Population increase, temporary transnational migration, and paddy holdings in a rural village of Laos

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Study Area

Kuthee village, Songkhone District, Savannakhet Province, Laos
- Ethnic: Lao
- Income Source: Surplus rice and Remittance
- Location: 55km southeast direction from the prefectural capital
- Real population: about 460 (Registered population: about 670)
- The number of households: 111
- Paddy area: 241.64ha (85 households, average holding area 2.8ha / household)

History of Village

- Surveying kinship in the village \( \rightarrow \) The seventh generation for 130 years
- A pioneer family reclaimed land in the end of 19th century, and then some few families were migrated in the early 20th century.

Background

In ethnic Lao village, children equally inherit land from parents
\( \rightarrow \) If population increases, land is inevitably divided, and it is difficult to secure the paddy area required for self-sufficiency.

Possibility to adapt the following strategies:
1. Reclaiming paddies within the village area
2. Buying paddies from the neighboring villages
3. Buying back paddies of ex-villagers (especially male)
4. Developing irrigation paddies for stable rice production

\( \rightarrow \) Can Boserup’s theory, promoting agricultural intensification by population increase, apply to a small-scale community in Laos?

Research Question

There is little evidence of detailed demographic analysis in the small-scale communities of developing countries to verify these hypothesis until then, because complete data of residents does not exist.

Now, we know that food production is not only the restricted factor of population, due to globalization or livelihood diversification.

What kind of factors do affect to demography and food production in the small-scale communities of developing countries?

Paddy Data

- Paddies owned by the villagers are surveyed, and 4,580 polygon data from WorldView2 satellite (Dec 11, 2012) are created for GIS analysis
- Input attributes such as household, reclaiming year, obtaining method, environment conditions etc.

Reclaiming Paddies before 1945

Reclaiming paddies from the northern areas of the village

61.96ha

Reclaiming Paddies in 1960

Expanded paddies around village

98.33ha
Reclaiming Paddies in 1980

Reclaiming paddies outside the village
128.91ha

Reclaiming Paddies in 2000

Almost finishing the paddy reclaiming at this point
155.13ha

Reclaiming Paddies in 2014

Little land to reclaim paddy at present
155.77ha

Reclaiming paddies had started from Na-lup which easily keep water, after that had extended it to Na-non. Agricultural intensification such as irrigation development is hardly seen.
Population increases, and also area of paddy extends. But paddy reclaiming in the village almost reached the limit around the beginning of 1970s.

Most of category of ‘Inherit+Purchase’ is that paddies bought back from ex-villagers.
Paddy Holding Strategy to Population Increase

Verifying the previous four hypotheses:
1. Reclaiming paddies within the village area
2. Buying paddies from the neighboring villages
3. Buying back paddies of ex-villagers (especially male)
4. Developing irrigation paddies for stable rice production

How are they earning an income to buy paddies?

Population Increase and Paddy Holding

Increasing Rate of Various Variables

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Paddy Reclaimed</th>
<th>Paddy Purchased</th>
<th>Migrant Worker</th>
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</thead>
<tbody>
<tr>
<td>1951-1960</td>
<td>4.2</td>
<td>4.5</td>
<td></td>
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<td>1961-1970</td>
<td>3.7</td>
<td>5.3</td>
<td></td>
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<td>1971-1980</td>
<td>2.7</td>
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<td>2.1</td>
<td>1.2</td>
<td>9.3</td>
<td>36.0</td>
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<td>0.8</td>
<td>8.2</td>
<td>8.6</td>
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<td>2001-2010</td>
<td>-0.1</td>
<td>0.0</td>
<td>7.0</td>
<td>8.5</td>
</tr>
</tbody>
</table>

* The estimation are filled out in red pen

Increasing Population
→ Decreasing land for reclaiming paddies by 1970
Continuing population increase
→ Purchasing paddies from the neighboring after 1970

How do they earn an income to buy paddies?
→ Migrant work in Bangkok

Temporary Transnational Migration in Thailand

Surveyed 83 villagers (=about 1/3 of migrants) at Bangkok in 2015
The ratio of male to female was 0.8 to 1.0.
Teens and twenties with low educational backgrounds account for approximately 66%

Childcare support

Many married couples can work in Bangkok as migrant workers.

Grandparents in Kuthee village take care of their grandchild
→ This kind of support makes possible to work at Bangkok for long periods of time
Real Population and Paddy Holding

Paddy area is increasing and real population is decreasing at the same time.

Migrant Works and Paddy Purchase

Kuhee villagers started to buy paddies from the neighboring villages around the mid of 1980s.

Per-capita Rice Production

Residents can get a large income from surplus rice.

Summary

1. Paddy development to cope with population increase
2. Shortage in arable land after 1970s and stated to buy paddy from the neighboring villages
3. Not change in yield of rice, but increase an income from surplus rice by substantially decreasing population due to temporary transnational migration

I do not think that villagers go to Bangkok as temporary migrant workers in order to get a surplus rice, and they also do not realize that temporary migration works contribute to an increase of per-capita rice production.

Such kind of strategy by Kuthee village may be debatable as "new type of agricultural involution" under the era of regional economic integration expanding in SEAsia.
Livelihood Change in Traditional Rural Village in Laos

- Self-sufficient Paddy Farming
- Temporary Migrant Work
- Regional Economic Integration
- Political Reform
- Education
- Decline in Birthrate

Thank you for your kind attention

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