ISCP25

DYING WISDOM OF TRADITIONAL WATER HARVESTING SYSTEMS IN INDIA – ITS SOCIO CULTURAL RELEVANCE IN CREATING CONTEMPORARY WATER SENSITIVE LANDSCAPES

Objectives:

- To examine the indigenous traditions on water management and human – water interface and its learning towards contemporary application.
- To comprehend the emerging landscapes being designed that come to terms with contemporary challenges of water.
- To address new attitude towards water and landscape that need to be catalyzed within the profession and among society at large

Abstract

Despite being crisscrossed by a complex network of rivers, vast stretches of India have neither a river nor a lake to depend on. Rainwater is the only copious and clean source of water, but its distribution is neither uniform nor assured in all parts. India is in water crisis despite its relatively high average rainfall. Water harvesting can offer a solution. If 5-10% of the land were used for rainwater collection there would be enough water for irrigation and household needs[i]

India's traditional water-harvesting structures are treasures of ingenuity. The practice of harvesting rainwater dates back to Vedic times when the need to create water sources that would remain both clean and provide plentifully was recognized. Over the centuries, people in different types of ecosystems throughout India have used basic Engineering skills to develop a wide variety of techniques to meet their water needs. Today, when the art and science of 'collecting water where it falls' is needed to help ensure an adequate, sustainable and equitable distribution of fresh water, it has become a dying wisdom. Serious efforts must to be made to combine water harvesting traditions with the insights of modern science and technology innovations. This dying wisdom can be effectively used to impound water by creating design elements as part of contemporary urban landscapes thereby giving cultural design expression to the traditional knowledge while extending the bounties of monsoon water from the wet months to dry months.

In India, from the 19th century onward, the paradigm of managing water has followed two interconnected routes. One, the state took upon itself the role of sole provider of water. It was the colonial state that centralized control over water resources. The post-independent state inherited this role, and continued with it. Among other things, this led to communities and households being no longer the primary agents of water provision and management. [ii]Moreover, the earlier use of rainwater and floodwater declined. In its place, there came a growing reliance on surface water (primarily rivers) and groundwater resources which have been heavily overused.

As an important component of the built environment, water thus has a crucial role to play in the sustainable development of Landscapes which embraces the environmental, social, cultural and economic aspects of Design, which intertwine with one another. This paper specifically investigates the concepts of social and cultural attributes in creating sustainable Landscapes and then situates them within the context of how contemporary challenges in water sensitive Landscape Design can be addressed. It shall focus on the treatment of Indigenous values in contemporary water resource management and discuss the traditional water harvesting systems of India down the ages, the technology of using the ancient engineering feat, it's advantages and the areas of concerns. The paper shall cite examples of contemporary applications of traditional water management techniques through built and un-built works of Design Cell as an attempt to creating water sensitive and productive Landscape Designs.

Keywords: *Traditional water systems, traditional knowledge, Ancient Engineering feat, Dying Wisdom, Water sensitive design, cultural expression, productive landscape, technology innovation, sustainable development, Contemporary water resource management*

[i] (Agarwal and Narain, 1997).

[ii] http://www.rainwaterharvesting.org/Crisis/Crisis.htm