



**Palestinian Hydrology Group  
(PHG)**

**2018**

# ANNUAL REPORT



April 2019

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## 1. Palestinian Hydrology Group (PHG) in Brief

PHG is an NGO established in 1987 and registered in 2001 in accordance with the Palestinian NGO Law number 1 of the year 2000 under registration number **QR-156-A**.

### Vision

**"Striving to achieve water and environmental justice for all Palestinian People"**

### Mission Statement

PHG is a nongovernment organization strives to maintain its lead position in delivering quality and innovative actions that contributes to sustain local water and environmental resources and related ecosystems, builds local human capacity and ensures just allocation of water and sanitation services as well as improves water, food and energy security for all Palestinian communities. Furthermore, to promote gender mainstreaming and empowers the vulnerable groups, including women, to participate in decision making and to promote the right to water and good water governance.

### Strategic objectives

- 1) contribute to building effective civil society and to ensure equity and the involvement of marginalized groups, specifically women in decision-making and promote good governance especially in water sector.
- 2) work to achieve sustainable and integrated management of water resources and the environment in Palestine
- 3) Adopt water as a human right principle to achieve just an equitable distribution of water sources and improve water and sanitation services for the Palestinian communities
- 4) Establish partnerships and alliances with various sectors and relevant authorities in the areas of research and implementation to ensure the development of the water sector.
- 5) Training and preparation of qualified technical staff able to manage and operate water facilities on a sustainable basis.

### Quality Objective 2018

To enable (12) Palestinian villages serving 18,000 citizens 45% whom are women, to improve water services by 50%, wastewater services as well as access to clean energy by 5% for these communities. In addition, to promote the right of the individual to get sufficient drinking water (according to the Palestinian specifications) at affordable price and to raise the productivity of water in 4 sites as well as to raise community awareness in 12 locations while conducting 160 training hours in water related aspects and adopting the principles of good governance in the field of water management in national institutions and to issue a report to document the water situation in 55 localities during the year 2018.

## 2. Report of the Board of Directors

In response to the political, social and economic challenges facing the Palestinian civil society, and out of the need to maintain the institution to its leading role as one of the important institutions in the water sector and the environment and civil society in general, the Board has provided the necessary means to carry out the new projects to maintain the leading role of the institution and give it a value-added excellence.

The harsh political and economic conditions in Palestine; declining donor contributions as well as increased competition among local and international NGOs, has affected the work of PHG and challenged its ability to achieve the quality objective set for the year 2018. However, PHG has implemented wide range of interventions that contributed to the improvement of social and economic conditions of the target communities.

The Board of Directors held during the year 2018 (10) meeting formally and a number of consultative meetings, the Board has taken several decisions, including procedural and strategic in nature, namely:

- recommending adoption of audited financial and administrative report for the year 2017
- Discussed the decline in funding and the need for focusing on unrestricted funding from local private sector and business people locally and in the Diaspora in addition to discuss income generating activities and improve financial situation.
- Discussed the financial challenges facing the organization and adopted decisions for organizational review in line with expert recommendation of changing the current structure to match fund availability from projects and revise the strategy by adopting a general strategic framework instead of predefined specific quality objective that may or may not be fulfilled if fund is not secured.
- Also discussed the possibility of benefiting from the existing assets (Old Office space, Land in Gaza), if needed to overcome financial shortfall.
- Adopted decision to make the necessary legal, institutional and financial preparations for joining the proposed social security scheme.
- Adoption of the 2019 budget

The board extends its sincere appreciation to all the partner organizations, donors and supporters of PHG who enabled us from accomplishing what we accomplished this year. Moreover, the Board seeks to develop the role of the institution in defending the values of a genuine civil society.

Chair of the Board  
Dr. Dima Amin

### 3. Executive Summary

PHG has carried out many activities, which contributed to improve water and sanitation services in the Palestinian communities. The main activities implemented during this year can be summarized as follows:

- **Integrated Irrigation Water Management:** 69500 m length of irrigation pipes and 14 steel reservoirs with total volume of 7500 m<sup>3</sup> was implemented to improve irrigation and irrigate new areas in the north and south of the West Bank.
- **Drinking water supply improvement:** PHG has constructed and rehabilitated 3 domestic water supply systems with total length of 3500 m of various diameters in the West Bank which served nearly 800 persons.
- **Groundwater Wells:** PHG has constructed 2 groundwater artificial recharge wells in Sanour Plain to reduce the flooding of fertile agricultural land and to enhance groundwater availability. In addition, PHG supervised the rehabilitation of 7 agricultural groundwater wells.
- **Ponds:** Rehabilitate 3 earth ponds.
- **Cisterns:** 4 new cisterns were constructed and 12 rehabilitated in the West Bank to improve access to water for agricultural and domestic purposes for the benefit of 660 beneficiaries including 580 students (306 male and 274 Female students and teachers).
- **Wastewater - Gray water Collection, treatment and Reuse:** PHG has implemented one unit gray water treatment units in the West Bank. In addition PHG has constructed 500 m length of sewer lines in Salfeet area.
- **Emergency Response: WASH;** PHG as part of its role in emergency response to the needs of affected people from Israeli acts against Palestinian communities especially in area "C", it has supplied 50 plastic water tanks of 1500 liter.
- **Improving WASH Facilities of War affected Households in Gaza:** PHG has replaced the damaged wash facilities for 850 households affected by the war on Gaza to enable the people to live in dignity in their houses.
- **Renewable Energy:** Construct 2 small solar system for pumping water out of groundwater wells in the Northern Part of West Bank. In addition, implement 150 household solar cooker and 70 biogas production units at household level in Gaza.
- **Agricultural Roads:** PHG has rehabilitated and reconstructed 13 km length of agricultural roads in the Northern and Southern Part of West Bank.
- **Public Awareness:** To help raise awareness towards the preservation of water resources, environmental and behavioral change, PHG has implemented 26 awareness-raising workshops and training activities to the beneficiary groups and students in addition to 4 open days with children as well as 11 workshops for women..
- **Training and Capacity Building:** PHG through its Water Training Institute has accomplished more than 200 hours of training where nearly 118 farmers and 141 female has benefited.
- **Research and Studies:** PHG has conducted four studies on various issues related to biogas and compost production, Auja Dam Storage problems, access to water and sanitation in 55 communities and sustainable Production and consumption initiatives.

The total beneficiary number from PHG activities in 2018 was nearly 35000 persons of which 58% male and 42% female including 850 students. Moreover, the agricultural water activities assisted in developing 3250 dunums.

The main obstacles faced the work of PHG during the year can be summarized as follows:

1. Escalated Israeli restrictions on access and work in marginal area in the West Bank especially those classified as Area C.
2. Poor economic conditions and low beneficiary contribution.

However, the organization through its experience and its distinguished relations with the local communities and stakeholders has eased the impact of these obstacles mentioned above and managed to maximize the benefit from the projects implemented during this year.

## 4. General Overview of the Situation in oPt

Despite the efforts of the Palestinian Government to develop strategies, plans, laws and regulations through the continued reform process started back in 2013, where a presidential decree for new water law # 4 for the year 2014 has been issued and new management and regulatory bodies have been created to help plan and manage water sector properly in Palestine, the continued Israeli restrictions and the increasing expansion of settlements in the occupied Palestinian territory (oPt) - occupied State of Palestine are considered the biggest factors in hindering the proper implementation of these plans and preventing the various bodies from assuming their roles entrusted to them by the new water law #4. Hence, hindering the improvement of environmental, social and economic conditions of the Palestinian People. The impact of settlements is not only through the direct act of land confiscation and expansion of settlements but also beyond that. The more dangerous is the act of settlers in preventing people from developing their land in area C and prevent them from accessing their local resources (eg. Springs) and destroy infrastructure and means of Palestinian livelihoods (destruction of wells, roads and cutting trees).

Results from PHG assessments has confirmed the general information related to Area “C” communities in the West Bank and East Jerusalem in terms of low or in access to water and basic services and how this mostly affects vulnerable families by increasing their poverty and food insecurity, as well as further deteriorating living conditions and hygiene practices. For example, it was realized that access to water in many Bedouin and herding communities in Southern Hebron, Northern Jordan Valley and eastern slopes (Ramallah) is secured through small size old water pipes laid over the ground with high losses and irregular water supply. Most importantly, the pipes are facing constant settler attacks and destruction which further restrict access to safe, sufficient and affordable water, thus forcing many families to depend on trucked water with prices over 20 NIS/m<sup>3</sup>, which places them in a situation of great financial vulnerability. As a result, many families are increasing their (semi) coerced seasonal displacement during summer to be closer to filling points and water sources. This movement complicates their return to the communities and places them at risk of permanent displacement due to settler harassment and settlement expansion.

The blockade, recurrent outbreaks of hostilities have continued to contribute to a serious deterioration in the access of the population to basic services in Gaza. This was mainly felt in a further deterioration in Gaza’s chronic electricity deficit with longer power outages of 18 to 20 hours a day, continue to severely undermining already depleted basic services and further reducing water supply where most of the population has access to piped water for only three to five hours every five days which resulted in reducing per capita water availability from 84 Liter to 53 liter and finally seriously impacting the operation of critical WASH facilities as reported by the HRP 2018 and second allocation strategy.

The blockade on Gaza is still imposing severe restrictions on entry of construction materials and other WASH related materials. The Gaza Reconstruction Mechanism (GRM) is still not as effective as it should be and the Israeli Authorities so called list of dual use items still complicating the entry of wash related materials on to Gaza.

These restrictions and acts have created a new challenge for local and international humanitarian NGOs in responding to the grave needs of communities leaving them very vulnerable to face very hard conditions.

## 5. Water and Environmental Situation in oPt

Despite all the efforts made by the government and nongovernment organizations in the field of water and environment, the needs are still huge. The situation can be summarized in the following key features:

- The gap between supply and demand is still very high and is estimated at nearly 300 million cubic meters. It is also estimated that Palestinian water abstraction from their local water resources have dropped by 14 MCM since the signature of Oslo Interim Agreement in 1993. This has increased the reliance of Palestinian on the purchased water quantity from the Israeli water company, hence reduced Palestinian water security. Moreover, Palestinian per capita water use has decline by 15% from previous years due to reduced amounts sold to Palestinians by the occupation authorities.
- The main constraint to the development of resources and infrastructure is that the Israeli occupation army and military orders are still the main controlling elements in the water and the environment sectors.
- Infrastructure is still poor where losses from water supply system may reach up to 45% on average per year.
- Poor social and economic conditions lead to lower ability of people to pay for water services and this effect the overall ability of supply providers to provide the services properly.
- There is a rising concern about the drilling of agricultural wells in the northern part of West Bank and in Jordan Valley. This needs to be regulated and controlled before it is too late and before some key traditional resources are lost completely.
- Wastewater collection and treatment is not yet up to the required level and the Israeli constraints are still hindering the development of new treatment plants. Moreover, the produced treated effluent from the existing treatment plants is not properly reused and flows either westward or eastward. It is really astonishing to know that Israel is capturing the flowing treated as well as poorly treated effluent flowing westward, treating and reusing it and charging Palestinians with the treatment cost. It was realized that Israel has charged Palestinian National Budget the sum of 83 Million NIS for treating the westward flowing effluent.
- Over 95 per cent of the water extracted from the coastal aquifer is unfit for human consumption, with the result that 90 per cent of people in Gaza rely on purchasing desalinated water from private trucking, posing a heavy financial burden on already impoverished families and health risks due to widespread contamination of that source. Increased electricity cuts have further reduced water supply and has affected the operation of approximately 130 critical water and sanitation facilities.

## 6. Activities



## 6.1 Conventional Water Resources Development

Most of conventional water resources in Palestine are in bad conditions due to the Israeli restrictions imposed on the rehabilitation of these resources in the West Bank. The main water sources developed during the year 2016 were:

### 6.1.1 Artificial Groundwater Recharge Wells:

PHG has constructed two artificial recharge wells in Sanour Plain to drain the flood water and store in the underneath aquifer



### 6.1.2 Groundwater Well Rehabilitation:

PHG Has supervised the rehabilitation of 7 agricultural groundwater wells in the northern part of West Bank and in the Jordan Valley.



### 6.1.3 Spring Rehabilitation:

PHG has rehabilitated 5 springs, in Ramallah and Hebron Area include source rehabilitation, reservoir and storage pond rehabilitation, and install main pipelines from the source to main storage.



## 6.2 Non-Conventional Water Resources Development

### 6.2.1 Wastewater and Gray water Collection, Treatment and Reuse

PHG has extended 500 m sewer line for collecting wastewater and reduce public health risk in Salfeet. PHG has also implemented 1 grey water treatment units, in Ein Qinia..

### 6.2.2 Water Harvesting:



Water Harvesting is one of the priorities that PHG has been promoting since its establishment. Such projects are relatively cheap and traditionally known and they secure sufficient and safe water quantities to the communities. PHG has implemented number of water harvesting projects as follows:

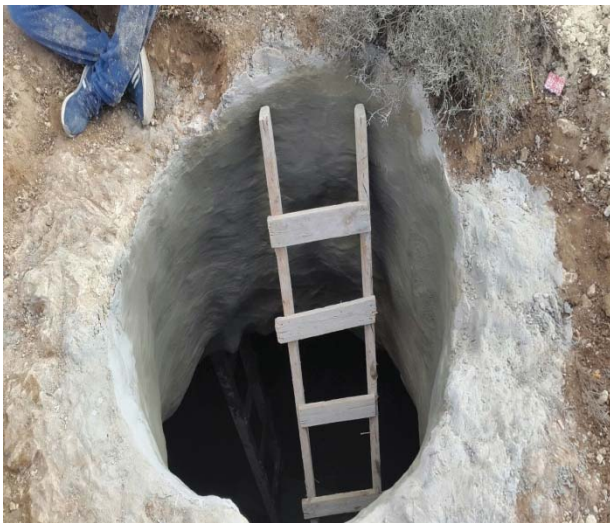
- **Ponds:** PHG has constructed 2 and rehabilitated one earth pond with volume of 2500 m<sup>3</sup> in the West Bank.

- **Cisterns:**

PHG has rehabilitated 16 cisterns for domestic and agricultural. Of which 4 were serving



four schools. The cisterns has benefited nearly 660 beneficiaries.



**Water Management**

### **6.3 Integrated Irrigation**

This activity aims at optimizing the use of agricultural water resources and to maximize the benefits of farmers through reducing the cost of purchased water, reducing losses and improve irrigation efficiency. PHG implemented 14 metallic circular reservoirs in northern and southern West Bank area 13 of them with 500 m<sup>3</sup> and one with 1000 m<sup>3</sup> capacity. In addition, implement 8500 meter long main irrigation lines and supervised the implementation of 61000 meter irrigation systems in the northern part of West Bank as well as implement 3 pumping stations.

The integrated system included the installation of water meter for each farmer to facilitate operation and management of the water used by each one of them.



## 6.4 Water Supply Development

PHG has implemented three domestic water supply systems with total length of 3500 m as follows: 1300 m in Al Zawyeh and 500m at Za'ayyim and 1700 m at Jabal El Baba - Azariyeh.



## 6.5 Improve Wash Facilities of War Affected Houses

PHG has rehabilitated the wash facilities of 850 war affected households in Gaza for the benefit of nearly 2500 persons.



## 6.6 Renewable Energy(Solar and Biogaz)

PHG has implemented two main solar energy systems for groundwater pumping in West Bank. It also implemented 150 solar cookers and 70 Biogas small reactor at household level in Gaza.



## 6.7 Agricultural Road Rehabilitation

PHG has rehabilitated and constructed 15 km length of agricultural roads in the northern and southern part of West Bank.



## 6.8 Awareness and Capacity Building

PHG believes that capacity building of beneficiaries is an important component of any project in order to ensure its sustainability. Training the beneficiaries on the operation and maintenance of the interventions improves the sustainability of these projects and serves them better. Moreover, raising the awareness of various constituency of society helps promote the best practice in water use and management as well as help in protecting the environment. In this context, PHG has conducted 200 hours of training for the 141 woman and 118 farmers as well as organized a



training in Jordan for technicians of Ministry of Agriculture. In addition, organize 26 workshops for children and 16 awareness workshops for women.



## 6.9 Agricultural Water User Associations



PHG has formed 19 agricultural water user associations in the West Bank to promote the participatory principle of community in managing local water sources and supplies.



## 6.10 Research and Studies

PHG has conducted four studies on various issues related to biogas and compost production, Auja Dam Storage problems, access to water and sanitation in 55 communities and sustainable Production and consumption initiatives.



## 6.11 Lobby and Advocacy

PHG has always played a major role at the national level and through the effective participation in several committees and also public events. Moreover, PHG has initiated several activities to help

promote the water awareness to decision makers as well as international visitors. PHG has accomplished the following:

- PHG has given 6 lectures to local and international delegates and groups on the current water problems and the impact of Israeli water policy on Palestinian Water Security.
- PHG is also one of effective institutions in civil society issues, whether performed individually or through its presence in the NGOs Network PNGO or PENGON (Environmental NGO Network).
- Play important role in coordinate among the local and international agencies working in the water and sanitation in oPt under the coordination mechanism known as EWASH.
- Finally PHG in its endeavor to advance water justice, it empowers people to act positively toward realizing their water rights and to raise their capacity to demand their right to access water.



**Audited Financial Statement**

**Palestinian Hydrology Group  
Statement of Financial Position  
As of December 31, 2018**

		2018	2017
	Note	U.S. \$	U.S. \$
<b>Assets</b>			
<b>Current Assets</b>			
Cash on hand and at banks	4	578,969	226,025
Prepayments and other debit balances	5	40,537	37,127
Pledges receivable	6	249,644	318,051
<b>Total Current Assets</b>		<b>869,150</b>	<b>581,203</b>
Land	7	174,280	142,078
Property, Plant and Equipment - Net	8	1,290,064	1,338,876
<b>Total Assets</b>		<b>2,333,494</b>	<b>2,062,157</b>
<b>Liabilities and Net Assets</b>			
<b>Current Liabilities</b>			
Accounts payable	9	179,332	52,561
Accrued expenses	10	6,000	6,000
Unpaid leave	11	-	46,571
<b>Total Current Liabilities</b>		<b>185,332</b>	<b>105,132</b>
Due to Employees	12	145,882	147,131
Employees' Provident Fund	13	375,526	349,328
Employees' end of service indemnity	14	693,959	656,199
<b>Total Liabilities</b>		<b>1,400,699</b>	<b>1,257,790</b>
<b>Net Assets</b>			
(Deficit) in Unrestricted Fund		(1,036,928)	(676,587)
Temporarily Restricted Fund	20	497,622	-
Cumulative Change of Fair Value		1,047,527	1,039,770
Investment in Property, Plant and Equipment		424,574	441,184
<b>Total Surplus in Net Assets</b>		<b>932,795</b>	<b>804,367</b>
<b>Total Liabilities and Net Assets</b>		<b>2,333,494</b>	<b>2,062,157</b>

**The Accompanying Notes Form an Integral Part of These Financial Statements**

Palestinian Hydrology Group  
Statement of Activities and Other Comprehensive Income  
For The Year Ended December 31, 2018

	Note	2018			2017
		Unrestricted	Temporary		Total
			Restricted	Total	
U.S. \$	U.S. \$	U.S. \$	U.S. \$	U.S. \$	
<b>Grants and Revenues:</b>					
Grants	15,20	--	1,915,211	1,915,211	1,492,932
Unrestricted Contributions	16	169,011	--	169,011	478,750
Other Income	17	281,397	--	281,397	144,496
		<b>450,408</b>	<b>1,915,211</b>	<b>2,365,619</b>	<b>2,116,178</b>
Net Assets Released from Restriction	20	1,417,589	(1,417,589)	--	--
<b>Total Grants and Revenues</b>		<b>1,867,997</b>	<b>497,622</b>	<b>2,365,619</b>	<b>2,116,178</b>
<b>Expenses:</b>					
Salaries and Related Expenses		764,514	--	764,514	906,641
Other Administrative Expenses		185,972	--	185,972	248,720
Projects' Expenses		1,245,549	--	1,245,549	1,084,632
		<b>2,196,035</b>	<b>--</b>	<b>2,196,035</b>	<b>2,239,993</b>
<b>Total Expense - (Statement - E)</b>					
Depreciation		48,812	--	48,812	55,668
Currency exchange difference		101	--	101	41,877
<b>Change in Net Assets for the Year</b>		<b>(376,951)</b>	<b>497,622</b>	<b>120,671</b>	<b>(221,360)</b>
Other Comprehensive Income		7,757	--	7,757	--
<b>Total Comprehensive (Loss) Income</b>		<b>(369,194)</b>	<b>497,622</b>	<b>128,428</b>	<b>(221,360)</b>

The Accompanying Notes Form an Integral Part of These Financial Statements

**Palestinian Hydrology Group**  
**Statement of Cash Flows**  
**For The Year Ended December 31, 2018**

	<u>2018</u>	<u>2017</u>
	<u>U.S. \$</u>	<u>U.S. \$</u>
<b>Cash Flows from Operating Activities:</b>		
Grants received	2,152,629	2,047,832
Other income	281,397	144,496
Expenses paid to suppliers and employees	<u>(2,048,880)</u>	<u>(2,277,150)</u>
<b>Cash Flow Provided (Used in) from Operating Activities</b>	<b><u>385,146</u></b>	<b><u>(84,822)</u></b>
<b>Cash Flows from Investing Activities:</b>		
Additions to Property, Plant and Equipment	<u>(32,202)</u>	<u>(1,232)</u>
<b>Cash (Used in) Investing Activities</b>	<b><u>(32,202)</u></b>	<b><u>(1,232)</u></b>
<b>Increase (Decrease) in Cash and Banks Balances</b>	<b>352,944</b>	<b>(86,054)</b>
Cash on hand and at Banks - Beginning of Year	<u>226,025</u>	<u>312,079</u>
<b>Cash on Hand and at Banks - End of Year</b>	<b><u>578,969</u></b>	<b><u>226,025</u></b>
<b>Adjustments to reconcile change in net assets to net cash provided by operating activities:</b>		
Change in net assets	128,428	(221,360)
Depreciation	48,812	55,668
Decrease in Pledges receivable	68,407	76,150
Decrease in prepayments and other debit balances	(3,410)	9,770
Increase (Decrease) in accounts payable	126,771	(82,910)
(Decrease) in due to employees	(1,249)	--
(Decrease) in unpaid leave	(46,571)	(2,640)
Increase in employees' provident fund	26,198	39,989
Increase in Employees' End of Service Indemnity	<u>37,760</u>	<u>40,511</u>
<b>Net cash flow Provided (Used in) from operating activities</b>	<b><u>385,146</u></b>	<b><u>(84,822)</u></b>

**The Accompanying Notes Form an Integral Part of These Financial Statements**