Effective rainfall in irrigated agriculture

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Bibliography

Irrigation in Ethiopian agriculture. This report argues that water resource management in agriculture is a critical contributor to the economic and social development of Ethiopia. If successful, irrigation in Ethiopia could represent a cornerstone of the agricultural development of the country, contributing up to ETB 140 billion to the economy and potentially moving up to 6 million households into food security. Rainfall is available in multiple forms that can be used for agriculture and irrigation. These forms include surface water (perennial and seasonal rivers), renewable groundwater, wetlands, soil moisture, and rainwater (captured or lost through evapotranspiration). FAO. (1978). Effective rainfall in irrigated agriculture. FAO Irrigation and Drainage Paper 25. Faulkner, J. W., Steenhuis, T., de Giesen, N. V., Andreini, M. and Liebe, J. R. (2008). Water use and productivity of two small reservoir irrigation schemes in Ghana's upper east region. Irrigation and Drainage. 57: 151â€“163. Indicators for comparing performance of irrigated agricultural systems. Research Report 20. Colombo, Sri Lanka: International Water Management Institute. Effective rainfall can vary substantially for different land cover and land use types, and the interception of rain-fall by vegetation/canopy can be a considerable fraction of precipitation, as much as 15-40 percent in forest canopies. In agricultural fields, maize, soybean, and similar crop canopies can intercept 0.08 inch to 0.16 inch of precipitation, sprinkler irrigation water for precipitation, or irrigation events greater than 0.5-0.6 inch. In most cases, the infiltration rate is much higher at the beginning of an irrigation and/or rainfall event and decreases gradual-ly over time as the soil gets wetter. Infiltration is substantially influenced by soil physical properties as well as soil moisture gradient.