

From Land Reform to Land Acquisition in West Bengal: State Policy and Agrarian Challenges

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Introduction

- Key questions: what are the major determinants of agricultural output and productivity growth in India?
- Determinants of changes in land inequality and landlessness?
- What role has been played by state policies in this respect in the past?
- What kinds of new policy approaches are needed for the future?

Major Policy Instruments

- In the first two decades since Independence, land reform was considered one of the main policy instruments for economic development in India
- Yet very little has been achieved, and it has all but disappeared from the policy agenda nowadays
- Except for the recent focus on land acquisition policy
- How do we understand the transition from (missing) land reform to (messed up) land acquisition?
- Role of agricultural credit and marketing policies
- Focus of my talk: what can we learn from experience of West Bengal (drawing on a number of different studies)?

Introduction, contd.

- With regard to land, West Bengal is different from other Indian states in many ways:
 - extent of land reform
 - state politics
 - recent land acquisition fiascos
- Nevertheless may be relevant to other states: what did they miss by failing to implement similar land reforms?
- Land acquisition policies: what can be learned from the Singur experience?
- Related policy issues that affect farmers: access to credit, and marketing channels

Presentation Outline

1. Land Reform experience
2. Land Acquisition experience: lessons from Singur
3. Access to credit: lessons from household surveys and policy experiment
4. Marketing constraints faced by small farmers: lessons from household surveys and policy experiment

1. Land Reform: The Questions

- What political factors determine implementation of land reforms?
- What were the effects of land reform on agricultural productivity growth?
- On reducing rural inequality or poverty?
- Other implications for local governance?

Research Strategy (Bardhan-Mookherjee)

- Household and farm surveys in a random sample of 89 villages distributed through all agricultural districts of West Bengal
- Covering the period from late 1960s until 2003-4
- Household surveys include details of landholding and their changes over time
- Farm cost of cultivation surveys from early 1980s to 1995, period of WB Green Revolution
- Detailed data concerning gram panchayats (GP) and agricultural development programs implemented since late 1970s
- Longitudinal analysis at the household/farm level

How Much Land Reforms in West Bengal?

- Large in comparison with other Indian states
- By early 1990s, 6.7% of land area distributed as land titles for the poor, compared with less than 1% for most other states
- Only state to seriously implement sharecropper registration program (Operation Barga):
 - minimum share of tenant
 - protection from eviction
- Mostly happened during the 1980s

TABLE 1: LAND REFORMS IMPLEMENTED IN WEST BENGAL 1978-98

	1978 Average	1998 Average
% land area appropriated	16.4*	15.3
% land area, titles distributed	1.4	5.4
% households receiving titles	4.9	14.9
% land area, tenancy registration	2.4	6.1
% households registered	3.1	4.4
% tenants registered	43.4	51.2
Average across sample villages, weighted by operational land areas		
Source: Block Land Records Offices for land reforms implemented		
Indirect household survey, for distribution of operational land and tenancy)		
*Only available for 34 villages		

Political Determinants of Implementation (Bardhan-Mookherjee 2010)

- Surprising lack of evidence concerning greater intensity of implementation by Left Front *vis-a-vis* the Congress at the local level:
- *Villages with Left-front dominated GPs did not implement more land reform than those with GPs dominated by Congress/TMC*
- Some evidence that political competition at the local (GP election) level increased implementation by either party (inverse-U shape relation between Left Front GP share and land reform implementation)
- Consistent with view that electoral competition (rather than party ideology) drove both parties to implement land reforms in a similar manner

Effects of Land Reforms on Agricultural Productivity

- Traditional view amongst economists that redistribution tends to lower efficiency/productivity
- However, context of land reform is different (owing to combination of imperfect credit markets, agency problems in land and rural labor markets)
- Theoretically, thus, land reforms have the potential to raise productivity, esp in rice-growing areas where agency problems are important and economies of scale are insignificant
- So empirical evidence is needed: where the West Bengal experience is useful
- First describe findings concerning effects of LR on productivity, thereafter on land inequality

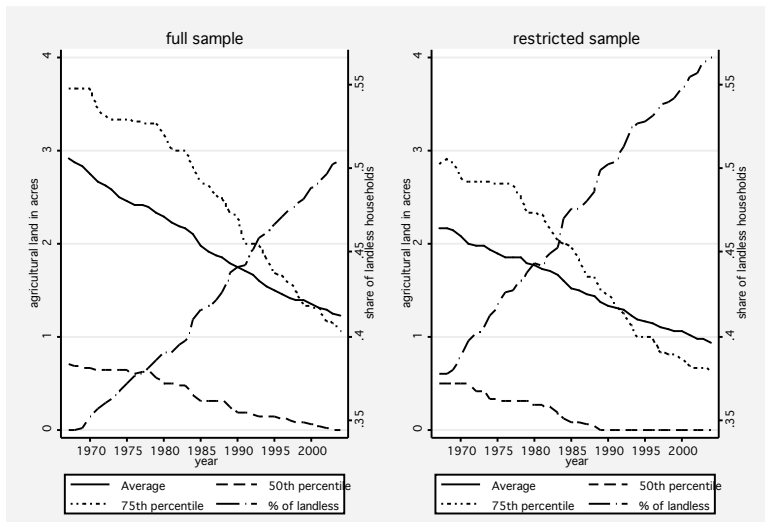
Effects of LR on Agricultural Productivity in W Bengal (Banerjee-Gertler-Ghatak 2002, Bardhan-Mookherjee 2011)

- Distribution of land titles had no significant effects (owing to small, infertile plots distributed)
- Operation Barga, on the other hand, had significant positive effect on productivity at the farm, village and district levels
- District level (BGG): 1% rise in registration rate associated with 0.4% rise in rice yields; Farm level (BM): 1% rise in land area distributed associated with .2-.4% rise in VA/acre
- However, over 2/3 of observed productivity growth owed to delivery of minikits by local governments; contribution of Operation Barga was comparatively small

Effects of LR on Land Inequality and Landlessness in West Bengal (Bardhan-Mookherjee-Luca-Pino 2011)

- To what extent did the land reforms lower inequality and poverty?
- Assess using measures of inequality in ownership of agricultural land
- Constructed from household survey of landholdings
- Find massive changes in the land distribution over 1967-2004

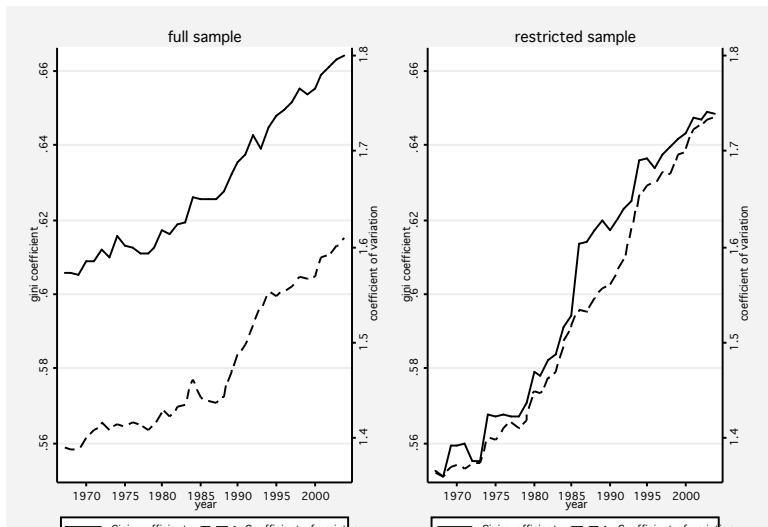
Agricultural land per household 1967-2004



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Land Reform and Acquisition in WB

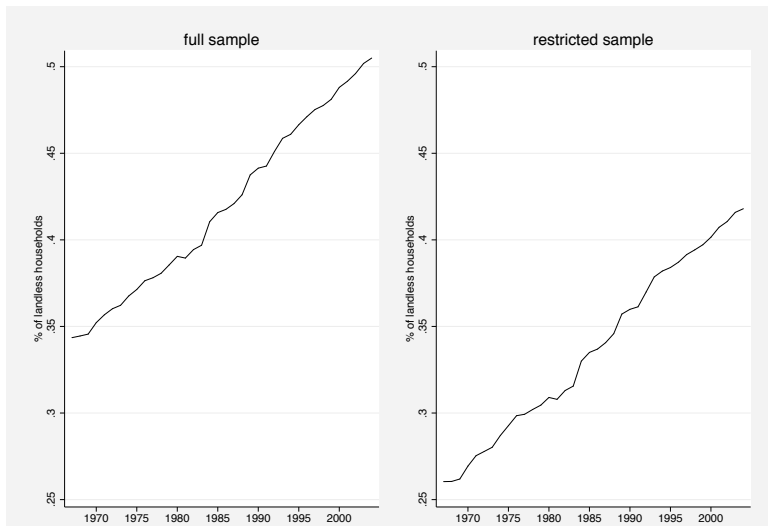
Average within-village land inequality 1967-2004



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Proportion of landless households 1967-2004



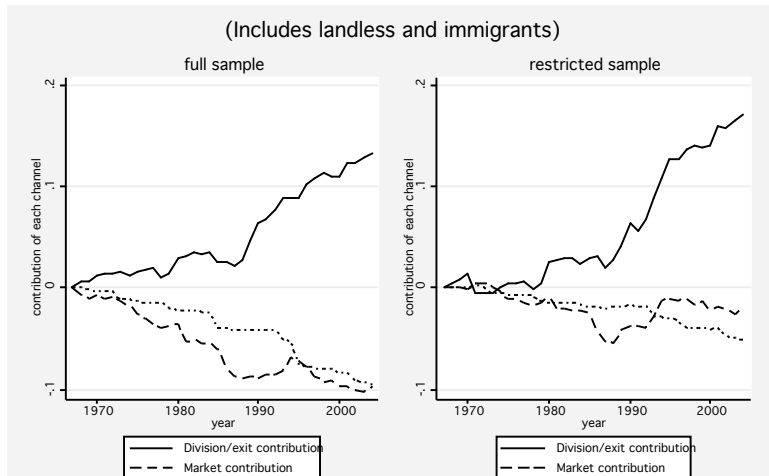
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Land Reform and Acquisition in WB

Table: Determinants of decrease in land holdings: cumulative changes at the household level, only natives (1967-2004)

Sample:	full	restricted
Land in 1967	2.862	2.143
Land change	-1.370	-0.926
Lost due to land division	-1.108	-0.785
Lost through sales	-0.557	-0.475
Gained through purchases	0.467	0.373
Lost due to reform	-0.097	-0.018
Gained due to reform	0.034	0.028
Lost as a gift	-0.116	-0.097
Gained as a gift	0.030	0.032
Lost for other reasons	-0.060	-0.024
Gained for other reasons	0.011	0.012

Rising within-village land inequality (CV), contribution of channels 1967-2004



How Much Did LR Contribute to Changes in Land Inequality?

- The previous results indicate that the direct effects of the land reforms were to reduce inequality in landownership
- But their effects were overshadowed by changes in household division, followed by land markets and immigration
- Possible indirect effects of land reform on household division, land markets and immigration: estimated in Bardhan, Mookherjee, Luca and Pino (2011)
- Assessing these indirect effects, we estimate a significant total effect of the land title program in lowering land inequality (mainly by reducing landlessness), but no effect of Operation Barga

Summary of Effects of Land Reform on Growth and Inequality

- The land title distribution program reduced landlessness and inequality, but had no significant effect on agricultural productivity at the village level
- The tenancy protection program raised agricultural productivity, but had no significant effect on inequality
- The effects of these land reforms were dwarfed by other factors:
 - agricultural development programs, for productivity
 - demographic changes (fertility, immigration), for inequality
- Conceivable that land reforms were essential for reasonably good local governance, but this is difficult to test econometrically

2. From Land Reform to Land Acquisition: Why?

- Agricultural productivity plateaued since the mid-90s
- Combined with considerable fall in land per household and per capita
- Most rural households cannot rely on agriculture any more for their livelihoods
- Decline in proportion of household heads declaring agricultural cultivation as their primary occupation (less than 50% by 2003)
- Corresponding rise in landlessness (almost 50% in 2003)
- And in education and aspirations of the young, who seek non-agricultural occupations

2. From Land Reform to Land Acquisition

- From the early 2000s, the Left Front realized the need to expand non-agricultural employment
- So it bent over backwards to invite private industry
- Tried to lure Tata away from tax concessions offered in HP and Uttaranchal
- Tata picked a site in Singur, 90 km from Kolkata, located on the Durgapur Expressway
- WB state government used its powers of eminent domain using the 1894 Land Acquisition Act, acquired 997 acres of (mostly) prime agricultural land

The Fiasco

- Local community in Singur was not consulted at the outset (learnt of the acquisition from newspaper reports)
- Owners of one-third of the land protested, backed by the Trinamul party which controlled Singur
- Protests escalated, confrontation between protesters and police...
- Tata stopped building its factory in 2008, withdrew to Gujarat
- In May 2011, Left Front lost its majority in the state legislature for the first time in 35 years

Understanding the Singur Fiasco (Ghatak, Mitra, Mookherjee, Nath 2013)

- Use a household survey to ascertain facts concerning land compensation offered to farmers whose land was acquired
- We compare actual compensations offered with market values of acquired plots, and evaluate the extent to which the offered amounts were inadequate
- What were the impacts of the land acquisition on different socio-economic groups in the affected villages?

Survey Details

- In 2010-11 we conducted a survey of a random sample of 1 in 6 households, in the 5 affected villages stratified according to landholding, occupation of head, and whether directly affected or not
- Compared them with households in 5 neighboring non-affected villages located on both sides of the Durgapur Expressway
- Found no significant differences between affected and unaffected households within acquired villages, but significant differences across villages
- So we focus on within-village differences in acquired villages between affected and unaffected households

Main Findings

- Majority of affected owners were marginal landowners engaged in cultivation, over half of whose land owned was acquired
- Governments compensation offers were approximately equal to reported market values of acquired plots *on average*
- But the inability of the official land records to distinguish between plots of heterogeneous quality meant that a substantial fraction of farmers were under-compensated relative to market values
- Those under-compensated were significantly more likely to refuse the compensation offers, as were those whose livelihoods were more dependent on agriculture

Main Findings, contd.

- Incomes and durable consumption of affected owners and tenants grew slower between 2005-2010 compared with unaffected owners and tenants
- Earnings of affected agricultural workers fell faster than unaffected (agricultural and non-agricultural) workers; former comprised 25-30% of population
- Add to this: adverse impact on tenants (15% of the population), and significant proportion (one-third) of landowners whose lands were acquired owing to under-compensation: majority of the local population were adversely impacted
- *The process was also a major source of dissatisfaction: a top-down process, with no efforts (at least initially) to consult or negotiate with the local community*

Implications for Future Land Acquisition Policy

- Sound economic arguments for over-compensation of farmers and tenants on grounds of efficiency, equity and political sustainability of industrialization programme (Ghatak-Mookherjee 2012)
- Local community should welcome the acquisition
- What makes compensation tricky: (i) poor quality of land records; (ii) heterogeneity of plots; (iii) heterogeneity of personal valuations placed by different owners on land as an asset

Implications for Future Land Acquisition Policy, contd.

- Clear that appropriate compensations should exceed the market value of the land
- Two problems with this:
 - Problems of ascertaining market values of acquired plots (mis-classification, incorporation of other relevant characteristics)
 - How much higher should the compensation be?
- LARR Bill in Parliament sets compensation at an arbitrary multiple (quadruple) of market value in rural areas

Implications for Future Land Acquisition Policy, contd.

- This may be too high, and retard industrialization (Chakravorty 2011)
- Key tradeoff: set compensation high enough to satisfy farmers, but not too high that it retards industrialization excessively
- Economists' solution (extension of Ghatak and Ghosh 2011): elicit households willingness to give up land by conducting auctions
- Could be extended to include multi-stage auctions: at the community level and then within communities at the household level

Multi-Stage Auction

- Stage 1: industrialist seeks land of x acres with specified characteristics, states maximum price it is willing to pay
- Stage 2: different panchayats are asked to conduct a (conditional) procurement auction within their jurisdictions where they seek to procure x acres and find out what landowners are willing to accept for their land, upto an aggregate of x acres of contiguous land
- Stage 3: based on outcome of stage 2, each panchayat submits a bid for the project: the lowest bid wins subject to meeting the factory reserve price

Implications for Land Acquisition Policy, contd.

- We need to consider such policy options, what problems they may give rise to
- Many advantages: it is a bottom-up procedure, incorporates heterogeneity of land, and is based on voluntary participation of those whose lands are acquired
- Additional consideration needs to be devoted to effect of acquisition on tenants and agricultural workers
- And offer a choice to owners of different modes of compensation: land elsewhere, pensions, shares in the industry, shop on factory premises, training and factory employment opportunities

3. Credit for Small Farmers (Maitra, Mitra, Mookherjee, Motta and Visaria 2013)

- Survey of households in 72 villages in two potato-growing districts (Hugli, W Medinipur)
- *Small farmers have very little access to loans from banks or cooperative societies (less than 2%), despite large expansions in credit directed to rural sector*
- Substantial growth of microfinance, *but it does not finance farming operations*
- Farmers rely on credit from local traders and lenders, average interest rate 20-30%
- Not much higher than cost of credit to local traders themselves (about 20-24%)

3. Credit (contd.): Scope for Innovative Credit Policies

- We have designed a new form of microfinance product, introduced in a policy experiment
- Agent-intermediated lending (similar to RBI Banking Correspondent/Facilitator model): agents are local traders or panchayat-appointed
- Offer 4 month loans to clients recommended by agents at 18% interest, repayments affect both loan extension and agent commissions
- Very promising results: those owning 0.5-1.5 acres earned rate of return exceeding 50%, with loan repayment rates about 98%
- Scope for scaling up (USAID/Bandhan), issues concerning rates at which MFIs lend from state banks

4. Marketing

- This is where the most important problems lie for small farmers
- Focus on potato: the most remunerative cash crop in W Bengal
- No major problems with regard to storage or transport
- Key problem: lack of direct access of small farmers to *mandis*

4. Lack of Access to Markets: Middleman Margins (Mitra, Mookherjee, Torero and Visaria 2013)

- More than 90% of harvested potatoes are sold to village *phorias*, who resell them to wholesalers at the *mandi*
- Size of *phoria* margins: in 2008 average (per kg) price at which *phoria* sold to wholesaler was Rs 4.77, and bought from farmer at Rs 2.14
- Transport/storage costs were Rs 0.20/kg; hence *phoria* profit margin exceeded 100%
- Low pass-through: Increase in retail price by Rs 1 resulted in increase in farmer price by less than Rs 0.20

Why are Middlemen Margins so Large?

- Could it be because farmers lack information about prevailing prices in mandis and retail markets?
- Conducted experiment where farmers in selected treatment villages were provided price information on a daily basis in 2007-08 (also extended 2010-13) via cellphones or local noticeboards
- Findings: zero average impact on farmgate price, increased volatility of farmer earnings

The Critical Problem: Lack of Effective Competition for Farmers Produce

- Information treatments had no effect owing to lack of effective competition among middlemen: vertical relations in the supply chain; possible collusion among local *phorias*
- Key underlying problem: inability of farmer to sell directly to wholesalers or retailers
- West Bengal does not have APMCs
- However even in other states with APMCs, they are not really effective, owing to control of APMCs by traders, and collusion of government officials with buyers

Policy Implications

- Encourage competition for farmers produce (entry by domestic or foreign corporates; contract farming) (effect of ITC e-choupals in MP)
- Improve *mandi* infrastructure and functioning (APMC regulations; esp. systems for verifying weight and quality of produce)
- Encourage panchayats to develop alternative (cooperative) marketing channels (e.g., remarkable success in China in developing potato cluster in Gansu province) and serve as intermediaries in contract farming

Summary and Conclusion

- Land reforms contributed modestly to rise in agricultural productivity and slowing down rise of landlessness in WB during late 70s and 80s
- They were possibly a necessary complement to Left Front's *Panchayat Raj* reforms, in creating functioning local governments that helped deliver seeds, fertilizers and credit to small farmers
- But further scope for land reforms may be limited, owing to high proportion of owner-cultivated small farms
- Supply of credit and marketing assistance are now more critical
- Need to devise innovative policies of directing institutional credit to small farmers, and enlarge their access to wholesale and retail markets