

Development Economics

Physical Capital and Rural Development

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Course Description

- Topics in Rural Development
- Classes: Monday Tuesday and Wednesday
- 3 formats:
 - Monday: Lab data Analysis (S2 @ 2pm)
 - Tuesday: Topic in Rural Development (reading list)
(Classroom A @ 2pm)
 - Wednesday: Seminar by professional of IO (Classroom A @2 pm)
- Group work Assignment (mandatory)
- Type of Exam: Essay versus Standard written exam

Essay: Literature Review (updated 2000 to 2015)

- The inverse farm size productivity relationship
- Land grabbing and agriculture productivity
- Spillovers effect Large versus small farm
- The role of education and infrastructure in new technology adoption
- The importance of coffee production among small farms in SSA
- Vulnerability, diversification, and decision making under risk

Group Work: Report on Land Market using the LSMS-ISA

- Each group will have to provide
- Folder of the country chosen with the following sub-folders:
 - Round one (in the case of UGA : 2009-10 etc) ...Round XX (Uga: 2012-13)
 - do
 - graphs
 - tables
 - redaction
 - The folder tables should include the descriptive statistics based on the excel spreadsheet Cross Section -Panel Summary Table on Land Module-final.xlsx
 - A Report on the data creation and a file in excel with the variable name from the dataset used to construct each variable (based on the file in excel: Variable description). Remember that the report should include the number of HH in each wave.
- Each group has to produce 2 different datasets for each wave: one at the plot level, one at the HH level. Each dataset should include a new variable called year=XXXX-XX (UGA= year=2009-10)
- The final datasets will include only the variables constructed plus the variables of the location of the HH (region, urban/rural, community (EA), district etc...)
- The final outline of the report will be
 - Hypothesis on the data variable creation
 - Institution of land market in the country
 - Description of the current land market from the dataset constructed
- Graphs produced with the variables constructed, and creation of additional variables (such as input technology (improved seeds, fertilizers, agrochemicals) will be a plus

Land as a factor of production

- Seventy-five percent of the world's poor live in rural areas, and most are involved in agriculture.
- In developing countries, land is a mean for generating a livelihood, accumulate wealth and transfer it between generations. Land serves as (de Janvry, Gordillo, Platteau and Sadoulet, 2001; Deininger, 2003):
 - *a store of wealth against inflation: a source of self-employment or food security;*
 - *a collateral for credit or serves to access credit subsidies (Binswanger and Rosenzweig, 1986).*
 - *a source of insurance as can be sold or rented out for liquidity.*
- Access to land is of fundamental importance for rural poor in order to increase their quality of life, and has significant consequences on welfare, market efficiency and equity.
- As a result, the well functioning of land market is crucial in order to determine the best use of land and, hence, promote market efficiency and overall equity.

Land and property rights

- **BENEFITS OF WELL-DEFINED PROPERTY RIGHTS**

- greater incentives for (and lower costs of) long-term resource conservation and the associated increased demand for investment.
- improved transferability (temporary or permanent) of land to cultivators who have the resources to make better use of it
- Secure land title combined with unrestricted land transactions play an important role for credit market.

- **COSTS OF WELL-DEFINED PROPERTY RIGHTS**

- costs associated with a physical delineation of the plots, the guarantee of an accurate record
- at low levels of development, communal land ownership may perform an important insurance function that would be eliminated by establishing fully individualized property rights in land

Functioning of Land Markets

- **LABOR MARKET IMPERFECTIONS**

- SUPERVISION CONSTRAINTS for hired labor => superiority of owner-operated farms (Jensen and Meckling 1976, Calvo and Wellisz 1978; Eswaran and Kotwal 1985a,b) . Wage workers' true effort is not easily observable. Cost of supervision is large in agricultural production due to spatial dispersion of the production process Family members,
 - have higher incentive to work than hired labor;
 - share in output risk; and
 - can be employed more flexibly without incurring in hiring costs
- TRANSACTION COSTS: will force households to cultivate the land they own, implying that land-abundant households would need to cultivate their land with expensive labor and land-scarce households would be trapped by underemployment in low-return, own-farm activity.

Functioning of Land Markets (2)

- **CAPITAL MARKET IMPERFECTIONS**

- Asymmetric information and moral hazard lead generally to quantity rationing in credit markets (Stiglitz and Weiss, 1981). Rural credit markets are difficult to develop and sustain, Credit rationing could be relieved by the ability to provide land as a collateral. However: many commercial banks do not lend land to small farmers because inability to make profits, high volatility of agriculture income, difficulty of sharing risk. The cost of borrowing money is a declining function of the amount of land owned => only large farms have access to credit. Local and National Bank.

- **FEW ECONOMIES OF SCALE IN AGRICULTURAL PRODUCTION**

- Negative relation: (Berry and Cline 1979; Burgess 2001; Carter 1984; Kutcher and Scandizzo 1981; Newell, Pandya, and Symons 1997; Udry 1997). Some of the observed inverse relationship can be explained by differences in land quality, as large farmers tend to cultivate less fertile land and grow crops of lower output value (Benjamin 1995; Bhalla and Roy 1988; Verma and Bromley 1987).
- The relationship between farm size and productivity will tend to be positive in situations where credit access is more important than the ability to overcome labor market imperfections (Kevano, 1996 – Sudan) or when larger farms have higher possibility to access to capital and other inputs

Implications for land rental markets

- Land sales markets provide an opportunity to obtain land for permanent use, which is normally associated with higher investment incentives than short-term rental
- However, transaction costs that are higher than in rental markets (Lence 2001)
- Surveying and mapping fees Appraisal fees
- Notary fees; Registration fees
- Taxes on land sales
- Other administrative costs
- If all markets were perfect, the sale price of land would equal the net present value of the stream of profits that could be derived from the land, and potential buyers would be indifferent between acquiring land through rent or through purchase.
- In areas with poorly developed insurance and capital markets land sales will likely be few and limited mainly to distress sales
- In agricultural economies where risk is high and purchasers' savings are the main source of funds for land acquisition, prices for land can fluctuate significantly over time. The reason is that because returns from agricultural production are highly covariate (differences in land prices in good and bad years

Implications for Land Sale Markets

- allow flexibility in adjusting the land area used with low transaction costs;
- require only a limited capital outlay, thereby leaving some liquidity available for productive investments;
- facilitate easy reallocation of land toward more efficient users than the current owners, especially if the current owners are old, are urban beneficiaries of restitutions, and so on;
- provide the pre-condition toward land ownership by the landless;
- help overcome, through sharecropping contracts, market failures in labor, insurance, credit, management, and supervision (de Janvry and others 2001).
- as opportunities in the non-farm economy increase, land markets allow households to engage in migration, specialization, investment, and intergenerational land transfer. Households with low agricultural skills are likely to be able to obtain higher incomes from off-farm employment than from farming, and thus will be better off if they rent out some or all of their land for others to cultivate