Name:	**16. JORDAN VALLEY PERMACULTURE PROJECT, JORDAN**		
Region	Asia	**Country**	Jordan
Ecosystem	Agriculture		
Nature of approach	Improvement in capacity, design and policy measures (raising awareness, capacity building); Implementation of EBA measures (natural resource management, changing management practices)		
Description of approach	**Objective/Expected outcomes** The site, located in the Kafrin area in the southern Jordan Valley, near to the Dead Sea, suffers from severe droughts and erosion of the poorly structured soil. Agriculture along with some tourism provides livelihoods for the local communities, which includes Bedouin people. The project set out to demonstrate the potential for improving human and environmental conditions in the Jordan Valley using low-cost, low-technological approaches. The objectives were to: 1. rehabilitate otherwise unproductive farmland through an integrated environmental management model based on Permaculture (sustainable agriculture); 2. improve the quantity and quality of agricultural production; 3. improve the livelihood and living conditions of the local people; 4. study the impacts of Permaculture on the soil, quality of plant and animal production, farm system and local environment. **Actions** Rehabilitation of 4ha of otherwise non-productive farmland, under high salinity and drought conditions, was undertaken using the integrated methodologies of permaculture. This involved creation of rainwater harvesting swales, installation of drip irrigation system to create conditions for planting. A pilot farm was established and planted for agricultural production, carefully designed to fix nitrogen to the soil, and reduce evaporation through shade and wind shelter. Animals were introduced to generate income and to provide manure for different crops. In addition, other practices were implemented, including pest control through the establishment of diverse crops to prevent fast spread in the case of pest infestation, planting herbs and flowers which attract natural pest enemies and planting repellant plants. Crop yields and water use was monitored, and compared with others in the area. The project was carried out with the involvement of the local community. **Results achieved** Diversified, Permaculture systems were established, resulting in enhanced soil structure leading to high crop yields per unit of water consumption. Water needs were reduced by about 40 per cent due to water harvesting and storage. Greater awareness was achieved with the community members of the importance of local natural resources such as native plants, local plant varieties, agricultural wastes, recycling and local community experience to deal with farm problems and implement the Permaculture practices. The site is now being used as a training center for a regional water management program for agricultural communities within the Jordan Valley. The project launched a revolving fund to help the local community to implement small agricultural projects with a focus on Permaculture, supporting local community members to implement agricultural and small commercial projects. **Lessons learned** This example represents a pilot model for sustainable management of natural resources especially soil, water and plants under extreme drought and salinity conditions. The success of implementing new approaches (permaculture is a new concept in the area which had been dominated by monoculture), was aided by working closely with the community to involve them in project activities, leading to uptake of the permaculture practices.		

Type of organisation	Research Institute	**Name of organisation:**	National Center for Agricultural Research and Transfer of Technology, Jordan; Permaculture Research Institute (PRI) of Australia
Further information and contact details	ProAct Network 2008. The Role of Environmental Management and eco-engineering in Disaster Risk Reduction and Climate Change Adaptation. Contact: Geoff Lawton, geoff@permaculture.org.au		