

ASSESSMENTS OF ECOSYSTEM SERVICES AND HUMAN WELLBEING: POTENTIAL AND LIMITATIONS FOR STRATEGIC REGIONAL PLANNING IN THAILAND




Dr. Louis Lebel (on behalf of the SGA team)

Director, Unit for Social and Environmental Research (USER), Chiang Mai University, Thailand

llebel@loxinfo.co.th, louis@sea-user.org, www.sea-user.org;

SGA Assessment Network Meeting, Cape Town 26-29 November 2012

Issues of concern

Khon Kaen	Nan	Samut Songkhram
<p>Agro-industry development based on a few key crops may undermine soil and water-related services from the agricultural landscape with adverse impacts on small-scale farmers</p>	<p>Expansion of maize in upper watersheds may reduce hydrological services important both upstream and downstream with consequences for livelihoods and health</p>	<p>Concern of impacts of national development policy, including emphasis on infrastructure, industrialization and mass tourism which may undermine riparian, coastal and aquatic-related services important to local livelihoods and culture</p>
		

Assessment process

Has three main phases: design, implementation and use each with several sub-steps.

Communication activities are important throughout.

DESIGN	Clarify specific user needs for the assessment	Agree on specific policy questions	Define conceptual framework
	Establish governance structures and assessment team	Engage key users and stakeholders	Establish assessment team
	Monitoring and evaluation	Monitoring & evaluation	Stakeholder & technical review
IMPLEMENTATION	Assess trends and conditions in ecosystem services and human well-being	Key ecosystems and services	Wellbeing linkages
	Develop scenarios	Identify key uncertainties	Determine drivers of change
	Explore possible responses	Modifying drivers or their impacts	Consider trade-offs
USE	Advocacy and communication	Advocacy for policy change	Communication of findings
	Planning	Link to policy & planning	Communication of findings
COMMUNICATION			

Design: stakeholders & governance

	Khon Kaen	Nan	Samut Songkhram
Lead stakeholders	Regional Environment Office (REO 10) Governor's Office	Provincial Administration Organization Governor's Office	Regional Environment Office (REO 8) Chamber of Commerce Governor's Office
Technical team	WeSD, Khon Kaen University	Thailand Environment Institute	Coordination Centre for Community-based Research and Kasetsart University
Other Stakeholders	Tambon Administrative Organizations (TAO) Sugarcane industry Local residents	TAO Maize industry Civil society organizations Provincial Agricultural Office Local residents	TAO Local residents Tourist businesses Manufacturing & heavy industries

Trends & Conditions

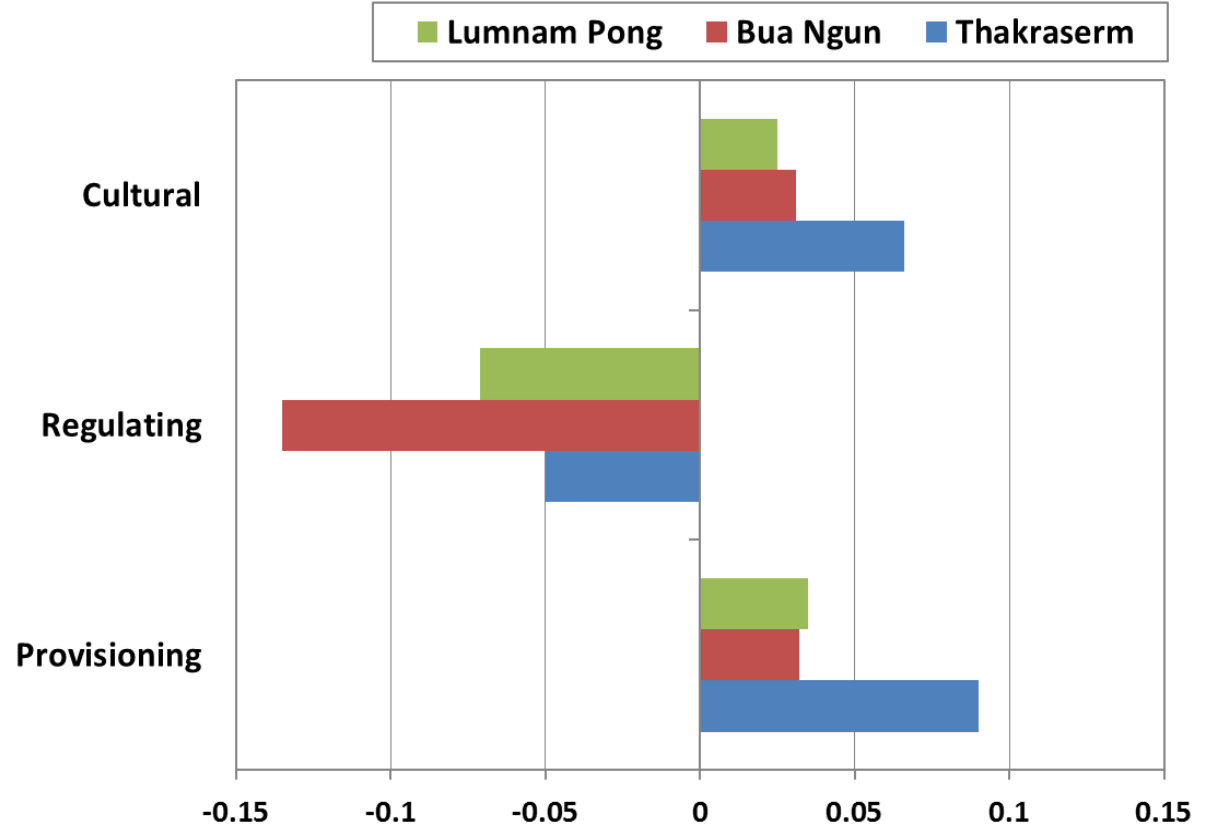
Summary of multiple lines of evidence for selected set of key services from three landscape types in Samut Songkhram province

Ecosystem services	Conditions	Trends	
		Stocks	Use flows
Coastal landscapes			
Fisheries production	High	↓	→
Erosion and storm protection	High	↗	↗
Agricultural landscapes			
Agriculture food production	High	↘	↘
Water purification and circulation	High	↘	↗
Tourism landscapes			
Cultural services	Middle	→	↗
Aesthetic services	Middle	↘	↗

Loss of regulating services

Perceived changes in levels of bundles of ecosystem services in three sub-districts of Khon Kaen province over past 10 years.

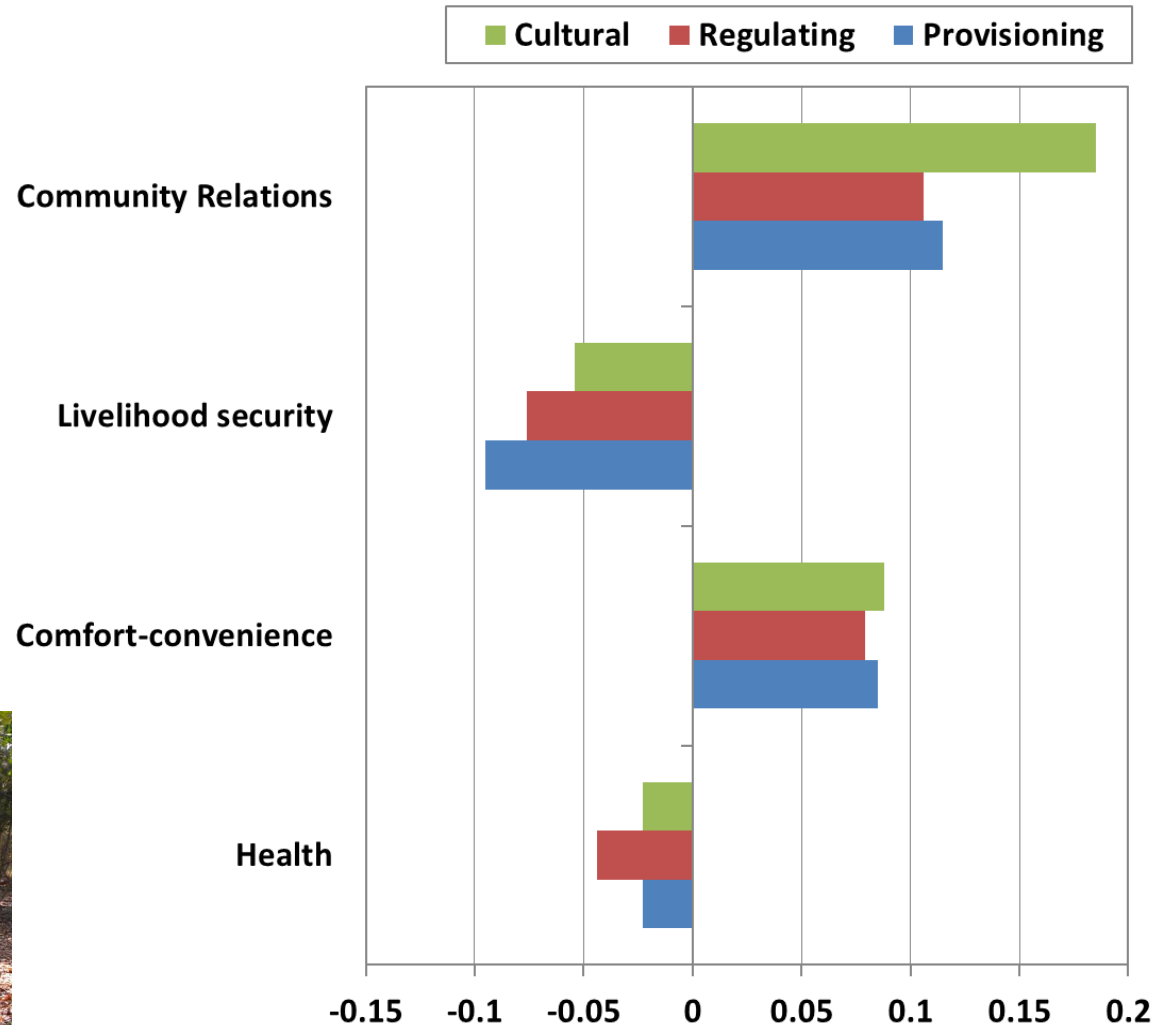
Household survey findings in Khon Kaen province



Human well-being links

Correlations between aggregate measures of well-being and uses of ecosystem services.

Example of evidence from household surveys in the Khon Kaen assessment.



Source: Khon Kaen Assessment Report

Scenarios in Nan



Farmers in Nan today.
What about tomorrow?

Think big

คิดใหญ่



Think far

คิดไกล



ตลาดภูมิภาค-โลก

เกษตรพาณิชย์

การเกษตร
จังหวัดน่าน
2565

เกษตรยั่งยืน



คิดจุกจิก

Think a lot

ตลาดท้องถิ่น-ในประเทศ



คิดใหม่

Think again

Responding to policy question: Khon Kaen




Key policy observations

- Policies and institutions related to key crops have a major influence on land-use
- Meaningful participation in planning remains limited
- Ecosystem services so far have been a low priority in current development strategies that promote Khon Kaen to be the center of energy and food crops

Assessment policy implications

- If continue need to mitigate impacts, e.g. through incentives for better land management practices
- If focus more on services and regional role opportunities for reducing pressure on agricultural lands but new issues around living in key 'economic corridors'
- Either way participation of local communities is crucial and should be strengthened

Use of assessments

Khon Kaen	Nan	Samut Songkhram
<p>Sub-district scenario exercises highlight non-agricultural interests and concerns</p> <p>Assessment team doing related follow-up work</p>	<p>Advocacy by groups wanting 'something to be done about upland Maize' including watershed fund rationale</p> <p>Scenario exercise used by Provincial Agricultural Office to inform its 10 year plan</p>	<p>Key assessment team members role in 4 year provincial plan process strengthened with evidence and community-based research experiences</p>
		

Assessments and planning

Advantages

- how ecosystems are important to different social groups
- how drivers influence land-use change
- How to use scenarios to explore the consequences and robustness of alternative policies and identify trade-offs
- Way to empower local actors and foster an evidence-based deliberative planning culture
- foundation for exploring feasibility of alternative policy instruments

Limitations

- take significant time and expertise to do well
- data constraints may be large
- require high quality coordination among stakeholders
- Not all key environment and development issues can be addressed through an ecosystem assessment
- planning and policy system may find it difficult to incorporate understanding into targets, indicators and budgets

Conclusions



- Ecosystem service assessments
 - are a useful way for exploring the ‘benefits’ provided by landscapes to human well-being and thus a potential tool in development planning and policy evaluation
 - are a social, not just technical, process that helps manage the boundaries between technical experts, planners, local residents and other knowledge holders and users



Thanks to Swedbio for support to assessment process, colleagues in UNDP/UNEP/PEI and MOI and the provincial assessment teams