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Center for Community-Based Resource Management (CBRM)

Natural Resources Institute, University of Manitoba

CBRM Database

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Case Study Name:		Leadership, social capital and incentives promote successful fisheries	
Authors:		• Nicolás L. Gutiérrez,[1] • Ray Hilborn[1] • & Omar Defeo	
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Region:		Europe, Southeast Asia	
Country:		(44 countries – Europe, Southeast Asia)	
Ecosystem Type:		Aquatic, marine, inland, coastal, open water (oceanic region)	
Social Characteristics:			
Scale of Study:		Regional, global	
Resource Type:		fisheries	

Type of Initiative:	Research driven
Community Based Work:	Aquatic, livelihoods, marine, economic, social ecological, social capital, consultative, cooperative, implementation
Keywords:	Aquatic, marine, economic, social ecological, capital, consultative, delegated, cooperative, implementation
Summary:	One billion people depend on seafood as their primary source of protein and 25% of the world's total animal protein comes from fisheries[1]. Yet a third of fish stocks worldwide are overexploited or depleted[1, 2]. Using individual case studies, many have argued that community-based co-management[3] should prevent the tragedy of the commons[4] because cooperative management by fishers, managers and scientists often results in sustainable fisheries[3, 5, 6]. However, general and multidisciplinary evaluations of co-management regimes and the conditions for social, economic and ecological success within such regimes are lacking. Here we examine 130 co-managed fisheries in a wide range of countries with different degrees of development, ecosystems, fishing sectors and type of resources. We identified strong leadership as the most important attribute contributing to success, followed by individual or community quotas, social cohesion and protected areas. Less important conditions included enforcement mechanisms, long-term management policies and life history of the resources. Fisheries were most successful when at least eight co-management attributes were present, showing a strong positive relationship between the number of these attributes and success, owing to redundancy in management regulations. Our results demonstrate the critical importance of prominent community leaders and robust social capital[7], combined with clear incentives through catch shares and conservation benefits derived from protected areas, for successfully managing aquatic resources and securing the livelihoods of communities depending on them. Our study offers hope that co-management, the only realistic solution for the majority of the world's fisheries, can solve many of the problems facing global fisheries.