Summary

This Project on Upland Agriculture Curriculum Development of a Network of Universities and Related Education Institutes in Cambodia, Laos PDR, Thailand and Vietnam was organized from September 2005 – December 2008 at three out of four locations of network. It was the first of its kind to bring together key educators and experts in the field of upland agriculture education to initiate the process towards harmonizing the upland agriculture, using system approach, curriculum for the region.

The activities presented in this report contented invaluable information and experiences pertaining to the development of upland agriculture in the region. During the course of the project, we bring together the diverse aspects of upland agriculture curriculum development in the Network. It is hoped that the experience and information collated, including the recommendations derived from the critical appraisals in the Report, will be useful in providing the current baseline on curriculum development for upland agriculture in the region. Hopefully, from this foundation, relevant future programs and plan could be formulated to progress further the efforts initiated by this Report towards developing a harmonized upland agriculture curriculum for the region.

In preparing this Final Report to the Rockefeller Foundation we wish to take the opportunity to acknowledge the contributions and help of the following:

- The participated educators for their effort in preparing paper and inputs during the course of the two years process.
- The Royal University of Agriculture, Hue University for Agriculture and Forestry, Provincial Agriculture and Forestry Office in Luoang Prabang, and the Multiple Cropping Center for hosting the planning workshop during the end of 2005 and early 2006.

- The Multiple Cropping Center and Faculty of Agriculture, Chiang Mai University for hosting the Project for two years and hosting the Planning workshop during March 5-6, 2006.

- The Multiple Cropping Center and Faculty of Agriculture, Chiang Mai University for organizing and hosting the Upland Agricultural Marketing: A tool to link the uplands and lowlands during October 25 – 28, 2006.

- The Multiple Cropping Center and Faculty of Agriculture, Chiang Mai University for hosting the Project for two years and hosting the Planning workshop during March 5-6, 2006.

- The Multiple Cropping Center and Faculty of Agriculture, Chiang Mai University for organizing and hosting the Upland Agricultural Marketing: A tool to link the uplands and lowlands during October 25 – 28, 2006.

- Hue University of Agriculture and Forestry, Hue City, Vietnam for organizing and hosting the Community-based Natural Resource Management workshop during April 23-25, 2007.

- The Multiple Cropping Center and Faculty of Agriculture, Chiang Mai University for hosting the Pre-Conclusion Workshop on November 2, 2007.

- The Multiple Cropping Center and Faculty of Agriculture, Chiang Mai University together with The University of Georgia, University of Florida, and International Consortium for Application of Systems Approaches for organizing and hosting DSSAT4 and CropDSS tools for assessing food security, crop production, nutrient management, climatic risk and environmental sustainability with simulation models and GIS tools, November 26 - December 7, 2007.

- PAFO at Louang Prabang city for organizing and sponsoring the Conclusion Workshop on December 24, 2007.

- Support staff of the Multiple Cropping Center for secretarial and miscellaneous help during the course of two year activities initiated by the Network.

- Many other individuals who have given specific or general help in one way or another during the Network and/or preparation of this Report.

Aim and Objectives

The overall goal of this project was to incorporate the experiences of recent and ongoing training, education and research projects with sustainable and environmentally conscious processes into the upland agriculture curricula and training programs. Several institutions in GMS region are currently offering such programs.

In pursuing this project, we have visited key institutions in the region, conducting teaching and research programs related to upland agriculture.

Second, we invited key persons of key institutions to share experiences and knowledge about upland agriculture issues. Specifically, we seek to augment active education and research efforts in the areas of poverty reduction, environmentally conscious food production systems for sustainable livelihood life-style, and decision support tools for environmental impact assessment currently underway at the key institutions in GMS.

Third, we established a Task Force to develop a joint upland agriculture training and education, which covers needs and visions for the region. The Task Force have tried to incorporate inputs from farmers, local communities, educators, policy makers, and future students to bring forward local information about aspects of upland agriculture.

Fourth, we brought key persons from key institutions to approve the joint upland agriculture training and education programs. At the end of the fourth activity, we seek to integrate experiences and technological advances emanating from such education and research programs into courses throughout short-term training programs and graduate curriculum.

Finally, we provided three short-term training programs that show participants how this new training and education concepts and materials can be implemented to improve upland communities and their environments.

With degree and non-degree training programs, we hope to produce upland agriculture professionals who are equipped with the systems thinking and practices, awareness, knowledge and ability to minimize the environmental impact of the upland agriculture processes that they oversee and involve.

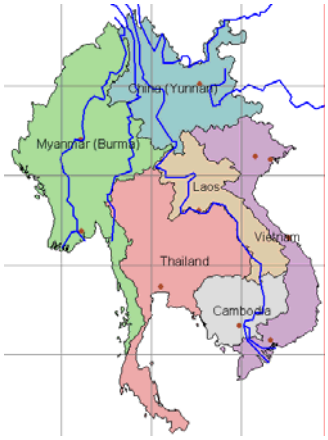
Background

Map 1 shows the Greater Mekong Subregion (GMS) Economic Cooperation was created by six countries sharing the Mekong River namely Cambodia, Lao PDR, Myanmar, Thailand, Vietnam, and the Yunnan Province of the People's Republic of China, with the help by the Asian Development Bank in 1992 (Krongkaew, 2004). The upland area of GMS is defined as areas between 300-3,000 m above mean sea level. With great diversity of environment and people, the GMS provide special learning environment for future generations to wisely modify the upland areas with strong relationships with the lowland area in different cultures. Traditional learning and education system is challenged by the modern Internet and other information technology, which give rise to more exploitation of the upland areas with fragile environment and production potential.

Agriculture is one of the most important economic sectors in GMS countries. Agriculture can contribute to the upland communities in the areas by decreasing the land area required for farming and/or diverting human labor from forest exploitation activities. On average 75% of the population is engaged in agriculture, aquaculture, and agro-forestry. The agricultural policies viewing the sector having a role in feeding the domestic demand (food self-sufficiency) or in generating the income to purchase food (food security) vary from country to country. e.g., Laos and Vietnam stress food self-sufficiency whereas Thailand has further liberalized the agricultural economy aiming at food security.

Naturally, upland and lowland systems are multifaceted—producers of essential commodities and services, users of common resources, and subject to environmental changes, social values, and ethical backgrounds. Newly trained degree holders in food, agriculture, and natural resources increasingly find that their jobs place them in dynamic, user-oriented demanding, and environmental concerns. In order to deal with these kinds of situations, professionals entering the field need new competencies and inquiry methodologies. They need an array of "system thinking and practice principles and practical tools" of inquiry approaches to help them understand, predict, and act on the interactions, and complexity of situations in ways that are conceptually valid and practically effective and efficient.

Map 1: Map of the Greater Mekong Subregion (GMS).
Source: http://www.adb.org/GMS/img/gmsmap2007.jpg



Activities and Methodology

Site visits

The main objectives of the site visit by CMU staff are to:

1. Assess the need for establishing a network of educators and researchers to conduct interdisciplinary research related to upland agriculture.
2. Identify interested individuals and organizations for further collaboration in UA curriculum development.

Visit to Luang Prabang, Laos PDR

Three CMU's staff has visited Souphanouvong University, Northern Agricultural and Forestry Research Office, and Luang Prabang Provincial Agricultural and Forestry Office (PAFO) during November 22 - 25, 2005. The team has identified several individuals to participate in the March 5 - 6, 2006 planning workshop in Chiang Mai.

Visit to Hue, Vietnam

Three CMU's staff has visited Hue University of Agriculture and Forestry in Central Vietnam during December 12 - 15, 2005. The team has identified several individuals to participate in the March 5 - 6, 2006 planning workshop in Chiang Mai.

Visit to Phnom Penh, Cambodia

Three CMU's staff has visited Royal University of Agriculture and Cambodia Agriculture Research and Development Institute during December 18 - 21, 2005. The team has identified several individuals to participate in the March 5 - 6, 2006 planning workshop in Chiang Mai.

Visit to Yunnan, China

A CMU's staff has visited Yunnan Agriculture University and Social Science Academy during Mid-January 2006. The team has identified several individuals to participate in the March 5 - 6, 2006 planning workshop in Chiang Mai.

Planning workshop

During March 5-6, 2006, the Project organized the planning workshop at Multiple Cropping Center, Faculty of Agriculture, Chiang Mai University. The workshop provided a venue for participants from Cambodia, Laos PDR, Thailand, and Vietnam to share knowledge and information about education and training of upland agriculture that transect portions of three countries within GMS to enable better understanding of regional land use dynamics and trans-boundary issues, emerging issues of common concern include: 1) Upland and lowland duality, 2) High rate of upland area conversion, 3) Food production for upland population, 4) Maintaining cultural, biological, and environmental diversity, and 5) Poverty alleviation and alternative livelihoods for upland communities.

Specifically, participants were asked to augment active education and research efforts as mentioned above in the areas of poverty reduction, environmentally conscious food production systems for sustainable livelihood life-style, and decision support tools for environmental impact assessment currently underway at the key institutions in GMS.

Objectives

The main objectives of the Planning workshop are to:

1. Gain better understand and to compile current upland agriculture curriculum in participating countries.
2. Build network of educators and researchers to conduct interdisciplinary and collaborative research related to upland agriculture.
3. Provide a forum to facilitate dialogue and recommendations.

Outcomes

Through the workshop interactions, diverse contributions from the participants, multiple outcomes are expected to emerge from the planning workshop including:

1. Workshop summary.

2. Suggested short-term training programs focusing on issues of upland agriculture.
   - Agricultural marketing
   - Community-based resource management
   - Decision support tools

3. Suggested collaborative research topics such as;
   - Watershed management and sustainable resource management techniques,
   - Community-based resource management
   - Sustainable food production systems
   - Decision Support tools and Information and extension service systems for upland communities.

Planning workshop website

More details information about the workshop, i.e., program, activities, participants, and resource person can be found here: http://www.mcc.cmu.ac.th/en/UA/02WS1.htm

Agricultural Marketing workshop

During October 25-28, 2006, the Project organized a training workshop on agricultural marketing.

This particular agricultural marketing workshop was the first meeting of this kind in the SE Asia region. The overall objective of this workshop was the introduction of system approach in curriculum development to address the marketing issues of local products for SE Asia and the examples of system approach curriculum at MCC.

Workshop Attendance

The workshop was attended by lectures and researchers in production, marketing, and social sciences from four SE Asia countries. The workshop presented existing cases related to marketing of upland products. The uses of system approach, through SIMILE software, to gain a better understanding of the link between upland and lowland ecosystems. Although the introduction is well-received, however, it is limited to individuals and institutions that have adequate manpower and ICT-trained staff. Most existing curriculum is designed to address issues mainly disciplinary-oriented. The use of system approach is not yet common in the existing curriculum because only few trained staff have recognized its strategic importance in teaching and learning. The approach need to be brought down to more detailed scales and to represent specific cases from each participating countries.

Workshop Activities

The workshop opening ceremony was presided over by Associate Prof. Dr. Benchaphun Ekasingh, Associate Director of the Multiple Cropping Center (MCC), Chiang Mai University, Thailand. Associate Prof. Dr. Attachai Jintrawet presented the system approach to curriculum development.

Objectives

The main objectives of this particular workshop are to:

1. To introduce system approach for issues related to current curriculum on agricultural marketing,
2. To discuss the contribution of system approach information to improve existing curriculum,
3. To further promote system approach and their application in the assessment, mapping and monitoring of agricultural marketing in linking the uplands and the lowlands.

The activities of the workshop were organized in several sessions, including presentations, site visits, and discussions in country working groups. The workshop sessions addressed the following main topics:

- Rethinking Marketing systems for pro-poor in the uplands.
- Production & Marketing strategies for poverty reduction and happiness in upland ecosystems.
- Potentials of high value commodities for niche Market as exemplified by the Royal Project Foundation: Agriculture credits and marketing.
- Rethinking marketing policies for pro-poor growth.
- Supporting farmer organizations for market access: the MCC experience.
- Role of ICT systems for safe-products marketing.
- Presentation of case studies by the Cambodian and the Laos participants.

1St Workshop website

More details information about the workshop, i.e., program, activities, participants, and resource person can be found here:

http://www.mcc.cmu.ac.th/en/UA/index.asp

Community-based Natural Resources Management workshop

During April 23-25, 2007, the Project organized a training workshop on Community based Natural Resources Management (CbNRM), with logistic and technical support from HUAF and Vietnam Upland Forum.

Objectives

The main objectives of this particular workshop are to:

1. To introduce system approach for issues related to current curriculum on community-based resource management,
2. To discuss the contribution of system approach information to improve existing curriculum,
3. To further promote system approach and their application in the assessment, mapping and monitoring of community-based resource management in linking the uplands and the lowlands.

Workshop Activities

The workshop opening ceremony was presided over by Rector of HUAF, Vietnam. Dr. Le van An presented the key concepts of CbNRM relevant to curriculum development.

The activities of the workshop were organized in several sessions, including presentations, site visits, and discussions in country working groups. The workshop sessions addressed the following main topics:

- CbNRM concepts and tools.
- Small group discussion on the following topics
- CbNRM, livelihood strategies (marketing) and poverty reduction
  - Linking CbNRM and policy innovations:
  - community forestry and community forestry law buffer zones
  - cases of linking local innovations and policy formulation
- Group formation processes and roles of local organizations in CbNRM.

2nd Workshop website

More details information about the workshop, i.e., program, activities, participants, and resource person can be found here:

http://www.mcc.cmu.ac.th/en/UA/index.asp

Decision Support Tools workshop

During November 26-Decmber 7, 2007, the Project organized a training workshop on Decision support tools, with logistic and technical support from MCC, CMU.

Today more than ever, increased food production and security depend on judicious use of resources. In addition, issues such as climate change, climate variability, soil carbon sequestration and the long-term impact on food production and food security and environmental sustainability, have become important. Many weather, soil, genetic and management factors affect the way a crop will respond to irrigation, fertilizer and other management practices. Determining appropriate crop management strategies under these uncertainties has major economic and environmental implications. Computer simulation models of the soil/plant/atmosphere system with user-friendly GIS interfaces can make a valuable contribution to both furthering our understanding of the processes that determine crop responses and predicting crop performance, resource use and environmental impacts for different environments and management scenarios. User-oriented simulation models greatly facilitate the task of optimizing crop growth and deriving recommendations concerning crop management. They can also be used to determine the potential impact of climate change on crop production and long-term soil carbon sequestration, carbon stock of a landscape, or provide management scenarios for adapting to climate variability.

Objectives

The overall goal of this training and seminary program is to familiarize participants with a comprehensive computer model for the simulation of crop growth and yield, soil and plant water, nutrient and carbon dynamics and their application to real work problems.

Workshop Activities

The workshop activities are:

1. Operation of the new Windows-based Decision Support System for Agrotechnology Transfer (DSSAT) Version 4 software.
2. Description of the new DSSAT-Cropping System Model, CSM and its modules, such as CROPGRO and CERES, and the science embedded in the models.
3. Minimum data requirements and experimental data collection for systems simulation to address food security issue.
4. Integration of crop simulation models with database management and Geographical Information Systems.
5. Application of the new DSSAT-CSM model to cope with food security issue in SE region by improving the management of cropping systems, especially rice-based cropping systems.
6. Linking crop models to assess large-scale crop production systems using CropDSS shell.

Participants

Twenty-eight participants from ten countries participated in the workshop organized by MCC-CMU and held in the Multiple Cropping Center from November 26 to December 7, 2007.

There were twelve country delegates from Thailand, four from Vietnam, three from Laos PDR, two each from Cambodia, and Malaysia, and one each from China, Ireland, Germany, Indonesia, and Myanmar. The participants were key persons in dealing with policy related questions on system approaches to assessing crop production, nutrient management, climate risk and environmental sustainability.

3rd Workshop website

More details information about the workshop, i.e., program, activities, participants, and resource person can be found here:

http://www.mcc.cmu.ac.th/

Conclusion workshops

During November 2 and December 24, 2007, the Project organized two separate conclusion workshops for the Network to express their concerns and recommendation for next steps. The first event was supported by MCC-CMU and the second event was logistically supported by the PAFO.

Objectives

The main objectives of the two workshops are to:

1. To finalize activities related curriculum development on upland agriculture.
2. To propose the next phase of the Project to support relevant activities.

Conclusion / Next Step

The UAN notes that members in the Network have universities and/or related institutes of higher learning with UAC. It also notes that all of the curricula are unique and that this uniqueness are due in part to unequal priorities accorded to different institutions and ecosystems settings, different emphasis given to different technical aspects of agricultural systems science, unequal allocations of funding support, and different levels of resource capability.

The Network, convinces that a diversity of UAC curriculum will help produce graduates who can take equal advantage of the advances made in addressing upland agriculture problems in the region, therefore recommended that ways and means be developed to enhance and strengthening such differences in the present UAC. It also recommended that improvement be made to the teaching methodology of upland agriculture at the university level so that graduates can become better equipped to implement effectively in linking the local to global issues as well as taking advantages of information technologies and tools.

Upland Agriculture curriculum, although diverse, should include the following main subjects and materials for students:

- Emphasis on environmental issues, i.e., soil conserving farming systems
- Socio-Economic aspects of upland agriculture.
- Communication skills at the technical and practical levels to promote integrated development of upland agricultural systems.

The Network notes that there is a need for university faculty members to interact with other resource persons (especially in-country expertise) from all sectors of UAC stakeholders (including environmentalist, agribusiness, others). These resource persons should be encouraged to share their knowledge with faculty members who are involved in UAC teaching to provide a more holistic view of the subject.

In addition, the Network calls for the strengthening of a two-way communication and collaboration between universities /research institutes and the farming community. The Network recognizes that there is often a breakdown between research/teaching and field implementation of UAC. To minimize this, the Network calls for strengthening of the linkages between universities/research institutes and the line and implementing agencies. This will help strengthening linkages between the field and classrooms will help produce systems approach students equipped with facilitating/learning /communicating skills capable and confident in working with farmers.

The Network appreciates that farmers often have field experiences based on traditional practices. Therefore, UAC developers should recognize their potential contributions and should encourage the scientific explanation and evaluation of their practices, as part of a thesis or research projects to better understand farmers and their upland agriculture management practices.

The Network agrees that universities should be encouraged to carry out specialized studies in any field of upland agriculture management and become centers of excellence in the selected fields of studies related to upland agriculture. The Network further agreed that such effort will help strengthen both the curriculum development and networking among universities and institutions.

The Network notes that many UAC have not taken note of emerging issues, i.e., relationships of global and local changes. Hence, the Network recommended that there be constant monitoring and review of the existing UAC in the universities with a view to provide timely upgrades. This is of particular concern as there are rapid advances in UAC in the region. The Network notes that revised UAC often takes a long time to be implemented. Therefore, the Network calls for efforts to speed up the adoption of any revised curriculum to take advantage of the rapid development in certain topics or fields of who have made significant advances in the implementation of UAC, e.g. those who have been involved with the Royal Project in Thailand.

Noting that upland agriculture is an important element of livelihood for local communities in the upland ecosystems and that new advances and developments do emerge from time to time, the Network recommended that holding future meeting and workshop be given consideration whenever necessary. Besides other activities, future activities could review the progress and achievements of the WG, consider possible networking, and develop other follow-up activities.

In the above context, the Network supports the effort to form a Working Group to discuss in greater depth the issues raised during the course of two-year project. This Working Group should include members from the academics as well as line agencies with a view to enhance collaboration between teachers and field workers. Such collaboration would ensure effective feedback from the field to support the development of a more practical UAC. The Network therefore recommends the formation of the “Working Group on Upland Agriculture Curriculum Development” with the structure and responsibilities to be developed. This Working Group will need to also work between Institutions should more of the latter be considered desirable subsequently.

The Network notes that university faculty development should be an important item in the Working Group activities, especially for UAC trainers. This may take the form of regular refresher training that should be organized with a view to upgrade skills and knowledge of faculty members. Such refresher training should be carried out in close cooperation with line agencies who have enormous practical field experience and

To encourage co-operation and collaboration between universities in the region, the Network urges universities and related institutions with UAC to place these on the Internet to ensure a wider circulation.

Next step activities:

1. Set up a UAC WG secretariat at MCC to provide supports for further the development of upland curriculum using systems approaches.

2. Set up national working groups on UAC to identify national needs and further the development of upland agriculture, based on national priorities.
   Publications (2)

3. Provision of scholarships for students from Cambodia, Laos PDF, Thailand and Vietnam to pursue their Master or Doctoral degrees in upland agriculture from institutions within and outside the Network.
   10 Master degree scholarships
   4 PhD degree scholarships

4. Provision of funding support for teaching and research staff to participate in on-the-job training and workshop in issue related to upland agriculture from institutions within and outside the Network.
   4 x 20 packs (2009 and 2010)
   (Mobile study tour)

5. Organize regional and national meetings and workshops/seminars on UA issues. The reports should be transmitted to the WG secretariat at MCC, Chiang Mai, Thailand.
   Mar 2009: CbNRM, Hue, Vietnam
   May 2009: Regional UA Conference
   Oct 2009: GIS & DSS, CMU, Thailand.
   Nov 2009: Agrobiodiversity Conservation & Utilization, CMU, Thailand
   Mar 2010: Marketing & AgBusiness, CMU, Thailand.
   Oct 2010: Sustainable Landscape Management, SU, Laos PDR

Blank Page

Lessons Learned

The followings are lessons learned from the Project.

Lesson 1: Upland agriculture is important

- Upland agriculture is a high priority topic in education and research agenda in all sites visited, The Network.
- The Network has common interest and mission related to upland agriculture and carrying out their educational mission, with high diversity in teaching and research programs.
- The Network is a very diverse in nature and will be more so in the near future, students can learn more from this diverse environment.
- However, one of the challenges the Network continually face is educating and inspiring students to be active, responsible GMS citizens who are engaged with their local, regional, and global partners.
- In addition, upland agriculture research and teaching programs need to start early and plan very carefully; interdisciplinary is a lot of work.

Lesson 2: Build on existing institutional settings

Adapt existing curricula and materials whenever possible. The Network learned not to start from zero each time. As mentioned in the activities, existing resources may include:

- Existing or standard curricula
- Strengthened curricula from other members in the Network
- On-the-job training courses
- Staff exchange programs

Lesson 3: Supports from Top Administration

- The President's/Rector's support of UA change efforts and continuity of leadership is essential to a curriculum change process, but not sufficient.
- Since curriculum is the faculty's domain, faculty members typically do not initiate changes in their courses based only on the President's/Rector's request or directive! We, then, learned that The Network need to understand the motivation of faculty to UA by engaging them.

Lesson 4: Engaging Staff and Faculty

- Obtaining faculty' interest and shared ownership of the introduction of UA curriculum is an essential, yet often time consuming, process; this process varies with faculty composition, the organizational culture, and the nature of what faculty perceives to be rewarding and important to their own teaching and research.
- Staff and Faculty members are more likely to own both the process and the outcome when asked for their input early in the process. They need to perceive benefits for themselves from implementing and sustaining UA changes and development, especially the regional level ones.

Lesson 5: System approach to real world problem of upland agriculture

- Across the Network, Higher education in agriculture still reflects the organization of a sectorial university. The process of learning about sustainable upland agriculture is not well suited to the traditions of our specialized, academic disciplinary structure. Because, UA involves complex interactions between people, their natural environment and the agricultural systems that they are striving to create.

- The upland agricultural system is a place where people and ecological processes interact in a process driven by personal and community goals and intentions. In order to understand or modify the system in a useful way, one must understand the components and their relationships with each other, and to the system's environment.

- Newly trained graduate for upland agriculture assignment in GMS must learn how to discuss and communicate with system's language—approach.

- A systems approach is useful for analyzing complex systems because of the need to examine the way in which parts fit together and relate to each other, and to look at how the total system interacts with its environment.
- Separate parts of the system, as we do within the confines of a specific discipline, we see only part of the picture.

Lesson 6: Strengthen Regional linkages

Regional "Academic" institutions need to join-in to share their resources, their current experiences and to enhance UA knowledge base and innovation of new frontiers.

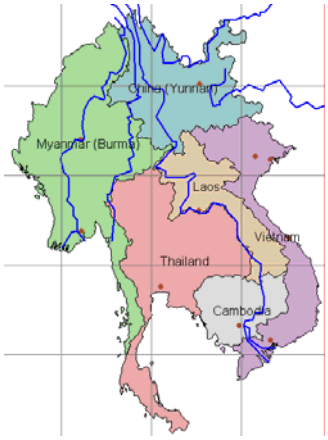
- No single national academic institution or donor can make significant contributions to strong and sustainable programs in isolation. The growth of upland agriculture will stem from intelligent, collaborative and cost efficient linkages among a wide number of actors.

- Collaboration and coordination are key building blocks for sustainable learning environment for upland agriculture, like GMS.

Lesson 7: Communication language

- English is the second language for all Network members. However, Network members able to communicate and convey idea regarding teaching and research experiences.

- Most important element regarding communication among members is the effort to establish encouraging atmosphere during workshops and other activities for participants to express their concerns and experiences of teaching and research with respect to upland agriculture.



Network Participants

Cambodia: Royal University of Agriculture

- Dr. Bunthan Ngo, Vice-Rector
- Mr. Khoun Eang, Vice-Dean, Faculty of Agronomy
- Dr. Hong Cheang, Vice Director
- Mr. Eng Leng, Vice Dean
- Mr. Sip Pagnasoley

Laos PDR: Louang Prabang Provincial Agriculture and Forestry Office

- Mr Somphong PRADICHITH
- Mr. Boonthanh Keoboualapha, Deputy Director
- Mr. Outhai Soukky, Agriculture and Forestry College
- Mr. Vilaphone Kanyasone, Agriculture and Forestry College
- Mr. Kaisone Vongkhamheang, Agriculture and Forestry Extension Center

Laos PDR: Louang Prabang Agriculture and Forestry College

- Mr Khamphoy PHONEXAI, Director

Laos PDR: Souphanouvong University

- Mr. Sianouvong Savathvong, Vice-Dean, Faculty of Agriculture
- Mr. Khamko Thammavong, Faculty of Agriculture

Laos PDR: National University of Laos

- Mr. Souklaty SYSANETH, Deputy Head of Academic Affair Division

Thailand: Chiang Mai University

- Assoc. Prof. Dr. Boonserm Cheva-Isarakul, Dean, Faculty of Agriculture
- Mr. Phrek Gypmantasiri, Advisor
- Assoc. Prof. Dr. Benchaphun Ekasingh, Assoc Director MCC-CMU,
- Assoc. Prof. Dr. Attachai Jintrawet, Project Leader
- Dr. Manoj Pothapohn
- Dr. Budsara Limnirunkul
- Asst. Prof. Dr. Thaworn Onpraphai
- Asst. Prof. Dr. Chanchai Saengchayosawat

Thailand: Rajjaphat Piboonsongkram University

- Dr. Kongsak Srikaew, Vice-Dean, Faculty of Agricultural Technology

Thailand: Chiang Mai Rajabhat University

- Mr. Att Atchaiyamontree

Thailand: Khon Kaen University

- Ms. Patcharin Ruchuwararak
- Ms. Jintana Kawasaki

Thailand: Naresuan University

- Asst Prof. Dr. Peerasak Chaiprasart, Dean

Thailand: Ubonratchathanee University

- Mr. Prasit Kanchana
- Ms. Supawadee Chaivivatrakul

Vietnam: Hue University of Agriculture and Forestry

- Prof. Tran Van Minh, Rector
- Prof. Le Duc Ngoan, Vice-Rector
- Prof. Hoang Manh Quan, Vice-Rector
- Prof. Nguyen Minh Hieu, Vice-Rector
- Dr. Le Van An, Director
- Ms. Nguyen Thi Thanh
- Dr. Ho Trung Thong
- Dr. Nguyen Thi Loc
- Dr. Ho Dac Thai Hoang
- Ms Nguyen Thi Cach
- Ms. Nguyen Phi Nam
- Ms. Le Thi Thuy Hang
- Mr. Nguyen Thi Ngoc Trang
- Ms. Le Thi Hien Nhan
- Ms. Dao Thi Phuong

Vietnam: Hanoi Agriculture University

- Prof Dr. Tran Duc Vien, Vice-Rector
- Mr. Nguyen Thanh Lam
- Mr. Nguyen Thi Thanh
- Ms. Nguyen The Phuong

Vietnam: Thai Nguyen University of Agriculture and Forestry

- Prof Dr. Tran Ngoc Ngoan, Vice-Rector
- Dr. Ngo Xuan Binh
- Mrs. Luong Thi Thu Huong

Vietnam: Tay Nguyen University

- Dr. Truong Tan Khanh
- Mr Nguyen Thi Thuy
- Mr Tran Trung Dung
- Mr. Nguyen Duc Dinh

Vietnam: Nong Lam University

- Dr. Hoang Huu Cai