

 Making a Difference – Scientific Capacity Building & Enhancement for Sustainable Development in Developing Countries

Integrated Participatory Analysis of Sustainability in the **Greater Mekong Sub-Region (GMS)**

Final Report for APN CAPaBLE Project: CBA2006-03NSY-Sevilla





Integrated Participatory Analysis of Sustainability in the Greater Mekong Sub-Region (GMS)

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Final Report submitted to APN

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Overview of project work and outcomes

Non-technical summary

A research training program on "Assessing Sustainable Development in the Greater Mekong Sub-region (GMS)" was organized by the Mekong Institute (MI) and Liphe4 Scientific Association in 21 May-1 June, 2007 as a part of the project entitled "**Integrated Participatory Analysis of Sustainability in the GMS**. Eleven resource persons and facilitators delivered the sessions during the two-week course. The participants were selected based on a one-page essay on sustainable development issue which they had submitted and their work experiences by Mekong Institute Research Advisory Committee members in six GMS countries. The participants were grouped in four small groups based on their interests on specific sustainable development issues. Participants identified the following issues for their research: Integrated Assessment of Community Based Tourism (Quality Tourism); Rural Development and the issue of Water; Rural Development within a changing economy; and studying the options of Organic Agriculture Development. At the end of the training; each group presented their detail research proposal that applied what they have learned during training.

The closing ceremony for the two week research training on Assessing Sustainable Development in the GMS on June 1, 2007 was chaired by Dr. Yaowalak Apichatvullop, Dean of the Faculty of Humanities and Social Sciences, Khon Kaen University and member of Mekong Institute Research Advisory Committee (MIRAC). Dr. Chaiyod Bunyagidj, Vice-president of Thailand Environment Institute (TEI), Bangkok was also present at the ceremony. The research training was sponsored by the Asia Pacific Network for Global Change Research (APN) and organized by MI and Liphe4 Scientific Association in partnership with National University of Laos, Asian Institute of Technology, Thailand and Wakayama University, Japan.

Objectives

The objectives of this project were:

- (1) to provide capacity building and awareness raising to young researchers from underprivileged countries of the Greater Mekong Sub-region
- (2) to train and enable participants to independently conduct research and public information on crucial global change and sustainability issues
- (3) to provide an opportunity for networking among young researchers and concerned professionals
- (4) to initiate a participatory process that engages the relevant national policy sectors in an intensive dialogue on global change issues
- (5) to publish and distribute the relevant state-of-the art research in Global Change and Sustainability

Amount received and number of years supported

The Grant awarded to this project was US\$ 28,000 for 2006-07

Work undertaken

A two-week long training course was organized for 19 participants in the training (1 from Myanmar, 2 each from Cambodia and Yunnan Province of China, 3 from Vietnam, 4 from Lao PDR, 6 from Thailand and 1 from Japan) was a part of the project entitled "Integrated Participatory Analysis of Sustainability in the GMS". The project includes following activities:

• A two-week training course for GMS young scientists and professionals on sustainability analysis (Assessing Sustainable Development in the Greater Mekong Sub-region)

- A policy discussion between participants and Thailand Environment Institute (TEI) on sustainability challenges and possible pathways towards sustainable development of the GMS (National Sustainable Development Strategy of Thailand and Sub-regional Sustainable Development Strategy of the GMS)
- The dissemination of results from the training and stakeholder dialogue to the Mekong Institute Journal in the forthcoming issue
- Network building among researchers through MIRAC, Mekong Institute Alumni Network (MIAN), professionals, and policy-sector representatives from government, universities and private sector

Results

All participants were given plenty of time for group discussions every day and incorporate sustainable development issues in each of the research proposals. The four groups as mentioned earlier were accommodating the following components like gender, Geographical Information System (GIS), environmental impacts and other related issues of sustainable development. As a part of policy discussion, Dr. Chaiyod from Thailand Environment Institute (TEI) discussed the policies on sustainable development at the sub-regional level for GMS and national level (Thailand case).

The Training Curriculum provided an overview of methodologies that can be used for conducting an "Integrated Analysis of Sustainability". Taking into account the different background of the participants from different countries, emphasis was placed on explaining the potentials of various methodologies, as well as the integration of all of them into a tool-kit for analysing sustainability scenarios. The following topics were included in the training sessions:

- Integrated Assessment of Sustainability, a general overview;
- Multi-Scale Integrated Analysis of Societal Metabolism;
- Participatory Development;
- Exploring Inclusive Solutions in Participatory Development;
- Biophysical constraints analysis: MFA, Land-time analysis
- Geographic Information Systems (GIS) applied to Integrated Analysis of Sustainability.
- Social and Environmental Impact Assessment
- Gender Issues in Global Change
- Public Health and Globalization Issues in the GMS
- Sub-regional Sustainable Development Strategies (SSDS) of the GMS; and
- National Sustainable Development Strategy; Case study of Thailand

For practical applications, specific problems such as food security; water availability and quality; soil degradation; deforestation; rural development and education; spatial imbalances along economic corridors and environment were discussed in different sessions in the training. To narrow these applications further, two sessions in the training were focused specifically on GMS topics: Sub-regional Sustainable Development Strategy in the GMS and National Sustainable Development Strategy: A Case Study from Thailand. Moreover, the inclusion of sustainable development context in evaluating climate mitigation options in developing countries which had been recommended by the World Summit for Sustainable Development (WSSD 2002) was also discussed in the training.

Relevance to the APN CAPaBLE Programme and its Objectives

Sustainable development is an integrative holistic view that takes into account the social, economic and environmental dimension and the inter-linkages among these dimensions. Economic development, social structures and environmental issues cannot be addressed as separate issues; rather they are altogether part of an interrelated whole. Hence, economic development and social well-being depend on

a functioning environment. The training was successful in the sense that it has enabled young GMS researchers to learn Integrated Analyses of Sustainability, research methods and apply it to assess current policies and development paths as well as future scenarios for the countries in the GMS.

In the training, resource persons came from groups actively engaged in research and teaching network on global change, such as Liphe4 Scientific Society, Asian Institute of Technology, Wakayama University, and Keio University as well as in relevant academic communities, such as the International Society for Ecological Economics. Their participation in the training course not only provided inputs on the state-of-the-art research on Global Change but also guided the participants to refine and narrow down their research questions on the GMS focused issues on the sustainable development. In addition, training has provided opportunities for participants to develop useful networks with an advanced group of researchers and resource persons.

The training contributed to improve knowledge about protecting the environment and imparted new methodologies to analyse biophysical patterns of the natural environment using new indicators and criteria. The research training, policy discussions and proposal writing for research operationalization in sustainable development in the GMS will contribute in a small way to the achievement of the following Millennium Development Goals (MDGs) set forth by the United Nations and adopted by participant countries in 2000: "eradicate extreme poverty and hunger"; "ensure environmental sustainability". The completed training and research areas identified by the training participants have clear link to the research areas of United National Conference to Combat Desertification (UNCCD) and have implications for other international conventions such as United Nations Framework Convention on Climate Change (UNFCCC) through the analysis of land use and the linkages between climate change and food security with the links between land use change and biodiversity.

Self evaluation

All participants exhibited high motivation throughout the training program, helped each other to understand, and contributed enthusiastically to the discussions. At the end of the training, all four groups presented their research proposals to a panel of resource people that provided feedback and critique to improve their proposals. The resource persons and MI staff observations indicate participants felt the course objectives were attained, curriculum knowledge and skills were attained, content and activities were satisfactory, resource persons appreciated and participants made new friendships and professional contacts.

Participants did a good job finding relevant research agenda for the GMS. Participants were well selected from MIRAC representatives based on their essay written about sustainable development in their country prior to coming to the training and all had some research background. All participants actively contributed to the success of the workshop. Participants' responded well to all case study exercises and group discussions conducted and it was a good introduction to participatory research and sustainable development to the GMS researchers. MI and resource persons found the training very useful and broadened the view of MI staff (who were involved throughout the training) on sustainable development. MI and resource person have seen the possibility and justification to continue this training for the next two years to similar types of participants in the GMS.

MI and resource persons believe that the training course covered state-of-the-art research-based knowledge in sustainable development and global change as applied to the situation of the GMS. Furthermore, it provided a foundation for future research activities, primarily in the fields of rural development, organic agriculture, quality/sustainable tourism, and water resource use. It is expected that the

research teams formed during the training will continue working on the sustainability topics identified with the strong support of organizing partners and resource persons of this training.

Potential for further work

All participants have become members of the Mekong Institute Alumni Network (MIAN) at Yahoo Groups after completing this training. They will be informed about future grant announcements and other opportunities in the GMS. APN- CAPaBLE and Mekong Institute can provide research grants to support researchers in the topics they had identified during the training. Now MI and resource persons are providing them literature references to improve their proposal for applying for research grant. The Training Curriculum was oriented to give an overview of methodologies that can be used when performing an Integrated Analysis of Sustainability.

The two-week training for young GMS researchers focused on intensive academic interaction with an international group of specialized resource persons and –more importantly-among each other. It has created a network of young academics who will stay in contact after the completion of the project and will use the concepts and methodologies presented in their future academic and applied work. The project had conceptualized four main elements: training, policy discussion, networking, and dissemination.

Publications

Mekong Institute has produced CD ROM and distributed for all participants in the final day of the training. The information will also be downloaded in the MI webpage in the Research Section (www.mekonginstitute.org). MI has also produced hard copy of training completion report with evaluation from resource persons and participants about the course delivery. The evaluation report has given us to revise our training program to be offered to the young GMS researchers in the sustainable development topics. The outcomes of the researches in the GMS will be published in the special issues in the Mekong Institute Journal "Review of Development and Cooperation" in near future. We will also encourage researchers to publish the related articles in the related scientific journals through MIRAC and MIAN. Special technical writings (news) will be published to in the MI quarterly publication (MI Newsletter- Mekong Connection) in July 2007 issues. All these materials will be distributed to all stakeholders of the training in the due course.

Acknowledgments

The Mekong Institute (MI) and Liphe4 Scientific Association wish to express their thanks to the Asia Pacific Network for Global Change Research- APN (CAPaBLE) for providing grant for training on "Assessing Sustainable Development in the Greater Mekong Sub-region". Without APN-CAPaBLE support the training program would not have been possible. Likewise, MI acknowledges the support from partner organization for providing resource persons for the training program. These are Asian Institute of Technology, Thailand; National University of Laos and Wakayama University of Japan. Mekong Institute and Liphe4 Scientific Association would like to extend their sincere thanks to the members of the Mekong Institute Research Advisory Committee (MIRAC) for selecting qualified researchers and participants for the training program. The following resource persons were involved in facilitating the training course for two-weeks and Mekong Institute and Liphe4 Scientific Association would like to express sincere appreciation to all resource persons and facilitators:

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Technical Report

Preface

Mekong Institute proposed this course after designing and completed successfully based on the priority needs of GMS stakeholders in the sustainable development issues. Nineteen participants (18 from GMS and 1 from Japan) attended the course. Participants came from diversified background working in Government office, NGOs, Private Sector and Universities, 53% were women. All 19 participants completed training successfully. Altogether 7 resource persons from outside and 5 facilitators form the Mekong Institute facilitated the training for two weeks. Overall participants have rated resource persons were good and excellent. All participants had high motivation throughout a day, helped each other to understand, and excellent discussions in each sessions. The four group discussions and staff observations indicate participants felt the course objectives were attained, curriculum knowledge and skills were attained, content and activities were satisfactory, resource persons appreciated and participants made new friendships and professional contacts. Participants and resource persons found MI has run this training very successfully.

Participants really did a good job finding the common research agenda for the GMS. Participants were well selected and have good research background. Most of them actively contributed to the success of the workshop. Participants' responded well to all case study exercises and group discussions conducted and it was a good introduction to participatory research and sustainable development. MI and other organizing partners believe that the training course covered state-of-the-art knowledge in sustainable development and global change as applied to the situation of the GMS. The training provided a foundation for future research activities, primarily in the fields of rural development, sustainable tourism, and water resource use. It is expected that the research teams formed during the training will continue working on the sustainability topics identified with the strong support of project partners and resource persons.

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1. Introduction

The project targeted underprivileged areas of the Greater Mekong Subregion with the aim of professional training on methods and approaches to Global Change and Sustainability research, policy dialogue between researchers and decision-makers, and dissemination. Working with young researchers and young professionals from these areas, the project also aimed at creating a common awareness of problems and provides training to them in order to be able to provide solutions at a specific and context-adapted level. The young researchers have found out the four research topics identified by them and at the end of the training they were able to make a power point presentation on those topics. The resource persona and facilitators provided feedback to their proposal and Mekong Institute believes that they are able to work independently with the necessary skills and they are endowed with the capacity to engage in problem-/issue-related networking activities. They have started to explore to enter processes of stakeholder dialogue and proposal improved to submit to the different donor agencies in the sub-region and outside.

The project trained young researchers and young professionals on methods and tools for analyzing issues related to global change in an integrated and participatory way. The activities include (1) an intensive training course, (2) policy dialogue (participatory support for problem structuring and awareness raising) and (3) dissemination (transfer of scientific knowledge to the policy sector and the public). Training was conducted by internationally renowned experts in the fields of integrated analysis, participatory research, and sustainability research. Participants trained to engage in Global Change research by applying practical, problemoriented, and policy-relevant approaches. The issues dealt with in the project concern aspects of Global Change research, including land use and land cover change, food and water security, and agricultural practices. There was a clear emphasis on socio-economic drivers of Global Change and on intervention in social systems for sustainable development. We believe that participants were enabled to conduct and inform on sustainability research independently and identify the relevant national sustainability issues and to suggest research strategies to tackle these issues.

This course presented Assessing Sustainable Development in the Greater Mekong Sub-region as a change process from a present, known state to a future, desired state. Thus, lessons learned from past, unfavourable experiences and state-of-theart approached methods are central to the course's curriculum. The course also advocated critical thinking and reflectiveness in order to increase the capacity of government officials to self-evaluate government policies and programs. This report evaluates the Assessing Sustainable Development in the Greater Mekong Subregion research training. To do so, it examines all programme aspects to determine how effective the curriculum was at accomplishing the learning objectives. Therefore, the report first describes the methods used to collect information and programme objectives. Second, it examines the programme organisation to determine if the curriculum and learning activities were useful to the participants' professional development. It then evaluates the programme outcomes by examining participants' attitudes on knowledge and skills gained and programme objectives attained. Finally, the report concludes by documenting recommendations based on participants' and resource person's feedback and MI staff observations to allow reflection on how best to continue the on-going, mutual process of providing excellence in capacity building learning programmes.

2. Methodology

The training for young GMS researchers and professionals used a mixed methodology of knowledge transfer (presentations by resource persons, interactive learning, team teaching), workshop (identified four common research on selected cases), and acknowledging the participants' experiences (active contribution by

participants on regional sustainability issues). During the training, the participants were able to apply and work with the following research methods: Integrated Assessment, Multi-Scale Integrated Analysis of Societal Metabolism, biophysical analysis (Material Flow Analysis, Land-time budget analysis), Social Multi-Criteria Evaluation and Participatory Approaches, Geographic Information Systems (GIS), Environmental Impact Assessment, and analysis of Gender Issues in Global Change. During the first day of the training, we collected participants' expectation from the training. We compared the expectations with the course objectives and plan and made aware to the participants and resource person. The following were the participants' expectations collected during the session:

- Methods and skills on sustainable development in GMS countries
- Understanding the method of sustainable development, especially for water resources
- To understand the concept of "development" and gain knowledge how to implement it in the real world
- Methods to access sustainable development
- Learn analytical method on sustainable development
- To understand and exchange more experiences on integrated sustainable development
- Understand sustainable development in GMS & how private sector can be involved in achieving sustainable development
- Understand the main indicators for assessing sustainable development in the GMS countries
- To understand sustainable development projects' effects on communities
- Sustainability and coordination point development (economy, social, and environment)
- Consequences of sustainable development towards the GMS people, especially the poor
- New skills and works on sustainable development
- Research methods on wastes water, environment sanitation
- To learn current situation (economic, social, and environment) in GMS and integrate perspectives and methodologies
- How does the international training course work?
- Making acquaintance with other researchers
- In order to get techniques to collect sound data for the research
- Gain sound knowledge on research method
- To gain experience how to conduct the research effectively
- To study how to conduct a research in an integrated & systematic way, esp. on regional issues
- To know participatory methods (project, programs, plans)
- Sharing experiences among the GMS participants

The training will make use of the modern facilities of the Mekong Institute, located in the center of the GMS on the campus of Khon Kaen University, Thailand. In this way, the venue is easily reachable by all participants via Khon Kaen's international airport, train connection, or highway road link. The structure of the training course of 10 days will include presentations by international resource persons, workshops on specific topics related to Global Change research (e.g. land cover/use change, transition of agricultural economies, energy sector analysis, human drivers of climatic change, earth systems), and mini-research projects that deal with specific GMS sustainability issues.

2.1 Group Assignments: Participants were told to have group discussion every day and put the sustainable development component in each research project after completing the discussion.

Group A: Integrated Assessment of Community Based Tourism (Quality Tourism) Group B: Rural Development and the issue of Water Group C: Rural Development within a changing economy Group D: Studying the options of Organic Agriculture Development

2.2 Evaluation of Training Course

Methods of evaluation used were questionnaires, focus group feedback sessions, observations by MI coaches, and resource persons' reports.

2.2.1 Questionnaires

Questionnaires after research training module sought feedback related to curriculum objectives and programme delivery, MI support services and GMS crosscutting issues. Summaries of questionnaire results are available in Appendices of this report.

2.2.2 Feedback Sessions

Weekly feedback sessions involved an open discussion on the various programme activities and reflections of the topics tackled. The feedback sessions were facilitated by the Program Manager and summarized by the Program Administrator. A summary of the points raised during these sessions is presented in Appendix of this report.

2.2.3 Self-facilitated group discussions

The participants were confronted with questions dealing with the training contents. The objective of this exercise was to be able to answer the question and achieve agreement among the group. Self-facilitation had the objective of making it possible for all participants to speak freely among equals, without the scrutiny of a resource person. One dummy exercise was given under the title of "exploring inclusive solutions" and four groups were formed to have this discussion. After completing the discussion the leader of the group presented the outcomes of the discussion.

3. Results & Discussion

During the training, fours groups were formed to explore the research topics related to sustainable development in the Greater Mekong Sub-region. Participants were told to have group discussion every day and put the sustainable development component in each research project after completing the discussion. Participants identified four main topics which are now under proposal expansion stage to apply for different donor agencies working in the GMS. The research topics identified by participants are:

3.1 Group Assignments

Group A: Integrated Assessment of Community Based Tourism (Quality Tourism)

- Empowerment of local community in the decision making
- Empowerment of women
- Integrated Assessment of different options (Costs and Benefits for different actors at different scales) using Geographical Information System (GIS), Land use analysis and environmental impact analysis
- Deliberative processes

"Group A" Members

- Nguyen Thi Mai Anh, Vietnam
- Rath Sethik, Cambodia

- ✤ Kyi Kyi Nyein, Myanmar: Group Leader
- Anuwan Vongpichet, Thailand
- Siriwattana Jaima, Thailand

Group B: Rural Development and the issue of Water

- Governance is sanitation and water security
- ✤ Water use in the agricultural sector
- Integrated water resource management
- Water allocation in watershed management
- Freshwater distribution and management
- Comparison of water use across the GMS countries

"Group B" Members

- ✤ Xayvillya Ounakone, Lao PDR
- Chuan Liang, China: Group Leader
- Khemngeun Pongmala, Lao PDR
- Phatcharapon Sakham, Thailand
- Lattnaphone Xayyaseng, Lao PDR

Group C: Rural Development within a changing economy

- Impact of labor migration (internal migration: rural to urban)
- Urbanization a model of pro-poor in agriculture
- Upland cultivation and poverty reduction
- Farming land use patterns in the GMS
- Integrated assessment of urbanization
- Globalizing economy (effects of globalization) a comparison of "trade off analysis" of existing trends and possible changes

"Group C" Members

- Ropharat Aphijanyatham, Thailand
- * Masatoshi Uehara, Japan: Group Leader
- Cong Manh Nguyen, Vietnam
- Vixay Homsombath, Lao PDR
- Khim Fadane, Cambodia

Group D: Studying the options of Agriculture Development against Ecological Constraints (Natural Resources)

- Integrated assessment organic rice production
- The role of organic agriculture and alternatives to high external input agriculture
- Environmental sustainability of agriculture production
- Biodiversity Conservation Assessment
- Aquaculture
- Environmental impact assessments

"Group D" Members

- Jantraporn Pratan, Thailand
- ✤ Shi-yu Wang, China
- ✤ Hoang Ha Tu, Vietnam
- Deelert Sombatthanasuk, Thailand: Group Leader

3.2 Resource Persons Reports

Programme presenter's reports were received. These include description of programme content, teaching methods, participants' achievements, and recommendations for improvement in organizing future programmes.

The quantitative and qualitative data gathered from these sources were processed and analysed to record the learning programmes organisation and achievement of objectives. It further documents recommendations for future programme improvement.

3.3 Programme Participants

Nineteen participants from seven countries attended the research learning. Participants' positions and organisations are given in Appendix. MI set participant selection criteria and cooperated with Mekong Institute Research Advisory Committee (MIRAC) to identify suitable candidates to receive APN CAPaBLE scholarships. All participants received scholarships except three participants (one from Japan and other two from Thailand but studying in Japan). They got partial scholarship from the Mekong Institute for teaching materials, tuition fee, food during the training. They paid their expenses like airfare and accommodations during the training program.

Among the nineteen participants, ten (53%) are women, and nine (47%) are men (table 1). In terms of position, fifteen (79%) of participants are of middle level which related to research (Director, Deputy Director General, Head of Department, Technical Officers, Associate Researchers, Academic Researchers/Official, Lecturers, Policy Analyst and Executive Committee Member), four (21%) are of Junior level (Course Students) (see table 2).

Country	Female	Male	Total
Cambodia	0	2	2
China	2	0	2
Japan	0	1	1
Lao PDR	1	3	4
Myanmar	1	0	1
Thailand	5	1	6
Vietnam	1	2	3
Total	10 (53%)	9 (47%)	19

Table 1: Number of Programme Participants by Sex/Country/Position

Table 2: Position of participants in their organizations

Description	Senior-level	Mid-level	Junior-level
Number of participants	-	15	4

All nineteen participants successfully completed the learning programme and awarded programme certificates.

3.4 Resource Persons

Ten resource persons facilitated research training sessions over the two weeks of the research training. MI research manager & administrators identified and contracted resource persons with expertise and direct experience in various Assessing Sustainable Development topics.

- Mr. Bhoj Raj Khanal, Research Manager, Mekong Institute, Khon Kaen, Thailand. Topic "Course Introduction"
- **Dr. Soparth Pongquan**, Asian Institute of Technology, Bangkok, Thailand. Topic "Research Concepts"
- **Prof. Dr. Mario Giampietro**, Director of the Unit of Technological Assessment at the National Institute of Research on Food and Nutrition (INRAN). Topic "Complexity, sustainability and the challenges of Integrated Assessment"

- **Dr. Suchat Katima**, Director of Mekong Institute, Khon Kaen, Thailand. Topic "Exploring inclusive solutions"
- **Dr Jharendu Pant**, Program Manager, Mekong Institute, Khon Kaen, Thailand. Topic "Participatory Development"
- **Dr. Hiroki Tanikawa**, Associate professor, Department of Environmental Systems, Wakayama University, Japan. Topic "GIS overview"
- **Dr. Kyoko Kusakabe**, Associate professor of Gender and Development Studies, School of Environment, and Resources and Development, Asian institute of Technology (AIT), Bangkok, Thailand. Topic "Gender in Sustainable Development"
- **Dr. Clemens Grunbuhel**, Senior Research and Lecturer at the institute of Social Ecology in Vienna. Topic "Biophysical and Social Constraints of Sustainable Development"
- **Prof. Lynn Thiesmeyer,** Lecturer and Researcher, Keio University, Japan. Topic "Globalization and Health"
- **Dr. Chaiyod Bunyagidj**, Vice President, Thailand Environment Institute (TEI) Thailand. Topic "Strategy for Sustainable Development"

Questionnaires were distributed at the end of research training sought feedback as to the resource person's effectiveness in helping participants understand curriculum content. Participants used ten indicators to rate the resource persons on a scale of 1 to 5 (Table 3). Ten resource persons performances were evaluated.

3.5 Curriculum

To assist in research training needs assessment and prioritisation, questionnaires asked participants of each programme to rate the usefulness of curriculum topic. Responses are summarised in Table 3. For the curriculum, see Appendices A and B attached with this report.

Table 3: Usefulness of Curriculum (Percentage of participants' responses)

1 = Very poor	2 = Poor	3 = Okay
4 = Good	5 = Excellent	

Description	Rating					
	1	2	3	4	5	N/A
Course Introduction by Mr. Bhoj Raj Khanal			16%	53%	26%	5%
Research Concepts by Dr. Soparth Pongquan			11%	58%	26%	5%
Complexity, sustainability and the challenges of Integrated Assessment by Dr. Mario Giampietro			21%	37%	42%	
Exploring inclusive solutions by Dr. Suchat Katima			16%	63%	16%	5%
Participatory Development by Dr Jharendu Pant			11%	47%	32%	11 %
GIS overview by Dr. Hiroki Tanikawa		5%	16%	37%	32%	11 %
Gender in Sustainable Development by Dr. Kyoko Kusakabe			37%	32%	32%	
Biophysical and Social Constraints of Sustainable Development by Dr. Clemens Grunbuhel			5%	47%	47%	
Globalization and health by Prof. Lynn Thiesmeyer		5%	26%	21%	42%	5%
Strategy for Sustainable Development by Dr. Chaiyod Bunyagidj			11%	58%	32%	

Most of the participants rated the usefulness of the curriculum as good. These results are supported by the verbal feedback and resource persons' reports. Full responses are available in Appendix A and at the end of this report.

3.6 Supplemental Activities

In order to deliver the curricula to a diverse clientele and learning styles a range of learning and social activities were employed. Questionnaires asked participants to rate usefulness of the following activities:

- learning activities: lecture, discussions, small group assignments, case studies, presentations
- social and recreational activities

3.6.1 Learning Activities

An important method of programme instruction for knowledge acquisition is lectures by resource persons along with associated class discussions. To develop skills in support of knowledge presented in lectures, participants were assigned individual and group assignments, case studies and presentations. Table 4 summarises the participants' ratings of the helpfulness of the learning activities. The majority of participants rated the learning activities as excellent or good. Full responses are in Appendix.

Table 4: Ratings of teaching/learning methods based on participants understanding of the topic (percentage of responses)

- 1 = not attained / very poor
- 2 = somewhat attained / poor
- 3 = mostly attained / okay
- 4 = attained / good
- 5 =fully attained / excellent

Description		Rating					
Description	1	2	3	4	5		
Lectures			32%	53%	16%		
Class discussions			11%	53%	37%		
Group work			16%	58%	26%		
Group presentation			32%	53%	16%		
Case study			11%	63%	26%		
Internet research			26%	53%	21%		

3.6.2 Social and Recreational Activities

Learning programme related social and recreational activities organised during the programme are summarised in Table 5. These activities were organised to foster friendships, professional networking and active participation and learning in the training programme. Overall, participants considered these activities were excellent.

Table 5: Level of satisfaction on social and recreation activities

- 1 = Not attained / very poor
- 2 = Somewhat attained / poor
- 3 = Mostly attained / okay
- 4 =Attained / good
- 5 = Fully attained / excellent

Description	Rating					
Description	1	2	3	4	5	N/A
Welcome reception			16%	26%	53%	5%
Campus tour			21%	32%	42%	5%
Weekend visit to Khon Kaen area eg. King Cobra village, Ubonratana Dam			21%	16%	53%	11%
Evening excursion to downtown areas in Khon Kaen		11%	37%	21%	32%	

3.6.3 Services and Administration

Programme questionnaires asked about participants' satisfaction with programme support services and administration.

3.6.3.1 Information Technology (IT) and Library Facilities

IT and library services were provided for participants. All participants had personal computers with Internet access in their bedrooms. Computers with Internet access were also provided in the conference room and library to assist participants in programme research and presentation preparation via the MI intranet. The library provides a specialised collection on GMS sustainable economic and social development. A full-time professional librarian with a Masters of Library Sciences degree was on duty to assist participants as required. Reasons given for this was limited time available and heavy demands from course project. All course materials and additional readings were provided on-line to participants via the MI Intranet. These materials were also provided on CD ROM format to all participants at the end of the course. Feedback from participants rated these services were excellent.

Table 6: Ratings of participants on IT and Library Facilities

1 = Very poor	2 = Poor	3 = Okay
4 = Good	5 = Excellent	NA= Did not use

Description -		Rating					
		2	3	4	5	NA	
Internet / computer		5%		37%	58%		
Intranet : course materials			16%	26%	58%		
Library	5%		11%	26%	26%	32%	

3.6.3.2 Service and Facilities

In general, participants were very satisfied with the services, MI facility and administration of this research training (Table 7). Services and facilities were rated acceptable or good.

Table 7: Overall ratings of MI services and facilities

1 = Very poor	2 = Poor	3 = Okay
4 = Good	5 = Excellent	NA = Did not use

Description			Rat	ing		
Description	1 2 3 4 5 1					
Internet / computer		5%		37%	58%	
Intranet : course materials			16%	26%	58%	
Library	5%		11%	26%	26%	32%
Telephone (phone box)	5%		5%	21%	47%	21%
Bedroom	5%		16%	42%	37%	
Laundry services	5%		16%	37%	26%	16%
Postal and Fax service			11%	16%	26%	47%
Transport arrangements			21%	37%	32%	11%
Recreational facilities/TV/ Karaoke / Sports		5%	21%	16%	53%	5%
Reception desk			11%	32%	53%	5%
Helpfulness of staffs				26%	74%	
Meals		5%	32%	21%	37%	5%
Communication about what is happening at MI			11%	37%	53%	

3.7 Programme Duration

The programmes were all two -weeks in length. Most participants in the course felt that the four-weeks was just the right length (table 8). In questionnaire surveys, some participants recommended that these programmes could be longer. This is due to the large amount of materials to be covered and a resulting heavy workload. Participants felt that while the content and materials were relevant – the pace was very intense. More time to reflect on and digest the information was requested. Overall, participants were satisfied with the division of time for study and recreating (table 11).

Table 8: Ratings on Length of Training Programme

About right length	Too long	Too short
74%	5%	21%

Table 9: Satisfaction level with time arrangements during the programme

- 1 = Not attained / very poor
- 3 = Mostly attained / okay
- 2 = Somewhat attained / poor
- 4 = Attained / good
- 5 = Fully attained / excellent

Description		Rating						
Description	1	2	3	4	5			
Time for recreation	5%		32%	42%	21%			
Time for study	5%		32%	42%	21%			

3.8 Programme Outcomes

Evaluation of outcomes of the research training concentrates on participants' reported level of attainment of programme objectives.

Box 1 : Expected Outcomes

1. Training course on approaches and tools for Integrated Sustainability Analysis and Participatory Research and Development

2. Network of young researchers and concerned professionals with a platform for exchanging knowledge, results, and case studies

3. A policy dialogue with the policy sector of the concerned areas

4. Publication of case studies from underprivileged areas of the GMS (Review of Cooperation and Development)

5. Special Issue on Global Change Research in Southeast Asia for the Int. Journal of Global Environmental Issues (Inderscience)

This section therefore examines the reported level of knowledge and skills gained and the number of regional cooperation and professional networks developed.

3.8.1 Knowledge and Skills Gained

The curricula covered a wide range of knowledge and skill areas. Questionnaires asked participants to rate the level of knowledge and skills they gained in each topic. Overall, participants reported they attained the knowledge and skills presented in each topic. Full topic summaries and comments by participants are listed in Appendix A.

 Table 10: Summary of Knowledge Gained (Average rate of response for all topic indicators)

- 1 = Not attained / very poor
- 2 = Somewhat attained / poor
- 3 = Mostly attained / okay
- 4 = Attained / good
- 5 = Fully attained / excellent

At the end of topic, I can now			Ratin	igs		
explain	1	2	3	4	5	N/A
What is research? Types of Researches		5%	26%	26%	42%	
Research Process		5%	11%	42%	42%	
The crisis of the paradigm of industrial agriculture over the world			26%	53%	21%	
Complexity, sustainability and the challenges of Integrated Assessment			26%	47%	26%	
Multi-scale integrated analysis of sustainability			21%	42%	37%	
Exploring inclusive solutions		11%	21%	47%	21%	
Participatory Development		5%	21%	37%	32%	5%
GIS overview with Google Earth		5%	16%	37%	42%	
Gender in Sustainable Development		11%	16%	37%	32%	5%
Biophysical and Social Constraints of Sustainable Development			16%	47%	37%	
Public Health and sustainable development in cross-border situations in the GMS		5%	32%	32%	32%	
Climate and HIV/AIDS		5%	37%	32%	26%	
Globalization and health		5%	26%	42%	26%	
Sustainable Development indicators (SDI) and National Strategy for Sustainable Development (NSDS)			11%	63%	26%	

Table 11: Summary of Skills Gained (Average rate of response for all topic indicators)

After topic, I am now able to			Ratin	igs		
	1	2	3	4	5	N/A
Explain what is research? Types of Researches		5%	42%	26%	26%	
Identify Research Process			26%	53%	16%	5%
Analysis the crisis of the paradigm of industrial agriculture over the world		5%	37%	42%	16%	
Explain Complexity, sustainability and the challenges of Integrated Assessment		5%	32%	47%	16%	
Compare Multi-scale integrated analysis of sustainability		16%	37%	37%	11%	
Explore inclusive solutions		11%	47%	37%	5%	
Explain Participatory Development		5%	37%	21%	32%	5%
Explain GIS overview with Google Earth	5%		32%	47%	11%	5%
Build Gender in Sustainable Development		11%	42%	16%	26%	5%
Analyse Biophysical and Social Constraints of Sustainable Development			26%	42%	26%	5%

Public Health and sustainable dev. in cross-border situations in the GMS		47%	37%	16%	
Explain Climate and HIV/AIDS	11%	47%	26%	6%	
Explain Globalization and health	5%	37%	32%	21%	5%
Analyse Sustainable Development indicators (SDI) and national Strategy for Sustainable Development (NSDS)		37%	53%	11%	

In order to assist researchers to apply the knowledge and skills gained in the course, professional skill development was also provided to a certain degree and whenever possible. Throughout the programme participants researched sub-regional issues, developed realistic applications for sustainable development and delivered their findings using PowerPoint slide presentations, flipcharts, and photographs. Participants reported that their professional skills for research and presentation preparation improved as shown in Table 12.

Table 12: Level of Skill Gained by Participants

- 1 = Not attained / very poor
- 2 = Somewhat attained / poor
- 3 = Mostly attained / okay
- 4 =Attained / good
- 5 = Fully attained / excellent

Description		Rating					
		2	3	4	5		
Presentation preparation and delivery		16%	26%	21%	37%		
Computer use and Internet searching	5%	5%	42%	21%	26%		
Using English in international communication		5%	11%	47%	37%		

3.8.2 Contribution on Regional Cooperation and Professional Networks

MI firmly believes that for knowledge and skills to have a significant impact and there must be collaborative effort by professionals throughout the sub-region. The course objectives specifically aim at cooperation among participants and professional networks in GMS. Questionnaires inquired about these objectives. The results indicate that the course provided very good opportunities for the participants to make friendships and professional contacts. Participants' responses are listed in the table 13 below:

Table13:OpportunitytoDevelopRegionalCooperationandProfessional Networks

- 1 = Not attained / very poor
- 2 = Somewhat attained / poor
- 3 = Mostly attained / okay
- 4 = Attained / good
- 5 = Fully attained / excellent

Description	Rating				
	1	2	3	4	5
Friendships			11%	32%	58%
Professional contacts			21%	37%	42%
Networking			21%	26%	53%

4. Conclusions

The Training Curriculum has emphasized to give an overview of methodologies that can be used when performing an Integrated Analysis of Sustainability. Taking into account the different background of researchers in the various countries, the emphasis was put on explaining the potentials of such methodologies, as well as the integration of all of them into a tool-kit for analyzing sustainability scenarios (past and future). The overwhelming majority of participants felt that course objectives were met. Major outcomes of the program are senior researchers of the region trained with state-of-the-art methods and tools; sub-regional network on global change and sustainable development founded and continuation assured; and further research instigated with promising results to be expected within one year.

As a general indication of this success, 63% of participants were satisfied while another 32% were very satisfied with the learning programme. No one was unsatisfied.

Table 14: Overall Programme Satisfaction

Description	Rating				
	Not satisfied	Somewhat satisfied	Mostly satisfied	Satisfied	Very satisfied
Participants overall satisfaction with this research training			5%	63%	32%

In conclusion questionnaires, group discussions and staff observations indicate participants felt the course objectives were attained, curriculum knowledge and skills were attained, content and activities were satisfactory, resource persons appreciated and participants made new friendships and professional contacts. Participants also found MI to be a clean, well-run facility with dedicated, friendly staff. However, despite this success there is scope for programme improvement. The comments and recommendations of resources persons were included with this report in the later part.

The following section documents recommendations based on participants' verbal and written feedback, support staff observations and resource person reports below.

In future courses, lectures, lengthy presentations, spoken word without visual aids cannot be deemed useful for this training course and feedbacks have been taken for this. Rather, MI should advise the resource persons to use creative, simple, and practical teaching methods, such as, exercises, audio-visuals, multimedia, games, group-work, and self-facilitation. In addition, background materials, lecture notes, readings, web-resources should be advised well before the start of the course in order to allow for self-study. Teaching aids and readings should be written in simple, understandable language devoid of many technical terms and lengthy sentences. Practical exercises and field visits were well received by participants, which were rated useful and important for gaining contextual knowledge.

5. Comments and Recommendations from Resource Persons

5.1 Dr. Soparth Pongquan, Asian Institute of Technology, Thailand

Comments

In my session, I think that timing is a bit short for participants given the fact that some of them are not familiar with the concept of the research. I noticed that those who had taken research before could interact and discuss in the session actively. I agree that the session on this is needed in this course as it provides some basis for the participants to develop more ideas on sustainable development toward the end of the course.

Recommendations

In future, I think the course may instruct them to write in brief their idea on a possible research to be conducted with a short guideline provided before coming to MI. Once they participate in this kind of session, they could have a conceptual linkage with they may like to do or post some questions or inquiries that may respond to their specific research interest.

5.2 Dr. Mario Giampietro, Liphe4 Scientific Association (Arizona State University, US)

Comments

My experience as teacher of this research training session was very pleasant. First of all, the event was very well organized. The facility was excellent providing a perfect working environment, in terms of both logistic and technical support. The teaching material I sent in advance had been distributed to the participants, that were all very well qualified and, apart from a few exceptions, all speaking excellent English. Coming to my session, it was a difficult one. It had the goal to provide an overview of the challenges associated with the concept of sustainability. The challenges considered were practical ones (the problems of economic development faced by the region) and scientific ones (the problems faced by the scientists willing to deal with these problems with models and numbers). Because of this double ambitious goal, the session was based on a series of unorthodox presentations challenging the "conventional" framing of these problems. That is, this session required the presentation of a lot of quantitative data, theoretical concepts and practical examples of case studies. Due to the short period available, I did not have the option of providing details, but just an overview of the linkages among the various problems, framing key issues against the big picture. Because of this, several published papers presenting the theory and case studies more in detail were given to the participants in electronic form. However, in spite of the short period of time available to the participants for processing this huge flow of information they were very reactive to such a challenge. As a matter of fact, during the discussions we had in the working groups, I was pleased to see that the main messages and the big picture the session was supposed to give, went actually through. They really did a terrific job.

Recommendations

First of all, I am convinced of the extreme usefulness of research training like this one. These events make it possible to expose the participants to new ideas and opportunities, strengthen the network of research and collaboration in the subregion boosting the possibility of developing in the future a more integrated action toward sustainable development. However, due to the complexity of the issue of sustainability and the heterogeneity of the situations found in the sub-region, I suggest, in future, to restrict the focus of the research training activity to a specific issue [e.g. (i) options of rural development based on community tourism; or in alternative - (ii) options of Low External Input agriculture for rural development; - or in alternative - (iii) the consequences of an economic transition away from a rural economy]. Starting with a more specific focus, the given issue can be better framed, in the activity of working groups. In this way, it could also be possible to ask to the participants to arrive to the training event with material referring to their own country, which could be used, in the working groups, to study similarity and differences among the different countries of the sub-region.

5.3 Dr. Hiroki Tanikawa, Wakayama University, Japan

Comments

Participants had a good opportunity to understand advanced technology for environmental research through my topics with regard to "GIS overview with Google Earth", "GPS and GIS ", "GIS in Environmental Research", and "Regional Material Flow Analysis with GIS". All participants had high motivation throughout a day, helped each other to understand, and excellent discussions in each sessions.

Recommendations

As to GIS, participant will have more idea through learning collaboration of GIS and GPS. So participant will have better understanding of the collaboration with using GPS in process of some subject map using GIS (or Google Earth or Google Map).

5.4 Dr. Suchat Katima, Director, Mekong Institute, Thailand

Comments/Recommendations

Participants are top nods. They are well selected and have good research background. Most of them actively contributed to the success of the workshop. Participants' responded well to case study exercise I conducted and it was a good introduction to participatory research. I found the training is very useful and it has broadened the view of staff on sustainable development.

5.5 Dr. Clemens M. Grunbuhel, Liphe4 Scientific Association

Comment

The training course covered state-of-the-art knowledge in sustainable development and global change as applied to the situation of the GMS. Furthermore, it provided a foundation for future research activities, primarily in the fields of rural development, sustainable tourism, and water resource use. It is expected that the research teams formed during the training will continue working on the sustainability topics identified with the strong support of project partners and resource persons. Funding sources for supporting these research activities have been identified and will ensure a lasting impact of the project. Major outcomes: (1) senior researchers of the region trained with state-of-the-art methods and tools; (2) sub-regional network on global change and sustainable development founded and continuation assured; (3) further research instigated with promising results to be expected within one year.

Recommendations

- (1) Continuation of the training course as a regular event for doctoral and postdoctoral researchers of the region. Global change and sustainability research is not well established in the GMS and a regular training could spur interest in the field among regional social actors.
- (2) Linking research activities with the GMS integration process. Engaging in further stakeholder dialogue on how to make the GMS process more sustainable will be major activity. For example, by presenting results of the sustainable tourism research group to actors from the tourism sector and developing case-specific solutions for each country.
- (3) Providing more opportunities and public arena for the presentation of research ideas and results by, e.g. informing the network on upcoming event, conferences, funding opportunities, etc.

5.6 Dr. Lynn Thiesmeyer, Keio University, Japan

Comments

I would have liked to focus my 2 topics more specifically, but because my session was near the end I also wanted to link my topics to the whole program. Further, based on participants' comments, in future I would like to do more exercises directly on field work and research techniques. The good part was that the choice /screening of participants had resulted in a very dynamic, participatory group of individuals whom it is a pleasure to know.

Recommendations

Based on the comments above, I would like to see more interaction among the various participants, irrespective of nationality. I feel that the breakdown into groups was a good way to do this, but outside the groups, nationalities tended to stick together. The point of such training programs, however, is to create long-lasting networks among current or future human resources in various countries. I would also like to see a more structured approach to staying in touch and assisting the project groups with their future grant applications, if possible.

5.7 Dr. Kyoko Kusakabe, Asian Institute of Technology, Thailand

Comments

The aim of the session was to help participants identify gender issues in their research topics, and discuss how they can collect information on these issues. The session was developed based on the assumption that participants already have a research plan in hand. The session was very enjoyable with a lot of participation from the group members, and the groups worked very well to identify gender issues in their research topics. Although some groups have not yet been able to focus their research enough to identify gender issues, still it was seen as a good exercise, since we could discus various issues that relate to wider areas surrounding the area of interest of the participants. At first, the differences in previous level of understanding on gender concepts will be a problem in the session. However, it turned out that this has actually worked out favourably, with those who already know something about gender being able to lead the group discussion.

Recommendations

Language still seems to be a problem, with many of the well-experienced participants not being able to contribute to discussions because of language barriers. There can be some encouragement to speak in their own language with peer translation, so that these people will not feel frustrated, and so that others can benefit from their knowledge and experience.

5.8 Dr. Jharendu Pant, Program Manager, Mekong Institute

Comments/Recommendations

This course was aimed at providing basic knowledge to young researchers and graduate students on the issues surrounding sustainable development. The curriculum was well designed covering a variety of aspects of the subject.

Participants of the course had come from diverse fields. Drawing on their experiences, most of them actively participated in discussion and group assignment throughout my sessions on 'Participatory Development: What? Why? and How?' With respect to their level of understanding, I have rated most of them 'high'.

I felt that the course, however, tried to cover too many things in a very short time. This type of arrangement made it difficult to go into the details of the topics. For example, in my sessions on 'Participatory Development,' the participants were not able to practice PRA tools adequately due essentially to time limitation. Hence, should this course be offered in the future, I would like to recommend to extend the course duration to three or four weeks.

6. Future Directions

The research training course has instructed the participants to write in brief their idea/concept on a possible research to be conducted in the GMS with collaboration with MI and Mekong Institute Research Advisory Committee. In the next similar training, it could also be possible to ask to the participants to arrive to the training event with material referring to their own country, which could be used, in the working groups, to study similarity and differences among the different countries of the sub-region.

MI and resource persons have expected that the research teams formed during the training will continue working on the sustainability topics identified with the strong support of project partners and resource persons. Funding sources for supporting these research activities have been identified and will ensure a lasting impact of the project. MI and resource persons have identified the training as the major outcomes as senior researchers of the region trained with state-of-the-art methods and tools; sub-regional network on global change and sustainable development founded and

continuation assured; and further research instigated with promising results to be expected within one year.

We want to see the continuation of the training course as a regular event for doctoral and postdoctoral researchers of the region. Global change and sustainability research is not well established in the GMS and a regular training could spur interest in the field among regional social actors. Linking research activities with the GMS integration process will be another step to contribute in this sector. Engaging in further stakeholder dialogue on how to make the GMS process more sustainable will be major activity. For example, by presenting results of the sustainable tourism research group to actors from the tourism sector and developing case-specific solutions for each country. In October 2007, MI is going to organize a regional conference on eco-tourism in the GMS in which the research agenda of quality tourism will be targeted for the meeting. In which some participants of this training will be invited so that we could implement our research by taking this experiences. MI with support from other strategic partners will provide more opportunities and public arena for the presentation of research ideas and results by, e.g. informing the network on upcoming event, conferences, funding opportunities, etc by searching funding from inside and outside the GMS. The point of such training programs, however, was to create long-lasting networks among current or future human resources in various countries which has definitely initiated by this training.

Finally, the outcomes of the researches in the GMS will be published in the special issues in the Mekong Institute Journal "Review of Development and Cooperation" in near future. We will also encourage researchers to publish the related articles in the related scientific journals through Mekong Institute Research Advisory Committee and Mekong Institute Alumni Network. Special technical writings (news) will be published to in the Mekong Institute quarterly publication (MI Newsletter) in July 2007 issues. These all materials will be distributed to all stakeholders of the training in the due course.

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Appendices

Appendix A

Summary of Research Training Questionnaire Survey

Using a scale of 1-5 (1 is the lowest – 5 is the highest)

1 – Not attained / very poor

2 – Somewhat attained / poor 4 – Attained / good

3 – Mostly attained / okay 5 - Fully attained / excellent

N/A – Did not attend

1. Usefulness of the delivered topics

Description			Rat	ing		
	1	2	3	4	5	N/A
Course Introduction by Mr. Bhoj Raj			(3)	(10)	(5)	(1)
Khanal			16%	53%	26%	5%
Research Concepts by Dr. Soparth			(2)	(11)	(5)	(1)
Pongquan			11%	58%	26%	5%
Complexity, sustainability and the			(4)	(7)	(8)	
challenges of Integrated Assessment by			21%	37%	42%	
Prof. Dr. Mario Giampietro			2170			
Exploring inclusive solutions by Dr.			(3)	(12)	(3)	(1)
Suchat Katima			16%	63%	16%	5%
Participatory Development by Dr.			(2)	(9)	(6)	(2)
Jharendu Pant			11%	47%	32%	11%
GIS overview by Dr. Hiroki Tanikawa		(1)	(3)	(7)	(6)	(2)
		5%	16%	37%	32%	11%
Gender in Sustainable Development by			(7)	(6)	(6)	
Dr. Kyoko Kusakabe			37%	32%	32%	
Biophysical and Social Constraints of			(1)	(8)	(9)	
Sustainable Development by Dr.			5%	47%	47%	
Clemens Grunbuhel			570	4770	4770	
Globalization and health by Prof. Lynn		(1)	(5)	(4)	(8)	(1)
Thiesmeyer		5%	26%	21%	42%	5%
Strategy for Sustainable Development			(2)	(11)	(6)	
by Dr. Chaiyod Bunyagidj			11%	58%	32%	

2. Helpfulness of topics to acquire additional knowledge on the subject to the participants

After tenie perticipante ware able to			Rat	ing		
After topic, participants were able to	1	2	3	4	5	N/A
What is research? Types of Researches		(1)	(5)	(5)	(8)	
What is research? Types of Researches		5%	26%	26%	42%	
Research Process		(1)	(2)	(8)	(8)	
Research Process		5%	11%	42%	42%	
The crisis of the paradigm of industrial			(5)	(10)	(4)	
agriculture over the world			26%	53%	21%	
Complexity, sustainability and the			(4)	(9)	(5)	
challenges of Integrated Assessment			26%	47%	26%	
Multi-scale integrated analysis of			(4)	(8)	(7)	
sustainability			21%	42%	37%	
Evaluating inclusive colutions		(2)	(4)	(9)	(4)	
Exploring inclusive solutions		11%	21%	47%	21%	
Derticington, Development		(1)	(4)	(7)	(6)	(1)
Participatory Development		5%	21%	37%	32%	5%
CIS even view with Coogle Forth		(1)	(3)	(7)	(8)	
GIS overview with Google Earth		5%	16%	37%	42%	

Gender in Sustainable Development	(2) 11%	(3) 16%	(7) 37%	(6) 32%	(1) 5%
Biophysical and Social Constraints of Sustainable Development		(3) 16%	(9) 47%	(7) 37%	
Public Health and sustainable development in cross-border situations in the GMS	(1) 5%	(6) 32%	(6) 32%	(6) 32%	
Climate and HIV/AIDS	(1) 5%	(7) 37%	(6) 32%	(5) 26%	
Globalization and health	(1) 5%	(5) 26%	(8) 42%	(5) 26%	
Sustainable Development indicators (SDI) and National Strategy for Sustainable Development (NSDS)		(2) 11%	(12) 63%	(5) 26%	
Average of response	4%	22%	42%	32%	1%

3. Helpfulness of topic to acquire <u>new</u> skills for participants

After tenie, participante ware able to	Rating							
After topic, participants were able to	1	2	3	4	5	N/A		
Explain what is research? Types of		(1)	(8)	(5)	(5)			
Researches		5%	42%	26%	26%			
Identify Research Process			(5)	(10)	(3)	(1)		
			26%	53%	16%	5%		
Analysis the crisis of the paradigm of		(1)	(7)	(8)	(3)			
industrial agriculture over the world		5%	37%	42%	16%			
Explain Complexity, sustainability and the		(1)	(6)	(9)	(3)			
challenges of Integrated Assessment		5%	32%	47%	16%			
Compare Multi-scale integrated analysis		(3)	(7)	(7)	(2)			
of sustainability		16%	37%	37%	11%			
Explore inclusive solutions		(2)	(9)	(7)	(1)			
		11%	47%	37%	5%			
Explain Participatory Development		(1)	(7)	(4)	(6)	(1)		
		5%	37%	21%	32%	5%		
Explain GIS overview with Google Earth	(1)		(6)	(9)	(2)	(1)		
	5%		32%	47%	11%	5%		
Build Gender in Sustainable Development		(2)	(8)	(3)	(5)	(1)		
		11%	42%	16%	26%	5%		
Analyse Biophysical and Social			(5)	(8)	(5)	(1)		
Constraints of Sustainable Development			26%	42%	26%	5%		
Modify Public Health and sustainable			(9)	(7)	(3)			
development in cross-border situations in			47%	37%	16%			
the GMS								
Explain Climate and HIV/AIDS		(2)	(9)	(5)	(5)			
		11%	47%	26%	16%			
Explain Globalization and health		(1)	(7)	(6)	(4)	(1)		
		5%	37%	32%	21%	5%		
Analyse Sustainable Development			(7)	(10)	(2)			
indicators (SDI) and national Strategy for			37%	53%	11%			
Sustainable Development (NSDS)								
Average of response	0.4	5.3	37.6	36.9	17.8	2.1		
	%	%	%	%	%	%		

4. Ratings of teaching methods based on your understanding of the topic

Description			Rating		
Description	1	2	3	4	5
Lectures			(6)	(10)	(3)
			32%	53%	16%
Class discussions			(2)	(10)	(7)
			11%	53%	37%
Croup work			(3)	(11)	(5)
Group work			16%	58%	26%
Group presentation			(6)	(10)	(3)
Group presentation			32%	53%	16%
Casa study			(2)	(12)	(5)
Case study			11%	63%	26%
Internet research			(5)	(10)	(4)
			26%	53%	21%

5. Ratings of presenter(s) teaching/facilitating skills on topic

Mr. Bhoj Raj Khanal

Description			Rat	ing		
Description	1	2	3	4	5	N/A
Course Introduction						
Was easy to understand			(6) 32%	(7) 37%	(6) 32%	
Encouraged me to learn			(6) 32%	(8) 42%	(4) 21%	(1) 5%
Spoke with enthusiasm			(5) 26%	(6) 32%	(6) 32%	(2) 11%
Spoke slowly and clearly		(2) 11%	(8) 42%	(5) 26%	(4) 21%	
Made the learning participatory			(4) 21%	(8) 42%	(6) 32%	(1) 5%
Gave clear explanations		(1) 5%	(5) 26%	(7) 37%	(5) 26%	(1) 5%
Provided good lecture notes			(5) 26%	(8) 42%	(5) 26%	(1) 5%
Used a variety of learning activities			(6) 32%	(6) 32%	(6) 32%	(1) 5%
Used examples related to GMS countries and other examples		(1) 5%	(6) 32%	(7) 37%	(4) 21%	(1) 5%
Integrated related issues (eg. environment, gender, poverty alleviation, good governance, regional cooperation)		(1) 5%	(6) 32%	(7) 37%	(4) 21%	(1) 5%
Average of response		3%	30%	36 %	26%	5%

Dr. Soparth Pongquan

Decorintion		Rating							
Description	1	2	3	4	5	N/A			
Research Concepts									
Was easy to understand		(1)	(3)	(10)	(5)				
		5%	16%	53%	26%				
Encouraged me to learn		(1)	(5)	(6)	(6)	(1)			
		5%	26%	32%	32%	5%			
Spoke with enthusiasm		(1)	(3)	(7)	(7)	(1)			
		5%	16%	37%	37%	5%			
Spoke slowly and clearly	(1)	(1)	(4)	(6)	(7)				
	5%	5%	21%	32%	37%				

Made the learning participatory	(1)	(1)	(6)	(6)	(5)	
	5%	5%	32%	32%	26%	
Gave clear explanations	(1)		(4)	(7)	(6)	(1)
	5%		21%	37%	32%	5%
Provided good lecture notes		(1)	(6)	(5)	(7)	
		5%	32%	26%	37%	
Used a variety of learning activities	(1)	(1)	(7)	(5)	(4)	(1)
	5%	5%	37%	26%	21%	5%
Used examples related to GMS countries	(1)		(5)	(6)	(7)	
and other examples	5%		26%	32%	37%	
Integrated related issues (eg.		(2)	(5)	(5)	(7)	
environment, gender, poverty alleviation,				• •	• •	
good governance, regional cooperation)		11%	26%	26%	37%	
Average of response	3%	5%	25%	33	32%	2%
				%		

Prof. Dr. Mario Giampietro

Description	Ratings								
Description	1	2	3	4	5	N/A			
Complexity, sustainability and the chall	enges	of Inte	grated	Assess	ment				
Was easy to understand		(3) 16%	(6) 32%	(6) 32%	(4) 21%				
Encouraged me to learn		(2) 11%	(5) 26%	(4) 21%	(7) 37%	(1) 5%			
Spoke with enthusiasm			(4) 21%	(7) 37%	(7) 37%	(1) 5%			
Spoke slowly and clearly		(3) 16%	(7) 37%	(4) 21%	(5) 26%				
Made the learning participatory		(1) 5%	(9) 47%	(5) 26%	(4) 21%				
Gave clear explanations		(1) 5%	(5) 26%	(6) 32%	(7) 37%				
Provided good lecture notes		(1) 5%	(4) 21%	(5) 26%	(9) 47%				
Used a variety of learning activities	(1) 5%	(2) 11%	(7) 37%	(3) 16%	(5) 26%	(1) 5%			
Used examples related to GMS countries and other examples			(4) 21%	(9) 47%	(6) 32%				
Integrated related issues (eg. environment, gender, poverty alleviation, good governance, regional cooperation)			(4) 21%	(8) 42%	(7) 37%				
Average of response	1%	7%	29%	30%	32%	2%			

Dr. Suchat Katima

Description			Rat	ing					
Description	1	2	3	4	5	N/A			
Exploring inclusive solutions	Exploring inclusive solutions								
Was easy to understand			(4)	(10)	(4)	(1)			
			21%	53%	21%	5%			
Encouraged me to learn		(1)	(4)	(8)	(4)	(2)			
		5%	21%	42%	21%	11%			
Spoke with enthusiasm			(1)	(11)	(5)	(2)			
			5%	58%	26%	11%			
Spoke slowly and clearly			(4)	(6)	(8)	(1)			
			21%	32%	42%	5%			
Made the learning participatory			(2)	(11)	(5)	(1)			
			11%	58%	26%	5%			
Gave clear explanations			(3)	(9)	(6)	(1)			
			16%	47%	32%	5%			
Provided good lecture notes		(1)	(1)	(9)	(7)	(1)			
		5%	5%	47%	37%	5%			

Used a variety of learning activities			(10) 53%	(7) 37%	(2) 11%
Used examples related to GMS countries and other examples		(2) 11%	(8) 42%	(8) 42%	(1) 5%
Integrated related issues (eg. environment, gender, poverty alleviation, good governance, regional cooperation)		(3) 16%	(6) 32%	(9) 47%	(1) 5%
Average of response	1%	13%	46%	33%	7%

Dr. Jharendu Pant

Description			Rat	ing		
Description	1	2	3	4	5	N/A
Participatory Development						
Was easy to understand	(1) 5%	(3) 16 %	(8) 42%	(6) 32%	(1) 5%	(1) 5%
Encouraged me to learn	(2) 11%	(3) 16%	(4) 21%	(8) 42%	(2) 11%	(2) 11%
Spoke with enthusiasm	(1) 5%	(3) 16%	(5) 26%	(8) 42%	(2) 11%	(1) 5%
Spoke slowly and clearly	(1) 5%	(5) 26%	(5) 26%	(7) 37%	(1) 5%	(1) 5%
Made the learning participatory	(1) 5%	(3) 16%	(4) 21%	(10) 53%	(1) 5%	(1) 5%
Gave clear explanations		(5) 26%	(4) 21%	(9) 47%	(1) 5%	
Provided good lecture notes		(2) 11%	(9) 47%	(7) 37%	(1) 5%	
Used a variety of learning activities	(1) 5%	(6) 32%	(8) 42%	(3) 16%	(1) 5%	(1) 5%
Used examples related to GMS countries and other examples		(4) 21%	(8) 42%	(6) 32%	(1) 5%	
Integrated related issues (eg. environment, gender, poverty alleviation, good governance, regional cooperation)		(4) 21%	(8) 42%	(6) 32%	(1) 5%	
Average of response	4%	20%	33%	37%	6%	4%

Dr. Hiroki Tanikawa

Description			Rat	ing		
Description	1	2	3	4	5	N/A
GIS overview with Google Earth						
Was easy to understand	(2)	(4)	(9)	(3)		
	11%	21%	47%	16%		
Encouraged me to learn		(3)	(4)	(6)	(5)	(1)
		16%	21%	32%	26%	5%
Spoke with enthusiasm		(2)	(6)	(6)	(4)	(1)
		11%	32%	32%	21%	5%
Spoke slowly and clearly	(1)		(5)	(8)	(5)	
	5%		26%	42%	26%	
Made the learning participatory			(4)	(9)	(6)	
			21%	47%	32%	
Gave clear explanations		(2)	(5)	(9)	(3)	
		11%	26%	47%	16%	
Provided good lecture notes		(1)	(5)	(6)	(7)	
		5%	26%	32%	37%	
Used a variety of learning activities			(5)	(8)	(6)	
			26%	42%	32%	
Used examples related to GMS countries			(7)	(6)	(6)	
and other examples			37%	32%	32%	

Integrated related issues (eg. environment, gender, poverty alleviation, good governance, regional cooperation)		(1) 5%	(5) 26%	(5) 26%	(8) 42%	
Average of response	2%	7%	29%	35%	26%	1%

Dr. Kyoko Kusakabe

Description	Rating							
Description	1	2	3	4	5	N/A		
Gender in Sustainable Development								
Was easy to understand		(2)	(2)	(8)	(7)			
		11%	11%	42%	37%			
Encouraged me to learn		(1)	(5)	(4)	(8)	(1)		
		5%	26%	21%	42%	5%		
Spoke with enthusiasm			(4)	(5)	(9)	(1)		
			21%	26%	47%	5%		
Spoke slowly and clearly		(1)	(5)	(6)	(7)			
		5%	26%	32%	37%			
Made the learning participatory			(5)	(6)	(8)			
			26%	32%	42%			
Gave clear explanations			(4)	(8)	(7)			
			21%	42%	37%			
Provided good lecture notes			(6)	(5)	(8)			
			32%	26%	42%			
Used a variety of learning activities		(1)	(6)	(5)	(7)			
		5%	32%	26%	37%			
Used examples related to GMS countries			(3)	(8)	(8)			
and other examples			16%	42%	42%			
Integrated related issues (eg. environment,			(5)	(5)	(9)			
gender, poverty alleviation, good			26%	26%	47%			
governance, regional cooperation)			2070					
Average of response		3%	24%	31%	41%	1%		

Dr. Clemens Grunbuhel

Description	Rating							
	1	2	3	4	5	N/A		
Biophysical and Social Constraints of Sustainable Development								
Was easy to understand			(1)	(8)	(10)			
			5%	42%	53%			
Encouraged me to learn			(2)	(8)	(8)	(1)		
			11%	42%	42%	5%		
Spoke with enthusiasm				(9)	(9)	(1)		
				47%	47%	5%		
Spoke slowly and clearly			(1)	(7)	(11)			
			5%	37%	58%			
Made the learning participatory		(1)		(9)	(9)			
		5%		47%	47%			
Gave clear explanations			(1)	(8)	(10)			
			5%	42%	53%			
Provided good lecture notes			(1)	(10)	(8)			
			5%	53%	42%			
Used a variety of learning activities		(1)		(8)	(9)	(1)		
		5%		42%	47%	5%		
Used examples related to GMS countries			(1)	(0)	(0)			
and other examples			(1) 5%	(9) 47%	(9) 47%			
			576	4770	4770			
Integrated related issues (eg. environment,			(3)	(6)	(10)			
gender, poverty alleviation, good			16%	32%	53%			
governance, regional cooperation)			1070	JZ /0	5570			
Average of response		1%	5%	43%	49%	2%		

Prof. Lynn Thiesmeyer Description	Rating						
	1	2	3	4	5	N/A	
Globalization and Health				•	•	•	
Was easy to understand			(6)	(8)	(5)		
-			32%	42%	26%		
Encouraged me to learn			(5)	(6)	(8)		
			26%	32%	42%		
Spoke with enthusiasm			(6)	(7)	(5)	(1)	
			32%	37%	26%	5%	
Spoke slowly and clearly		(1)	(3)	(8)	(7)		
		5%	16%	42%	37%		
Made the learning participatory		(1)	(2)	(7)	(9)		
		5%	11%	37%	47%		
Gave clear explanations			(3)	(9)	(7)		
			16%	47%	37%		
Provided good lecture notes			(6)	(9)	(4)		
			32%	47%	21%		
Used a variety of learning activities		(1)	(5)	(6)	(7)		
		5%	26%	32%	37%		
Used examples related to GMS countries			(3)	(7)	(9)		
and other examples			16%	37%	47%		
Integrated related issues (eg. environment,			(5)	(5)	(9)		
gender, poverty alleviation, good			26%	26%	47%		
governance, regional cooperation)			2070	2070	4770		
Average of response		2%	23%	38%	37%	1%	

Prof. Lynn Thiesmeyer

Dr. Chaiyod Bunyagidj

Description	Rating							
	1	2	3	4	5	N/A		
Sustainable Development indicators (SDI) and national Strategy for Sustainable								
Development (NSDS) : Thailand Case Stu	ay	r – – – –	(0)	(0)	(-)			
Was easy to understand			(3)	(9)	(7)			
			16%	47%	37%			
Encouraged me to learn			(4)	(9)	(5)	(1)		
			21%	47%	26%	5%		
Spoke with enthusiasm			(4)	(8)	(6)	(1)		
			21%	42%	32%	5%		
Spoke slowly and clearly			(4)	(9)	(6)			
			21%	47%	32%			
Made the learning participatory			(2)	(10)	(6)	(1)		
5 Fr - Fr - F			11%	53%	32%	5%		
Gave clear explanations			(2)	(9)	(7)	(1)		
•			11%	47%	37%	5%		
Provided good lecture notes			(3)	(8)	(7)	(1)		
5			16%	42%	37%	5%		
Used a variety of learning activities			(6)	(10)	(2)	(1)		
, , , , , , , , , , , , , , , , , , , ,			32%	53%	11%	5%		
Used examples related to GMS countries			(6)	(10)	(3)			
and other examples			32%	53%	16%			
Integrated related issues (eg. environment,								
gender, poverty alleviation, good			(6)	(10)	(3)			
governance, regional cooperation)			32%	53%	16%			
Average of response			21%	48%	28%	3%		

Appendix B

Comments/recommendations from Participants on content of Research Training Course

What was interesting? And Why? What was difficult OR boring? And Why? How can MI improve on the topic content?

- This training course in real useful because of the presentation on the methods of researches which gave much large and new knowledge.
- All problems are very interesting. It is not easy to understand English with different pronunciation (the resource persons changed every day)
- I like the topic of Biophysical and Social Constraints of Sustainable because. I have experiences about this story and wanted to develop my knowledge.
- Interesting topics are research, case study, biophysical and social development, participatory development, and sustainability.
- The content leads to complexity of sustainable development assessment but doesn't give much solution/awareness for planning. Every assessment needs multiple aspects to explore but maybe have little time to explore samples (comprehensive ones). Should provide more case study, exercises, and activities success/failure stories about community-based projects.
- Different to merge conceptual idea on everyone in short time when do group participation because everyone background and concepts are different.
- Interacted assessment was most interesting as it help access what's going on. Dr. Mario's presentation gave interesting perspective. Communication in English should be made compulsory.
- The assessment methods and research methods are most interesting because they are very new for me. However, other topics are also very interesting such as sustainability and participatory aspects. I feel that everything is ok.
- Research concepts because it is the first time that I take course on it and it made me know how I can do the research. Nothing to make me bored almost interesting.
- Environment.
- Every course is interesting the topics become boring when presenters make it boring. It depends on the way to present and the language. I comment that 60% of topics are general. It would be nice if presenters can show more the real case and obstacles and solution as an example.
- The training was interesting when there are other activities such as games, group discussing, group activities but boring when there is only lecture for all day esp. in the first week). MI should provide and arrange more various kind of topic in each day. This training probably focus too much on agricultural topic, but still lack of the others such as migrant problem, education etc.
- Facilitators may want to give more Q and A time to participants and lesson their lecture time. Dr. Mario's session cannot be comprehended fully so I suggest cutting case studies down and giving more time on extensive /detailed lecture.
- Dr. Clemens's case study is very interesting. I like to know deeper.
- Integrated assessment was interesting.
- Interesting topic related to our current occupation. Difficult topic we are not familiar with. Improve more participatory.
- It was the study presented by Prof. Mario because it's more about the ways to improve the lead of poverty towards the sustainable development such as understanding the course interrelated or complexity resolution. However, this presentation was too much just for one common issue.
- The topics are covered all that are very crucial for me because it can use for my works. It is very excited learning course.

- It's obvious that Thailand Environment Institute (TEI) hasn't come up with comprehensive 'Regional" session, so it's better not to present the Regional and give more time on Sustainable Development Indicators (SDI) in Thailand's case.
- There is much information for study. The lecture is very good and need to research on.
- SDI is interesting.
- Because I have heard about sustainable development in my country a lot. However, it seems unclear to everyone as well as me the meaning inside, thus, after learning the presentation at least I am aware some of the components and indicators to measure the sustainable development.
- SDI was interesting, because it is as a monitoring tool.
- I'd like to know that how the SDI is used in practice, what we can see by comparing the GMS countries from the perspective.
- Gave general perspective of Sustainable Development (SD) with relevant examples. It was not boring. Content was adequate. English should be made compulsory with no exception.
- I am interested in Integrated Assessment and all the topics because it is good.
- Knowing how to apply knowledge of SD in actual indicators. Data validity is the problem. General comments: session of Dr. Lynn should be upfront because it gives general understanding of globalization and complication issue of SD.
- The topic is more holistic. It should use more time to emphasis on each issue before measuring. How to choose and set each indicator must be explained.
Appendix C

Summary of Overall Programme and MI Services Questionnaire Survey for the Training Participants

Using a scale of 1-5 (1 is the lowest – 5 is the highest)

- 1 Not attained / very poor2 Somewhat attained / poor3 Mostly attained / okay4 Attained / good5 Fully attained / excellentNA did not use / did not attend

1. Level of enjoyment in the extracurricular/recreational activities

Description			Ratii	ng		
Description	1	2	3	4	5	N/A
Welcome reception			(3) 16%	(5) 26%	(10) 53%	(1) 5%
KKU Campus Tour			(4) 21%	(6) 32%	(8) 42%	(1) 5%
Weekend visit to Khon Kaen area (King Cobra village, Ubonratana Dam)			(4) 21%	(3) 16%	(10) 53%	(2) 11%
Evening excursion to downtown areas in Khon Kaen		(2) 11%	(7) 37%	(4) 21%	(6) 32%	

2. Overall effectiveness of the organization of this research training

Description	Rating					
	1	2	3	4	5	N/A
For the distribution of lecture notes, handouts, etc		(1) 5%		(11) 58%	(7) 37%	
For the display of lecture notes, readings and daily schedule on the INTRANET			(1) 5%	(6) 32%	(12) 63%	
For the training rooms (audio-visual presentation aids, seating arrangements)	(1) 5%		(1) 5%	(5) 26%	(12) 63%	(1) 5%

3. Level of satisfaction with the following services at MI

Description	Rating					
-	1	2	3	4	5	NA
Internet / computer		(1) 5%		(7) 37%	(11) 58%	
Intranet : course materials			(3) 16%	(5) 26%	(11) 58%	
Library	(1) 5%		(2) 11%	(5) 26%	(5) 26%	(6) 32%
Telephone (phone box)	(1) 5%		(1) 5%	(4) 21%	(9) 47%	(4) 21%
Bedroom	(1) 5%		(3) 16%	(8) 42%	(7) 37%	
Laundry services	(1) 5%		(3) 16%	(7) 37%	(5) 26%	(3) 16%
Postal and Fax service			(2) 11%	(3) 16%	(5) 26%	(9) 47%
Transport arrangements			(4) 21%	(7) 37%	(6) 32%	(2) 11%
Recreation facilities/TV/Karaoke/ Sports		(1) 5%	(4) 21%	(3) 16%	(10) 53%	(1) 5%

Reception desk		(2)	(6)	(10)	(1)
		11%	32%	53%	5%
Helpfulness of staffs			(5)	(14)	
			26%	74%	
Meals	(1)	(6)	(4)	(7)	(1)
	5%	32%	21%	37%	5%
Communication about what is	·	(2)	(7)	(10)	
happening at MI		11%	37%	53%	

4. Level of Satisfaction of the meals served at MI

Description		Rating			
	1	2	3	4	5
Quality / taste		(2)	(7)	(6)	(4)
	· · · · · · · · · · · · · · · · · · ·	11%	37%	32%	21%
Quantity			(4)	(8)	(7)
			21%	42%	37%
Cleanliness			(3)	(8)	(8)
			16%	42%	42%
Service			(2)	(7)	(10)
			11%	37%	53%

5. Appropriateness of time allocation between research training study and recreational activities

Description	Rating				
	1	2	3	4	5
Time for recreation	(1)		(6)	(8)	(4)
	5%		32%	42%	21%
Time for study	(1)		(6)	(8)	(4)
	5%		32%	42%	21%

6. During this 2 week research training at MI, participants have...

Description	Rating				
	1	2	3	4	5
improved my skills for presentation		(3)	(5)	(4)	(7)
preparation and delivery		16%	26%	21%	37%
developed new skills for computer use and	(1)	(1)	(8)	(4)	(5)
Internet searching	5%	5%	42%	21%	26%
improved my skills to use English in		(1)	(2)	(9)	(7)
international communication		5%	11%	47%	37%

If you ticked **"1 or 2"** in Question No. 6, please tick only one box below. Because...

I have already had the skills before coming to this program	(6) 32%
The course activity does not allow me to do so	-

7. During this 2 week research training at MI, Participants have developed

Description	Rating				
	1	2	3	4	5
friendships			(2)	(6)	(11)
			11%	32%	58%
professional contacts			(4)	(7)	(8)
			21%	37%	42%
networking			(4)	(5)	(10)
			21%	26%	53%

Participants could have developed more friendships and professional contacts if.....

- Participants have chances to get into other workshop with familiar with this training workshop
- There have been more opportunities
- More time, more participating, more sustainable development
- Every participant has equal English proficiency
- Majority of participants are in the same field
- The training period was short
- Speak more English and more experience
- Participants could know at least three languages (more Thailand) and talk English very well

8. Overall satisfaction

Description	Rating				
	1	2	3	4	5
Your overall satisfaction with this research training is			(1) 5%	(12) 63%	(6) 32%

9. The period of "2 week" research training was ...

about right length	too long	too short
(14) 74%	(1) 5%	(4) 21%

If you ticked "too long" or "too short" please indicate how many weeks you prefer.

- 3 4 weeks
- More information giving on a short time
- Learnt background in research made it difficult to digest all content of the program
- One week

10. During this 2 week research training,

I would have liked to learn more about

- Paradigms and metabolism
- Method assessment a problem of research
- Negotiation
- Processing to research
- Research process, participatory development, biophysical and social constraints, gender and GMS
- Sustainability concept in different sectors; Asian development and Multiscaled assessment
- On research methodology
- Assessing methodology and research process
- All topics because almost are interesting
- Social economic and some technical issue
- How to conduct research in the real field
- Successful and unsuccessful example of development projects around the world
- Specific method of PRA and specific of case studies.
- Integrated assessment of sustainability and GIS.
- Sustainable development and research methodology, GIS and participatory.
- Conflict over natural resources use between countries in GMS and alternative conflicts resolutions over these problems alternative development indicators beside agricultural improvement and community based tourism.

• It is very good; it is enough for me to learn all topics.

I would have liked to learn *less* about

- Situation of each in provincial
- What is going on in Thailand?
- Everything is okay
- Theories
- Gender
- Environmental exploration because there are thousand articles of this available on the internet moreover it is done already

11. Please specify your future needs for other research training that you would like MI to offer.

- About data analysis technique
- Subject for research training attained
- Questionnaire design exercise. Survey, interview example
- Social/political/natural relationship in GMS
- Research methodology, project management and economic corridor
- Environmental economics and environmental management
- Continue take course on making research in next step
- The crisis of the paradigm of industrial agriculture over the world
- I prefer to learn more about something more concrete and technical thing than general overview
- Participatory research in the real field
- "One-site" participatory research/development project implementation.
- Communication with researchers from other countries. Field trip–go to a village and practice the method
- Application of integrated assessment tool and the statistic analyse tool
- Field interview
- A lot of thing here are work enough
- MI should organize the same workshop but invite other participants
- In the future MI can have many alumni that are very fruitful for research.

Appendix D

List of Participants of the Research Training

Photo	Name, Position and Institution	Contact Address	Office Telephone, Fax and email
CAMBODIA (2))		
	Mr. Khim Fadane Administrative Staff and Academic Researcher Social Planning Department Ministry of Planning	478 Street 230 Phnom Penh CAMBODIA	Tel: (855) 12 549 549 Mobile: (855) 1551 8162 Email : fadane2003@yahoo.com
	Mr. Rath Sethik Lecturer Department of Environmental Science Royal University of Phnom Penh	# 150 E0, Street 156, Sangkat Tek Laak II, Khan Toul Kork Phnom Penh CAMBODIA	Mobile: 855-1283 4557 Email: sethikrath53@yahoo.co.uk
CHINA (2)			
	Ms Chuan Liang -Associate Researcher -Director of the International Exchange Division of Yunnan Academy of Social Science	No. 577, Huanchengxi Road, Kunming City, Yunnan CHINA	Tel: 86-871 4141035 Fax : 86-871 4142394 Email: liangchuan@hotmail.com
	Ms Shi-yu Wang Associate Researcher Horticulture Department Faculty of Horticulture and Landscape Architecture, Yunnan Agricultural University	Kunming, Yunnan CHINA	Tel: 86-871 5228618 Mobile: 86-871 672 9765 Email: wsygfg@yahoo.com.cn
Lao PDR (4)			
	Mr Vixay Homsombath Deputy Director General Investment Monitoring and Evaluation Committee for Planning and Investment	Vientiane Capital	Tel: 856-21-251256 Fax: 856-21-241286 Mobile: 856-20-980 1173 Email: vixayhomsombath3@ya hoo.com
	Mr Xayviliya Ounakone Technical Officer Policy and Legislation Development Unit Water Resource Coordination Committee Secretariat (Nam Ngum River Basin Development Sector Project)	3rd floor, Science Technology and Environment Agency, Nahidill Road, Vientiane Capital LAO PDR	Tel: 856-21 241744 Fax: 856-21 218737 Mobile: 856 206 667 645 Email: ounakonel1@yahoo.co m

	Mr Lattanaphone Xayyaseng Technical Official Science Technology and Environment Agency (STEA), Environment Research Institute Ms Khemngeun Pongmala Lecturer Center for Environmen and Development Studies National University of Laos	Vientiane Capital LAO PDR Vientiane Capital LAO PDR	Tel: 856-21 218915 Fax: 856-21 213472 Mobile : 856 202243339 Email: daophone@hotmail.com Tel: 856-21 770 561 Fax: 856-21 770 381 Mobile: 856-20 771 8356 Email: kpongmala@yahoo.com
Japan (1)			
	Mr Masatoshi Uehara Doctoral Course Student Media and Governance Keio University	Shonandai 2-3- 11-503, Fujisawashi, Kanagawa JAPAN	Tel: 090-9394 1981 Fax: 0466 33 38328 Email: masatosi@sfc.keio.ac.jp
Myanmar (1)	Ma Kui Kui Nuoin	No. 289/200	Tol: 05 1 254 400
	Ms Kyi Kyi Nyein Executive Committee Member National and International Relation, Myanmar Women Entrepreneurs' Association (MWEA) Executive Director Synergy Co., Ltd.	No. 288/290, Shwedagon Pagoda Road, Yangon MYANMAR 1002 DNH Tower, 272 Pyay Road, Sanchaung Township, Yangon	Tel: 95 1 254 400 Fax: 951 254 566 Email: mwea@myanmar.com.m m Tel: 95 1 535 262 / 706 817 Fax: 951 539 772 Email: kyikyin@gmail.com, synergy@myanmar.com.m m
Thailand (6)			
	Ms Phatcharaporn Sakham Master Degree Student Khon Kaen University	49/52, Saunkhaew Apartment, Nai Muang District Khon Kaen Province 40000 THAILAND	Mobile: 66 (0) 86 860 7760 Email: <u>volunteer44@hotmail.com</u> <u>495080085@kku.ac.th</u>
	Ms Anuwan Vongpichet , Plan and Policy Analyst, Logistics Strategy Infrastructure Project Office, The National Economic and Social Development Board	21/28 M. 10, Nwamin Road, Soi 133, Klongkum Buengkum, Bangkok THAILAND 	Tel: +65 973 82969 Email: anuwan@nus.edu.sg

	Ms Jantraporn Pratan Agricultural Extension Academic Official Agricultural Extension Office	Extension Agriculture Ubon Ratchathani Province 34000 THAILAND	Tel: +66 (0) 45 311 052 Fax: +66 (0) 45 312693 Mobile: +66 (0) 8 1070 2995 Email: jantraporn.p@doae.go.t h
	Ms Siriwattana Jaima Environmental Technical Officer Regional Environmental Office 2, Ministry of Natural Resource and Environment	Muang District Lampang Province 50002 THAILAND	Tel: +66 (0) 5422 7201 ext. 18 Fax: +66 (0) 5422 7207 Mobile: +66 (0) 1885 6577 Email: <u>ssiriwattana@hotmail.com</u> ssiriwattana@gmail.com
	Ms Ropharat Aphijanyatham First-year Student of Master's Degree Human Security and Communications Keio University	Plume IS - 303, 12-28 Yagami Saiwaiku Kawasakishi, Kanagawa JAPAN	Tel: 090-6042 6667 Email: lekkuu22@yahoo.com, ropharat@sfc.keio.ac.jp
	Mr Deelert Sombatthanasuk Master Candidate, Graduate School of Media and Governance Keio University	Soshigaya International House Room C 314 Setagaya Ku, Tokyo JAPAN	Tel: 080 1791 5791 Email: dsombatthanasuk@yah oo.com
Vietnam (3)	Ms Nguyen Thi Mai Anh, Officer Research and Development Vietravel Company	No. 7 Y-To Nong Lam-San Van Dong, Hanoi Agricultural University, Hanoi VIETNAM	Tel: 84 4 8767301 F: 84 4 9331979 Mobile: +84 988 366 106 Email: <u>violetma84@yahoo.com</u> <u>maianh281@gmail.com</u>
	Mr Hoang Ha Tu Head of Department Public Health Preventive Medicine Centre	08 Ngo Quyen Street Hue City, Thua Thien Hue Province VIETNAM	Tel: 84 54 822466 Fax: +84 54 823 858 Mobile: +84 914 202 546 Email: hoanghatu2003@yahoo .com
	Mr Nguyen Cong Manh, Researcher, Department for Trade Policy and International Integration Studies, Central Institute for Economic Management (CIEM), Ministry of Planning and Investment	68 Phan Dinh Phung Street Hanoi VIETNAM	Tel: +84 804 3695 Fax: +84 4 845 6795 Mobile: +84 915 482332 Email: nguyencongmanh@cie m.org.vn

Appendix E

List of Resource Persons/Facilitators

Photo	Name and Institution	Contact Address	Office Telephone, Fax and email
	Dr. Soparth Pongquan	Regional and Rural Development Planning, School of Environment, Resources and Development, Asian Institute of Technology Thailand	Email : <u>soparth@ait.ac.th</u> Web: <u>www.ait.ac.th</u>
	Prof. Dr. Mario Giampietro	Liphe4 Scientific Association Present: Arizona State University, AZ, the USA	Email: <u>giampietro@liphe4.org</u> Web: <u>www.liphe4.org</u>
tion	Dr. Suchat Katima, Director	Mekong Institute 123 Mittraparb Road, Khon Kaen University Muang District, Khon Kaen 40002 THAILAND	Tel : 66 (0) 43202 411 Fax: 66 (0) 4334 3131 Email: <u>suchat@mekonginstitut</u> <u>e.org</u> Web: www.mekonginstitute.or g
	Dr. Jharendu Pant Program Manager	Mekong Institute 123 Mittraparb Road, Khon Kaen University Muang District, Khon Kaen 40002 THAILAND	Tel: 66 (0) 43 202 411 Fax: 66 (0) 4334 3131 Email: jharendu@mekonginstit ute.org Web: www.mekonginstitute.or g
	Dr. Hiroki Tanikawa Associate Professor	Wakayama University Japan	Email: <u>tanikawa@sys.wakayam</u> <u>a-u.ac.jp</u>
	Dr. Kyoko Kusakabe Associate Professor	Gender and Development Studies, School of Environment, Resources and Development, Asian Institute of Technology Thailand	Email: <u>kyokok@ait.ac.th</u> Web: <u>www.ait.ac.th</u>

Dr. Clemens Grunbuhel , Assistant Professor	liphe4 Scientific Association and Department of Anthropology, University of Vienna Austria	Tel.: +43 6991 7469292 Email : grunbuhel@liphe4.org Web: <u>www.liphe4.org</u>
Dr. Lynn Thiesmeyer Professor	Keio University Japan	Email: <u>thiesmey@sfc.keio.ac.jp</u>
Dr. Chaiyod Bunyagidj , Vice-president	Thailand Environment Institute (TEI) Bangkok, Thailand	Email: <u>chaiyod@tei.or.th</u>
Dr. Ramon Sevilla , Academic Director	Mekong Institute 123 Mittraparb Road, Khon Kaen University Muang District Khon Kaen 40002 THAILAND	Tel : 66 (0) 43 202 411 Fax: 66 (0) 4334 3131 Email: ramon@mekonginstitute .org Web: www.mekonginstitute.org
Mr. Bhoj Raj Khanal , Research Manager	Mekong Institute 123 Mittraparb Road, Khon Kaen University Muang District Khon Kaen 40002 THAILAND	Tel: 66 (0) 43 202 411 Fax: 66 (0) 4334 3131 Email: bhoj@mekonginstitute.o rg Web: www.mekonginstitute.org
Mr. Sa-nga Sattanun Program Administrator	Mekong Institute 123 Mittraparb Road, Khon Kaen University Muang District Khon Kaen 40002 THAILAND	Tel: 66 (0) 43 202 411 Fax: 66 (0) 4334 3131 Email: sa- nga@mekonginstitute.or g Web: www.mekonginstitute.org
Mr. Samart Pola , Research and Information Officer	Mekong Institute 123 Mittraparb Road, Khon Kaen University Muang District Khon Kaen 40002 THAILAND	Tel : 66 (0) 43 202 411 Fax: 66 (0) 4334 3131 Email: library@mekonginstitute .org Web: www.mekonginstitute.or g

Appendix F

Program Schedule of Research Training

Sunday, May 20, 2007

Participants arrive at Mekong Institute Khon Kaen, Thailand

Monday, May 21, 2007

08:00	Participants be seated in Conference Room
08:15 – 08:30	Welcoming / Opening Address by Dr. Suchat Katima, MI Director
08:30 – 08:45	Mekong Institute Video Presentation
08:45 – 10.00	-Welcome by Mr. Bhoj Raj Khanal and Mr. Sa-nga Sattanun
	 Participant's individual photos for programme activities
	- Participants' introduction by Mr. Sa-nga Sattanun
	- Orientation to Mekong Institute Library by Mr. Samart Pola
	- Orientation to Mekong Institute & Staff by Bhoj Raj Khanal
10:00 – 10:30	Tea Break
10:30 – 12:00	Course Introduction by Mr. Bhoj Raj Khanal
12:00 – 14:00	Lunch / Self - study
14.00 – 15:00	What is research? Types of Researches
	What are important Research Components by Dr. Soparth
	Pongquan
15:00 – 15:30	Tea Break
15:30 – 17:00	Conceptual Framework and Operationalization of Action
17 00 10 00	Researches by Dr. Soparth Pongquan
17:00 - 18:00	Khon Kaen University Campus Tour by MI Staff
18:15 – 20:00	Welcome Party at MI Building (Ground Floor)
From 20:00	Free time/ Self -study

Tuesday, May 22, 2007

[T	
08:30 – 10:00	The crisis of the paradigm of industrial agriculture over the
	world: lessons for the future of rural development by Prof. Dr.
	Mario Giampietro
10.00 10.20	
10:00 – 10:30	Tea Break
10:30 - 12:00	The crisis of the paradigm of industrial agriculture over the
	world: lessons for the future of rural development (Contd.) by
	Prof. Dr. Mario Giampietro
12:00 -14:00	Lunch / Self – study
14:00 –15:30	Complexity, Sustainability and the challenges of Integrated
	Assessment by Prof. Dr. Mario Giampietro
15:30 - 16:00	Tea Break
	iou Dioun
16:00 – 17:30	Case study of applications of Multi-Scale Integrated Analysis of
	Societal Metabolism: Wuhan, Hubei Province, China by Prof. Dr.
	Mario Giampietro
18:00 – 20:00	Dinner + recreation at Lotus Super Market

Wednesday, May 23, 2006

08:30 - 10:00	Case study of applications of Multi-Scale Integrated Analysis of Societal Metabolism: Nam Dong District, Thua Thien Hue Province, Vietnam by Prof. Dr. Mario Giampietro
10:00 – 10.30	Tea Break
10:30 - 12.00	
10.30 - 12.00	Multiple Scale Integrated Assessment of Societal Metabolism by Prof. Dr. Mario Giampietro
12:00 – 14.00	Lunch / Self - study
14:00 –15:30	Multiple Scale Integrated Assessment of Societal Metabolism (Contd.) by Prof. Dr. Mario Giampietro
15:30 – 16:00	Tea Break
16:00 – 17:30	Constituting the Working Groups and research topics
	Working Group Exercise (the various Working groups interact
	with resource persons and fellow participants, ask questions,
	clarifications and making comments in relation to how to apply
	the method to the problems they want to tackle in their case
	studies) (Prof. Dr. Mario Giampietro and Bhoj Raj Khanal)
From 17.30	Free time/ Self -study

Thursday, May 24, 2007

08:30 - 10:00	Exploring inclusive solutions: Case Study on Multi-Stakeholder participation in Hydropower project in Thailand by Dr. Suchat Katima
10:00 – 10:30	Tea Break
10:30 – 12:00	Participatory Development, What? And Why? by Dr. Jharendu Pant
12:00 – 13.30	Lunch / Self - study
13:30 – 15:00	Participatory Development Techniques, How? by Dr. Jharendu Pant
15:00 – 15:30	Tea Break
15:30 – 17:00	Participatory Development Tools
	Working Groups: Setting up participatory research (contd.) by
	Dr. Jharendu Pant and Bhoj Raj Khanal
from 17.00	Free time/ Self -study

Friday, May 25, 2007

08:30 - 10:00 10:00 - 10:30	GIS overview with Google Earth by Dr. Hiroki Tanikawa Tea Break
10:30 - 12:00	Working Group Exercise (outside): Estimation of size of the Earth with GPS and your foot by Dr. Hiroki Tanikawa
12:00 - 13.30	Lunch / Self - study
13:30 – 15:00	GIS in Environmental Research #1 Material Flow Analysis by Dr. Hiroki Tanikawa
15:00 – 15:30	Tea Break
15:30 – 17:00	GIS in Environmental Research #2 Regional Material Flow Analysis by Dr. Hiroki Tanikawa
from 17.00	Free time/ Self -study

Saturday, May 26, 2007

Trip to Buddhist Temple, Ubolratana Dam, King Cobra Village

Sunday, May 27, 2007

Free Time, relax and self-study

Monday, May 28, 2007

08:30 - 10:00	Gender in Sustainable Development by Dr. Kyoko Kusakabe
10:00 – 10:30	Tea Break
10:30 - 12:00	'Gender analysis in the globalizing economy in the context of
	GMS (con't) by Dr. Kyoko Kusakabe
12:00 – 13.30	Lunch / Self – study
13:30 – 15:00	'Gender analysis in the globalizing economy in the context of
	GMS (con't) by Dr. Kyoko Kusakabe
15:00 – 15:30	Tea Break
15:30 – 17:00	Working Groups: Integration of Gender in research topics by Dr.
	Kyoko Kusakabe
from 17.00 Fi	ree time/ Self -study

Tuesday, May 29, 2007

08:30 - 10:00	Biophysical and Social Constraints of Sustainable Development by Dr. Clemens Grunbuhel
10:00 – 10:30	Tea Break
10:30 – 12:00	Biophysical and Social Constraints of Sustainable Development (con't) by Dr. Clemens Grunbuhel
12:00 – 13.30	Lunch / Self – study
13:30 – 15:00	Biophysical and Social Constraints of Sustainable Development (con't) by Dr. Clemens Grunbuhel
15:00 – 15:30	Tea Break
15:30 – 17:00	Working Groups: Integrating biophysical and social analysis in research topics by Dr. Clemens Grunbuhel
from 17.00	Free time / Dinner / Self - study

Wednesday, May 30, 2007

08:30 - 10:00	Social & Environmental Impact Assessment by Dr. Clemens
	Grunbuhel
10:00 - 10:30	Tea Break
10:30 - 12:00	Working Groups: Finalizing the research topics with trainers by
	Dr. Clemens Grunbuhel, Bhoj Raj Khanal
12:00 - 13.30	Lunch
13:30 – 15:00	Working Groups: Finalizing the research topics with trainers by
	Dr. Clemens Grunbuhel and Bhoj Raj Khanal
15:00 – 15:30	Tea Break
15:30 - 17:00	Presentation of Working Groups & Feedback by Dr. Clemens
	Grunbuhel and Bhoj Raj Khanal
from 17.00	Free time / Dinner / Self - study

Thursday, May 31, 2007

08:30 - 10.00	Presentation of Working Groups & Feedback by Dr. Clemens Grunbuhel
10:00 - 10:30	Tea Break
10:30 - 12:00	Public Health in cross-border situations for sustainable
	development in the GMS by Prof. Lynn Thiesmeyer
12:00 - 13.30	Lunch / Self – study
13:30 – 15:00	Public Health in cross-border situations for sustainable
	development in the GMS (Contd.) by Prof. Lynn Thiesmeyer
15:00 – 15:30	Tea Break
15:30 - 17:00	Cross-border issues and risks in sustainable development and
	Globalization by Prof. Lynn Thiesmeyer
from 18.00	Dinner + recreation at Big C Super Market

Friday, June 1, 2007

08:30 - 10:00	Cross-border issues and risks in sustainable development and
	Globalization (Contd.) by Prof. Lynn Thiesmeyer
10:00 - 10:30	Tea Break
10:30 - 12:00	Sustainable Development Strategy for GMS region : Status
	Updated by Dr. Chaiyod Bunyagidj
12:00 - 13.30	Lunch / Self – study
13:30 - 15:00	Sustainable Development Indicators(SDI) and National Strategy
	for Sustainable Development (NSDS): Thailand Case Study by Dr.
	Chaiyod Bunyagidj
15:00 – 15:30	Tea Break
15:30 - 17:00	Closing Ceremony
from 17.00	Farewell Reception at MI Building Ground Floor

Appendix G

Abbreviations Used

AIT ASEAN APN CBD GIS GMS	Asian Institute of Technology Association of South East Asian Nations Asia Pacific Network for Global Change Research Convention of Biodiversity Geographical Information System Greater Mekong Sub-region
GPS	Geographical Positioning System
IHDP	International Human Dimension Program on Global Environmental Change
INRAN	National Institute of Research on Food and Nutrition
IT	Information Technology
KKU	Khon Kaen University
MDGs	Millennium Development Goals
MEA	Millennium Environmental Assessment
MFA	Material Flow Analysis
MI	Mekong Institute
MIAN	Mekong Institute Alumni Network
MIRAC	Mekong Institute Research Advisory Committee
NSDS	National Sustainable Development Strategy
NUOL	National University of Laos
SD	Sustainable Development
SDI	Sustainable Development Indicators
SSDS	Sub-regional Sustainable Development Strategy
TEI	Thailand Environment Institute
UNCCD	United Nations Convention on Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
WSSD	World Summit for Sustainable Development

Appendix H

Funding sources outside the APN

Keio University and Prof. Lynn Thiesmeyer, Keio University, Japan sponsored three candidates (one Japanese and two Thai) for their round trip air fare from Tokyo to Khon Kaen, Thailand and Accommodations expenses for them. MI shouldered the expenses of tuition fee, food, airport pick up and drop, health insurance and expenses of field trips and training kits.

Five resource persons and facilitators involved from the Mekong Institute for this training without taking any allowances and honorarium.

Liphe4 Scientific Association, Wakayama University, Asian Institute of Technology, Thailand, and Thailand Environment Institute provided resources persons for this training.

Appendix I

Photo Gallery



Picture 1: Participants posing photo with MI management in during Opening Ceremony



Picture 3: MI Research Manager Mr. Bhoj Raj Khanal introducing the resource persons



Picture 5: MI Program Administrator Mr. Sanga Sattanun presenting financial and administrative procedures to the participants



Picture 2: MI Director, Dr. Suchat Katima delivering welcome speech to the participants and resource persons



Picture 4: MI Research Manager presenting course outlines to the participants



Picture 6: Dr. Soparth Pongquan delivering the sessions in the first day of the training



Picture 7: Participants enjoying in the welcome reception



Picture 9: Thai dancer performing ISAN dance during Welcome dinner



Picture 11: Small groups are seen busy in discussing on their research



Picture 8: Participants taking group photos during Thai cultural performance during welcome reception



Picture 10: Prof. Mario Giampitro facilitating discussion in one of the four groups formed for research problem identification



Picture 12: Participants taking photos with Prof. Mario in the Second day of the research training



Picture 13: MI Director Dr. Suchat Katima delivering his session in fourth day



Picture 15: Dr. Kyoko Kusakabe is seen taking classes in the six day of the training



Picture 17: Dr. Clemens Grunhubel, is seen taking class in Seventh day



Picture 14: Dr. Jharendu Pant, Program Manager of MI taking classes in fourth day



Picture 16: Dr. Hiroki Tanikawa, is seen taking class during fifth day



Picture 18: Participants enjoyed the weekend trip to Ubon Rattana Dam



Picture 19: Dr. Lynn Theismeyer is seen facilitating group for the discussion in their group research agenda



Picture 21: One of the four groups presenting their research proposal



Picture 23: Chief Guest Dr. Yaowalak Apichavullop, Dean of Faculty of Humanities and Social Science, KKU and others during closing ceremony



Picture 20: Dr. Chaiyod from Thailand Environment Institute discussing with participants



Picture 22: Group members defending their research ideas with other group members and resource persons



Picture 24: Participants, resource persons and MI staff seen posing photo during closing of the training program