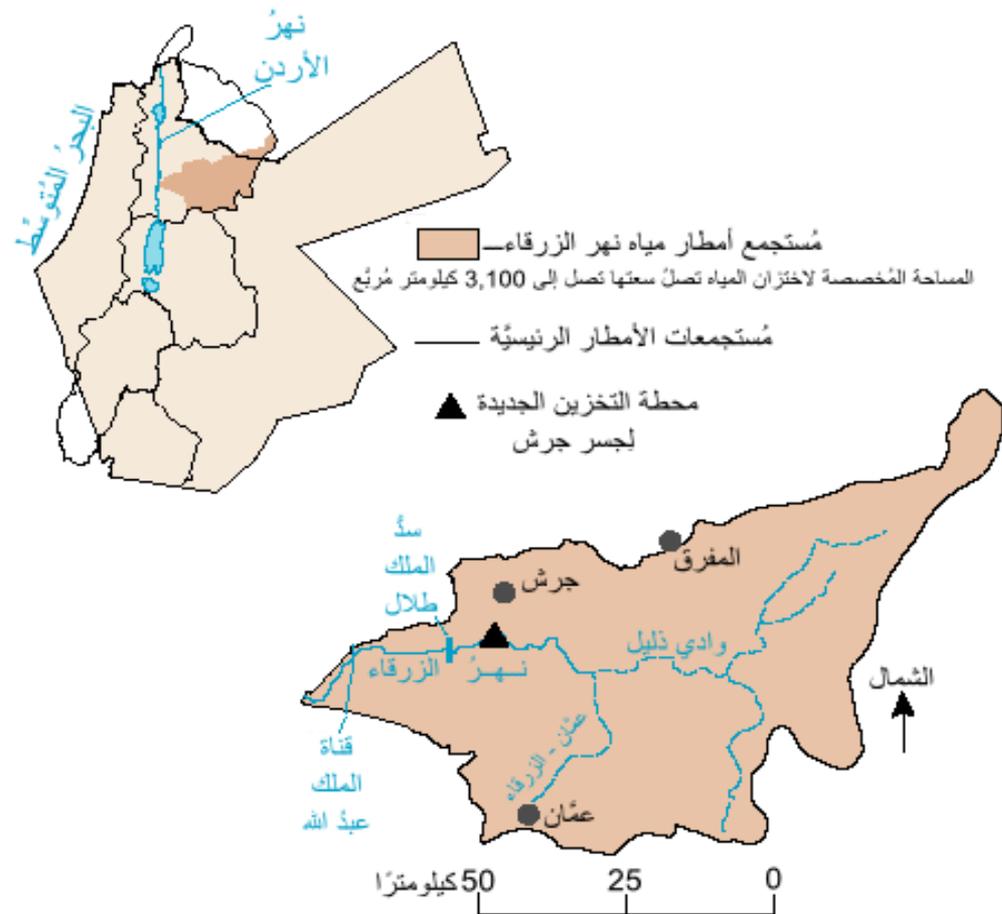


Capacity Building for the Rehabilitation of the Zarqa River Project



Context of the Project

The Zarqa River Basin is the third largest in Jordan and flows through five governorates. The most densely populated area in Jordan which is the catchment area of Zarqa river comprises around 65% of the country's population and more than 85% of its industrial and economical activities.



Continue-

The continuous deterioration of the ecosystem component of the Zarqa river since almost three decades is one of the biggest environmental challenges in Jordan. The Zarqa river has been categorized by the Jordanian government as the biggest environmental hotspot, with plans for rehabilitation of the basin being promoted to the top of priorities of environmental management in Jordan.



Continue-

The process of rehabilitation of Zarqa river is considered as an urgent national demand, even under the current condition of deterioration that require high investment in rehabilitation. Any concerted effort that starts now will be less costly than any efforts in the future. Moreover, the cost of mitigation measures that can be implemented rapidly is less than the cost of the loss of environmental services in the Zarqa river.



Project Objective

The project overall objective is to strengthen the national institutional capacities in the domain of rivers rehabilitation and integrated water resources management and raise the awareness of end – users towards more sustainable approaches to the management of natural resources.



Project Description

The project is considered to be the initial step in a long term strategy for the rehabilitation of the Zarqa river basin.

The project attempts to build national capacities and initiate a concerted national response to the severe levels of degradation to which river basins in Jordan are subjected. This project uses the Zarqa river basin as a pilot region for the adoption of an Ecosystem based approach to sustainable water resources management incorporating all levels of interventions from research to policy development to field testing groups from government, non-government, private and local communities sectors.



Rehabilitation Strategy and Rehabilitation principles



This particular project is the cornerstone for the implementation of the long term rehabilitation strategy for the Zarqa river basin. The strategy builds on the principles of Integrated Water Resources Management (IWRM) using lessons and experience gathered from river basin around the world. It combines development of effective governance, application of economic and system analysis tools, participatory planning, stakeholder consultation, knowledge management and capacity building, while engaging civil society in implementation of rehabilitation and sustainable management.

Continue-

Rehabilitation of the river is envisioned to be a long-term endeavor, requiring a decade or more of commitment to rebuilding the functions of the river and its ecosystems. The project is based on the following rehabilitation principles derived from proven experience in river basin management:

The Ecosystem Approach: *The integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.*

Integrated Water Resources Management (IWRM) : *A systematic process for the sustainable development, allocation and monitoring of water resources use in the context of social, economic and environmental objectives.*

Participatory Planning: *Development and management of the restoration of river basin at the intermediate and local level by promoting increased participation and representation of stakeholders mainly end-users in planning and decision making processes.*

Continue-

Protecting Ecosystem Services: *Recognizing the full value of ecosystem services, and investing them accordingly, can safeguard livelihood and profits in the future, save considerable costs and help achieve sustainable development goals.*

Maintaining Environmental Flows: *The water regime provided within the river to maintain ecosystems and their benefits where there are competing water uses and where flows are regulated.*

Key Players

- ***Ministry of Environment.***
- ***Ministry of Water and Irrigation.***
- ***Ministry of Agriculture***
- ***Ministry of Planning and International Cooperation.***
- ***Ministry of Health.***
- ***Greater Amman Municipality***
- ***Zarqa Municipality***
- ***Ruseifah Municipality.***
- ***Hashemite University.***
- ***Royal Administration for Environment Protection.***
- ***International Union for Conservation of Nature.***
- ***Civil Society Organizations.***
- ***Community.***

Great Issues

- At the institutional level, it is vital to institutionalize the national efforts for Zarqa River rehabilitation. This can be done through the establishment of a special unit which is mandated by the law to protect and sustainably manage the various ecosystems in Jordan. In addition the objectives of rehabilitation should be integrated in the programs and plans of ministries and public, private, civil and academic institutions. To make this system sustainable a charter for the protection and rehabilitation of Zarqa River can be adopted by the government, the civil society and all relevant institutions. The charter will provide the values, principles and implementation tools for the rehabilitation of Zarqa River based on a clear national vision and master plan for this ecosystem.

- Proper legislation should be developed. The first priority is to enact a legislation that covers all gaps in the specification of river basin ownership and regulating the urban and developmental activities in a way that does not impact the efforts to rehabilitate the River basin and protect it from pollution. The River course should be mapped and zoned as protected from urban expansion with focus on forestation and reintroduction of green cover.

Continue-

- The main principle of rehabilitation is the integrated management of natural resources. This can be achieved through several actions. The first initiative can be periodical clean up and streamlining of the river course and the removal of wastes and obstacles that prevent the natural flow of water. The next step will be promoting the adoption of the principles of integrated natural resource management and the ecosystem approach (land, water and species) in all development project and initiatives along the Zarqa River. This should be done in parallel to taking all necessary steps that can preserve the current quantity of permanent water flow in Zarqa River and planning to introduce additional water quantities from non-conventional sources (fully treated wastewater, rainwater harvesting, grey water, etc...) in the dry areas of the river basin and implementation of natural filtration and constructed wetlands initiatives that are based on ecosystem services.

Continue-

- On the agricultural level there is a need for the restructuring of agricultural activities in Zarqa River Basin to match national standards and respond to the changes in the quantity and quality of water and shift to sustainable irrigation and agriculture patterns. This should be associated with the increase in the size of the green cover on the river banks on publicly owned lands and developing forestation partnerships in areas owned by the private sector.

- Any restoration program should be implemented within a framework of partnerships with local community. This can be done in two actions. First is the implementation of a series of community based rehabilitation projects through the development of local strategic plans in hotspots along the river. The second is the establishment of a coalition of environmental NGOs or the creation of a specialized civil society organization that is specialized in the conservation and rehabilitation of Zarqa River Basin to act in awareness, education and advocacy.