Agricultural Organization and Productivity:

Introduction

- Agriculture occupies a central place in the economy of many less developed economies.

  – According to the UNDP, in 1996 agriculture employed

    ○ 60% of the labour force while generated only 20% of GDP of the LDCs;

    ○ 2% of the labour force while generatyed 2% of GDP of the DCs.

- The first fact implies that in the LDCs agriculture is relatively less productive compared to non-agriculture (employs 40% of labour, contributes 80% of GDP).

- The two facts together imply that agriculture in the less developed countries is also relatively less productive compared to agriculture in developed countries.

  – Yet it provides the livelihood of a majority of people in LDCs.

- One set of reasons is backward technology, infrastructure, "bad policies", and so on.

- Another set of reasons is *missing markets*, *transactions costs*, and *inefficiencies* of agricultural organization.

Market Incompleteness and Informal Institutions

- Outline and try to understand the variety of **market imperfections** pervasive in the developing world and the nature and effectiveness of **informal institutions** that arise to fill the resulting gaps.

- The literature has witnessed a remarkable explosion in the last three decades drawing on advances in

  – game theory and

  – the economics of information.

- The main contribution of this literature is

  – explain the source of distinctive institutional characteristics of the *informal economy* in developing countries extensively documented by

    ○ empirical economists, sociologists and anthropologists.

(a) Fragmented labor and credit markets:

  – large variations in wages and interest rates within a narrow geographic region, despite the presence of competition.

(b) Persistent lack of market clearing despite absence of any regulations that prevent prices from adjusting flexibly:

  – unemployment; credit rationing.

(c) Pervasiveness of long-term contracts between

  – borrowers and lenders, employers and employees, farmers and traders.

(d) Coexistence of diverse contractual forms:

  – tenancy contracts, some involve fixed rents and others sharecropping.

(e) Unequal treatment of observationally similar workers or borrowers.

– Dual labor markets where some workers enter into long-term contracts while others carry out similar tasks on a casual basis at substantially lower wages.

(f) Interlinked transactions and exclusive dealings between specific agent pairs across multiple markets:

– bundling of credit with tenancy, employment or marketing contracts.

(g) Importance of asset ownership in access to credit, tenancy or employment markets.

– Limited access of the poor

  ○ to credit owing to lack of collateral

  ○ to tenancy owing to higher risks of rent default

  ○ to employment owing to malnutrition and absence of human capital.

(h) Higher yields achieved by small farms *vis-a-vis* large farms, despite superior access of the latter to credit and technology.

(i) Thinness of certain markets such as the market for land sales;

– Causes persistence of tenancy and unequal land ownership distributions despite the superior productivity of small family farms.

(j) Importance of informal cooperatives and kinship networks in determining access to essential productive inputs such as

– credit, insurance, technological information, water and common lands.

- These phenomena are difficult to explain within the traditional neoclassical theory of a complete set of Arrow-Debreu markets.

  – Neither are most of them consistent with textbook versions of monopoly or oligopoly.

- Accordingly many traditional scholars have inferred the irrelevance of neoclassical economics to the context of developing countries.

 ⇒ Need for alternative paradigms.

- The new **economics of information** does provide a cogent explanation of many of these institutional characteristics

  – within the context of an analytical framework grounded on the same methodology as the traditional approach.

  – The theoretical models also serve as a useful basis for empirical testing and measurement.