

Ref: UNDP/PAL 10-96998

4 May 2017

Excellency,

**Subject: Emergency Rubble Removal and Debris Management Programme
Completion Report**

Reference is made to the contribution agreement between the Directorate General for Development Co-Operation of the Italian Ministry of Foreign Affairs and UNDP's Programme of Assistance to the Palestinian People (UNDP) for the "Emergency Rubble and Debris management Project" effective 16 October 2015.

I am pleased to submit herewith the Narrative and Financial Final Performance Report.

The report summarizes the progress of the project as of 31 March 2017 and provides an overview of the achievements, challenges, lessons learned, financial status and way forward.

I thank the Directorate General for Development Co-Operation of the Italian Ministry of Foreign Affairs for its contributions to UNDP and look forward to strengthening our partnership in support of the Palestinian People.

Sincerely yours,

Khaled Shahwan
Officer-In-Charge
UNDP/PAPP



Attached:

1. Emergency Rubble Removal and Debris Management Project Final Report.
2. Success Story

H.E Fabio Sokolowicz
Consul General of Italy
Jerusalem
Katamon – 16, Kaf Tet Benovember Street

Completion Report

Directorate General for Development Co-Operation of the Italian Ministry of Foreign Affairs

United Nations Development Programme

Programme of Assistance to the Palestinian People

Emergency Rubble Removal and Debris management programme

Reporting Period	Final Report (from 16 October 2015 till 31 March 2017)
Donor	Directorate General for Development Co-Operation of the Italian Ministry of Foreign Affairs
Country	State of Palestine
Project Title	Emergency Rubble removal and Debris management in the Gaza Strip
Project ID / (Atlas Award ID)	Emergency Supply and Advanced Plan for Early Recovery / Gaza
Outputs (Atlas Project ID and Description)	Award ID: 00050123 Emergency rubble removal and Crushing Concrete Rubble Project ID: PAL 10-96998
Implementing Partner(s)	MoPWH, UNMAS and Local Contractors
Project Start Date	16 October 2015
Project End Date	31 March 2017
Revenue received	<ul style="list-style-type: none"> • Regular Euro • Other <ul style="list-style-type: none"> ◦ Donor Euro 800,000.00 • Total Euro 800,000.00 <p style="text-align: right;">Equivalent to USD 877,192.96</p>
UNDP Contact Person	Roberto Valent Special Representative of the Administrator UNDP/PAPP Email: roberto.valent@undp.org / Tel.: +972 2 626 8200

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Project Completion Report

I. Executive Summary

This completion report summarizes the progress made as of 31 March 2017 towards achieving the project's proposed results and objectives. It provides an overview of the impacts of implementation of the project different activities, the lessons learned and the final financial statement in relation to the approved project budget.

Over the project implementation period from October 2015 to March 2017, the project supported the removal of rubble and construction debris that resulted from the July 2014 war from the affected areas in the Gaza Strip. By the end of the project, around 80,000 persons (39,200 males and 40,800 females) had access to a safer and a cleaner environment in the project targeted areas as a result of removal of construction debris, unexploded ordinance and remnant of war from their destroyed households. The targeted population benefited also from reduced risks of Unexploded Ordinances (UXOs) and Exploded Remnants of War (ERM) and were more aware of their danger. Moreover, around 32,000 tons of rubble was removed, and 105,000 tons of concrete rubble was crushed in Rafah crushing site to be used in roads rehabilitation activities.

The project also supported creating emergency jobs targeting the affected population. Over the implementation period, around 11,587 working days were generated for around 437 workers who economically benefited from these jobs. In addition around 2,180 persons of whom around 1,200 were females indirectly benefited from the created emergency jobs from implementing the rubble removal and crushing activities, and construction debris & sand cleaning activities.

The following section provides brief background about the intervention while other sections of the report presents in details the achieved results during the project implementation period.

II. Description of the Project

Introduction and Background

Since the night of 7 July 2014, the Israeli forces carried out hundreds of intense aerial and navy bombardment operations throughout the Gaza Strip, targeting military installations, and residences of alleged activists. According to the final damage and losses assessment report that was published on 28 August 2014 more than 2,133 Palestinians, including 500 children were killed by Israeli attacks since the start the operation. According to the Palestinian Ministry of Health, 11,100 Palestinians, including 3,374 children, were injured.

The final assessment showed that 13% of the entire housing stock in the Gaza Strip was affected. Around 18,000 housing units have been either totally destroyed or severely damaged leaving more than 108,000 people homeless, since their homes have been rendered totally uninhabitable. The military operations also affected basic community infrastructure, including water and sanitation facilities, roads, health centres, schools, and security and public buildings.

From previous incursions and major military operations that were carried out in the Gaza Strip during 2008, 2009, and 2012, UNDP has developed an assessment mechanism to assess the damages of Infrastructure facilities including public buildings, housing, public infrastructures, the fishery port, and agricultural infrastructure, etc. UNDP technical teams on the ground coordinated with related ministries and municipalities to assess damages and survey quantities of rubble that resulted from the Israeli military attacks, and to identify the needs on the ground. The final UNDP's assessment report estimated that there were around 2 Million tons of rubble that were generated as a result of 2014 war on the Gaza Strip, compared to 650,000 tons of rubble that were generated in 2009. As part of UNDP's recovery programme in the Gaza Strip, UNDP committed to remove 50% of the case load, around one million tons of the generated rubble. The following table presents the distribution of this quantity in relation to the affected areas.

Areas of the Gaza strip	Actual quantities (Tons)	% of the total generated rubble	Proposed quantities to be removed by UNDP (Tons)
Northern Governorates	500,000	25%	250,000
Gaza city	700,000	35%	350,000
Middle area	200,000	10%	100,000
Khan Younis	360,000	18%	180,000
Rafah	240,000	12%	120,000
Total	2,000,000	100%	1,000,000 tons

Table 2: Rubble Quantities Breakdown

Considering the above, UNDP has adopted, where relevant, a labour-intensive approach as part of its project implementation strategy in order to bring relief to the affected population in the Gaza Strip.

Objectives

The overall goal of this project was to bring immediate relief, recovery, and support to the Palestinian people of the Gaza Strip through the restoration of access to essential services and livelihoods. While the objectives of the project were to:

1. Supporting the safe return of displaced persons by allowing them access to their homes, as well as to facilitate the movement of basic supplies and services;
2. Reducing risks of Unexploded Ordinance (UXOs), Exploded Remnant of War (ERW), and generating awareness of their danger
3. Safeguarding the environment by removing rubble to crushing and storage sites and ensuring it to be re-used in road rehabilitation activities, and
4. Generating emergency employment for the affected population

Expected Outputs and Proposed Activities funded by Directorate General for Development Co-Operation of the Italian Ministry of Foreign Affairs

Expected Outputs:

The project is designed to deliver following outputs:

1. Around 35,000 tons of rubble is removed from Gaza, the middle area and Rafah in the Gaza Strip benefiting 50,000 persons.
2. Around 120,000 tons of concrete rubble to be crushed and reused in roads rehabilitation.

The project supported implementing the following activities to materialize its outputs:

- Removal and safe disposal of hazardous materials.
- Deconstruction of totally damaged residential, commercial and industrial buildings, sorting of debris, removal and crushing of rubble clearing of debris from major roads, residential neighbourhoods, and public areas through job creation and construction debris & sand cleaning activity.

III. Implementation Process

Implementation Process for rubble removal activities

UNDP/PAPP worked in close coordination with local authorities, national institutions, private sector and other UN agencies in the implementation of the project activities. In addition, the following activities were conducted during the project (Please refer to **Annex A** of arrangement and implementation process and **Annex B** of the project infographic results):

- Demolishing and sorting of non-concrete materials such as wood, aluminum, steel, isolating materials, ceramic, asphalt, terrazzo, asbestos, UXOs, garbage, and others

(excluding sand and clay and any soil resulting from the sieving/sorting process) from existing damaged structures and rubble stockpiles;

- Transporting and spreading sand and clay generated from concrete sieving ,sites cleaning, rubble sorting, foundation removal, demolishing of buildings or any other source;
- Demolishing, sorting and transporting of concrete materials from existing damaged structures, rubble stockpiles, water tanks flats, floors, partially damaged structures etc. The work includes excavation for existing foundations, cutting of steel bars, cutting of concrete elements into small parts (maximum 50x50x50 cm), demolishing of damaged buildings and walls, loading of concrete rubble, transporting to the dump site and up-loading concrete rubble;
- Demolishing, sorting and transporting of concrete materials from existing damaged high-rise buildings (more than 10 meters high from the top of highest ceiling of the building down to the first ground floor/all elements above highest ceiling will not be considered in determining high-rise building height such as columns, stairs, etc). The work includes excavation for existing foundations, cutting of steel bars, cutting of concrete elements into small parts (maximum 50x50x50 cm), demolishing of damaged buildings and walls, loading of concrete rubble, transporting to the dump site, up-loading concrete rubble, and using of special machines and equipment;
- Rubble owners were able to take any non- concrete materials for their personal reuse such as steel, widows, doors, furniture, etc.;
- Identification of Unexploded ordinance and risk awareness: UNDP/PAPP coordinated with UNMAS to carry out risk assessment of the project targeted sites. According to the recommendation of the risk assessment report and level of risks, UNDP prepared its rubble removal plans;
- Communication with house owners and Ministry of Housing: the process started with signing a consent forms by the owner of the rubble to allow UNMAS and UNDP teams to enter the place and make the necessary investigation and rubble removal. This consent form was signed by Ministry of Public Works and Housing and submitted to UNDP. UNDP sent a request for UNMAS for risk assessment and further investigation and upon the result of risk assessment, UNDP took proper mitigations during rubble removal;
- Procurement of contractors and rubble removal activities.

Implementation Process for construction debris & sand cleaning activity

The Job Creation activities were implemented directly by UNDP/PAPP employing the following procedures:

- Steering committee from the solid waste joint service counsels (JSC's), Gaza Municipality and UNDP was formed to select a list of eligible workers from existing data base used for such activities and according to the criteria mentioned below.
- After selection of worker/supervision staff, all selected candidates asked to sign a contract with the eligible contractor.
- Each worker started working in assigned locations and signed attendance sheet when he arrived to the site and when he left it. UNDP staff on daily basis monitored the attendance of workers. UNDP Programme Manager conducted random site visits to check on the monitoring process and to take any required corrective measures.
- By end of each month, a list of engaged unemployed is prepared with a total of working days for each one including the amount to be paid. This list is prepared by UNDP site engineers and reviewed by UNDP manager.
- UNDP transferred all workers' payment to be processed by the Bank of Palestine who issued a Bank statement to UNDP indicated the list of workers who received their entitlement
- The amount of \$ 14 per day was applied as a minimum daily wage in accordance with the Palestinian law
- UNDP subcontracted one subcontractor for removing collected sand and construction debris and transporting all to the landfill.
- UNDP contracted 4 site engineers on IC modality to supervise implementation of the activities.

1. Criteria for workers

- Candidates should not be an employer in any of official institutions (PA, De-facto government, NGO, etc)
- Candidate should not be engaged in any of Job Creation Programs for 6 months before this activity (usually we check this with UNRWA, Ministry of Labor, JCP, and others)
- Skills, age between (25-35), married status, family size and gender are also part of selection criteria

2. Criteria for Supervisors

- Candidate should not be an employer in any of official institutions (PA, De-facto government, NGO, etc)
- Candidate should not be engaged in any of Job Creation Programs at the same time of this activity (usually we check this with UNRWA, Ministry of Labor, JCP, and others)
- Graduated staff is the targeted beneficiaries or foremen with 3 years of experience.
- Skills, age (25-35), married status, family size and gender are also part of selection criteria

IV. Achievements Review

General and Specific Achievements

As of 31 March 2017, around 1,105,287 tons of rubble was removed from affected different areas in the Gaza Strip under all contributions of Italy, Sida, Japan and USAID. The rubble was completely removed from 2,000 units and different locations in the Gaza Strip. The activities have generated 42,122 working days and around 3,226 UXOs were removed from all locations. In addition, private sector and some other NGOs in the Gaza Strip actively contributed to rubble removal activities and removed around 800,000 tons of rubble. All the rubble that was generated as a result of July 2014 war on Gaza was collected, removed, transported to disposal sites. Rubble removed by UNDP was crushed and reused in roads rehabilitation in different locations of the Gaza Strip.

In particular, under the Italian contribution, the following results were achieved,

1. Around 32,000 tons of rubble and construction debris were safely removed from Gaza, Middle and Rafah areas,
2. Around 105,000 of concrete rubble were crushed in Rafah crushing site,
3. 80,000 persons (39,200 males and 40,800 females) of the targeted areas benefited from reduced risks from UXOs and ERM and were more aware of their security risks
4. Around 1,885 working days were generated for around 35 workers from rubble removal and crushing activities
5. Around 9,702 working days were generated for around 403 workers from construction debris and sand cleaning activity
6. Two safety training workshops were conducted for the engaged workers,

Results of the Activities (Output of the Project)

Result	Description	Obstacles
32,000 tons of rubble were removed from Gaza, Middle Area and Rafah Governorate	Demolition, sorting and transfer of accumulated rubble to the crushing site in Johr Al Dik area in Gaza and Tal Al Sultan crushing site in Rafah area	N/A
105,000 tons of concrete rubble were crushed in Rafah crushing site	Crushing concrete debris transported to the site into different sizes (from 0 to 6 cm).	N/A
1,885 working days were generated creating 35 jobs	Engaging trained workers in sorting, demolition and crushing process	N/A
80,000 people were benefited from rubble removal activities of whom 40,800 were women	Almost all 80,000 people of Gaza, Middle and Rafah area were benefited from rubble removal process of which 750 were directly benefited and remaining were indirectly as the rubble removal facilitated their movement and enhanced the environmental conditions in the area.	N/A
A total of 35 people participated in two training sessions	Training of workers prior to starting works to teach them how to deal with hazardous materials such as asbestos, UXOs and others.	N/A
9,702 working days were generated creating 402 jobs for debris removal through job creation activity	Engaging trained workers and supervisors in cleaning streets after rubble removal different activities for one month through community engagement	N/A

Table 3: Results, Description and Obstacles

V. Progress in Gender Mainstreaming

1. 20% of UNDP Rubble Removal Staff were female
2. UNDP included a mandatory request from all contractors and subcontractors to include female staff in rubble removal process
3. UNDP jointly with UN-Women put a road map for gender mainstreaming for the whole rubble removal programme.

4. UNDP gave a priority for rubble removal to those houses and families headed by women, around 82 locations headed by women are given priority and cleared

VI. Overall Programme Lessons Learned

The main lessons learned that were grasped during the project implementation include:

1. **Development the beneficiaries' database:** It is important to record formally all beneficiaries including the ones who refused to have their rubble removed and develop database disaggregated in geographical locations, social status and gender. The beneficiaries' database was very useful in setting the baseline, measuring progress, and setting priorities
2. **Creation of emergency short-term jobs is essential to bring relief to the affected population:** UNDP faced an issue at one point in the process where communities in some neighborhoods questioned why they were not benefiting in terms of employment and income from rubble removal operations, whereas, in other neighborhoods where cash for work methods were used, communities were employed in the removal operations. Cash-for-work modalities could only apply in Gaza for low risk sites, due to safety risks. In addition, the choice of the modality depends on the complexity of the job to be performed. Hanging buildings, high-rise structures are potential hazards for workers that may be dealt better by machinery. From UNDP experience, cash-for-work interventions have great assets, but are also heavier to deal with and implementation of the work is quite longer. A balance needs to be achieved between social benefits and expediency of the work.
3. **Capacity of private contractors:** the capacity of local contractors and partners needs to be carefully analyzed. In particular, issues related to insurance for workers, capacity to deal with complex infrastructure deconstruction, capacity to provide safety equipment, etc. need to be considered during selection of contractors. Time frame for implementation of activities should be also carefully planned especially for high-rise and beyond repair buildings as they required special machines for demolition as well as longer time rather than other buildings.
4. **Engagement of stakeholders is a key to the success of the project:** implementation of the project activities required continuous coordination with the UNMAS, and Ministry of housing. Regular follow up meetings were very useful in terms of handling any emerging issues raised during implementation.
5. **Promoting women participation in rubble removal activities:** participation of both male and female in rubble removal activities was very essential in reflecting the needs of both women and men of the affected population and in setting priorities to ensure equal access of both men and women to information and economic benefits.

VII. Conclusions and Way Forward

The project planned outputs were fully achieved and its intended overall goal to bring relief and a safer environment for 80,000 persons of the war affected population in Gaza Strip was fully reached out as well. UNDP will maximize the benefits generated from this project by utilizing the crushed rubbles in rehabilitations of damaged roads in the Gaza Strip.

VIII. Financial Report

Activity Description	Budget Item	Allocated Budget	Disbursement	Balance (\$)
Undertake removal of 35,000 tons of rubble	Rubble removal		167,874.23	
Undertake crushing of 120,000 tons of concrete rubble to be used in rehabilitation of 5 km	Crushing	621,537.00	327,998.39	-47,368.62
	Construction debris & sand cleaning activity		173,033.00	
PIU - Project Implementation Unit cost	Personnel	140,500.00	122,299.80	18,200.20
	Miscellaneous (including designs, surveys, tender docs, etc.)	50,178.70	21,010.28	29,168.42
Sub-total		812,215.70	812,215.7	0
UNDP GMS (8%)		64,977.26	64,977.26	0
Total (USD)		877,192.96	877,192.96	0

Table 43: Project Financial Status

IX. Publicity of the Project

UNDP/PAPP exerted all necessary efforts to ensure the visibility of the Directorate General for Development Co-Operation of the Italian Ministry of Foreign Affairs. The following visibility measures were implemented during the project:

- On 27 July 2016, UNDP jointly with Ambassador of Italy visited the project activities.
- Highlighted role of Italy as a donor in all project follow up meetings with the project stakeholders.
- Prepared a project fact sheet and published at UNDP/PAPP official website.
- Highlighted the funding source for the project in all announced activities
- Placed Italy logo on all project's related materials during the project lifecycle that includes tendering, construction plaques, inauguration plaques, etc.

X. Photos



Rubble Removal Activities



Rubble Removal Activities



Rubble Removal Activities



Rubble Removal Activities



Crushing Activities



Crushing Activities



UNMAS Training

UNMAS Training



Construction debris & sand cleaning activity



Construction debris & sand cleaning activity



Construction debris & sand cleaning activity

1. Names of UNDP Officer in charge and Project Manager

Reporting person: Hala Othman / Programme Manager
Authorized Project Quality Assurance: Husam Tubail / Deputy Team Leader, Environment and Natural Resources team
Date of submission: 30 April, 2017
Supervisor staff with his signature: Rima Abumiddain/Team Leader, Environment and Natural Resources



1. Names of UNDP Officer in charge and Project Manager

Reporting person:	Hala Othman / Programme Manager	<i>Hala</i>
Authorized Project Quality Assurance:	Husam Tubail / Deputy Team Leader, Environment and Natural Resources team	<i>for Husam Hala</i>
Date of submission:	16 May, 2017	
Supervisor staff with his signature:	Rima Abumiddain/Team Leader, Environment and Natural Resources	

Annex A: Rubble Removal Arrangement

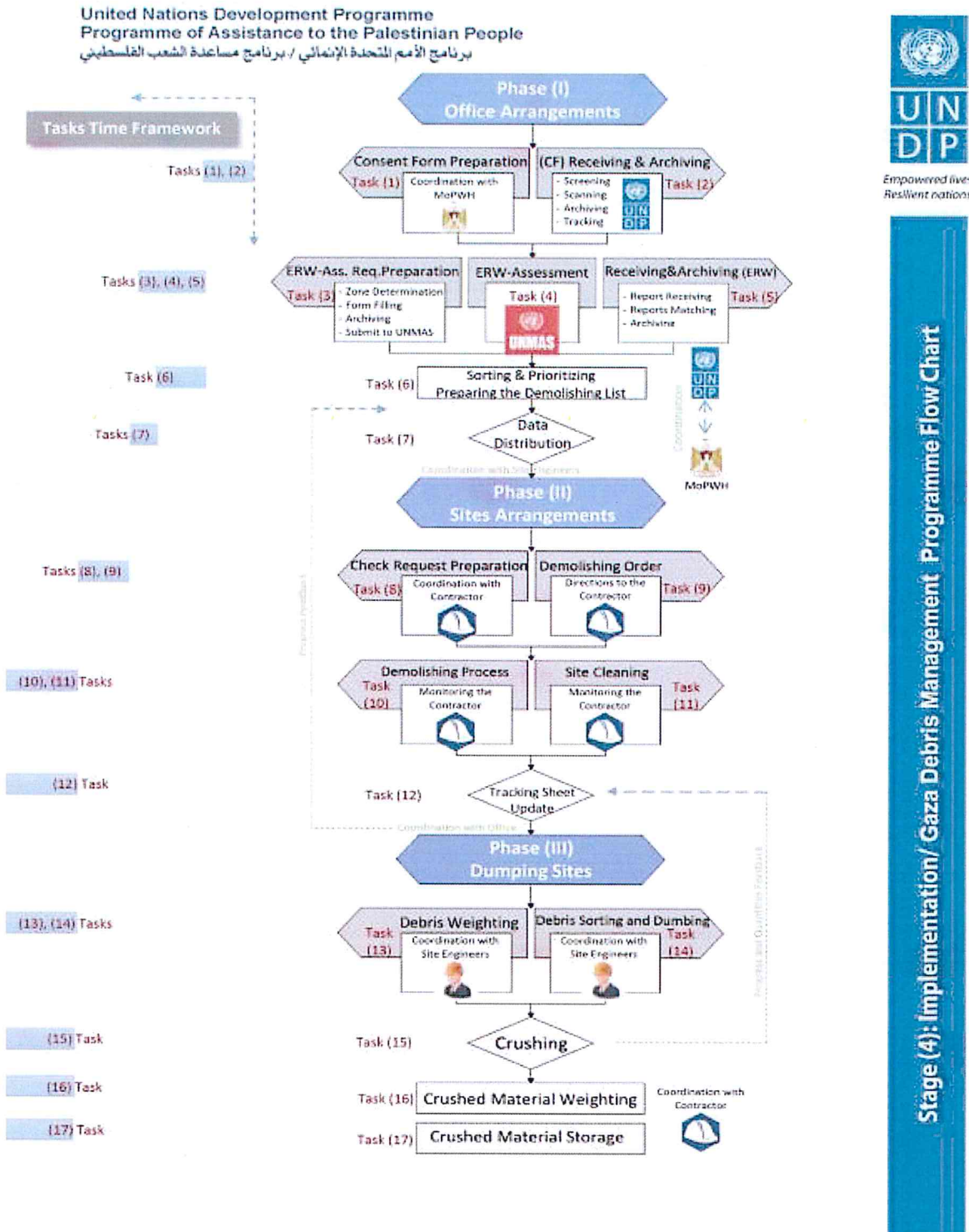


Figure 1: Rubble Removal Arrangement

Annex B: Project Infographic

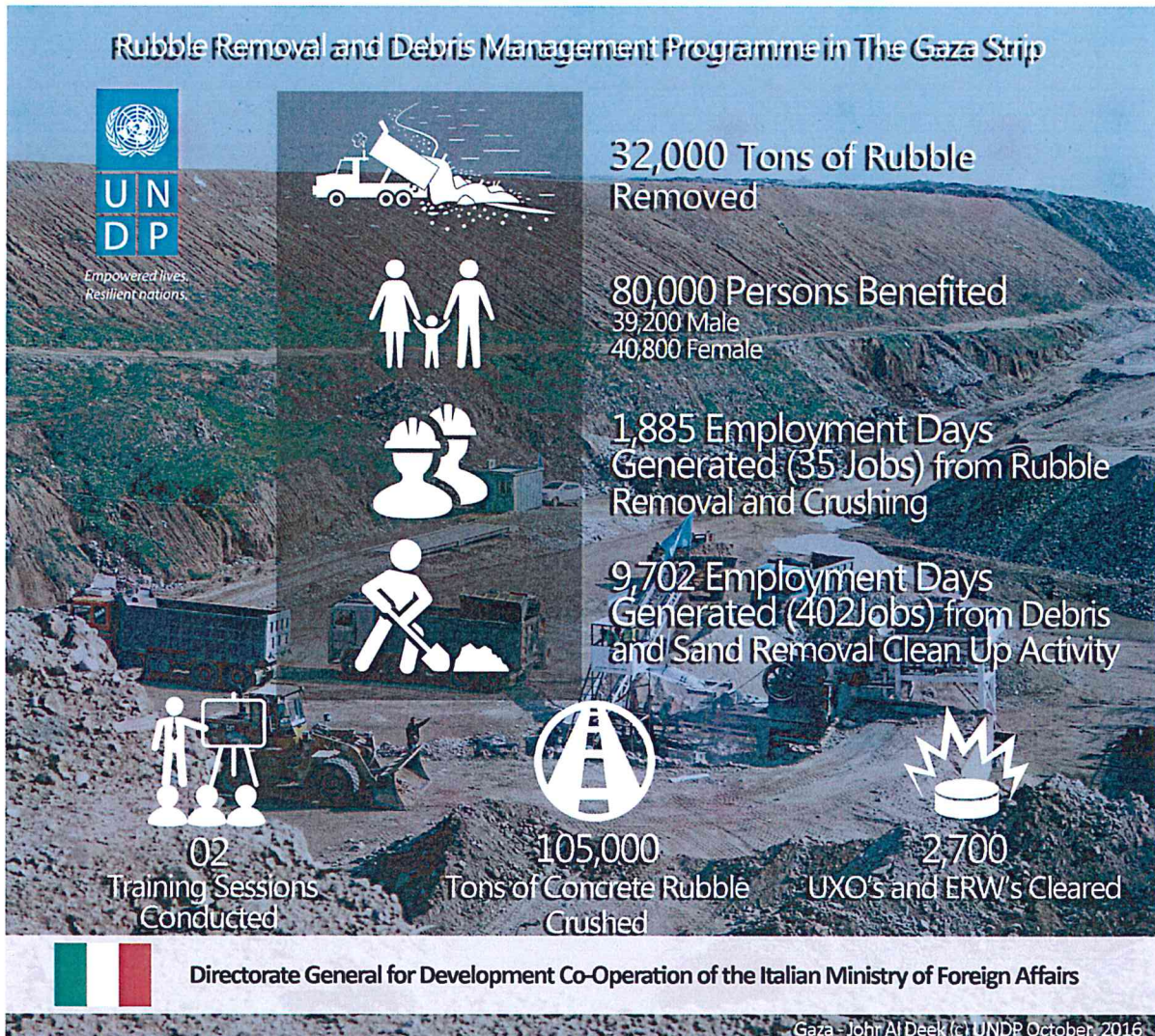


Figure 2: Italian Project Results Infographic