

Irrigation technology in ancient Sri Lanka and its applicability in the modern context

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Knowledge and experience gathered over the ages by Sri Lanka on technology and techniques contributed much to building up of a local irrigation and water management system with a distinguishable identity. This had been a process continued from the pre-Anuradhapura Era (before 6th century BC) through the Polonnaruwa Era (up to 12th century). The irrigation methodology broadly divided into two major categories – dam based irrigation systems and reservoir based irrigation systems - was used in conjunction in the country.

Both categories possess unique technologies and techniques that are identified separately. This presentation describes the unique technologies and techniques used in irrigation construction that were identified by the author through his recent research and their applicability in the modern context. The paper seeks to research the effectiveness of the indigenous technology, engineering capabilities and the government structures on irrigation development in contemporary Sri Lanka.

Keywords: local irrigation; water management system; cascade systems; irrigation technology; indigenous technology