

**IDENTIFIKASI KETERSEDIAAN AIR TANAH DI DATARAN ALUVIAL  
STUDI KASUS PADA DATARAN ALUVIAL KARANGANYAR, JAWA TENGAH**

**Oleh :**

**Rizka, M dan I. Hadi, S  
Pusat Penelitian Geoteknologi – LIPI**

**ABSTRACT**

*Karanganyar is the coastal region, which is located in the south of Gombong, Central Java. These area a wide alluvial land that spreads from the west of Citanduy to the south of Kulonprogo.*

*Generally, human activity is always related to water in their life. Therefore, settlement pattern usually follows the ridge pattern of these area. There are three settlement patterns, north-south (N-S) settlement, east-west (E-W) settlement and mixture settlement. Whereas four ridge patterns in this area are ancient coastal ridge, present coastal ridge, fluvial ridge and fluvio lacustrine ridge. East-west settlements are located in the ancient coast ridge and present coast ridge, north-south located in fluvial ridge and mixture settlement located in fluvio lacustrine ridge.*

*The uniqueness from this area is water availability not same between pattern settlement. Settlement in fluvial ridge more easy find freshwater, thus settlement in ancient coast ridge and present coastal ridge, although these area near the coastal. But settlement in fluvio lacustrin ridge more difficulty to find freshwater.*

*In this case, historical geology might influence the condition, there is a possibility that fluvial ridge is sand bar of alluvial system, where fresh water is in a thick sand. Fluvio lacustrine ridge has thin sand layer and not homogen, therefore the freshwater could be found locally. While the flow of brackish water, might be from sea water intrusion or surface flow from water formation.*

*Keywords : Settlement, Ridge, Freshwater.*