Paper ID	035
Author(s)	Hiambok Jones Syiemlieh
Title	Landscapes in the humid regions of Meghalaya
Abstract	

Landscapes have been interesting subject of human enquiry. Landscapes have always been the platform on which human society has always depended and will always depend in the future for all its needs. Landscapes that exist today are not just what was formed yesterday. They have evolved over time and have continuously changed as natural forces play a big role in the process of evolution. While geomorphic processes are continuously acting on the surface of the earth over millennia, what is seen today is the cumulative result of natural as well as human activities superimposed over time. With the development of technology, a host of issues in the synoptic understanding of landscapes have been achieved. The use of GIS & RS in the field of geography in the understanding of landforms which is a basis of physical landscape can be visualized in several terrain contexts. The current work aims at achieving a general method of basic landform mapping as the basis to construct regional layers of information to understand the fast-evolving cultural landscape in hilly terrain using RS & GIS techniques.

Keywords	landforms, landscapes, cultural, terrain
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Paper ID	276
Author(s)	Toru Terao, Masahide Ishizuka and Satoshi Murayama
Title	Evaluation of multiple functions of traditional small hydro energy harvesting system in
	Takamatsu, Japan
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## Abstract

In Kagawa Prefecture, more than 300 water mills are known to have been in operation. They were used for various important daily tasks such as threshing and grinding. We will discuss the various functions of these water mills. Firstly, we evaluate the energy amount and energy efficiency of these water mills as a hydro energy harvesting system. We will discuss production of hydro energy from precipitation and a reasonable evaluation method of the available energy. Next, we will describe how the available hydro energy was used in real traditional Japanese society. We will describe a water mill, the Takahara-Suisha, as a representative of such a traditional hydro energy harvesting system, which has been maintained to this day. There have been historical changes in the way energy is used. After electrification, even a mixture of traditional hydro energy and modern electricity was realized. The Takahara-Suisha is related to the water resource management system and the lifestyle of the local society. The former is embedded in the local agricultural water management system and the Takahara-Suisha operation is still under the regulation of a local irrigation association. For the latter, the Takahara-Suisha was used to produce wheat flour, the ingredient of the local spritual local dish, udon. The spectacular traditional mechanism to enery production and use in the Takahara-Suisha has attracted and united people. In November 2024 they had a ""Water Mill Festival"" with several hundred participants. Finally, we will discuss such a useful function in the local society.

Keywords	water mill, hydro energy, community, water, foods
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