Land Tenure Reforms in Asia and Africa: Impacts on Poverty and Natural Resource Management

Conceptual Framework

(Forthcoming book to be published by Palgrave Macmillan: Editors: Stein Holden, Keijiro Otsuka and Klaus Deininger)

Presenter: Stein Holden
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- Thanks to all contributors for all efforts with your chapters!
Major land tenure reforms studied

- Land-to-the-tiller reforms,
- Market-assisted land redistribution reforms,
- Tenure security and land market enhancing tenure reforms,
- Forest tenure reforms,
- The needed future reforms to address the challenges arising from the recent sharp increase in demand for land in Africa.
PART I: Land Redistribution Reforms

- Caste Discrimination, Land Reforms and Land Market Performance in Nepal
  - Jeetendra P. Aryal and Stein Holden

- Does Sharecropping Affect Long-term Investment? Evidence from West Bengal’s Tenancy Reforms
  - Klaus Deininger, Songqing Jin, and Vandana Yadav

- Would Small be More Beautiful in the South African Land Reform?
  - Henrik Wiig and Henning Øien

- The Economic Effects of Land Redistribution: The Case of Community Based Rural Land Development Project in Malawi
  - Franklin Simtowe, Mariapia Mendola, Julius Mangisoni, Hardwick Tchale, and Clement Nyirongo
PART II: Tenure Security and Transfer Rights Enhancing Reforms

- Welfare Impacts of Land Certification in Tigray, Ethiopia
  - Stein Holden and Hosaena Ghebru

  - Luu Duc Khai, Thomas Markussen, Simon McCoy, and Finn Tarp

- Land Market Participation and Farm Size-Productivity Relationship: Implications of Land Tenure Reforms in Uganda
  - Alex Tatwangire and Stein Holden
PART III: Forest Tenure Reforms

- From Deforestation to Reforestation: The Evolution of Community Forest Management in the Dang District of Nepal
  - Nayayan Poudel, Nobuhiko Fuwa, and Keijiro Otsuka

- Tenure and Forest Management in India: Impacts on Equity and Efficiency of Van Panchayats in Uttarakhand
  - Ashokankur Datta and Gunnar Köhlin

- Tenure Security and Investment Effects of Forest Tenure Reform in China
  - Stein Holden, Yuanyuan Yi, Xuemei Jiang and Jintao Xu,

- Forest Management Decentralization in Kenya: Effects on Household Farm Forestry in Kakamega
  - Maurice Juma Ogada, Wilfred Nyangena, and Geophrey Sikei

- Impact of Land Certification on Tree Growing on Private Plots of Rural Households: Evidence from Ethiopia
  - Alemu Mekonnen, Hosaena Ghebru, Stein Holden, and Menale Kassie
PART IV: New Challenges & Future of Land Tenure Reform

- The Rise of Large Farms in Land Abundant Countries: Do They Have a Future?
  - Derek Byerlee, and Klaus Deininger

- Using the Land Governance Assessment Framework to Help Secure Rural Land Rights: Framework and Experience Thus Far
  - Klaus Deininger and Thea Hilhorst

- Conclusions
  - Stein Holden, Kejiro Otsuka, and Klaus Deininger
Sources and effects of tenure insecurity

Sources of risk
- Unclear borders
- Encroachment
- Conflicts
- Expropriation
- Redistribution

Tenure insecurity of owners

Rights
- User rights
- Mortgaging rights
- Transfer rights
- Limited investment
- Limited access to credit
- Limited land transfers

Production inefficiency

User rights
- Limited investment

Mortgaging rights
- Limited access to credit

Transfer rights
- Limited land transfers

Limited investment
- Production inefficiency

Limited access to credit
- Production inefficiency

Limited land transfers
- Production inefficiency

Production inefficiency

Tenure insecurity and land tenure reforms

Sources of risk

- Unclear borders
- Encroachment
- Conflicts

Private

State

Tenure insecurity of owners

Rights

- User rights
- Limited investment
- Mortgaging rights
- Limited access to credit
- Transfer rights
- Limited land transfers

Land tenure reform

Production inefficiency

Welfare outcomes

User rights

Limited investment

Mortgaging rights

Limited access to credit

Transfer rights

Limited land transfers

- Welfare outcomes

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Some of the complexity of land tenure reform analysis: Context specificity

- Cultural norms
- Political history
- Land rights & Land tenure reform
- Factor endowments
- Operational farm size distribution
- Non-land factor market characteristics
- Production efficiency
- Land market characteristics
- Technology characteristics
- Welfare distribution outcomes
Land-to-the-tiller policies and impacts

- **Sources of risk**
  - Unequal land distribution
  - Expropriation Redistribution
  - Unclear borders Encroachment Conflicts

- **Tenure insecurity of owners**
  - Private
  - State

- **Land-to-the-tiller policies**
  - Limited land access for land-poor

- **Rights**
  - User rights
  - Mortgaging rights
  - Transfer rights
  - Limited investment
  - Limited access to credit
  - Limited land transfers

- **Production inefficiency**
  - Poverty
  - Limited land transfers
  - Production inefficiency
Nepal **Land-to-the-tiller reform:**
Land Reform Act of 1964

- Nepal: With a history of caste discrimination
- First comprehensive land reform program in Nepal
- Objective:
  - Ensure a fair share of the production to the cultivators by putting exploitation to an end
Main Features of Land Reform 1964

- **Redistribution of surplus land** (land acquired after the imposition of land ceilings) to land-poor/landless farmers

- **Security of tenancy rights**
  - Cannot evict tenant without proper reasons
  - Later on, interpreted as: registered tenants can claim ownership rights on 25% of rented land (land-to-the-tiller)

- **Fixing of rent**: Maximum 50% of production

- **Abolition of sub-tenancies**
Achievements of Land Reform 1964

- Granted tenancy certificates to 300,000 tillers
- Acquired nearly 31000 ha surplus land (land obtained by imposing ceiling on land holding)- nearly 2% of total agricultural land
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</thead>
<tbody>
<tr>
<td>Tenant households</td>
<td>40.4</td>
<td>19.0</td>
<td>9.5</td>
<td>15.9</td>
<td>12.2</td>
</tr>
<tr>
<td>Area under tenancy</td>
<td>25.5</td>
<td>15.9</td>
<td>6.2</td>
<td>8.5</td>
<td>8.7</td>
</tr>
</tbody>
</table>

Source: Ministry of Land Reform and Management (2006)
Weaknesses of Land Reform 1964

- Due to weak implementation,
  - Large land owners got time to sell (or redistribute among close relatives) their land above the ceiling
  - Many landlords evicted tenants

- Dual ownership of rented land: As tenants can claim ownership rights to 25% of the rented land, it created dual ownership of rented land by landlord and tenant.
  - Increased conflicts between landlords and formal tenants
  - Increased informal short-term tenancy as landlords fear to rent out land using written contract
Figure 1: Analysis of the farm size productivity relationship using local polynomial regression.
Consequences of Land-to-the-Tiller Reform in Nepal

- Distorted land rental markets
- Created a loss-loss situation for tenants (Bhandari, 2006)
  - Did not get enough land from redistribution (because only 2 % land was acquired)
  - Reduced access to land through land rental market
Low-cost land registration and certification impacts

- **Unclear borders**
- **Encroachment**
- **Conflicts**

**Sources of risk**

- **Private**
- **State**
- **Expropriation**
- **Redistribution**

**Tenure security of owners**

- **Rights**
  - User rights
  - Mortgaging rights
  - Transfer rights

**Investment**

**Access to credit**

**Production efficiency**

**Food security**

**Low-cost land registration and certification**
Land Market Participation and Farm Size - Productivity Relationship: Implications of Land Tenure Reforms in Uganda

By

Alex Tatwangire and Stein T. Holden

CLTSUMB
Centre for Land Tenure Studies
An Inverse Farm Size – Productivity Relationship

- Caused by
  - Land quality differences
  - Imperfections in land and labor markets:
    - \( \rightarrow \) argument for redistributive land tenure reforms or land tenure reforms that enhance land market development that would be good both for efficiency and equity (Holden, Otsuka and Place 2008)
  - Or simply an artifact caused by measurement error? (Lamb 2003)

- We use household panel data from Uganda to assess the extent of IR in different tenure systems (mailo, freehold and customary tenure systems)
The Inverse Relationship and Land Market Friendly Reform

- The recent Ugandan land tenure reform has attempted to strengthen individual land rights including rights to sell land.
- We assessed the IR in different tenure systems in Uganda and use the IR as an indicator of the how successful the reform has been in making land markets to work
Key results: Inverse Farm Size-Productivity relationship in different tenure systems in Uganda

<table>
<thead>
<tr>
<th>Right hand side (RHS) variables</th>
<th>Log of total value of crop production per acre operated farm size (in Ug.shs)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Panel <strong>Fixed-Effects</strong> (FE) Models</td>
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<tr>
<td></td>
<td>Panel <strong>Random-Effects</strong> (RE) Models</td>
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<tr>
<td>Different land tenure systems</td>
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<tr>
<td>Freehold</td>
<td></td>
</tr>
<tr>
<td>Mailo</td>
<td></td>
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<tr>
<td>Customary</td>
<td></td>
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<tr>
<td>(1)</td>
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<td>(2)</td>
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<td>(3)</td>
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<tr>
<td>Log of farm size</td>
<td><strong>-0.480</strong>*</td>
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<tr>
<td></td>
<td><strong>-0.885</strong>*</td>
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<tr>
<td></td>
<td><strong>-0.757</strong>*</td>
</tr>
<tr>
<td></td>
<td><strong>-0.441</strong>*</td>
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<tr>
<td></td>
<td><strong>-0.735</strong>*</td>
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<td><strong>-0.616</strong>*</td>
</tr>
</tbody>
</table>
The Inverse Relationship in Uganda

Scatterplot, lowess, and local linear regression

Log value of crop output/operated farm-size (Ug.shs)
0 2 4 6
Log of farm size (area under crops) in acres

Actual Data
Lowess
Local Linear
Key findings from the Uganda study

- Found robust evidence of an inverse farm size – land productivity relationship in the freehold, mailo and customary systems.
- The relationship was less inverse in the freehold system, consistent with the evidence of better functioning land markets there.
Market assisted land redistribution and impacts

- **Sources of risk**
  - Unclear borders
  - Encroachment
  - Conflicts
  - Private
  - State

- **Tenure security of owners**
  - User rights

- **Rights**
  - Investment
  - Access to credit
  - Production efficiency
  - Mortgaging rights
  - Transfer rights
  - Enhanced land transfers

- **Market-assisted land redistribution**
  - Investment
  - Access to credit
  - Production efficiency
  - Poverty reduction

- **Unequal land distribution**
  - Land access for land-poor

- **User rights**

- **Transfer rights**

- **Mortgaging rights**

- **Investment**

- **Access to credit**

- **Production efficiency**

- **Poverty reduction**

- **Market assisted land redistribution and impacts**
Forest tenure reforms and impacts

Sources of risk

- Unclear borders
- Encroachment
- Conflicts

Population pressure, economic development

State

Deforestation and forest degradation

State property

Communal tenure rights

Individual tenure rights

Rights

- Forest tenure reform

Sources of risk

- Expropriation
- Redistribution

State

Population pressure, economic development

Private

Deforestation and forest degradation

State property

Communal tenure rights

Individual tenure rights

Welfare outcomes

Forest tenure reforms

Forest production efficiency and sustainability

Forest investment

Forest management

Population pressure, economic development

State

Unclear borders

Encroachment

Conflicts

Population pressure, economic development

State

Expropriation

Redistribution
Tenure Security and Investment Effects of Forest Tenure Reform in China

By Stein Holden*, Yuanyuan Yi**, Jintao Xu** and Xuemei Jiang**

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** Peking University, Beijing

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Centre for Land Tenure Studies
Forest Tenure in China

- Two ownership types
  - **State**
    - ~42% forest area and 68% volume;
    - Managed by state forest enterprises and farms
  - **Collective**
    - 58% area and 32% volume
    - Growing share of timber production
    - Diversified management schemes
Timing of forest plot allocation to hhs

Kernel density estimate

kernel = epanechnikov, bandwidth = 1.2146
Inside each forest certificate is a map of the forest plot, which was done by surveying (not GPS).
Lessons from the China study

- More valuable forest land; i.e. forest plots located closer to roads, having less slope, and having access to irrigation water; were more likely to have been allocated to individual households.

- Forestland certificates strengthened the feeling of tenure security on plots and stimulated investment in forestry, which may be the most significant finding of policy relevance.

- Since the surveyed households only had forestland certificates for about 15 percent of all forest plots, expanding such certification can be recommended.
New demand for land and need for land governance

Sources of risk

Unclear borders
Encroachment
Conflicts

Investor demand for land

Private

Expropriation
Redistribution

Tenure security of owners

State

Investor rights

Statutory
tenure rights

Customary

tenure rights

Investment

Land transfers

Production efficiency

Welfare outcomes

Land governance reform

Rights

Investor

demand

Investor

rights

Statutory

rules

International

institutions

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Some concluding remarks

- There exist no “silver bullets”
- Good intentions is no guarantee for success
- It is possible to learn from history but every country and time period is unique
- New technologies have reduced the costs of formalization of land rights
- Increasing land values and weak governance increase tenure insecurity and begs for reforms that can improve land governance
Kei Otsuka will now present more detailed hypotheses and conclusions.