4. Agricultural Transformation and Rural Development

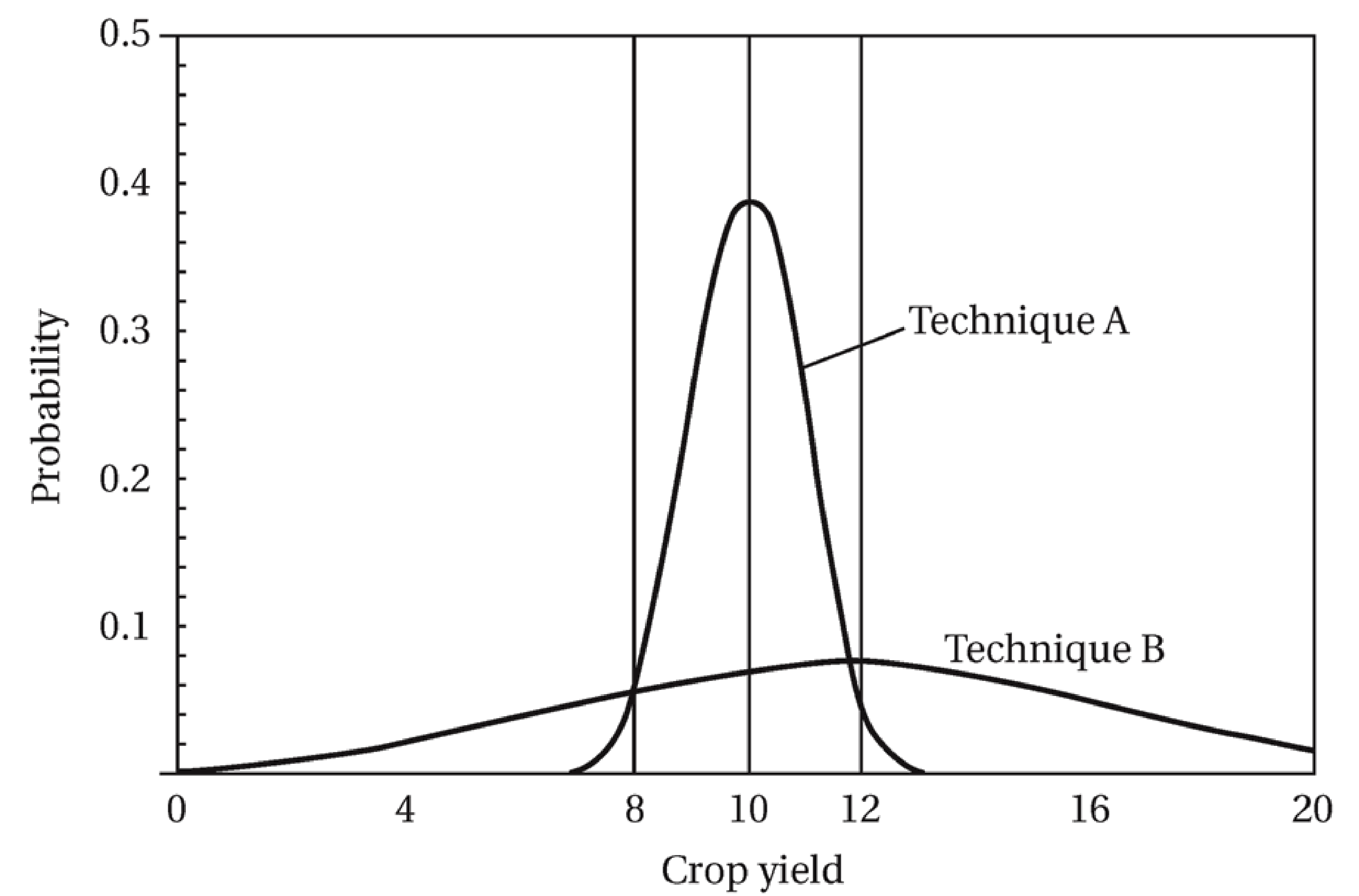
The Economics of Agricultural Development

- Transition From Peasant to Commercial Farming
- Subsistence farming: risk aversion, uncertainty, and survival
  - The transition to mixed and diversified farming
- Commercial farming : from divergence to specialization

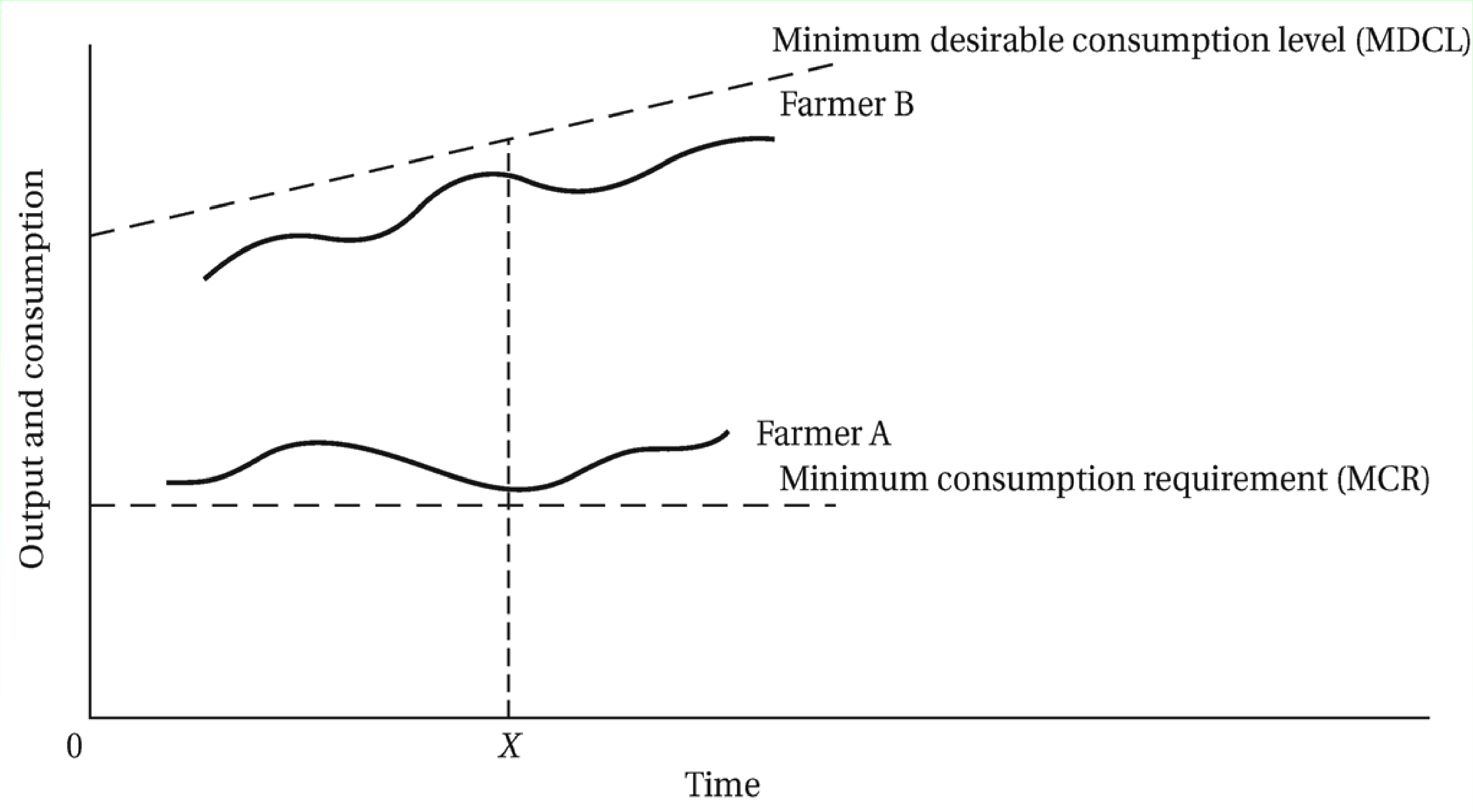
Subsistence farming

- Traditional two-factor neoclassical model is not adequate
- Price uncertainty and limited access to credit and insurance explains risk aversion
- Risk averse subsistence farmers prefer technologies that combine low mean-per-hectare with low variance to alternative high yielding technologies
- Efforts to minimize risk and remove commercial and institutional obstacles to small farmer innovation are necessary

Crop Yield Probability Densities of Two Different Farming Techniques



Small-Farmer Attitudes toward Risk: Why It Is Sometimes Rational to Resist Innovation and Change



Conclusions: farm types

- There are 3 types of farms in developing countries: subsistence, mixed, and specialized commercial, still most of them are peasant subsistence and small-scale mixed family farms.

- Large-scale commercial farms should not form the basis of most agricultural development strategies due to many problems in developing nation

Conditions for Development

1. Farm structures and land tenure patterns must be adapted to the dual objectives of increasing food production and promoting a wider distribution of the benefits of agrarian progress
   – Land reform is a necessary first condition, entails a redistribution of the rights of ownership or use of land
   – Empirically, land redistribution increases rural employment, raises rural incomes, and leads to grater agricultural production and more efficient resource utilization.

2. Government support systems are created to provide the necessary incentives, economic opportunities and access to needed credit and inputs to enable small farmers to expand output and raise productivity

- network of external support services
- appropriate pricing policies related to both farm inputs and outputs

3. Rural development, though dependent primarily on small-farmer agricultural progress, implies much more. It encompasses;

- Efforts to raise both farm and nonfarm rural real incomes through job creation, rural industrialization,
- Provision of education, health and nutrition, housing, and a variety of related social and welfare services
- A decreasing inequality in the distribution of rural incomes and a lessening of urban-rural imbalances in incomes and economic opportunities
- The capacity of the rural sector to sustain and accelerate the pace of these improvements over time

Toward a Strategy of Agricultural and Rural Development

- Improving small-scale agriculture
  - Institutional and pricing policies: Providing necessary economic incentives
  - Adapting to New opportunities and New Constraints
- Conditions for Rural development
  - Land Reform
  - Supportive polices
  - Integrated Development Objectives