

Information (Technology), Market Performance, and Welfare in The South Indian Fisheries Sector

NextLab I Reading Presentation

09/17/2008

Executive Summary

- Does ICT really matter (has a priority) in low income countries?
- Use introduction of mobile phone into Southern India as evidence
 - A close study from 1997 to 2001
 - Proving economic models and theories (90% of the paper)
- Result confirmed improvement in market performance and citizen welfare

Study conducted in Southern India

Kozhikode, Kannur, and Kasaragod



Figure by MIT OpenCourseWare, using base map by US CIA.

- Heavy fisheries area
- 15 markets 15 miles apart
- 300 sardine fishing units
- One market sell per day
- Introduction of mobile phone in 1997 to 2000



The Economics Model predicts market performance and welfare improvement

- Information enables sellers decision to not sell on local market
 - High VS. low density of fish zones
- Model and theorem based on Bayes-Nash equilibrium game theory
- Linear regression predicting the effect



Results matches predictions

- Lower in overall fish price (4% lower)
- Lower price dispersion within and between markets (from 70% to 15%)
- Eliminate waste (from 5-8%)
- Consumer and producer surplus increase

Alternative explanations are disproved

- Explanations such as:
 - Mobile phones lead to increase in wealth in those area of coverage
 - Mobile phones effect transaction timing and create collusion
 - Entry and exit changes overtime

Summary

- ICT adds benefit to low-income region by generating a well functioning market and should be prioritize
- Practice can be repeated elsewhere especially in perishable commodities sector
- Information available from ICT development enforce economic theorem
 - Law of One Price
 - Welfare Effect

MIT OpenCourseWare
<http://ocw.mit.edu>

MAS.965 / 6.976 / EC.S06 NextLab I: Designing Mobile Technologies for the Next Billion Users
Fall 2008

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