

"Living Landscapes China" LILAC

Symposium

"Land use in the Greater Mekong Subregion – A Challenge for Society, Economy and Biodiversity"

October 11 - 14, 2010

Organized by: Xishuangbanna Tropical Botanical Garden (XTBG)

Chinese Academy of Sciences, China, and University of Hohenheim, Germany

Venue: Xishuangbanna Tropical Botanical Garden (XTBG)

Chinese Academy of Sciences Research Centre

Menglun Township, Mengla County Yunnan Province 666303, PR China

Background

"Techniques should be developed or improved that integrate different types of information [...] into a package that is easy to understand, visually attractive, and that allows modelling of different development options." (Cao et al. 2003)¹

Land use in the Greater Mekong Subregion (GMS) is undergoing serious alteration. The region has increasingly become part of the global economy due to the impacts of globalization and remarkable improvements in infrastructure. This results in far-reaching and often unpredictable impacts on man and his environment. Specifically, the socio-economic situation of rural people as well as the exceptional biological diversity are affected. Within the GMS, Xishuangbanna is famous for its cultural and environmental diversity and therefore well suited for a case study on land-use changes and its consequences.

The goal of development should be the sustainable improvement of living conditions taking into account the preservation of environmental services and capacities. In the GMS biodiversity is not only worth to be protected because of its ecological uniqueness but also because of its potential economic value.

The sustainability of development and land-use change processes requires the understanding of the underlying driving forces as well as the consequences of specific decisions. It has been, therefore, the objective of this research co-operation to analyse social, economic, and ecological framework conditions in Naban River Watershed National Nature Reserve and the possible consequences of land-use change. Based on this analysis we developed a GIS-based scenario tool for modelling development trajectories on regional scale. Such a modelling tool supports the assessment of land-use change with regard to their social, economic, hydrological and ecological implications. The overall framework can be used in decision making processes affecting land-use patterns.

¹ Cao M., Woods K., Hu H. & Li L. 2003. Biodiversity management and sustainable development. Lancang-Mekong River in the new millennium. China Forestry Publishing House.

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Sunday, 10.10.10

- Arrival of participants at Jinghong Airport, Xishuangbanna
 - o Pick-up service from airport and transfer to Xishuangbanna Tropical Botanical Garden
 - o Hotel check-in and registration
 - o Welcome Dinner

Monday, 11.10.10

09:00 - 10:30 Opening Ceremony	
09:00 - 09:30	Symposium opening and introduction of "LILAC" by Prof. Chen / Prof. Sauerborn
09:30 - 10:30	Official presentations
10:30 - 10:45	Tea break
	10:45 – 15:30 Keynotes (30 min. + 10 min.)

Presentation of keynote speakers

- Jeff FOX, East-West Center, Honolulu, Hawaii:
 "Land use in the GMS-perspective: opportunities and challenges"
- 2. **XU, Jianchu**, Centre for Mountain Ecosystem Studies, Kunming, ICRAF China: "Speed of change the human dimension of globalization in the GMS"

12:15 - 13:30 Lunch break

- 3. TING, Zuo, Department of Rural Development and Management, COHD/CIADeconomy:
 - "How to safeguard livelihoods in a globalizing economy?!"
- 4. Richard WAKEFORD, OECD Rural Working Party:
 "Rural development from the OECD perspective"
- **5. Richard CORLETT,** Department of Biological Science National University of Singapore: "Development with or against nature? The perspective of an ecologist"

15:30 – 15:40 Tea break

15:40 – 16:40 Panel discussion Global Change in the GMS –Challenges for Research and Management

18:30 Dinner

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Tuesday, 12.10.10

08:40 – 12:20 Session on biodiversity and land use (15+5 Minutes)

- MO, Xia-Xue: "Limited impact on plant diversity and composition of traditional forest management in a tropical seasonal rainforest in SW China"
- LIU, Jingxin: "Land-use and plant diversity a case study from the NRWNNR"
- o **ZHU, Hua**: "Vegetation and flora of Xishuangbanna, southern Yunnan"
- MENG, Lingzeng: "Ground beetle (Carabidae) communities and species distribution in a dynamic landscape mosaic of tropical Yunnan, SW China"
- Konrad MARTIN: "Responses of insect pollinators (hoverflies and wild bees) to land use change in tropical Yunnan, SW China"

10:20 - 10:40 Tea Break

- **FANG, Lin**: "Effect of plant carbon inputs on soil microbial biomass carbon in different land uses of Xishuangbanna"
- Abdolbaset GHORBANI: "Non-timber forest products in the NRWNNR the case of medicinal and food plants"
- LI, Yong-Mei: "Soil quality evaluation of different land use types in Naban River Watershed National Nature Reserve"
- Maria WOLFF: "Carbon sequestration potentials and nutrient status under different land uses in Xishuangbanna, Southwest China"
- ZHANG, Qingfan: "Water Management in Nabanhe National Reserve"

12:20 - 12:40 Panel discussion

"Lessons learned, relevance of findings, identification of crucial research needs"

12:40 - 13:40: Lunch break

13:40 – 17:50 Session on Socio-Economy

- ZHANG, Chunxia: "Analysis of the effects on livestock diversity factors in Naban River Watershed National Nature Reserve"
- LENG, Jing: "The effect of farming area on the livestock number in Naban River Watershed National Nature Reserve"
- Simon RIEDEL: "Perspectives of small scale Pig Production in Naban River Watershed National Nature Reserve, southern Yunnan, P. R. China"

10 minutes break

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Session on Socio-Economy (continued)

- Wolfgang PFINGST: "Post-harvest technologies for value added neglected plants of the Naban River Watershed National Nature Reserve"
- LIANG, Chuan: "Social, cultural and institutional framework of agricultural landscape protection"
- LIU, Yan: "A village social accounting matrix for mountainous Southwest China: a case study in Xishuangbanna, Yunnan, China"

15:50 - 16:10 Tea Break

- TANG, Lixia: "Opinion leaders: linkage between external extension system and farmers in knowledge flow"
- Patrick GROETZ: "The adoption likelihood of land-use innovations in the Naban River Watershed National Nature Reserve (NRWNNR), Southwest China"
- Stefanie WEHNER: "Landscape and society: the dialectics of the rubber-line"
- JIN, Leshan: "Comparative study on urban and rural residents' willingness to pay for environmental protection: case study at the Nanbanhe Watershed, Yunnan"
- Tobias BÖRGER: "Economic valuation of a land-use change scenario of rubber cultivation in Xishuangbanna"

17:50 - 18:20 Panel discussion

"Lessons learned, relevance of findings, identification of crucial research needs"

19:30 Dinner Party

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Wednesday, 13.10.10

09:00 - 12:30 Session on land-use change modelling

- Sylvia HERRMANN: "Integrated modelling approach for impact assessment"
- Tarig M. GIBREEL: "Land-use change analysis by programming of farmer behaviour: a village-household approach to assess the impact of rubber production in southern China"
- Karin BERKHOFF: "Modelling land use change in the NRWNNR with the CLUE-S model"

10:30 - 10:45 Tea Break

Session on land-use change modelling (continued)

- ZHANG, Lulu: "Assessment of scenario-driven landscape water budget"
- Marc COTTER: "A biodiversity evaluation tool for the tropics modelling concept for conservation and planning"
- Karin BERKHOFF: "Impact assessment of land-use change scenarios for the NRWNNR"

12:30 - 13:00 Panel discussion

"Lessons learned, relevance of findings, identification of crucial research needs"

13:00 – 14:15 Lunch break

14:15 - 15:15 Final plenary session

- Challenges and experiences of this international interdisciplinary project approach
- Relevant joint findings and important aspects highlighted
- Future challenges and prospects
- Visions for the future development within the GMS and identification of necessary scientific contributions

15:15 Closing ceremony

18:00 Dinner

Thursday, 14.10.10

08:30 – 17:30 Post-Conference excursion to the Naban River Watershed National Nature Reserve (optional)

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Accommodation: At XTBG. Has to be covered by the participants. Expenses: 200

RMB/room/day (one room with two beds or with one bed).

Transportation

There will be a pick-up/drop-off service from/to the airport. Therefore, please provide us your flight schedule as early as possible.

Organizing Committee

Prof. Dr. Joachim Sauerborn

Ms. Inga Häuser & Dr. Gerhard Langenberger, University of Hohenheim

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