

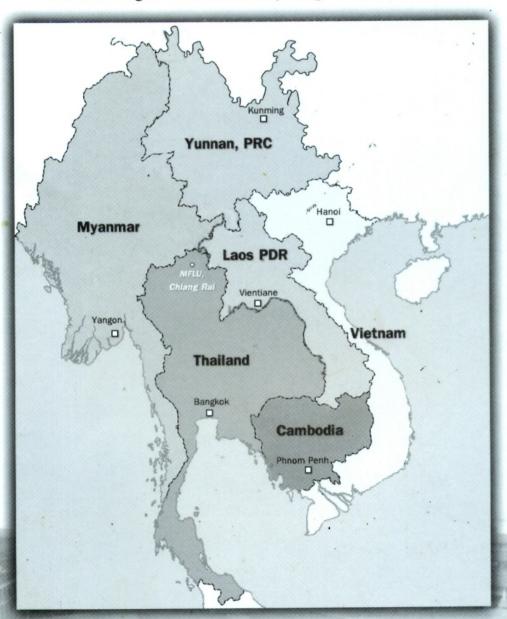


Proceedings of a Regional Seminar

on

# Natural Resources and Environmental Management in the Greater Mekong Sub-region:

The Role of Higher Education in Policy Design and Implementation



Organized by
Mae Fah Luang University
and

The Ministry of Natural Resources and Environment of Thailand

January 15-17 2006

Mae Fah Luang University, Chiang Rai, Thailand

# Proceedings of a Regional Seminar

on

Natural Resources and Environmental Management in the Greater Mekong Sub-region:

The Role of Higher Education in Policy Design and Implementation

January 15-17, 2006, Mae Fah Luang University, Chiang Rai, Thailand

# Organized by

Mae Fah Luang University and

The Ministry of Natural Resources and Environment of Thailand

# Edited by

Dr. Nguyen Luong Bach, Professor Dr. J. Keith Syers and Professor Dr. Okitsugu Fujiwara

#### **PREFACE**

## Associate Professor Dr. Vanchai Sirichana President Mae Fah Luang University, Thailand

Natural resources and environmental problems have become increasingly serious, complex, interrelated, and often trans-boundary in nature. The increasing depletion of natural resources and the negative impact of pollution on soil, water, air, and forests in the Greater Mekong Sub-region (or the GMS) point to the need for improved approaches to policy design and implementation, including more effective planning and regulations, for better natural resources and environmental management (NREM). There is also a parallel need to upgrade technical competence and managerial skills to accelerate progress towards achieving 'self-reliant and sustainable development' in individual GMS countries, as well as in the GMS as a whole. This requires that higher educational institutions in the GMS devise the training programs required to develop human resources capability for addressing the key NREM issues at various scales within the different public- and private-sector organizations involved. The challenges faced by higher education in this context are many but the costs of not addressing these challenges effectively are large in terms of the longer-term, adverse impact on the future development of the countries in question.

With this background, Mae Fah Luang University and the Ministry of Natural Resources and Environment of Thailand joined forces to organize a regional seminar to address the policy design and implementation issues relating to NREM in the GMS and particularly the role of higher education in providing training and research support. Several leading organizations in the region kindly agreed to support the seminar, including Asia Research Center, Asia Science and Education for Economic Development Institute (Asia SEED), Asian Development Bank (ADB), SEAMEO Regional Centre for Higher Education and Development (RIHED), and Thailand-U.S. Educational Foundation (Fulbright). An early objective was to seek participation from key institutions (including governmental ministries and leading higher educational institutions) in our neighboring GMS countries (Cambodia, Lao PDR, Myanmar, Vietnam, and Yunnan Province of China), as well as leading international organizations with a regional focus (e.g., ADB, The World Conservation Union (IUCN), Mekong River Commission (MRC), United Nations Environment Programme (UNEP), and the World Bank) and distinguished international scholars working in NREM from Australia, Japan, the United Kingdom, and the United States of America, as well as from Thailand.

The Regional Seminar on 'Natural Resources and Environmental Management in the Greater Mekong Sub-region: The Role of Higher Education in Policy Design and Implementation' was held at Mae Fah Luang University, Chiang Rai, Thailand on January 15-17, 2006. There were 131 participants from 12 countries, with 21 international participants, including 15 from GMS countries. The Minister of Natural Resources and Environment of Thailand (H.E. Mr. Yongyut Tiyapairat) delivered the Opening Address and the Permanent Secretary of the Ministry of Natural Resources and Environment of Thailand (The Honorable Mr. Petipong Pungbun Na Ayudhya) delivered a Keynote Address detailing the important NREM issues facing Thailand at the present time.

The major objectives of the seminar were to discuss the requirements for effective policy design and implementation of NREM in the GMS, and to identify the research and urgent training needs and activities required for capacity building, which could be carried out by a new university network, the GMS University Network on Natural Resources and Environmental Management (GMS/UniNet on NREM), to be established after the Seminar, with support from national, regional, and international organizations and sponsors. The seminar was very fortunate in having the participation of several leading, international

speakers who gave Keynote Addresses on policy directions. These included Dr. Robert Fisher (Australian Mekong Resource Center, University of Sydney, Australia), Professor Jin Sato (Institute of Environmental Studies, Graduate School of Frontier Sciences, University of Tokyo, Japan), Professor Anthony O'Donnell (Institute for Research on Environment and Sustainability, University of Newcastle upon Tyne, United Kingdom), and Professor William Ascher (Claremont McKenna College, California, United States of America).

Overview Presentations and Lead Papers from a number of international organizations working on different aspects of NREM in the GMS from different perspectives were presented by Mr. Jean-Pierre Verbiest (ADB), Mr. Urooj Malik (ADB), Dr. Nat Pinnoi (World Bank), Dr. Yuwaree In-na (UNEP), Ms. Kate Lazarus (IUCN), Mr. Javed Mir (ADB), and Dr. Wijarn Simachaya (MRC). We were very pleased to welcome a good number of participants representing government departments (China, Cambodia, Lao PDR, Vietnam and Thailand) and universities in the GMS, and their contributions, through sharing valuable experiences and mutual interests in training and research collaboration, added substantially to the content and the output from the Regional Seminar.

As President of Mae Fah Luang University, the co-host of the seminar, I was very pleased to welcome all of the participants to this important Seminar and later on, to present the possible future role of our university in NREM in the GMS. This included the need to establish the GMS University Network on NREM, followed by the University commitment to pursue its original intention with strong support from all parties concerned within the GMS and beyond.

It gives me considerable pleasure to announce that our Regional Seminar was successful in meeting our objectives, as can be seen by the Resolutions (included in this volume), which were unanimously adopted by the participants on the final morning of the seminar. These further encourage Mae Fah Luang University to proceed with our endeavor to make NREM a cornerstone of our activities and to follow in the footsteps of the Princess Mother and to pursue the conservation and rehabilitation of nature and the environment for sustainable development in the North of Thailand and the Greater Mekong Sub-region, thus fulfilling a primary mission of the university.

This Proceedings was co-edited by Dr. Nguyen Luong Bach, Professor J. Keith Syers, and Professor Okitsugu Fujiwara. Included in the appendix is a valuable contribution from Mr. Prachuab Chaiyasan, who unfortunately was unable to attend the seminar. The contents make a valuable contribution to our understanding of NREM issues in the GMS and highlight what needs to be done to increase human capacity and competence for addressing these issues so that the goal of self-reliant and sustainable development in the GMS can become a reality.

Let us join hands and try to make it happen!

February 10, 2006

# TABLE OF CONTENTS

PREFACE	ii
SEMINAR PROGRAM	vi
RESOLUTIONS	viii
1. OVERVIEW	1
Overview of the Regional Seminar Okitsugu Fujiwara, J. Keith Syers, and Nguyen Luong Bach	2
2. OPENING SPEECHES	6
Welcome Address  Vanchai Sirichana	7
Opening Address  Yongyut Tiyapairat	8
Welcome Address  Jean-Pierre A Verbiest	10
3. KEYNOTE ADDRESSES	12
Key Natural Resources and Environmental Management Issues in the GMS and Ways Forwards  Petipong Pungbun Na Ayudhya	13
Collaborative Learning for NREM Policy Development  Robert Fisher	15
Towards a New Generation of Resource Professionals  Jin Sato	24
Institutional Prerequisites of Policymaking for Sustainable Development William Ascher	31
A Challenging Role for Mae Fah Luang University for NREM  Vanchai Sirichana	38
Role of Higher Education in Sustainable Natural Resources and Environmental  Management  Anthony Gerard O'Donnell	42
4. OVERVIEW ON NR&EM IN THE CONTEXT OF DEVELOPMENT	50
Sub-regional Economic Cooperation and Sustainable Natural Resources Management: The Role of ADB in the GMS Urooj Malik	51
5. SHARING EXPERIENCES FROM INTERNATIONAL ORGANIZATIONS	56
GMS Core Environment Program: Opportunities for Cooperation & Collaboration  Javed Hussain Mir	57
Sharing Experiences from World Bank (East Asia & Pacific Region)  Nat Pinnoi	60
The UNEP Experience with NREM in the GMS  Yuwaree In-na	62

Maintaining Ecological Balance of the Lower Mekong Basin Wijarn Simachaya	69
Sharing Experiences from IUCN-The World Conservation Union  Kate Lazarus	72
6. SHARING EXPERIENCES FROM GMS COUNTRIES	77
Wetland Valuation in the Lower Mekong Basin and Deforestation in Cambodia  Srey Sunleang	78
Policy Design and Implementation of Natural Resources and Environmental Management in Lao PDR  Soukata Vichit	81
Sharing Experiences of NREM in Thailand Nisakorn Kositratna	82
Training Needs Assessment for Policy Design and Implementation in Natural Resources and Environment Management in Vietnam  Tran Thi Minh Ha	84
Strengthening the Natural Resources and Environmental Management in the Greater Mekong Sub-Region with Positive Actions  Tian Chunxiu	87
7. CONCLUDING REMARKS	89
Remarks from Asian Development Bank Urooj Malik	90
Remarks from World Bank Nat Pinnoi	91
Remarks from Ministry of Natural Resources and Environment of Thailand Sawanee Sukhotu	92
Remarks from Mae Fae Luang University  Vanchai Sirichana	93
APPENDICES	94
Appendix 1: List of Participants	95
Appendix 2: Facilitating Cooperation in the Greater Mekong Sub-region  Prachuab Chaiyasan  Appendix 3: Organizing Committee	108
Appendix 4: Supporting Organizations	112
INDEX	113

## SEMINAR PROGRAM

Master of Cere	emonies: Ms. Sansanee Sitapan
Sunday, Janua	ry 15, 2006
16.00-17.30 17.30-18.00	Registration Opening Ceremony Welcome Address by Dr. Vanchai Sirichana (President of MFLU) Opening Address by H.E. Mr. Yongyut Tiyapairat (Minister of NR&E of Thailand) Welcome Address by Jean-Pierre Verbiest, Country Director, ADB,
18.30-20.00	Thailand  Reception Dinner hosted by Ministry of NR&E of Thailand
Day I (Monday	y, January 16, 2006)
08.30-10.30	Keynote Addresses on Policy Directions  Mr. Petipong Pungbun Na Ayudhya (Permanent Secretary, Ministry of NR&E, Thailand)
	Dr. Robert Fisher (Australian Mekong Resource Center, University of Sydney, Australia)
	Dr. Jin Sato (Institute of Environmental Studies, Graduate School of Frontier Sciences, University of Tokyo, Japan)
	Dr. William Ascher (Donald C. McKenna Professor of Government and Economics, Claremont McKenna College, USA)
	Chaired by Dr. Yonosuke Hara (Professor of Information Economics, Graduate School of Information Studies and Asian Economy at Institute of Oriental Culture, University of Tokyo, Japan)
10.30-10.45	Coffee Break
10.45-11.15	Discussion on Keynote Addresses (Chaired by Dr Yonosuke Hara)
11.15-12.00	Overview Presentation on NR&EM in the Context of Development Mr Urooj Malik (Director, Agriculture, Environment, and Natural Resources Division, Mekong Department, Asian Development Bank, Manila)
	Chaired by Dr. Somrudee Nicro (Director, Urbanization and Environment Program, Thailand Environment Institute)
12.00-13.30	Lunch
13.30-15.15	Sharing Experiences from International Organizations
	Mr. Javed Mir (Senior Natural Resources Specialist (Forestry), Agriculture, Environment, and Natural Resources Division, Mekong Department, Asian Development Bank)
	Dr. Nat Pinnoi (Environment and Social Development Unit, East Asia and Pacific Division, World Bank)
	Dr. Yuwaree In-na (Environmental Affairs Officer, UNEP Regional Office for Asia and the Pacific)
	Dr. Wijarn Simachaya (Director, Environment Division, Mekong River Commission)
	Ms. Kate Lazarus (Senior Programme Officer, Asia Water and Wetlands Program, The World Conservation Union (IUCN)
	Chaired by Mr. Noritada Morita (Chairman and CEO, Asia Strategy Forum, Thailand)
15.15-15.30	Coffee Break

Sharing Experiences from GMS Countries

15.30-17.00

Ministry of Environment, Cambodia Mr. Soukata Vichit, Director, Department of Environment, Science and Technology, Lao PDR Ms. Nisakorn Kositrata, Secretary General, Office of Policy and Planning for Natural Resources and Environment, Thailand Ms. Tran Thi Minh Ha, Director General, International Cooperation Department, Ministry of Natural Resources and Environment, Vietnam SR Ms. Tian Chunxiu, Division Director, Policy Research Center for Environment and Economy, State Environmental Protection Administration, PR China Chaired by Dr. Monthip Tabucanon (Deputy Permanent Secretary, Ministry of NR&E, Thailand) 18:30-20:00 Dinner hosted by MFLU Day 2 (Tuesday, January 17, 2006) 08.30-09.30 Keynote Addresses on Higher Education in NREM Dr. Vanchai Sirichana (President, Mae Fah Luang University) Dr. Anthony O'Donnell (Director, Institute for Research on Environment and Sustainability, University of Newcastle upon Tyne, UK) Chaired by Dr. Pirom Chantaworn (Thammasat University) 09:30-10.30 Designing activities for GMS/UniNet on NREM "Contributions from GMS Countries on Activities Required" Open discussion chaired by Dr. Richard Frankel (Center for NREM, MFLU) 10.30-10.45 Coffee Break 10.45-11.30 Discussion and Adoption of Resolutions Chaired by Dr. J. Keith Syers (Acting Director of the Center for NREM and Dean of the School of Science, MFLU) 11:30-12:00 Closing Ceremony Concluding Remarks by: Representative of ADB Representative of WB Representative of Ministry of NR&E, Thailand Dr. Vanchai Sirichana, President of MFLU Chaired by Associate Professor Nareewan Chintakanond (Vice-President for Planning and External Relations Development, MFLU) 12:00-13:00 Farewell Lunch hosted by MFLU

Dr. Srey Sunleaning, Vice Chief of Wetland, Watershed and Coastal

Zones Office, Department of Nature Conservation and Protection,

# Special Program for GMS participants

13:00-17:00 Field Trip to Doi Tung and the Golden Triangle

#### RESOLUTIONS

The Regional Seminar on "Natural Resources and Environmental Management (NREM) in the Greater Mekong Sub-region: The Role of Higher Education in Policy Design and Implementation" was held between January 15 and 17, 2006 at Mae Fah Luang University, Chiang Rai, Thailand, with 131 participants, including 36 from overseas. It was co-organized by Mae Fah Luang University and the Ministry of Natural Resources and Environment of Thailand, and supported by Asia Research Center, Thailand-U.S. Educational Foundation (Fulbright), SEAMEO Regional Centre for Higher Education and Development (RIHED), Asia Science and Education for Economic Development Institute (Asia-SEED), and Asian Development Bank (ADB).

### It was unanimously agreed that:

- 1. The magnitude of natural and environmental resources depletion and the impact of pollution on soil, water, air, forests and climate change throughout GMS countries, clearly signaled an urgent need to adopt more holistic and regionally-harmonized approaches to effectively designing, implementing, and monitoring policies, planning, and regulations for sustainable development in GMS countries.
- Cross-cutting issues, such as population, resource utilization, poverty reduction, human health, community involvement and public participation, social impact, transboundary and inter-generational equity and justice, and rapid economic growth and NREM should be emphasized.
- 3. Higher educational institutions in the GMS should devise holistic and in-depth, short-term courses and graduate degree programs to help develop adequate human resources within those concerned public and private organizations dealing with NREM issues in the GMS, and to upgrade technical and managerial skills and competence for the comprehensive and systematic problem-solving of management issues for self-reliant and sustainable development of the GMS.
- 4. Systematic research and studies on policy and planning of NREM were needed, and, in close cooperation with concerned local, national, regional, international organizations, NGOs and private organizations, higher educational institutions should be encouraged to jointly conduct collaborative research on regional issues such as "comparative studies", cross-cutting issues", "key sector issues", "historical perspectives", and "transboundary issues", so that their research outputs along with their public dissemination would contribute significantly to comprehensive design and implementation of natural resources and environmental policies in GMS countries.
- 5. The Greater Mekong Sub-region University Network on Natural Resources and Environmental Management (GMS/UniNet on NREM) should be established to cater for the capacity building and research needs, described above, and Mae Fah Luang University would host the Secretariat of the Network. The objectives, composition, and activities would be finalized soon. An initial Steering Committee consisting of representatives from participating initial member institutions within GMS countries and participating supporting organizations would be formed to prepare an MOU for the formal establishment of "GMS/UniNet on NREM" to be signed by Presidents/Rectors of all member institutions before June, 2006.

It was endorsed that the initial list of short-term training programs and collaborative research and studies for the GMS proposed by Mae Fah Luang University (as in an attachment) should be pursued further.

#### Attachment

The initial list of five general areas for short-term training programs is:

- 1. Sustainable development and conservation in the context of economic development
- 2. Natural resources and environmental systems, and their dynamics
- 3. Ecosystem form and function and biodiversity conservation
- 4. Socioeconomic and environmental impact assessment and risk management
- 5. Policy and planning for natural resources and environmental management

The initial list of collaborative research and studies is:

- 1. Data mining, and synthesis and dissemination (using modern spatial technologies) from previous NREM studies in the GMS to be conducted with a view to identifying gaps and hence needs, and opportunities
- 2. Biodiversity conservation in GMS countries, including the development, implementation, and evaluation of improved practices, for example the creation of biodiversity conservation corridors
- 3. Landuse change impacts on soil, water, and forest resources, and on socioeconomics in the GMS
- 4. NREM policy design and implementation in GMS countries and proposals for improvement (e.g., public participation, prioritization and systemization of policy design)
- 5. Review of transboundary issues (e.g., trans-national road networks, deforestation, water resources of Mekong River, cost and benefit distribution) and the development of solutions for NREM in the GMS and applications elsewhere.