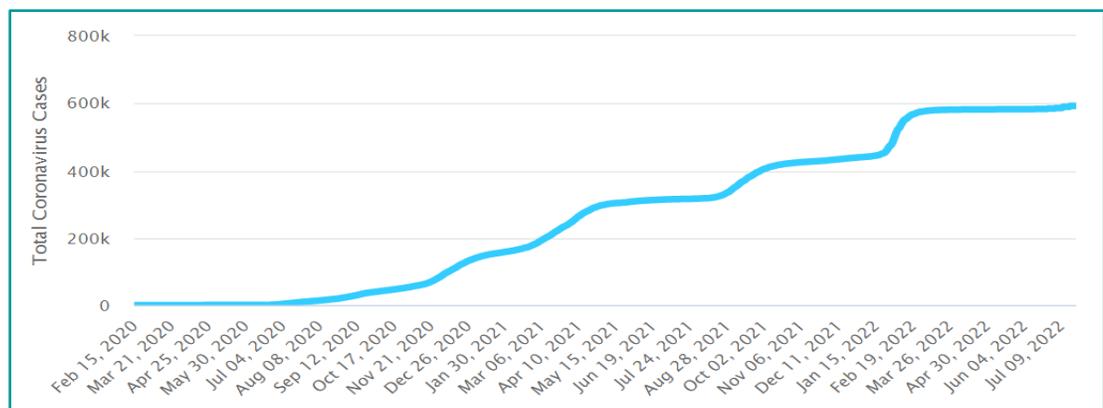
4.4 The spread of diseases

4.4.1 Overview

The ongoing COVID-19 epidemic showed a severe gap in the national and international preparedness measures against diseases outbreak. Since May 2022, more than 255,029 COVID -19 infected cases have been recorded in the Gaza strip; out of them, more than 1,982 passed away. Health, education, and livelihood sectors were the most affected by the epidemic due to the weak health infrastructures and government restrictions on infection prevention and control measures.

As a response to this global emergency, WHO is continually updating its infection prevention and control recommendations and standards, such as maintaining social distancing, wearing masks and applying appropriate hygiene practices. Adequate access to WASH services is considered one of the main factors affecting a person's capacity to maintain the minimum IPC measures, including:

- Ensure access to hygiene and cleaning materials and tools on household, institution and community levels. Therefore, enhance the capacity to maintain the recommended hygiene practices such as handwashing and environmental cleaning.
- Ensure access to adequate water and sanitation facilities on household, institution and community levels. Therefore, decrease the crowdedness around WASH facilities and ensure these facilities' sufficiency, such as handwashing stations and latrines.
- Improve/ maintain public water and sanitation services for the most vulnerable communities, therefore promoting the households' and communities' capacities to maintain an adequate hygiene status.



Total Coronavirus Cases in the State of Palestine

4.4.2 Humanitarian consequences

The lack of or limited access to sufficient WASH services during the spread of diseases could result in severe humanitarian consequences that affect the national and international efforts to control the spread of that disease. These consequences include but are not limited to:

- Limited capacities or abilities to maintain adequate hygiene practices in the household, school, or community will result in more infected cases.
- Limited access to WASH facilities due to the inadequate quantity or quality of these facilities will result in not using or overcrowding around these facilities, therefore putting the facilities users at risk of being infected.
- Limited access to public water and sanitation services will prevent many vulnerable households who cannot compensate for this limited access from applying the recommended IPC measures. Therefore, increasing their risk of being infected.

5. Estimated humanitarian caseload per scenario

Scenario	Flash floods	Escalation of violence	Increasing restrictions against entry of WASH materials, including power supply	The spread of diseases
Expected Caseload (# of Affected people)	280,000	1,150,00	350,000	700,000
Assumptions	Communities who face mild, medium and severe flooding events according to WASH vulnerability mapping.	People are estimated to be potentially affected during the escalation (the estimated no. is based on the 2021 escalation updates).	Communities receive less than 50 l/c/d of water through the water networks due to the lack of O&M materials and power supply shortages.	The population under the severe poverty line in Gaza, according to MOSD (33%), these families will suffer limited access to WASH services.

6. WASH proposed response and preparedness actions

#	Proposed response	Unit	Risk scenarios	Activity description	Timeframe	Preparedness actions
1	The provision of trucked water	Truck (10 M ³)	<ul style="list-style-type: none"> Flash floods Escalation of violence Increasing restrictions The spread of diseases 	<p>The provision of trucked water for the communities not connected/ lost the connection to water networks. By purchasing trucked water, the Partners will ensure providing the vulnerable families with the required water quantities (30 l/c/d) to satisfy their basic needs for drinking, cooking, cleaning and maintaining basic hygiene practices. In addition, PWA and CMWU will activate the necessary water filling points in the affected area to facilitate water trucks' access to fill and deliver the water.</p> <p><i>The water filling points' activation/ operation and trucked water delivery should be started within five days of the response.</i></p>	less than two weeks	Water trucking implementation methodology, Map of water filling points in the West Bank
2	The Provision of bottled water	1.5 litre	<ul style="list-style-type: none"> Flash floods Escalation of violence Increasing restrictions The spread of diseases 	<p>The provision of bottled water will target the families that lost their access to water during emergencies. This activity's main objective is to maintain lifesaving access to water by providing water quantities (3 l/c/d) for the targeted households to satisfy their drinking needs until providing a more sufficient water source (water trucking, water network).</p>	less than two weeks	

#	Proposed response	Unit	Risk scenarios	Activity description	Timeframe	Preparedness actions
				<i>Bottled water purchase and delivery should be started within 24 hours of the response.</i>		
3	The provision/ rehabilitation of household latrines	Latrine	<ul style="list-style-type: none"> Flash floods Escalation of violence 	<p>The provision of mobile latrines will target families with insufficient access to basic sanitation facilities during emergencies. The partners will provide/ rehabilitate latrines that satisfy the affected persons' needs for defecation, handwashing and other hygiene practices, considering the minimum privacy, dignity and safety measures.</p> <p><i>The purchase and delivery of the mobile latrine should be started within five days of the response.</i></p>	2 - 4 weeks	Standard design and technical specification of mobile latrine
4	H.H Hygiene kits and vouchers	Hygiene kit	<ul style="list-style-type: none"> Flash floods Escalation of violence Increasing restrictions The spread of diseases 	<p>The distribution of hygiene kits or hygiene materials vouchers will target the most vulnerable families with limited capacities to purchase the required hygiene materials during emergencies. The activity objective is to support the affected families in adopting adequate hygiene practices that maintain their health considering safety, privacy and dignity needs. According to the WASH Cluster standard list of hygiene materials, the provided</p>	less than two weeks	Map of WFP licensed shops for e-vouchering

#	Proposed response	Unit	Risk scenarios	Activity description	Timeframe	Preparedness actions
				<p>materials should be provided to satisfy the family's needs for 14 days.</p> <p><i>The purchase and delivery of the hygiene kits should be started within five days of the response.</i></p>		
5	The provision of community hygiene and cleaning materials and tools	Community kit	<ul style="list-style-type: none"> Flash floods Escalation of violence Increasing restrictions The spread of diseases 	<p>Providing hygiene and cleaning materials to the communities affected by emergencies will support the local authorities in maintaining the hygiene of the affected communities' environment. This includes cleaning the community's streets, institutions and other public facilities. According to the WASH Cluster standard list of hygiene materials, the provided materials should satisfy the family's needs for 14 days.</p> <p><i>The purchase and delivery of the community hygiene and cleaning kits should be started within five days of the response.</i></p>	2-4 weeks	Map of WFP eligible shops in the West Bank
6	The provision of PE tanks	PE tank (1.5M3)	<ul style="list-style-type: none"> Flash floods Escalation of violence 	<p>The provision of PE tanks for the most vulnerable households improves their water keeping and storage capacities during emergencies. Providing 1,500 litres PE tanks</p>	less than two weeks	Market survey Contracts with the suppliers

#	Proposed response	Unit	Risk scenarios	Activity description	Timeframe	Preparedness actions
				<p>will ensure the targeted household's water storage capacity for 8 to 10 days.</p> <p><i>The purchase and delivery of the PE tanks should be started within two days of the response.</i></p>		
7	The provision of operational materials and tools (water, sanitation)	WASH service provider	<ul style="list-style-type: none"> Flash floods Escalation of violence Increasing restrictions The spread of diseases 	<p>The action is about providing vulnerable WASH service providers with operation and maintenance materials to maintain their services during emergencies. Therefore the provided materials should maintain the water and sanitation services for the affected communities. The type, quantity and quality of the materials and tools should be according to the WASH Cluster standard O&M list attached.</p> <p><i>The purchase and delivery of the maintenance and operation materials should be started after a detailed assessment of each service provider's needs within 30 days of the response.</i></p>	4-8 weeks	<p>Checklist of the required maintenance and operation tools and materials</p> <p>List of the main private sector suppliers.</p>
8	The provision of handwashing stations in schools, HCFS and IDPs centres	Institutions (Schools , HCFs)	<ul style="list-style-type: none"> Flash floods Escalation of violence 	<p>The provision and installation of handwashing stations in schools and healthcare facilities will provide access to the targeted institutions to maintain the required level of hygiene practices. The provided handwashing facilities</p>	2-4 weeks	

#	Proposed response	Unit	Risk scenarios	Activity description	Timeframe	Preparedness actions
				<p>could be mobile or fixed and consider the number and gender of the users.</p> <p><i>The purchase and installation of the handwashing facilities should be started within five days of the response.</i></p>		
9	Rehabilitation/installation of WASH facilities and infrastructures (Water wells, pumping stations, water, sewer, stormwater networks, culverts....etc.)	WASH facility	<ul style="list-style-type: none"> Flash floods Escalation of violence Increasing restrictions The spread of diseases 	<p>As a medium- and long-term solutions, partners to provide simple WASH infrastructures on the community level. These simple infrastructures will provide improved access to WASH services for the affected groups and facilitate their recovery after the emergency. The proposed infrastructures should provide an immediate solution for the identified WASH vulnerability like flooding, water scarcity....etc.).</p> <p><i>The installation of the proposed infrastructures should be after a detailed assessment of the WASH needs based on technical design. And should be completed within 60 days of the emergency response.</i></p>	more than eight weeks	
10	The provision of chlorine and chemicals for water wells and	Litre	<ul style="list-style-type: none"> Escalation of violence Increasing restrictions The spread of diseases 	The action targets the reservoirs, wells and desalination plants in the Gaza Strip. Providing chlorine and chemicals for these facilities will	2-4 weeks	PWA and CMWU technical guidance and

#	Proposed response	Unit	Risk scenarios	Activity description	Timeframe	Preparedness actions
	desalination plants			<p>ensure that the supplied water is adequate for drinking and domestic use.</p> <p><i>The chlorine and chemicals provision should be started within five days of the response or associated with cisterns rehabilitation activities.</i></p>		chlorination manual
11	Provision of Jerry cans	4 litres jerry can	<ul style="list-style-type: none"> Flash floods Escalation of violence Increasing restrictions The spread of diseases 	<p>The provision of Jerry cans will target the families that lost their access to water during emergencies. This activity's main objective is to maintain lifesaving access to water by providing water quantities (3 l/c/d) for the targeted households to satisfy their drinking needs until providing a more sufficient water source (water trucking, water network).</p> <p><i>The purchase and delivery of the Jerry cans should be started within 24 hours of the response.</i></p>	less than two weeks	
12	Water quality monitoring (One test for each HH)	Test	<ul style="list-style-type: none"> Flash floods Escalation of violence Increasing restrictions The spread of diseases 	<p>Partners in coordination with PWA and the relative service providers will monitor the water quality in the affected areas. This includes implementing several tests for community and household water resources and storage structures.</p>	less than two weeks	PWA water quality department contacts

#	Proposed response	Unit	Risk scenarios	Activity description	Timeframe	Preparedness actions
				<i>The monitoring process should start immediately after the crisis to ensure that the provided water is suitable for drinking and domestic use.</i>		
13	Vacuuming wastewater (Once for each HH)	Household	<ul style="list-style-type: none"> Flash floods Escalation of violence 	<p>Through this action, partners will target the affected communities that do not have sewer services. These households facing wastewater flooding due to emergencies will be targeted by regular vacuuming of their cesspit and septic tanks to ensure that wastewater flooding will not affect the targeted households and the surrounding environment.</p> <p><i>The vacuuming of the wastewater should be started immediately when wastewater flooding occurs in the targeted areas.</i></p>	less than two weeks	<p>Map of the official wastewater disposal sites</p> <p>List of private vacuum trucks owners and locations</p>

7. Estimated WASH response caseload per scenario

WASH response intervention	Intervention Unit	Scenarios caseload (Quantities needed)			
		Natural disasters (Flooding)	Escalation of violence	Increasing restrictions against entry of WASH materials	The spread of diseases
The provision of trucked water	Truck (10 M ³)	23,520	49,700	29,400	60,000
The Provision of bottled water	1.5 litre	560,000	1,160,000	700,000	700,000
The provision/ rehabilitation of household latrines	Latrine	21,000	17,000	-	-
H.H Hygiene kits and vouchers	Hygiene kit	21,000	17,000	200,000	140,000
The provision of community hygiene and cleaning materials and tools	Community kit	360	250	250	250
The provision of PE tanks	PE tank (1.5M3)	21,000	17,000	-	-
The provision of operational materials and tools (water, sanitation)	WASH service provider	25	25	25	25
The provision of handwashing stations in schools, HCFS and IDPs centres	Institutions (Schools, HCFs)	120	86	-	-
Rehabilitation/installation of WASH facilities and infrastructures (Water wells, pumping stations, water, sewer, stormwater networks, culverts....etc.)	WASH facility	30	300	500	10
The provision of chlorine and chemicals for water wells and desalination plants	Litre	-	1,694,000	1,185,800	2,371,600
Provision of Jerry cans	4 litres jerry can	21,000	17,000	200,000	100,000
Water quality monitoring (One test for each HH)	Test	400	1,750	1,750	3,500
Vacuuming wastewater (Once for each HH)	Household	21,000	17,000	-	-

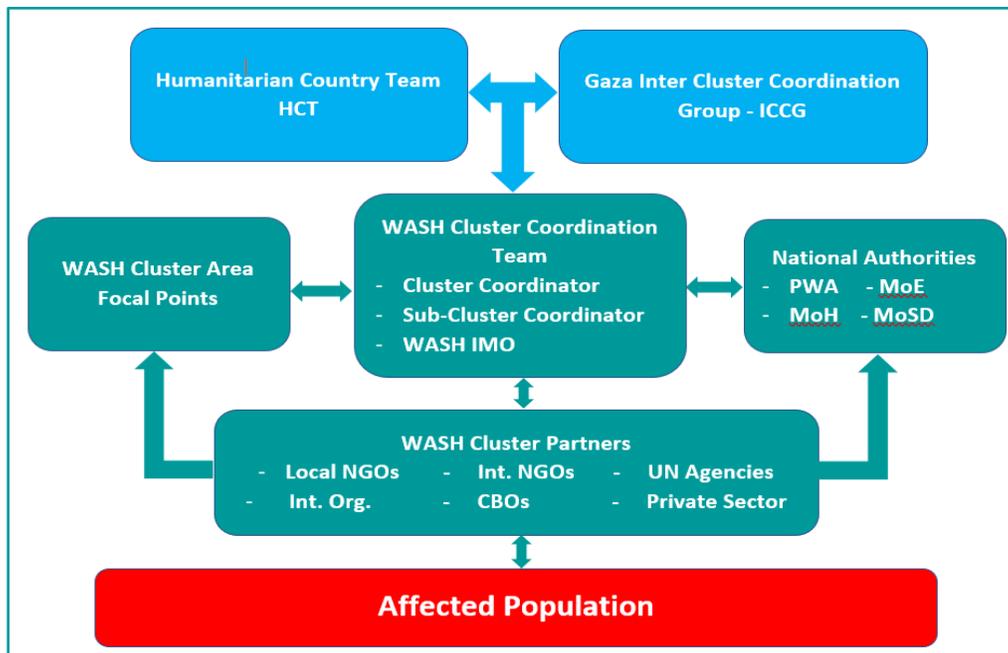
8. Coordination

8.1 WASH Cluster Coordination mechanism

In cooperation with area focal points and partners, the WASH Cluster has developed a clear coordination mechanism to ensure efficient communication between the WASH Cluster coordination team, WASH partners and national authorities. Moreover, the WASH Cluster actively participates in the national and subnational inter-cluster coordination mechanisms. Therefore, the WASH emergency planning and response during emergencies will be a part of the sub-national inter-agency planning and response.

For Intra Cluster coordination:

- WASH Cluster coordinate with national authorities and area focal points to assess/crosscheck the WASH needs resulting from the risks scenarios.
- WASH area focal points coordinate with the local authorities and communities to assess the WASH needs in their geographical areas.
- WASH Cluster analyze the vulnerability data to define the WASH vulnerability caseload, severity, and geographical and demographical breakdown.
- In coordination with partners and national authorities, WASH Cluster will update partners' response capacities and geographical focus.
- WASH Cluster partners provide the required WASH assistance according to the cluster technical standards and procedures.
- WASH Cluster partners regularly update the WASH 5Ws system and fund tracking sheets in accordance with the cluster communication tools and mechanisms.
- WASH Cluster provide regular updates to the ICCG, HCT and Cluster lead agency on the progress of the WASH response and the outstanding WASH needs.



8.2 WASH Contingency Plan operationalization procedures:

Action	Discription	Timeline	Focal point
Emergency event	When one or more of the identified scenarios occur based on the defined triggers.	NA	PA or HCT
Activation of WASH response planning	WASH SAG to agree on the activation of the WASH response according to the contingency plan.	Immediately	WASH Cluster SAG
Needs identification	WASH area focal points to assess the immediate humanitarian needs in their geographical areas using the defined assessment tools.	24 hours	WASH Cluster Area focal points
Coordination with relevant PA authorities	WASH Cluster to communicate with the relevant PA authorities to assess their response plans and field updates.	24 hours	WASH Cluster team
Rapid gap analysis	WASH Cluster to analyze the collected data and PA ministries plan to identify the gap and the required caseload.	24 hours	WASH Cluster team
Update partners response capacities	WASH Cluster to assess partners' response capacities based on the available resources and stocks.	48 hours	WASH Cluster team
Provide the required WASH response	Cluster partners to provide the required assistance based on the contingency plan specifications, timeframe and coordination procedures.	According to the Contingency response plan timeframe	WASH Cluster partners
Coordinating and monitoring the response	WASH Cluster to coordinate the response with partners and ensure the response's quality according to the contingency plan guidelines.	NA	WASH Cluster team

9 Annexes

9.1 WASH Cluster Gaza Contingency Focal points

Name	Organization	Position	Email	Phone
Mohammed Amro	WASH Cluster	WASH Cluster Coordinator	mamro@unicef.org	0592911044
Yasser Nassar	WASH Cluster	WASH Sub-Cluster Coordinator	ynassar@unicef.org	0598934713
Mohammed Hussain	WASH Cluster	WASH Cluster IM Officer	mohahussein@unicef.org	0599674383

9.2 WASH Area Focal Points

Name	Organization	Geographical Area	Email	Phone
Adel Abu-Ikmeil	Action Against Hunger	Khan Younes governorate	aabuikmeil@pt.acfspain.org	0594799942
Tamer Abu Zuhry	Islamic Relief Palestine	Rafah governorate	t.zuhri@irpal.ps	0599609611
Waseem Mushtaha	Oxfam	Gaza governorate	wassem.mushtaha@oxfam.org	0599861030
Husain Qanoo	Save the Children	North Gaza governorate	hussain.qano@savethechildren.org	0598947729
Karam Mater	We-World GVC	Deir Al-Balah governorate	karam.matar@gvc.weworld.it	0594211875

9.3 WASH Implementing Partners

Organization	Focal Point	Email	Phone #
Action Against Hunger	Adel Abu-Ikmeil	aabuikmeil@pt.acfspain.org	0594799942
AISHA	Maryam Abou Elta	m.abualatta@hotmail.com	0599148483

Organization	Focal Point	Email	Phone #
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Cesvi	Fidaa Fayad	technical_gaza@cesvioverseas.org	0599267879
CRS	Ola Musleh	ola.musleh@crs.org	0562151552
DanChurchAid/Norwegian Church Aid (DCA/NCA)	Nidal Hamdouna	nham@dca.dk	0595941301
ESDC	Aisha Salem	asalem@esdc-pal.org	0592499878
Global Communities	Yazdan El Amawi	yelamawi@globalcommunities.org	0567603121
IDRF	Mohammed A. Alijla	malijla@idrf.ca	0592238382
Islamic Relief Palestine (IR)	Tamer Abu Zuhry	t.zuhri@irpal.ps	0599609611
MA'AN Development Center	Mosab AlHindi	mosabh@maan-ctr.org	0599493577
Mercy Corps	Samir Al Nahhal	snahhal@mercycorps.org	0593500327
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Al-Nakheel Association	Abdallah El Farra	palmtrees1945@yahoo.com	0599831320
Palestinian Environmental Friends	Mohammed Al Nairab	mnairab@pefrac.org.ps	0599419815
PARC	A'aed Abed	aaed.abed@pal-arc.org	0598543131
PENGON	Fidaa Q. ALZaanin	fidaa.zaanin@gmail.com	0599776429
PHG	Riyad Junena	riyadjune@yahoo.com	0599745442
Qatar Charity	Salem Al Wahaidi	swahaidi@qcharity.org	0599739228
Save the Children	Husain Qanoo	hussain.qano@savethechildren.org	0598947729

Organization	Focal Point	Email	Phone #
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WeWorld-GVC	Giovanni Pedron	giovanni.pedron@gvc.weworld.it	0547495114
Youth Empowerment Center	Abdel-Fattah	abedalfatahh@gmail.com	0592945555

9.4 Emergency contacts

Governorate	Name	Org.	Functional Title	Email Address	Mobile Phone
North Gaza	Husain Qanoo'	SC	WATSAN Project Coordinator	hussain.qano@savethechildren.org	059 8947729
	Hamdi Motair	CMWU	Water Department Jabalia	h_mutair@hotmail.com	059 9189145
	Rajab Al Anqah	CMWU	Beit Hanoun WWTP	ankah_eng@yahoo.com	059 9414942
Gaza	Waseem B. Mushtaha	Oxfam	WASH Program Manager	Wassem.Mushtaha@oxfam.org	059 8910982 059 9861030
	Eman Aqeel	UNICEF	WASH Officer	Eaqeel@unicef.org	059 9259809
	Rafiq Abed	UNRWA	Head of Environmental Health Department	r.abed@unrwa.org	059 9815455
	Maher Alnajjar	CMWU	CMWU Deputy Director General	m_najjar60@cmwu.ps	059 9267104 056 2200801
	Mohamad Al-Halabi	MoG	International Cooperation	mhalabi@mogaza.org	059 9815608
	Islam Al-Boji	ICRC	Water and Habitat Engineer	gaz_wathab@icrc.org frboher@icrc.org	0598 935461
	Ramzi Ahel (Gaza city)	CMWU	CMWU Gaza	ramzyahel10@hotmail.com	0599815662

Middle Area	Karam Mater	WWGVC	Gaza program officer	karam.matar@gvc.weworld.it	059 4211875
	Radwan Abu Kraim	CMWU	CMWU middle area	redwankrayem@cmwu.ps	056 2200994
Khan Yunis	Adel Abu- Ikmeil	ACF	WASH Program Manager	aabuikmeil@pt.acfspain.org	059 4799942
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Rafah	Mohammed Abweni	CMWU	CMWU Rafah	m.ebweini@cmwu.ps	056 2200954
	Tamer Al-Zuhri	IRPAL	WASH Coordinator	t.zuhri@irpal.ps	059 9609611
National Counterparts	Monther Shoblak	CMWU	CMWU Director General	monthersh@cmwu.ps	056 6500800
	Yasmine Bashir	CMWU	CMWU Cluster focal point	ybasheer@cmwu.ps	056 2200996
	Mahmoud Abed Latif	PWA	PWA Cluster focal point	mahlatif@yahoo.com	059 9425726
	Hamada Al Bayari	UN OCHA	Humanitarian Affairs Officer	al-bayari@un.org	59 9675 625

9.5 WASH Cluster Partners response capacities

Proposed response	Unit	Average cost/unit -USD	Name of Organization/s	Partners Operational Capacity	Quantities available	Required budget USD\$	# of benef.
Community hygiene materials and tools	Community kit	1,300	PARC, PENGON, PHG, YEC, IR, OXFAM, WWGVC	190	70	\$247,000	90,400
H.H Hygiene kits and vouchers	Hygiene kit	70	AISHA, BLDA, MA'AN, Al-Nakheel, PARC, PENGON, PHG, YEC, AAH, ACTED, ANERA, CESVI, CRS, DCA/NCA, Global Communities, IR, Mercy Corps, NRC, OXFAM, SCI, SIF, WWGVC, UNICEF	37,242	7,885	\$2,421,940	231,370

Proposed response	Unit	Average cost/unit -USD	Name of Organization/s	Partners Operational Capacity	Quantities available	Required budget USD\$	# of benef.
Provision of bottles of water	1.5 liters bottle	0.56	AISHA, MA'AN, Al-Nakheel, PARC, PHG, YEC, AAH, ANERA, Mercy Corps, OXFAM	712,300	13,400	\$360,380	35,365
Provision of chlorine and chemicals for water wells and desalination plants	Liter	1.3	IDRF, PARC, PHG, YEC, NRC, OXFAM, QC, UNICEF	331,000	170,000	\$430,300	371,000
Provision of handwashing stations in schools, HCFS and IDPs centers	Institution (School, HCF, ...etc)	800	PARC, PHG, YEC, NRC, OXFAM, WWGVC	120	5	\$96,000	95,000
Provision/ rehabilitation of household latrines	Latrine	1,700	Al-Nakheel, PARC, PHG, YEC, ANERA, OXFAM, WWGVC	966	-	\$1,642,200	7,600
Provision of Jerry cans	4 liters jerry can	2.1	PARC, PHG, YEC, ACTED, NRC, OXFAM, WWGVC, UNICEF	108,310	16,500	\$227,451	125,850
Provision of operational materials and tools (water, sanitation)	WASH service provider	15,000	ESDC, PARC, PHG, YEC, NRC, OXFAM, QC, WWGVC, UNICEF	68	15	\$1,020,000	650,000
Provision of PE tanks	PE tank (1.5M ³)	190	AISHA, BLDA, IDRF, Al-Nakheel, PARC, PHG, YEC, AAH, DCA/NCA, Global	6,005	30	\$1,156,000	21,775

Proposed response	Unit	Average cost/unit -USD	Name of Organization/s	Partners Operational Capacity	Quantities available	Required budget USD\$	# of benef.
			Communities, IR, Mercy Corps, NRC, OXFAM, SCI, WWGVC				
Rehabilitation/installation of WASH facilities and infrastructures	WASH facility	14,785	Al-Nakheel, PARC, PHG, YEC, CESVI, DCA/NCA, Global Communities, Mercy Corps, NRC, OXFAM, SCI, WWGVC	250	9	\$2,550,000	372,600
Vacuuming wastewater	Household	35	PARC, PHG, YEC, ACTED, CESVI, Global Communities, NRC, OXFAM, QC	3,045	1,000	\$106,575	40,893
Water quality monitoring	Test	10	PEF, PARC, PENGON, PHG, YEC, CESVI, Mercy Corps, OXFAM	4,340	480	\$67,400	46,590
Water trucking	Truck (10 M ³)	100	IDRF, BLDA, PARC, PHG, YEC, AAH, OXFAM, QC, SIF, WWGVC	4,043	-	\$384,700	39,450
Total						\$10,709,946	862,893

9.6 WASH services community assessment tool

Section	Question	Answer
Community Information	Governorate	
	Palestinian District (PCBS)	
	Palestinian community	
	Number of Population	
	Number of HouseHolds	
	Avg. HH size	
	Male 0-18	
	Female 0-18	
	Male 18-65	
	Female 18-65	
	Male 65+	
	Female 65+	
	Poverty rate	
	% of PWD	
	% of female-headed HH	
	% of Refugees	
	% Individuals suffering chronical diseases	
	Unemployment rate (15 years and above)	
	Dependency Rate	
	Community affected by occupation violence	
	Community Classification	
	% of pop. In area C	
% of pop. In A&B		
% of pop. In H2		
% of pop. In EJ		
WASH Cluster Partners	The agency conducting the assessment	
	Name of the Assessor	
	Date of the interview	
Community focal point	Complete name of respondent	
	What is your role in this community?	
	Email address	
	Phone no.	
Service Provider information	What is the type of service provider?	Joint service council
		Municipality
		Local council



Section	Question	Answer	
		CBO	
		Community representative	
	What is the name of the service provider?		
	Specify the communities benefited by this service provider!		
	Select the type of service/s you provide!	Water services	
		Sanitation services	
		Solid waste services	
		Flood prevention services	
	Water services	Select the main source of water!	Water well (licensed)
			Water well (not licensed)
Filling point			
Spring			
PWA-JWSC			
Select the alternative source of water! (If any)		Water well (licensed)	
		Water well (not licensed)	
		Filling point	
		Spring	
		PWA-JWSC	
Specify the percentage (%) of water network service coverage in the catchment area		0.00%	
		10.00%	
		20.00%	
		30.00%	
		40.00%	
		50.00%	
		60.00%	
		70.00%	
		80.00%	
	90.00%		
100.00%			
How much is the average cost of water from the water network source? (NIS/M3)			
Estimate the no. of households not connected to the water network in the catchment area			



Section	Question	Answer
	What is the percentage of the non-revenue of water in the water distribution system ?	
	What is the average water consumption provided via the water network (L/C/D)?	
	According to the water distribution schedule, every how many days the water reaches the houses?	
	Do water trucking services needed in the catchment area?	Yes
		No
	If yes, who is the owner of the water truck?	Service provider body
		Private sector
		CBO
	What is the average cost of water delivered from the water trucking source for the end-user? (NIS/M3)	
	What is/are the water uses in the community ?	Domestic
Drinking		
Livelihood		
Tourist		
Commercial		
Sanitation service	Specify the percentage (%) of sewer network service coverage in the catchment area	0.00%
		10.00%
		20.00%
		30.00%
		40.00%
		50.00%
		60.00%
		70.00%
		80.00%
		90.00%
	100.00%	
	Specify the percentage (%) of sewage service connected to the municipal sewage treatment unit	0.00%
		10.00%
		20.00%
		30.00%
		40.00%
		50.00%
		60.00%
		70.00%
		80.00%
90.00%		



Section	Question	Answer
		100.00%
	Estimate the no. of households not connected to the sewage collection network in the catchment area	
	Estimate the percentage (%) of households depending on the vacuuming truck for sewage disposal	
	Who is the owner of the vacuum truck?	Service provider body
		Private sector
		CBO
	How much is the cost of a 10 M3 capacity vacuuming truck for one trip?	
	Where is the main vacuum truck disposing point?	Agricultural area
Open area (wadies)-illegal		
Open area (wadies)-legal		
Treatment Plant		
Solid waste services	Specify the % of solid waste service coverage in the catchment area	0.00%
		10.00%
		20.00%
		30.00%
		40.00%
		50.00%
		60.00%
		70.00%
		80.00%
		90.00%
	100.00%	
	Estimate the no. of households not covered by the solid waste collection services in the catchment area	
	Specify the disposal location of the collected municipal solid waste?	Open area (legal)
		Open area (illegal)
		Transfer station
Legal dumping site		
Illegal dumping site		
How much is the frequency of Waste accumulation in the community?	None	
	Rarely (once or less per week)	



Section	Question	Answer
		Occasionally (between 2 to 4 days per week)
		Properly (>4 days per week)
Flood prevention services	How much was the frequency in the last three years of the flood/s presence in the area?	Never
		1 to 3
		More than 3
	How do you evaluate the severity of floods?	Mild
		Medium
		Severe
	# of households affected by the floods!	
Comments	Any additional comments from the respondent	
	Assessor's comments/Observations if any	

9.7 WASH household assessment tool

Section	Question	Answer
Household information	Surveyor name	
	Geographical Area	
	Governorate	
	Palestinian Community	
	Please take a geo-point of your current location	xxxxx
	Please take a geo-point of your current location	yyyyyy
	HH Rep. Name	
	HH Rep. Phone no.	
	How many people in your household	
	Male 0-18	
	Female 0-18	
	Male 18-65	
	Female 18-65	
	Male 65+	
	Female 65+	
	# of PWD	
Access to water	What is the primary water source for domestic use ?	Water network
		Water trucking
		Rainwater harvesting
		Water well
	What is the secondary water source for domestic use ?	Water network
		Water trucking
		Rainwater harvesting
		Water well
	What is the primary water source for drinking use ?	Water network
		Water trucking
		Rainwater harvesting
		Water well
	What is the secondary water source for drinking use ?	Water network
Water trucking		
Rainwater harvesting		
Water well		
If the water system is network! What is the		



Section	Question	Answer
	average consumption per month (M3)	
	How many days do you have access to water in the network per month! (Days/month)	
	If the water system in water trucking ! What is the average consumption per month M3	
	If the water system is water trucking ! What is the cost of each M3 (ILS/M3)	
	If the water system is rainwater harvesting cistern ! What is the rainwater harvesting cistern volume (M3)	
	What is the distance to the water source?	On-premises
		Less than 0.5 Km
		0.6 to 1 km
		1 to 3 Km
		3 to 7 km
		more than 7 km
	If connected to the water network, who is the operator?	NON
		CBOs
		Private Vendors
		Charities
		CMWU
		Municipality Water service council
	What is the household estimated average water consumption (M3/month) (Total from all sources)	
	What is the type of water storage unit your HH use!	Concrete tank
		Steel tank
		PE tank
		Water cistern



Section	Question	Answer
	How much is the water storage available Qty (M3)!	
	Domestic water Storage capacity M3	
	Does the storage units covered or not !	Yes No
	How much is the water price of drinking water (ILS/250 liter)	5 or less
		6 to 10
		11 to 15
		more than 15
	For what do you use the water ?	Domestic
		Drinking
		livelihood
Access to sanitation and hygiene	What is the available sewage collection system	Sewer network
		Covered and lined septic tank/cesspool
		A hand-dug hole in the ground
		It is connected to communal lined drainage and the sewage system
		It drains into an open area outside of the shelter and remains stagnant
	Does the household apply water reuse measures ?	Always
		Sometimes
		Never
	If not connected to the septic tank! Do your HH use vacuum the tank regularly?	Yes
		No
	What is the vacuum truck disposing point?	Treatment Plant
		Open area - illegal
		Sewer Network
		Dumping site
		Agricultural area
What is the cost of vacuuming the tank (ILS/10 m3)?	20 or less	
	20 to 50	
	50 to 75	
	75 to 100	
	100 to 150	
	above 150	
	Flush or pour/flush toilet	



Section	Question	Answer
	What is the available household sanitation facility (latrine/toilet) ?	Pit latrine without a slab or platform
		Pit latrine with a slab and platform
		Open hole
		Bucket toilet
		Hanging toilet/latrine
		Plastic bag
		None of the above, open defecation
	What is the status of the latrine in the HH?	Connected to the water source
		Clean and no smells
		No water leaking
		Sufficient space
		Sufficient lightening
	What is the distance to the latrines	Inside the shelter
		less than 50 meters
		50 to 100
	Do you share this sanitation facility (latrine or toilet) with other households?	Yes
		No
	If yes, how many households are you sharing this sanitation facility with?	
	Which of the following items are permanently available in your latrine?	Toilet seat
		Handwashing station (in or beside the latrine)
		Bidet
		Toilet paper
		Soap
		Trash basket
		Non
	What is the availability of personal and household hygiene materials ?	Always
		Often
Sometimes		
Never		
Do the latrines used by your household lockable from the inside?	Yes	
	No	
	Yes	



Section	Question	Answer
	Do your HH toilet adapted for PWD use? If there are PWD/s in the HH	No
Access to solid waste collection service	Do your HH connected to the public solid waste collection service?	Yes No
	If Yes, What is the type of service provider?	Municipality
		CBO
		Joint Services councils
		Private Sector
	If yes, how many times per week solid waste is being collected?	
	How do you collect the solid waste in your house?	Pins
		Solid waste plastic bags
		Any available bag
	Availability of solid waste pins or containers in your neighborhood !	Yes
		No
	If not, what is the main coping mechanism for solid waste disposal?	Dumping solid waste in an official dumping location
Dumping in the area		
Burning "incineration" in the area		
Burying		
How do you evaluate the solid waste accumulation ?	Rarely (once or less per week)	
	Occasionally (between 2 to 4 per week)	
	Properly (>4 per week)	
Flood prevention services	How many times has your current location seen flooding in the past 3 years?	Never
		1 to 3
		More than 3
	How were your daily activities been affected by floods in the past three years? (Multiple)	Children could not get to school
		Mobility of adults affected
		Electricity services negatively affected
		Water services negatively affected
		Affected livelihoods due to damage to agricultural land, injury/death to herd and livestock, or related infrastructure



Section	Question	Answer
		People getting sick
		Restricted access to markets
		Restricted access to healthcare facilities
		Sewer services negatively affected
	How has your shelter been affected by floods in the past three years? (Multiple)	No effects
		Water leaking into the shelter
		Damage of furniture (sofas, bed, cabinets, etc.)
		Damage to shelter items (doors, windows, floor, ceiling, etc.)
		Damage to shelter surroundings (boundary walls, garden, entrance, external furniture)
		Complete destruction of shelter
	What are the mitigation measures have you used to reduce the risk of flooding?	Don't know
		Nothing
		Simple shelter rehabilitation (strengthening/ isolating the cieling and walls)
		Leave the shelter or move to another location.
		Walls or tunnels around the shelters to protect it from water leaking and flow.
Don't know		
Comments	Any additional comments from the respondent ?	
	Assessor's comments/Observations if any !	

Gaza WASH Contingency Plan - 2022

WASH Cluster Coordination Team

State of Palestine

November 2022

[WASH Cluster Website](#)

