



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Prospects and Dilemmas of Institutional Networking: Case of the Southeast Asian Network for Agroforestry Education (SEANAFE)

Jesus C. Fernandez

SEAMEO-BIOTROP

Email: j.fernandez@biotrop.org

Leila D. Landicho

Institute of Agroforestry-College of Forestry and Natural Resources

University of the Philippines Los Banos

Email: leila_landicho@yahoo.com

ABSTRACT

This article highlights SEANAFE's experiences and lessons learned from its 15 years of operation as a regional agroforestry education network. It argues that while institutional networking offers opportunities in strengthening the quality of agroforestry education, there are also institutional mechanisms that constrain the sustainable achievement of the goals and objectives set by the network. To achieve an effective network, therefore, this article suggests the need for more focused nationwide and region-wide activities rather than purely institutional activities; clear and sustained commitments of member-institutions; dynamic relationships between and among country networks and their member-institutions; more tangible outputs that would enhance active participation of member-institutions; effective and efficient communication; and more aggressive fund sourcing and collaborations with donors.

Keywords: networking, agroforestry education, Southeast Asian Network for Agroforestry Education

JEL Classification: Q23, Z18

INTRODUCTION

The complexity of today's modern society makes it difficult for any organization to exist singly. Thus, the formation of partnerships, convergence, networking, and collaboration are among the strategies that organizations or groups adopt to cope with the current challenges. These terms are used interchangeably because they share similar concepts. In general, partnership is a dynamic relationship of diverse actors with mutually agreed objectives, pursued through a shared understanding, mutual influence, well-balanced synergy, mutual respect, accountability and transparency, and equal participation (Brinkerhoff 2002). Usually, organizations group together and establish a partnership or network because of their shared goals. Alpert (2009) describes partnerships in education and development as mutually-beneficial relationships between two or more institutions, including businesses, industries, universities, nongovernment organizations, school systems, and service organizations. According to Creech and Willard (2001, 5), "formal knowledge networks work together on a common concern aimed at strengthening each other's research and communications capacity, sharing knowledge bases, and developing solutions that meet the needs of target decision makers at the national and international level."

The formation of the Southeast Asian Network for Agroforestry Education (SEANAFE) was in congruence with the aforementioned concepts. When agroforestry started to be recognized as a field of study among educational institutions in Southeast Asia in the late 1980s, Rudebjer and del Castillo (1998) noted that the agroforestry courses/programs were not mainstreamed in the curricular programs of most of the agricultural universities in the region that were surveyed in their study. Their study also revealed that these agricultural universities lacked the following important

components, namely: reference materials and other teaching facilities in agroforestry, a staff development program for the agroforestry teaching staff, and inter-institutional linkages in agroforestry development and promotion. These findings triggered the establishment of SEANAFE in 1999. The formal establishment of SEANAFE, therefore, concurs with Creech and Willard (2001) who argues that networks are established because of the sense of urgency to address the growing social, economic, and environmental problems being felt by various sectors.

SEANAFE was envisioned to empower individuals and communities in the region in managing their natural resources and the environment for a sustainable livelihood through collaboration among educational institutions (SEANAFE 2010). This regional network of 88 member-institutions in Indonesia, Lao PDR, Philippines, Malaysia, Thailand, and Vietnam was also guided by the following aims, which are to: (1) improve the quality, availability and accessibility of agroforestry education; (2) promote cooperation among stakeholders in agroforestry; (3) foster collaboration among disciplines in the education system; (4) enhance the exchange of information, staff, students, and other resources among network members; (5) facilitate research connectivity and collaboration; (6) link agroforestry education to the extension system and practice in the field; (7) provide opportunities for human resources development in agroforestry education and training; (8) help create job opportunities for agroforestry graduates; and (9) assist in mobilizing resources for national and regional collaboration on agroforestry capacity building.

One national agroforestry network each in Indonesia, Lao PDR, Malaysia, Philippines, Thailand, and Vietnam was formed to serve as the core of the technical and financial support from SEANAFE. These national agroforestry

networks then mobilized individual member-universities and other national agencies to promote agroforestry education.

This article highlights the experiences of SEANAFE in building institutional capacities for agroforestry education, highlighting its contributions, as well as the challenges and constraints, in effectively achieving its vision.

Brief Description of SEANAFE's Mandates, Programs, and Operation

SEANAFE aims to improve livelihood and sustainable land management in Southeast Asia through educational change in the field of agroforestry and integrated natural resources management. It primarily seeks to develop human resources through collaboration among educational institutions. Its members consist of universities and technical colleges in Indonesia, Lao PDR, Philippines, Thailand, Vietnam, and Malaysia. From 2001, this regional network enhanced decentralization via the establishment of national agroforestry networks in the six member-countries. SEANAFE is governed by a board represented by the coordinators of the national agroforestry education networks of the six member-countries. It consists of 86 member-institutions which comprise the general assembly. A secretariat office provides technical and administrative backstopping in the network's operations. Since its inception until 2010, SEANAFE operations have been fully supported by the Swedish International Development Cooperation Agency (Sida).

Improving agroforestry education is the primary priority program of SEANAFE. Thus, it facilitates curriculum development through the following mechanisms: conduct of training on participatory curriculum development; training needs assessment and identification of gaps in existing curricula; monitoring of research outputs; joint projects leading toward developing curriculum frameworks on

agroforestry and natural resources management; publication of curriculum guides which are translated by the national networks to their respective language of instruction; and, policy advocacy. SEANAFE also supports the training of lecturers via regional courses, national courses organized by the national agroforestry networks, and courses offered by the World Agroforestry Centre (ICRAF). In addition, this regional network provides agroforestry books, journals, databases, and other agroforestry information to the teaching staff and libraries of member-institutions, as well as modest financial support. SEANAFE has also embarked on collaborative researches aimed at developing market-based and landscape-oriented curricular programs in agroforestry.

Contributions of SEANAFE in Strengthening Agroforestry Education in Southeast Asia

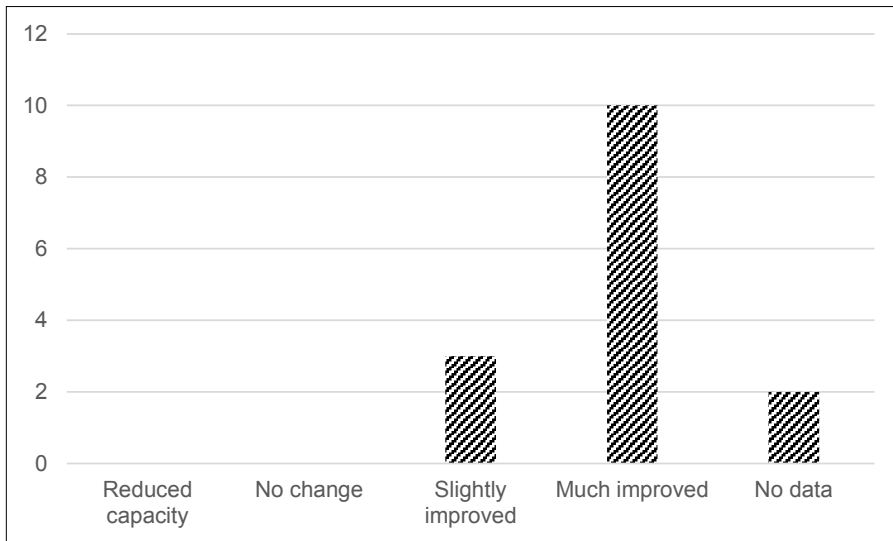
In a study conducted by Rudebjer et al. in 2008, an improvement in the status of the different elements of agroforestry education was noted among the 15 SEANAFE member-institutions in Laos, Indonesia, Vietnam, Philippines, and Thailand, as shown in Table 1. The staff capacity has improved (Figure 1) as evidenced by the following: increase in number of agroforestry publications; increase in the number of teaching staff including those from other departments; increase in the number of PhD holders; availability of lecture notes and books on agroforestry written by the teaching staff; provision of technical assistance to other partner-agencies; enhanced skills in proposal preparation; and improved teaching methods. Rudebjer et al. (2008) reported that among the 18 faculties/colleges surveyed in their impact assessment, 101 teachers and institutional leaders participated in the SEANAFE activities during the seven-year period of network operations.

Table 1. Institutional capacity for agroforestry education in 15 SEANAFE member-institutions: status and change (1999–2006)

Variable	Status (2006), (No. of institutions)			Change (1999-2006), (No. of institutions)					
	Inadequate	Adequate	Very Good	No Data	Reduced Capacity	No Change	Slightly Improved	Much Improved	No Data
Staff capacity for agroforestry education		1	9	5			3	10	2
Infrastructure, technical and financial resources for agroforestry education	1	7	2	5		3	7	4	1
Leadership related to agroforestry development	2	5	5	3	1	1	4	6	3
Program management and agroforestry curricula		5	5	5			5	5	5
Networking and linkages		3	9	3			5	8	2

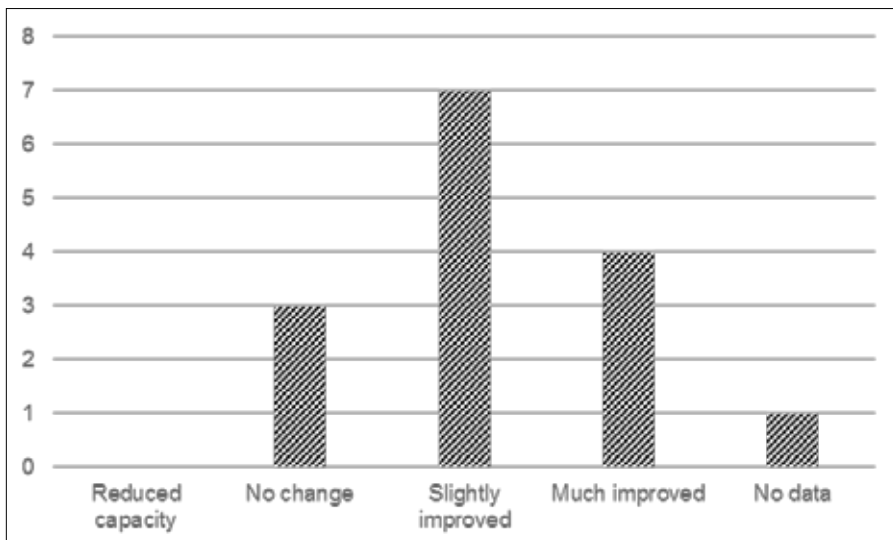
Source: Rudebjer et al. (2008)

Figure 1. Change in the status of teaching staff capacity in agroforestry education of 15 SEANAFE member-institutions, 1999–2006



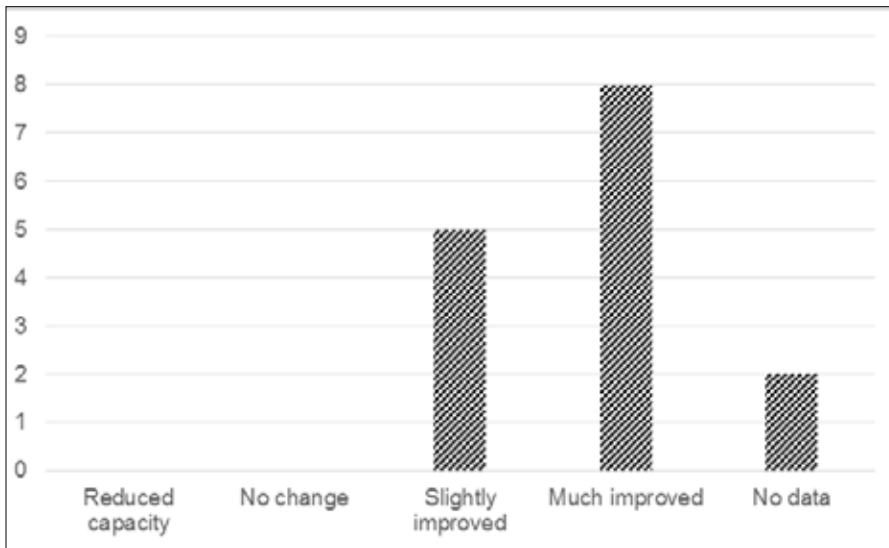
Source: Rudebjer et al. 2008

Figure 2. Change in the status of facilities and resources in agroforestry education of 15 SEANAFE member-institutions, 1999–2006



Source: Rudebjer et al. 2008

Figure 3. Change in the status networking capacity in agroforestry education of 15 SEANAFE member-institutions, 1999-2006



Source: Rudebjer et al. 2008

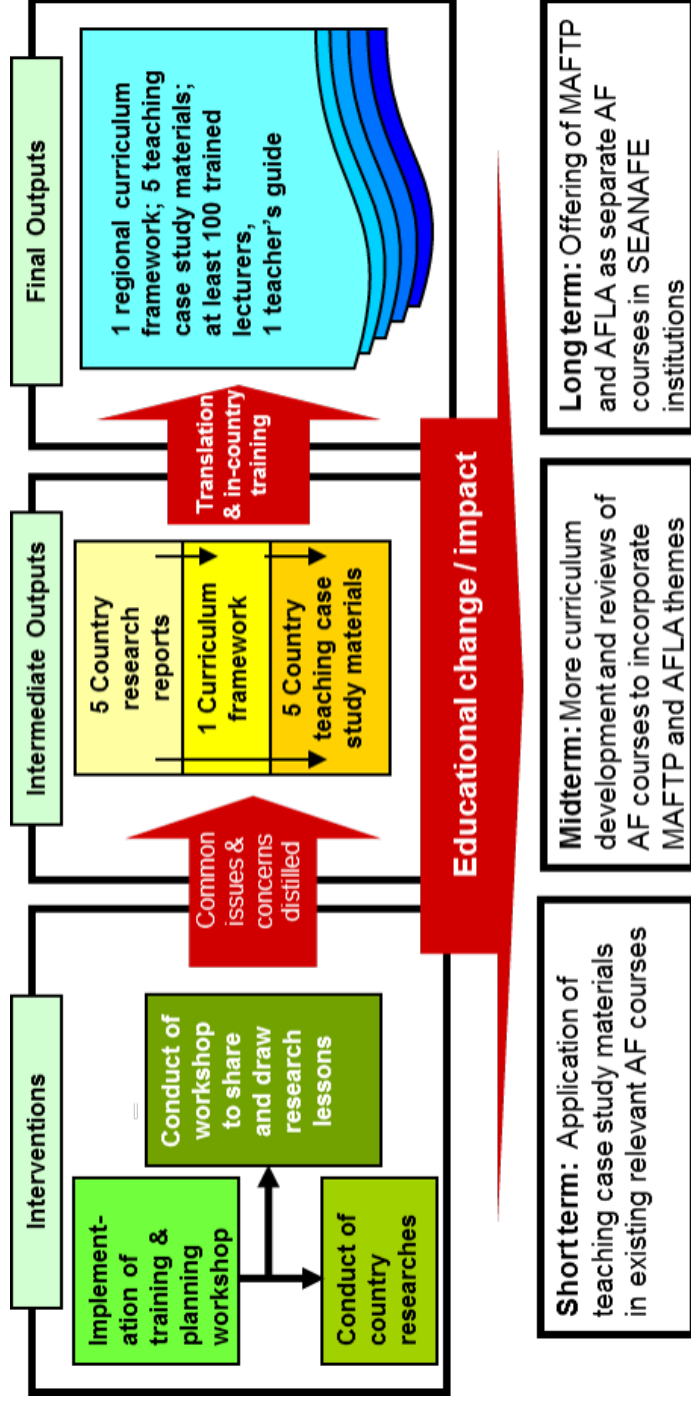
The said study also highlighted an improvement in the teaching facilities (Figure 2) as evidenced by the availability and accessibility of agroforestry references to the students and faculty members, increased number of agroforestry references, and increased number of off-campus learning laboratories. In addition, the networking capacity of the SEANAFE members has improved much (Figure 3) as indicated by enhanced cooperation with international organizations, national and local agencies, and other universities implementing agroforestry education programs and the recognition of the member-institutions at the local level. However, SEANAFE did not contribute significantly to the development of the agroforestry curricular program. Perhaps, this is because of the existing policies in each country as regards the implementation of curricular programs.

These findings are consistent with the views of Cogburn and Levinson (2003), cited by Semali, Baker, and Freer (2013), that professional development opportunities

for faculty and administrators, interaction among students, curricular enhancements, and increased effectiveness in achieving educational goals are among the principal benefits of international partnerships.

As noted by Temu, Redubjer, and Chakeredza (2010), agroforestry is perceived as “falling in the rocks” between the forestry and agriculture sectors. Territorial and turf issues have always been the major challenges in promoting agroforestry education. In the past 15 years, however, agroforestry has been mainstreamed into the education programs of the universities and colleges in the Southeast Asian and African regions. This is owed to SEANAFE and the African Network for Agroforestry Education (ANAFE), respectively. The two regional networks have employed a number of strategies towards the institutionalization of agroforestry education (Temu, Redubjer, and Chakeredza 2010). These include developing and facilitating creative and participatory curriculum designs and reviews, enhancing faculty capacity to

Figure 4. SEANAFE Project Framework



Source: Fernandez and Rudebjer 2010

participate and guide curriculum development review, enhancing faculty capacity in social and technical areas in agroforestry, providing access to new tools and source materials for faculty to develop their own teaching and learning resources, providing research opportunities in an international context to graduate students and faculty, strengthening network among institutions, and supporting policy advocacy for the greater integration of disciplines.

As regards institution building, the 15-year regional collaboration through SEANAFE has enabled the establishment of fully functional national agroforestry networks which have established their respective permanent secretariat offices in one of their member-institutions (SEANAFE 2010). These are the Lao Network for Agroforestry Education (LaoNAFE) with the National University of Laos, the Philippine Agroforestry Education and Research Network (PAFERN) with the University of the Philippines Los Baños, and the Thai Network for Agroforestry Education (ThaiNAFE) with Kasetsart University. Meanwhile, the Indonesia Network for Agroforestry Education (INAFE) and the Vietnam Network for Agroforestry Education (VNAFE) have their secretariat hosting on a rotation basis depending on the affiliation of the country coordinator. PAFERN and ThaiNAFE have attained national recognition in their respective countries. The former is a non-profit, non-stock organization, registered with the Philippine Securities and Exchange Commission, which has been implementing agroforestry development and promotion activities in the Philippines. On the other hand, the latter has become affiliated with the Thailand Council of Agricultural Deans.

In the area of research, the SEANAFE member-institutions have been able to conduct agroforestry researches from plot/farm-level to landscape approach through the research projects on the Marketing of Agroforestry

Tree Products (MAFTP) and the Agroforestry Landscape Analysis (AFLA). The integration of the concepts of marketing and agroforestry landscape analysis in university curricula provided the impetus for SEANAFE to conceptualize and implement the research projects on MAFTP and AFLA. Most universities in SEANAFE member-countries were lacking in courses that addressed the environmental impacts of land use decisions within a landscape context, and the demand aspects of agroforestry, especially the links between producers and consumers, markets, post-harvest processing, and small-scale livelihood systems.

The MAFTP and AFLA projects were primarily aimed to build capacities and teaching materials toward enhancing the relevance of agroforestry education among SEANAFE member-institutions. The MAFTP project was also SEANAFE's attempt to contribute to a more holistic view of the production and marketing chain related to agroforestry tree products. On the other hand, through the AFLA project, SEANAFE hoped to reinforce the importance of integrating both the natural and social aspects of studying land use practices at various levels and scales toward more sustainable natural resources management.

As shown in Figure 1, both projects envisioned three educational impacts. In the short term, the projects were expected to enrich agroforestry teaching materials in SEANAFE institutions through the adoption of the case study materials. In the midterm, the projects hoped to stir more curriculum development and reviews among universities and colleges within and outside the Southeast Asian region to incorporate MAFTP and AFLA themes in existing agroforestry curricula. In the long term, SEANAFE looks forward to MAFTP and AFLA curricula being offered as separate courses within agriculture and/or forestry programs in its member-institutions.

The participatory approach in the implementation of the MAFTP and AFLA has maximized experienced and peer-based learning among the country team members, who, while undertaking the various project activities, capitalized on the opportunity for participatory curriculum development by involving as many respondents as possible, maximized consensus-building among country teams to heighten ownership of the project outputs, and enhanced interaction among the SEANAFE member-institutions.

Challenges and Constraints Faced by SEANAFE in Agroforestry Promotion

Differences among country networks

Although all country networks were formally established during Phase 1 of the project from 1998–2006, they nevertheless evolved in various ways in Phase 2 (2007–2010) due to their differences in needs and priorities, purposes, leadership capacities, degree of commitment of member-institutions, and the resources available to them. The differences are evident in their level of operation and their structural setup and logistical arrangements with their host institutions. These affected the country networks' quality of decision-making processes, nature and scope of activities they engage in, the rate at which they seize opportunities from within and outside SEANAFE, and the speed and quality of outputs they produce in implementing network activities.

Most of the country networks have ventured into implementing activities only at the institutional level, especially concerning network management. However, there were also some country networks that contributed additional funds which enabled more of their member-institutions to participate and expand the scope of their activities to the national level (e.g., congresses, dialogues, seminars,

and workshops). Unfortunately, not all country networks fully availed themselves of funds allocated for regional-level activities like the MS Research Fellowship, resource mobilization workshops, and needs assessment studies, thus, depriving themselves of producing more outputs and impacts for their stakeholders. All these resulted in the uneven performance levels achieved by the country networks.

Variation in the perception of agroforestry as a concept and discipline within and between country networks

The concept of agroforestry has undergone considerable variations through the years partly as a result of the evolution of similar or related concepts like community forestry, social forestry, sustainable agriculture, and others. These variations, including overlaps between these concepts, become evident in the way agroforestry education is offered in learning institutions within and between SEANAFE member-countries. While most PAFERN institutions have been offering a complete BS Agroforestry program since the early 1990s, agroforestry has remained as a course (i.e., a core course or an optional one), or a topic within a course(s) in forestry and/or agriculture programs in member-universities of other country networks. SEANAFE's Impact Study (Rudebjer et al. 2008) attests to this and attributes the differences to each country's agricultural, environmental, and educational policies and job markets. Because of this, the relevance of SEANAFE activities also received varied attention from the member-institutions as evidenced by the number and quality of their participation.

Variation in curriculum development and review protocols among country networks

Curricular review and development processes also vary among SEANAFE member-countries. In Indonesia, Laos, and Thailand, the process is top-down from the

ministry/department level. On the other hand, the process is less bureaucratic in the Philippines, and to some extent in Vietnam, where learning institutions have more freedom to revise existing curricula and introduce new ones provided they comply with basic standards prescribed by the national agencies concerned. This variation affected the mainstreaming of curricular frameworks and teaching materials produced by SEANAFE.

As noted by Rudebjer et al. (2008), SEANAFE's influence on curriculum development seemed weak because of the policies at the national levels, which constrained the institution of agroforestry education programs. This observation is also true in Africa, where ANAFE works as a regional network. While ANAFE has made considerable achievements in networking, the lack of policy-level recognition of agroforestry as a field of study, and the weak link between education, research, and the extension system, remain as challenges (ANAFE 2013).

Level of participation and commitment of member-institutions and individuals

Knowledge networks require institutional commitment beyond the participation of individuals and experts. While expert networks and consultative groups have their place, we have learned that a knowledge network requires the commitment of an institution for several reasons.

Effective members' participation and commitment are given conditions for a successful networking. As stated in the SEANAFE charter, members must have the capacity to contribute skills, time, and other resources. They also need to participate in the decision-making processes and the operation of the network. However, participation in both regional and country-network activities was limited to a few, and usually from the same institutions and individuals as has been

indicated in the results of SEANAFE's 2007 mid-term project evaluation. Human and material resources in the country networks have not been fully mobilized and maximized due to workload priorities and bureaucratic policies in member-institutions. In most cases, country coordinators and/or the network committee members have become the think tanks and, at the same time, the implementers of network activities.

While ANAFE has established a network of 123 member colleges and universities in 34 African countries, and were organized into four regional sub-networks and national sub-networks, the issue on the participation and membership in the networks remains a challenge, including the sustainability of leadership and communication among the members. Network management remains a concern (ANAFE 2013).

Creech and Willard (2001) argue that knowledge networks require institutional commitment beyond the individual participation. Institutional commitment comprises the following features: (1) accountability, to see to it that institutional mandates are carried out instead of personal interests; (2) continuity, which ensures the sustainability of the network; and (3) commitment of resources, such that counterpart funds are allocated, instead of relying solely on the network's core funds.

Degree of relationship between and among member-institutions and country networks

According to Ashman (2003), one characteristic of an effective network is having members that share a history of working together, knowing each other, and relating to each other with mutual trust. But this surely takes time (ICCO 2004). The implementation of SEANAFE regional projects certainly provided several opportunities for working together but with the main purpose of learning and completing project activities. Although linkages

were established among project participants, these were not elevated to the institutional and country network levels as the participation in SEANAFE project activities was rather individual even though the participants were endorsed by the country networks. The level of membership can be said to have affected the kind of relationship that existed between and within country networks. Had the membership and participation to SEANAFE project activities been truly institutional, there could have been inter-institutional and country network collaborations fostered by the project participants, which in turn could have strengthened relationships between and among their respective institutions and country networks toward a more cohesive regional network.

Communication and information exchange barriers

Information exchange, especially on policy decisions, activity updates, and lessons learned, is a crucial networking activity. However, not all member-institutions and project collaborators of SEANAFE have good access to the internet and other communication media. Most country networks were lacking in formal and acceptable inter-institutional mechanisms for regular communication. Likewise, the dissemination of feedback from project collaborators remained wanting despite SEANAFE's use of various communication media. This could be attributed to the fact that project collaborators were full-time faculty members and at some point were also occupying administrative positions in their respective universities. Coordinating a SEANAFE project was just among the many responsibilities they needed to attend to on a daily basis. Again, the issue on individual and institutional commitment remains a concern.

Resource mobilization and sustainability

Both SEANAFE and the country networks have not been too proactive in seeking additional funds to sustain operation. Very few proposals have been developed and submitted for funding. Most of the proposals submitted did not yield favorable results; this could be due to weak follow up or the inadequacy of the proposals to merit donor attention. Thus, SEANAFE relied mostly on the available funds from Sida to carry out its functions and activities. Some partnership arrangements also worked out. On a positive note, however, SEANAFE has maximized the Sida funds as evident in the accomplishment of more activities on top of those set in the original project document.

As earlier reported in 2008, all country networks had agreed to collect annual membership fees to support their internal operations. However, the collection may not be too significant considering the number of members a country network has and the amount agreed upon. Some member-institutions may not have ready access to funds to pay their membership fees regularly.

Lessons Learned in Institutional Networking

After almost 15 years of operation, what significant lessons can be drawn from SEANAFE's experiences? Is networking an efficient and effective way to build capacities and promote agroforestry education? How do these lessons contribute to the current literature in networking and agroforestry education? How and under what circumstances would the lessons provide clearer guidelines to further support networking activities in the future, particularly for Sida as donor and ICRAF as host institution?

Ashman (2003) highlights the characteristics that effective networks and partnerships are associated with, namely:

(1) pre-existing social capital in which the people or organizations share a history of working together; (2) strategic fit such that the project goals, methodology, functional roles of partners, and meaningful organizational portfolio are present; (3) donor relationship wherein the donors provide resources and other forms of support in ways that facilitate the growth of genuine joint agenda rather than “over-direction”; (4) leadership commitment; (5) governance and management; and (6) joint learning.

SEANAFE nevertheless does not claim exclusivity on these lessons as other networks may have undergone similar experiences. In essence, the lessons learned are actually anchored on the four factors that contribute to a successful network (ICCO 2004). These factors relate to the network’s purpose, capacity and disposition of members particularly their participation and commitment, management and governance of its activities, and the role of the donors. Among the lessons learned by SEANAFE in its 15 years of networking are as follows:

As long as it has focus, and proper activity planning and implementation based on the needs of member-countries, networking could be a good mechanism for national and region-wide capacity building and the promotion of agroforestry education.

Networking, according to Engel (1993), is characterized by four major activities: provision of services, particularly sharing of information and lessons; learning together; advocacy; and management of network operations. For SEANAFE, these activities were made possible as a result of having defined project objectives, focus, and funding support. However, the differences in the way agroforestry education was taught in the various country networks have affected the quality and extent of outputs and impacts produced. Thus, these differences, including the existing needs and capacities of

member-institutions, must be recognized in planning and implementing network activities. The way learning processes are designed and facilitated in the network is a critical consideration, too. It is nevertheless essential that member-institutions must first have a shared understanding of the network objectives. They must be given flexibility, too, to adopt strategies they find most relevant to respond to their situations, based on this understanding in producing expected outputs.

Linkages and partnership with relevant networks and organizations enhance learning for member-institutions.

The establishment of strategic linkages and partnership with relevant networks and organizations further builds capacities and enhances the knowledge of member-institutions on the subject matter that the network focuses on. According to Engel et al. (2002), focusing on learning only from one’s own experiences may, at a certain point, lead the network to isolation with respect to relevant experiences elsewhere. SEANAFE had both taken advantage of, and missed benefiting from, this lesson in implementing its major projects. Thus, it will be good for SEANAFE to have a ready directory of relevant organizations it could partner with in generating and sharing knowledge through the activities it would implement in the future.

Implementing more national and region-wide activities, rather than purely institutional ones, produce better advocacy results for agroforestry and agroforestry education

The level in which network activities are carried out matters so much in promoting agroforestry. This has been proven by the experiences of national networks in Indonesia, Philippines and Vietnam when they conducted their special projects. Their efforts led to collaborative undertaking with national government agencies, especially in the case of Philippines and Vietnam. Thus, the activities

of country networks must transcend the institutional level which is usually tied up with the available network funds.

Establishing good network relationships among member individuals and organizations would result in a more cohesive and collaborative work culture in the network.

As cited earlier (Ashman 2003), a network could be more effective if its members share a history of working together, know each other, and relate to each other with mutual trust. But this is not accomplished overnight. SEANAFE had a number of regional projects which certainly provided several opportunities for working together to achieve the main purpose of learning and completing project activities. However, the linkages established among project participants were not fully elevated to the institutional and country network levels. The level of membership and the leadership in the country networks can be said to have affected the kind of relationship between and within country networks. Thus, adequate time and importance must be given to strengthening formal relationships between and among member-institutions and country networks toward a more cohesive and collaborative regional network. This should be properly incorporated in the process of planning for annual activities.

Effective and efficient communication, which is essential in network operations, must be adequately funded.

As Creech and Willard (2001) said, communication is the *raison d'être* of a network. SEANAFE has experienced the best and the worst, in terms of having good communication between and among country networks in various aspects of network operations. The country networks must allocate sufficient funds to maximize the use of available communication media to ensure that information-sharing and the feedback system function well for a

more effective decision-making and smooth implementation of network activities. While the SEANAFE Facilitation Unit serves as the central communication hub, country networks must nevertheless develop their own communication protocol and infrastructure that are more appropriate and practical for their member-institutions.

Knowledge networks such as SEANAFE are communication networks, and therefore, the knowledge generated by the network should be shared between and among the members of the network, and more importantly beyond the network members, particularly the decision-makers, to establish an impact on the policy-making processes. Creech and Willard (2001) emphasized that traditional communication approaches such as the distribution of print reports and website establishment could still be used as communication strategies. However, he also stressed that workshops and forums and electronic conferences could best help build relationship with the decision makers. Effective use of web communication technologies on the network website, and portal and gateway sites are important means to enhance information dissemination about the network.

The more tangible the benefits and contributions of the country networks to organizational mandates are, the more involved will the member-institutions become in network activities. There is a need, therefore, for continuing capacity development and strengthening.

As observed in most of the country networks, member-institutions that have participated and benefited from network activities are usually the same institutions that become more involved in network affairs. This, however, assumes that the individuals representing the institution in network activities have been effectively translating the benefits of their participation for the use of their respective institutions. Since network experiences can always have general

implications, network coordinators must nevertheless also communicate both the direct and indirect effects of network activities to participating and non-participating institutions. This is one major service that a network is expected to do for its member-institutions.

Knowledge networks must develop and strengthen capacity in all members, as argued by Creech and Willard (2001). By developing and/or strengthening institutional capacity, each member can learn from one another, and can help build on the strengths of one another. Creech and Willard (2001) also emphasized that capacity development should come at all points of the network operations—from planning, implementation, communicating the network activities more broadly, to the task of influencing the decision makers. In this way, the network members will have a better appreciation about their involvement in the network activities, and thus, would ensure their continued participation.

It is more advantageous to consider donor funds as mobilization funds to attract more collaboration in conducting network activities.

In implementing network activities, complementary partnerships are necessary to augment the limited network resources. This means that donor funds must be strategically utilized as the network's counterpart funds to collaborate with relevant partners, thereby increasing the overall budget for a particular activity. Further, in-kind support from member-institutions must also be encouraged. Country networks must not limit their work plans to individual project level as provided for in the network fund allocation. Partnering with the relevant and appropriate institutions could maximize donor funds, enhance collaboration, and create more impact, as experienced by most of the country networks. However, the country networks must purposively take concrete steps toward this direction to get the most out of this lesson.

Network coordination requires more than leadership charisma and technical expertise. Good management, communication, and facilitation skills are as equally important.

As already mentioned, effective governance and management is one major factor that contributes to the success of a network. Thus, network coordinators must be skillful in planning and monitoring network activities, building relationships among the members, communicating decisions, resolving conflicts, and performing other related tasks. Inherently, SEANAFE country coordinators have technical backgrounds, although they have experienced tackling administrative tasks at some point in their career. Thus, the annual meetings of country network coordinators have served as opportunities for them to share with each other their good management practices, thus promoting learning together.

Leadership is key to network sustainability (Willard and Creech 2006). Leadership capacity is required to communicate ideas, build consensus and cohesion between and among the members, manage and build relationships, and implement practically all activities that are related to network management. Willard and Creech (2006) also highlight the need for the facilitation skills of the network leaders or coordinators such that one member should act as the coordinating node to maintain the network operations.

Selection of members must be strategic, and membership must be formalized from the start to enhance their participation, commitment, and ownership of network activities.

The SEANAFE Board and the Country Network Committees must come up with a clearer set of strategic criteria and processes, other than those stated in the SEANAFE Charter, in carefully identifying which organizations must be invited to join SEANAFE. Being strategic could mean inviting member-institutions that represent relevant sectors, share

common interest with SEANAFE's vision, mission, and goals, and possess the expertise and capacity necessary to help carry out network activities. The process may include formalizing the membership to heighten the sense of ownership of the network, and create trust and understanding among member-institutions. This would require institutionalizing the two related activities done in late 2008, namely, the issuance of membership certificates and the conduct of formal orientations, including on the rules of engagement, for heads and designated representatives of the member-institutions. These activities matter greatly for structured organizations like learning institutions, as suggested by the country coordinators. Network activities will most likely continue if there is institutional commitment, even in the face of eventual changes in leadership within. Wherever and whenever necessary and appropriate, country networks must actively involve senior officials of member-institutions in network planning to get their support and facilitate the implementation of network activities and objectives.

Donor funds serve as reliable resources to implement planned network activities within the given grant period. However, the network needs to generate extra funds from other sources to sustain operations.

Sida has provided adequate funds to carry out SEANAFE's project activities. The said fund, however, could not carry SEANAFE through a next phase as it is time-bound.

Willard and Creech (2006) argue that being financially self-sustaining does not ensure the sustainability of the network. Instead, financial and material support from a variety of sources such as donors, clients, members, hosts, and other stakeholders should be mobilized by the network to help sustain their network operations.

REFERENCES

- Alpert, Carol Lynn. 2009. "Broadening and Deepening the Impact: A Theoretical Framework for Partnerships between Science Museums and STEM Research Centres." *Social Epistemology* 23 (3-4): 267-281.
- ANAFE (The African Network for Agroforestry Education). 2013. "The African Network for Agroforestry Education." Accessed March 31, 2014. <http://www.anafeafrica.org/>
- Ashman, D. 2003. "Closing the Gap between Promise and Practice: A Framework for Planning, Monitoring, and Evaluating Social Development Networks." Accessed September 5, 2013. <http://www.eldis.org/go/home&id=16488&type=Document#.VCPhNxacBhI>
- Brinkerhoff, J.M. 2002. "Assessing and Improving Partnership Relationships and Outcomes: A Proposed Framework." *Evaluation and Program Planning* 25 (3): 215-231.
- Cogburn, Derrick L., and Nanette S. Levinson. 2003. "US-Africa Virtual Collaboration in Globalization Studies: Success Factors for Complex, Cross-National Learning Teams." *International Studies Perspectives* 4 (1): 34-51.
- Creech, Heather, and Terri Willard. 2001. *Strategic Intentions: Managing Knowledge Networks for Sustainable Development*. Winnipeg, Manitoba: International Institute of Sustainable Development.
- Engel, P.G.H. 1993. "Daring to Share: Networking among Non-governmental Organizations: Linking with Farmers' Network for Low-External-Input and Sustainable Agriculture." In *Linking with Farmers: Networking for Low-External-Input and Sustainable Agriculture* edited by Carine Alders, Bertus Haverkort, and Laurens van Veldhuizen, 131-150. London, UK: Intermediate Technology Publications.
- . 2002. *Strategic Assessment: ILEIA Building Bridges 1999-2002*. Maastricht, The Netherlands: European Centre for Development Policy Management.
- Fernandez, J.C., and P.G. Rudebjer. 2010. "Case Study Approach to Region-wide Curriculum and Teaching Materials Development in Agroforestry Education in Southeast Asia." *Working Paper* 101. Bogor, Indonesia: World Agroforestry Centre Southeast Asia Regional Office.

- ICCO (Interchurch Organization for Development Cooperation). 2004. "Networking for Learning: What can Participants Do?" Accessed October 23, 2013. [http:// http://www.mande.co.uk/docs/networkingforlearning.pdf](http://www.mande.co.uk/docs/networkingforlearning.pdf)
- Landicho, L.D. 2011. "PAFERN: Advancing Philippine Agroforestry Education and Research via Networking." *Asian Journal of Agriculture and Development* 8 (1): 91–105.
- Rudebjer, P.G., and R.A. del Castillo. 1998. "How Is Agroforestry Taught in Southeast Asia: A Status and Needs Assessment in Indonesia, Lao PDR, the Philippines, Thailand, and Vietnam." *Training and Education Report* No. 49 Bogor, Indonesia: International Centre for Research in Agroforestry.
- Rudebjer, P.G., L.D. Landicho, D. Pipatwattanakul, I.Z. Siregar, and D.D. Booi. 2008. "Impact of the Southeast Asian Network for Agroforestry Education (SEANAFE) on Agroforestry Education Capacity." *Working Paper* 73. Bogor, Indonesia: World Agroforestry Centre Southeast Asia Regional Office.
- Semali, L.M, R. Baker, and R. Freer. 2013. "Multi-institutional Partnerships for Higher Education in Africa: A Case Study of Assumptions of International Academic Collaboration." *International Journal of Higher Education* 2 (2): 53–66.
- SEANAFE (Southeast Asian Network for Agroforestry Education). 2010. "Final Project Report." Bogor, Indonesia: World Agroforestry Centre (ICRAF)-Regional Office.
- Temu, A.B., P.G. Redubjer, and S. Chakeredza. 2010. "Enhancing Integrated Approaches in Agricultural Learning Systems Using Experiences from Agroforestry." *Scientific Research and Essays* 5 (16): 2179–2185.
- Willard, T., and H. Creech. 2006. Sustainability of International Development Networks: Review of IDRC Experience (1995-2005). International Institute of Sustainable Development. <http://www.iisd.org> (accessed on March 31, 2014).