

Kingdom of Saudi Arabia
Preparatory Assistance (PA)
To Support
Jeddah Municipality in the
Preparation of Environmental Master Plan
Proposal: 00047687
Project ID: 00057497

Situation Analysis:

Located on the coast of the Red Sea (21.50° N 39.1667° E), is the major urban center in western Saudi Arabia, the largest in the Western Province, and the second largest city in Saudi Arabia after the capital city Riyadh. With a population of approximately 2.8 million with an average yearly growth rate of 2.6 a massive expansion and growth rate, the city is confronting a greater environmental challenge with a number of problems that need urgent solutions.

Air quality:

- The city depends on water from the desalination plant, which unfortunately uses heavy fuel oil that dumps massive amounts of air pollutants.
- The industrial district has many factories that also contribute (undocumented amounts) to this problem. An oil refinery in the center of the city that may also be contributing sulfur compounds into the air.
- Heavy traffic in the city must contribute certain amounts into the atmosphere but this has yet to be verified.
- Massive influx of people from around the world occurs in a short period of time during the Haj season and in relatively small and well-defined areas, conditions that can facilitate the several factors that keep pollution at a high-level during the pilgrimage season.

Water quality: the challenges are as follows.

- The city lacks a good sewage system and work is currently ongoing in this respect. Residents often use septic tanks dumped directly into the ground water. This has caused a rise in the water table of the city and deteriorated the quality of the ground water, tremendously. This ground water may also be leaking directly into the Red Sea and coastal area.
- There are a limited number of water treatment plants making them unable to handle the continuously growing demands. Water quality is in question as these plants dump directly into the Red Sea. (No strict monitoring of these influents has ever been made.) These plants do not have phosphorus or nitrate treatment. Illicit dumping of sewer water in the storm water circuit greatly affects the quality of water being dumping into the Red Sea.
- The lack of sewer treatment facilities has caused sewage water to be dumped directly into a valley, called Musk Lake, 40 kilometers away from Jeddah, (thousands of

truckloads per week.) This lake contaminates the water table, threatening to collapse the valley line to the city. Some work is currently ongoing to provide a solution to this problem. Analysis of this lake water has shown traces of industrial waste as well.

- The above-mentioned reasons create a major concern for the city's coastal waters to ensure it is safe for recreational use.
- A new study of the water pollution problems found BOD (Biological Oxygen Demand) and COD (Chemical Oxygen Demand) is well beyond the standards for water treated by wastewater treatment plants. This includes the creek water, which is a small inlet of the Red Sea, (Obhur).
- Another major problem of the city is contaminated lagoon areas throughout the city. There are two large lagoons where the BOD is very high according to current studies. The city thought to install aerators and this solution is currently being evaluated for its efficiency.
- The lagoon, located west of Jeddah "Musk lake" with a daily input of 30,000 m³ is raising the concern about ground water pressure and the pressure on the earth dam that was built to stop any overflow to the city.
- Jeddah reefs are, unfortunately, negatively impacted by the growing population (2.6 million) and problems of urban and industrial development including pollution, domestic and industrial sewage dumping, and construction. A further problem is the increase in local and foreign tourism, boating and diving, and their direct and indirect impacts on the coral reefs.

As for the solid waste, dumping sites are inadequate concerns about what to do with the sludge that comes out from the wastewater treatment plant, and the ash generated from the desalination plant.

To speed-up the reuse of treated sewage water, four Projects were initiated:

- 1) National Park, 20 million m²
- 2) Eastern Forest, initially 2.5 million m². Now, expanded to 6.5 million m²
- 3) Golf Course
- 4) Nurseries

Non-coordinated and monitored efforts by different entities that do not have a unified master plan for handling is proving to be an issue at this point.

Objective, outcomes, duration of the Preparatory Assistance (PA)

The objectives this PA is to carry on a mission that will assess the current situation and prepare a report on the current environmental situation in the Jeddah area. In Addition, this

PA will facilitate the development of a project document that would encompass main activities and outcomes for a joint development programme between Jeddah Municipality and UNDP.

This PA will provide two international consultants in the field of environment for the duration of two weeks.

The report will include an assessment of the current environmental situation, the actual and potential health hazards faced by the inhabitants of some areas in Jeddah, a list of all relevant partners and a projection of the future situation under the ongoing trends. The report will also include possible initiatives and projects that could be undertaken, as well as guidelines and references based on the experience of other environmental master plans.

The main outcomes, outputs and activities that are intended to serve this purpose are represented in the following:

Outcome:

The production and implementation of an Environmental Master Plan

Output1:

An assessment report, providing an overview of Jeddah environmental situation, the relevant partners and results of meetings..

Activities:

- Read all provided background documentation
- Provide Best practices reports
- Through meetings with various stakeholders: assess the human, financial, materiel resources and current environmental situation that the proposed Plan would require over the short (1 year) and medium-terms (3 years) in order to deliver on its proposed program of work based on readings, meetings and site visits
- identify local, regional and international programs and initiatives that the proposed center should establish links with for mutual benefit
- Prepare and present a presentation to HRH Mecca Governor and stakeholders on the preliminary findings and future Environmental Master Plan suggestions.

Output2:

An agreed upon project document including work plan and budget for the Environmental Master Plan with the Municipality of Jeddah

Activities:

- Based on output one and initial feedback, Draft an initial logical framework and project document.
- Drafting of detailed work plan and budget will be developed to express the needed resources to be mobilized to support UNDP activities, and preparation of project document for signing.

Outputs	Impact and Intended Results	Indicative Activities (Strategy)	Type of Activities	Input/Timing/Relationship with other Partners	Cost in USD
1. An assessment report, providing an overview of Jeddah environmental situation, the relevant partners and results of meetings	Establishing a clear situation analysis focusing on coordinating and facilitating development and implementation of an environmental master plan for the city of Jeddah	1.1 Read all Background documentation	Desk Review/ Home base	2 Consultants for 15 man-days to come November 2007.	Tickets: 6,000 DSA: 15X200X: =6,000 Terminal: 2X152= 304 Fees: 2X600X1: =18,000 Subtotal: 30,304
		1.2 Provide best practices reports on other countries experiences	Desk Review		
		1.3 Through meetings with various stakeholders: assess the human, financial, materiel resources and current environmental situation that the proposed Plan would require over the short (1 year) and medium-terms (3 years) in order to deliver on its proposed program of work based on readings, meetings and site visits	Desk work/ Field visits		
		1.4 identify local, regional and international programs and initiatives that the project's host should establish links with for mutual benefit	Meetings with Stakeholders		
		1.5 Prepare a presentation to stakeholders on the preliminary findings and suggestions	Desk work		
2. An agreed upon project document.	The development of Joint programme between the Municipality of Jeddah and UNDP to support development activities.	2.1 Formulation of Project Document	Presentation		
		2.2 Drafting of detailed work plan and budget to express the needed resources and activities to be mobilized to support UNDP activities, and preparation of project document for signing	Desk Review		
3. Contingency					2,000
4. Facilities and Administration 5%					1,616
TOTAL				33,920	

Management Arrangement

The project will be nationally executed through the Municipality of Jeddah. The National Project Director (NPD) will be in charge of the management of this project and will be the coordination focal point with UNDP. All project personnel will be under the guidance and supervision of an assigned project manager.

The amount estimated in the budget (**US\$ 33,920**) will be deposited with UNDP. Thereafter, payments for items identified in the project matrix (budget) will be made by UNDP after receiving disbursement instructions from the NPD. A financial report will be submitted to the Municipality at the end of the project for the purpose of review and endorsement. In the event that both parties decided to close this project and certain funds remained unutilized, UNDP will return the unutilized balance, after clearing all contractual commitments, to the Municipality or transfer to a full-fledged project depending on the preference of the Municipality.

The budget is subject to review as needs arise and there is enough flexibility to transfer among project budget sub lines.



Preparatory Assistance Document

Country: Kingdom of Saudi Arabia

Expected Outcome(s)/Indicator (s):

Jeddah Environmental Master Plan PD

(CPAP outcomes linked to the MYFF goal and service line)

Achieving the MDGs and Reducing Poverty

Expected Output(s)/Annual Targets:

Mission report and PD

(CPAP outputs linked to the above CPAP outcome)

Environmental policies incorporated in National planning policies

Implementing partner:

Municipality of Jeddah

The objective of this PA is to help facilitate the development of a project document that would encompass main activities and outcomes for a joint development programme between Jeddah Municipality and UNDP for the production of a Project Document aiming at the creation of an Environmental Master Plan

Programme Period: 2 years
Project Title: Jeddah Environmental Master Plan
Project ID: SAU10/ 57497
Project Duration: 6 months
Management Arrangement: NEX

Total Budget: 33,920 USD

Agreed by (Municipality of Jeddah): **Eng. Adel Faqeeh**
Mayor of Jeddah

Signature

Date

Agreed by (UNDP):

Dr. El-Mostafa Benlamlih
UNDP Resident Representative

Signature

Date