

**International Symposium**

**Towards Sustainable Livelihoods and  
Ecosystems in Mountainous Regions**

**7-9 March 2006 in Chiang Mai, Thailand**

**organized by  
University of Hohenheim, Germany  
in cooperation with  
Chiang Mai University, Thailand &  
Southeast Asia Regional Office of the  
World Agroforestry Centre (ICRAF)**

**Tentative Symposium Program**

**Funded by Deutsche Forschungsgemeinschaft (DFG)  
and co-funded by National Research Council of Thailand**

**Note: Program is subject to changes and to confirmation  
of some keynote speakers and contributed paper and poster authors**

**PROGRAM OVERVIEW (TUESDAY, 7 MARCH - THURSDAY, 9 MARCH 2006)**

<b>Day</b>	<b>Tuesday 7 March</b>	<b>Wednesday 8 March</b>	<b>Thursday 9 March</b>
<b>Time</b>	<b>Registration:</b>		
8:30 – 9:00	<b>Monday 6 March: 14:00 – 18:00</b>	<b>Contributed Paper Session 2 4 concurrent groups</b>	<b>Plenary Session 4: Panel discussion</b>
9:00 – 9:30	<b>Tuesday: 8:00 – 9:30</b>		
9:30 – 10:00	<b>Welcome and Introduction</b>		
10:00 – 10:30	<b>Coffee/tea</b>	<b>Coffee/tea</b>	<b>Coffee/tea</b>
10:30 – 11:00	<b>Plenary Session 1 Mountainous Regions: A challenging ecosystem</b>	<b>Plenary Session 3: Introduction to Posters Poster Session</b>	<b>Plenary Session 5: Reports from contributed paper sessions Concluding remarks &amp; Closing</b>
11:00 – 11:30			
11:30 – 12:00			
12:00 – 13:30	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>
13:30 – 14:00	<b>Plenary Session 2 Mountainous Regions: A challenging ecosystem</b>	<b>Contributed Paper Session 3 4 concurrent groups</b>	<b>Optional Post-Symposium Excursions: Mae Sa Valley Mae Jo University ICRAF Research Sites Royal Project Centers</b>
14:00 – 14:30			
14:30 – 15:00			
15:00 – 15:30	<b>Coffee/tea</b>	<b>Coffee/tea</b>	
15:30 – 16:00	<b>Contributed Paper Session 1 4 concurrent groups</b>	<b>Contributed Paper Session 4 4 concurrent groups</b>	
16:00 – 16:30			
16:30 – 17:00			
19:00	<b>Reception Dinner</b>		

---

<b>8:00 – 9:30</b>	<b>REGISTRATION: FOYER OF THE IMPERIAL MAE PING HOTEL</b>
--------------------	---

<b>9:30 – 10:00</b>	<b>OPENING</b>
---------------------	----------------

**Welcome Address**

Pongsak Angkasith, President, Chiang Mai University, Thailand

Hagen E.W. Dirksen, German Honorary Consul, Chiang Mai

**Introduction to Symposium Theme and Uplands Program**

Franz Heidhues and Karl Stahr, University of Hohenheim, Germany

<b>10:00 – 10:30</b>	<b>COFFEE/TEA BREAK</b>
----------------------	-------------------------

<b>10:30 – 12:00</b>	<b>PLENARY SESSION 1</b>
----------------------	--------------------------

**Mountainous Regions: A Challenging Ecosystem**

**Chair:** Franz Heidhues, University of Hohenheim, Germany

Keynote I

**Reconciling biodiversity conservation and human livelihoods in the mountains of Europe**

Jonathan Mitchley, Imperial College London, UK

Keynote II

**Challenges for research and development in mountainous regions of Southeast Asia (*Title to be confirmed*)**

Meine van Noordwijk, World Agroforestry Centre, Bogor

<b>12:00 – 13:30</b>	<b>LUNCH BREAK</b>
----------------------	--------------------

<b>13:30 – 15:00</b>	<b>PLENARY SESSION 2</b>
----------------------	--------------------------

**Mountainous Regions: A Challenging Ecosystem**

**Chair:** Karl Stahr, University of Hohenheim, Germany

Keynote III

**Innovative Research Approaches for Mountainous Regions:  
Operationalizing Systems Integration at Farm and Landscape  
Scales in Eastern Africa**

Laura German, African Highlands Initiative, Kampala, Uganda

Keynote IV

**Conserving natural resources in mountainous regions of Latin  
America: The case of Ecuador**

Wolfgang Wilcke, University of Mainz, Germany (*to be confirmed*)

<b>15:00 – 15:30</b>	<b>COFFEE/TEA BREAK</b>
----------------------	-------------------------

<b>15:30 – 17:00</b>	<b>CONTRIBUTED PAPER SESSION 1 (4 CONCURRENT)</b>
----------------------	---

<b>CPS 1-1</b>	<b>ANALYSIS OF MOUNTAIN ECOSYSTEMS</b>
----------------	--

<b>ROOM 1</b>
---------------

**Chair:** Rod Lefroy, CIAT Southeast Asia, Vientiane, Lao PDR

**1. Root effects on slope stability in Sumberjaya, Lampung (Indonesia)**

Hairiah, K. et al., Brawijaya University, Malang, Indonesia

**2. Lateral water flow and transport of agrochemicals in a sloped soil under litchi  
in Northern Thailand**

Kahl, G. et al., University of Hohenheim, Germany

**3. Can reforestation regain the hydrological function of natural forest in sloping  
areas?**

Sri Rahayu Utami et al., Brawijaya University, Malang, Indonesia

**4. Dynamics and diversity in agroecosystems: Approaches for sustainable land  
use in litchi orchards of northern Thailand**

Euler, D. et al., University of Hohenheim, Germany

CPS 1-2	HIGH-VALUE FRUIT PRODUCTION AND PROCESSING	ROOM 2
---------	--	--------

**Chair:** Pittaya Sruamsiri, Chiang Mai University, Thailand

- 1. The role of boron and zinc deficiency on flower induction of litchi**  
Roygrong, S. et al., University of Hohenheim, Germany
- 2. Effect of partial rootzone drying and deficit irrigation on stomatal resistance and leaf abscisic acid concentration of mango trees**  
Hegele, M. et al., University of Hohenheim, Germany
- 3. Stomatal resistance for monitoring drought stress under deficit irrigation applied to litchi, mango and longan in northern Thailand**  
Spreer, W. et al., University of Hohenheim, Germany
- 4. Improvement of air flow and temperature distribution in the conventional longan dryer**  
Janjai, S. et al., Silpakorn University, Nakhon Pathom, Thailand
- 5. Options for mango processing into products rich in provitamin A and parallel transformation of biological waste into value-adding byproducts**  
Neidhart, S. et al., University of Hohenheim, Germany

CPS 1-3	MULTI-AGENT SYSTEMS MODELING	ROOM 3
---------	------------------------------	--------

**Chair:** Benchaphun Ekasingh, Chiang Mai University, Thailand

- 1. Assessing innovations and sustainability strategies with multi-agent system**  
Schreinemachers, P. and Berger, T., University of Hohenheim, Germany
- 2. Multi-agent simulations of the human impacts and landscape dynamics of agroforestry adoption in the uplands of southern Philippines**  
Magcale-Macandog, D.B. et al., University of the Philippines, Los Baños, Philippines
- 3. Companion modelling for collective learning & action in water management: Lessons learnt from three case studies in northern Thailand and Bhutan**  
Tayan Raj Gurung et al., CIRAD, Montpellier, France
- 4. Participatory simulation sessions to support collective decision: the case of water allocation between a Thai and a Hmong village in northern Thailand**  
Becu, N. et al., University of Hohenheim, Germany

---

<b>CPS 1-4</b>	<b>WATERSHED AND PROTECTED AREA MANAGEMENT</b>	<b>ROOM 4</b>
----------------	--	---------------

**Chair:** Harald Leisch, University of Hohenheim, Germany

**1. Approaching land degradation in the uplands of Laos: Looking beyond the approximate causes**

Lestrelin, G. and Giordano, M., IRD, IWMI and University of Durham, UK

**2. Recent changes in the composite swidden farming system in Vietnam's northern mountain region**

Tran Duc Vien et al., Hanoi Agricultural University, Vietnam

**3. Socio-economic aspects of heather burning in upland management in the UK: Case of the Peak District National Park**

Niba Fon, J., University of Leeds, UK

**4. Sustaining productivity and controlling land degradation in mountainous areas of NE Thailand through integrated watershed management**

Wongkahart, T. et al., Office of Agricultural Research and Development, Khon Kaen, Thailand

<b>19:00</b>	<b>RECEPTION DINNER</b>
--------------	-------------------------

<b>8:30 – 10:00</b>	<b>CONTRIBUTED PAPER SESSION 2 (4 CONCURRENT)</b>
---------------------	---

<b>CPS 2-1</b>	<b>MODELING LAND USE AND LANDSCAPE DYNAMICS</b>	<b>ROOM 1</b>
----------------	---	---------------

**Chair:** Attachai Jintrawet, Chiang Mai University, Thailand

- 1. Shifting cultivation in Luang Prabang: A spatial and temporal assessment of the forest-farm-fallow landscape mosaic using remote sensing and GIS**  
Samek, J.K., Michigan State University, USA
- 2. Bringing space into econometric land use change models: A case study in the northwestern uplands of Vietnam**  
Manh Cuong Pham and Zeller, M., University of Göttingen, Germany
- 3. Combining geomatics, local knowledge, and conventional methods for monitoring forest conditions and analyzing their associations with governance parameters**  
Gautam, A.P., Asian Institute of Technology, Thailand
- 4. Alternative landuse options for Philippine grasslands: A bioeconomic modeling approach using the WaNuLCAS model**  
Magcale-Macandog, D.B. et al., University of the Philippines, Los Baños, Philippines

<b>CPS 2-2</b>	<b>TOWARDS SUSTAINABLE LAND USE PRACTICES</b>	<b>ROOM 2</b>
----------------	---	---------------

**Chair:** Nguyen Van Dinh, Hanoi Agricultural University, Vietnam

- 1. Issues for the adoption of direct seeding mulch-based cropping systems in southern Xayabury, Lao PDR**  
Tran Quoc, H. et al., CIRAD-CA, Vientiane, Laos
- 2. Participatory agroforestry technology development: Experiences of LI-BIRD**  
Regmi, B.R. et al., Local Initiatives for Biodiversity, Research and Development (LI-BIRD), Batolathar, Nepal
- 3. Economic potential of establishing fruit bearing perennials in cropped fields**  
Rañola, R.F. et al., University of the Philippines, Los Baños, Philippines
- 4. Modeling sustainability of highland agricultural systems in northern Thailand**  
Praneetvatakul, S. and Sirijinda, A., Kasetsart University, Bangkok, Thailand

CPS 2-3

RESOURCE TENURE, VALUATION AND POLICIES

ROOM 3

**Chair:** Anan Ganjanapan, Chiang Mai University, Thailand

**1. Reforestation policies and upland allocation in northern Vietnam: An institutional approach to comprehend their impact on farmers' strategies and land use change**

Clement, F., University of Newcastle upon Tyne, UK

**2. Socio-economic change and institutional responses: 'Best and Worst Practice' Cases from mountains and hills in western Nepal**

Berg, T.R., Aalborg University, Denmark

**3. An assessment of water security and livelihoods of highlanders in the North of Thailand: A case study of Mae Sa watershed, Chiang Mai province**

Sangkaptux, C. et al., Chiang Mai University, Thailand

**4. Economic valuation of environmental benefits in developing and emerging countries: theoretical considerations and practical evidence from Thailand and the Philippines**

Ahlheim, M. et al., University of Hohenheim, Germany

CPS 2-4

PROJECT IMPACT AND PROJECT EXPERIENCE

ROOM 4

**Chair:** Andrew Bartlett, Vientiane, Lao PDR

**1. Alternative Livelihoods: Is there substance in the slogan? Evidence from opium cultivation in Afghanistan**

Pain, A., University of East Anglia, Norwich, UK

**2. Communities vs. development in China's Southwest Mountain Regions**

Russel, H., The University of Western Australia, Australia

**3. Making a difference: Project intervention in Xieng Ngeun district, Luang Prabang province, Lao PDR**

Alexander, K. and Spennemann, D., Charles Sturt University, Albury, Australia

**4. Integrated multidisciplinary development approach for poverty reduction and peace building: A SAHAKARYA Approach**

Regmi, S.K., SAHAKARYA Project, Kathmandu, Nepal

10:00 – 10:30

COFFEE/TEA BREAK



<b>10:30 – 12:00</b>	<b>PLENARY SESSION 3: POSTER SESSION</b>
----------------------	--

**Introduction to the Poster Session (Plenary)**

N.N.

A list of presented posters is included in this program volume, page 15 ff.

<b>12:00 – 13.30</b>	<b>LUNCH BREAK</b>
----------------------	--------------------

<b>13:30 – 15:00</b>	<b>CONTRIBUTED PAPER SESSION 3 (4 CONCURRENT)</b>
----------------------	---

<b>CPS 3-1</b>	<b>IMPROVING PRODUCTIVITY OF SLOPING LAND</b>	<b>ROOM 1</b>
----------------	---	---------------

**Chair:** Somchai Ongprasert, Maejo University, Chiang Mai, Thailand

**1. Soil fertility, crop production and temporal changes of resource use on steep slopes in upland northwest Vietnam**

Wezel, A. et al., University of Hohenheim, Germany

**2. A nutrient balance analysis of the sustainability of a composite swiddening agroecosystem in Vietnam's northern mountain region**

Tran Duc Vien et al., Hanoi Agricultural University, Vietnam

**3. Irrigation in a karst area of northwestern Thailand: A challenge**

Schuler, U. et al., University of Hohenheim, Germany

**4. Socio-economic characterization of indigenous soil and water conservation systems for sloping land**

Kayombo, B., College of Agriculture, Gaborone, Botswana

<b>CPS 3-2</b>	<b>ACCESS TO MARKETS AND RURAL SERVICES</b>	<b>ROOM 2</b>
----------------	---	---------------

**Chair:** Franz Heidhues, University of Hohenheim, Germany

**1. Impact of urban development and market access on farming systems evolution in Xieng Khouang province, Lao PDR**

Lienhardt, P. et al., CIRAD, Montpellier, France

**2. Livelihood strategies and market access in the Moroccan High Atlas**

Buerli, M. et al., International Center for Agricultural Research in the Dry Areas (ICARDA), Aleppo, Syria

**3. Creating backward and forward linkages for underutilized crops: The case of Quinoa, an organic seed crop from the Andes region of South America**

Jacobsen, S.-E. et al., Royal Veterinary and Agricultural University, Taastrup, Denmark

**4. Participatory agricultural extension in Northern Upland Vietnam: Challenges of coordinating rural service provision and bridging the farmer/extensionist interface**

Nguyen Duy Linh et al., Hanoi Agricultural University, Vietnam

<b>CPS 3-3</b>	<b>GOVERNANCE, NETWORKS AND LIVELIHOODS</b>	<b>ROOM 3</b>
----------------	---	---------------

**Chair:** Terry Rambo, Khon Kaen University, Thailand

**1. State administrations and local society: Conditions for political participation in the highlands of northern Thailand**

Bechstedt, H.-D. and Legsomboon, W., University of Hohenheim, Germany

**2. Sustainable use and management of natural resources in uplands of China: Policies, issues, and the way forward**

Rasul, G., International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal

**3. Within society and informal risk-sharing networks: Which role do women play? Experiences from northern Vietnam**

Beuchelt, T. et al., University of Hohenheim, Germany

**4. Impact of cash crop cultivation on gender relations dynamics in Khasi community, a matrilineal tribe of Meghalaya, India**

Tiwari, B.K. et al., North-Eastern Hill University, Shillong, India

<b>CPS 3-4</b>	<b>Special session and discussion group: 20 years after Khon Kaen – Has the PRA and ‘farmer first’ movement benefited the poor in upland areas?</b>	<b>ROOM 4</b>
----------------	---	---------------

**Chair:** N.N.

Papers on special invitation

<b>15:00 – 15:30</b>	<b>COFFEE BREAK</b>
----------------------	---------------------

<b>15:30 – 17:00</b>	<b>CONTRIBUTED PAPER SESSION 4 (4 CONCURRENT)</b>
----------------------	---

<b>CPS 4-1</b>	<b>COMMUNITY-BASED RESOURCE CONSERVATION</b>	<b>ROOM 1</b>
----------------	--	---------------

**Chair:** Xu Jianchu, International Center for Integrated Mountain Development (ICIMOD), Katmandu, Nepal

**1. Research on local knowledge for sustainable management of natural reserves in Vietnam: Case study of the LLINC project**

Tran Hong Thu, Institute of Anthropology, Hanoi, Vietnam

**2. Traditional knowledge and conservation of medicinal plants for sustainable livelihoods in the Garhwal Himalayan region of Uttaranchal, India**

Uniyal, B. et al., NAVDANYA, Uttaranchal, India

**3. Integrated forest management in the Bale mountains of Ethiopia**

Amente, G., Albrecht-Ludwigs University, Freiburg, Germany

**4. Knowledge-based system (KBS) approach to achieve sustainable landscapes and farms**

Fagerström, M.H. and van Noordwijk, M., World Agroforestry Centre, Bogor, Indonesia

<b>CPS 4-2</b>	<b>LIVELIHOOD TRAJECTORIES IN MOUNTAIN REGIONS</b>	<b>ROOM 2</b>
----------------	--	---------------

**Chair:** David Thomas, World Agroforestry Centre, Thailand

**1. Participatory scenarios for sustainable management of ASB benchmark site in Thailand: Case of Mae Kong Kha Sub-watershed of Mae Chaem Watershed**

Thongbai, P. et al., Thailand Institute of Scientific and Technological Research, Thailand

**2. Sustainable livelihoods and ecosystem in mountainous regions: A case study of Kelawat Forest Reserve, Malaysia**

Martin, R.A. et al., Sabah Forestry Department, Malaysia

**3. Sustaining mountain livelihoods through agri-tourism: Issues and trends in Asian mountains, with specific reference to the Nepalese Himalaya**

Nepal, S.K., Texas A&M University, USA

**4. The geo-ecological and socio-economic implications of tea plantation closures in Darjeeling, Indian Himalaya**

Tirkey, L. and Gardner, J., University of Manitoba, Canada

<b>CPS 4-3</b>	<b>ROLE OF LIVESTOCK FOR MOUNTAIN LIVELIHOODS</b>	<b>ROOM 3</b>
----------------	---	---------------

**Chair:** Anne Valle Zárate, University of Hohenheim, Germany

**1. Efficiency of smallholder husbandry based on suitability of smallholder pig production systems in North Vietnam**

Thuy, L.T. et al., National Institute of Animal Husbandry, Hanoi, Vietnam

**2. A demand analysis for livestock microinsurance in northern Vietnam**

Fischer, I. et al., University of Hohenheim, Germany

**3. Livelihood from weeds and leaves – Nutrient flows in the crop/aquaculture system of Black Thai Farmers in Yen Chau, Son La province, northern Vietnam**

Steinbronn, S. et al., University of Hohenheim, Germany

**4. The contribution of livestock development to sustainable livelihoods in the central highlands of Vietnam: A case study**

Truong Tan Khanh et al., Tay Nguyen University, Daklak, Vietnam

<b>CPS 4-4</b>	<b>Special session and/or discussion group</b>	<b>ROOM 4</b>
----------------	--	---------------

**Chair:** N.N.

Theme and contributors to special session and/or discussion group to be specified

**8:30 – 10:00 PLENARY SESSION 5: PANEL DISCUSSION****Theme to be specified**

**Chair:** David Thomas, World Agroforestry Centre, Chiang Mai, Thailand

**Panelists:**

Rod Lefroy, CIAT Southeast Asia Program, Vientiane, Lao PDR

Qian Jie, Center for Biodiversity and Indigenous Knowledge, China

Terry Rambo, Khon Kaen University, Thailand

Jonathan Mitchley, Imperial College London, UK

Tran Duc Vien, Hanoi Agricultural University, Vietnam

Xu Jianchu, International Center for Integrated Mountain Development (ICIMOD), Katmandu, Nepal

**Discussion****10:00 – 10:30 COFFEE/TEA BREAK****10:30 – 11:30 PLENARY SESSION 5****Reports from Contributed Paper Sessions**

**Chair:** N.N.

**11:30 – 12:00 CONCLUSIONS & CLOSING SESSION****Concluding remarks**

Franz Heidhues and Karl Stahr, University of Hohenheim, Germany

**Closing**

Pongsak Angkasith, President, Chiang Mai University, Thailand

<b>POST-SYMPOSIUM EXCURSIONS (OPTIONAL)</b>
---

The organizers offer several excursions to visit research sites and projects related to different thematic aspects of the symposium.

Excursion A: Sustainable agriculture in Mae Sa Watershed

Excursion B: Research station for longan and mango at Mae Jo University

Excursion C: Community-based ecotourism in Mae Wang

Excursion D: Successful replacement of opium: The case of the Royal Project

Participants, who are interested in taking part in one of these excursions are asked to register at the Excursion Desk at the first day of the symposium where more details on the excursion sites, the topics, and other logistic information will be available.

Please be informed that each tour is limited with regard to the number of participants.

The organizers would like to thank the following institutions for facilitating and organizing the excursions:

- The Uplands Program, Thailand Office
- Chiang Mai University, Faculty of Agriculture
- Mae Jo University, Faculty of Agricultural Production
- World Agroforestry Center, Chiang Mai Office
- Royal Project Foundation

---

**POSTERS PRESENTED AT THE POSTER SESSION**

---

***Livelihood analysis, indigenous farming practices and rural development*****Changes to agricultural production and livelihoods in Xieng Ngeun district, Luang Prabang province, Lao PDR**

Alexander, K. et al., Charles Sturt University, Albury, Australia

**Role of off-season vegetables in the sustainable livelihood of hills' people: A case for the Pindar Basin (Uttaranchal Himalaya)**

Vishwambhar Prasad Sati, Eritrea Institute of Technology, Asmara, Eritrea

**Principal component analysis of poverty in northern Thailand**

Sricharoen, T., University of Hohenheim, Germany

**Integrated highland development in Bario, Sarawak, Malaysia: An overview**

Jiwan, D. et al., Forest Research Centre, Kuching, Malaysia

**Health insurance for the poor as one element of the social security network in the mountainous regions of northern Vietnam**

Tran Quang Trung et al., University of Hohenheim, Germany

**Ecotourism development program by the Lundayeh Community in Ulu Padas, Sabah, Malaysia**

Majail, J., WWF Malaysia – Borneo Program, Malaysia

**Promotion of ecotourism for sustainable livelihoods in the protected areas of Garhwal hills of Uttaranchal state in India: An integrated approach for entrepreneurship promotion and self reliance**

Bagri, C., India

**Sustainable development of the Western Ghats Mountain Region – Key factor in food security, economic development and poverty eradication in Kerala**

Nair, K.S., Centre for Earth Research & Environment Management, Kerala, India

**The role of Integrated Conservation-Development Projects (ICDPs) in sustainable environmental management in China**

Xiang-Jun Yang, Regional Community Forestry Training Center for Asia and the Pacific (RECOFTC), Yunnan, China

**Indigenous strategies of sustainable farming systems in the highlands of northern Philippines**

Magcale-Macandog, D.B. and Ocampo, L.J.M., University of the Philippines, Los Baños, Philippines

***Technology development, adaptation and adoption*****Dissemination pathways of innovations in irrigation technology in rural upland areas of northern Thailand**

Pinmanee, S. et al., Uplands Program – Thailand Office, Chiang Mai, Thailand

**Integrated hedgerow technology: Promising options and opportunities for shifting cultivation and sloping land areas**

Regmi, B.R. et al., Local Initiatives for Biodiversity, Research and Development (LI-BIRD), Batolathar, Nepal

**Adaptation of soil conservation technologies by smallholders. A holistic research approach implemented in northern Laos**

Tivet, F. et al., CIRAD-CA, Vientiane, Lao PDR

**Adoption of sustainability enhancing innovations in mountainous areas of Northern Thailand**

Tipraqsa, P. et al., University of Hohenheim, Germany

**Mainstreaming agroforestry adoption: Actors, motivations and options**

Magcale-Macandog, D.B. et al., University of the Philippines, Los Baños, Philippines

***Farming systems, food security and economic assessment*****Sustainable land use for the uplands of Vietnam and Laos – Science and local knowledge for food security – LUSLOF project**

Fagerström, M.H. et al., World Agroforestry Centre, Bogor, Indonesia

**Environmental awareness to reflex the practices on natural resources utilization of mountainous people in northern Thailand**

Sirisupluxuna, P. and Mungkung, N., Kasetsart University, Bangkok, Thailand

**Economic performance of composite swiddening in Tat hamlet, northwestern Vietnam**

Nguyen Mau Dung et al., Hanoi Agricultural University, Vietnam

**Application of Multi-Agent Systems simulation for evaluating sustainability in mountainous area in Northern Thailand: the case of Bor Krai village, Mae Hong Son province**

Potchanasin, C. et al., University of Hohenheim, Germany

**Companion modelling to support adaptive watershed management in northern Thailand highlands**

Barnaud, C. et al., Department of Geography, Paris X-Nanterre University, France

**Market chain analysis and agricultural production in Xieng Ngeun district, Luang Prabang province, Lao PDR**

Alexander, K. and Khounsy, B., Charles Sturt University, Albury, Australia



***Fruit production, agroforestry systems and environmental assessment***

**The effect of fertilizers and soil amendment managed on the concentration of trace elements in litchi leave after flowering stage**

Inthasan, J. et al., Mae Jo University, Chiang Mai, Thailand

**The use of thermal photography for monitoring drought stress in greenhouse litchi trees**

Jantschke, C. et al., University of Hohenheim, Germany

**Which risks do result from the application of paclobutrazol in off-season mango production regarding residues in fruit and soil? First results of a long-term field study in northern Thailand**

Neidhart, S. et al., University of Hohenheim, Germany

**Tracking methane and nitrous oxide emissions in hedgerow systems in the Philippine uplands**

Magcale-Macandog, D.B. et al., University of the Philippines, Los Baños, Philippines

**Evaluation of soil water availability under rainfed land use systems on highland in northern Thailand**

Wicharuck, S. and Panomtaranichagul, M., Chiang Mai University, Thailand

***Forest policies, forest management and community-based conservation***

**Forest Products and Livelihoods of Rural Households: Evidence from the Vicinity of the Lore-Lindu National Park, Central Sulawesi, Indonesia**

Schwarze, S. et al., University of Göttingen, Germany

**Commercial collection of Non-Timber Forest Products and households living in or near the forests: Case study in Que – Con Cuong and Ma – Tuong Duong, Nghe An, Vietnam**

Tran Duc Vien et al., Hanoi Agricultural University, Vietnam

**Livelihood versus biodiversity conservation: Challenges in a Philippine mountain protected area**

Gomez, A.L.V. and Roxas, A.T., University of the Philippines in Mindanao, Philippines

**From shifting cultivation and agroforestry to ecological village construct, a case in the Nabanhe Watershed, Xishuangbanna, Southwest China**

Zhao-Iu Wu, Xishuanbanna Tropical Botanical Garden, Kunming, China

**Community based conservation of medicinal and aromatic plants of Northeast India**

Kharbuli, B. et al., North Eastern Hill University, Shillong, India

**Local Ecological Knowledge of the Karen People on reforestation management in Mae Klang Luang, Doi Inthanon National Park, northern Thailand**

Choocharoen, C., Uplands Program – Thailand Office, Chiang Mai, Thailand

**RUPES: A bright future for the Philippines' upland poor**

Villamor, G.B. and Lasco, R.D., RUPES Program, World Agroforestry Centre, Philippines

<b>SPONSORS</b>
-----------------

The organizers would like to thank the following sponsors for their support:

**Deutsche Forschungsgemeinschaft (DFG)**

**National Research Council of Thailand (NRCT)**

**World Agroforestry Centre (ICRAF)**

**Unibund – University of Hohenheim, Germany**

## **Information Address for Further Contacts**

### **Local Organizing Committee**

Assist. Prof. Dr. Pittaya Sruamsiri, Chiang Mai University

Dr. Andreas Neef, University of Hohenheim

Dr. David Thomas, World Agroforestry Centre

### **Symposium Secretariat**

Ms. Kesarapon Srichun

The Uplands Program, Thailand Office

c/o Faculty of Agriculture

Chiang Mai University

Chiang Mai 50100

Thailand

Phone: +66-53-944647

Fax: +66-53-893099

E-Mail: [uplands@loxinfo.co.th](mailto:uplands@loxinfo.co.th)

Website: <http://www.mountainsymposium2006.net.ms>