



UXOs Clearance, and improvement of solid waste services in the Gaza Strip
Reprogramming of Rehabilitation of Salah El-Din Street Project

Project Document

June 30, 2010

United Nations Development Programme

Country: occupied Palestinian territory

Project Document

Project Title	UXOs Clearance and improvement of solid waste services in Gaza Strip
UNDAF Outcome(s):	N/A
Expected CP Outcome(s): <i>(Those linked to the project and extracted from the CP)</i>	Access to effective social, economic, public services and utilities improved
Expected Output(s): <i>(Those that will result from the project)</i>	<p>Project Outcome:</p> <p>Gaza's Populations environment and livelihood improved through clearance and safe disposal of UXOs, and control of solid waste pollution</p> <p>Project outputs:</p> <ol style="list-style-type: none">1. Mine action activities effectively coordinated and implemented in accordance to International Mine Action Standards2. UXO Risk Assessments (RAs) of 80 kilometres of agricultural roads completed3. Explosive Ordnance Disposal (EOD) support for High risks rubble removal sites provided and Safe destruction of UXOs implemented4. 100,000 tons of concrete rubble crushed and stockpiled5. 80 km of agricultural roads rehabilitated using crushed concreted rubbles to enhance farmers accessibility to their farms6. Solid waste primary collection services extended in the Gaza Strip7. Capacity of existing dumping sites extended to accommodate the generated SW for the coming 7 years8. Waste recovery promoted through recycling and establishing of compost facility
Executing Entity:	UNDP/PAPP
Implementing Agencies:	UNMAS, MAG, JCP, and PEF

Brief Description

The project aims at reducing threats to public health and safeguarding the environment through clearance and safe disposal of UXOs, reusing of crushed concrete rubbles crushed material to improve access to agricultural productive areas, and improving solid waste services in the Gaza Strip. Palestinian people's livelihood in the Gaza Strip and their access to essential services were severely impacted as a result of the Israeli bombardment and military operations during the period December 2008-January 2009. A total of 600,000 tons of rubble was generated and more than 25,000 tons of municipal solid waste accumulated at random dump sites closed to residential areas which pose serious threats to the public health. The overall situation of solid waste management in the Gaza Strip is weak due to weakened local authorities as a result of lack of financial and technical capacity and inadequate infrastructure for proper collection, treatment and disposal of municipal solid waste. The project will increase solid waste primary collection rate at the targeted areas by 10- 15 % and extend the capacity of 3 official dumping sites for the coming 7 years. In addition it will also generate more than 400,000 working days opportunities to residents of the targeted areas. The project will be directly implemented by UNDP/PAPP in partnership with United Nations Mine action services, Mine Advisory Group, Palestinian Authority Job Creation Programme and Palestinian environment friends.

Programme Period: 2010-2012 (24Months)
 Key Result Area (Strategic Plan):
 Improved access to effective social, economic, and public services

Atlas Award ID: PAL 10_50123
 Project Number: PAL 10_71646
 Start date: July 2010
 End Date: June 2012

PAC Meeting Date
 Management Arrangements: UNDP DIM

Total resources required: US\$ 18,262,654

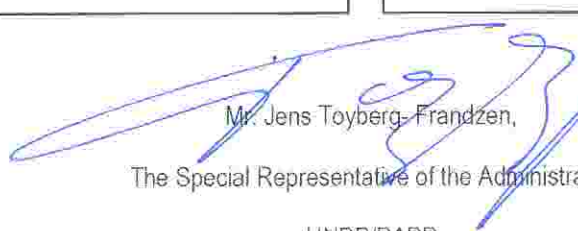
Total allocated resources: US\$ 18,262,654

- Regular _____
- Other:
 - Donor: Government of Japan / Re-programme of remaining balance of Salah Eldeen project _____
 - Donor _____
 - Donor _____
 - Government _____

Unfunded budget: _____

In-kind Contributions: _____

Agreed by (UNDP):


 Mr. Jens Toyberg-Frandzen,
 The Special Representative of the Administrator
 UNDP/PAPP



Date:

July 2010

I. SITUATION ANALYSIS

In the Gaza Strip, the dramatic events of the Cast lead Israeli military operation on December 2008-January 2009 have exacerbated further the living standards and the socio-economic conditions of the residents of the Gaza Strip that resulted from the two years of closure and siege imposed by Israel and contributed to the internal conflict among Palestinian factions.

UNDP, as the coordinator of the Early Recovery cluster, has been working with the Palestinian Authority, its sister UN agencies, national and international partners to assess damages and needs, and develop plans for restoration of essential social and public services, reconstruct essential infrastructure in order to accelerate livelihood recovery.

UNDP/PAPP field survey has verified that the majority of public and government institutions including municipalities, ministries, and police and civil defense stations have been destroyed, depriving the population of basic services. In addition, 4068 private houses have either been destroyed or severely damaged, leaving tens of thousands of people without shelter, employment or access to essential services.

UNDP/PAPP field survey also estimated that 600,000 tons of concrete rubble had been generated during the Conflict. The survey identified that the specific locations where the rubble has been compiled was heavily contaminated with asbestos and explosive remnants of war which poses a serious risk to communities in the affected areas. It has been reported that there have been 9 UXO related accidents resulting in 25 injured and 10 killed (7 children) since the end of the conflict.

Mismanagement of solid waste has been identified as one of the key factors that contribute to environmental degradation in the Gaza Strip. Since the economic siege has been imposed on the Gaza Strip, the services provided by the municipalities have been deteriorated very rapidly. The total population of the Gaza Strip is estimated at 1.5 million and generates a solid waste quantity of about 1,200 tons/day. Currently the average solid waste collection rate from residential areas is estimated at 65 %. All solid waste produced by the population in Gaza is disposed of at 3 disposal sites located along the eastern border of the Gaza Strip. Due to the lack of equipments and vehicles, municipalities have used a number of temporary dump site "transfer stations" located in dense populated areas. The daily collected waste is transferred to those sites and then to official ones later on. However, solid waste is spread over the surrounding areas and remains for several days before final disposal. The locations of these sites nearby residential areas cause a serious threat to public health.

Industrial and health care waste are also present, however, detailed data on the generated waste quantities, disposal and handling practices are limited. Joher Al-deek dump site is designed to accommodate the disposal of hazardous waste; however, the site manager reported that the site received a little shipment every month. Health Care Waste generated at the hospitals and clinics is identified by the Palestinian Environmental law as hazardous waste. During February 2009, UNDP/PAPP conducted a Hazardous Health Care Waste (HHCW) rapid assessment study. The assessment indicated that health care waste is routinely mixed with domestic and municipal waste, and many people such as hospital cleaning staff and waste collecting staff are exposed to potential life threatening disease, including but not limited to HIV/AIDS, hepatitis, and tetanus.

There is no composting or recycling facility established in Gaza. All generated waste is collected and disposed directly at landfill sites. Composting of municipal solid waste will significantly contribute to expanding of lifetime of dumpsite as 60% of the generated solid waste is organic material and can be used for compost production. Moreover, during the siege and closure that are imposed on the Gaza Strip, fertilizers have not been allowed to enter

into the market. Farmers will be welling and are in bad need for organic fertilizers to be able to condition the soil and improve the quality of their produce. This activity will safeguard the environment and at the same time will generate financial benefits for the operators of the compost facility and for the farmers as well. It will create a local alternative and reduce dependency on the Israeli market and the import of fertilizers from outside Gaza.

During year 2007 UNDP/PAPP has suspended and later terminated its infrastructure related construction activities in Gaza Strip due to the unavailability of construction materials in the local market as a result of imposed blockade on Gaza, however, UNDP is still exerting serious efforts with the Government of Israel to allow construction materials for its projects into Gaza, which, unfortunately have not been successful to this point. Therefore UNDP and EoJ has agreed to reprogramming the remaining fund mounting to US\$ 18.262 million allocated for the rehabilitation of Salah El-Din street project to support early recovery interventions in Gaza.

Linkages to the original programme objectives:

The proposed reprogramming activities will contribute to enhancing the quality of life and reducing public health threats associated with UXOs, municipal waste and concrete rubble throughout the communities in Gaza Strip through implementation of UXO clearance and safe disposal, rubble removal, crushing and reuse, and immediate support for municipal solid waste management services. It is worth to mention that the objectives of this project are linked with the Rehabilitation of Salah El-Din Regional street project in the Gaza Strip according to the following:

Both projects use a labor intensive strategy when it comes to rehabilitation of roads and streets in the Gaza Strip and the Rubble removal and crushing activities as well as the solid waste management activities where both Programme components will generate approximately 400,000 working days;

Both projects will improve the wellbeing and livelihood of the residents of Gaza Strip by enhancing access to public and social services;

Both projects contribute to improve the socio-economic standards of the targeted population; the demolished houses and the rubble is a major constraint for new development and construction activities in the affected areas;

Both projects shared the same purpose in terms of rehabilitation of roads; the majority of crushed concrete rubble will be used for rehabilitating of 80 km of agricultural roads in the affected areas. In addition 76 kilometers of agricultural roads will be risk assessed and clearance conducted to remove any UXO that make passage and use of the roads dangerous.

II. STRATEGY

2.1 National Strategy in the oPt

Effective and environmentally sound solid waste management is essential to meet public health targets. Unmanaged waste impact quality of life. This project contributes to the achievements of the infrastructure objective of the Palestinian Reform and Development Plan (PRDP 2008-2010) that aims to increase national prosperity and enhance quality of life through achieving efficient and environmentally sound management of solid waste and debris.

The Palestinian Authority has identified that solid waste management and rubble removal as one of its key development priorities. The Palestinian Early Recovery and Reconstruction plan listed SWM among its priorities under the social, infrastructure and environmental sectors.

Furthermore, the project is in line with the Palestinian Environmental Quality Authority policy principles and strategy (EQA environmental strategy 2000) as it contributes to the 4 main pillars of EQA strategy: protection of public health; protection of natural resources; preservation of the rich cultural heritage and strengthening of environmental institutions.

2.2 UNDP/PAPP Strategic Framework 2008-2011

The planned project outputs will contribute to the second outcome of UNDP/PAPP mid-term strategic framework 2008-2011 which aims at accelerating economic recovery, promotion of livelihoods, and self reliance through improving access to effective social, economic, public service and public utilities.

The project has multiplier effect and towards its completion, it contributes to reducing threats on affected residential areas, generating employment opportunities, controlling pollution and supporting cost recovery of waste. As highlighted in the PA Early Recovery Plan, the recent Israeli incursion in the Gaza Strip, and the 18 months blockade that preceded it, have caused major damage to Gaza's public and private infrastructure and to its basic service delivery systems. In particular, 4,068 houses were destroyed as well as a large number of public buildings and private sector facilities. Many of these buildings are dangerously hanging ruins, contain hazardous materials such as asbestos and UXOs and are thus an environmental and security threat for the civilian population. In addition, their removal is an essential prerequisite for reconstruction.

With regard to waste management, the capacity of municipalities to collect and dispose solid waste in an efficient, safe and environmentally sound manner has deteriorated during the 3 years blockade and the Israeli incursion has given it a last blow. Equipment and spare parts are lacking to ensure maintenance and operation of waste collection trucks, landfills' capacities have been long exceeded and financial resources for household collection are insufficient. As a result, waste is collected in a haphazard manner, piles up in the streets, and is dumped in the proximity of housing complexes or in improper dumping sites, with major risks of leakages in the aquifer. The public health threat related to solid waste is becoming a growing concern for the Gaza Strip that requires immediate interventions. Both components of the proposed project are thus important early recovery priorities. Both are aimed at supporting civilian communities recover a safe and dignified living environment, free from health and environmental hazards, in which they will be able to rebuild their lives. Finally, both components, through the employment opportunities that they will generate, come in support of a livelihood recovery process.

1. Project Components

3.1 Component (1): UXOs Clearance, Safe Disposal and Destruction

The objective of this project component is to undertake EOD support, and UXO threat reduction activities in support of reconstruction activities, rubble removal and in response to community needs. The activities will be carried out by Mines Advisory Group (MAG) EOD teams as the implementing agency and UNMAS as the task coordination agency. The scope will include the following:

Activity 3.1.1: Coordination of Mine Action Activities within Gaza

This activity will be carried out by the UN Mine Action Team – Gaza (representing UNMAS) and will be financed under this project proposal. UNMAT - Gaza responsibilities will include the following:

- Manage supervise and operationally tasking and control of the EOD teams on a daily basis.
- Prioritize Mine Action support to rubble removal activities.
- Accreditation, Monitoring and Quality Assurance of Mine Action actors within Gaza.
- Coordination of Mine Action activities with IDF, COGAT, UN Agencies, NGO/INGO's, and local authorities as required.
- Facilitation of Mine Action personnel into and out of Gaza/Israel.
- Facilitation of entry and exit of specialist Explosive Ordnance Disposal (EOD) equipment into and out of Gaza/Israel.
- Facilitation of importation, storage and recording of explosive usage by EOD teams.
- Review MAG technical reports to ensure technical and statistical reports are maintained on Mine Action activities.
- Represent Mine Action at meetings such as UNCT, SMT, ASMT and donor meetings as required.
- Represent Mine Action at Sector and Cluster Lead meetings as required.
- Providing updates to the UN Inter-Agency Coordination Group on Mine Action.
- Supervise and monitor mine action activities to ensure Mine Action in Gaza is implemented in accordance with International Mine Action Standards (IMAS).
- Providing Mine Action inputs to the UN Secretary General's report.
- Liaise and report to UNMAS HQ on Mine Action Activities.
- Providing input to the Landmine Monitor Report of Mine Action activities in Gaza.
- The establishment of Boards of Inquiry for all UXO related incidents or accidents.
- Providing geographical information on Mine Action activities to OCHA for GIS mapping.
- Provide Mine Action technical advice to all Humanitarian Agencies as requested.

Activity 3.1.2: Implement Mine Action Activities as tasked by UNMAT-Gaza

UNDP will contract directly Mine Advisory Group (MAG) EOD teams who will be responsible for implementation of EOD activities. The activities will include the following scope of work:

- Conduct UXO risk assessments: The UXO risk assessment process is a preparatory planning tool to facilitate future planning and activities related to specific sites that have been targeted by either air, naval or ground forces. The purpose of a UXO risk assessment is to assist actors conducting rubble removal, other recovery and reconstruction activities to implement mitigation measures appropriate to the potential residual UXO risk. Wherever possible, these risk assessments are conducted in cooperation with the owners of the land / building. Upon request, MAG EOD teams will undertake formal UXO risk assessments of sites as tasked by UNMAT. The UXO risk assessment process involves:
 - o Assessing if the site has been struck by ordnance and potential for remaining UXO hazard;
 - o Designation of sites as either having a potential low, medium or high residual UXO risk;
 - o Recommending appropriate safety precaution for the site, clearance methodology for the site and the requirement for subsequent EOD support;
 - o Providing an auditable report on the potential risk posed by UXO with designated sites for use by client, rubble removal contractors, and reconstruction and development agencies within Gaza.
- Provide EOD technical assessment and emergency response support: EOD teams will be able to respond to the UXO threat whether present at sites or on call dependant on the threat level. UXO threat in destroyed buildings could include Anti-Tank mines, aircraft bombs which are either fused or unfused. In addition other naval, air or ground delivered ordnance may also pose a threat. Activities to be undertaken as part of this process include:
 - o Inspection of suspicious objects and determining suitable on site safety precautions;
 - o Removal of items deemed 'safe' to move by the EOD team;
 - o Implement safety procedures for items deemed unsafe to remove
 - o Coordinate with related authorities to identify destruction site and undertake safe destruction

1.2 Component (2): Crushing and Reuse of Collected Concrete Rubble

In June 2009, UNDP in cooperation with UN agencies and International NGOs has formulated multi-actor action plan in order to coordinate efforts and share information regarding safe removal, crushing and reuse of the full amount of 600,000 tons of concrete rubble produced during the Cast lead Israeli military operation. UNDP through a project funded by CIDA and SIDA has removed a total amount of 340,000 tons of rubble from affected areas in the Gaza Strip and planned to crush a total of 300,000 tons of concrete rubbles. Other agencies such as CHF, NRC, UNRWA and local authorities has planned and secured fund to remove the remaining amount. Through this project the scope of this component includes implementing the following activities:

Activity 3.2.1: Rubble Crushing and Stockpiling

In relation to the Rubble Removal multi-actors plan, this activity will support crushing a total of 100,000 tons of concrete rubbles. Currently there are 2 crushing machines available in Gaza with a total daily capacity of 2,500 tons/day. The crushed material will be stockpiled at central dumping site in Khan Younis area as indicated at the project sitemap.

Activity 3.2.2: Reuse of Crushed Concrete Rubble

UNDP/PAPP agricultural damage and needs assessment has indicated that 100 km out of 350 km of agricultural roads were destroyed during the cast lead military operation in January 2009. The destruction of agricultural infrastructure including roads took place in three locations (East of Khan Younis, East of Gaza and east and north of Jabalia). UNDP is aiming at accelerating recovery of the agricultural sector through "a project funded by Islamic Development Bank (IDB)" rehabilitating of agricultural wells, pump stations, and water trunk lines at these areas. Rehabilitating of agricultural roads in these areas will enhance farmers' access to their farms and will promote restoration of agricultural livelihood. Throughout this project a total of 80 km of agricultural roads will be rehabilitated using a mixture of crushed rubble concrete and sand. The project will be implemented in three locations, east Khan Younis, east of Gaza and the Northern area. A total of 350,000 tons of crushed rubble concrete will be fully utilized and a labor intensive modality will be adopted when possible for the rehabilitation of roads.

This activity will create 200 job opportunity for a period of 12 months and will support the following:

- finalize needs assessment and selection criteria
- Prepare bill of quantities and roads layout plan, and profiles in coordination with local municipalities
- Local contractors to rehabilitate at least 80 km agricultural roads. Works will include land survey, planning, excavation, leveling, paving of crushed concrete, compaction, and fencing opened areas along the targeted roads.

Activity 3.2.3: Set Up a Project Implementation Unit

This activity will finance operational cost for establishing project management cost to enable implementation of project component 2 activities such as salaries for contracted staff (project manager, technical operation manager and site engineers, and admin assistants), office rent, staff security expenses, communication and other logistic requirements.

3.3 Component (3): Immediate Support for Municipal Solid Waste Management

Activity 3.3.1: Labor Intensive Households Waste Collection

The total population of Gaza is estimated 1.4 million and generated daily 1, 360 tons of municipal solid waste. Due to lack of equipments, transfer vehicles, and fuel as a result of 2 years blockade, the service providers “municipalities and village council” are unable to collect the generated household waste from the residential areas on daily basis. Currently the average solid waste collection rate is estimated at 65%. This activity will support operational cost in terms of salaries and administrative expenses for 540 labors with donkey and carts for a period of 18 months. As a result the average solid waste primary collection rate will increase by 10-15 %. The Gaza strip will be divided into five geographic areas and carts will be distributed as follows:

Area	Inhabitants	Number of workers
Northern Area	265,932	102
Gaza Area	487,904	207
Middle Area	201,112	68
Khanyounis Area	269,601	100
Rafah Area	165,240	63
Totals	1,389,789	540

However, during the approval process, many actors in this sector has employed labor intensive scheme and provided direct assistance to the service providers. Accordingly UNDP in partnership with the Job Creation Programme “JCP” in Gaza has carried out extensive consultation with solid waste management councils and municipalities in order to verify their needs. In addition a project steering committee was formulated and has reviewed the outcome of the survey in its meeting dated on May 25 2010. The project steering committee recommended revising the original proposal by incorporating the following:

- No. of donkey carts needed is 180 workers
- No. of workers needed to clean up streets, yards, beach, and effectively participates in collection from house to house is 270 workers.
- 5 Store keepers distributed over five governorates (intervention areas) to be in charge of tools distribution at the morning and to deliver these tools by the end of working day.
- Workers will be divided into 29 groups each group will be monitored by a supervisor.
- 18 clerks will be employed who will be responsible for ensuring workers attendance and other related logistics support.
- An awareness campaign will be conducted by 26 health educators and social workers in parallel with the implementation processes to enhance the public awareness of disposal municipal SW and they will be responsible for verifying the criteria of hiring workers.
- The wages of worker has been set based on ministry of labours rules and regulation for minimum wages of unskilled labors as well as based on similar wages set in similar programmes.

Activity 3.3.2: Upgrading of existing Solid Waste Dumping Sites

In the Gaza Strip, solid waste produced by the population in the amount of 1360 ton/day is disposed at 3 official disposal sites located along the eastern boarder of the Gaza Strip. All the three official solid waste namely Gaza_Joher Al-deek with total area of 140 dunum, Deir-Albalah with total area of 60 dunum, and Rafah with total area of 27 dunum have approached their capacity since year 2008. As a result, the number of random dumping of solid waste in open areas has increased. Such practice of illegal dumping is threatening groundwater quality and

creating many environmental and health impacts to the nearby residential areas and therefore they need to be closed.

The assessment carried out by EUNIDA (EUNIDA, March 2009) with support from UNDP office for the EuropeAid Cooperation in March 2009, demonstrated the immediate needs to expand the capacity of the 3 official solid waste dumping sites for the coming 10 years including waste minimization component such as waste reduction, recycling and compost. The study has estimated the investment cost required for the extension in the amount of EURO 11.0 million.

During the formulation of this proposal UNDP has consulted solid waste service providers in Gaza Strip where they stressed to extend the capacity of the 3 official dumping sites to dispose of the generated solid waste at least in the coming 5 years. Thus the activity proposed at the original proposal revised to reflect the immediate needs of the service providers. The revised activity will support extending the capacity of the 3 official dumping sites by at least 150 dunum which will allow accommodating the generated waste during the coming 7 years at these sites until a new sanitary landfill for the Gaza Strip is constructed. Annex C provides details on the planned expansion as well as related cost. This activity will support the following:

- Consultant to study feasibility study, detailed design and EIA for upgrading of the 3 official dumping sites
- extending the capacity of the existing dumping site and implementation of mitigation measures

Activity 3.3.3: Development and Implementation of Solid Waste Recycling and Composting Facility in Rafah

It is estimated that 120 tons of household solid waste generated daily in Rafah governorate. The total amount is currently disposed at Rafah dumping site located at east of Rafah. The dumping site will approach its capacity within 2 years due to increasing quantities of transferred solid waste. In order to expand the span life time of its dumping site, the Municipality has adopted solid waste integrated management planning which include promoting municipal solid waste recycling and composting. The municipal solid waste in Gaza contains 60 % organic material. In the process of compost production 40% of this organic material will be transferred to compost. Throughout this activity, a semi-automatic machine will be manufactured and installed in order to separate organic fraction. The separation facility will receive 100-120 tons of solid waste per day. After processing the separated organic solid waste will transfer to compost facility. It is expected the plant will produce 20-25 tons of compost/ day and will generate revenues sufficient to cover its annual operational cost (selling of compost and separated recyclable materials). This activity will support the following:

- Consultant to study the feasibility of recycling, market study and cost recovery opportunities for waste recycling and compost production and design composting production and recycling plant
- Implementation of compost production plant in Rafah which includes the investment and cost required for procuring goods, equipments, salaries, administrative cost for a period of one year, and the civil works construction and installation of compost and recycling plant at the location of Rafah solid waste transfer station.

Activity 3.3.4: Set up Project Implementation Unit

This activity will finance the cost for establishing the project implementation Unit to enable implementation of project component 3 activities such as salaries for contracted staff (project manager, and site engineers), office rent, staff security expenses, communication and other logistic requirements.

III. RESULTS AND RESOURCES FRAMEWORK

Intended Project Outcome:

Gaza's Populations environment and livelihood improved through clearance and safe disposal of UXOs, and control of Solid waste pollution

Project Outcome Indicators and targets

- Change in threat level at contaminated areas, Target: No increase in number of people injured or killed
- Change in % of solid waste collection coverage, Target: solid waste coverage increased by 10-15%
- Indicator: number of people have access to environmentally sound municipal solid waste services , Target: 3 dumping sites extended for 7 years
- Indicator: Change in farmers ability to access their agricultural farms: Target: 80 km of agricultural roads at the affected areas rehabilitated
- Indicator: Number of jobs created, Target: 300,000 working days opportunity created

Baseline:

- 600,000 tons of rubble from private and public buildings accumulated in the Gaza Strip
- Rubble removal from affected areas completed
- Rubble crushing activities for 300,000 tons of collected rubbles is currently ongoing
- 10 people killed by UXOs and 25 injured since 27 Dec 08.
- 100 km of agricultural roads destroyed
- 1,360 tons of municipal solid waste daily generated in Gaza Strip
- 65% is the average solid waste collection rate from residential areas
- Existing dump sites have approached their capacities
- No recycling or compost facility in place

Applicable Key Result Area (from 2008-11 Strategic Plan):

Improved access to effective social, economic, public services

Partnership Strategy: The project will be executed by UNDP in partnership with UNMAS, MAG, PA JCP, PEF

Project title and ID (ATLAS Award ID): UXOs clearance and improvement of solid waste management services in Gaza Strip. Project ID: 000071646

INTENDED OUTPUTS	OUTPUT TARGETS FOR (YEARS)	INDICATIVE ACTIVITIES	RESPONSIBLE	INPUTS
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			PARTIES	
Component No. 1 UXO clearance, and disposal				
Output 1 Mine action activities effectively coordinated and implemented in accordance to International Mine Action Standards	Target 2010: Accreditation of MAG reports	<ul style="list-style-type: none"> ▪ Prepare MOU with UNMAS ▪ Perform Operational tasking and control of the EOD teams on a daily basis. ▪ Prioritize Mine Action activities in consultation with Early Recovery and Reconstruction Actors. ▪ Monitor and supervise Mine Action actors within Gaza. ▪ Coordinate Mine Action activities with IDF, COGAT, UN Agencies, NGO/INGO's, and local authorities as required. ▪ Facilitate importation, storage and recording of explosive usage by EOD teams. ▪ Provide input to the Landmine Monitor Report of Mine Action activities in Gaza. ▪ Provide geographical information on Mine Action activities to OCHA for GIS mapping. ▪ Provide Mine Action technical advice to all Humanitarian Agencies as requested. 	UNMAS	Equipment UNMAS team comprises, project manager,
Output 2: UXO Risk Assessments (RAs) for agricultural roads completed	Target 2010: Minimum 80 KM of agricultural roads identified and assessed	<ul style="list-style-type: none"> ▪ Prepare MOU with MAG ▪ Team mobilization ▪ Undertake mine risk assessment ▪ Prepare and provide an auditable report on potential risks for each designated sites to be used by the requested agency and the contractors. 	UNDP, UNMAS, MAG	Equipments Explosive Ordinance Disposal Teams, Technical operational Manger
Output 3: EOD support to private houses, public buildings , agricultural and commercial sites RR team provided including safe destruction of collected UXOs	Target 2010: Support provide for 40 high risk sites at minimum	<ul style="list-style-type: none"> ▪ Remove and neutralize any UXO or remnants of UXO or White Phosphorous located during the Risk Assessment or Rubble Removal process. Remove and neutralize deep buried UXO located outside rubble removal sites 	UNMAS , MAG	Equipments EOD teams Contractors

	<p>Target 2010:</p> <p>UXO/white phosphorus safely destructed at minimum</p>	<ul style="list-style-type: none"> ▪ Remove and neutralize any UXO or remnants of UXO or White Phosphorous located during the Risk Assessment or Rubble Removal process. ▪ Remove and neutralize deep buried UXO located outside rubble removal sites 		<p>Equipments</p> <p>EOD teams</p> <p>Contractors</p>
Component 2: Rubble sorting, removal, crushing and reuse				
<p>Output 4:</p> <p>100,000 tons of concrete rubble crushed and temporary stored at the dumping site</p>	<p>Target 2011:</p> <p>100,000 tons of rubble crushed and temporary stored</p>	<ul style="list-style-type: none"> ▪ Bidding process. ▪ Prepare the tender document. ▪ Bid and award the contract. ▪ Undertake crushing activity by local contractor ▪ Implement the work under supervision of UNDP/PAPP. 	<p>UNDP</p>	<p>Crushing machines</p> <p>Equipments</p> <p>Contractors</p>
<p>Output 5:</p> <p>crushed concrete rubble reused in agricultural roads rehabilitation and more than 200 job opportunity generated for 12 months</p>	<p>Targets:</p> <p>2010: 20 km of agricultural roads rehabilitated</p> <p>2011: 40 Km of agricultural roads rehabilitated</p> <p>2012: 20 Km of agricultural roads rehabilitated</p>	<ul style="list-style-type: none"> ▪ finalize needs assessment and selection criteria ▪ Carry out land survey and Prepare detailed bill of quantities in coordination with municipal councils ▪ Prepare the tender document. ▪ Bid and award the contract. ▪ Undertake agricultural roads rehabilitations by local contractor <p>Implement the work under supervision of UNDP/PAPP</p>	<p>UNDP</p>	<p>Municipalities needs assessment</p> <p>Local contractors</p>
		<p>Establish project implementation unit</p>	<p>UNDP</p>	<p>Staff, Vehicles, and</p> <p>Field equipment</p>
Component 3: immediate support for municipal solid waste management services				

<p>Output 6:</p> <p>Solid waste primary collection extended and more than 540 job opportunity created for 18 months</p>	<p>Targets:</p> <p>2010: Primary Collection rate increased by 5 %</p> <p>2011: Primary Collection rate increased by 10 %</p>	<ul style="list-style-type: none"> ▪ Finalize municipalities needs assessment in primary collection ▪ Draft MOU between UNDP and PA job creation programme (JPC) 	<p>UNDP JCP</p>	<p>Consultant</p> <p>Municipality solid waste management plans, needs assessment</p>
<p>Output 7:</p> <p>Capacity of existing dumping sites extended</p>	<p>Year 2010: studies completed</p> <p>Year 2011: at least capacity of one dumping site extended</p> <p>Year 2012: at least capacity of two dumping sites extended</p>	<ul style="list-style-type: none"> ▪ Draft ToR for provision of consultancy services ▪ Undertake feasibility study, detailed design and EIA of upgrading existing dump sites ▪ Carry out rehabilitation for existing dumping sites 	<p>UNDP</p>	<p>Consultancy services</p> <p>Needs assessment reports</p> <p>Contractor</p>
<p>Output 8:</p> <p>Waste recovery enhanced through recycling and compost facility established</p>	<p>Year 2010: feasibility, market analysis and detailed design complete</p> <p>Year 2011: civil works and installation of facility equipment</p> <p>Year 2012:</p> <p>100-120 tons of SW separated 20-25 tons of compost produced/day</p>	<ul style="list-style-type: none"> ▪ Carry out feasibility study of recycling, market study and cost recovery opportunities for waste recycling and compost production ▪ Conduct a detail-designed pilot project for composting production and recycling, ▪ Implementation of a pilot project for compost production in Rafah. 	<p>UNDP Palestinian Environmental friends (PEF)</p>	<p>Consultancy services</p> <p>Needs assessment reports</p>
		<p>Establish project implementation unit Recruitment of project manager, project assistance, 3 site engineers</p>	<p>UNDP</p>	<p>Staff</p> <p>Vehicles</p>

VI. Annual Work-Plans ,years 2010-2012

Indicated output	Activities	Timeframe										Responsible Party	Planned Budget		
		2010			2011				2012		Funding Source		Budget Description	amounts	
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2					
Component 1: UXOs clearance, and disposal and safe destruction															
Output 1 Mine action activities effectively coordinated and implemented in accordance to International Mine Action Standards	<ul style="list-style-type: none"> ▪ Operational tasking and control of the EOD teams on a daily basis. ▪ Prioritize Mine Action activities in consultation with Early Recovery and Reconstruction Actors. ▪ Monitor and supervise Mine Action actors within Gaza. ▪ Coordinate Mine Action activities with IDF, COGAT, UN Agencies, NGO/INGO's, and local authorities as required. ▪ Facilitate importation, storage and recording of explosive usage by EOD teams. ▪ Provide input to the Landmine Monitor Report of Mine Action activities in Gaza. ▪ Provide geographical information on Mine Action activities to OCHA for GIS mapping. ▪ Provide Mine Action technical advice to all Humanitarian Agencies as requested. 			X	X							UNMAS	GoJ	Contract with UN agencies	881,731
Output 2: UXO Risk Assessments (RAs) for agricultural roads sites completed	<ul style="list-style-type: none"> ▪ Undertake mine risk assessment, the process involves <ul style="list-style-type: none"> - Assessing if the site has been struck by ordnance and potential for remaining UXO hazard; - Designation of sites as either having a potential low, medium or high residual UXO risk; 			X	X										

	<ul style="list-style-type: none"> - Recommending appropriate safety precaution for the site, clearance methodology for the site and the requirement for subsequent EOD support; - Provide an auditable report on the potential risk posed by UXO with designated sites for use by client. 													
Output 3. EOD support to private houses, public buildings, agricultural and commercial sites RR team provided including safe destruction of collected UXOs	<ul style="list-style-type: none"> ▪ Liaise with related authorities to identify destruction site ▪ Coordinated with related authorities to transport the required explosives for destruction of UXOs to the identified site ▪ Undertake the appropriate measures to as well as safe guard the environment ▪ Remove and neutralize any UXO or remnants of UXO or White Phosphorous located during the Risk Assessment or Rubble Removal process. The process involves: <ul style="list-style-type: none"> - Inspection of suspicious objects and determining suitable on site safety precautions; - Removal of items deemed 'safe' to move by the EOD team; ▪ Implement safety procedures for items deemed unsafe to remove 	X	X							MAG	GoJ	Project agreement with INGo	764,382	
Output 4: 100,000 tons of concrete Rubble crushed and temporary stored at the dumping site.	<ul style="list-style-type: none"> ▪ Bidding process. ▪ Prepare the tender document. ▪ Bid and award the contract. ▪ Undertake crushing activity by local contractor ▪ Implement the work under supervision of UNDP/PAPP 		X	X	X	X				UNDP	GOJ	Service Contracts / companies	700,000	
Output 5: crushed concrete rubble reused in agricultural roads rehabilitation	<ul style="list-style-type: none"> ▪ Carry out land survey and Prepare detailed bill of quantities in coordination with municipal councils ▪ Prepare the tender document. ▪ Bid and award the contract. ▪ Undertake agricultural roads rehabilitations 		X	X	X	X	X	X		UNDP	GOJ	Service Contracts/ companies	2,000,000	

Output 6: Solid waste primary collection extended and 540 job opportunity generated for 18 months	<ul style="list-style-type: none"> ▪ Finalize municipalities needs assessment in primary collection ▪ Draft MOU between UNDP and specialized NGO ▪ Operation cost for 540 contracted individuals 		X	X	X	X	X	X				UNDP and JCP	GOJ	PCA with Local NGO	3,994,920
Output 7: capacity of existing dumping sites extended	<ul style="list-style-type: none"> ▪ Draft ToR for provision of consultancy services ▪ Undertake feasibility study, detailed design and EIA of upgrading existing dump sites ▪ Rehabilitate the 3 official existing dumping sites 		X	X	X	X	X	X	X	X	X	UNDP	GOJ	Service contracts/companies	6,894,010
Output 8: Waste recovery enhanced through recycling and compost facility established	<ul style="list-style-type: none"> ▪ Carry out feasibility study, market analysis, and detailed design for waste recycling and compost 		X	X								UNDP and PEF	GOJ	PCA with local NGO	1,000,000
	<ul style="list-style-type: none"> ▪ Civil works construction and Supply and install facility equipment 			X	X	X									
	<ul style="list-style-type: none"> ▪ Support operational cost for compost and recycling facility 					X	X	X	X	X					
Direct cost of Project implementation unit	Project manager, project coordinator, project assistant, 10 site engineers and utilities(fuel, communication, rent, 3 vehicles, security)			X	X	X	X	X	X	X	X	UNDP	GOJ	Contracts Individual s	832,858

Note: detailed cost estimate and budget description is provided in Annex A, B, C, and D

Summary of Project Budget

No.	Budget Item	Original Budget	Revised Budget
1.	Component 1: UXOs clearance, safe disposal and destruction	US\$ 4,358,346	US\$ 1,646,113
2.	Component 2: Rubble removal and crushing	US\$ 7,811,300	US\$ 3,261,300
3.	Component 3: Solid waste management	US\$ 4,898,255	US\$ 12,160,488
4.	Total estimated cost component 1+2+3	US\$17,067,901	US\$17,067,901
5.	UNDP GMS 7%	US\$ 1,194,753	US\$ 1,194,753
6.	Total Project Cost (5+6)	US\$ 18,262,654	18,262,654

Detailed project budget is illustrated in annex (A).

V. Project management arrangement

Implementation Modalities

UNDP/PAPP delivers through the Direct Execution (DEX) modality which will be the mechanism for the implementation of this project and works in partnership with national authorities, civil society, the private sector; the international community and UN sister agencies. UNDP/PAPP will engage in partnership with UNMAS, MAG, JCP, and PEF for the implementation of the project activities. Capacity assessment has been conducted for JCP and PEF to assess their ability to implement the assigned project activities under project component number 3.

UNDP will be accountable for delivering the intended project results and report to EoJ on quarterly basis

UNDP will enter into cooperation agreement with UNMAS for coordination of UXOs clearance and disposal component (1). UNMAS will be responsible for operational tasking, managing and monitoring the implementation of UXO activities carried out by MAG to ensure mine action activities implemented in accordance to mine action international standards.

UNDP will contract MAG directly for deployment of EOD teams and implementation of UXOs clearance and safe disposal activities in the ground as described in this proposal. MAG operation will be supervised and monitored by UNMAS.

UNDP will enter in a cooperation agreement with the PA Job Creation Programme (JPC) according to which JPC will carry out needs assessment, coordinate with municipal solid service providers, contract individuals, and supervise activity implementations of improvement of primary solid waste collection under component 3. JCP will report directly to the UNDP solid waste management component, which will be accountable to UNDP for the activity results.

UNDP will enter into a cooperation agreement with the Palestinian Environmental Friends (PEF), an experienced local NGO in solid waste recycling for implementation of solid waste recycling and composting activity under component number 3. PEF will be responsible for operating the recycling facility in coordination with Municipality of Rafah and will report directly and be held accountable for the activity results.

In addition, UNDP/PAPP, will seek to identify and pre-qualify International Consultancy Firms for carrying out the Detailed Design for upgrading Gaza solid waste dumping site and development and implementation of solid waste recycling and composting pilot project in Rafah. UNDP will look for firms with demonstrable technical and financial capabilities who will be invited to participate in the relevant request for proposal to carry out consultancy services for the detailed design.

Planning and management of activities

UNDP will assign a Project Manager who will be responsible for day-to-day management and decision-making for the project. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document to the required standard of quality and within the specified constraints of time and cost. In order to ensure effective implementation and continuous activities progress monitoring, the Project Manager will be assisted by Project Assistant, 2 project component coordinators, 10 site engineers and a project component coordinator assigned by UNMAS.

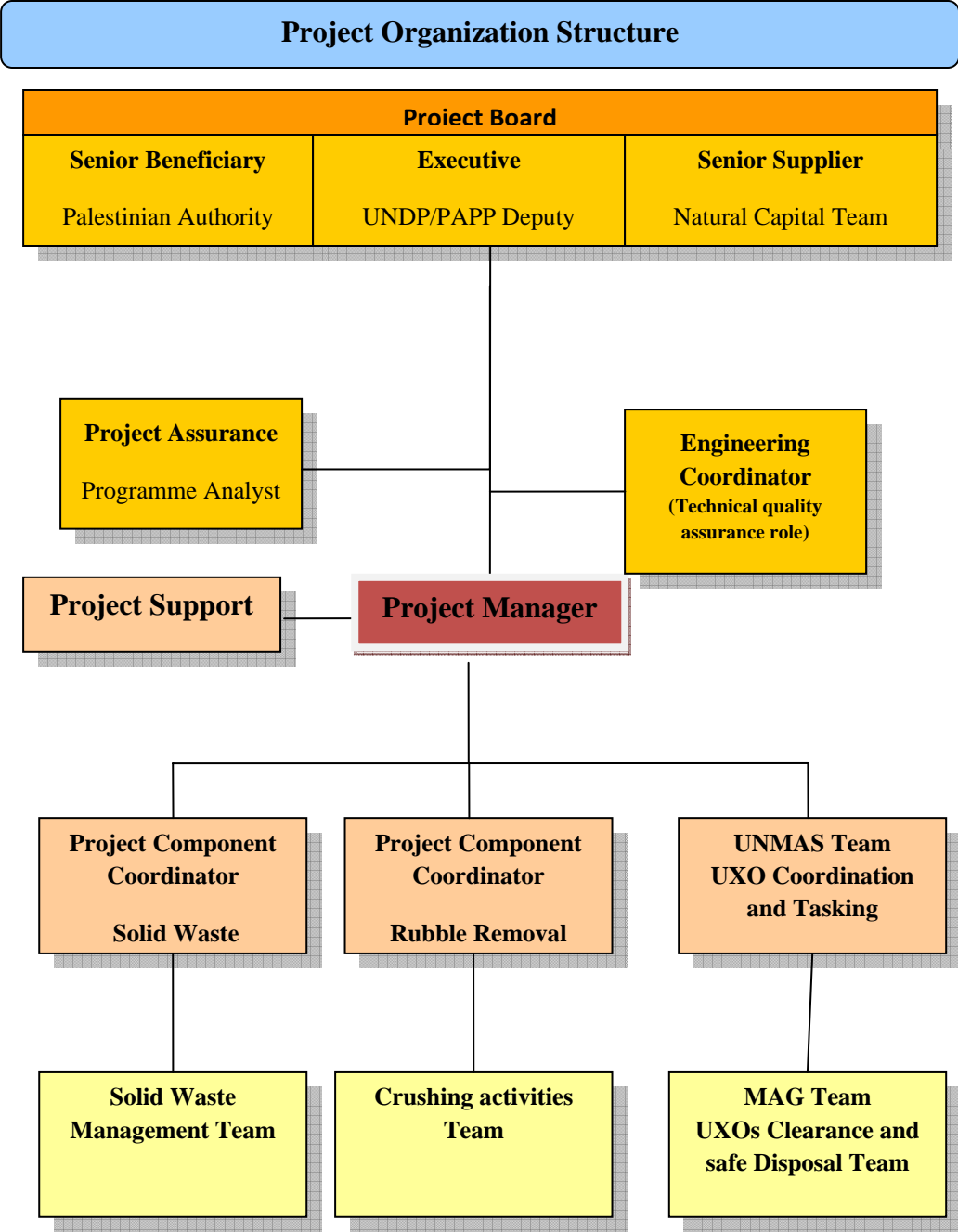
Project Oversight and Assurance

The project board will be established to undertake project oversight and assurance responsibility. The Project Board is a group responsible for making management decisions on a consensus basis for the project when guidance is required by the Project Manager, including recommendations for approval of project revisions. Project reviews by the board are made at designated decision points during the running of the project, or as necessary when raised by the Project Manager. The Board will be consulted by the Project Manager for decisions when project tolerances (i.e. constraints normally in terms of time and budget) have been exceeded. The Project Board will convene quarterly. The Project Board consists of the following:

- *Executive* : representing the project ownership to chair the group (Deputy Special Representative, Programme),
- *Senior Supplier*: to provide guidance regarding the technical feasibility of the project (Natural Capital Team Leader)
- *Senior Beneficiary*: to ensure the realization of project benefits from the perspective of project beneficiaries (representatives from PA and local authorities)

The project board makes decisions on a consensus basis. Final decision making on project activities and accountability however rests with UNDP in accordance with its applicable regulations, rules, policies and procedures.

Project Assurance for this project will be the delegated responsibility of UNDP Programme Analyst. The Project Assurance role supports the Project Board by carrying out regular objective and independent project oversight and monitoring functions. It ensures that appropriate project management milestones are managed and completed.



IV. MONITORING FRAMEWORK AND EVALUATION

▪ General provisions

The Project Manager will prepare a Communication and Monitoring plan (C&M plan) in support of project objectives with details on external and internal monitoring and communication activities. The Project Manager will need to ensure adequate monitoring of all project activities and should draw on counterparts' resources for activity monitoring in a bid to strengthen capacities in this regard.

The contribution of achieved project outputs to the intended outcome will be monitored by the Natural Capital Team in close connection with the Gaza Office programming team. Provisions for project evaluation in support of lessons learned in the implementation should be taken into consideration. The Project Board should make recommendations for the application of such an evaluation, building on dialogue with local stakeholders.

▪ Regular monitoring activities

On a quarterly basis, a quality assessment shall record progress towards the completion of key results, based on quality criteria and methods captured in the Quality Management table below. An Issue Log shall be activated in Atlas and updated by the Project Manager to facilitate tracking and resolution of potential problems or requests for change.

A risk log shall be activated in Atlas and regularly updated by reviewing the external environment that may affect the project implementation.

Based on the above information recorded in Atlas, a Quarterly Progress Report (QPR) shall be submitted by the Project Manager to the Project Board through Project Assurance, using the standard report format available in the Executive Snapshot.

A project Lesson-learned log shall be activated and regularly updated to ensure on-going learning and adaptation within the organization and to facilitate the preparation of the Lessons-learned Report at the end of the project. A Monitoring Schedule Plan shall be activated in Atlas and updated to track key management actions/events.

▪ Annual Monitoring and Evaluation activities

An annual Progress Report shall be prepared by the Project Manager and shared with the Project Board. As minimum requirement, the annual Progress Report shall consist of the Atlas standard format for the QPR covering the reporting period with updated information for each above element of the QPR as well as a summary of results achieved against pre-defined targets at the output level.

Based on the above report, an annual project review shall be conducted during the last quarter of each year or soon after, to assess the performance of the project and appraise the Work Plan for the next year. In the second year, this review will be a final assessment. This review is driven by the Project Board and may involve other stakeholders, as required. It shall focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes.

Quality Management for Project Activity Results

OUTPUT 1:		
Mine action activities effectively coordinated and implemented in accordance to International Mine Action Standards		
Activity Result 1 (Atlas Activity ID)	<i>Coordinate and operationally tasking Risk assessment and EOD teams</i>	Start Date: July 2010 End Date: December 2010
Purpose	<i>ensure EOD teams practice according to mine actions international standards</i>	
Description	<i>a total of 2,042 crisis affected sites need to be risk assessed prior to launching rubble removal activities. UNMAT will issue report for each site quantifying the associated risk and propose a methodology for RR.</i>	
Quality Criteria	Quality Method	Date of Assessment
<i>how/with what indicators the quality of the activity result will be measured?</i>	<i>Means of verification. what method will be used to determine if quality criteria has been met?</i>	<i>When will the assessment of quality be performed?</i>
% of response to agency inquiry	Formulated action plan	quarterly
Number of identified high risk sites	Formulated implementation plan and progress report	quarterly

OUTPUT 2: UXO Risk Assessments (RAs) for private house, agricultural and commercial sites completed		
Activity Result 1 (Atlas Activity ID)	<i>undertake risk assessment for 2042 crisis affected sites</i>	Start Date: July 2010 End Date: December 2010
Purpose	To ensure safety of rubble removal team (undp staff, contractors workers) as well as the community of the affected areas	
Description	<i>EOD team respond to rubble removal actors inquires to assess the affected sited, quantify the risks and support rubble removal activities</i>	
Quality Criteria	Quality Method	Date of Assessment
<i>how/with what indicators the quality of the activity result will be measured?</i>	<i>Means of verification. what method will be used to determine if quality criteria has been met?</i>	<i>When will the assessment of quality be performed?</i>

Number of moderated and high risk sites	risk assessments reports	quarterly
	Field visits	quarterly

OUTPUT 3: EOD support to private houses, public buildings , agricultural and commercial sites RR team provided		
Activity Result 1 (Atlas Activity ID)	<i>support to removal from high and moderate risks and disposal of UXOs</i>	Start Date: July 2010 End Date: December 2010
Purpose	ensure safety of rubble removal teams and disposal of UXOs	
Description	<i>EOD teams provide support and work in cooperation with Rubble removal teams to clear rubbles from moderate and high risk sites</i>	
Quality Criteria <i>how/with what indicators the quality of the activity result will be measured?</i>	Quality Method <i>Means of verification. what method will be used to determine if quality criteria has been met?</i>	Date of Assessment <i>When will the assessment of quality be performed?</i>
		quarterly
Timely Response of EOD teams to agency request	reports and site visits	quarterly
		quarterly

OUTPUT 4: 100,000 tons of concrete rubble crushed and temporary stored at the crushing site		
Activity Result 1 (Atlas Activity ID)	<i>crushing of concrete rubbles</i>	Start Date: July 2010 End Date: June 2011
Purpose	enable reuse of crushed material in environmental accepted manner	
Description	<i>The activity will support crushing of rubble concrete to the size less than 10 cm</i>	
Quality Criteria <i>how/with what indicators the quality of the activity result will be measured?</i>	Quality Method <i>Means of verification. what method will be used to determine if quality criteria has been met?</i>	Date of Assessment <i>When will the assessment of quality be performed?</i>

quantity crushed per day	Field visits, reports, test	quarterly

OUTPUT 5 : crushed concrete rubble reused in agricultural roads		
Activity Result 1 (Atlas Activity ID)	<i>Rehabilitation of agricultural roads</i>	Start Date: July 2010 End Date: April 2012
Purpose	Improving access of farmers to productive agricultural areas	
Description	- <i>The activity supports rehabilitation of internal and agricultural roads</i>	
Quality Criteria <i>how/with what indicators the quality of the activity result will be measured?</i>	Quality Method <i>Means of verification. what method will be used to determine if quality criteria has been met?</i>	Date of Assessment <i>When will the assessment of quality be performed?</i>
Number of km rehabilitated	Field visits, reports, test	quarterly

OUTPUT 6 : Solid waste primary collection extended and 540 job opportunity generated for 18 months		
Activity Result 1 (Atlas Activity ID)	<i>Rehabilitation of agricultural roads</i>	Start Date: July 2010 End Date: December 2011
Purpose	Improving solid waste primary collection	
Description	- <i>The activity supports employing labour extensive programme to support Gaza Municipalities in extending their service coverage</i>	
Quality Criteria <i>how/with what indicators the quality of the activity result will be measured?</i>	Quality Method <i>Means of verification. what method will be used to determine if quality criteria has been met?</i>	Date of Assessment <i>When will the assessment of quality be performed?</i>

Rate of collection rate	Field visits, reports, surveys	quarterly
Areas and population served		

OUTPUT 7 : capacity of existing dumping sites extended		
Activity Result 1 (Atlas Activity ID)	<i>The capacity of the 3 official dumping sites extended for the coming 7 years</i>	Start Date: July 2010 End Date: June 2012
Purpose	Dispose of generated solid waste in environmentally sound manner	
Description	- <i>The activity supports extension of existing dumping sites</i>	
Quality Criteria <i>how/with what indicators the quality of the activity result will be measured?</i>	Quality Method <i>Means of verification. what method will be used to determine if quality criteria has been met?</i>	Date of Assessment <i>When will the assessment of quality be performed?</i>
Detailed design recommendation	ToR, Progress and review Reports,	quarterly
Number of site extended	Field visits, reports	Annual
Total areas extended	Field visits, progress reports	Annual

OUTPUT 8 : crushed concrete rubble reused in agricultural roads		
Activity Result 1 (Atlas Activity ID)	Waste recovery enhanced through recycling and compost facility established	Start Date: July 2010 End Date: June 2012
Purpose	Promote solid waste recycling and composting	
Description	- <i>The activity supports establishing compost facility in Rafah area</i>	
Quality Criteria <i>how/with what indicators the quality of the activity result will be measured?</i>	Quality Method <i>Means of verification. what method will be used to determine if quality criteria has been met?</i>	Date of Assessment <i>When will the assessment of quality be performed?</i>
Quantity of produced compost	Field visits, reports, test	quarterly
Quality of produced compost	Reports and laboratory test	quarterly

LIST OF ANNEXES

Annex A: detailed project budget

Annex B: detailed breakdown cost for cash for work “improvement of primary solid waste collection”

Annex C: annex c detailed cost estimate breakdown for extension of 3 solid waste dumping sites in the Gaza Strip

Annex D: detailed cost estimate breakdown for establishing compost facility

Annex E: detailed risk management matrix

Annex F: Government of Japan letter of approval

Annex A. detailed project budget

project cost estimate					
Project component/activity cost	unit	# of units	unit rate	total US\$	comments/justifications
component 1: UXOs clearance and safe disposal					
activity 1.1: coordination of mine action activities in Gaza (UNMAS)				881,731	MOU will be signed with UNMAS as implementing agency for activity 1.1
activity 1.2: implementation of mine action activities as tasked by UNMAT in Gaza (MAG)				764,382	MOU will be signed with MAG as implementing agency for activity 1.2
Sub-total component # 1				1,646,113	
Component 2: sorting, removal, crushing and reuse of rubble concrete					
Activity 2.1 crushing of 100,000 tons of rubbles	tons	100,000	7.00	700,000	
Activity 2.2 reuse of crushed concrete rubble for rehabilitation of agricultural roads in the affected areas	km	80	25,000.00	2,000,000	<p>the estimated unit cost includes road works excavation, leveling, supply of sand and mixing of crushed concrete, paving and compaction. the estimated unit rate cost is divide into:</p> <p>per each square meter: US\$ 0.7 for excavation, leveling US\$ 3.0 for transportation crushed material, spreading in 30 cm and compaction US\$ 0.50 for supplying sand, mixing with crushed concrete total estimated based on per square meter is US\$ 4.2. assuming average width road 5 m. total estimated cost per square meter per 1 meter width is $4.2 * 5 = 21$US\$. thus total estimated cost per 1000 meter is US\$ 21,000. in addition to this amount US\$ 4,000 provisional cost per Km length is considered for fencing open areas along the rehabilitated agricultural roads. the implementation modality considered involvement of intensive labors.</p>
Activity 2.3 establishing implementation unit					

Project manager	month	18	4,200.00	75,600	cost estimate includes hazardous pay
project component coordinator	month	18	3,800.00	68,400	The project coordinator is responsible for the management of project component activities on daily basis. Responsibilities include; effectively managing of 15 site engineers to supervise rubble removal and crushing activities, liaising and planning with MAG EOD teams, review daily reports and prepare weekly progress report on the status of work for each package and solve obstacles that might face contractors on site and liaise with local authorities to ensure quality of work in accordance with UNDP practices. refer to TOM TOR
project assistant	month	12	2,200.00	26,400	including hazardous pay
site engineers (3 staff * 15 month) 45 month	3 for 15 month	45	2,500.00	112,500	3 site engineers will be recruited to supervise crushing activities at the crushing site
site engineers (3 staff * 12 month) 36 month	3 for 12 month	36	2,500.00	90,000	Agricultural road rehabilitation will be divide into 3 packages that covers three geographical areas. 3 site engineers will be recruited
Fuel	month	18	2,000.00	36,000	
rent , utilities, and communications	month	18	1,800.00	32,400	
Procurement of 4X4W vehicles	number	3	40,000.00	120,000	the vehicle will be procured and transported to Gaza by Jerusalem office.
Total estimated cost for activity 2.3				561,300	
Sub-total component # 2				3,261,300	
Component 3 : immediate support for municipal solid waste services management					
activity 3.1: improvement of primary household solid waste collection				3,994,920	Detailed cost estimate breakdown presented at Annex B. the activity covers the following : - US\$ 3,348,950 wages of 540 labor under cash for work scheme - US\$ 300,000 carts and clearing tools - US\$ 187,870 operational cost for 18 months - US\$ 158,100 NGO management and implementation cost
Sum of activity 3.1				3,994,920	
Activity 3.2 rehabilitation of existing dump sites					
provision for consultancy services				150,000	provision for consultancy services to prepare assignment TOR, undertake feasibility study and detailed design for upgrading of the 3 official solid waste dumping sites in the Gaza Strip

upgrading of 3 official dumping sites "civil and earth works"	21901.61 m2 per year for 7 years	153,311	43.99	6,744,010	Detailed cost estimate breakdown presented at Annex C. In accordance with UNDP consultation with regional solid waste councils and the Municipalities in the Gaza Strip the activity will support extension of 3 official solid waste dumping sites for the coming 7 years. Work will include excavation, earth work; lining based on the detailed design and EIA study recommendations. The unit rate will be adjusted in accordance to consultant recommendation in the detailed design.
Sum of activity 3.2				6,894,010	
Activity 3.3 Pilot project for solid waste recycling and composting					
provision for consultancy services				40,000	local consultant to undertake market analysis, cost recovery, detailed design, and options for involvement of private sector
Site preparation, Civil works construction and supplying and installation of equipment				750,000	a total area of 8 dunum has been allocated by municipality of Rafah. Work will include, site clearance, excavation and leveling, fencing and purchasing and installing of equipments. See Annex D for detailed cost estimate breakdown. US\$ 190,000 for site preparation US\$ 560,000 for supplying and installing of equipment
NGO implementation and operational cost				210,000	Activity support NGo implementation, maintenance and operational cost. See Annex D for detailed cost estimate breakdown
Sum of activity 3.3				1,000,000	
Activity 3.4 establishing for project management unit					
project component coordinator	month	18	4,250.00	76,500	
site engineers (3 staff * 18 month) 54 month	3 for 18 month	54	2,500.00	135,000	3 site engineers will be recruited to supervise the rehabilitation of the 3 official dumping sites in the Gaza Strip
site engineer (1 staff for 12 months)	1 for 12 month	12	2,500.00	30,000	site engineers will be responsible for supervising civil and earth works for preparation, installation and commissioning of recycling facility
Rent, utilities and communications	month	18	1,670	30,058	
Sum of activity 3.4				271,558	
Total estimated cost for Component 3				12,160,488	
Total estimated cost for component 1 + 2 + 3				17,067,901	
UNDP General Management service cost				1,194,753	7 % UNDP GMS
Total project estimated cost				18,262,654	

Annex B: detailed breakdown cost for cash for work “improvement of primary solid waste collection”

Position	%	No	Rate \$	Days	Months	Total \$	Working days
1. wages for 540 workers (see below distribution per area)	-						
Donkey Carts	100%	180	12	25	18	972,000	81,000
Workers	100%	270	12	25	18	1,458,000	121,500
Store Keepers	100%	5	18	25	18	40,500	2,250
Supervisor Carts	100%	12	23	25	18	124,200	5,400
Supervisor Labors	100%	27	23	25	18	279,450	12,150
Clerks	100%	18	23	25	18	186,300	8,100
Truck & Loader Drivers	100%	3	6	25	18	8,100	1,350
Area Coordinators	100%	5	48	25	19	114,000	2,375
Social Workers	100%	20	16	25	16	128,000	8,000
contingency						38,400	
total cost of workers' wages		540				3,348,950	242,125

2. carts and clearing tools

Item carts tools	No of Carts	No required during project timeframe	Price \$		total
Bucket	180	3	20		10,800
Broom	180	12	4		8,640
Rick	180	3	20		10,800
As Rick	180	3	20		10,800
Rake	180	3	10		5,400
Gloves	180	36	2		12,960
Mask (box of 50)	180	6	5		5,400
Plastic Bags (ton)	1	6	3500		21,000
T-shirt	180	36	3		19,440
Hat	180	36	2		12,960
Miscellaneous					31,800
sub-total					150,000

Item clearing tools	No	Price \$	Total
Broom	6200	4	24,800
As Rick	160	20	3,200
Rake	80	10	800
Hoe	80	20	1,600
Wheel Bush Carts	80	60	4,800
Gloves	700	2	1,400
Mask (box of 50)	250	5	1,250
Plastic Bags (ton)	4	3500	14,000
T-shirt	12000	3	36,000
Hat	12000	2	24,000
Miscellaneous			38,150
sub-total			150,000

total cost of carts and clearing tools 300,000

3. operation cost

Item	total
Mobile line (55\$ monthly cost per line)	12,100
Stores (120\$ monthly rent cost per store)	20,160
Car rent (Project Coordinator) (800 \$ monthly cost)	15,200
Rent Share	11,000
Electricity	3,500
communication	3,500
Stationary	6,000
Hospitality	4,000
Miscellaneous	76,410
Insurance	30,000
Auditor	6,000
sub-total	187,870

total cost of 18 months operation 187,870

4. NGO management cost

Position	Percentage	No	Rate \$	Days	Months	Total \$	Working days
Site Management							
Project Coordinator	100%	1	60	25	20	30,000	500
Office Management							
Manager	33%	1	100	25	20	16,500	500
Financial Manager	33%	1	64	25	20	10,560	500
Contract	33%	1	40	25	20	6,600	500
Tender sale	33%	1	36	25	20	5,940	500
Technical division Manager	50%	1	64	25	20	16,000	500
Assistant Project Coordinator	100%	1	36	25	20	18,000	500
Administrators(2 male & 1 Female)	100%	3	32	25	20	48,000	1,500
Office boy	100%	1	13	25	20	6,500	500
total cost of NGO management cost						158,100	5,000

Total cash for works component						3,994,920	
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Staff distribution per Geographical area

Area	NO of Workers	Carts	No. of Social Workers	No. of Supervisors \$ field staff	Total Number
Northern Area	60	26	3	13	102
Gaza	90	84	8	25	207
Khan Younis, Eastern Area and Middle Area	90	48	7	23	168
Rafah	30	22	2	9	63
	270	180	20	70	540

Annex C: Detailed cost estimate breakdown for extension of 3 SW dumping sites in the Gaza Strip

quantity of solid waste generated per day in the Gaza Strip

Geographical area	SW Quantity ton/day
Northern Governorate	280.00
Gaza Governorate	700.00
middle Area Governorate	120.00
Khan younis Governorate	140.00
Rafah Governorate	120.00
total amount generated /day	1,360.00

cost estimate for 7 years extension

total volume generated per day , cubic meter/day	900.07
total volume generated per year, cubic meter/year	328,524.16
total dumping area required per Year " extension for one year, square meter	21,901.61
total area required for 7 years extension , square meter	153,311.27
cost estimate per square meter in US\$ (The cost estimate breakdown presented below calculated based on the design report of Deir- AlBalh duming site constructed in year 2002.	43.99
total cost estimate for 7 years extension in US\$	6,744,009.58

cost estimate breakdown per square meter

item description	Material US\$	Machinery and labor cost	SUM US\$
Excavation	0.00	1.00	1.00
Leveling	0.00	0.50	0.50
Compaction	0.00	0.25	0.25
Lining	3.50	0.50	4.00
Basecoars	5.50	1.00	6.50
Asphalt 3/4" (4 cm)	10.00	2.00	12.00
Asphalt 1/2" (5 cm)	12.00	2.00	14.00
Sub-Total	31.00	7.25	38.25
contractor overhead and profit			5.74
total			43.99

Note: the estimated cost per square meter will be adjusted in accordance with the recommendation of the detailed design report

Annex D Detailed cost estimate breakdown for establishing compost facility

Budget Description	BUDGET							Notes
	Unit	No. of Units	Quantity / Duration	Unit of Duration	% Covered	Unit Cost US \$	Total Cost US \$	
consultancy services								
consultant	Person	2	5	Month	100%	4,000.00	40,000.00	local consultant
Sub-Total							40,000.00	
Project implementation by the NGO and operation cost								
PEF Project Manager	Person	1	18	Month	33%	1,800.00	10,800.00	
project coordinator	Person	1	17	Month	100%	800.00	13,600.00	
site / supervisor Engineer	Person	1	12	Month	100%	600.00	7,200.00	
Skilled Workers	Person	3	12	Month	100%	350.00	12,600.00	
unskilled workers	Person	20	12	Month	100%	300.00	72,000.00	
maintenance							20,000.00	
utilities (communication , utilities, rent)			18	Month	100%	2,000.00	36,000.00	
contingency							37,800.00	
Sub-Total							210,000.00	
Site preparation and Fences and rehabilitation								
Site preparation and leveling	m2	1	8000	NA	100%	2.00	16,000.00	
SW Garbage transfer to final dump site	m3	1	7000	NA	100%	1.40	9,800.00	
Project Area Fencing	m	1	488	NA	100%	25.00	12,200.00	
Construction of site roof	m2	1	2000	NA	100%	25	50,000.00	
construction of site floor with drainage system	m2	1	2000	NA	100%	30	60,000.00	
Steel lined Container	Piece	1	1	NA	100%	7000	7,000.00	
Rehabilitating the wall fence of the site	m2	1	100	NA	100%	100	10,000.00	
Installation of Other services (Water + Electricity, Sewage,...)	m	1	500	NA	100%	50	25,000.00	
Sub-Total							190,000.00	
Semi Mechanical Sorting, Composting, Handling Equipments								
Sorting Equipments								
Weighbridge	No	1	1	NA	100%	45,000.00	45,000.00	
Feeding Conveyer	No	1	1	NA	100%	30,000.00	30,000.00	
Bag Breaker	No	1	1	NA	100%	55,000.00	55,000.00	
Sorting Conveyer	No	1	1	NA	100%	30,000.00	30,000.00	
Over Belt Magnet	No	1	1	NA	100%	37,000.00	37,000.00	
Fixed trammel screen (10 cm)	No	1	1	NA	100%	56,000.00	56,000.00	
Metal Baler	No	1	1	NA	100%	40,000.00	40,000.00	
Light recyclables Baler	No	1	1	NA	100%	29,000.00	29,000.00	
Electrical Control panels	No	1	1	NA	100%	40,000.00	40,000.00	

Composting Equipments								
pulled type turning Machine	No	1	1	NA	100%	25,000.00	25,000.00	
water addition unit	No	1	1	NA	100%	10,000.00	10,000.00	
Final trammel screen unit	No	1	1	NA	100%	40,000.00	40,000.00	
Lab	No	1	1	NA	100%	10,000.00	10,000.00	
Handling Equipments								
Tractor	No	1	1	NA	100%	20,000.00	20,000.00	
Skid steer loader	No	1	1	NA	100%	45,000.00	45,000.00	
D- Erection								
D- Erection	No	1	1	NA	100%	24,000.00	24,000.00	
E- Freight								
E-Freight	No	1	1	NA	100%	24,000.00	24,000.00	
Sub-Total							560,000.00	
Total							1,000,000.00	

Annex E Detailed Risk Management Matrix

Area	Risk	Mitigation Measures	Options for Programme Responses
Operational Risks			
Administration / Operations	<ul style="list-style-type: none"> - Mobility restrictions of the project staff due to the security situation either caused by the Israelis (incursions, shelling) or by internal clashes - Shortage of Fuel might hinder mobility thus restrict work and prevent progress - restrictions on staff accessibility to affected sites on the buffer zone - restrictions on allowing material required for EOD team to get into Gaza 	<ul style="list-style-type: none"> - UNDP security office in coordination with the UNRWA Security Liaison person coordinate for the day-to-day travel of the staff and issue security clearance for ensuring the safety of the staff - UNDP security officer to coordinate with Israeli authorities for the issue of security clearance to access the buffer zone - Local Police approached in cases of travel of international staff and for any unexpected hazard - Provide security update on daily basis for all staff 	<ul style="list-style-type: none"> - Police could be consulted for increasing the safety of staff in hazardous situations - Take security measures and mitigation for staff travels in cases of security alerts. - Suspend the travel of staff in exceptional security situations - Suspend work in the buffer zone until access clearance is granted
Programme Risks			

<p>Project Implementation / Progress</p>	<ul style="list-style-type: none"> - Any militant act from the may affect the successful implementation of the project - lack of financial resources required to implement to remove the total generated rubbles - lack of coordination between rubble removal actors and beneficiaries as well - insufficient capacity of EOD teams to response to different agencies needs 	<ul style="list-style-type: none"> - UNDP security office in coordination with the UNRWA Security Liaison office coordinate the day-to-day travel of the staff and issue security clearance for ensuring the safety of the staff - UNDP to formulate a joint action plan to avoid duplication and share information - UNDP to draft recourse mobilization plan - UNDP to support UNMAT to up-scale their capacities 	<ul style="list-style-type: none"> - Partner organizations, community representatives and stakeholders are informed about the situation and the planned interventions. - Rubble removal actors are requested to report to UNDP on their planned interventions and progress - UNDP and RR actors to prioritize their interventions
<p>Project outcome</p>	<ul style="list-style-type: none"> - Major Security crises e.g. total incursion into the Gaza Strip or Total closure of access of people and goods. - Resistance of the crisis affected people to cooperate with EOD teams or Rubble Removal contractors 	<ul style="list-style-type: none"> - organize community awareness sessions and training - Assessment to inform activities design and planning - Rubble removal actors to convene every two weeks 	<ul style="list-style-type: none"> - UNDP reviews intervention strategy to respond to crises - UNDP suspends support

Annex F: Government of Japan letter of approval



*Representative Office
of Japan to the Palestinian Authority*

June 29th, 2010

**Mr. Jens Toyberg-Frandzen
Special Representative of the Administrator
United Nations Development Programme
Programme of Assistance to the Palestinian People**

Subject: Reprogramming of Rehabilitation of Salah El-Din Street Project

As per the proposal of the captioned project submitted by UNDP on 26th June 2010, it is my great pleasure to inform you that the Government of Japan has approved the following components as requested;

1. Clearance and Safe Disposal of UXO's (1,646,113US\$)
2. Crushing of Concrete Rubble and Reuse (3,261,300US\$)
3. Improvement of Solid Waste Management(12,160,488US\$)

In this regard, I would like to request an immediate commencement of the above project.

I would also like to take this opportunity to remind you that in case of any problem and/or further modification of the project, to contact us without any delay. In addition, you are kindly requested to submit a progress report to the Embassy on a quarterly basis as well, after close examination of the report in your office.

I avail myself of this opportunity to renew to the United Nations of Development Programme, the assurances of my highest consideration.

Sincerely yours,

Naofumi HASHIMOTO
Representative of Japan to the PA
Minister, Embassy of Japan in Israel