

N51		Rajasthan	
Title/ Name of work undertaken		Birkha Bawri at Jodhpur in Rajasthan	
Location		Jodhpur	
Organization/NGO/Persons responsible to undertake the work		Umaid Heritage Real Estate	
Description		<p>The Umaid Heritage Site is a private township located in southeast of the Umaid Bhawan Palace in Jodhpur, Rajasthan and was faced with acute water shortage. To overcome this problem, a Rain Water Harvesting (RWH) system was developed inside the housing complex. The Birkha Bawri as the structure draws inspiration from traditional step wells in the region and is used to catch rainwater from the site catchment area. Apart from storage and conservation of rainwater, the project also highlights sustainable storm water management in the housing complex, as it collects runoff and minimizes water logging in the area. The rainwater is collected from open areas through natural slopes as well as from the roof top of the house connected through drainage conduits. The water enters from both sides of the underground longitudinal storage structure (Bawri) and holds 17.5 million liters of harvested rainwater annually and serves as a reliable source of water for meeting landscape requirements. The steep depth of the tank (18 meters) provides shade to water and reduces evaporation losses. The water stored in the structure is used to supply water to the residents during lean periods and also to meet horticulture needs.</p>	
Outcome		<p>The RWH system has greatly reduced dependence on municipal water supply and groundwater extraction by 50%. Economic benefits such as reduction in use of water tankers have led to savings of Rs. 2.36 crore annually. The structure has increased property value of the complex by demonstrating perfect combination of good architectural design and well maintained green spaces in scanty rainfall region. Overall dependence on municipal storm water structure has lessened and water logging controlled. The project provides green landscaped area to the site, which is hugely sustainable.</p> <p>Source : SELECTED BEST PRACTICES IN WATER MANAGEMENT by Niti Aayog August 2017, with support of TERI university</p>	
Photographs-yes			

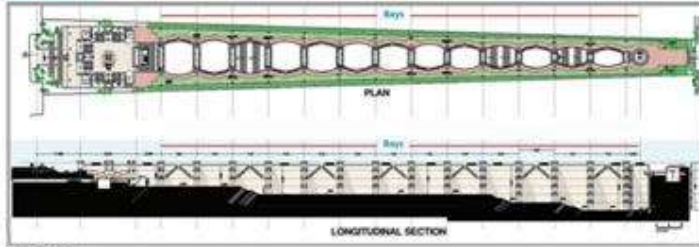
Jatin Chhabra



First Place

Urban / Rural / Landscape Category

DIAGRAM 3 Plan and section of the Birkha Bawari



Source: A. Shah