



Palestinian water Authority

Donor Contributions to the Water and Sanitation Sector in Palestine

"The Palestinian Water Authority has prepared this Booklet to highlight the importance of the existing and ongoing cooperation projects funded by international donors in the sector. We also wanted to reflect the outcome of this cooperation and how it has assisted in the development and improvement of the sector."

Dr. Shaddad Attili Head of Palestinian Water Authority

Note: Names are listed in alphabetical order.



AFD's activities and support in the Water and Sanitation sector in Palestine

Water Supply and sanitation is the main focal sector for the French Development Agency. Since 1998 \rightarrow Around 100 M€ have been commited by AFD in this sector

Current projects amount:

Sanitation projects:24%

AFD commitments since 1998

Water projects: 68%

AFD is supporting the following institutions:

- The Palestinian Water Authority
- The West Bank Water Department
- The Water and Sewage Service Authority (Bethlehem)
- The Tubas Joint Water and Sanitation Service Council
- The Maythaloun Joint Water and Sanitation Service Council
- The Jenin West Villages Water Service Council (Al Yamoun)



International Year of Water Cooperation 2013 | 1

EUR 66.6m grant

AFD in numbers:

ightarrow 800 000 people have now a better access to water

 \rightarrow **250 000 people** will have a better access to water through on-going projects

ightarrow around **400 km** of water pipes has been build or rehabilitated

→ **590 000 people** will have a better access to sanitation through on-going projects

WATER SUPPLY

Area	Name of the project	Grant (m€)	Population	Goal	Stage
Jenin governorate	Al Yamoun Water supply	10.5	70 000 (11 villages)	 increase the availability of drinking water; institutional support to the Joint Water Service Council and to West Bank Water Department 	Conception (works launched in 2014 and completed in 2016)
Tubas governorate	Tammoun- Tubas water supply	13	60 000 (4 villages)	 secure and increase the availability of drinking water; institutional support to the Joint Water and Sanitation Service Council 	On-going (completion of Phase 1 in 2013 and Phase 2 in 2014
Jenin governorate	Maythaloun water supply	10.6	25 000 (6 villages)	 develop a drinking water supply; creation and institutional support to the Joint Water Service Council 	Completed in 2011 Under operation
Bethlehem governorate	Bethlehem water supply	9.5	112 000 (WSSA area)	 increase the availability of drinking water contribute to a sustainable and effective management of water and sanitation services 	Conception (works launched in 2013 an completed in 2015)

These programs will give access and/or improve the water supply to more than 250 000 inh.

SANITATION

Area	Name of the project	Grant (m€)	Population	Goal	Stage
Tubas governorate	Mysilia small scale wastewater treatment plant	5.5	4 800 (1 village)	 construction of a small scale waste water treatment plant (4800 EQH or 625m³/d in 2035) improve collective and individual sanitation systems institutional support to the Joint Water and Sanitation Service Council reuse water component for agriculture. 	Conception (works launched in 2014 and completed in 2015)
Bethlehem governorate	Bethlehem pumping stations	0.5	112 000 (WSSA area)	 improve the wastewater collection; 	Conception (realization planned in 2013)
Gaza Strip	North Gaza Emergency Sewage System	16	250 000 (4 cities)	 drying out of the waste water lake in Beit Lahia and transfer of the effluent to the future site construction of a biological waste water treatment plant in Jabalia (36,500m³/d) 	on-going (completion planed in 2013)
Hebron governorate	Hebron Regional wastewater treatment plant	10 (to commit in 2013)	225 000	 construction of a biological waste water treatment plant (15 250 m³/d) contribute to a sustainable and effective management of water and sanitation services 	Feasibility study in progress Appraisal planed mid 2013

These programs will give access and/or improve the wastewater treatment for more than 590 000 inh.

OTHERS

Area	Name of the project	Grant (m€)	Goal	Stage
Palestinian Water Authority	Technical Planning and Advisory Team	1	- support to the water sector reform process	on-going









Photo 2. NGEST under construction

Austrian Representative Office

Austrian Development Agency Involvement in the Water Sector

While highlighting the severe water problems in West Bank and Gaza from both qualitative and quantitative aspects, in addition to the Israeli restrictions and practices on water sources, water and sanitationhas become one of the major sectors within the overall strategy of the Austrian Development Cooperation in Palestine. In 2002, the Austrian Development Cooperation was the first to support PWA in Gaza Stripin financing the first seawater desalination plant. Since then, Austria has been funding various projects in both West Bank and Gaza in order to effectively provide assistance for the use of non-conventional water sources, in addition to a more efficient management of wastewater and its reuse. Currently,four projects with a total budget of EUR 3.836.535 are implemented to increase water supply through various means inWest Bank and Gaza.

"Building Capacity and Institutional Reform for an IntegratedManagement of Water and Sanitation Services in Rural Communities" projectdelivers a comprehensive capacity building program including set of tools for technical guidelines, operational management, in addition to technical researches and trainings. This programwill enable PWA, implementers and operators on onsite wastewater treatment systems to develop and manage low cost wastewater treatment systems in different rural communities within the West Bank in an integrated and sustainable approach. Four pilot scale wastewater treatment systems in four rural communities will be upgraded. Also, several Joint Service Councils (JSC) will be strengthened through specialized training seminars, technical site visits, regional study tours, public awareness programs, local workshops, conference participation, and provision of software and hardware tools, in addition to the establishment of rural community partnership. In the light of deficiency of the water resources in Gaza and the strategic plan to utilize major parts of so called non-conventional water sources for agricultural purposes, the need becomes urgent to build a capable organization that deals with the management and distribution of the treated effluent from waste and storm water. This entity shall be regulated by the Palestinian Water Authority. "Technical Assistance on Use of Non-Conventional Water Sources - Reuse of Treated Wastewater, Management of Storm Water Harvesting in the Gaza Strip" project aims for the establishment of such an entity. By the time infrastructure for distributing the treated effluent to farmers is ready, the organization is on ground and ready with the regulations and guidelines that will govern the relation between this service provider and farmers on one hand and with PWA on the other hand.



Awareness Workshops in the CBOs

In partnership with UNDP and the implementation of Coastal Municipal Water Utility (CMWU) and PWA, "Improve the Capacity of CMWU for Monitoring the Quality of Water Supply in the Gaza Strip" project aims to improve the monitoring of water supply quality and mitigate the health risk of heavy metals in municipal water supply. Throughout this project, baseline information for heavy metals concentration in municipal water supply water will be established. Samples will be taken from about 100 water wells from different location in the Gaza Strip. Concentration of heavy metals such as Arsenic, Barium, Boron, Chromium, Fluoride, Manganese, Molybdenum, Selenium, Cadmium, etc. will be measured and compared with WHO pollution control guidelines. The results

will be statistically analyzed with respect to location and cause/effect relationship. The potential sources of pollution will be identified and the capacity of CMWU to monitor the water quality will be enhanced through support the establishment of CMWU water quality laboratory and providing training for the CMWU staff. Given that adult women, men and children are differently impacted by heavy metals, risk mitigation measures will be designed to address the specific needs of both sexes throughout their lifecycle.

In partnership with PWA, the project "Technical Assistance to the Project Coordination Unit for Implementation of the Rolling Program of Intervention for Additional supply of Water for Gaza Strip" will establish Project Coordination Unit for implementation of the Rolling Program of Interventions for Additional Supply of Water for the Gaza Strip (TA-G-PCU). In 2008, a report was prepared by PWA refocusing on the water infrastructure in Palestine. In this report, the need for a "Gaza Emergency Technical Assistance Program" was envisaged and a comparative study of option for additional water supply in Gaza (CSO-G) was published. This study included nine different interventions that present a coherent approach to address the critical issues in the water sector in Gaza. The first of these interventions is the establishment of a "Gaza Project Coordination Unit" required to drive and coordinate all of the proposed interventions. The overall objective of the project is to improve the quality and increase the quantity of the water available for domestic and agricultural use in the Gaza Strip, it aims to significantly improve the likelihood of effective and efficient implementation of a set of nine interventions recommended by the (CSO-G).



Awareness Workshops in the CBOs



Representative Office of the Czech Republic in Ramallah



The Czech Republic (Czech Development Agency) Multi-Year National Water Allocation System (MYWAS)

Location: Ramallah, West Bank

Partner: Palestinian Water Authority (PWA)

On March 7, 2011 a Memorandum of Understanding has been signed between the Czech Representative Office in Ramallah and the Palestinian Water Authority for the implementation of a three-year project Multi-Year National Water Allocation System (MYWAS). For the first year of the project 5 500 000 CZK (275 000 USD) we allocated, for the second year and third year 5 000 000 CZK (250 000 USD). The project should provide a central water management system of Palestinian water resources, with emphasis on protection of water resources and ensuring access to the drinking water. The implementation of the project began in May 2011. The project should continue until November 2014.

MYWAS/WEAP is a powerful and innovative approach that enables ability to do system-wide cost-benefit analysis of water infrastructure projects, taking into account forecasts of such things as drought, population growth and difference economic/ political development scenarios. Significantly, they also take into account the user's own values and policies concerning water. MYWAS/WEAP can analyze current, future and proposed water management issues, water infrastructure planning, and alternative water policies for decision-makers. Palestine (PWA) is much in need of new water infrastructure, and WAS and MYWAS/WEAP will be of major assistance in planning and implementing programs that alleviate the current water crisis.



EUREP

Water, Sanitation and Solid Waste Management

With a total of \in 66 million invested by the EU in the water and sanitation and solid waste management sectors from 2006 to 2012, the EU is becoming a major actor in health and environmental protection in Palestine. Our cooperation in this sector has also been increasing in quality and quantity over the past 2 years, with \in 42 million committed in 2011 and 2012 alone, including \in 20 million for Gaza. A further \in 20 million for the Nablus East water sanitation and reuse programme is foreseen under the 2013 EU budget.

Water and Wastewater Status in the Palestinian territory

Water supply and sanitation in the Palestinian territories is characterized by severe water shortage, which is exacerbated by the effects of Israeli occupation. There is a continued need for better sewage connection, wastewater treatment, waste collection and landfills, in both the Gaza Strip and the West Bank. Today water and wastewater has become a focal sector of the European Union (EU) in Palestine.

Sustainable Management of Natural Resources

The EU aims at supporting the Palestinian National Authority to provide collective sanitation, treatment of wastewater and re-use part of it for agriculture purposes. This will reduce pollution of the environment including aquifers; contribute to preserving ground water resources and free fresh water from agricultural use for human consumption.





Main interventions in the sector

Policy and Regional Cooperation

- Fostering cooperation in between water management authorities in Israel, Jordan, Palestinian Authority (EXACT), €1.5 million, 2011-2014
- Integrated Trans-boundary Regional NGO Master Plan for the Lower Jordan River Basin, grant to Water and Environment development Agency/Friends of the Earth Middle East, EU contrib. €2.4 million, total budget €3.1 million.

Water Supply

- Water supply infrastructure projects in the Hebron governorate, €2 million, 2011-2012.
- Water supply improvement component of Sustainable Management of natural Resources, Gaza, 2012-2016, €5 million.
- Small scale low volume seawater desalination, Instrument for Stability, € 10 million, 2011-2015.

Wastewater Management and Reuse

- Water Sanitation and reuse for agriculture in Tayasir (Tubas Gov.), €22 million, 2011-2017.
- North Gaza Emergency Sewage Treatment, total budget \$74 million, EU contribution €6 million, 2006 2014
- Medium scale wastewater treatment and reuse, Food Security NGO call for proposal, €9.48 million, 2011-2014.
- Sewerage Nablus East for wastewater collection, sanitation and reuse project, under preparation, to be potentially funded under EU 2013 budget.
- Hebron Sanitation and Reuse project, under preparation, to be potentially funded under EU 2014 budget.

Solid Waste Management

- Solid Waste Equipment Southern West Bank, Hebron and Bethlehem regional landfill, €4.29 million, 2010-2012
- Solid Waste Management Equipment, complementary needs for all West Bank, €3.10 million, 2010-2012
- Recycling programme, €0.6 million, 2010-2012
- Gaza solid waste management, EU contribution €5 million, with World Bank and AFD.

Water an	Water and sanitation/Solid Waste projects managed by EU Rep Office in East Jerusalem							
Commit. Year	Title	Sub-sector	Budget (€M)					
2006	North Gaza Emergency Sewage Treatment project (under infrastructure Facility 2005)	Wastewater sanitation and Reuse	6.0					
2008	Fostering co-operation on Water Management between the Israeli, Palestinian and Jordanian Water Authorities (EXACT)	IWRM, Transborder water ressources management, Climate change adaptation	1.5					
2008	Solid Waste Equipment for the West Bank	Solid Waste Equipment	4.3					
2009	Solid Waste Equipment for the West Bank	Solid Waste Equipment	3.6					
2009	Wadi Cooperating for Urban Water Management	Small scale collective sanitation (Lebanon), Stormwater collection, floods control (Jericho)	0.5					
2010	Sanitation and Wastewater in Gaza	Stormwater collection, floods control	3.5					
2011	Water sanitation and Reuse Programme in the West Bank	Wastewater sanitation and Reuse	22.0					
2011	Short Term Low Volume Sea Water Desalination Plant For Southern Governorates of the Gaza Strip	Desalination, water supply	10.0					
2011	All Across the Jordan: Trans- boundary Master Planning of the Lower Jordan River Basin	IWRM, Transborder water ressources management	2.4					
2012	Sustainable Management of Natural Ressources in Gaza	Solid Waste Management, Solid Waste Disposal, Water Supply	11.0					
2013*	East Nablus Sewerage and Reuse	Wastewater sanitation and Reuse; Industrial emmissions	20*					
*Forecast								

Ν	Main EU regional projects in water and sanitation and climate change					
Impl. Period	Title	Sub-sector	Budget (€M)			
2008- 2016	CBC Cross-Border Cooperation, Part Of Mediterranean Sea Basin Programme 2007 2013	Cross border cooperation	189.2			
2009- 2013	Support to the EU Water Initiative Medeterranean component (Med-EUWI)	Integrated water ressources management, Transborder water ressources management	1.0			
2012- 2015	Technical assistance for Water Supply to Gaza, Seawater Desalination Project	Desalination, water supply	4.0			
2010- 2014	Shared Environemental Information Systems (SEIS)	Environment / Priority themes: (1). Water: fresh water (2). Waste: household / municipal (3). Air (emissions + climate change)	-			
2009- 2014	Horizon 2020 - Capacity Building Mediterranean Environmental Programme	Capacity building, mainly in water and sanitation and solid waste management sectors	-			
2010- 2014	Support to Sustainable Water Integrated Management (SWIM)	 Non-conventional water resources (including wastewater treatment and reuse and desalination) with emphasis on rural areas; Economic valuation of the costs to remediate water degradation; Noregret actions for the adaptation of the water sector to climate change and; Local water governance, with emphasis on the experiences of Water Users Associations 	6.7			
2011- 2014	Pilot projects of SWIM	 Adaptation to Climate Change of the Mediterranean Agricultural Systems (ACLIMAS) Innovative Means to Protect Water Resources in the Mediterranean Coastal Areas through Re-injection of Treated Water (IMPROWARE) Network of demonstration activities for sustainable integrated wastewater treatment and reuse in the Mediterranean (Sustain Water MED) All Across the Jordan: Trans boundary Master Planning of the Lower Jordan River Basin Water harvesting and Agricultural techniques in Dry lands: an Integrated and Sustainable model in Maghreb Regions (WADIS MAR) 	15.0			
2012- 2014	Promoting sustainable groundwater resources in the Mediterranean Basin: improving technical and administrative skills in selected Mediterranean Basin municipalities to alleviate pollution of groundwater	Capacity building, IWRM	1.4			



Cooperation between Finland and Palestine in the Water and Wastewater Sector

The goal of Finnish development cooperation in the Palestinian territory is to support the Middle East peace process by developing the institutions of a future Palestinian state. Finnish support to the Palestinian water sector aims at providing better quality of life and environmental sustainability through improving equal access to water and developing the management of scarce Palestinian water resources. The cooperation in the water sector began in 1994 through a UNDP project focusing on wastewater management in the West Bank. Between 1999 - 2007 Finland supported the PWA's capacity to manage projects in the West Bank and Gaza.

The current project, Construction and Rehabilitation of Water Infrastructure Networks in Northwest Villages of Jerusalem, spans from April 2010 to September 2013. It is implemented by the PWA with technical assistance by Finnish Consulting Group. The total contribution of Finland is EUR 7,8 million. The objective is to improve the quality of life, socio-economy and health conditions of the 50,000 inhabitants (in 2020) in eight villages by providing them with a reliable and equitable water supply and services. The villages are north of the green line, largely isolated by the separation barrier and settlements.

The project is divided into three interrelated parts. First, the construction element consists of rehabilitation and expansion of 93 kilometres of new water networks and main water pipelines, a new booster station, a new regional storage reservoir and the rehabilitation of two existing service tanks. The project provides 6,000 new domestic house connections that will serve nearly 40,000 people. Second, the development of the institutional setup for the management of the network is a key element for the sustainability of the project and for reaching its development objectives. In 2013 the project will focus on developing the capacity of the new joint service council (Water and Wastewater Department, WWD) and support steps needed for its integrated into Jerusalem Water Undertaking (JWU) in the medium term. Public participation is a key principle in ensuring cost recovery and timely financial self-sustainability. Finally, the third element of the project provides a pre-feasibility study for a wastewater system for the project area, creating a basis for a possible future donor project in the area.

In the bilateral development consultations between the PA and Finland in the spring of 2012, the two parties agreed in principle that the cooperation in the sector will continue after the end of the current project. Details of the continued cooperation will be decided on during 2013.



Picture: the children of the Northwest Jerusalem villages will benefit from improved water services





German Contribution in Supporting the Palestinian Water Sector

Germany has been a longstanding partner of the Palestinian water sector. Ever since the late 1980's, the German Development Cooperation (GDC) has worked closely with its partners like municipalities and later also the Palestinian Water Authority. Currently, the German Federal Ministry for Economic Cooperation and Development (BMZ) provides around 213 million euro for programmes and projects in the water sector for both technical and financial cooporation through GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) and KfW Development Bank (KfW-Entwicklungs bank).

The general goal of the GDC is the improvement of living, working and health conditions for the Palestinian population and, thus, contributing to state building. The GDC aims to contribute to improved and sustainable water supply and sanitation services, efficient use of scarce water resources, and environmental protection especially regarding groundwater thus alleviating the associated risks to public health and sound sector development especially focusing on financial and institutional sustainability.

The GDC also contributes actively to improved donors' harmonization, and alignment to national policies, strategies and priorities. Hence, Germany is committed to implementing the current water sector reform led by PWA and will continue to support the development of relevant infrastructure for the benefit of the Palestinians.

The "Deutsche Gesellschaft für Internationale Zusammenarbeit" (GIZ)is the implementing agency for technical cooperation.

The current water programme of GIZ is supporting the Palestinian water sector through a multi-level approach since 2006 with a total duration of 11 years. The current phase II (January 2010 - December 2013 with a budget of 5.9 million euro) facilitates the flexibility to adjust to a complex political context focusing on:

• **Political Level:** Support the Palestinian Water Authority (PWA) to develop its steering, negotiating, coordinating and regulating capacities in the water sector. Main achievements include the development of a performance monitoring system, regular reporting of the 11 largest water service providers and the establishment of a Joint Water Committee Unit within PWA.

- Level of service provision: support technical, managerial and financial capacities of water and sanitation service providers to deliver reliable, safe and affordable services. On the managerial level organizational structures and job descriptions were developed. Technical achievements are the establishment of non-revenue water and GIS units, and on the financial level tariffs were reviewed and the financial and accounting systems were upgraded. Supported service providers are Jerusalem Water Undertaking, Water Supply and Sewerage Authority of Bethlehem, Water Supply and Sanitation Departments of Nablus and Tulkarem municipalities.
- Level of knowledge exchange: support networking and dissemination of experiences, lessons learned and best practices in the sector.
- **Promotion of gender equality:** a gender strategy for the sector was developed and endorsed by the cabinet. Monitoring bodies will ensure the sector wide implementation of corresponding activities.

The individual measures are in line with the overall Palestinian reform efforts and complement each other in terms of anticipated results.

The German Financial Cooperation implemented through KfW Development Bank is financing strategic projects contributing to the accomplishment of the GDC goals and objectives for the water sector through the establishment of concrete physical infrastructure accompanied by consulting services and operational assistance. The current German Financial Cooperation portfolio focuses mainly on constructing wastewater treatment plants and associated sewerage systems, pilot reuse scheme, reducing water losses and establishment of water networks.



Training on using equipment for water losses (TC)



Al-Bireh WWTP commissioned in year 2000

Project	Implementing Institution	Budget (million Euros)
Ongoing projects		207.2
Salfit Sewerage	Salfit Municipality	8.7
Nablus West Sewerage	Nablus Municipality	40.8
 Gaza Central Sewerage Rehabilitation and Extension of Sheikh Ejleen WWTP (completed) East Bureij WWTP (planned) 	Coastal Municipal Water Utility	70.6
Regional Sewerage Tulkarem	Tulkarem Municipality	16
Water Loss Reduction	Jerusalem Water Undertaking	11
Water and Sanitation Programme	Palestinian Water Authority	15.8
Nablus Water Loss Reduction II	Nablus Municipality	17.3
Wastewater Treatment Ramallah Region	Jerusalem Water Undertaking	27
Planned Projects		
Sewerage Nablus East	Nablus Municipality	11.8 (initial commitment by German Government, and additional commitment is envisaged)



New and Rehabilitation of Water Networks -Nablus and Ramallah



Construction of NablusWest WWTP





The International Committee of the Red Cross

The General Operations for the Water and Habitat Department

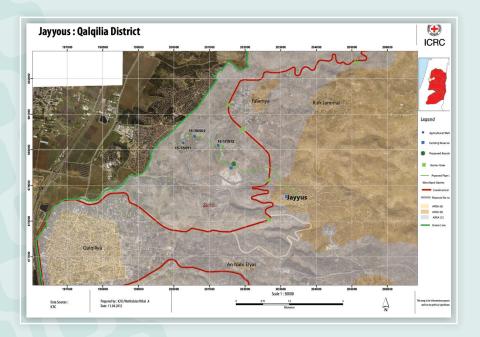
The International Committee of the Red Cross (ICRC) is an impartial, neutral and independent organisation whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflicts and other situations of violence and to provide them with assistance. The ICRC also endeavours to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles. Established in 1863, the ICRC is at the origin of the Geneva Conventions and the International Red Cross and Red Crescent Movement. It directs and coordinates the international activities conducted by the Movement in armed conflicts and other situations of violence.

To alleviate the chronic water shortage in the West Bank, the ICRC has been working in partnership with the Palestinian Water Authority (PWA) since 2006.

Between 2006 and 2012, the ICRC and the PWA have improved the water supply in over ten locations in the West Bank including: Beit Furik, Beit Dajan, Yatta-Samoa, South-Eats Loop, Simiya Dahriya, Anabta, Halhul, Aqraba and Yatta clusters.

Area/ beneficiaries	Project Component	Costs \$ USD	Objectives	Duration
23'000 capita Halhul-Hebron District	 Balancing water tank 2000m³ and 3.2 km transmission line. Construction of Booster Pumping Station and distribution lines 	1.0 million	 Increase the water supply for the town. Provide water storage Connect the unserved households. 	2009-2012
13'000 capita Anabta- Tulkarem District	 Construction of a water pumping station. Building of a 1000 m³ water tank. Construction of a 4.6 km long steel transmission pipeline 	2.3 Million	 Operate the well and pump the water to the distribution system. Store sufficient amounts of water Ensure a continuous water supply for the population. 	2009-2012

35'000 capita Aqraba Cluster Nablus District	 Equipping a deep well and booster station. construction of two balancing tanks Rujeeb (2000m³) and Awarta (3000m³). Construction of the main transmission lines; Rujeeb-Awarta (4.88km), Awarta-Aqraba (10 km) and Aqraba-Qusra (10 km). Construction of feeder lines 15.6 km with 8 filling points. 	2.5 Million	 Improve people's access to water in rural and urban areas. 	2009-2011
10'850 capita Yatta Cluster- Hebron District	 Construction of 8 km of transmission pipeline. Construction of two elevated reservoirs of 500m³ 	1.0 million	 Improve the water supply and providing water to 20 communities in Yatta. 	2011
1'700 capita Bir al Basha Jenin District	Construction of 12Km of water network	500′000	 Develop a sustainable water supply system for the village and connect 250 households to water network. 	2011
4'000 capita Jayyous village- Qalqiliya district	 Constructing of 5 km transmission pipeline. Construction of an online booster pump, including electrical panel, generator and all required mechanical parts. 	750′000	 Increase the water quantities supplied for Jayyous town Providing access to the water resources located behind the barrier wall. 	Ongoing
Municipal wells assessment in West Bank	Assessing 43 water wells in the analyzing the hydrological co- components. in order to preduce/maintain/improve the the assessment and, Prepare detailed as regarding interven contextual and technical priori	2012		







Consulate General of Italy Jerusalem Development Cooperation Unit



Italian Contribution in Water Sector Programs (2010-2012)

The Italian Government has always been awarded of the importance of sustainable management and development of water supply and wastewater services and standards in the Palestinian Territories. Furthermore, it has always been sensitive about ensuring concerted efforts towards improved water systems management, rehabilitation and maintenance. According to the importance water issues have in development processes, the Italian Development Cooperation has been funding projects implemented by UN Agencies and Italian NGOs in the Gaza Strip and the West Bank in the last years.In particular, the above mentioned projects have been historically focusing on interventions related to water wells, pipes, desalination plants and water tanks.



Project Title	Brief Project's description	Project's total ammount (€)	period
Technology for gray water purification and use in agriculture	Water purification and use for irrigation greenhouse	50,000.00	2009
Emergency Rehabilitation and Water&Sanitation- phase I-Emergency Appeal. (UNRWA)	The work consists of supplying and constructing water line to replace the deteriorated small size one with new water line of 4" diameter to serve block number five at the beach camp; including valves, manholes and relevant fittings and accessories.	1,000,000.00	2010
Emergency Rehabilitation and Water&Sanitation- phase II-Emergency Appeal. (UNRWA)	The work consists of supplying and constructing water line to replace the deteriorated small size one with new water line of 4" diameter to serve block number five at the beach camp; including valves, manholes and relevant fittings and accessories.	1,000,000.00	2011
Emergency Rehabilitation and Water&Sanitation- phase III-Emergency Appeal. (UNRWA)	The work consists of supplying and constructing water line to replace the deteriorated small size one with new water line of 4" diameter to serve block number five at the beach camp; including valves, manholes and relevant fittings and accessories.	1,500,000.00	2012
Improvement of water quality in Deir Al Balah governorate (UNDP)	increase access to safe water for Deir al Balah and Zawayda Municipalities	210,000,000.00	2010- 2012



JICA's Assistance in the Water and Sanitation Sector in Palestine

Improvement of water and wastewater services is one of the main programs of Japan's priority assistance areas for Palestinians. This program aims to assist efficient water usage under the limited water resources in the territories through improving the wastewater treatment system and water facilities. Also, because the groundwater is shared with neighboring countries, which therefore has a high interest in this region, an appropriate address to the water issue is expected to lead to the mutual trust building.

Under this program, Japan International Cooperation Agency (JICA) has the following on-going projects.

1. Jericho Wastewater Collection, Treatment System and Reuse Project (Grant Assistance)

- Grant Amount: up to 2.65 billion JPY (approximately 32 million USD)
- Construction period: June 2012 March 2014

The project goal is to establish a sewerage system in Jericho to improve sanitary conditions and mitigate groundwater contamination. The treatment plant will serve 30,000 of Jericho citizens in the target year 2020 as well as the Jericho Agro-Industrial Park. The project will construct a wastewater treatment plant with the maximum capacity of 9,800m3/day and 25.4 km trunk sewer pipes in Jericho city.

2. Technical Assistance and Capacity Building Project for Jericho Sanitation Project (Technical Cooperation)

Project period: December 2012 – July2016

Related to the construction project above, this project is to provide technical assistance to establish the system for operation and management of sewage works in Jericho municipality, which has never had experience in operating and managing the sewage system. The project supports to develop not only the technical operation and maintenance capacity of the infrastructure, but also the institutional capacity for the system management including establishment of legal and financial framework.

3. Capacity Building in Water Management for Palestinians in Jordan (Technical Cooperation)

Project period: 2006-2011

Collaborating with the Water Authority of Jordan, 198 Palestinians were trained in Jordan. The main goal of this third country training program was to improve water and wastewater institutional capability on operating and managing water projects. This was to improve water quality and quantity conditions of limited water resources in Palestine. The project already helped in building capacity and upgraded different kinds of required skills of the PWA and other water utilities staff in different fields of water sciences. Generally speaking, the third country training program could be listed as complementary efforts of the other assistance projects of the water and wastewater to enable staff properly and effectively operate related facilities and equipments. Adding to that, a Follow Up project was conducted to implement learnt new techniques and principles to reduce non-revenue water in water utilities. In conclusion, all capacity building efforts helped towards efficient water usage as well as planning the water sector.



Using Non-Revenue Water (NRW) Equipments



Training session: Financial Analysis on saved NRW



Kingdom of the Netherlands

The Netherlands contribution to the Water Sector in Palestine

The Netherlands supports the water sector in the occupied Palestinian Territories (oPT) in different ways: with projects in the oPT, via regional cooperation and by inviting students to specialised education in the Netherlands. The Dutch private sector also takes a keen interest in the water sector in the oPT and the Dutch government actively supports this interest.

Projects in Palestine

When the Netherlands decided to re-join the water sector, the Netherlands' Representative Office in Ramallah (NRO) started looking for niches where Dutch support could be of added value. After consultations with the Palestinian Water Authority (PWA), other donors and private sector the NRO identified cross border cooperation on waste-water as one particular niche. The Netherlands, UNDP and PWA are exploring together possibilities to improve the waste water collection and treatment in the area of Baqa Al-Sharqia and Nazlat.

The second area the Netherlands would like to focus on, is loss-reduction through the rehabilitation and improvement of networks. Given the limited access to water in the oPT and the significant losses of available water through leakages, the NRO intends to reconstruct and repair existing networks and support the construction of new networks where those don't exist. The Netherlands is exploring possibilities to do this in cooperation with other donors active in the oPT.

Projects in these two themes are currently being developed.

Regional Cooperation

The Netherlands contributes to two regional initiatives that are relevant to the oPT: theCenter of Excellence in Desalination and Water Reuse Technology established in Muscat(MEDRC) and the Executive Action Team (EXACT).

MEDRC(www.medrc.org)

MEDRC's Mission is to promote cooperation on the vital topic of water scarcity in the Middle East. The main objective of the center is to build international project advisory boards and international research partnerships that contribute to lowering the cost of desalination technology, making it more affordable to resolve long term water scarcity needs in the Middle East and North Africa region. This mission has led to a new research strategy geared to granting funds to research project teams composed of organizations and individuals that had never before considered working together.

It is MEDRC's aim to gather and coordinate resources across national boundary lines. MEDRC offers a regional facility for interaction with and among researchers from the region and the world, for partnership projects with the private sector, and a facility for the conduct of training programs and seminars.

EXACT (http://exact-me.org)

Executive Action Team, EXACT, comprises of water experts from Israeli, Jordanian, and Palestinian water-management agencies. Technical and financial support to EXACT is contributed by the European Union, France, The Netherlands, and the United States. Former donors include Australia and Canada. EXACT aims to improve the quality of the water resources data collected in the region and to improve communication among the scientific community in the region.

Studying in the Netherlands

Many water experts in the oPT have studied in The Netherlands and every year a significant number of Palestinians want to join those numbers, by enrollingin well-knowninstitutes as the University of Delft, UNESO-IHE or University of Wageningen. The Netherlands Fellowship Programme (NFP) offers the opportunity of a scholarship (for Master-degrees and short courses) to highly motivated professionals with at least three years' work experience in the profit and non-profit sectors who are in a position to introduce the newly-acquired skills and knowledge into their employing organisation.

For more information please visit www.studyinholland.nl.

Dutch Private Sector

The Dutch private sector takes a keen interest in the opportunities that exist in the water sector oPT. The Netherlands is well-known for its expertise and innovation in water. Companies like Royal HaskoningDHV and Witteveen+Bos are involved in projects on wastewater and supply.

The Ministry of Foreign Affairs supports public private partnerships in water. The Sustainable Water Fund (FDW) stimulates public/private collaborations in the water sector in order to contribute towards water safety and water reliability to developing countries. In real terms this means collective initiatives between governmental bodies, industry and Non-Governmental Organisations (NGO's) or knowledge Institutions that focus on the following sub-themes and which could be eligible for subsidies from FDW:

Improved access to drinking water and sanitation.

Efficient and sustainable water use, particularly within agriculture.

Safe deltas and improved basin management.

For more information please visit: www.agentschapnl.nl/en/programmas-regelingen/ sustainable-water-fund-fdw.



Improve water quality at Aqbat Jaber Camp



Norwegian Contribution to the Palestinian Water Sector

In the period from 1996 till 2004, Norway was a major contributor to the establishment of the Palestinian Water Authority (PWA). During those years, Norwegian support included technical assistance by specialized Norwegian institutions and with the assistance of international consultants studies of the legal, financial, administrative and technical systems of the PWA were prepared. Norway also supported reconstruction programs and development of the infrastructure of the drinking water services and sewage treatment, as well as building and equipping a central laboratory connected to the PWA for monitoring of water quality.

In 2008 Norway returned to the water sector by engaging in the reform of the sector. The first step was based on a request from the PWA Chairman in 2008, whereupon Norway funded a study to review the Palestinian water sector. This report, entitled "An Audit of the Operations and Projects in the Water Sector in Palestine: The Strategic Refocusing of Water Sector Infrastructure in Palestine" (commonly referred to as "The PWA Audit"), recommended that the administrative and developmental situation of the water sector in Palestine should to be re-evaluated and reformed. This report was considered a turning point in the Palestinian water sector and PWA's reform plan was adopted by the Council of Ministers by means of Legislation No. 13/13/04 in December 2009.

Secondly, Norway has financed the Institutional Water Sector Review (IWSR). By providing informed input to the PWA lead reform process, the purpose was to propose a preferred institutional arrangement for the sector which should be derived by consensus. The outcome was a thorough review of the sector, pointing to both strengths and weaknesses. Perhaps the most important finding was the need to separate the policy and regulatory functions of the PWA, a recommendation which PWA is in the process of implementing.

Norway has also supported the preparation of a revised water law for Palestine. This Legislative Review will complete the submission to the Council of Ministers of the preferred institutional arrangement from the IWSR by providing a revised water law that will be compatible with the newly proposed institutional arrangement.

Together with several other international donors, Norway signed a "Memorandum of Understanding" with PWA in 2012 which shall ensure that the parties work in line with the reform.

In addition to the sector reform, Norway has been committed to help increase the water supply in Gaza. This was primarily done by financing the report entitled "Comparative Study of Options for an Additional Supply of Water for the Gaza Strip (CSO-G)", which based on an analysis of the available options developed a rolling plan which will help increase the water supply in Gaza both on short, medium and long term. The plan was approved by the Palestinian Cabinet and some of the proposed activities are currently under implementation.

In parallel, Norway financed the report entitled "The Domestic Water Distribution System in Gaza". Based on plans and other documentation dating back to 2000, the consultants present their assessment of the north-south water carrier across the Gaza Strip as well as the water distribution system. Both components will be key for the planned regional desalination plant in Gaza.

Norway re-joined the Executive Action Team (EXACT) Multilateral Working Group on Water Resources in Oslo in 2010. Norway believes Exact makes a distinct contribution to pre-empt serious crises of drought and politics in the Middle East. Together with the US, Norway is currently supporting the Real Time Water Quality and Quantity Monitoring and Weather Monitoring Project.



PWA water quality central Lab



Spanish Cooperation - AECID Funded Projects in Water and Sanitation

Beneficiary	Partners	Project	Main Activities	Amount in Euros
Bilateral Grant 2012 - PALESTINIAN WATER AUTHORITY	Fundación Promoción Social de la Cultura (FSPC)	Institutional Strengthening of the Palestinian Water Authority of the PNA	Ongoing (final december 2014)	200,000
Bilateral Grant Started 2012 - Coastal Municipalities Water Utility (Gaza)	FUNDACIÓN ACCIÓN CONTRA EL HAMBRE -ACF Spain	Suply of a proper sanitation system for the Batn AsSameen quarter in Khan Younis (Gaza Strip)	Construction of the sewage network for the quarter (final december 2014)	800,000
NGOs Grant Started 2011 - ASAMBLEA DE COOPERACIÓN POR LA PAZ (ACPP)	Palestinian Hidrology Group	Improvement of access to food and sanitation services for 3080 inhabitants of Beit Hassan, Jordan Valley	Construction of sewage network with household connection, and WasteWater Treatment Plant (Constructed Wetland) (Extended to 21.05.2013)	480,000
Bilateral Grant Started 2012 - ARIJ	Fundación Centro de las Nuevas Tecnologías del Agua (CENTA)	Implementation of an integral wastewater treatment and reuse system in Wadi Al Aroub (Hebron) (final december 2014)	Construction of a Waste Water Treatment Plant for	808,000
Open Call For Proposal started 2010 - Fundación Centro de las Nuevas Tecnologías del Agua (CENTA)	ARIJ	Design and implementation of an integral wastewater treatment and reuse system in the area of Wadi Al Aroub (Hebron)	the whole wadi, including Al Aroub Camp (Extended until 27.03.2013)	450,488

Beneficiary	Partners	Project	Main Activities	Amount in Euros
MultiYear Agreement started 2010 - FUNDACIÓN ACCIÓN CONTRA EL HAMBRE - ACF Spain	UAWC, PLDC, ESDC	Agreement for the improvement of living conditions of the most vulnerable communities in the West Bank (Implementation in 4 years. 2010-2014)	Construction of the water network, with HH connections, for AI Burj-AI Bireh and Bet Mirsim (Dura Joint Village Council). WQ Monitoring in cisterns from Massafer Yatta, Ar Ramadin and Road 317 clusters	Total grant 2400000 (only 1200000 for water and sanitation)
Open Call For Proposal Started 2009 - Fundación Centro de las Nuevas Tecnologías del Agua (CENTA) (Started 2009)	ARIJ	Analysis and studies to elaborate a proposal for a basic sanitation and environmental management system in the West Bank	(Completed 2011)	216,249
Multiyear Agreement started 2006 - FUNDACIÓN ACCIÓN CONTRA EL HAMBRE - ACF Spain		(Completed between january and march 2009)	Emergency Water Tankering in Gaza Strip, during 8 weeks after the "Cast Lead Operation", supply of fuel for water wells. Supply of replacements for the water system (pipelines, pumps) and management of the sewage system.	230,000
Emergency Grant Started 2008 - UNICEF	K	Water supply and improving of sanitation in schools in West Bank (Completed 2010)	Improvement of water supply and sanitation in 42 schools, and community centers from Jericó, Tubas, Tulkarem, Qalquilia, Nablus and Jenin	779,632
Open Call for Proposal Started 2009 - FUNDACIÓN ACCIÓN CONTRA EL HAMBRE - ACF Spain	CMWU	Construction of the sanitation network for Block N, Khan Younis Refugee Camp, Gaza Strip	(Completed 2010)	210,000
Emergency Grant Started 2010 - UNICEF		Improvement of the acces to clean water for the kids in West Bank, and support to the coordination of the WASH Cluster	(Completed 2011)	500,000
Emergency Grant Started 2011 - UNICEF		Rehabilitation of the sewage network from Al Qadesiya, Rafah(Gaza)	(Completed 2012)	391,272
		TOTAL		5,065,641



Swedish on-going support to the Water and Waste Water Sector

Storm Water and Sewerage Project, The Fast Track Program, in North Gaza between Sweden and the Palestinian Authority (PWA-PMU) – bilateral support which has been prolonged until mid-2013.

The Amer Sewarage and local stormwater drainage of Northern Gaza forms part of the overall initiative by PWA to provide stormwater and wastewater services for the Jabalia refugee camp and the municipalities of Jabalia, Beit Lahia, Beit Hanoun and Um Al-Naser in Northern Gaza. The project is a continuation of earlier interventions as regards to the stormwater and sewerage collection and disposal system in Northern Gaza financed by Sweden. Swedish support to the PWA goes as far back as to 1998.

The on-going project's objective is to contribute towards enhancing the water resources and improving the local environment and the public health situation in northern Gaza through improved stormwater and wastewater management.

The major components of the project are the construction the Amer Wastewater Pumping Station which was completed in the fall of 2012 and the Khalaf Infiltration Basin which is envisaged to be finalized at the end of June 2013.

The Swedish financial support amounts to SEK 55 million for the complete project (about 8,5 MUSD).

Northern Gaza Emergency Sewage Treatment Plant Project (NGEST)

The NGEST project was developed in response to mitigate the tremendous health and environmental threats to the communities surrounding the sewage effluent lake at Beit Lahia, replacing the obsolete waste water treatment plant and instead provide a sustainable, long-term solution to the treatment of wastewater for the Northern Gaza Governorate. The first part of the project consisted of the construction of the terminal pumping station, pressure pipeline and nine infiltration basins, which have been in operation since 2009. The second part of the project, which is on-going, consists of constructing the actual waste water treatment plant. Sweden has together with the World Bank, EU, Belgium and France contributed to the construction of the plant which is planned to be completed during 2013.

The Swedish financial support so far amounts to SEK 60 million (about 9,2 MUSD not including the allocation for 2013).





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UNDP/PAPP Support to Water Sector in Palestine

UNDP works in partnership with line ministries and civil society organizations in the Palestinian Authority to enhance institutional responsiveness and improve people access to water services.

In 2012, through the water governance programme for the Arab States, and in partnership with SIWI, UNDP/PAPP completed a water integrity assessment for the water sector in the West Bank and Gaza Strip. The assessment identified various gaps in the existing policies, management systems related to water sector governance, resources management and service delivery.

In partnership with the Italian cooperating, UNDP/PAPP completed in 2012 the upgrading of Deir Al-Balah small scale desalination plan to operate at a capacity of 600 cubic meters per day. The plant provides supply of safe drinking water to more than 17,000 people in Al-Zawida area in the Gaza Strip.

Also, with funding from government of Japan, UNDP/PAPP completed the upgrading of a water supply system in Rafah. The system included the construction of a water tank, installation of booster pumps and trunk lines. The project provided more than 50,000 people with better access to municipal water supply in Rafah. By end of 2013, the upgrading of water supply system in Beit Hanoun town will be completed where about 40,000 people will be benefited from the new system.

UNDP/PAPP, through the promotion of peace building through cross boundary wastewater management programme, completed the construction of sewage networks in two villages in the north of the West Bank. By end of June 2013, the installation of wastewater networks in the third village will be completed were 16,500 people in the three villages will have access to a public sewage network and treatment facility. In addition, an interim protocol for trans-boundary wastewater management was drafted. The protocol provides a framework for managing and control wastewater flows across the border between Israel and oPt. The project is funded by Japan.

In addition, the preparations are underway for the construction of wastewater treatment plant in Kan Younis Governorate south of Gaza Strip. UNDP/PAPP is in the process of finalizing cost sharing agreement with Islamic Development Bank to complement initial fund contributed by government of Japan for the construction of large scale wastewater Treatment plant and infiltration facilities. The project phase 1 with a cost estimated at US\$ 57.8 million will treat about 26,000 cubic meters per day and will connect about 200,000 people to the treatment facility.



Upgrading of water supply system in Rafah





Upgrading of Deir Al-Balah Desalination plant







Installation of wastewater network in Barta'a Al-Shariqia



Summary of USAID's Water and Wastewater Activities

Since 1994, USAID has been one of the largest donors in the infrastructure sector in the West Bank and Gaza. In an effort to increase or improve access to public infrastructure and services, USAID rehabilitatesand constructs infrastructure, including water facilities, sanitation networks, community infrastructure, and roads.

Since 2002, USAID investments in the water sector have been designed to expand access to potable water to hundreds of thousands of Palestinian families, while improving the operation and financing of such services. USAID is addressing challenges in the water and wastewater sectors by working to increase sustainable access to safe drinking water through the installation of water transmission lines, water distribution lines, construction of water reservoirs, and drilling new wells in the West Bank and Gaza. Collectively, USAID's water sector activities are leading to improvements in the volume, quality and reliability of drinking water to the Palestinian people. In the wastewater sector, USAID is placing new sewage lines, thereby helping to alleviate the flow of raw sewage into riverbeds and the subsequent pollution of aquifers. In addition, through improved systems, training, and hands-on technical assistance, USAID is strengthening the capacity of the Palestinian Water Authority and West Bank Water Department to better operate and maintain its growing water system. This effort, together with the rehabilitation of aged and leaking pipelines, is aimed at reducing water losses and improving the sustainable use of limited resources for the Palestinian population.

USAID has had many significant achievements in the water sector. Since 2000, USAID has upgraded water distribution networks and installed more than 866 kilometers of water pipelines to provide access to clean water to more than one million people. In the past year alone, 74,400 Palestinians in the West Bank had access to piped water for the first time, including 43,000 people in the village of Dura, in the southern West Bank, and its surrounding areas.

In addition, this past year USAID launched and implemented an innovative program to properly dispose of industrial wastewater resulting from stone cutting activities within the Hebron Industrial Zone. Previously, the wastewater was being dumped illegally in nearby valleys and wastewater pipelines that were not equipped to handle industrial wastewater, causing numerous environmental and health issues. By working quickly with all stakeholders to address the issue USAID found a solution that halted all illegal dumping, thereby averting potential contamination of the fresh water supply in the West Bank.

In addition to direct infrastructure support, USAID has supported and continues to support a number of studies to determine which programs and activities would best assist Palestinians in managing and developing water resources. In the sanitation and wastewater sector, USAID conducted a feasibility study on the use of packaged wastewater treatment plants in the West Bank and began designing a pilot packaged wastewater treatment plant. In addition, USAID funded the design of a groundwater well monitoring program.





1The 4,000 meter3Yatta Reservoir, in the southern West Bank.

3 A 5000 meter3water reservoir constructed by USAID in Khan Younis to reduce the water shortage faced by area residents. The new water reservoir provides water to 70.000 people in the town.



2 Children in Khan Younis, Gaza enjoy clean tap water as a result of USAID activities.



World Bank funded Projects in the Water Sector

Project Name	Description	Project Cost (MUS\$)
North Gaza Emergency Sewage Treatment (NGEST)	Part A: The construction of part A components has started in August 2005 and was completed on April 2009 through implementation of three contracts, namely the construction of the terminal pumping station at B/Lahia, construction of Ductile pressure pipeline and the construction of 9 infiltration basins at the new site of the NGEST with a total amount (USD \$13.61million) and currently in operation under CMWU. Part B: North Gaza Sewage Treatment Plant is designed with an ultimate capacity of 69,000 m3/day and comprising five treatment modules for secondary biological treatment with nitrogen removal, as well as sludge treatment, digestion, electricity generation, dewatering, drying and storage. The works are progressing well where 43.4% has been completed. The project is financed by the World Bank (US\$ 26.8M) with potential increase in the future for the recovery scheme for the reuse of treated wastewater, France (AFD) (US\$ 20.65M), European Union (US\$7.74M), SIDA (US\$ 6.75), Belgium (US\$ 5.16M) and EIB/PA (US\$ 5.913M)	73
Gaza water Supply and Sewage Systems Improvement Project (WSSSIP)	The project development objective is to improve the quality and efficiency of water supply and wastewater service provision in Gaza. This would be achieved through (i) rehabilitation and expansion of existing water and wastewater systems, and (ii) enhancing the capacity of the CMWU to sustain water and wastewater services. The Grant support (i) improving of water supply and wastewater facilities including (a) water supply networks rehabilitation and reconfiguration, (b) rehabilitation of water wells, (c) service water meters replacement and district meters installation, and (d) upgrading and maintaining of wastewater pumping stations (ii) utility capacity building and operational support including (a) construction of utility central facilities (b) technical assistance for the CMWU, and (c) operational assistance financing purchase of chemicals, chlorine, regents, fuel to run the water and wastewater facilities and expenses of PMU. The project is financed by the World Bank (US\$ 6.4M) and the Islamic Development Bank (US\$11.14M)	17.54

Water Sector Capacity Building Project (WSCBP)	 The Project aims at strengthening the capacity of the PWA to more effectively plan, monitor, and regulate water sector development in the West Bank and Gaza. It is expected to contribute to the overall objectives of the Water Sector Reform Initiative as set forth by the Palestinian Authority: With regard to institutions, to establish strong, capable, and sustainable institutions within a legal framework that clearly defines their roles, responsibilities and the interface (relationship) between them. With regard to infrastructure needs, to improve water supply and sanitation strategies, policies, investment programs, project designs, and the implementation of projects, in an effort to substantially accelerate infrastructure development. With regard to water resources management, to build the institutional knowledge, policies, and monitoring and enforcement capacities, as part of an effort to achieve a monitoring and enforcement awareness in line with the development of water consumers, improving water demand management awareness in line with the development of an enfort to substantion policies. With regard to water consumers, improving water demand management awareness in line with the development of avarer conservation policies. 	6.00
Water Supply and Sanitation Improvements for West Bethlehem Villages	The project would provide financing to (i) determine, through a comprehensive feasibility and design study the optimal solution for sustainably managing the wastewater and wastewater reuse in five Palestinian communities in the western rural area of Bethlehem District in the West Bank, (ii) finance the replacement of piped water supply networks in four communities and construction of new reservoirs to improve the water supply for two of these communities, and (iii) develop the capacity of local institutions (the Joint Services Council for Planning and Development (JSCPD) and Village Councils) within the project area to plan and manage improved water supply and sanitation infrastructure, including safe reuse of treated wastewater for agricultural purposes. Since the project addresses the objectives of the state and peace building, therefore the financing (US\$ 3.65) was channeled through the State and Peace Building Fund (SPF) in the World Bank.	3.65

The project would aim to implement the first phase of the waste water management program for Hebron Governorate envisaged in the West Bank Water Resources Program. It has two overall objectives: (i) to reduce the environmental pollution from wastewater produced in the Hebron Governorate; and (ii) to provide a reliable supply of treated effluent and biosolids suitable for reuse in agriculture in the area.

Hebron Wastewater Management Project The project objectives would be achieved through implementation of the first phase of the Hebron Wastewater Master Plan, including: (i) the design, construction and operation of a regional wastewater treatment plant (WWTP) for the Hebron governorate; (ii) the design and construction of facilities for reuse of WWTP effluents and biosolids in agriculture; (iii) capacity building of the organizations in charge of operation and maintenance of the WWTP and the waste water reuse scheme; (iv) establishment and capacity building of a water users association for reuse of treated effluents; (v) establishing a Project Implementation Unit. The project is in the feasibility study stage, where the World Bank provided (US\$0.6 M) and the AFD provided (US\$ 0.45M equivalent). And they are committed to finance (US\$ 10 M and 10 M Euros respectively) the implementation.

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Palestinian water Authority سـلطـة الهياه الفـلسـطينية

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