Theme: Marketing  
Session: TuB2 - Supply Chains

Title: Distribution of value and risk in small-scale fisheries: A market chain analysis of the trade in live reef food fish

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Abstract: Market chain analysis can provide information on distribution of costs and profits to intermediaries and aid in identifying concentrations of market power. There is a paucity of research and limited empirical data on market chains in developing country fisheries, especially small-scale fisheries. With these fisheries dominated by artisanal and subsistence fishers, concerns that gains will be unevenly distributed along the chain are more acute. Differences in gains extracted along the market chain are usually attributed to marketing costs incurred by upstream agents. The magnitude of these costs will vary with market chain complexity, distances to market and processing, storage and transportation requirements. Another factor often identified as affecting the distribution of value along the chain is risk; however risk is rarely explicitly incorporated into market chain analysis to explain divergences in value gains extracted. All these factors are exacerbated in low technology small-scale fisheries.

This paper examines the market chain for the trade in live reef food fish (LRFF), a high-value export fishery involving many countries in the Asia-Pacific region. Trade characteristics mean the market chain is more extended than most seafood chains and susceptible to concentrations of market power by downstream agents. In the first instance the paper describes the supply chain for LRFF, identifies costs and revenues along the value chain and estimates the relative size and distribution of final values. A spreadsheet model of the market chain is developed that incorporates risk borne by various agents along the chain and is used to explore value distribution outcomes under a range of risk reduction scenarios. Understanding the risk profile of the LRFF market chain can help frame policy initiatives that target technological improvements and marketing strategies toward mitigating biological impacts and enhancing economic benefits accruing to upstream fishing communities.