Implications of the Innovation System Perspective for Agricultural Extension in Vietnam

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Ecological triggers of change

- Lowland rice, fish ponds
- Deforestation
- Land use intensification: annual (cash) crops
- Intensification of animal husbandry
- Erosion + runoff

Innovation Asia-Pacific Symposium, 4-7 May 2009, Kathmandu/Nepal
Ethnic Diversity
More than 50 ethnic groups, Most of them in mountainous regions

Land Use Systems
Varying between ethnic groups

Rural livelihoods
> 85% of population depend on agric.

Risk exposure
Climate conditions, e.g. droughts, floods

Land Use Systems
Varying between ethnic groups

Adequate extension
for pro-poor innovation?

Infrastructure
Lack of roads and transportation

Access to Services
Less chances for credit and information

Markets
Restricted access to inputs and product outlets

Commercialization
Transition from self-sufficiency to commodity production
Purpose of the study

Explore consequences of diversification of extension providers on marginalized upland farmers

• Unique ethnical situation
• Economic transformation
• Growing income disparities

How can studying the pig sector feed into the discussion?

- Distribution of pig husbandry
- Intensification is a very recent option
- Rapidly growing demand for pork needs innovation in raising systems
Introduction to the research area

Innovation Asia-Pacific Symposium, 4-7 May 2009, Kathmandu/Nepal
Framework of the research

Adapted from: Mytelka, L.K. (2000).
**Methods applied**

Step 1:  
**Document analysis.** Collection of relevant laws and decrees on national and province level to sketch the legal environment of pig husbandry

Step 2:  
**RAAKS-tools.** Group-based actor mapping and linkage matrixes in 2 villages of each ethnic group

Step 3:  
**Open-ended interviews.** During >80 interviews with representatives from all actor groups, characteristics of actors were collected in profiles and the quality of linkages was analyzed

Step 4:  
**A Quantitative survey** was conducted among 180 Hh. In 3 villages of each ethnic group to analyze utilization of information sources
Current Policy debates

“Leanization” of production

Future of small-scale pig husbandry

Call for enhanced participation in designing extension agendas
The extension arena

“State Extension System”

Agricultural Extension Center (AE)
Group lectures, demonstration models

Veterinary Unit (in MARD)
Backing models of AE, vaccination campaigns

“Voluntary extension system”

Mass Organizations
Group discussions, featuring activities of AE

FOs (F-Clubs, (new) Cooperatives)
Knowledge exchange, matching contacts with AE

Shops and Private Firms
Individual extension talks

Private service suppliers
Various veterinary services

New media
TV broadcasts, books

“Traditional actors” with stronger commitment to:
- Sector political directions
- Classical top-down extension approaches

“New actors” evolved over the past decade
Usage of information sources

Intensity of contacts
Thai > Hmong

Source/Ethnic group

<table>
<thead>
<tr>
<th>Source/</th>
<th>Black Thai</th>
<th>Hmong</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;traditional&quot;</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>&quot;new&quot;</td>
<td>+</td>
<td>-</td>
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</tbody>
</table>

Source: own data

n_{Thai} = 95
n_{Hmong} = 92
Two distinct knowledge systems along ethnic boundaries (despite spatial proximity)
Infraestructure of utilized knowledge sources is uneven
Minor exchange and few contact point only between ethnic groups
Number of utilized information sources beyond village boundaries larger for the Thai
Communication networks (II)

- Increasing diversification, outside-orientation and usage frequency of information sources

- Relatively small number of utilized information sources
- Emphasis on (informal) information sources within the community
- Contacts with “traditional” sources exceed contacts with “new” sources considerably
- System relatively impermeable
Communication networks (III)

- Large number of utilized information sources
- Formal information sources dominate
- Permeability of system is large
- Utilization of “new” sources that have a stronger commitment to participation and dialogue

Increasing diversification, outside-orientation and usage frequency of information sources
Increasing diversification, outside-orientation and usage frequency of information sources

- Limited number of extension providers being utilized from both groups
- Joint information sources less utilized by the Hmong
- Joint information sources outside villages

<table>
<thead>
<tr>
<th>Linkage</th>
<th>Linkage control (from farmers’ perspective)</th>
<th>Relevance of farmers’ individual situation</th>
<th>Accessibility to services</th>
<th>Timeliness of services</th>
<th>Scope of participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer - Extension Worker</td>
<td>- -</td>
<td>-</td>
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<tr>
<td>Farmer – Mass Organizations</td>
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</tr>
<tr>
<td>Farmer – Shops</td>
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</table>
Consequences

Although extension service supply has increased and diversified...

Increasing segregation of knowledge system(s) due to

- Lack of (formalized and informal) inter-ethnic communication
- Unbalanced utilization of new sources – traditional sources

Huge potential for innovation through inter-ethnic communication without inputs from outside is not retrieved

Development gap of pig husbandry between ethnic groups will further widen

...who gets to innovate?
Approaches towards integrating knowledge domains

Stimulating exchange by linking ethnic groups

- Emphasize positions of jointly used information brokers as “facilitators of integrating knowledge domains” (requires further institutionalization, e.g. standards, certificates, incentives)

- Develop and establish approaches for multi-ethnic farmer training groups and discussion platforms (when is the appropriate time for facilitators from outside to pull out? -> problems in sustainability and scaling-out)
Thank you!


