

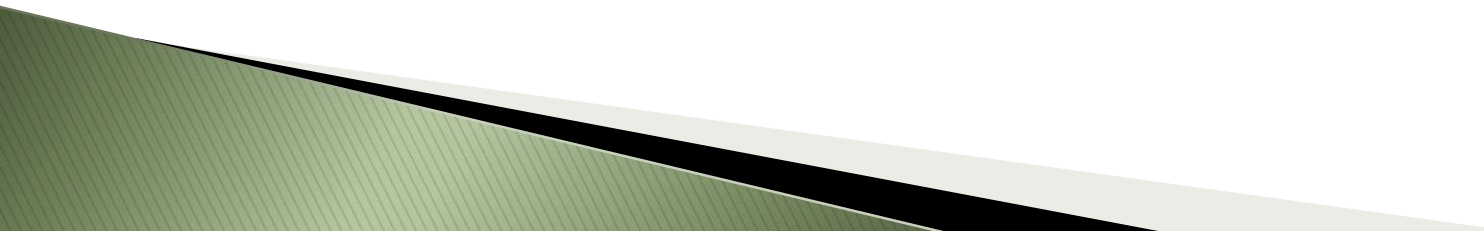
**Inter-agency coordination and role of local community on flood
management of Mekong's Tributaries in Northern Thailand: The
case study of telemetry system in Kok River Basin**

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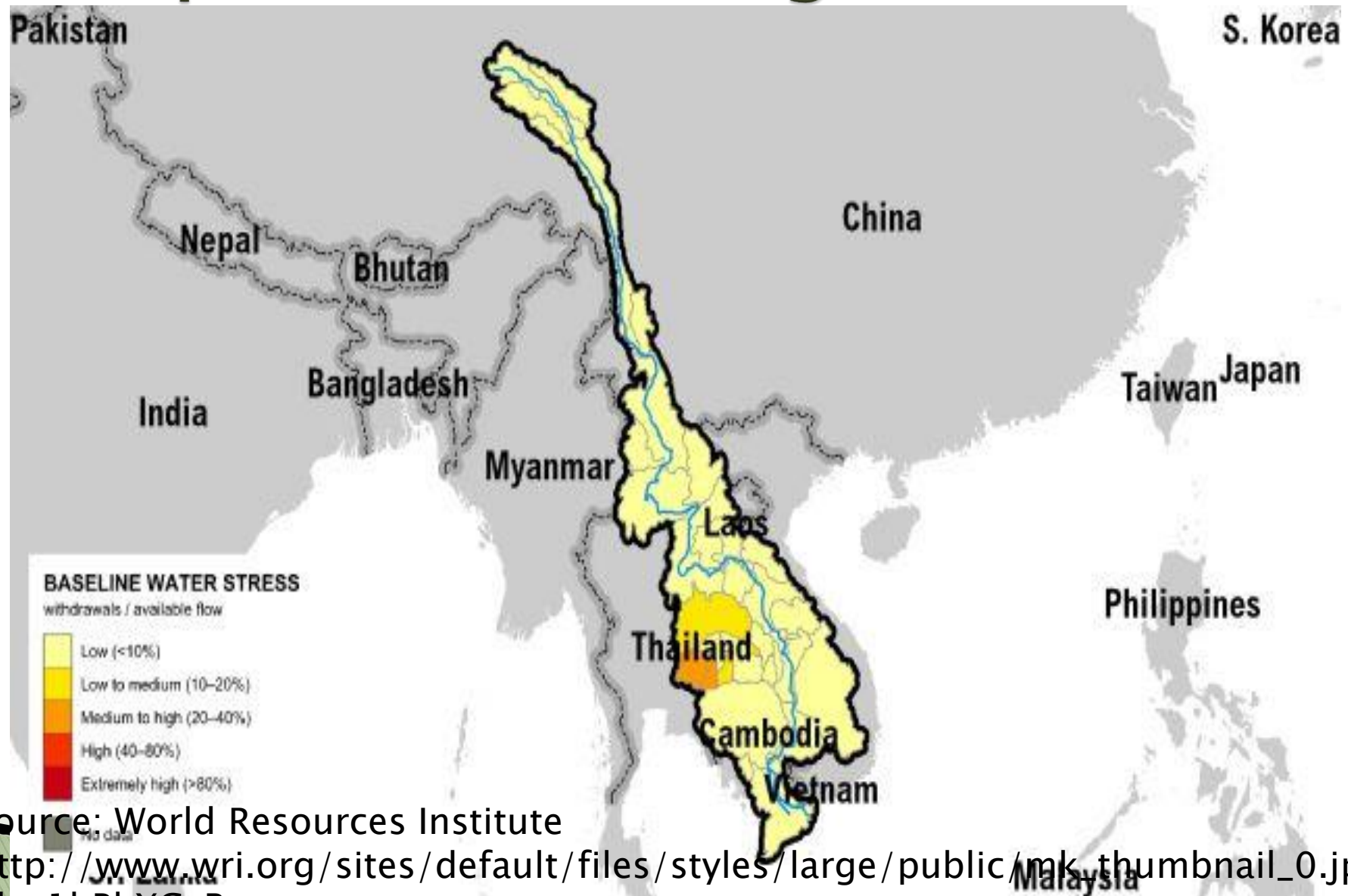
Background

- ▶ The 2nd part of the project titled “Water and Sustainable Development: Civil Society and Water Management of Mekong’s Tributaries in Northern Thailand”
- ▶ 2015: “State–Community Relations and the Integrated Water Resource Management in Northern Thailand: The case study of the People Council of Ing River”
- ▶ 2016: “Inter–agency coordination and role of local community on flood management of Mekong’s Tributaries in Northern Thailand: The case study of telemetry system in Kok River Basin”

Outline of the presentation

- ▶ Introduction : Kok River and flood
 - ▶ Research question
 - ▶ Research design
 - ▶ Research findings
 - ▶ Analysis
 - ▶ Conclusion
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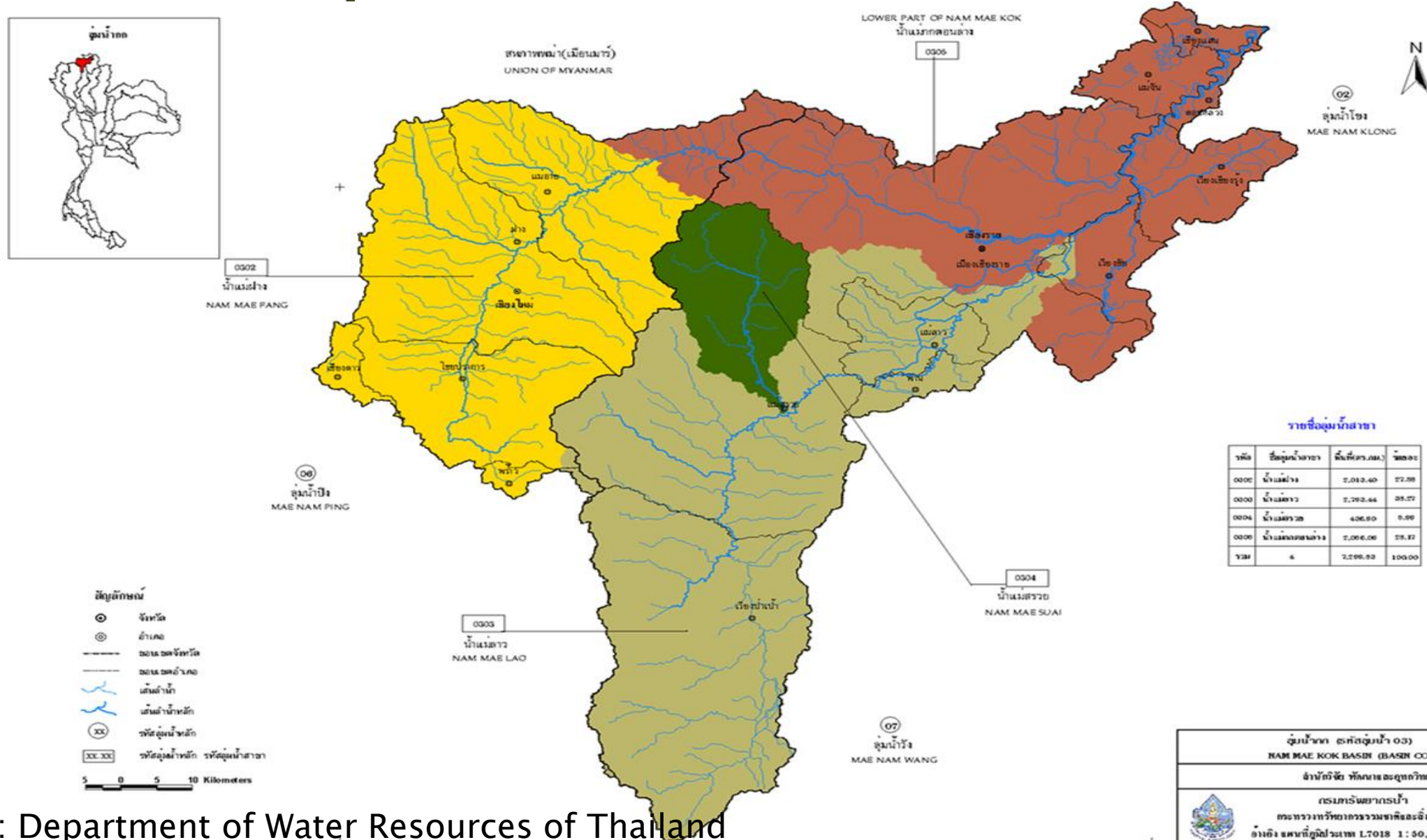
Map of the Mekong River Basin



Source: World Resources Institute

http://www.wri.org/sites/default/files/styles/large/public/mk_thumbnail_0.jpg?itok=1bBbXCeR

Map of the Kok River Basin



Source: Department of Water Resources of Thailand

Kok River Basin

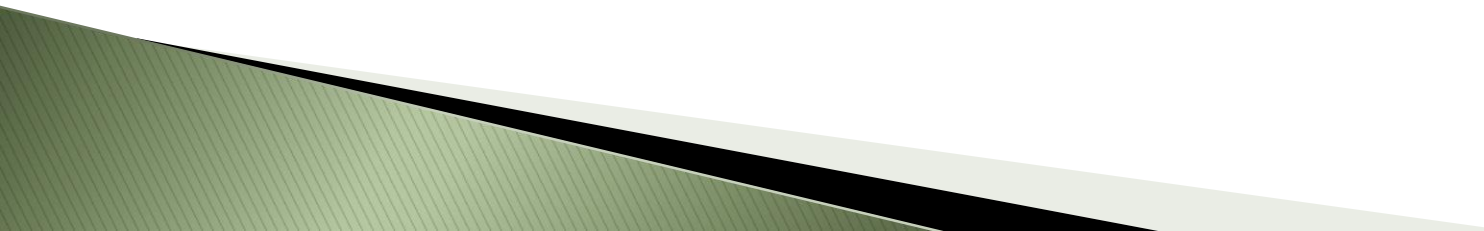
- ▶ **Basin area** 10,875 square kilometer
 - In Myanmar 2,980 square kilometer
 - In Thailand 7,895 square kilometer
 - In Chiangrai 8 districts
 - In Chaingmai 3 districts

- ▶ **Origin** Shan State, Myanmar
- ▶ **Mouth** Sop Kok Village, Chiangrai Province, Thailand

- ▶ **Length** 285 kilometer
 - In Myanmar 128 kilometer
 - In Thailand 157 kilometer

Flood situation in the Kok River Basin

Flood types

- ▶ **Tributary flood**: occurs when the Kok River overflows its banks because of intense rainfall
 - ▶ **Mainstream flood**: occurs when the Mekong River overflows its banks especially in the rainy season (June–November)
 - ▶ **Combined flood**: occurred by the interaction between the Mekong River and Kok River when their water levels are high at the same time.
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Flood situation in the Kok River Basin

► Flooded area

- **Chiang Rai City** located at the mid stream of the Kok River experiences frequent flood because of **the tributary flood**, particularly when there is a heavy rainfall and water level overflows the banks and flows into Chiang Rai City causing flood for several days.
- **Sop Kok Village**, a village located at the down stream of the Kok River where it meets the Mekong River, is flooded by huge amount of water of the Mekong each year when the Kok's water level is high. This is categorized as **the mainstream flood** or **combined flood** depending on the situation.

Telemetry system for flood management

- ▶ **Telemetry** is defined as “highly automated communications process by which data are collected from instruments located in remote or inaccessible points and transmitted to receiving equipment for measurement, monitoring, display, and recording”
- ▶ **Telemetry** is a water management system deployed by several agencies to generate data to be used in the assessment and decision making
- ▶ **Telemetry** is used to manage water supply for agriculture, to manage risk for early warning in terms of water quantity and quality
- ▶ Data collection, data analysis, data distribution is essential and, therefore; coordination is a key for management and utilization
- ▶ There are more than 20 telemetry stations in Kok River Basin installed by several agencies, both central and local (RID, DDPM–Chiangrai, and Chiangrai Provincial Office)

Research questions

- ▶ Main arguments
- ▶ The coordination among agencies for information sharing is essential
 - Inter-agency coordination under the centralized administrative system
- ▶ The role of community is the key of the success: ownership in management, utilization, and maintenance
 - Passive role and unawareness of local people

Research design

- ▶ Documentary research
- ▶ Field research :
 - Area: Kok River Basin – Chiangsaen
 - Case / Project: Telemetry system
 - Key informants:
 - Government's official (central and local)
 - Local NGOs
 - Local people

Agencies responsible for flood management

Central governmental agencies	Regional/Local Governmental agencies
<ol style="list-style-type: none">1. National Water Resources Committee2. Department of Water Resources3. Royal Irrigation Department4. Department of Disaster Prevention and Mitigation	<ol style="list-style-type: none">1. Chiang Rai Provincial Office2. Chiang Rai Provincial Irrigation Office3. Kok and Northern Mekong River Basin Committee4. Disaster Prevention and Mitigation Provincial Office (Chiang Rai)5. Ban Saeo Subdistrict Municipality6. Sop Kok Village Committee

Civil Society engaging in for flood management

Civil Society

1. Chiang Khong Conservation Group
2. Association of Chiang Saen Livable City
(สมาคมเชียงใหม่เมืองน่าอยู่)
3. Kok River Basin Ecology Group (กลุ่มนิเวศน์ลุ่มน้ำกก)

Findings 1 : Inter-agency coordination

- ▶ At **policy level**, there is **an integrated policy and plan** for water management (water supply, water allocation, and flood control) – **National Water Resource Committee**
- ▶ At **practical level**,
 - each agency **works independently** and is **accountable to its home ministry**
 - each agency does not aware about **the duplication** due to different purposes (the agency's purpose varies according to each ministry's goal)
 - each agency consider local people as **an objective of its service**
 - each agency works as “one time activity” meaning that only the equipment is provided with **no long term maintenance cost – maintenance cost is shouldered by either the local authority or local people**

Findings 1: Voices from officials

- ▶ Royal Irrigation Department (RID)
 - “We have an obligation to provide water supply, allocate water, and prevent flood. **The integrated management and coordination among agencies does not exist due to different purpose of each agency.**”
- ▶ Kok and Northern Mekong River Basins Committee
 - “**It is necessary to have a legal framework** to be a guideline for all agencies to coordinate under the supervision of the River Basin Committee (RBC).”
 -
- ▶ Disaster Prevention and Mitigation Provincial Office (Chiangrai)
 - “We utilize information from our agency as well as from RID. However, **in practice, to respond to emergency**, we need approval following **the line of command which is time consuming.**”

Findings 1: Voices from officials

► Chiangrai Provincial Office

- “The telemetry system is initiated by **officials; it is our job, not the people’s**. However, the local authority should maintain it because it is useful for the people in the area. Even there are many stations, they are not duplicated due to different and varied purposes.”

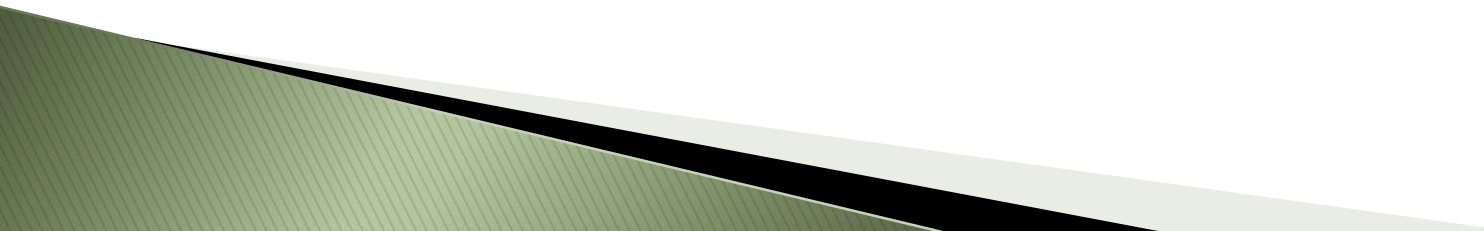
► Ban Saeo Subdistrict Municipality

- “**Monk, local NGOs, and social network (friends)** are important sources of information and early warning for flood prevention.”

► Sop Kok Village Committee

- “**We are aware of the unusual water flow from upstream; however, we can not do anything.** Sometimes we got information from government telling us to prepare for possible flood, but we can not do anything more than preparation. **Local people in general are also passive.**”

Findings 2: Roles of local NGOs and people

- ▶ There are **a few active local NGOs** in the area.
 - ▶ Local NGOs **hardly find support** from either officials or local people.
 - ▶ Local NGOs have tried to raise **awareness about external threat**,
▶ particularly from the upstream country, but the result is very limited.
 - ▶ Local NGOs demand for **more and wider participation**.
 - ▶ **Although local NGOs is active, local people in general are passive.**
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Findings 2: Voices from local NGOs and people

► Association of Chiang Saen Livable City

- “We always join the meeting invited by the officials, receive information, and distribute information to local people. We are aware of water flow from China; however, it is beyond our control. **We do not cooperate with the People Council of Ing River because we do not share a common interest.**”

► Kok River Basin Ecology Group

- “**It is very difficult to get support or to cooperate with officials.** We have tried to raise awareness of local people about water flow from the upstream countries as well as other environmental issues related to construction in the upstream countries (PRC and Lao PDR); however, our attempt brings limited result. **Although we are active, local people here in general are passive and concentrate only on their daily lives.**”

Analysis: Regional Governance

► Regional governance

- **Collaboration**
 - Cross sectors
 - Crossing political boundaries
- **Sustained citizen engagement**
 - Welcoming new voices
 - Visioning a different future
- **Leveraging regional resources**
 - Analyzing the region's competitive advantages
 - Strengthening the competencies of local elected officials
 - Engaging key intermediaries
 - Investing local capital

Sources: STATSAMERICA, October 2009, pp. 121–128
Rural Policy Research Institute, July 2006

Analysis: Regional Governance

- ▶ Kok River Basin and flood prevention
- ▶ Challenges for inter-agency coordination
 - Bureaucratic politics
 - Centralized administrative system
- ▶ Challenges for local NGOs and community
 - Weakness and unawareness
 - Perception of the issue – transboundary issue

Conclusion: Next step

▶ Civil Society

- National / local civil society
 - Commonality and difference between CSOs in Chiang Kong (Ing River) and Chiang Saen (Kok River)
- Transnational civil society

▶ Coordination

- National level
 - Inter-agency coordination
 - Government and community relations
- Regional level
 - Inter-government organization (MRC)



Thank you for your attention