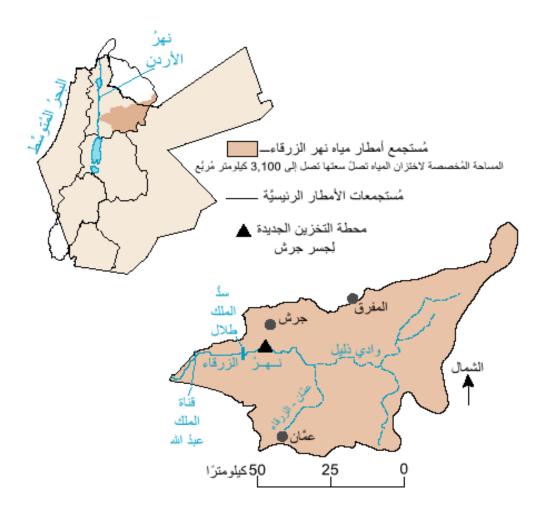
Flood water harvesting in the Zarqa River



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.



Flood as a Disaster



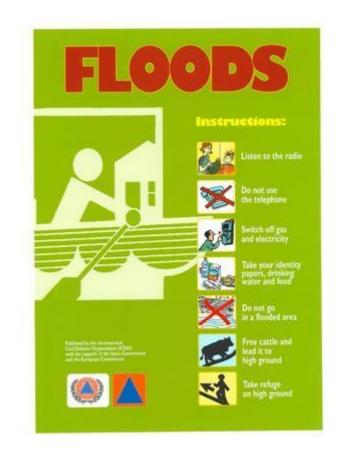


In many cases, floods caused deaths, suffering an extensive damages to both public and private properties. Unplanned urbanization on both banks of rivers and upper reaches of the basins has a major role in the rising cost of floods, besides the meteorological and hydrological magnitudes of the occurrences. New approach to tackle with the reduction and control the susceptibility to the flood damages, namely the "Integrated Flood Management" concept. It is nowadays well known that, owing to the complex nature of the Hazard Mitigation, specific measures for the flood hazards cannot be implemented or evaluated independently. However for Prevention of flood risks a thorough risk analysis provides the base for an integrated approach to flood risk management, including pre-flood prevention, risk mitigation and flood preparedness.

Flood as a Disaster

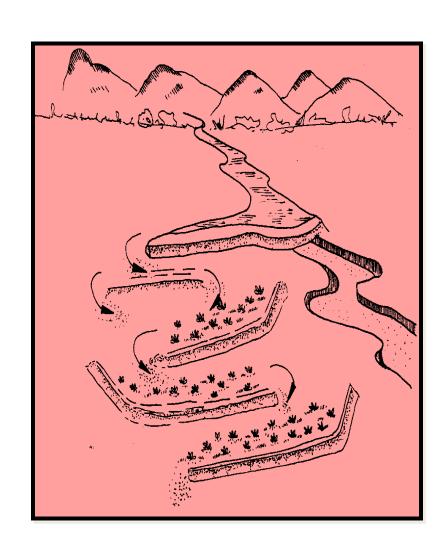
Prevention of flood risks focuses on the design of flood management schemes taking into account economic development and climate change.

These measures include application of safety standards, raising and reinforcing of embankments, and storm surge barriers as well as making room for rivers. Mitigation of risks requires another type of measure, taking into account spatial planning; development of new urban areas, flood proofing and compartmentalization and dedicated protection of vital infrastructure.



Flood Water Harvesting

- Collection of exece water flood from a major wadi.
- Large catchment upstream.
- Stone terrace or earth dam structures and water distribution networks
- Need flood managment (spillways).
- Storage of water in soil horizon ponds or reservoirs.



Flood Water Harvesting

Benefits of floodwater harvesting:-

- Increase of soil moisture for crop production.
- Ground water recharge.
- Reduction of flash floods hazards.

