

## **Precipitation Indices as Indicators of Water Resource Sustainability: A Study on Developed States of Peninsular Malaysia**

### **ABSTRACT**

Precipitation index has been used to measure droughts. The occurrence of droughts can be damaging to the water supply system in Malaysia. On normal hydrometeorological conditions, the water supply system is already grappling in order to meet the needs of consumers. New developments on global climate change cast a greater doubt on the sustainability of the water supply systems of Malaysia, since there is growing evidence of changing meteorological patterns which may adversely affect the rainfall amount. The developed states in Malaysia refer to Selangor, Pulau Pinang, Melaka and Negeri Sembilan. As developed states, development has placed these states at a very challenging situation; as such its water resources are really overstretched in terms of its ability to meet the ever growing demand. This study evaluates the standardized precipitation indices of these states and analyse them as to whether the indices can be used as precursors to water resource sustainability in these states.