

# Regional and International Cooperation in Higher Education: the SEAMEO SEARCA Experience

Editha Calienta- Cedicol<sup>1</sup>

Graduate Education and Institutional Development Officer, SEAMEO Southeast Asian Regional Center  
for Graduate Study and Research in Agriculture (SEARCA), College, Laguna, Philippines.

## I. Introduction

The advent of globalization brought about rapid changes in societies worldwide. Change, slow or fast, is a constant factor that characterizes the world. Diversity often accompanies change. But despite the diversities, visions and missions have provided the road map to the future of many organizations. In education, variations in terms of systems and approaches, focus, needs, priorities, and expertise among countries generally serve as bases for academic requirements and skills that human resources have to develop and acquire.

Academic institutions help shape the future development of international education through unity of purpose and direction despite geographical boundaries, and political and socio-cultural diversities. These institutions help develop human resources who will have the proper orientation and capability to adapt to the rapidly changing environment, and the flexibility to make adjustments in diverse situations. But how do academic institutions attain success in providing the needed orientation and exposure to students and faculty in order to widen their perspectives and enhance understanding of education and development at the international level? With several constraints such as limited resources and institutional capacities, low government support, and the resistance among faculty members to redirect efforts towards a more inter-disciplinary approach to teaching and research, educational institutions face the dilemma of how to globalize education.

One strategy that is now widely adopted by most institutions is the development and/or strengthening of cooperation through partnerships, strategic alliances, and consortia at the regional and international level.

The main subject of this paper is to present the experiences of the Southeast Asian Ministers of Education Organization Regional Center for Graduate Study and Research in Agriculture (SEAMEO SEARCA) in enhancing higher education in agriculture for global competitiveness through regional and international cooperation.

## II. SEAMEO SEARCA: Over three decades of agricultural human resource development in Southeast Asia

The Southeast East Asian Ministers of Education Organization (SEAMEO) is a network of ministers of education that continuously responds to the challenges of global education. SEAMEO is a treaty organization founded in 1965 to promote regional cooperation in education, science, and culture. It has 10 members, namely; Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. Its associate members include Australia, Canada, France, Germany, the Netherlands, and New Zealand.

The SEAMEO Regional Center for Graduate Study and Research in Agriculture (SEARCA) is one of the centers of excellence of SEAMEO established in 1966 to assist in the development of high-level professionals in agriculture in

---

<sup>1</sup> Visiting Professor of the International Cooperation Center for Agricultural Education (ICCAE), Nagoya University, Japan: November 1, 2000-January 31, 2001.

the region. For the next five years, SEARCA's vision is to be Southeast Asia's leader in sustainable agriculture. Its mission is to strengthen institutional capacity in sustainable agriculture for a food secure Southeast Asia through human resource development, research, knowledge exchange, and policy support.

Other SEAMEO centers are focused on the following areas: archaeology and fine arts (SPAFA), Thailand; tropical biology (BIOTROP), Indonesia; tropical medicine (TROPMED), Thailand; distance learning (SEAMOLEC), Indonesia; higher education (RIHED), Thailand; educational innovation and technology (INNOTECH), Philippines; language education (RELC), Singapore; vocational and technical education (VOCTECH), Brunei Darussalam; training (RETRAC), Vietnam; and science and mathematics education (RECSAM), Malaysia

### **Organization**

SEARCA is hosted by the Philippine government on the campus of the University of the Philippines Los Banos. Operating autonomously from UPLB, SEARCA's policymaking body is the Governing Board which is composed of representatives from each of the SEAMEO member countries. The Board is responsible for approval of operational policies, strategic planning, annual evaluation, and review of the Center's programs and budget within the framework of its approved five-year development plan.

### **Functions**

Specifically, SEARCA's functions include:

1. To promote and facilitate high-quality graduate study programs leading to the masters and doctorate degrees through collaborating institutions;
2. To provide graduate scholarships, fellowships, and/or assistantships for students from member countries;
3. To provide direction and funds for research by graduate students, faculty members, and other cooperating research workers of member countries;
4. To promote, undertake, and coordinate research programs, as instituted and supported by the Center, with special emphasis on research related to the needs and pressing problems of agriculture in the region;
5. To publish the findings of agricultural research done in the region, or other pertinent research done elsewhere;
6. To hold short-term training courses, seminars, workshops and conferences on selected agricultural problems and topics;
7. To provide advisory and consulting services to member countries, through staff visits and exchanges, seminars, and fellowships.

### **Funding**

SEARCA derives its funding from several sources: from contributions of member and associate member countries for its human resource development programs, meetings, and seminars and conferences; from friendly governments and donor agencies interested in development work through research and other projects in Southeast Asia; from the Philippine government which is the Center's host country; and from partner institutions, collaborators and networks which provide counterpart funds to SEARCA for collaborative undertakings.

### **Over thirty years of regional and international cooperation**

Since the beginning, SEARCA has employed the strategy of developing linkages through multilateral and bilateral agreements with agencies and institutions at the local, regional, and international level. Fund assistance came from

these agencies, and from member and associate member countries. The type of support in the past was more of an *aid* or *direct grants and donations* from friendly governments, and therefore more donor-driven. Then came a time when donors were tightening belts, and had to refocus their priorities. Funds became scarce so that SEARCA then had to look farther beyond the horizon. The Center realized that it could not keep on depending solely on donations. It has to sustain its activities and safeguard its existence to be able to achieve its mandate of assisting in the agricultural human resource development of the region, far beyond the expectations of SEAMEO. Armed with a strong will, sincere intentions, competent and dedicated staff, and a good track record, the officers implemented the one most important viable strategy: *to intensify resource generation efforts through partnerships, collaboration, cost-sharing schemes, and developing networks*. Funding for projects then slowly graduated into more of counterpart-type. Here, a more participatory approach is done during project design, activity-based allocation of resources, and shared responsibility in project implementation and monitoring among partners and stakeholders.

Through thick and thin, SEARCA had withstood the test of time. At present, SEARCA takes pride of its over thirty fruitful years of service to the Southeast Asian region. SEARCA's main strength is in human resource development.

SEARCA's human resource development mandate is primarily carried out by its graduate education and training programs. Initiated in academic year 1968-69, the Graduate Education Program of SEARCA provides scholarships to qualified nationals of SEAMEO member countries to pursue advanced studies leading to the MS and PhD degrees in agriculture, forestry, and related fields. Through the scholarships, SEARCA seeks to prepare the grantees for positions of leadership in their respective countries. So far, it has produced 810 masters and doctorate degree fellows who now continuously show a high 'return-on-investment' manifested through their contributions to development work in their respective areas of work. A number of these fellows (12.75%) now occupy top positions in government, positions that help influence policies and reforms. Majority (58.35%) of the fellows are occupying teaching, research, and extension positions; 18.31% are handling supervisory administrative and technical positions, while 1.08% remain in the administrative positions in government agencies. A few (9.52%) are in consulting firms and occupying middle to top management positions in private companies in Asia, the US, Canada, and Australia.

Aside from the graduate fellows, the Center has produced 11,000 training alumni in Asia. These training alumni are now tapped by the Center to take the lead in in-country trainings within and outside Southeast Asia thereby implementing a multiplier effect.

In research and development, SEARCA has moved from the more basic and production-oriented type of research to a more downstream and applied one. SEARCA's R&D program has coordinated and facilitated the conduct of over 100 research projects in selected pilot sites in Southeast Asia. Results of researches have been disseminated through the Center publications for use by agricultural colleges and universities, local government agencies, and information centers.

But despite the track record of SEARCA, the regional financial crisis, and questions on quality and relevance continued to pose a challenge to its existence. SEARCA has to strategically position itself in order to align its thrusts not only to the needs of the region but also to partner with other agencies with similar thrusts for complementation of activities and maximization of available resources. A refocusing needed to be done during the strategic planning stage for its next five-year plan. To do that, SEARCA has to do an environmental scanning of the trends, needs, issues/concerns, challenges and opportunities in agricultural education and research upon which the focus of regional or international cooperation should be anchored.

### III. Issues and trends in agricultural higher education and research

The continuing importance of agriculture has been emphasized in many reports and scientific fora. Issues on food security, sustainability in food production, poverty alleviation, nutrition and health, point to the significance of agriculture development as one of the major foci and agenda for support. Thus, with it comes the need to enhance agricultural education and research in order to respond to the increasing agricultural requirements of the region and the world.

The proliferation of agricultural education institutions in some countries in Southeast Asia was attributed to the emphasis on agricultural prosperity in the 1970s and 80s. Table 1 shows the number of tertiary institutions in agriculture existing throughout Southeast Asia.

Table 1. Agricultural tertiary institutions in Southeast Asia.

Country	Number of institutions
Brunei Darussalam	1
Cambodia	1
Indonesia	28
Lao Peoples Democratic Republic	1
Malaysia	1
Myanmar	1
Philippines	≥50
Singapore	nd
Thailand	13
Vietnam	4

The development of human resources through education and training has always been recognized as critical to economic growth. But is the world producing the right human resources to assist in economic growth? This question remains to be the major concern of agricultural higher education and training institutions.

#### The role of agricultural colleges and universities

It should be recognized that agricultural education is not only the responsibility of traditional learning institutions such as universities, colleges, and agricultural training institutes, but also the people's organizations, and informal community structures and workgroups that facilitate information exchange. People involved in agricultural education includes not only the educators, researchers, and extension workers, but also the whole farm household, in which each member has a direct or indirect role and share in agricultural development.

Agricultural education institutions submit to the trilogy of functions, i.e, teaching, research, and extension. In the past, these institutions espouse the production-orientation in agriculture, and practice the compartmentalized, single discipline studies. Nowadays, the dimensions of teaching, research and extension in agriculture have to be suited to the changing needs of the times in the light of the quest for agricultural modernization and globalization. Table 2 presents the evolving roles of agricultural education institutions in Asia as gathered by Sung (1996) in Fellizar (1999).

#### Trends

The current trend in agricultural education is geared towards modernizing agriculture. Agricultural colleges and universities now tend to build on partnerships, consortia and information networking to enhance education and

research programs. The use of information and communication technology (ICT) has rendered information virtually available at one's fingertips. It has provided opportunities for greater access to education to a wider group of clientele across the globe through distance education.

Universities across Southeast Asia have made strides towards modernizing agriculture and seizing opportunities to compete globally.

In Vietnam, for example, the government has started to merge small universities and colleges into a few, strongly focused, western-modeled universities. Although higher education institutions are still under the direct control of the Ministry of Education and Training, heads of universities and academic departments have been given increased autonomy in managing their internal affairs. Foreign education is being encouraged to further equip the country to respond to a market-oriented economy. Agricultural education is geared towards agroindustrialization and natural resources conservation. Vietnam is changing and developing rapidly, and activities to enhance higher education are continuously intensified.

Table 2. Newly evolved roles of agricultural education institutions in Asia (after Sung 1996 in Fellizar 1999).

Areas	Traditional Roles	Newly evolved roles
Extension and Policy	<ul style="list-style-type: none"> <li>• Diffusion of agricultural technologies and information to increase agricultural productivity among farmers</li> <li>• Provision of technical advice to farmers</li> </ul>	<ul style="list-style-type: none"> <li>• Diffusion of agricultural technologies and information on land use, environment, and natural resources management</li> <li>• Provision of technical advice to farmers and policy makers</li> <li>• Agricultural services (credit, marketing, etc) and empowering informal community structures</li> </ul>
Research	<ul style="list-style-type: none"> <li>• Development of technologies to increase agricultural productivity</li> <li>• Compartmentalized research or single discipline studies</li> <li>• Focus on traditional crops and lowland ecosystem</li> <li>• Livestock production</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainability of crop production</li> <li>• Organic farming and sustainable agriculture</li> <li>• Development and introduction of soil and water conservation technologies</li> <li>• Integrated Pest Management</li> <li>• Environmental Pollution</li> <li>• Agro-industrialization</li> <li>• Biotechnology</li> <li>• Ecosystem-based research in a landscape continuum</li> <li>• Integration of livestock production in farming systems</li> <li>• Environmental protection and protected area management</li> <li>• Environmental impact assessment</li> <li>• Food security</li> <li>• Multi-and inter-disciplinary approach in research</li> </ul>

Table 2. (continued)

Education/training	<ul style="list-style-type: none"> <li>• Providing good quality agriculture education</li> </ul>	<ul style="list-style-type: none"> <li>• Providing good quality agricultural education by developing responsive issue and demand-driven agriculture curricula for teaching and training</li> <li>• Developing innovative tools and methodologies to provide incentives to agriculture professionals</li> <li>• Networking among educational institutions</li> </ul>
--------------------	--	---

In Cambodia, a National Higher Education Task Force was established in 1995 to formulate a National Action Plan for higher education designed for the unique needs and conditions of Cambodia. The following objectives were identified to characterize the higher education system of Cambodia: a) development of human resources; b) contribution to national development; c) quality of output; d) efficiency of operation. Among the priorities identified by the Committee are: a) the development of a plan at the institutional level for the professional training for academic staff for higher degrees, short term-training, and continuing education; and b) to train new academic staff via the development of graduate degree programs in selected disciplines in collaboration with regional and international scientific communities. The Institute of Agricultural Technology, now known as Royal University of Agriculture, after it has been renamed in 1994, is the only agricultural university in Cambodia and is now engaged in the re-establishment or re-engineering of its agriculture programs. It, therefore, needs assistance in terms of curriculum development of specific disciplines both at the undergraduate and graduate level, and development of more responsive research and training programs.

In Lao Peoples Democratic Republic, the national government has adopted a national education policy towards increasing the education system's ability to provide the skilled work force at all levels needed to be able to meet the demands of a free market economy. Major issues confronting higher education in Lao PDR include: a) shortage of tertiary-level human resources; b) lack of capacity to plan and develop curricula responding to the needs of society; c) low quality of higher education because of program inadequacy; d) poor teaching and research facilities; and e) under-qualified teaching staff. Problems related to agriculture and forestry include: drought and flood which reduce rice paddy production; slash-and-burn or shifting agricultural cultivation; a vast potential of natural resources remain unexploited because of lack of resources and technical expertise. The government's strategies include the following: a) establishment of an agro-forestry structure linked to industry and services; b) promotion of market economy; c) integration of rural development to improve living conditions of rural and ethnic people; and d) improving the economic management mechanism in the government to increase favorable conditions to the market economy. The National University of Lao PDR, a merger of eight faculties, including the Faculty of Agriculture and Forestry, needs assistance from external agencies in terms of funds and experts to address the major issues mentioned.

In Myanmar, the Yezin Agricultural University (YAU) underwent many changes from 1924 to 1999, which affected the structure of the course curricula. The Myanmar government is currently engaged in joint venture projects with foreign agencies to protect, conserve and improve the environmental conditions in the country. This includes human resource development activities to produce people trained to do and teach specific disciplines. The YAU needs

assistance in curriculum development to improve the present agriculture curriculum to include the latest developments in the agriculture science and make it attuned to the needs of the present times. Such subjects as GIS, remote sensing, and use of IT in agriculture need to be included in the curricula. There is also a need to strengthen the IT facilities in the university. Continuing education or training is very badly needed.

In Indonesia, three strategic programs have been formulated to carry out the mission of higher education: 1) higher education management programs; 2) programs for increasing quality and relevance of higher education; 3) programs for equity. Three areas of action have been identified to accelerate Indonesia's contribution to agricultural development in the region: 1) active involvement of educational institutions in human resource development; 2) active involvement in research programs with emphasis on policy recommendations; and 3) intensification of partnership and cooperation, and increased involvement in development processes.

In Malaysia, the demand for distance learning by nontraditional students and agricultural practitioners, who could not leave their workplaces for long periods of time to attend formal courses, is increasing. Universiti Putra Malaysia (UPM) has responded to this through a wide application of information technology in agricultural education and bioindustrial services. Its Institute of Distance Education and Learning (IDEAL) offers courses at a distance. Incubator IT farms and the MultiMedia Corridor, a joint venture between UPM and the industry, are now in place on campus to serve as practical IT laboratories for students. The agriculture curricula are designed to produce graduates who shall espouse the philosophy of sustainable agriculture; are well-versed in precision agriculture; competent in economics and business to be able to compete globally; possess the necessary communication and interpersonal skills; competent in the field of molecular biology and biochemistry; and must possess problem-solving and critical thinking skills.

In Thailand, higher education programs are integrated into the long-term national education development plans. The recent national development plan takes a more aggressive and dynamic approach in responding to global environmental concerns. Education programs particularly in the tertiary level have put more premiums on curriculum development towards more relevant programs that meet modern demands. At present, Kasetsart University and Chiang Mai University are taking the lead in the development of sustainable agriculture curricula at the undergraduate and graduate level. The Open University system introducing more courses at a distance is being enhanced.

In the Philippines, initiatives to develop the agriculture sector include: 1) development of highly-trained manpower in agriculture; 2) strengthening regional state colleges and universities and providing them fiscal autonomy; 3) rationalizing agricultural education system. The Agriculture and Fisheries Modernization Act (AFMA) of 1997 mandated the establishment of a National Agriculture and Fisheries Education System (NAFES) aimed at unifying, coordinating and improving academic programs in agriculture and fisheries, upgrading the quality, ensuring sustainability, and promoting global competitiveness at all levels of agriculture and fisheries education.

## Issues

In the process of scanning the environment for agricultural education, several issues common to agricultural universities in Southeast Asia emerged. These are:

1. Inability of many agriculture practitioners to attend formal courses in agricultural education institutions. This points out to the need to enhance distance education and application of IT to access agricultural education.
2. Lack of documentation on innovative tools and replicable extension methodologies to respond to the educational needs of agricultural stakeholders (farmers, fishers, forest dwellers, rural communities, etc.)
3. Slow rate of professional advancement. This is attributed to inadequate funding for fellowships, postdoctoral studies, and the too bureaucratic traditional promotion procedures that continue to delay the advancement of young scientists, researchers and academicians within the universities. The attractive compensation package offered by private and international firms, and the wide array of opportunities outside one's country result to brain drain.
4. Education and employment misfit. This usually happens when education fails to address or respond to the emerging concerns and needs of the different sectors, as well as opportunities available at different levels. Many educational institutions tend to concentrate on the supply of manpower for a particular field without really looking at the demand for that field.
5. Inadequate funding for academic and research activities. Many agricultural higher education institutions in developing countries lack the financial support to conduct full-blown researches and run training programs.
6. There is a need for universities to forge alliances with other universities and agencies, that are engaged in agricultural education, research and development in order to share information, pool resources, and strategically position themselves as a strong driving force for development in the region.

#### **IV. Sharpening SEARCA's focus**

Given the above scenario, the challenges of agriculture in the region become much more complicated. There is a need to develop and extend more efficient and sustainable production technologies to meet the growing demand for food and other agricultural products without damaging the long-term production potential of the resource base. The development of agriculture professionals who shall be responsible for planning, policy formulation, and decision-making for agricultural development will continue to be an important undertaking. But then again, the question is, 'how could SEARCA respond to the challenges, take advantage of opportunities, and achieve its mission with limited resources?'

SEARCA's Seventh Five-Year Plan covering the period 1999 to 2004 called for a sharper focus in its institutional development efforts. This was done by concentrating resources on areas that will provide the greatest impact on sustainable agriculture development in the region, and to non-SEAMEO member countries. This required the center to be more efficient and creative in its search for alternative funding mechanisms and sources. It must operate in a setting of strong collaborative relationships with donors and partners in the region and beyond for joint programming and funding. It must look at innovative models for its various programs to attract new and keep past clients and donors. It must strengthen its internal resources generation efforts for greater flexibility in setting and pursuing its priorities and ensuring sustainability of its programs. Finally, it must be able to leverage its greatest assets, i.e., its own human resources and those that comprise its most valuable network--- the SEARCA fellows, alumni and the SEAMEO and University Consortium partners.

SEARCA has identified the priority areas, which fall under the five Consortium-identified broad themes of rehabilitation of degraded resource systems, food and agriculture policy, environment-friendly agriculture, coastal resource management, and agro-industry/agribusiness. These themes which will serve as the bedrock of SEARCA's

programs and activities are as follows: 1) food security; 2) biotechnology (risk assessment and management, ethical and policy implications of bio-safety standards set by governments); 3) water resource management; 4) biodiversity conservation; 5) environmental risk management, 6) cross cutting concerns such as gender, policy support, and sustainable agriculture indicators.

*Twinning* as a human resource development strategy is being adopted through a project called Project SHARE, which is in the process of implementation for Indochina countries. The project involves the assistance to selected agricultural universities in Cambodia, Lao PDR, Myanmar and Vietnam in the improvement of teaching, research, and extension capabilities and make their programs competitive at the regional and eventually at the international level. It will involve inter-institutional partnership where there is shared goal setting, decision-making, implementation and evaluation. Aside from sharing its resources, SEARCA will serve as coordinator and broker between and among participating universities. SEARCA will utilize its pool of experts and contacts from Southeast Asia, Australia, Canada, and other countries in Asia, Europe and United States. Members of SEARCA's University Consortium shall be involved in this project. SEARCA is now looking for additional partners and funding collaborators in this activity. Specific programs and activities per university and per country will be discussed and firmed up as soon as partners and collaborators are identified and memoranda of agreement are in place.

SEARCA is also pushing for the implementation of Project LINK, also focusing on Indochina countries, to promote the research-extension-farmer linkage in agriculture. This project will also involve partners among stakeholders and interested funding agencies.

Another major initiative of SEARCA is assistance to agricultural colleges and universities in the development of a curriculum geared towards sustainable agriculture in the region. This activity is ongoing at the national and regional levels. SEARCA is now facilitating the establishment of a network of sustainable agriculture centers for Indochina.

## V. Enhancing cooperation

For SEARCA, enhancing cooperation in agricultural higher education at the regional and international levels would entail efforts to attract new partners while maintaining close contacts with past donors, partners and clients for new initiatives and opportunities.

SEARCA is aware that cooperation through partnerships, linkages and consortia should start in one's own institution before it could successfully be applied at different levels. The following highlights such experience at the institutional, national, regional and international levels:

### \* Institutional

Inter-unit collaboration was institutionalized among the Human Resource Development (HRD) (composed of the Graduate Education and Institutional Development (GEID) and Training Programs), the R& D, Publications, and Consulting Services at SEARCA to ensure better effectiveness of program implementation, complementation, synergy and optimum use of resources. This arrangement enables the Center to render more comprehensive and holistic outputs. Thesis topics of scholars coordinated by the HRD group are focused on R&D priority themes and therefore aligning these to SEARCA's thrusts. This will give the scholars the priority to be attached to any of SEARCA's ongoing research projects. Needs for enhancement courses for scholars are relayed to Training Unit for designing of tailor-made training courses that could be open to scholars and outsiders. The pool of experts in HRD's database, which is composed mostly of University Consortium experts and SEARCA fellows is also tapped by

R&D for their experts needs. Results of students' theses researches and faculty fellowships/professorial chairs are then submitted to SEARCA's Publications Unit.

New programs developed at either the HRD and R&D Units are fed into the Consulting Services Group for promotion and marketing. The Group also has a pool of experts that cater to outside clients.

Information gathered by the Group on prospective projects at the national, regional and international levels that may be handled by SEARCA are immediately relayed to the Program Units for proposal development. In addition, each of the Program Units is required to market and promote SEARCA's programs and activities.

The GEID Unit, which handles the networking and linkage activities, serves as the main contact point of the Consortium, the fellows, and other academic networks.

#### \* **National**

SEARCA's mandate cannot be carried out efficiently without the cooperation of its target beneficiaries, stakeholders and partners at the national level. These include bilateral arrangements with the local communities, universities, government agencies, research institutions, the industry, private sector, and NGOs per country. In the Philippines, for example, SEARCA developed alliances with the Association of Colleges of Agriculture in the Philippines (ACAP), the government agencies such as the Philippine Commission on Higher Education; Department of Agriculture, Department of Environment and Natural Resources, Department of Science and Technology, farmers organizations, and the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) with its network of National Agriculture Research Systems (NARS) for Philippine projects.

In Indonesia, the following partners collaborate in human resource development activities for nationals of Indonesia, namely: The Directorate General of Higher Education of the Department of Higher Education, Ministry of Education and Culture; the Ministry of Forestry and Estate (MOFE); Rubber Plantation Research Institute, Agency for Agricultural Research and Development (AARD) and selected agricultural universities.

This type of cooperation is also done for other countries.

#### \* **Regional**

##### **SEAMEO Network**

This is an example of an inter-organization type of cooperation. The network of Ministries of Education gives SEARCA the most advantage especially at the policy level. SEARCA is always represented in annual meetings at different levels where policies are formulated, strategies are reviewed, and plans, programs, and budgets are approved. These meetings are the SEAMEO Council Meeting, the High Officials Meeting, and the Center Directors Meeting. The network of SEAMEO Centers also provides opportunities to SEARCA to learn about other initiatives in education and research and to develop collaborative undertakings.

##### **University Consortium**

This is an example of an inter-university type of cooperation but managed by a central coordinating body which is not a university. SEARCA serves as partner and coordinator of the Southeast Asian

University Consortium for Graduate Education in Agriculture and Natural Resources. The University Consortium (UC), initiated and established by SEARCA in 1989, is a commitment made by leading Southeast Asian education institutions to share academic expertise and resources and serve as a primary vehicle for delivering high quality graduate degree programs in agriculture and natural resources necessary to ensure the development of topnotch graduates in the region to make them globally competitive.

The five founding members of the UC are: Institut Pertanian Bogor (IPB) in Bogor and Universitas Gadjah Mada (UGM) in Yogyakarta, both in Indonesia; Kasetsart University (KU), Thailand; Universiti Pertanian Malaysia (now Universiti Putra Malaysia, UPM), Malaysia; and the University of the Philippines Los Banos (UPLB), Philippines. In 1992, the University of British Columbia (UBC) in Canada and in 1993, the University of Queensland (UQ) in Australia, became the University Consortium's associate members. Applications for associate membership were received from the University of Göttingen in Germany, and Nagoya University in Japan. These applications are currently being evaluated by the Consortium Board. To sustain the activities of the UC, members pay an annual membership fee. SEARCA being a partner and coordinator, contributes an amount equivalent to 100 % of the total fees from members. SEARCA serves as the Secretariat of the UC.

The following subnetworks of the University Consortium shall soon be set up in the region: gender subnetwork; policy studies subnetwork, and the acid soils management subnetwork.

### **Asian Association of Agricultural Colleges and Universities (AAACU)**

One big network that has been in existence since 1972 is the AAACU, an association of agricultural colleges and universities in Asia whose main mission is to improve human welfare through agriculture education, research and extension. This is another example of an inter-university cooperation but coordinated by a non-university organization. SEARCA, being an affiliate member of this network, collaborates with AAACU by providing counterpart funds and participating in the implementation of its activities, by providing office space and managing its Secretariat, and by helping in the sourcing of project funds. Operational funds of AAACU come from the annual membership fees.

There are 48 regular and 4 affiliate members of AAACU composed of agricultural institutions and research agencies in Bangladesh, Guam, India, Indonesia, Iran, Korea, Japan, Malaysia, Nepal, Pakistan, the Philippines, Saudi Arabia, Taiwan, Thailand, Turkey, and Vietnam.

Within the AAACU itself are networks of universities which are also members such as the Indian Agricultural Universities Association (IAUA) and the ACAP of the Philippines. SEARCA hopes to tap AAACU members also for its Projects SHARE and LINK.

### **Regional SEARCA Fellows Association (RSFA)**

This is an example of cooperation among individuals where membership is based on individual interest to serve and not on the interest of the institution where the individual is employed. This association, formed in 1992, is a very potent regional organization for strategic alliances, with sub-chapters existing in almost all SEAMEO member countries. The association comprises of SEARCA graduate fellows and training alumni. The SEARCA fellows and alumni are now being tapped for collaborative in-country projects. SEARCA believes that because of the commitment of these fellows

borne out of their sense of loyalty and gratitude to SEARCA and their benefactors, chances of success in collaborative undertakings are high and eventually create a stronger impact of SEARCA's HRD within and outside the region.

Country chapters include the Thai SEARCA Fellows Association (TSFA); the Indonesian SEARCA Fellows Association (ISFA) Bogor and Yogyakarta chapters; Vietnam SEARCA Fellows Association (VISA), the Malaysian SEARCA Fellows Association (MASFA); and the SEARCA Fellows Association of the Philippines (SFAP). The formation of the Cambodian SEARCA Fellows Association (CASFA); the Brunei SEARCA Fellows Association, and the Lao SEARCA Fellows Association are in the offing.

Several projects at the country and regional level have been implemented by the associations in collaboration with SEARCA. A big project involving the regional SEARCA fellows is the Regional Volunteer Experts for Agricultural Modernization (REVEAM), which is funded by the ASEAN Foundation, Inc. and has attracted the World Bank for a possible partnership in research and extension. The project is anchored on the spirit of voluntarism and intends to showcase the impact of SEARCA's human resource development through the volunteer expert services of its fellows.

#### **Southeast Asian Network for Agricultural Extension (SEANAE)**

This is a network of institutions interested in promoting agricultural extension work in the region. This network was initiated in 1997 by SEARCA and the Centre National d' Etudes Agronomiques de Regions des Chaudes (CNEARC), a French organization. The network has initiated in-country activities and meetings. SEARCA's Training Unit is currently coordinating its activities. The SEANAE Newsletter provides the vehicle for information dissemination.

#### **\* International**

SEARCA's activities are not intended to be myopic in scope and reach as it aims not only to be recognized internationally but mainly to make its programs and products (especially the human resources) globally competitive. It has to look far beyond the horizon for opportunities to tap international partners who have keen interest in the development of Southeast Asia and input international perspectives into its regional programs. The following are SEARCA's present and past partners and collaborators: ASEAN Foundation; International Rice Research Institute (IRRI); International Development Research Center of Canada (IDRC), Canadian International Development Agency (CIDA); ASEAN-Canada; German Academic Exchange Service (DAAD); GTZ; CNEARC; International Center for Agro-Forestry (ICRAF); International Center for Land and Aquatic Resources Management (ICLARM); International Potato Center (CIP); International Plant Genetic Resources Institute (IPGRI); Food and Agriculture Organization (FAO) of the United Nations; United Nations Educational, Scientific, and Cultural Organization (UNESCO); Asian Development Bank (ADB); World Bank- Economic Development Institute; ISNAR; Winrock International; University of Göttingen-Center for Tropical and Subtropical Agriculture and Forestry (CeTSAF), Germany; University of Bonn; University of Newcastle-Upon-Tyne International Center for Sustainable Agriculture; United Nations Development Program (UNDP); International Institute for Rural Reconstruction (IIRR); and the Australian International Development Assistance Bureau (AIDAB).

The above agencies collaborate with SEARCA on its graduate scholarship, research and training projects. A new project intended to serve a wide group of clientele at the international level is the UC's Distributed Learning Project. This involves the multi-campus offering of the Master of Science in Sustainable Resource Management on distributed learning scheme using mixed mode of approaches: on-line, face-to-face, at a distance, on campus. The following participating universities contribute courses to the program: University of British Columbia, Canada; University of Queensland, Australia; and Universiti Putra Malaysia. The university where the student takes majority of the courses will confer the degree. SEARCA issues an international certificate to the student upon completion. The project has been launched in November and the information on the program is now on the Web. SEARCA is currently also looking for partners to fund scholarships for DL students, course development and training of tutors for this project.

## VI. Lessons

From SEARCA's experience in the establishment, management, and coordination of networks and partnerships, several lessons can be gleaned to show why people or institutions succeed or fail in cooperation work. It must be realized, however, that there is no perfect recipe for cooperation work, and that one can only apply various modalities that suit best the situation and the intentions. But there are critical elements that should be observed as anyone ventures into the realm of networking and partnerships.

One of SEARCA's success stories is the University Consortium, which is recognized as one of the best contributions to agricultural graduate education in the region. The following critical elements make the UC network succeed in achieving its goals:

*First*, the UC has **clearly defined the problem** that it needs to address and has stated this as the guiding principle and mission in setting up the Network.

*Second*, the UC **objectives are clear**, as manifested by the identification of components of the Program on student and faculty exchange, research fellowship, professional chair, and thesis grants, which generally seeks to improve the quality and relevance of graduate education in the region.

*Third*, it must have sustainable **activities**. The network remains to be a network in name only if it does not have any work. Since it has expanded its activities from the regular components of exchange programs, fellowships, professional chairs and scholarship grants to projects such as distributed learning, summer course in sustainable agriculture for credit; specialized training courses on topics identified by the UC; international forum on policy research, and gender related issues.

*Fourth*, although there are differences in terms of systems and resources available at each university, each one adheres to the principle of **reciprocity**, where one contributes to the other's welfare, and with knowledge and resources flowing in both directions. The members, therefore, perceive **mutual benefits derived from the network** such as strengthening of graduate students and faculty through exchange programs; establishment of broad equivalency of admission standards for graduate programs among member universities; development of cooperative programs in instruction, research, and extension; and information exchange.

*Fifth*, the UC is composed of **interested and committed individuals and institutions with complementary expertise, technology, and resources**. The members of the network constitute its main body. Being the ones who committed to contribute to the network to achieve a purpose, the members themselves are immersed in the works and are expected to

harvest the benefits of the collaboration. Therefore, the members should be those that have the capacity to contribute and provide unique experiences to the other members. The members of the UC have complementary expertise and resources. Programs of strengths have been identified so that students and faculty members of a particular member university could avail of the strengths and abundance of resources in another member university. The academic and research expertise at UBC and UQ offers an international perspective to the regional universities.

*Sixth*, it has **a very good management and coordination system** that effectively facilitates communication, information dissemination and implementation of the programs and activities with the presence of a strong Secretariat at SEARCA as the central coordinating body, that facilitates the meetings, manages the activities, and takes charge of publishing the brochures and the UC Newsletter. Added to this is the existence of the UC Coordinators who serve as the main contact persons at each member university.

*Seventh*, the UC **has the physical, financial, and manpower resources** to sustain its activities and operations for a period of time with the presence of Consortium Coordinating Offices, the staff of each office, and the establishment of the Consortium funding scheme.

*Eighth*, the UC **follows a planning and problem-framing process** through its series of meetings at different levels. . The steering group is The Board composed of the Consortium Chief Executives and Executive Officers who give directions on programs and activities.

*Ninth*, the **selection of new Network members is governed by a set of criteria** developed by the UC members themselves. A few years after its establishment, the UC has attracted many educational institutions in other parts of the world to become associate members so that the UC had to come up with a set of criteria for regular and associate membership. The criteria covers aspects like strength in programs, faculty and facilities, willingness to share resources and funds, and keen interest in the development of Southeast Asia.

In addition to the above elements as manifested in the UC example, there are **important factors** that need to be considered in regional and international cooperation in higher education as follows:

1. The strategic plans of universities should be developed with the participation of stakeholders. The plan then serves as the stakeholders' guide in supporting the universities. The plan should include the mission statement of the university, the strategy or strategies to be employed; and a three to five-year operational plan, which should clearly define the roles and responsibilities of the various stakeholders.
2. The need to look at course equivalencies in academic programs offered at participating universities to be able to arrive at a consensus for certain requirements without sacrificing standards and quality in order to effect a successful exchange program.
3. The need to institutionalize a standard monitoring and evaluation system to be used by the network to regularly assess performance and impacts.
4. People involved in cooperation work should have good interpersonal skills to be able to create an atmosphere of friendliness and goodwill among partners and prospective collaborators.
5. The need to know potential partners or collaborators in terms of structure, functions, thrusts, and priorities.
6. The need to exercise diplomacy in dealing with people. Establishing relationships most often touches sensitivities (political underpinnings, socio-cultural issues, bureaucratic processes, etc.). One must be careful not to destroy diplomatic relations between institutions and between countries.
7. Cooperation work should be anchored on mutual trust.

## VII. Prospects

The prospects are high for the advancement of higher education in agriculture at the national, regional and international levels through enhanced cooperation not only because it is the trend, but because it is the most viable strategy and approach to internationalizing education, and to address the never-ending question posed to higher education institutions: that of *sustainability* and *increased relevance*.

Despite the varying stages of development in developing countries which make the implementation of cooperative programs and projects not only difficult but also exciting and challenging, a cooperating institution can make adjustments by assessing each country and categorizing the levels of development first, before determining the type and the kind of cooperative work to implement, and choosing the agency or institution to partner with. There are countries at the forefront of modernization and development, employing high-tech strategies and gradually even moving away from the conventional agricultural concerns. On the other hand, there are countries with more basic agricultural concerns and with still developing educational capabilities. For the former, the cooperating institutions will have to employ a more upstream strategy such as implementing biotechnology and geographic information systems (GIS) projects; and for the latter, the focus of activities may have to be on capability improvement and institutional capacity-building (Villareal 1999).

## References

- Bourne, Richard (ed). 2000. Universities and Development. London: Association of Commonwealth Universities.
- Cedicol, Editha C., Soekartawi, and Sajise, P.E. 1987. "Enhancing Academic Cooperation in the Southeast Asian Region: the Challenge of SEARCA." Paper presented during the University Consortium Coordinators Seminar-Workshop on Enhancing Academic Cooperation Through the University Consortium held at Universiti Putra Malaysia, Serdang, Selangor, Malaysia, 14-18 July.
- Fellizar, Francisco P. Jr., E. C. Cedicol, R. G. Bernardo, and A.K.M. Chatterjee. 1999. "Issues in Agricultural Education in Southeast Asia." Report of the 1st General Assembly of the Southeast Asian Network for Agroforestry Education (SEANAFE). Indonesia: ICRAF.
- Tallafer, L.L., Suva, M.M., Domingo, Leah Lyn D (eds.) 2000. "Riding the Winds of Change." SEARCA, College, Los Banos, Laguna, Philippines. 82 pp.
- Sajise, Percy E. 1999. Opening Remarks and Tenth Anniversary Message on the theme, "University Consortium: Meeting the Challenges of the Next Millennium" delivered during the Twelfth University Consortium Executive Officers and Coordinators Meeting, 14-16 September 1999, Phuket, Thailand.
- SEAMEO SEARCA Seventh Five-Year Plan: July 1999-June 2004. 1999. SEARCA, College, Los Banos, Laguna, Philippines. 43 pp.
- Villareal, Ruben L. 1999. Acceptance Speech as Incoming SEARCA Director delivered during the SEARCA Directorship Turnover Ceremonies, 7 December 1999, SEARCA, College, Laguna, Philippines.