Inbetween the rural and the urban: Translocal Networks and Resilience to Environmental Risks in Northeast Thailand

Till Rockenbauch
Department of Geography, University Bonn
Background:
- I) Climate change and migration
- II) TransRe-Project
- III) Thailand

1. PhD-Thesis
   - Research challenge & questions
   - Analytical concept
   - Operational concept

2. Insights from the field
   - Study sites
   - Vulnerability mapping
   - Network mapping

3. Preliminary results
   - Study sites: Actor-groups
   - Village-example: Types of support
   - Household example: Dealing with risks

4. Conclusion & outlook
Die Klimaflüchtlinge kommen

Das Leben der anderen ist armselig und kurz

22.09.2015, von REINHARD MERKEL

„[…] ihr Anteil am Umfang der globalen Migration wird in den kommenden Jahrzehnten weit übertroffen werden vom Einfluss eines anderen Verursachers: dem Klimawandels.“

Flucht, Krieg und Klimawandel

Klimawandel kann Konflikte anheizen

Wie realistisch und wie groß das Ausmaß der Bedrohung durch den Klimawandel ist, zeigen inzwischen etliche Studien. Bereits jetzt beobachten Wissenschaftler, dass die steigenden Temperaturen unseren Planeten verändern. Das "ewige Eis" der Arktis und die grönlandischen Gletscher erweisen sich als sehr vergänglich - schmelzen sie weiter ab, könnte der Meeresspiegel Hans Joachim Schellnhuber vom Potsdam-Institut für Klimafolgenforschung zufolge um bis zu sieben Meter steigen. Etliche Millionen Menschen würden ihre Siedlungsraumes an den Küsten verlieren.

„[…] Die Folgen, so schätzen manche Experten, könnten mehrere hundert Millionen Klimaflüchtlinge sein. Dort, wo sie hingehen, wird es zur Konkurrenz um die Einheimischen um die örtlichen Ressourcen kommen. “
I.2 Scientific debate

Environmental refugees: a growing phenomenon of the 21st century

Norman Myers

Green College, University of Oxford, Upper Mansfield, Mile Road, Headington, Oxford OX3 6SE, UK (norman.tmyers@ox.ac.uk)

The total number of environmental refugees could well double by the year 2010, [...] when global warming takes hold, there could be as many as 200 million people [...]”

“The range and complexity of the interactions between these drivers means that it will rarely be possible to distinguish individuals for whom environmental factors are the sole driver (‘environmental migrants’).”

Migration and Global Environmental Change
Future Challenges and Opportunities

FINAL PROJECT REPORT
1.3 New perspectives

- Climate only one factor for migration decisions
- Consideration of regional context
- Feedback processes between environmental change and migration
- Multi-local focus
- Migration as chance / adaptation

Harald Sterly, Felicitas Hillmann, Marie Pahl, Birte Rafflenbeul
2015
II.1 TransRe-Project

Building Resilience through Translocality
Climate Change, Migration and Social Resilience of Rural Communities in Thailand

www.transre.org

Topics & Sub-Projects

Risk, Vulnerability & Resilience
This sub-project will carry out detailed vulnerability and resilience analyses in selected villages in rural Thailand. The aim is to understand the influence of social network properties and flows on the ability of households to respond to climate change.

Social Networks & Translocal Resilience
The aim is to understand the influence of social network properties and flows on the ability of households to respond to climate change.

Social Practices of Translocality
This sub-project focuses on the everyday practices of translocality and translocal migration, exploring how migrants who are rooted in rural Thailand navigate their social and economic lives.

Governing Translocal Social Resilience
This sub-project is interested in understanding the governance context of the climate-migration-adaptation nexus at the local and translocal levels.
II.2 Translocality framework

Source: Greiner & Sakdapolrak 2013
II.2 Translocality framework

Economic, political, social and cultural dynamics outside the place

Source: Greiner & Sakdapolrak 2013
III.1 Thailand – Climate change

- Drought 2014-15-16:
  - 12% reduction in national rice yields
  - Historical low of water reservoirs
  - Ban of irrigation during dry seasons
  - Announcement of 8 emergency regions

- Flood 2011:
  - 65 of 77 provinces affected
  - In particular in Central Thailand
  - Damage > $45 Mrd.

Source (USDA 2016)

Source: (Worldbank 2011)
III.2 Thailand - Migration

Thai Restaurant in Düsseldorf
(Sakdapolrak 2014)

Skyline Bangkok
(Porst 2015)

Rice transplanting in the North of Thailand
(Rockenbauch 2015)

Thai laborer in Singapore in the 90ties
(S. Jiangkratok)
1. PhD-Thesis

„Resilience to Environmental Risks and the Role of Social Networks – A Case Study from Rural Thailand“
1.1 Research challenge & questions

Which role do translocal social networks play for the resilience to climate related risks (in the places of origin)?

1. What are attributes of translocal social networks?

2. Which structure / which „resource flows“ strengthen / impede resilience?

3. How are social networks and resilience related on actor-, household- and community level?
1.2 Research approach

Exploring the potential of **social network analysis (SNA)** for translocality research

**Total networks:**

- Structure / descriptive
- Social relation
- Actors

**Ego-networks:**

- Embeddedness / qualitative
- Alteri
- EGO
1.3 Analytical concept

Resilience

Actor based:  
„Social Resilience Capacities“

System based:  
„Social Production of Ecosystem Services“

Own figure based on Keck & Sakdapolrak (2013)

Own figure based on Ernstson (2013)
1.3 Analytical concept

Relation between social resilience and social-ecological resilience mediated through translocal networks (own figure)
1.4 Operational concept

Capacity: cope
Network: Support Networks
Ties: Labor, Advice, Finance
Level: Household
Assessment: Ego Networks

SES process: articulation
generation
distribution

Social-Resilience
Adapt Innovation Networks Knowledge, Information Farmer Ego /partial networks
Transform Governance Networks Influence Community Total network

Translocal perspective
2. Insights from the field
2.1 Study sites
2.2 Vulnerability mapping

<table>
<thead>
<tr>
<th></th>
<th>Big land</th>
<th>Medium</th>
<th>Small land</th>
</tr>
</thead>
<tbody>
<tr>
<td>International migration</td>
<td>HH1</td>
<td></td>
<td>HH22</td>
</tr>
<tr>
<td>Internal migration</td>
<td></td>
<td>HH30</td>
<td></td>
</tr>
<tr>
<td>No migration</td>
<td>HH50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.3 Network mapping

- EGO
- House
- Village
- Thailand
- Abroad

Actor-groups:
- Household member
- Relatives
- Acquaintance
- Social groups & Institutions

Type of support:
- Labor
- Info
- Finance

Henning et al. (2011)
Hollstein & Strauss (2006)
Schönhuth (2013)
Steinbrink (2009)
2.3 Network mapping

Actor-groups:
- Household member
- Relatives
- Acquaintance
- Social groups & Institutions

Type of support:
- Labor
- Info
- Finance
2.3 Network mapping

Actor-groups:
- Household member
- Relatives
- Acquaintance
- Social groups & Institutions

Type of support:
- Labor
- Info
- Finance

Future scenario

EGO
3. Preliminary results
3.1 Actor-groups

Burriram

Udon Thani

Phitsanulok

Household member
Relatives
Acquaintance
Social Groups / Inst.
3.2 Types of support

Udon Thani, Village A: $N_{HH} = 13$, $N_{AI} = 255$
3.3 Actor groups / types of support

Udon Thani, Village A: $N_{HH} = 13$, $N_{AI} = 255$
3.4 Dealing with risks: Household A + B

10 HH-Member

Land: 5 rai
(Rice, tobacco)

Drought 2012:
75% loss

Income:
• Wage labor (BKK)
• Wage labor (Korea)
• Tobacco

7 HH-Member

Land: 6 rai
(Rice, vegetables, livestock)

Drought 2012:
50-66% loss

Income:
• Wage labor (Korea, Thailand)
• Vegetables
• Rice
3.4 Dealing with risks: Household A + B

Drought

**A**
- Focus on labor in the household / relatives
- Intensify wage labor of HH-member in the city

**B**
- Focus on labor in the household / close relatives
- Material support by relatives in the village

Scenario

**A**
- Shift to sugar cane (with help of relatives)
- Intensify wage labor abroad (HH-member)
  + Translocal relations

**B**
- Reduce land size for rice
- Focus on rice for own consumption and alternative income activities in the village
  - Translocal relations
4. Conclusion & outlook

1) Rural households are embedded in translocal support networks:
   - Actor-groups, number and type of support are differentiated according to locality
   - Appearance and relevance of translocal relations are differentiated between study sites

2) Translocal networks are changing
   - Transformation from household- and kin based support to formalized / institutionalized networks (market/state)

3) Translocal network can support resilience
   - Mobilization of resources (e.g. financial resources)
   - Long-term costs / competing capacities of resilience
   - Motivation and perception of particular actors

4) SNA is a promising tool for assessing translocal networks
   - Resource demining
   - Methodological limitations
Thank you for your attention!
Literature & Links

TransRe-Project:
- www.transre.org
- facebook.com/TransReProject
- @TransReProject

Literature:
- Ernstson (2013): The social production of ecosystem services: A framework for studying environmental justice and ecological complexity in urbanized landscapes.