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# Evaluation Report

## **Consulting Services:**

### **Final Evaluation of the Project**

## **“Fostering Co-operation on Water Management between the Palestinian Israeli, and Jordanian Water Authorities”**

*Submitted by:*



**GENERAL**  
**Consulting & Training**  
جنرل للاستشارات و التدريب

**December 4<sup>th</sup>, 2017**

## **Project Information Sheet**

**Project title:**

Fostering Co-operation on Water Management Between the Palestinian Israeli, and Jordanian Water Authorities

**Implemented by:**

United Nations Development Programme / Programme of Assistance to the Palestinian People (UNDP/PAPP)

**Project counterparts:**

Palestine - Palestinian Water Authority (PWA)

Israel - Israeli Water Authority (IWA)

Jordan - Ministry of Water and Irrigation (MWI)

**Donor:**

European Union

**Start date:**

December 21<sup>st</sup>, 2013

**End date:**

December 20<sup>th</sup>, 2017

**Evaluation period:**

October/November/December 2017

**Evaluators:**

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## List of abbreviations

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AFD	<i>Agence Française du Développement</i>
ENM	<i>Ecole Nationale de la Météorologie de Météo France</i>
EUD	European Delegation to West Bank and Gaza Strip
EXACT	Executive Action Team
GCT	General Consulting & Training
HEC-HMS	HEC Hydrologic Modeling System
IWA	Israeli Water Authority (Israel)
M&E	Monitoring and Evaluation
MWI	Ministry of Water and Irrigation (Jordan)
MoT	Ministry of Transportation (Palestine)
NAP	National Adaptation Plan
PWA	Palestinian Water Authority
UNDP/PAPP	United Nations Development Programme / Programme of Assistance to the Palestinian People
UNDAF	United Nations Development Assistance Framework
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
WGWR	Working Group on Water Resources

## Executive summary

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The purpose of the evaluation is to assess the performance of the project and to measure to what extent the objective/outputs/activities have been achieved against the results and resources framework, and identifying factors that have hindered or facilitated the success of the project. It is aimed at critically reviewing the stages of the project implementation and its products through applying a participatory approach.

The evaluation exercise answered four main evaluation questions: relevance; effectiveness; efficiency; and sustainability.

Interviews with project stakeholders; review of relevant national publications and policies; review of relevant project documents/reports; and consultation of relevant websites were the tools utilized by the Evaluation Team.

The evaluation exercise was divided into three phases: inception phase (from 17/10 to 26/10/2017); data collection phase (from 29/10 to 02/11/2017) and synthesis and dissemination phase (from 06/11 to 04/12/2017).

The project design includes features related to: capacity building; provision of expert advice; support to implementation; and facilitation of experience/expertise exchange between different stakeholders. These features are typical of technical cooperation support projects and aim at improving the quality of aid effectiveness in the long term.

The intervention logic were characterized by a realistic strategy: the outputs were linked to the achievement of the project outcomes (goal and specific objective), and activities were logically sequenced to achieve the outputs.

The project addressed the needs in terms of capacity building of the Core Parties and the three outputs were successfully achieved in the course of the implementation.

The evaluation exercise proved that the set-up of the consultative process was appropriate: decisions were taken during the Project Steering Committee meetings so that Core Parties were able to express opinions and orient project activities to match their needs as institutional project beneficiaries; UNDP provided its expertise in term of project management and facilitation at international recognized standards; and the consultants provided the very specific technical know-how essential to the success of the project.

Finally, the sustainability of the intervention is satisfactory because the high degree of ownerships demonstrated by the Core Parties and their actual interest to build on the project achievements.

The evaluation exercise identified two lessons learned related respectively to the set-up of the consultative process which proved to be suitable and effective and to organization of the training sessions which resulted in enhanced capacity of the beneficiary institutions.

Three recommendations are the main outcomes of the evaluation exercise for similar projects to be implemented by UNDP in the region:

1. Identification of regional activities, which require information sharing, may contribute to increase the level of cooperation and dialogue.
2. A project inception phase dedicated to assess the institutional needs and capacities of participants may lay the foundation to enhance the overall effectiveness of the intervention itself.
3. An independent mid-term review exercise may represent a valid tool to accommodate emerging needs and interests of project stakeholders during the project implementation.

## Brief project overview

### Project background

Bilateral and multilateral peace talks between Israel, Jordan and the Palestinian Authority led to the creation of the multilateral Working Group on Water Resources (WGWR) in 1992. In 1994, the group established the Executive ACTION Team (EXACT) to assist in its coordination and endorsed the Water data Bank Programme that received EU support since 1995. The USA has been the gavel-holder of this forum since its creation.

On 20 December 2013, a contribution agreement was signed between UNDP and the European Union for the implementation of the project under evaluation

This project is the fifth project funded by the EU in the framework of the WGWR/EXACT initiative. It focuses on the identification and quantification of climate effects on water resources in the Core Parties territories.

The Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC AR-4) indicated a precipitation decrease in the Mediterranean area for a future warmer climate. Several regional climate projections were made for the 21st century for the Eastern Mediterranean area. However, those models are still relatively coarse in terms of spatial resolution. Several factors imply the need for a high-resolution model including: (i) the Core Parties are in areas with very diverse climates including arid, semi-arid and Mediterranean climates: (ii) precipitation in the sub-region is highly variable spatially and temporally, (iii) the need to take into consideration the topography, soil, water resources, and land use for reliable climate modelling and water resources quantification.

The three EXACT core parties agreed to cooperate on a project that will focus on the impacts of climate change on water resources in pilot sites selected by each of the core parties in Israel, Palestine and Jordan.

### Project objectives

- **Goal**

The project would contribute to the success of the EXACT initiative, which is 1) a platform for sub-regional cooperation on water-related issues with emphasis on sharing of data and information related to water resources, and know-how transfer, 2) a platform to create an atmosphere that enhances the peace process.

- **Specific objective**

Generation of quantitative data on current and future water availability in the sub-region of the Core Parties in light of the possible impact of climate change and possible changes in land use patterns and water resources.

- **UNDAF Outcome**

The capacity of Palestinian institutions is further improved to ensure the safeguarding of the environment

## Outputs and activities

### Output 1:

Quantitative data on current and future water availability scenarios collected and generated in the sub-region of the Core Parties on the basis of existing hydro-climatic models and hydrological and hydro-geological data from the Core Parties.

### Activities

- Formulate the project implementation unit;
- Develop the technical specifications for the meteorological stations;
- Start the procurement process to supply and install the metrological data and award the contract;
- Supply and install (at least 6) metrological stations in the project sites
- Collect and monitor hydro-climatic data from the selected sites;
- Down-scale, customize and localize the hydro-climatic model;
- The hydro-climatic model will generate data and provide scenarios for water availability in the region.

### Output 2:

Improved expertise of the Core Parties in the field of high-resolution hydro-climatic models.

### Activities

- Equipment provision and capacity building.

### Output 3:

Identified remedial or mitigation actions on the basis of joint discussions on the implications of the future water availability.

### Activities

- Discuss jointly the implication of the future water, availability on the basis of work done.
- Develop a joint action plan for climate change adaptation and remedial action

## Evaluation Methodology, Focus and Limitations

The evaluation, carried out with a participatory methodology, represents a synthesis of facts, opinions and points of view collected by the evaluators. It draws its findings through the triangulation of the information obtained from the different information sources, which also represent the means of verification.

The evaluation took place from October 17th to December 4th, 2017.

The Evaluation Team of General Consulting & Training (GCT) used the following tools to gather the necessary data and information presented in this report:

- Review of relevant project documents/reports;
- Meeting with the UNDP/PAPP officers;
- Interviews with five Palestinian project stakeholders (including the project focal point);
- Interview with two Israeli project stakeholders (including the project focal point);
- Exchange of a questionnaire via email with the Jordanian focal point;
- Meeting with the EU officer in charge;
- Interview with an international consultant; and
- Consultation of relevant websites.

In principle, the International Team Leader should have held remotely a meeting with representatives of MWI in Jordan. This was not possible, and a questionnaire with seven questions was shared with him. Answers received were very short and, as such, they did not provide significant elements to inform the evaluation report, which as a consequence does not assess in depth the performance of the project from the perspective of the Jordanian counterpart.

The evaluation exercise was divided into three phases:

- **Inception phase (from 17/10 to 26/10/2017)**

The evaluation exercise was led by the GCT International Team Leader with institutional coordination of UNDP/PAPP and the support of the GCT National Expert.

An inception report was delivered by GCT to UNDP/PAPP including the agreed evaluation methodology and a work plan for the mission to Palestine.

- **Data collection phase (from 29/10 to 02/11/2017)**

During the mission, the GCT International Team Leader and the GCT National Expert met the main stakeholders who took part in project activities.

The mission took only place in the Palestine and Israel.

The detailed work plan of the evaluation mission is added in Annex 2.

The evaluation interviewed those stakeholders that could take in the evaluation exercise. UNDP Project Manager and Project Coordinator facilitated the work of the Evaluation Team arranging the meetings.

- **Synthesis and dissemination phase (from 06/11 to 04/12/2017)**

The International Team Leader shared the Evaluation Briefing Notes with UNDP. These were later discussed through a briefing session held remotely by the International Team Leader and the UNDP management team a week after the end of the evaluation mission

During this phase the International Team Leader interviewed remotely a representative of the consulting consortium, who actively participated in project implementation.

A report summarizing the evaluation findings was formulated by the GCT International Team Leader and shared with relevant UNDP officers for their comments, which were later incorporated in the report.

The GCT International Team Leader consulted a variety of documents and reports. A full list of the documents and reports consulted is presented in Annex 3.

## Evaluation findings

The key findings of the evaluation relate to the four evaluation questions to which the exercise attempted to give pertinent, solid and reasoned answers.

### Relevance

The project originated within the WGWR/EXACT Initiative; it was the fifth project funded by the EU in the framework of the initiative. The concept idea was developed by the EXACT focal point of each Core Party.

Project design entailed activities related to:

- **Capacity building**

Capacity building was the main focus of the project. Output 2 explicitly mentions this characteristic of the project design. Furthermore, modalities of implementation of most of the activities were a learning-by-doing exercise for all officers belonging to the three Core Parties; especially those related to output 3.

- **Provision of expert advice**

Expert advice was essential to lead the core technical activities of the project.

- **Support to implementation**

The whole project design aimed at setting filling knowledge gaps for future implementation of climate change related policies in the three countries.

- **Facilitation of experience/expertise exchange between different stakeholders**

The exchange of experience/expertise and enhancing cooperation between the three Core Parties represented the most important dimension of the main goal of the project.

The four aforementioned features are typical of technical cooperation support projects and aim at improving the quality of aid effectiveness in the long term.

The project design were characterized by a realistic strategy: the outputs were linked to the achievement of the project outcomes (goal and specific objective), and activities were logically sequenced to achieve the outputs. Actually, the formulation of the output 1 coincided largely with that of the specific objective.

The design entailed the constitution of a Project Steering Committee (project implementation unit) to support the implementation and the M&E activities.

The intervention is as well ascribable to two main areas of intervention of UNDP at global level, i.e. sustainable development and climate and disaster resilience. The project is also relevant for UNDP because of its institutional engagement at global and regional level UNDP covering the three main dimensions of the project; i.e. water resources management, climate change and transboundary cooperation.

The three countries are Parties of the United Nations Framework Convention on Climate Change (UNFCCC): this fact represents as well an element of the institutional relevance of the project.

At national level the intervention is coherent with the support UNDP/PAPP provides to the Palestinian Authority in the environment sector and it is aligned to the United Nations Development Assistance Framework (UNDAF) outcome in Palestine.

At country level, the project is aligned with the following strategies and policies:

- Israel:
  - “Israeli National Plan for the Implementation of Paris Agreement” (2016)
  - Policy paper “Adaptation to climate change in Israel – Recommendations and knowledge gaps” by the Ministry of Environmental Protection, Office of the Chief Scientist (February, 2014)

The enhancement of information availability and water resources strategy change are the main knowledge gaps identified in the policy paper.
- Palestine:
  - National Adaptation Plan to Climate Change (2016)
  - Water Sector Reform Plan (2014-16)
  - National Agriculture Sector Strategy - “Resilience and Development” (2014-2016)
- Jordan:
  - “Climate Change Policy for a Resilient Water Sector” (2016)
  - “National Climate Change Policy of the Hashemite Kingdom of Jordan 2013-2020” Sector Strategic Guidance Framework – Ministry of Environment and UNDP

All representatives of the Core Parties met during the evaluation exercise expressed their appreciation for the project as it addressed their needs in terms of capacity building: improved expertise of the Core Parties in the field of high-resolution hydro-climatic models was considered a priority by all. The capacity building exercise was deemed necessary by all stakeholders. In particular, the project represented a first experience with climate modelling for the Palestinian and Jordanian counterparts, while it filled a specific narrow gap in the Israeli officers’ competencies.

The relevance of some project activities (the installation of meteorological stations and related website and the conduction of the vulnerability assessment) was not fully recognized by Israeli stakeholders.

## Effectiveness

### **Output 1: Quantitative data on current and future water availability scenarios collected and generated in the sub-region of the Core Parties on the basis of existing hydro-climatic models and hydrological and hydro-geological data from the Core Parties.**

The level of achievement of output 1 is summarized by the following project deliverables:

- Two meteorological stations were installed in each country and a dedicated website ([www.hrhcm.org](http://www.hrhcm.org)) was created to host and share the meteorological data produced by the six meteorological stations. Some problems occurred:

Israel counterpart never shared the data produced with other project stakeholders through the website. IWA officers lamented a problem with the installation of the two meteorological stations: the software installed in the two meteorological stations is not compatible with their

existing software that communicates with their central meteorological stations’ database. As a consequence they do not utilize the data generated by two stations provided by the project. This occurrence may explain their scarce interest in the maintenance of the stations (one of them has never been operative) and in sharing the data with the project database available in the website.

At the moment of the evaluation mission, Jordanian counterparts were not sharing the data with other project stakeholder, as well. Actually, the Jordanian counterparts communicated the Evaluation Team that both stations were broken and not yet repaired. The evaluation exercise could not find out when the stations will be repaired.

- A hydro-climatic model was down-scaled, customized and localized: a large regional dataset of climate indices at high resolution for hydrological use were developed and finalized by August 2016 by a consortium of consulting firms (TEC Conseil, ARIA Technologies and ACTERRA-Conseil). This combined a work on a large domain, based on the post-processing of CORDEX datasets, and a work on a small domain, relying on new dedicated runs of WRF model, configured in climate mode. The production of climatic indices was preceded by the development of a high resolution gridded reference climatology, to correct the bias of models and to evaluate results of the small domain. The hydro-climatic model generated data and provided future scenarios for water availability up to year 2100 in the region and on this regard a visualization tool was also developed and finalized in September 2016.

The downscaling exercise was considered important by all officers of the Core Parties encountered during the evaluation mission as it filled institutional capacity gaps of involved institutions.

## **Output 2: Improved expertise of the Core Parties in the field of high-resolution hydro-climatic models.**

Output 2 was achieved.

The capacity building component of the project followed two tracks:

1. A learning-by-doing approach, which characterized the activities related to output 3, especially in Israel and Palestine; and
2. Dedicated training sessions on “Dynamical Climate Change Downscaling for improved impact assessment and adaptation planning in the water sector” were organized in France, specifically:
  - In Toulouse at the *Ecole Nationale de la Météorologie (ENM) of Météo-France* in May 2016; and
  - In Marseilles at the French International Training Centre for Development Cooperation of the *Agence Française du Développement (AFD)* in October 2017.

Existing technical capacities of Core Parties were different and the consultants had to adapt the training contents to the three different audiences: the training needs were identified through a dedicated capacity assessment taking in consideration the different level of the technical capacities. The training needs assessment and proposed training programme were then presented by the consultants during two Project Steering Committees (April 2016 and January 2017)..

## **Output 3: Identified remedial or mitigation actions on the basis of joint discussions on the implications of the future water availability.**

In October 2016, the three Core Parties expressed their preference to carry out three vulnerability assessments at country level during a Project Steering Committee and to produce a Cooperation Framework on Climate Change Adaptation and Water Resources instead of engaging in identifying remedial or mitigation actions on the basis of joint discussions on the implications of the future water availability. Output 3 was then changed and substantially achieved by the end of the project.

The three vulnerability assessments were the following:

1. Climate Vulnerability Assessment for the Harod Basin (Israel) with focus on agriculture and wetland ecosystems;
2. Climate Vulnerability Assessment for Zarqa River Basin (Jordan) with focus on human consumption, ecosystems, agriculture, extreme floods and drought; and
3. Climate Vulnerability Assessment of Al Malih Basin (Palestine) with focus on human consumption and agriculture.

The quality of the assessments was deemed satisfactory by all stakeholders met during the evaluation mission. The assessments were prepared through a participatory approach and in each country a dedicated workshops with relevant stakeholders was conducted.

Activities to achieve output 3 were carried out in three different ways:

- In Palestine, the consultants worked closely to PWA officers: the work focused on the HEC Hydrologic Modelling System (HEC-HMS) as PWA previously worked with it in another project (funded by USAID) and then on the conduction of the Climate Vulnerability Assessment. The involvement of PWA officers was significant and the work represented a learning-by-doing.
- In Jordan, the consultants utilized the open source GR Model and then focused on the conduction of the Climate Vulnerability Assessment. The involvement of MWI officers was significant only during the assessment.
- In Israel, the consultants utilized the open source GR Model and then focused on the conduction of the Climate Vulnerability Assessment. The involvement of IWA officers was significant and the work represented a learning-by-doing. IWA officers, however, lamented a scarce relevance of the assessment, as they already had their own tools to deal with climate vulnerabilities.

During the evaluation exercise, the Cooperation Framework on Climate Change Adaptation and Water Resources was about to be finalized. The exercise recognized that the framework represented the main common effort highlighting common priorities and opportunities to actually foster the cooperation between the Core Parties.

The achievements of the project were aligned with the original project design with the exception of output 3 which was modified by a decision taken by the Project Steering Committee. The modification was needed as it addressed an explicit request of the Core Parties. Furthermore, it is important to notice that the original formulation of output 3 was very ambitious considering the actual relationships between the parties. Having a more “down-to-earth” formulation should be considered positively: the level of cooperation between the three parties is lower, but probabilities that the studies will be used for future implementation of remedial actions against climate change are higher.

It is important to note that the conduction of the vulnerability assessments, including the application of hydrological models represented an important phase of project implementation

as it enhanced the overall ownership of each project counterpart and broadened the project audience to other relevant national stakeholders in the three countries.

## Efficiency

The project was implemented through a consultative process:

- UNDP management played the role of facilitator;
- The Core Parties were actively engaged in the decision making process through their focal points who sat in the Project Steering Committee;
- Technical officers of the Core Parties represented the project beneficiaries; and
- A consortium of consulting firms provided the technical know-out to carry out the core project activities with the exception of those related to the installation of the six meteorological stations, directly managed by UNDP in strict collaboration with the Core Parties.

The evaluation exercise proved that the set-up of the consultative process was appropriate: decisions were taken during the Project Steering Committee meetings so that Core Parties were able to express opinions and orient project activities to match their needs as institutional project beneficiaries; UNDP provided its expertise in terms of project management and facilitation at internationally recognized standards; and the consultants provided the very specific technical know-how essential to the success of the project.

The table below is the financial statement, shared by UNDP with the International Team Leader. The table shows the allocated budget and disbursement per output:

	Allocated budget in Euro	Disbursement in Euro
<b>Project implementation unit</b>	236'146	199'134
<b>Output 1</b>	378'858	252'707
<b>Output 2</b>		174'141
<b>Output 3</b>	277'996	152'270

Funds for outputs 2 were not identified in the initial budget. This occurrence does not represent a problem as the project implementation itself was thought as a learning-by-doing exercise. Indeed, the learning-by-doing element was essential during the implementation of activities related to output 1 and 3. Furthermore, two ad-hoc training sessions were organized in France (see “Effectiveness” section)

The budget allocated to the project proved to be reasonable and realistic for the completion of activities: at the time of the evaluation exercise, there are still project funds (about 115,000) not spent. They will cover mainly staff salaries, pending payments to the consultants, the general management support costs, and the contingency budget; most of these funds will be spent by the end of the project. Instead, the original timeframe of the project did not match the scope of work. The down scaling exercise required very high computational performances (in terms of computer hard disk capacities and random access memory) which were not considered in the design phase: The whole exercise of running and down scaling the regional model and the necessary corrections to the produced data required at least 12 continuous months.

The implementation was extended from 24 months to 48 months through a no-cost extension requested to and approved by the donor.

The project was characterized by three significant elements:

1. A very specific technical scope.

2. A different degree of technical capacities of the beneficiary institutions (the Core Parties).
3. Relationships between the Core Parties were and are obviously politically tense. Indeed, the project itself was generated within the EXACT initiative, which in turn was created within the “peace talks” process. Tension between the parties should not be considered surprising. Furthermore, “Operation Protective Edge” (Israel-Gaza war) was launched in July 2014 and ended the following month, August 5<sup>th</sup> 2014; the occurrence obviously has an impact on project implementation, i.e. during the first year of implementation only a Project Steering Committee was held in April 2014.

The implementation of activities was difficult due to the situation just mentioned, and UNDP had to put in place lot of efforts to engage the Core Parties in a fruitful collaboration and play effectively its role of facilitator. As a consequence, the actual duration of the project stretched and a no-cost extension was necessary to complete all the project activities.

The approval of the no-cost extension took seven months (from December 2015 until July 2016) and entailed the suspension of the project financial disbursement by EU. Activities could not be interrupted and as a consequence UNDP had to cover some project costs, i.e. the salaries of the Project Coordinator and Project Manager, with other funds.

The vast majority of activities did not entail the participation of any national officers who not belonging to the three institutions, i.e. IWA, PWA and MWI. Other nationally officers participated to the climate vulnerability assessment, which in turn did not entail cooperation between the countries: each Core Parties conducted the vulnerability assessment with project consultants. This reluctance to open up the project to other actors is to be attributed to the political situation. Indeed, the three water authorities are engaged in the WGWR/EXACT since its creation; this occurrence did not apply to many other national institutions.

The implementation of activities followed a logical sequence, which may be summarized as follows:

- Installation of meteorological station;
- Website to share the data;
- Formulation of the downscaled model; and
- Formulation of the climate vulnerability assessments.
- Formulation of the Cooperation Framework on Climate Change Adaptation and Water Resources

Capacity building was a learning-by-doing exercise with two ad-hoc training held in France in 2016 (Toulouse) and in 2017 (Marseilles).

The project design and the nature of the activities (provision of expert advice, production of data and capacity building) did not entail the necessity of a sophisticated indicators and data collection tools and allowed for a continuous monitoring on the job. Nine Project Steering Committee meetings represented institutionally the decision making moments, UNDP facilitated and coordinated the activities accordingly, and consultants worked closely with the three Core Parties to carry out the technical activities.

## Sustainability

All stakeholders met during the evaluation mission stated that they are utilizing and will keep building upon the knowledge generated by the project.

IWA stressed the importance on the knowledge gap in term of climate modelling and programming that was filled by the project. IWA officers are now able run downscaling exercise without any external assistance. They already built on project output 1 and 3 and not as their main goal was output 2, i.e. filling in their knowledge gap. For these reasons, it is most probable that they will not be engaged with keeping updated the downscaled model and the related visualization tool. They have the financial capacity to keep building on the technical achievement of the project.

Palestinian officers are satisfied with the achievement of the project. The project represented their first introduction to climate modelling, so that they are not yet ready to run modelling exercises on their own.

On the other hand, PWA is already working on other vulnerability assessment for two areas in the West Bank (Eastern Slopes of Jenin and Eastern Slopes of Tulkarem). This exercise does not entail any financial effort, and it can be conducted by relevant officers as part of their daily working routine. At the moment of the evaluation mission, Palestinian counterpart did not have enough financial and technical capacity to keep update the model produced within the project.

Finally, Jordanian officers stated that they will use the knowledge during the activities of their institution (MWI).

The three institutions (IWA, PWA and MWI) affirmed their willingness to keep their dialogue open in the coming years whenever common grounds for cooperation are defined. The “concept note for a follow up phase on transboundary cooperation in the area of climate change and water adaptation” drafted by UNDP, the Core Parties and the consultants may represent an opportunity to keep working on transboundary cooperation between the three Core Parties while building on the achievements of the project.

## Conclusions and recommendations

### Conclusions

The evaluation exercise recognized the performance of the project was substantially good at output and objective level. An overall satisfaction was recorded throughout the evaluation mission. However, some complaints about the relevance and effectiveness of certain activities were done during the evaluation mission by IWA representatives.

The project was relevant for all participants, although some component were not deemed important by all stakeholders.

Its effectiveness should be considered substantial in terms of the capacities built; participants were equipped with the relevant tools and know-how for a deeper understanding of the climate change impacts in their countries.

Modalities of implementation were appropriate as they encouraged consultation between stakeholders through a common decision making process which allowed outputs reformulation in the course of the implementation period.

Finally, the sustainability of the intervention should be considered satisfactory because the high degree of ownerships demonstrated by the Core Parties and their actual interest to build on the project achievements.

The evaluation exercise cannot assess the full dimension of the achievement of the project goal. However, it was evident that cooperation at technical level between the three Core Parties was possible despite the political situation. On this regard, it is important to highlight that no meeting occurred in the frame of the WGWR/EXACT initiative during the project implementation period. If WGWR/EXACT steering committee had met during the implementation, it would have maybe increased the commitment and ownership of each institution, facilitated the project steering committee meetings and minimize the impact of political situation on the project implementation

### Lessons learned and recommendations

Two lessons learned can be drawn through the evaluation exercise:

1. The set-up of the consultative process was suitable to the circumstances: each stakeholder could play its role within the project according to its institutional mandate and technical capacities:
  - UNDP as implementing agency & facilitator;
  - The Core Parties as decision makers (project focal points) and beneficiaries (technical officers); and
  - The consultants as technical advisors.

In this ways the role of each stakeholder was clearly defined and the dialogue between the Core Parties was fostered through the identification of common needs, mainly represented by the institutional necessity to fill in technical gaps in regard to climate modelling.

2. Training needs assessment conducted in order to have a training programme adapted the different technical capacities of the trainees proved to be an effective tool to promote participation and learning.

Four recommendations are the main outcomes of the evaluation exercise in case projects with similar features (regional and transboundary cooperation, capacity building, policy support and provision of expert advice) to the project evaluated will be implemented by UNDP in the region:

1. Identification of regional activities, which require information sharing to be implemented, may contribute to increase the level of cooperation and dialogue.
2. The institutional priorities, capacities and interests of each beneficiary institution should be considered as a prerequisite to plan and implement activities. A project inception phase dedicated to assess the institutional needs and capacities of participants may lay the foundation to enhance the overall effectiveness of the intervention itself. In principle, it would be better to carry out such stakeholders’ analysis during the project design phase. The analysis would have better identified the needs of each institution and problems of scarce relevance or effectiveness, as the installation of the meteorological stations, could have been avoided. Furthermore, the overall implementation process could have resulted smoother and characterized by fewer project management efforts to bring together the representatives of the counterparts.
3. Supporting the visualization tool revealed to be a good exercise to share data and knowledge between the parties. It is then important to include similar platforms an ideal tool to share data and knowledge and promote common capacity building processes.
4. An independent mid-term review exercise may represent a valid tool to accommodate emerging needs and interests of project stakeholders, to inform Project Steering Committee’s decisions, and consequently ease project management and re-define project design (outputs and activities) accordingly.

It is finally important to note that the Cooperation Framework on Climate Change Adaptation and Water Resources produced within the project is a reference document that may constitute a valid starting point to keep fostering the cooperation on water management between the Palestinian, Israeli, and Jordanian Water Authorities.

## Annex 1 - ToRs of the evaluation as per the Inception Report

### Purpose of the evaluation

The purpose of the evaluation is to assess the performance of the project and to measure to what extent the objective/outputs/activities have been achieved against the results and resources framework, and identifying factors that have hindered or facilitated the success of the project. It is aimed at critically reviewing the stages of the project implementation and its products through applying a participatory approach. A special focus will be dedicated to the strategic regional aspects of the project, the sustainability of dynamics generated among Core Parties, and commitments for the future.

The evaluation exercise will answer to four main evaluation questions/criteria, i.e. relevance, effectiveness, efficiency, timeliness and sustainability, and five main aspects will be taken into consideration, i.e. project objective/outputs, processes, sustainability of results, monitoring and evaluation, and conclusions and lessons learned. For each aspect, a wide array of factors will be considered:

- i. Objective, Output, Activities
  - Effectiveness and efficiency of project activities
  - Progress in the achievement of outcomes/outputs, measured against the baselines and indicators set at the outset of the project.

### B) Processes

- i. Institutional arrangement
  - Formulation and implementation stages.
  - Consultative processes.
  - Assumptions and risks.
  - Sustainability of results.
- ii. Partnerships
  - Assessment of level of involvement and perception of partners.
  - Assessment of collaboration level among relevant stakeholders.
- iii. Processes and Administration
  - Project administration procedures
  - Milestones
  - Key decision and outputs.
  - Project oversight and active engagement by UNDP and the project steering committee.
  - Coordination between UNDP and partners.
- iv. Disbursements
  - Overview of actual spending against budget expectations
  - Analyze disbursements to determine if funds have been applied effectively and efficiently.
- v. Budget procedures
  - Effectiveness of project document to provide adequate guidance on how to allocate the budget.
  - Audits and any issues raised in audit and subsequent adjustments to accommodate review recommendations.
  - Review budget revisions and provide an opinion on the appropriateness and relevance of such revisions.

- vi. Coordination mechanisms
- Appropriateness and efficiency of coordinating mechanisms and approaches.
  - Propose improved coordination mechanisms and approaches.

### C) Sustainability of Results

- Identify evidence showing that the results/lessons of project could be replicated to other areas
- Analyze risk to ensuring sustainability of the project outcomes and results (i.e. country ownership, financial, institutional capacity).

### D) Monitoring and Evaluation

- Identify problems/constraints, which impacted on successful delivery of the project identified at the project design stage.
- Identify threats/risks to project success that emerged during implementation and strategies implemented to overcome these threats/risks.

### E) Conclusion, lessons learned

- Assess substantive reports (e.g. risk assessment, progress reports, lessons learned documents)
- Identify key lessons emerging.
- Identify element hindering or promoting success.

## Evaluation Questions

### Relevance

- How relevant was the project concept: did it respond to stated priorities and needs concerning climate change and environment related issues? Did it correspond with the UNDP objectives in the oPt? Did it correspond with national priorities at country level? Were the project objectives relevant in the context of the oPt?
- How appropriate was the project for addressing the needs of Palestinian institutions and stakeholders, as well as their priorities in the field of mainstreaming environment and climate change?
- Were the project objectives and design relevant given the environmental, political, economic and social context of oPt, as well as consistent with national strategies and development plans?
- To what extent were the activities/interventions/factors implemented relevant for achieving the objectives defined by the project, and in consistent with the intended impacts?
- How well did the project complement and link to activities of other donors/development agencies at local level?
- Did it respond to the proper presentation of Palestine in the international community especially w/r to MEAs?

### Effectiveness

- To what extent were the project outcomes and outputs achieved/are likely to be achieved in a timely manner?
- Have the quantity and quality of outputs produced been satisfactory?
- What were the major factors (internal and external - foreseen or unforeseen) influencing the implementation of project, and achievement or non-achievement its planned outputs and outcomes?

- Which components of the project had the greatest/least achievements? What have been the supporting/constraining factors?
- What concrete improvements and changes have taken place as a direct result of the project?
- To what extent project’s staff supported effective implementation of project activities to achieve expected outputs and outcomes, in line with the original project’s documents?
- What other achievement were observed other than target set earlier?

### **Efficiency**

- Were the resources used to obtain the expected outputs and outcomes sufficient and pertinent? Has the project been efficiently managed given the available staffing and resources (financial, human and administrative)?
- Review budget revisions and provide an opinion on the appropriateness and relevancy of such revisions, besides overview of actual spending against budget expectations.
- Was the chosen management structure by UNDP/PAPP for implementation and oversight the project appropriate and feasible? What are the major strengths and weaknesses of this approach?
- To what extent did technical assistance by international and national teams during the formulation and implementation contribute to define and produce the planned results?
- To what extent the main stakeholders were participated in the project? Were they supported with needed and valued capacities and resources to support the project activities?
- To what extent has the project been able to develop strong and enabling partnerships?
- Assess the national level involvement and perception of partners, local partnerships and their involvement, as well as the collaboration between government, non- governmental organizations, the private sector, and academic institutions.
- Assess the appropriateness and efficiency of coordinating mechanisms and approaches,
- Have the project’s timeline and deadlines been followed as planned? Have plans been used, implemented and adapted as necessary?
- How effectively did the project management monitor project performance and results? Was the M&E Strategy systematically applied and was it appropriate to the project in terms of accuracy and flexibility?

### **Sustainability**

- To what extent do positive outputs & outcomes of the project hold after its completion? What are the major influencing factors? Which benefits are or aren’t intended to be continued?
- What external factors and their effects on project activities that may positively or negatively impact the sustainability of its interventions?
- What is the specific sustainability plan/strategy incorporating the needed actions to ensure the sustainability of project?
- Are local partners willing and committed to continue with the project? How effectively has the project built necessary capacity of people and institutions?
- Analyze risk to ensuring sustainability of the project outcomes and results (i.e country ownership, financial, institutional capacity).

## Annex 2 - Work plan of the evaluation mission

Date	Activity	Persons met	Position	Institution
Sunday 29.10.2017	Meeting	<b>Ms. TaghreedNajjar</b>	Project Manager /Environment and Natural Resources Team	UNDP/PAPP
		<b>Ms. SaeraHakawati</b>	Project Coordinator /Environment and Natural Resources Team	UNDP/PAPP
	Meeting	<b>Eng. DeebAbdelghafoor</b>	Director of Water Resources Development Department	PWA
		<b>Ms. Salam Abu Hantash</b>	Head of Water Harvesting Section	PWA
Monday 30.10.2017	Meeting	<b>Eng. Yousef Abu Assa'd</b>	Head of Palestinian Metrological Office	Meteorological Office - MoT
	Meeting	<b>Mr. Isam Isa</b>	Director of applied meteorological studies	Meteorological Department - MoT
	Meeting	<b>Mr. HusamTubail</b>	Program Analyst / Environment and Natural Resources Team	UNDP/PAPP
	Meeting	<b>Mr. JoãoAnselmo</b>	Programme Manager / Agriculture and Food Security	EUD
Tuesday 31.10.2017	Meeting	<b>Mr. Roberto Valent</b>	Special Representative to the Administrator	UNDP/PAPP
	Meeting	<b>Ms.Rima Abu Middain</b>	Team Leader / Environment and Natural Resources Team	UNDP/PAPP
Wednesday 01.11.2017	Meeting	<b>Mr. Alaa R.H. Masri</b>	Head of Alternative Resources Section	PWA
	Meeting	<b>Dr. Amir Givati</b>		IWA
Thursday 02.11.2017	Meeting	<b>Ms.Rima Abu Middain</b>	Team Leader / Environment and Natural Resources Team	UNDP/PAPP
		<b>Ms.HusamTubail</b>	Program Analyst / Environment and Natural Resources Team	UNDP/PAPP

Two other meetings were heldremotely by the International Team Leader during the synthesis and dissemination phase of the evaluation:

Tuesday 07.11.2017	Meeting	<b>Mr. StepahneSimonet</b>	Consultant/Managing Director	ACTERRA
Thursday 09.11.2017	De-briefing	<b>Ms.Rima Abu Middain</b>	Team Leader / Environment and Natural Resources Team	UNDP/PAPP
		<b>Ms.HusamTubail</b>	Program Analyst / Environment and Natural Resources Team	UNDP/PAPP
		<b>Ms. TaghreedNajjar</b>	Project Manager /Environment and Natural Resources Team	UNDP/PAPP

## **Annex 3 - List of the documents, reports & websites consulted**

### **Published reports (policies and strategies)**

#### Israel:

- “Israeli National Plan for the Implementation of Paris Agreement” (2016)
- Policy paper “Adaptation to climate change in Israel – Recommendations and knowledge gaps” by the Ministry of Environmental Protection, Office of the Chief Scientist (February, 2014)

#### Palestine:

- National Adaptation Plan to Climate Change (2016)
- Water Sector Reform Plan (2014-16)
- National Agriculture Sector Strategy - “Resilience and Development” (2014-2016)

#### Jordan:

- “Climate Change Policy for a Resilient Water Sector” (2016)
- “National Climate Change Policy of the Hashemite Kingdom of Jordan 2013-2020” Sector Strategic Guidance Framework – Ministry of Environment and UNDP

### **Project deliverables**

- Activity 1 - Final report - Production of downscaled climate indices (July, 2016)
- Activity 2 - Training course material on “Dynamical Climate Change Downscaling for improved impact assessment and adaptation planning in the water sector” (Israel, Jordan, Palestine) in Toulouse, France (June, 2016)
- Climate Vulnerability Assessment for the Harod Basin (Israel)
- Climate Vulnerability Assessment for Zarqa River Basin (Jordan)
- Climate Vulnerability Assessment of Al Malih Basin (Palestine)

### **Project reports and documents**

- Project document
- UNDP Request for 12 months no cost extension and budget reallocation
- EU approval letter (extension)
- Progress report 2015
- Progress report 2016
- List of Project Steering Committee meetings

## Websites

- [www.enm.meteo.fr](http://www.enm.meteo.fr)
- [www.hrhc.org](http://www.hrhc.org)
- [www.ipcc.ch](http://www.ipcc.ch)
- [www.undp.org](http://www.undp.org)
- [www.zef.de](http://www.zef.de)