

# Markets in Agriculture

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## How important of markets?

- ▶ Well-functioning markets ensure that macro-level economic policies change the incentives and constraints by micro-level decision-makers.
- ▶ On the other hand, well-functioning markets support important opportunities for welfare improvements at micro-level that aggregate into sustainable macro-level growth.
- ▶ The efficiency of the marketing system affects both producer income and consumer cost-of-living
- ▶ Imperfect markets are contagious: when there is a market failure in some sector, it can lead to problems in other markets, particularly when these markets are interrelated.
- ▶ Problems of information asymmetries, risk, and contract enforcement are main reasons of incompleteness or imperfection of markets. These cause high transaction costs for the market prices.

# Information, incentives, and enforcement

- ▶ Information: Unobserved actions
  - ▶ Landlord cannot observe tenant's effort as many factors, such as rains and pests, and cannot determine output.
  - ▶ The incomplete market here is from lack of observability. The problems of unobserved action lead to '*moral hazard*' and a need to study theory of contracts.
- ▶ Information: Unobserved types
  - ▶ E.g. lending problem: we cannot identify who are intrinsically bad risks, potentially default. Two main solutions are to charge an interest-rate premium on the loan or to require collateral.
  - ▶ High interest rates will discourage good borrower, and will not prevent bad borrowers from defaulting
  - ▶ Lending to a group, cutting off loans if any one member of the group defaults, might help when within a group they know each other better, hence they will self-select into safe groups.

# Information, incentives, and enforcement

- ▶ Incentives: Conflict with insurance
  - ▶ To solve moral hazard from limited information, contracts have to be designed to provide appropriate incentives.
  - ▶ For example, if a large employer hires labor and is unable to monitor labor's activities, he might offer a contract with attractive wage and with explicit punishment (if shirking, then fired)
  - ▶ However, how can we find 'evidence' that directly say it's a labor's failure, not from weather
  - ▶ Contracts based on indirect evidence create uncertainty for economic agents who dislike uncertainty, and this lack of insurance constitute inefficiency

# Information, incentives, and enforcement

- ▶ Incentives: Short-term contracts
  - ▶ Employees can legally terminate a contract. Employers still cannot ensure benefits from their investment in the form of adequate nutrition or on-the-job training.
  - ▶ In poor societies, this can lead to undernourished population and overall economic inefficiency.
- ▶ Enforcement: Limited liability
  - ▶ Limited liability constraint: when the borrower is poor and cannot pay out of his wealth because he has little or none.
  - ▶ Implication: borrowers may want to overinvest in risky projects since the lender is the one who bear the downside risk.
  - ▶ Outcome: credit rationing - you don't raise loan levels because you are afraid of losing more if the project collapse, or you are afraid to raise interest rates because you will attract more risky borrowers.

# Information, incentives, and enforcement

- ▶ Enforcement: Breaking agreements
  - ▶ Mutual insurance scheme: farmer A may transfer money to farmer B when A has a good harvest and B does not and vice versa.
  - ▶ How is this scheme to be enforced when it comes to B's turn to pay, but he does not?
  - ▶ Informal insurance must rest on an implicit nexus of social agreement, sanction and discipline of deviators from the agreement, which we need the flow of information to make this mechanism works.