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## Farmer Water Management Strategies for Dry Season Water Shortages in Central Lombok, Indonesia

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### ABSTRACT

This paper examines how farmers in central Lombok have organized themselves to manage agricultural water collectively and to adapt to seasonally dry conditions. We interviewed eighteen village heads from October to December 2006. One of our questions we posed prior to field interviews was what might be the social and technical coping strategies that have allowed farmers to survive the lengthy dry seasons under the high population density of Lombok island. Some examples of organizational structure and practices in Central Lombok are presented. There were several common water management strategies that were revealed from these interviews including: methods of organization, flexible cropping systems, water allocation mechanisms, methods of compromise, alternative payments, and traditional water management practices. The statistical analysis comparing village characteristics and coping strategies suggests a relation between mosque number per village and farmers ability to cope. Farmers have shown their own unique coping strategies in times of water shortages and under decentralization occurring over the past decade. This decentralization involved turning over small scale irrigation systems (under 500 hectares), to the water user associations themselves in order to facilitate more efficient management and maintenance.

### KEYWORDS

Water User Associations, Subak, In-Kind Payments, Critical Dry Lands, Coping Strategies, Adaptation, Cropping Systems

### Cite this paper

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