

Ref: UNDP PAL10-00109382

Date: 1 November 2018

**Subject: Rafah Wastewater Treatment Plant and Reuse Plants - Photo Voltaic Solar System
Progress Report**

Your Excellency,

Reference is made to the contribution agreement between the Government of Japan and UNDP's Programme of Assistance to the Palestinian People for the Rafah Wastewater Treatment Plant and Reuse Plants - Photo Voltaic Solar System project, effective March 2018.

I am pleased to submit herewith the second narrative and financial progress report for the abovementioned project.

The report summarizes the progress of the project during the period from 01 July to 30 September 2018. It also provides an overview of the achievements, challenges, lessons learned, financial status and way forward.

I thank the Government of Japan for its contributions through UNDP and look forward to strengthening our partnership in support of the Palestinian People.

Sincerely yours,



Roberto Valent

Special Representative of the Administrator
UNDP/PAPP



H.E. Takeshi Okubo
Ambassador for the Palestinian Affairs
Representative of Japan to Palestine
Ramallah



من الشعب الياباني
From the People of Japan



*Empowered lives.
Resilient nations.*

**United Nations Development Programme
Programme of Assistance to the Palestinian People**

Country: occupied Palestinian territory

Donor: Government of Japan

Project: Rafah Wastewater Treatment Plant and Reuse Plants
Photo Voltaic Solar System

PAL10-00109382

**Progress Report
01 July to 30 September 2018**

Progress Report

1. Report Summary

- (1) **Title of the Project:** Rafah Wastewater Treatment Plant and Reuse Plants - Photo Voltaic Solar System
- (2) **Date of approval:** March 2018
- (3) **Project No:** PAL 10-00109382, **Award No.** 000 91323
- (4) **Total Project budget:** USD 500,000
- (5) **Scheme of the Project:** Japanese Supplementary Fund
- (6) **Period covered by the report:** Third Quarterly Progress Report, covering the period from 01 July to 30 September 2018
- (7) **Names of UNDP Officer in charge, and Project Manager with their contact address**
- Iman Al Hussein, Infrastructure Specialist, e-mail: iman.husseini@undp.org
 - Mohammad Mezyad, Project Manager, email: mohammad.mezyad@undp.org
- (8) **Name of Palestinian counterpart, title and contact address**
- Eng. Rebhi Elsheikh, Deputy Head of Palestinian Water Authority (PWA), Mobile 0599167655
 - Eng. Monther Shoblak, Managing Director of the Coastal Municipalities Water Utility (CMWU) email: mothersh@cmwu.ps Mobile: 0599267108

2. Contents

(1) Summary of the Project

The unsustainable water, sanitation and hygiene (WASH) situation in the Gaza Strip has been exacerbated by the longstanding blockade and the 2014 hostilities. Thus, Palestinians in the Gaza Strip are in dire need of sustainable WASH solutions.

Wastewater and sewage treatment plants lack the appropriate infrastructure to respond to population growth in the Gaza Strip. According to United Nations "Gaza in 2020: A liveable Place?", some 90,000 CM of raw or partially treated sewage is being discharged daily into the Mediterranean Sea (almost 33 MCM per year). This is creating pollution, public health hazards especially for the population as they swim in the sea during the summer. In addition, the fishing industry, which is considered a vital part of the food basket for around two million people, is also being affected, directly impacting the food security of around 4,000 fishermen and their families.

Over 95 percent of water is unfit for human use, according to reports from the Palestinian Water Authority (PWA) and the Environment Quality Authority (EQA). In such a situation, safe recycled wastewater is a precious resource for Palestinian agriculture. Investments are needed in waste water and sewage treatment and post-treatment facilities to be able to re-infiltrate treated water into the aquifer and for irrigation of agricultural farms with quality that meets the standards set by the PWA and EQA.

The Coastal Municipalities Water Utility (CMWU) has identified the demand of Rafah

waste water treatment plant (WWTP) to be 270 KWp for optimal operation. Japan International Cooperation Agency (JICA) through Nippon International Cooperation for Community Development (NICCOD), had implemented 173 KWp of PV system for the Rafah WWTP.

With generous support from the Government of Japan, the “Rafah Waste Water Treatment Plant and Reuse Plants (RWWTP)- Photo Voltaic Solar System” project aims to protect public health and improve the wellbeing of the Palestinian population in the Gaza Strip. The intervention will be twofold. First, extra 100 KWp. will be installed in the Refah WWTP which is expected to operate the plant efficiently, with full capacity to treat waste water up to the required standard for post treatment to produce adequate water quality for irrigation. Second, another 100 KWp will be installed for operating the pumping station to transfer treated water for the targeted farming areas for irrigation purposes. Before the project, 14,000 CM of untreated waste water were dumped into the sea causing public health and environmental hazards for the fishing industry. Upon completion of the project, such wastewater quantities will be effectively treated, where 7,200 CM of the treated water will be utilized for irrigation of agricultural areas in Rafah.

The project will also contribute to more sustainable and integrated water management in the Gaza Strip through the reuse of treated waste water for irrigation purposes in the Rafah Governorate. The quality of treated wastewater for irrigation schemes will be improved through the utilization of solar energy for the operation of Rafah waste water treatment plant and Rafah post treatment facilities. Around 500 farmers and their families (50% males and 50% females) from Al Mawasi, Al Shouka and Al Moharrarat areas will benefit directly from access to treated waste water for irrigation of their farms. In addition, around 170,000 residents of the Rafah Governorate will benefit from improved public health and environment conditions following the treatment of waste water pumped into the sea, as well as the improved quality of corps that will be produced.

(2) Project components

Objectives:

1. Palestinians have the capacity to access basic and social services
2. Key government and non-governmental actors have capacities to scale up climate change adaptation and mitigation interventions across major sectors of the economy

Outcomes:

1. Infrastructure, natural and cultural resources are more sustainably used and managed in the Gaza Strip.
2. Palestinian population has enhanced, secured and sustainable access to their natural resources, better environmental protection and sustainable resources management.



Outputs:

1. Rafah waste water treatment Plant and Rafah Post Treatment facilities are operated by utilizing solar energy

3. Financial report

| Budget items | A. Original budget (USD) | B. Disbursement (USD) | C. Balance (A-B) | D. Rate of disbursement (%) (B/A*100) |
|--|--------------------------|-----------------------|-------------------|---------------------------------------|
| Consultant to design the solar energy system | 5,000.00 | 5,000.00 | 0.00 | 100% |
| Technical activities for supply and installation of 200 Kwp grid solar energy system | 353,000 | 58,576.77 | 294,423.23 | 16.5% |
| Subtotal: technical activities | 358,000.00 | 63,576.77 | 294,423.23 | 17.7% |
| UNDP Direct Implementation Cost | 77,145.32 | 13,669.57 | 63,475.75 | 17.72% |
| General Operation Expenses | 14,558.71 | 7,716.05 | 6,842.66 | 53% |
| Advocacy and Visibility | 5,000.00 | 5,000.00 | 0 | 100.00% |
| Monitoring and Evaluation | 3,258.93 | 0 | 3,258.93 | 0.00% |
| Communications | 5,000.00 | 3,333.33 | 1,666.67 | 66.67% |
| Programmable amount | 462,962.96 | 93,295.72 | 369,667.24 | 20.15% |
| GMS (8%) | 37,037.04 | 7,463.66 | 29,573.38 | 20.15% |
| Grand Total | 500,000.00 | 100,759.38 | 399,240.62 | 20.15% |

*It is important to highlight that the financial figures in this report are temporary figures and may be corrected at a later stage due to exchange rate fluctuations, realized gain/loss or any other possible corrections. UNDP/PAPP's financial system operates in such a manner that the financial system closes in early December of each year and that final expenditure reports reflecting the disbursements and GMS of the previous year are only published in March of the following year.

4. Any special notes or remarks

UNDP has led discussions with PENRA for the connection of the solar system with the national grid. The discussions with Gaza Electricity Distribution Company (GEDCO), in cooperation with PENRA, reached to an understanding between the parties to utilize the

available amount in the budget for the grid connection and to utilize any savings in the budget to cover the project's share in the new line between Rafah Waste Water Treatment Plant and Rafah Treated Sewage Reuse Plant. In this regard, a joint committee from GEDCO, PENRA and UNDP was formed to assess the site and determine the route of the connection line to the existing electricity network.

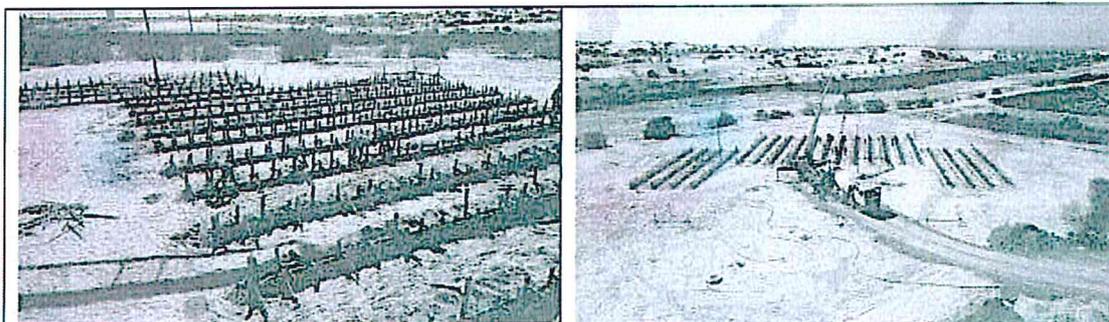
5. Pictures of project indicating before the project and progress of the project

| | |
|---|--|
|  |  |
| <p>Existing waste water pumps</p> | <p>The site where the installation of the new solar system for the Rafah WWTP</p> |
|  |  |
| <p>Casting Ground Beam of Solar Panels</p> | <p>Casting Ground Beam of Solar Panels</p> |
|  |  |

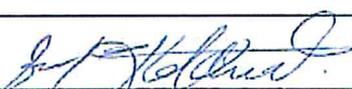
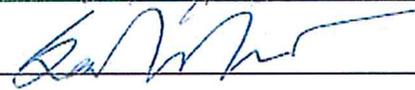
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8. Report authorization by UNDP/PAPP

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| Reporting person: Mohammad Mezyad, Project Manager |  |
| Date of submission: 3 October 2018 | |
| Supervisor staff with his/her signature: Iman Al Hussein, Infrastructure Specialist |  |
| Approved by: Basil Nasser, Head of Gaza office |  |