Ph.D. course

Topics in Applied Microeconomic Analysis

Department of Economics and Resource Management (IØR)
Norwegian University of Life Sciences (UMB), Ås

Lecturer: Gerald Shively, Professor, Dep. Agric. Econ., Purdue University, USA
Dates: 7. -16. June 2010 (lectures 09:00-10:30; exercises & readings)
Place: Ås, Norway
Credits: 5 ECTS
Course code: ECN 452
Application deadline: 7. May 2010

Objectives
This short course is targeted to Ph.D. students with previous experience in economics and an interest in applied microeconomics, especially agricultural development. The course will cover a range of topics in applied microeconomic analysis, with an emphasis on building layers of complexity in empirical models of farm household behavior. Course material will be motivated by daily readings and examples from developing country settings. Topics to be covered include risk and uncertainty; technology adoption; productive efficiency; market participation; intertemporal choice; and investment behavior under uncertainty. Throughout the course the applied emphasis will be on the use and analysis of household survey data. Students will have the opportunity to replicate results from published research to gain practical insights into the research process. The course will make extensive use of data for examples and daily group projects. Data will be distributed (in Stata v9 format) on Day 1. Course evaluation will be based on class participation and a term paper. The due date for the term paper will be announced in class.

Participation
There is no course fee. Funds are available to support travel and accommodation for external participants. Applications for such support and registration can be directed to shulic@umb.no. Please include a budget. Accommodation can be arranged in the guest houses of UMB. More information about accommodation is available at http://www.sias.no/english/housing/guest_accomodation.html. Participants should apply directly at this page.

Student at UMB can register directly by course code ECN452. For any further questions, please contact Shuling Chen Lillemo:
Email: shulic@umb.no
Web: http://www.umb.no/ior-en
Tel: +47 45066216
Fax: +47 64965701
**Course schedule**

Key readings are marked with * below. Students are expected to read these items prior to the class meeting in which the reading is to be covered. Other readings are considered background or supplementary.

**Day 1: Household modeling**

We begin by outlining the basic static model of household production and consumption. We explore issues related to household shadow prices and market participation. We examine issues of separability and non-separability of household production and consumption.


**Day 2: Agricultural production**

We spend the session engaged in some hands-on work related to measuring agricultural production and measures of factor productivity derived therefrom.


**Day 3: Productivity and efficiency**

On day 4 we investigate some fundamental questions from the microeconomic development literature. What does it mean to be productive? What does it mean to be efficient? How do we measure these concepts and what factors influence a household’s ability to be productive or efficient?


Day 4: Technology adoption

We generalize the basic household model and build a simple conceptual model of investment following Marshall. We consider the role of risk and uncertainty in influencing the adoption of new technologies.


Day 5: Market participation

We revisit the role of market participation. We examine factors associated with market participation and study the household-level impacts of participation in agricultural markets.


Day 6: Competing and synergistic activities

Rural households often have a range of possible activities in which to engage. One of the main concerns is whether to grow food crops, cash crops, or both. How do households choose their portfolio of activities? How do we model and measure competing and synergistic activities?

Day 7: Labor allocation

Labor is one of the most important factors available to rural households. In many settings, it is the only productive asset available for allocation. How do households decide where and when to allocate their labor? How can we formally model and measure labor allocation?


Day 8: Investment under uncertainty

How should an agricultural household decide whether to invest in capital? Why do traditional NPV models of investment fail to explain observed investment behavior? Here we review a theoretical approach to investment behavior that emphasizes irreversibility and uncertainty.


The lecturer
Gerald Shively (shivelyg@purdue.edu) is an applied economist with research interests in tropical forests, agriculture, and land use change. Much of his work focuses on decision making in low-income settings, and the influence of trade and economic policy changes on land use. He works with colleagues in Purdue's Center for Global Trade Analysis to develop novel approaches to integrated assessment (IA) of climate change research, especially the development of methods to evaluate economic costs and benefits of alternative climate change scenarios. He has conducted studies to assess the carbon storage potential of tropical forest and agroforestry systems. He is the author of more than 50 peer reviewed publications and co-editor of the recent book Land Use Change in Tropical Watersheds: Evidence, Causes, and Remedies (CAB International, 2005). Jerry currently serves as Co-Editor-in-Chief for the journal Agricultural Economics and is an Associate Editor for the journal Environment and Development Economics.