Land Administration and Economic Development: Evidence from Eastern Nepal

Objectives

- Main Research Objective: To investigate the role of land administration on economic development.
- This paper **assesses the contribution of land tenure security on agricultural production based on the evidences collected from Nepal.**
Putting Land Administration into the Context of Land-based Economic Development


A good land administration contributes to economic development by:

- Providing security to investors.
- Permitting real estate to be traded in the market place.
- Administering land and property taxes which can lead to the collection of substantial revenue (Dale and McLaughlin, 1999)

A good land administration and secured tenure mobilizes hidden capital from land (de Soto, 2001).

Presence of a good land administration [or security of land tenure] is responsible for a growth of 5.9% of the GDP in the Netherlands. (van der Molen, 2003).
Land Tenure and Property Rights Theories

- Land tenure security supports to economic development by increasing
  - credit supply
  - investment demand and
  - agricultural productivity
  (Feder et al., 1987; Deininger and Jin, 2006; Smith, 2005)

- There will be a causal connection between the set of property rights and its level of economic performance (Reeve, 1986).

- The function of property rights is to create incentives to use resource efficiently (Posner, 1973).

Development Theories

- ... Capital can be generated from land to fund growth and development (Griffith-Charles, 2004).

- Noneconomic institutional factors including the nature of land tenure arrangements should also be considered while analysing the development problems (Todaro & Smith, 2006).

- Secured property rights and rule of the land are the determinants of economic development which provide an institutional framework conducive to growth (Thirlwall, 2011).
Thus, land administration supports to economic development mainly in two ways -

- by increasing agricultural production through higher ability and willingness to invest and higher motivation for land use, and
- by generating more revenue for the government through land registration, collection of land tax and property valuation.

XXV International Federation of Surveyors Congress, Kuala Lumpur, Malaysia, 16 – 21 June 2014
Background

- The Chulachuli area of Ilam district, Eastern Nepal remained disputed for a long time as the government decided to build a **Green Belt** in 1970s and tried to evacuate the settlement offering landowners some compensation.

- Various efforts were done by the government to resolve the dispute. However, the 23rd Committee formed in 2007 became successful to solve the problem which registered land in the name of 4,918 applicants during 2008 and 2011.

Rights & Risks

- Main property rights enjoyed by the landowners after registration of land:
  - Ownership
  - Sale & transfer
  - Access to loan from banking sector
  - Lease
  - Use of production

- Risks lowered after registration of land:
  - Risks of losing their land
  - Risks of acquisition of land by the government without fair compensation
Land Use

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Registration</td>
</tr>
<tr>
<td>Shelter</td>
<td>91</td>
</tr>
<tr>
<td>Agriculture</td>
<td>98</td>
</tr>
<tr>
<td>Commercial</td>
<td>4</td>
</tr>
</tbody>
</table>

Number of respondents using land for shelter and commercial purpose is increased and that of agriculture is increased.

Changes on Land-Related Activities

Number of respondents engaged in following activities are increased remarkably after registration of land:
- Renovating houses
- Land levelling
- Planting fruits and trees
- Fencing
- Constructing irrigation canal to their land
- Using new tools and techniques of agriculture
**Land Value**

Average land value before formalization was Rs. 60.7 thousands which increased by 323% percent and reached to Rs. 196.5 thousand.

XXV International Federation of Surveyors Congress, Kuala Lumpur, Malaysia, 16 – 21 June 2014 01/07/2014

---

**Valuation of Land**

- Valuation of residential land increased by up to 24 and 20 times than that of 2007/08 in Ward Number 1 to 4 and 5 to 8 respectively.
- Valuation of first category of agricultural land in Ward Numbers 1 to 4 and 5 to 8 is increased by around 9 and 7 times respectively from that of highest category of land in the year 2007/08.

XXV International Federation of Surveyors Congress, Kuala Lumpur, Malaysia, 16 – 21 June 2014 01/07/2014
**Investment & Income**

Changes in Investment and Income in Chulachuli, Nepal

<table>
<thead>
<tr>
<th></th>
<th>Before Registration *</th>
<th>After Registration*</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Investment</td>
<td>2.7</td>
<td>4.3</td>
<td>160</td>
</tr>
<tr>
<td>Average Income</td>
<td>4.3</td>
<td>6.4</td>
<td>149</td>
</tr>
</tbody>
</table>

* Rs. in Thousand

---

**Correlation of Property Rights with Investment, Income and Land Value**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Rights</th>
<th>Land Value</th>
<th>Investment</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rights</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Value</td>
<td>0.685***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>0.219***</td>
<td>0.343***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>0.199***</td>
<td>0.229***</td>
<td>0.391***</td>
<td>1</td>
</tr>
</tbody>
</table>

*** denotes significant relation at 1 percent level
### One Way ANOVA with Property Rights

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Value</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2.104E12</td>
<td>1</td>
<td>2.104E12</td>
<td><strong>669.755</strong></td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2.388E12</td>
<td>760</td>
<td>3.142E9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.492E12</td>
<td>761</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Investment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.918E8</td>
<td>1</td>
<td>1.918E8</td>
<td><strong>38.045</strong></td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3.831E9</td>
<td>760</td>
<td>5040310.148</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.022E9</td>
<td>761</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.709E8</td>
<td>1</td>
<td>1.709E8</td>
<td><strong>31.065</strong></td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4.181E9</td>
<td>760</td>
<td>5501879.342</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.352E9</td>
<td>761</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

High F Value & p<.05 shows there is significant difference between means.

**Conclusion**

- After registration of land
  - Property rights are more secured.
  - Land use pattern and land related activities are slightly changed
  - Land value, investment and income increased considerably after registration of land. They are positively correlated with property rights.
- Thus, land tenure security has increased agriculture production.
Thank you

Gandhi Subedi
E-mail: g.p.subedi@pgr.reading.ac.uk

XXV International Federation of Surveyors Congress, Kuala Lumpur, Malaysia, 16 – 21 June 2014