

Imperial College  
London

**MAKING AGRICULTURAL MARKET  
SYSTEMS WORK FOR THE POOR:  
*Promoting effective, efficient &  
accessible coordination & exchange***

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contributions from the Agriculture and Natural Resources Team of the  
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# Outline

- *Starting points*
  - Exchange and coordination mechanisms
  - Agriculture's special role in driving pro-poor growth
  - Market failures in poor agriculture
  - Constraints to agricultural and market development in poor rural areas
- *Policy history: States, markets and pro-poor agricultural growth in the 20th century*
  - State led agricultural development policies
  - Market led agricultural development policies
  - Differing views on market led agricultural development
- *MMWP implications*

## Exchange & coordination: the basis for growth

- *Gift exchange*
  - shared values of reciprocity & collective good.
  - imprecise mutual obligation
  - declining relative importance *but* social capital & personal relations in business
- *Hierarchies*
  - command & control to allocate resources.
  - dominant mechanism in developed economies
- *Markets*
  - voluntary transactions for mutual gain
  - precise terms of exchange
  - should facilitate competition, quality & production efficiency where they work
  - high 'fixed' system costs but high volumes yield low unit costs

## **Agriculture's special role in driving pro-poor growth**

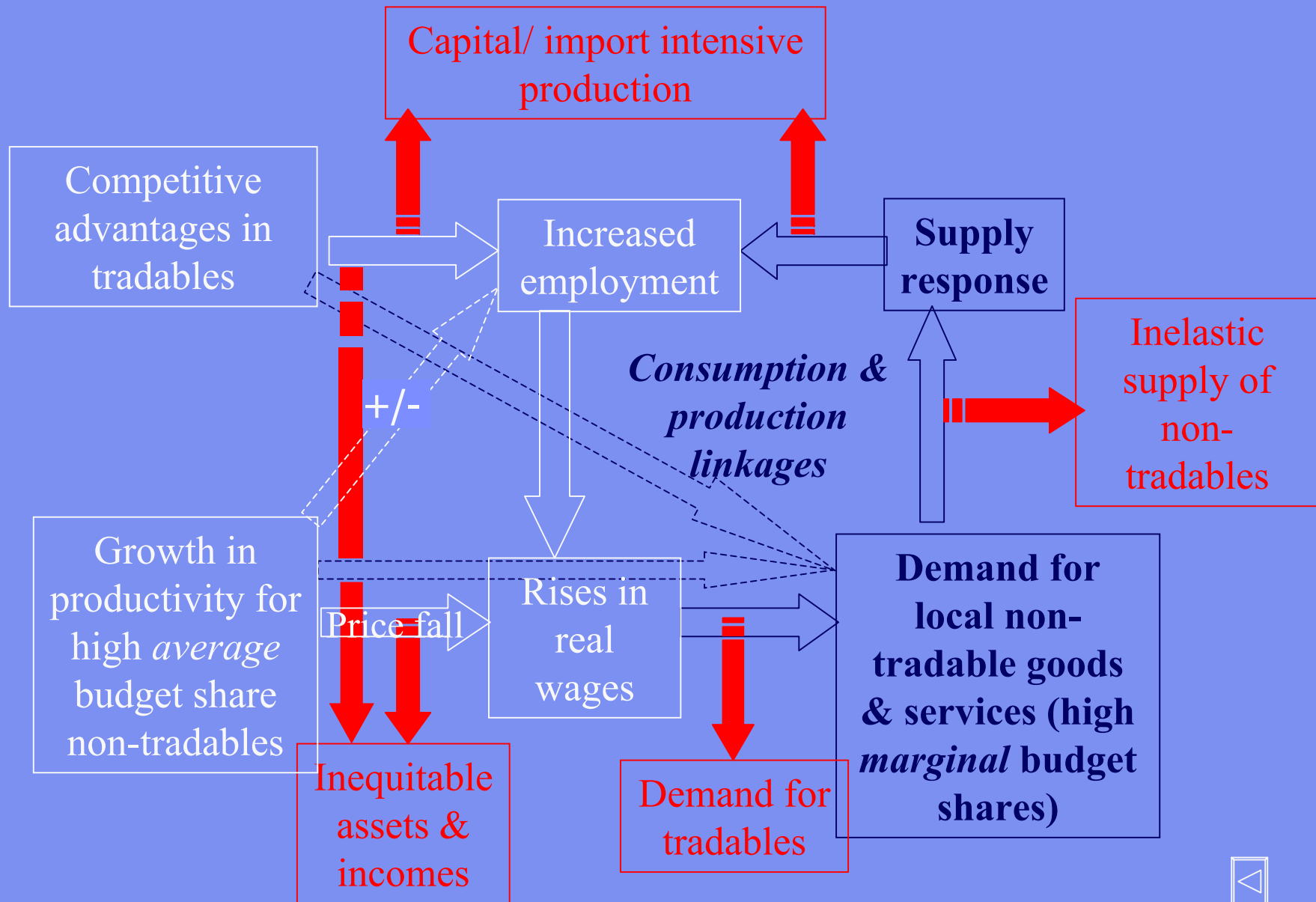
- ❑ direct impacts of increased agricultural productivity & incomes on poor farmers & farm labourers
- ❑ cheaper food for the urban and rural poor;
- ❑ capital investment in agriculture itself
- ❑ release of surplus capital and labour to other sectors of the economy
- ❑ stimulus for demand for local goods and services

Depends on

- ❑ Stages of development & growth
- ❑ Nature of growth (land productivity & labour demand, in tradables & staples)
- ❑ Both agricultural markets (for driving growth) and linkage markets (for transmitting benefits)

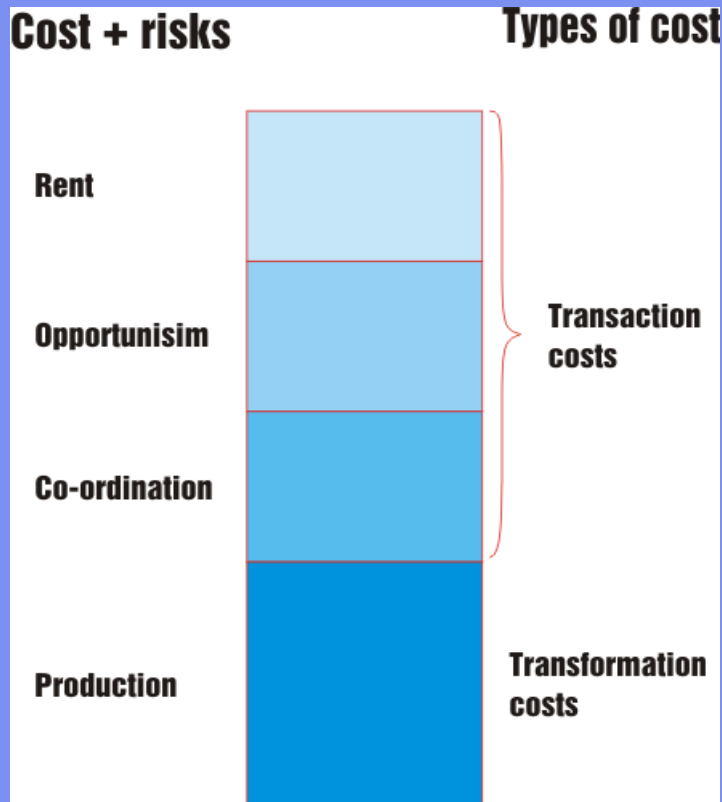


*Driving* **GROWTH**, *supporting* **LINKAGES**, *reducing* **LEAKAGES**



# Market failures & transaction costs in poor agriculture

- ❑ *Public good failures:* research, extension, communications infrastructure, (health services)
- ❑ *Transaction failures:* high transaction costs & risks
- ❑ *Access failures:* exclusion & discrimination



**Rent** refers to costs or losses as a result of powerful government, political, criminal or other agents expropriating or threatening to expropriate income or assets.

**Opportunism** costs are associated with the risk of cheating.

**Coordination** costs are the costs related to matching suitable buyers and sellers. These may be “search” costs as well as “reference” costs.

## Constraints to agricultural & market development in poor rural areas

- Generic and often mutually reinforcing problems:
  - poor roads & telecommunications;
  - limited monetary economy;
  - thin markets for agricultural inputs, outputs & finance
- Business environment (especially in agriculture) with
  - weak information;
  - difficult contract enforcement;
  - high risks (in production, prices, access to inputs and markets, enforcing contracts);
  - high transactions costs

## Constraints to agricultural and market development in poor rural areas (2)

Specific issues for small scale farming and labouring:

- ❑ long production & sales cycles (exacerbating risks) with seasonality in labour use, cash flow, food availability, etc;
- ❑ technical progress (& land pressure) need inputs, but small individual input purchases, with high transaction costs;
- ❑ discontinuous switches between technologies and crops, with threshold prices and levels of performance above (below) which certain activities are (are not) viable;
- ❑ input purchases need seasonal finance (very difficult)
- ❑ significant shares of output for subsistence: output sales may not fully cover purchased input and labour costs;
- ❑ tenure arrangements affect farmers' ability to borrow, to expand, or to exit with a lump-sum

# Coordination Failure: Low Level Equilibrium Trap



## Mechanisms for overcoming coordination failure?

- ❑ **Pump priming** (external investments)
- ❑ **Threshold shifting** (prices, technology, natural & price risks, infrastructure, coordination costs and risks)
- ❑ **'Non-market' coordination** (hierarchy/ gift/ market hybrids)

- ❑ *Local coordination*

- Endogenous
- 'Soft' external support
- 'Hard' external system  
(strong central coordination & credible commitments)

- ❑ *Extensive coordination*

- vertical integration (commercial / state farms)
- vertical relations (interlocking, parastatals)
- horizontal relations (farmer or trader associations, parastatals)



## Access failures for the poor

- Economic exclusion
  - basic lack of resources needed to participate in productive activities and associated markets.
  - 'transaction failures' with high fixed transaction costs in small scale transactions & for marginalised / those with little social capital
- Social exclusion or discrimination
  - based on caste, class, tribe, religion, gender, etc
  - depresses efficiency of market systems & poor people's benefits from economic exchange.
    - *Socially discriminatory segmented markets*
    - *Extractive interlocking*

## States, markets and pro-poor agricultural growth in the 20th century

Two broad phases of dominant development policy in poor rural economies:

- *state-led* development: state interventions to address *market failures*
- *market-led* development: reliance on the private sector and markets to avoid *state failures* when intervening in markets

## State led agricultural development: policies & outcomes

- Price interventions: input and finance subsidies, output price stabilisation (support?)
- Organisational interventions (parastatals, state-sponsored cooperatives, agricultural finance)

### Outcomes:

- Some (mainly African) countries large government expenditures with little gain: major drain on government budgets.
- Other (mainly Asian) countries the greatest processes of agricultural growth and poverty reduction in history.

# Processes & conditions for agricultural transformations

## GOVERNMENT ACTION

*Phase 1.  
Establishing  
the basics*

Roads / Irrigation Systems  
/ Research / Extension /  
(Land Reform)

*Phase 2.  
Kick starting  
markets*

Reliable local seasonal  
finance, input & output  
markets

*Phase 3.  
Withdrawal  
(non-agric ?)*

Effective private  
sector markets

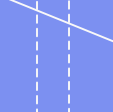
## STATUS OF AGRIC

Extensive, low  
productivity  
agriculture.

Profitable intensive  
technology. Wider uptake  
inhibited by lack of input,  
finance & output markets

Effective farmer input  
demand & surplus prodn.

Larger volumes of finance &  
input demand & produce  
supply. Non-agric. linkages.



## **State led agricultural development: demise**

In both failed & successful state led systems, government intervention then (correctly) seen as:

- costly & inefficient
- anti-competitive
- serving harmful vested interests
- large drain on public resources (inhibiting macroeconomic stabilisation, diverting public expenditure)
- giving bad (or non-existent) services to farmers

## Market led agricultural development: policies

- ❑ State activities to address public good failures (research, extension & market information; market regulation; road & telecommunications infrastructure)
- ❑ Privatisation or dismantling of agricultural marketing parastatals (de-linking credit, input and output markets)
- ❑ Deregulation of markets
- ❑ Elimination of credit, input and output subsidies
- ❑ Wider reforms to reduce public expenditure & remove tariffs & controls (reduce over-valuation of exchange rates, improve macro-economic environment)
- ❑ “Social action funds” to assist short-term losers
- ❑ Development of institutions supporting markets

## Market led agricultural development: outcomes

- Often provided some quick fiscal relief
- Mixed macro-economic benefits from wider SAPs
- **Successes**
  - in poor countries & lower-middle income countries with dense populations & diversified agriculture & rural economy
  - lower consumer prices for staples in southern Africa
  - some export crops in poor countries (?cotton)
- **Failures**
  - to stimulate pro-poor agricultural growth in poor rural economies with weak infrastructure, high dependence on low productivity staple production, etc

# Processes & conditions for agricultural transformations

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Liberalisation 'fails'

Liberalisation 'succeeds'

## Differing views on market led agricultural development

- *Partial liberalisation*: high investment risks & low incentives: incomplete, uncertain implementation
- *Weak institutions*: high investment risks & low incentives: weak property rights & institutional environment?
- *Institutional critique*
  - Intervention in food staples inevitable & often legitimate
  - Naïve expectations of rapid market development
  - Flaws in failing to address coordination failures?
  - Empirical & theoretical challenges
    - Green revolution experience
    - Predominance of markets in poor rural economies (*atomistic, relational market systems*) & hierarchies in advanced market economies (*market & hierarchy reputational systems*)
    - Benefits of hierarchies - economies of scale (entrepreneurial, transaction cost); incomplete contracts; asset specificity

## MMWP implications: Principles

- ❑ A “stages” view of agricultural development & policy with change over time
  - as markets, hierarchies & economies develop,
  - as importance & role of agriculture diminish
- ❑ Exchanges for direct agriculture growth & for linkages
- ❑ Learn & adapt lessons from state & market led experiences – roles and weaknesses of the state, private sector and civil society organisations
- ❑ Critical questions about the capacity of the state (for regulation? for intervention?) and governance
- ❑ Promote coordinated exchange: improved market performance & reach *with other mechanisms* – e.g. development of hierarchies an explicit goal, with ‘business models’, farmer organisations, etc
- ❑ View coordination as a critical public good
- ❑ Good macro-economic management

## MMWP implications: practice

- ❑ Establish the basics (roads, basically profitable technology, irrigation?)
- ❑ Improve market information systems & reduce transaction costs
- ❑ Promote coordinated supply chains for food & cash crop intensification (financial services, input supply, output buying & processing, transport, research & extension)
- ❑ Facilitate smallholder access to those supply chains;
- ❑ Manage structural transitions & evolution, avoid 'lock in'
- ❑ Land, labour & financial markets to facilitate economic movement
  - International markets, policy & trade;
  - Role & effects of food aid & other safety net support;
  - Difficulties limiting access by disadvantaged groups.

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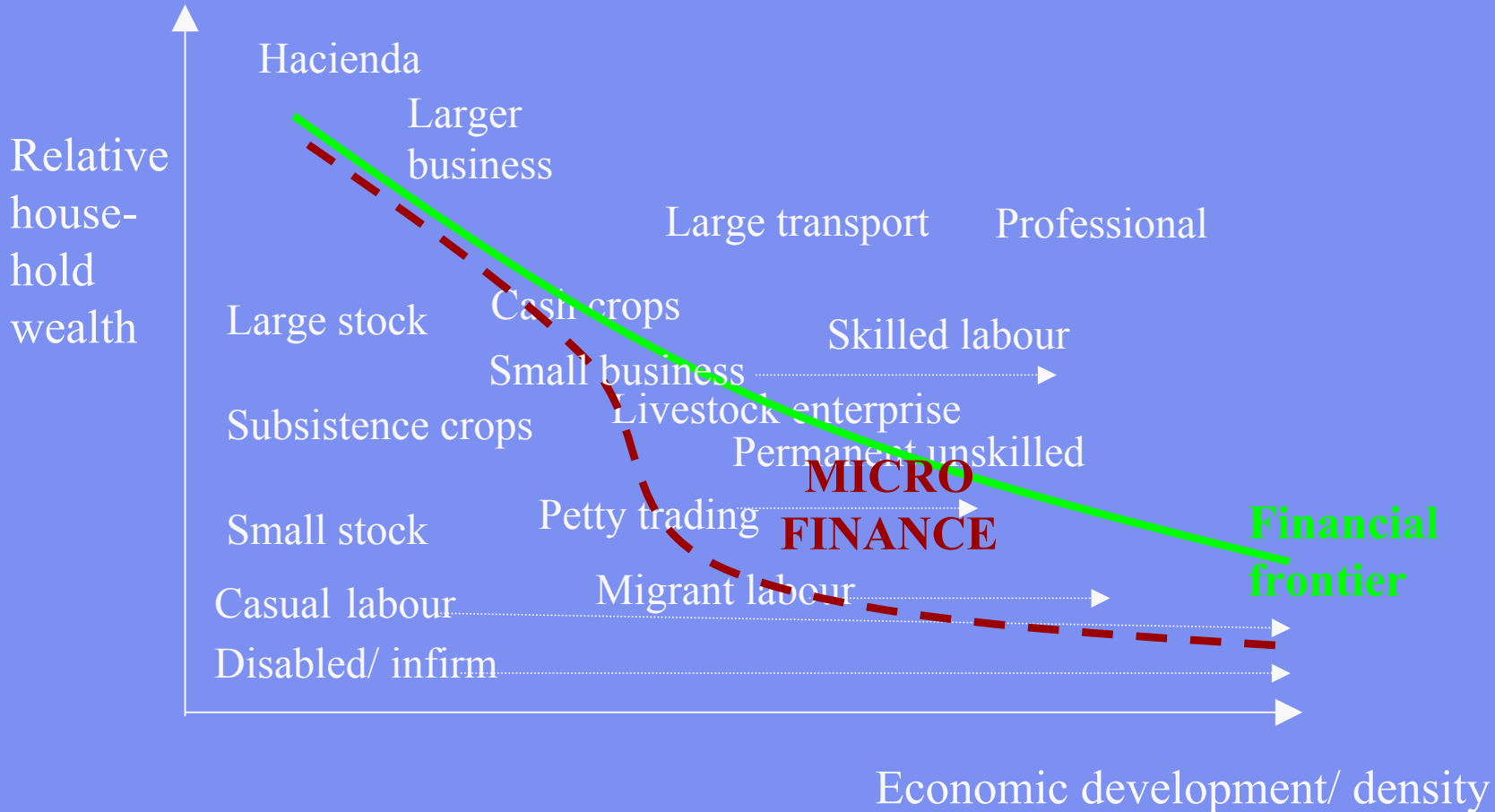
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# Market frontiers



# High and Low Level Equilibria with Coordination Failure

