



Tropentag, October 11-13, 2006, Bonn

“Prosperity and Poverty in a Globalised World—  
Challenges for Agricultural Research”

## Conserving the Indigenous-organic Rice Farming System of Coastal Kerala, India: Does the Market Provide Superior Solutions Than the Standards?

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### Abstract

This paper examines the conservation alternatives for the indigenous rice-prawn farming system, known as Pokkali farming of Coastal Kerala (India), under the Command and Control (C&C) and market creation frameworks. The system exists as a world-acclaimed farming model complementing the natural system, utilising indigenous knowledge and ensuring efficient utilisation of local resources. The proximity to sea and subsequent periodical seawater inundation ensure the uniqueness of the rice varieties cultivated, and contribute to the high degree of specialisation in the cultural practices followed in the region. The less remunerative rice cultivation compliments a highly profitable prawn culture, making it a unique agro-ecological continuum. The farming system is traditionally organic, as farmers desist from use of agrochemicals in rice farming which hampers the productivity of the succeeding crop, i.e., the prawn culture. But lately, the unsustainable monoculture of prawn has caught up, which though provides higher net return over rice-prawn culture in short run, is found to be unsustainable both from ecological and social contexts. The cost-benefit and production function analyses were taken up to substantiate that short-run economic incentives form the primary reason for this shift. Despite the state government's direct intervention that has made the monoculture illegal, more area is being gradually brought under fallow-prawn and prawn-prawn systems, owing largely to the multitude of constraints associated with the labour-intensive rice cultivation. The market mechanism, involving a price premium for the branded Pokkali rice, can be seen as an efficient alternative for the *in situ* conservation of the indigenous varieties and cultivation practices. Though Pokkali rice is distinguishable in taste, quality and utility from the conventional rice, a positive willingness to pay is ensured for this indigenous-organic rice, especially in case of the urban consumers. Considering the merit good status of organic products, state intervention, especially in the form of subsidies was found to be highly popular among the farmer and consumer groups.

**Keywords:** Command and control, indigenous farming system, Kerala, Market creation, Organic rice, Pokkali lands