

Title: **Technical Change in A Malaysian Purse Seine Fishery: Implications for Development and Resource Management**

Authors: Eric Janofsky, (USA)
Bee Hong Yeo (Malaysia)
Benjamin Gilbert (USA)
Theodore Groves, University of Callifornia, San Diego (USA)
Dale Squires, NOAA Fisheries (USA)

Abstract: The impact of technological adoption on economic growth is a critical issue for economic policy in the developing world. The issue is further compounded for industries exploiting renewable common resources with ill-structured property rights, because greater efficiency increases pressure on the resource stock. The paper analyzes the effect of adoption of electronic devices on production of the east coast Peninsular Malaysian purse seine fishery. We find that adoption raises expected catch at all levels of input in the fishery. We also find that technological change is fuel-saving and capital- and labor-augmenting, suggesting that electronics allow greater ease at finding fish and that a larger capital stock and crew contributes to the increased catch. We conclude with a discussion of the implications for sustainable resource management and economic development.