

**Red Sea Dead Sea Water Conveyance Project
Feasibility Study – Environmental, Technical and Economic and
Environmental and Social Assessment**

**Clarifications, Task and Guidance for the Study Program
December 3, 2007**

I. CLARIFICATIONS

1. Section 13.1.19 –Project Alternatives including the No-Action Alternative

Section 13.1.19, Sub-Task 2 – Project Alternatives at the Regional Level. It is clarified that this Sub-Task would be undertaken as follows:

The analysis of alternatives at the regional level will be undertaken jointly by a team of three independent consultants, who will be selected from a list of three candidates submitted by each of the beneficiary parties. The World Bank will select one qualified individual from each of the submitted lists in consultation with the Study Technical Steering Committee for the three-person team of consultants and will recruit them in accordance with World Bank procurement guidelines.

The team of three independent consultants, not otherwise affiliated with the study program, will undertake the analysis in a manner consistent with the provisions of Section 13.1.19 of the TOR. The Study Technical Steering Committee will review the consultants' draft report. Once the Study Technical Steering Committee determines that the report is satisfactory, the report will be incorporated into the Environmental and Social Assessment Report, which will be reviewed by the Independent Panel of Experts in accordance with Section 17 and disclosed as part of the public consultations process in accordance with Section 14.2.2 of the TOR.

2. Section 14.2 – Public Consultation and Disclosure

The Environmental and Social Assessment Consultant shall ensure that all key materials for future public consultations are available in English, Arabic and Hebrew.

II. TASK TO BE ADDED TO THE RFP

Assessment of Impact of Climate Change.

The Middle East region is the most water scarce region in the world. Global Circulation Models (GCM) project an increase in temperature in the region by 1-2°C by 2030-2050. Precipitation is projected to remain somewhat unchanged over the entire region; however, because of projected increases in temperatures, a higher rate of evaporation is expected. Soil moisture also is projected to decrease in most parts of the region, increasing the potential for soil degradation. The overall impact of climate change on water resources and the environment could be significant and warrants consideration as part of this Feasibility Study.

The objective of this new task is to carry out an assessment of the potential impact of climate change on the proposed water conveyance project. This will consist of projecting future conditions with the project including potential climate change impacts. Where impacts are considered significant, adaptation measures should be identified, with a focus on no-regret actions in the context of local socio-economic and environmental frameworks in the region. If alternative project configurations are under consideration, this task will be performed for each configuration of the Red Sea–Dead Sea water conveyance.

For each of the four Sub-Studies, the Feasibility Study Consultant shall:

1. Identify and document scenarios reflecting the potential range of climate change in the region under study. Translate climate change signals to parameters with quantitative measures of magnitude and variability. The key parameters considered for this analysis should be: temperature, precipitation, runoff, evapotranspiration (or potential evapotranspiration), climate moisture index, and runoff coefficient.
2. Assess the vulnerability and risk of all relevant components of the proposed project to current and projected climate change scenarios. This assessment should be carried out for each sub-Study and combined into a cumulative impact assessment. The assessment must include the risks of climate change on the environmental, technical, and economic aspects of the Study Program.
3. Carry out a comprehensive review of the existing knowledge and experience in adaptation to climate change as related to projects of this magnitude and scope. Develop an adaptation plan for the proposed project, as appropriate, including risk management options, reasons for action/no action and costs.

The Feasibility Study and Environmental and Social Assessment Consultants will factor the findings of this task into their reports.

III. GUIDANCE TO THE CONSULTANT

1. The Environmental and Social Assessment Consultant will include the examination of potential for gas emissions from the Dead Sea among the potential ecological impacts to be investigated.
2. The Environmental and Social Assessment Consultant will include an examination of the risk of potential genetic discontinuity (referred to as ecological connectivity in the TOR) affecting terrestrial wildlife and potential impacts to migratory bird species using the flyway in the study area.