

***Thamnop* Irrigation and Natural Hydrology in Northeast Thailand**

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Farmers in some parts of Indochina Peninsula have been using earthen weirs that block up rivers to supply water to their paddy fields. Flood water from rivers spreads in paddy field almost without any control or regulation, and irrigable area depends on amount of river runoff. Use of such earthen irrigation weirs is especially prevalent in the southern part of the northeastern region, Thailand (Northeast Thailand), and area around Siem Riap, Cambodia, where people call them “*thamnop*” or “*thumnup*”. These two areas have a common geographical feature that rivers have very limited ratio of mountainous area in their basins.

“*Mountainless*” rivers in Northeast Thailand lack base-flow that is stable and usually exploited as a water resource. They have little runoff except for some prominent peak-flows in rainy season. Analysis on structures of *thamnop* and hydrology of rivers with *thamnop* indicated that the *thamnop* irrigation system is well designed to fully exploit runoff of mountainless rivers.

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