Center for Community-Based Resource Management (CBRM)

Natural Resources Institute, University of Manitoba

CBRM Database

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Case Study Name:		**Incentives for cooperation: The effects of institutional controls on common pool resource extraction in Cambodia**	
Author:		Traver, H., Clements, T., Keane, A., & Milner-Gulland, E.J.	
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Region:		Southeast Asia	
Country:		Cambodia	
Ecosystem Type:		Aquatic	
Social Characteristics:		Communities inside protected areas	
Scale of Study:		Community/Household	
Resource Type:		Fisheries	
Type of Initiative:		Research driven project	
Community Based Work:		Resource management	
Keywords:		Experimental games; Field experiment; Self-organisation; Decision-making; Incentive payments; Socio-ecological	

	systems
Summary:	**Cooperation among humans is highly dependent on social and institutional conditions, with individual incentives playing a key role in determining the level of cooperation achieved. Understanding the conditions under which cooperation can emerge has important implications for the design of resource management and wildlife conservation interventions. Incentive-based conservation approaches are being widely implemented, yet very few studies test the role of incentives in promoting cooperation in relevant developing country contexts. Using a common pool resource game, in four villages in Cambodia, we investigated how the level of within-group cooperation varies under different institutional arrangements, including opportunities for social approval, external enforcement of rules and individual and collective incentive payments. Our results demonstrate the significance of self-organisation, the ability to devise, monitor and enforce a set of rules, among resource users. Treatments which promoted self-organisation had the greatest effect in reducing individual extraction, achieved the greatest efficiencies and had the strongest interaction with group decision-making in reducing extraction. The effects of these treatments carried over to reduce extraction in subsequent treatments, irrespective of their institutional arrangements. These results suggest that policies designed to incentivise certain behaviour in local stakeholder groups may be more successful if they create opportunities for local decision-making.**