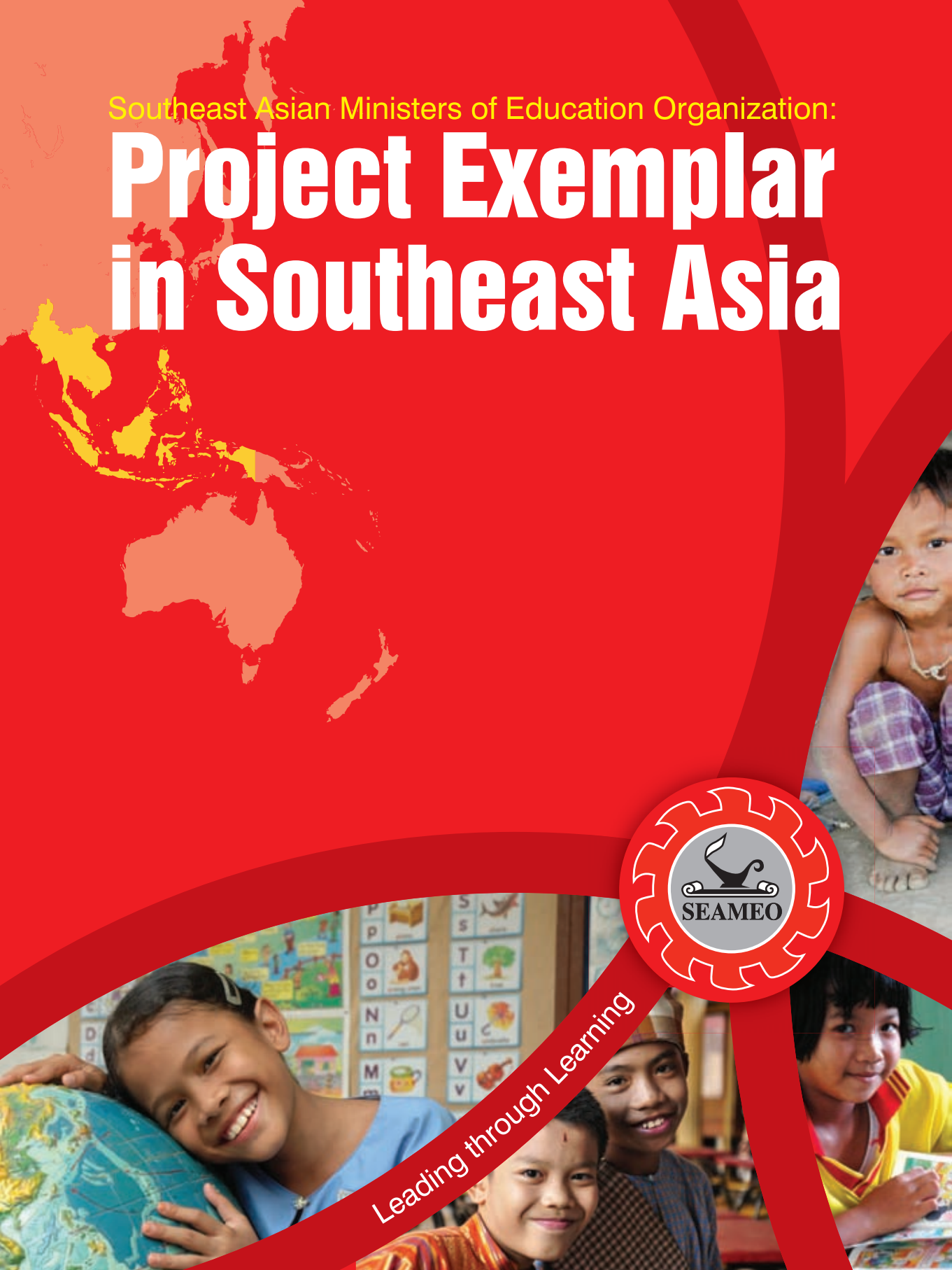


Southeast Asian Ministers of Education Organization:

Project Exemplar in Southeast Asia



Leading through Learning





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Foreword

Southeast Asian Ministers of Education Organization: Project Exemplar in Southeast Asia showcases some of the highly effective initiatives undertaken by units within the Southeast Asian Ministers of Education Organization (SEAMEO) to improve lives across our region.

The book presents good practices and examples of pioneering programmes which seek to provide recommendations and solution to issues and challenges which address national, regional and global educational concerns.

SEAMEO's motto, "Leading through Learning" reflects the organization's leadership and commitment to the region in promoting quality education, science and culture in Southeast Asia and beyond.

Through the activities and strategies undertaken by the 19 SEAMEO Regional Centres, SEAMEO is able to reach out to diverse communities in Southeast Asia to contribute to the development of human resources and address challenging issues such as poverty alleviation, creating better quality of life, educational equity and quality, enhancing agriculture and natural resources as well as health and nutrition, and promoting the dissemination and exchange of knowledge and learning of indigenous cultures and traditions .

We hope that the publication of Project Exemplar in Southeast Asia serves as a source of learning and reference for educational institutions across Southeast Asia. We are also confident that this book will help the general public to better understand the nature of the work of the SEAMEO organization which will continually expand and grow as the organization strides into a new stage of growth in the 21st Century, described in our ten-year strategic vision as "the Golden SEAMEO".

The SEAMEO Secretariat would like to thank Ministers of Education, Senior Officials and Centre Directors of SEAMEO Member Countries for their commitment and unfailing support over the years.

We also like to recognize the excellent cooperation we have received from our Associate Members, Affiliate Members and the international community. All of these efforts have, in one way or another, contributed to the completion of the projects and programmes described in this publication.



Dr Witaya Jeradechakul
Director, SEAMEO Secretariat






1. Education



Photo: SEAMEO Secretariat



1.1 Reaching the Unreached: Collaborative Projects to Reach the Unreached in Southeast Asia and Achieve the Education for All Goals by 2015



**By the SEAMEO Asian Ministers of Education Secretariat
(SEAMEO Secretariat), Thailand**

www.seameo.org

The SEAMEO Secretariat is the executive arm of the SEAMEO Council and is the headquarters of the organization. Based in Bangkok, Thailand, the primary functions of the Secretariat are to execute the instructions and decisions of the SEAMEO Council, convene the key meetings of the organization such as the SEAMEO Centre Directors Meeting, the SEAMEO High Officials Meeting and the SEAMEO Council Conference. The Secretariat is also tasked to develop and implement special regional projects and to coordinate activities and facilitate cooperation among SEAMEO Member Countries, SEAMEO Regional Centres and partners.

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1.1 Reaching the Unreached: Collaborative Projects to Reach the Unreached in Southeast Asia and Achieve the Education for All Goals by 2015

I. Abstract

The Education for All (EFA) movement is a global commitment to provide quality basic education for all children, youths and adults by 2015. It started when representatives of the international community met at the World Conference on Education for All in 1990 to universalize primary education and take action to reduce massive worldwide illiteracy by the year 2015.

Most global nations made a commitment to attain the six goals of EFA, including the 11 SEAMEO Member Countries. UNESCO has stated that although significant gains have been made in the Asia-Pacific region towards the goals, there are still pockets of learners that remain unreached, who are unable to access and participate in education.

The “unreached” constitutes the last percentage of the population who have either been historically and culturally excluded, or have been pushed to difficult circumstances due to recent economic and political trends. The challenge is meeting the needs of these population groups.

In 2008 and with seven years remaining before the 2015 goal, the 11 SEAMEO Member Countries resolved to join hands, work together and leverage each other’s strengths to reach unreached and marginalized population groups in the region; and address their education and development needs.

This unique opportunity to work together as a region takes advantage of the good practices and resources of SEAMEO Member Countries to help fellow countries in the organization who lag behind in the implementation of EFA programmes and need assistance to advance attainment of any of the goals in their respective countries. The SEAMEO Secretariat serves as the coordinating agency.

The six goals of the EFA initiative are to expand early childhood care and education; achieve universal primary education; improve the provision of learning and life skills; increase literacy rates; achieve gender equality in education; and advance the quality of education by 2015.

Through a process of sharing common challenges and potential answers to these challenges, SEAMEO Member Countries developed 10 collaborative projects that aim to address issues of access, equity and quality of education among the unreached and underserved population groups in Southeast Asia. Various activities were developed for different groups with different needs.

II. Project Description

The “Reaching the Unreached” project is a regional and multi-country approach to achieving the EFA goals in Southeast Asia. Through sharing best practices among SEAMEO Member Countries and with the SEAMEO Regional Centres, EFA partners, and international organizations, the 11 SEAMEO Member Countries identified strategies and activities to address the needs of the 10 prioritized unreached groups in Southeast Asia. The activities are meant to be implemented collaboratively and regionally.

Countries that have a strong standing in terms of expertise, existing systems and operational network volunteered to lead the implementation of the projects. Other countries volunteered as supporting and/or participating countries. SEAMEO Regional Centres, EFA partners (such as UNESCO, the ASEAN Secretariat and UNICEF), and other international organizations selected certain projects and volunteered to support their implementation. The SEAMEO Secretariat serves as the coordinating agency.

The 10 collaborative projects tailored for the needs of the prioritized unreached groups in Southeast Asia are the following:

Project	Target Group	Components	Lead Country
1. Transition support for learners with disabilities	Learners with disabilities or with special educational needs	Policy formulation, data collection, exchange programme/ training, establishment of a regional centre	Malaysia

Project	Target Group	Components	Lead Country
2. Tracking system for students at risk of dropping out	Underperforming students, students at risk of dropping out	Inventory of existing researches, identifying student tracking and profiling systems, workshops to develop framework, system development, toolkit development, capacity building	Philippines
3. Conference to promote awareness of education for girls and women	Girls and women in rural areas and ethnic minorities	Sharing of best practices in budget-based gender, school supplementary food programmes, gender-responsive projects, basic education for girls	Malaysia
4. Tracking mechanism for unreached populations	Learners from remote and rural communities; children who are not registered in schools	Research, exchange visits, capacity building	Vietnam
5. Pre-school programme for all	Children from poor families	Study visits, capacity building, development of regional school readiness competencies, provision of technical assistance to member countries in enriching national standards and curriculum establishment of pre-schools in remote areas, provision of support services such as feeding, monitor&evaluation	Brunei Darussalam

Project	Target Group	Components	Lead Country
6. Multi-Grade Teaching	Learners from remote, dispersed and isolated areas	Development of guidelines for training of multi-grade teachers, capacity building, monitor&evaluation	Lao PDR
7. Development of more community-based learning centres in rural areas in Southeast Asia for Literacy and Livelihood	Children, youth and adults from poor families in rural/ remote/isolated areas	Assessment and work planning, establishment of centres, capacity building, entrepreneurship, monitor& evaluation	Thailand
8. Inter-country schooling programme for stateless and undocumented children (coordination between governments)	Stateless/non-documented children in the states' borders	Inter-ministerial coordination, setting-up of special border schools	Indonesia
9. Project on HIV and AIDS using an integrated approach (providing education, care, treatment and counseling services to learners affected or infected by HIV and AIDS)	Children, youth and adults infected and affected by HIV and/or AIDS	Data collection, care and treatment, curriculum strengthening, capacity building, monitor&evaluation	Thailand
10. Education in emergencies and disaster preparedness	Children in difficult circumstances	Provision of kits and guidelines, teachers and community involvement, refurbishment of structures, advocacy	Indonesia and Philippines

The SEAMEO “Reaching the Unreached” initiative marks the beginning of a coordinated regional approach to meeting the EFA goals. It is a dynamic response to ensuring that the needs of the unreached and marginalized groups in Southeast Asia are addressed. Their participation is critical in meeting the EFA goals by the year 2015 deadline.

Considering the diversity of the individual SEAMEO Member Countries as well as the economic gaps and political differences that exist among them, the “Reaching the Unreached” initiative maximizes the strengths of SEAMEO as a regional body by pooling its expertise and best practices to benefit all of its Member Countries.

Each project addresses the need of a specific unreached group in Southeast Asia. There are 10 projects, thus, 10 unreached groups stand to benefit from this initiative. Activities are designed by taking into consideration the nature of the target groups and their immediate needs for access to a quality basic education. These range from short to long-term activities that include, among others, policy formulation, materials development, teacher training, advocacy, community mobilization, research, infrastructure building, and monitoring and evaluation.



Photo: SEAMEO Secretariat

Senior education officials from the SEAMEO Member Countries identify common priorities and strategies to address the needs of the unreached

III. Significant Impacts

The implementation of the 10 collaborative projects to “Reach the Unreached” is a commitment of SEAMEO to help achieve the EFA goals in Southeast Asia by 2015. It reinforces the EFA achievements of individual SEAMEO Member Countries. At the same time, it highlights their successes beyond national boundaries and underpins the regional effort in providing EFA in Southeast Asia.

Moreover, the initiative demonstrates the enormous potential of learning from partner countries and working together within the framework of SEAMEO cooperation.

IV. Success Factors

The initiative is need-driven and anchored on a specific directive of the education ministers of the SEAMEO Member Countries. Having in mind the urgency of reaching the unreached population groups to truly achieve EFA goals in SEAMEO Member Countries, the education ministers agreed in 2008, that the focus on future cooperation in education should be on implementing EFA by 2015. SEAMEO Member Countries are aware of the EFA commitment at both national and regional levels, thus, dialogue about the differing issues and planning directives with respective partners at the regional level is not difficult.

SEAMEO Member Countries are familiar with EFA issues and can relate easily to the implementation challenges that others are facing. There is a shared need to find solutions to address challenges through experiences and the best practices of others. As a mechanism to accelerate attainment of the EFA goals as a region, there is an inherent dynamism for SEAMEO Member Countries to work together and be part of the initiative.

Implementation of the initiative is at the regional level and involves multiple countries and stakeholders. Cooperation in education is the very essence of SEAMEO and this can be considered the best feature of the “Reaching the Unreached” initiative. The project framework allows for various stakeholders, both government and non-governmental organizations, to take part as well as consider what they are able to contribute in each of the 10 collaborative projects. Everything is done on a voluntary basis.

Moreover, the initiative is led by SEAMEO in coordination with UNESCO and the ASEAN Secretariat. This marks the first time the three organizations united their efforts to trigger momentum within the region to reach out further and address the education and development needs of unreached groups in Southeast Asia.

The 10 collaborative projects leverage on experiences and best practices of others.

Activities under the 10 projects do not create and present new methods of doing things because they are all based on tested and winning formulas of other organizations/agencies. The collaborative projects are meant to replicate methods and practices proven effective by an individual SEAMEO Member Country, or a SEAMEO Regional Centre of an EFA partner. SEAMEO Member Countries that introduced the outstanding method for replication usually got the leading role in the project’s implementation in order to facilitate the easy transfer of technology to others. Meanwhile, SEAMEO Regional Centres or EFA partners that share best practices, act in a support role to help the lead country with effective project implementation.



Education for All partners' composed of international organizations assist the SEAMEO Member Countries in drafting the collaborative project proposals to reach the unreached.

V. Lessons Learned and Potential for Project Expansion

1. The support and commitment of participating parties is crucial.

Since the initiative is collaborative in nature, success in implementation depends on the strong commitment of all stakeholders. As such, it is important to agree on and set clear objectives, a realistic time frame, and specific project deliverables. With these in place, all stakeholders will have a clear knowledge on the extent of their respective commitment and responsibility to the initiative. This is the basis for coordination and effective monitoring of project progress.

2. A monitoring mechanism and a clear communication process justify effective implementation of the initiative.

At the regional level, the process of facilitating the link between and among relevant people and focal persons in each organization and country for each project poses a challenge. This is especially so when one takes into consideration the fact that there are 10 projects to be coordinated with many stakeholders at different levels. On the part of the SEAMEO Secretariat and some EFA partners such as UNESCO, this requires constant communication and monitoring to keep the momentum of interested parties focused. At the country level, lead countries are encouraged to set up effective management and coordinating mechanisms to ensure involvement of relevant ministries and non-governmental organizations.

Part of a clear communication process is delineating the specific roles of all parties involved. A clear accounting of all tasks and who will do each of them is necessary. A backlog in one project component affects the entire project implementation process.

3. Developing strategic ways to generate funds for the initiative ensures successful implementation and sustainability.

In many cases, the issue of funding delays implementation of some of the projects. Plans to implement components of some projects are drawn but not the specific funding mechanisms. Some lead countries contribute a certain amount for the projects and approach EFA partners to provide counterpart funds. However, some lead countries find difficulty in doing so and rely on the SEAMEO Secretariat and EFA partners to provide or generate funds for them.

The “Reaching the Unreached” initiative is expected to contribute to EFA achievements of SEAMEO Member Countries at the end of the EFA decade in 2015. By this date, evaluation of the results and the effectiveness of implementation will be conducted. After which, the scaling up of the 10 collaborative projects is possible beyond 2015.




Photo: SEAMEO Secretariat

EFA partners and educators visit institutions in Bangkok to meet some unreached population groups and gain insights how to address their needs.



Photo: SEAMEO RECSAM



1.2 Climate Change Education for SEAMEO Member Countries: Teachers' Guide Book Integrating Climate Change Issues in Southeast Asian Schools



**By the SEAMEO Regional Centre for Education in Science
and Mathematics (SEAMEO RECSAM), Malaysia**

www.recsam.edu.my

Established in 1967, SEAMEO RECSAM's definitive goal is to enhance the quality of science and mathematics education in SEAMEO Member Countries. It is mandated to plan and conduct programmes for science and mathematics teachers and educators. This includes training programmes, seminars, conferences, workshops, research and development, and the publication of journals. The centre's research activities are focused on science and mathematics education issues to assist policy makers and science and mathematics educators/ teachers.

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1.2 Climate Change Education for SEAMEO Member Countries: Teachers' Guide Book Integrating Climate Change Issues in Southeast Asian Schools

I. Abstract

Human activity is considered to be the biggest factor behind the build-up of green house gases in the atmosphere. These green houses gases triggered an increase in temperature that led to global warming, which eventually caused climate change. Future climate scenarios pose challenges outside the historical experience. Socio-economic and environmental problems are escalating due to a changing climate and are considerably compounded by a population increase in the region. The young generation of today is the population group that will be most affected and hard hit by this scenario. They will experience the adverse effects of climate change in the future times and will be the group forced to address the issue. Improving the adaptive capacity of the youth to become environmentally-oriented citizens must be an urgent priority of the education sector in Southeast Asia. It is important that the youth are made familiar with scientific coping mechanisms from what we know today, so that they can become aware of the causes of climate change and understand what they can do to mitigate it. SEAMEO RECSAM, as a regional centre for education in Science and Mathematics, has the responsibility to provide relevant education to equip them to cope and co-exist with this ever changing environment.

II. Project Description

1. How does the project link to the needs of the region?

Southeast Asia occupies only three per cent of the world's surface, yet the region nurtures 20 per cent of the world's biodiversity. The region's 670 million population, representing 10 per cent of the world's total population, will continue to compete for space and natural resources. About 60 per cent of Southeast Asian communities are living in rural areas and 80 per cent of this fraction is highly dependent on natural resources for income.

A majority of Southeast Asian people rely heavily on agriculture for their living. Most of the agricultural activities are influenced by the climate. Climate change will have significant impacts in this region, particularly on food production. Food production will drop dramatically as the temperature continues to increase and rainfall decreases as forecasted.

On the other hand, an increase in population will significantly be followed by higher demands for food. The concern becomes even greater when we consider the future energy crisis and the competition between bio-fuel and food production within a limited land space.

The issue of global warming is alarming and the impact of climatic change is disastrous. It is compromising the stability of freshwater supplies, food security and natural resources as a whole. Today's youth is a group that is likely to experience and suffer the effects of climate change much more than in contemporary times, and they will be forced to address the issue more so than in present times.

Future climate poses challenges outside the historical experience. Improving adaptive capacity must be an urgent priority for Southeast Asia's education sector which plays a very significant role in developing environmentally aware citizens. So, there is a need to make an urgent call to our policy makers, educators and development organizations to address the problems by extensively educating the youth with real-time and scientific capacity building.

2. How does SEAMEO RECSAM address this need?

SEAMEO RECSAM, as a regional centre for education, is taking the lead in this collaborative project involving eight SEAMEO Regional Centres, each with their own expertise in the socio-economic and environment sectors in educating the young people of the region. The publication of a Teachers' Guide Book Integrating Climate Change Issues in Southeast Asian Schools has provided teachers with a useful resource to facilitate the capacity building of young people on issues of climate change and the impact of global warming.

Developing adaptive capacity is an ability to cope with climate change; to moderate the potential damage from it; to take advantage of its opportunities; or to cope with its consequences.



Photo: SEAMEO RECSAM

A "try-out" session at SMKA Al-Mashoor (L) School, Penang, Malaysia.

The adaptive capacity of the people will play an important role in changing the spatial patterns of vulnerability. This can be done by increasing the levels of income, education and technical skills; the improvement of public infrastructure, disaster preparedness and management; and health care systems. Sustainable and equitable development programmes and enhanced social capital can reduce the climate change vulnerability of developing countries in Southeast Asia.

Adaptations to deal with rising sea levels, more intense cyclones and typhoons, and threats to ecosystems and biodiversity demand high priority action in the region. It was suggested that the design of an appropriate adaptation programme in any Southeast Asian country must be based on a comparison of damages with costs of adaptation.

The project was initiated in September 2009 through a collaborative meeting with the other seven SEAMEO Regional Centres. This led to a blueprint for the Teachers' Guide Book Integrating Climate Change Issues in Southeast Asian Schools, by identifying climate change issues to be integrated across curriculum. A three-day workshop in October 2009, involving eight SEAMEO Sister Centres led by SEAMEO RECSAM in Penang, Malaysia, finalised the framework of the teachers' guidebook.

The eight centres involved in this project have their own respective expertise and they have been asked to develop or write 10 pages of background facts on the issue and three lesson plan exemplars such as:

1. SEAMEO Regional Centre for Education in Science and Mathematics (SEAMEO RECSAM)
 - Key Issues Affecting Climate Change and Relevance of Climate Change to SEAMEO, Education Systems and Human Development
 - Climate Change Impact on Energy (Renewal and Non Renewal)
2. SEAMEO Regional Centre for Archaeology and Fine Arts (SEAMEO SPAFA)
 - Climate Change Impact on Poverty
 - Climate Change Impact on Conflict over Use of Scarce, Depleting Resources that are Basic for Survival
3. SEAMEO Regional Centre for Food and Nutrition (SEAMEO RECFON) and SEAMEO TROPMED Regional Centre for Public Health (SEAMEO TROPMED/ Philippines)
 - Climate Change Impact on Health and Nutrition
4. SEAMEO Regional Open Learning Centre (SEAMEO SEAMOLEC)
 - Climate Change Impact on Access to Safe Water
5. SEAMEO Regional Centre for Tropical Biology (SEAMEO BIOTROP) and SEAMEO Regional Centre for Educational Innovation and Technology (SEAMEO INNOTECH)
 - Climate Change Impact on Rising Sea Levels and Sea Temperature

6. SEAMEO Regional Centre for Graduate Study and Research in Agriculture (SEAMEO SEARCA)
 - Climate Change Impact on Agricultural Production and Food Security
7. SEAMEO Regional Centre for Tropical Biology (SEAMEO BIOTROP)
 - Climate Change Impact on Biodiversity and Ecosystem

The centre also organised a “Climate Change and Energy Teacher Training” workshop from 1-4 February 2010. This workshop was held to familiarise participants with climate change issues, to enable them to produce lesson plans to integrate climate change issues in the subject areas they are teaching, with a special focus on energy sources and utilization. The participants were divided into three groups: General Science; Mathematics; and Physics, and asked to prepare lesson plans that were put into practice at SMK Tanjung Bungah, SMK Penang Free and SMKA Al-Mashoor (L) schools. These lesson plans were included in the teacher’s guidebook.



Photo: SEAMEO REC/SAM

A Teacher’s Workshop on “Climate Change and Energy Teacher Training” on 1-4 February 2010, Penang, Malaysia.

III. Significant Impacts

Welcoming this innovation in education for SEAMEO Member Countries will create a favourable impact on the school system and the community. Such innovative educational practices will improve the understanding of both teachers and students that the Southeast Asian region is highly dependent on natural resources for economic development and yet we are not giving enough emphasis to environmental education. A greater awareness of environmental education will make us all more aware that human activities are the biggest cause of the rise in green house gases, which eventually leads to climate change.

IV. Success Factors

The multidisciplinary composition of the collaborating team was the strongest positive feature that made this project unique. The network and collaboration of this multidisciplinary team,

from eight SEAMEO Regional Centres, has successfully developed a learning guide with distinctive learning approaches and strategies.

Through this collaborative effort, the project will be extended further since the main goal is actually to help mitigate climate change and strengthen resiliency towards climate change effects through education.

V. Lessons Learned and Potential for Project Expansion

This project needs the continued support of all the centres, plus outside funding assistance to bring the project down to the community level. The Teachers' Guide Book Integrating Climate Change Issues in Southeast Asian Schools will not have a great impact if it is not followed up by the training of teachers on how to use the guide book effectively. Teachers are encouraged to develop and produce more of the lesson exemplars given in the Teachers' Guide and this will be published online to reach a wider audience. Further funding is therefore required to conduct the training in all 11 SEAMEO Member Countries.



Students give a presentation on climate change at SMK Tanjung Bungah, Penang, Malaysia.





Photo: SEAMEO RELC



1.3 RELC International Annual Seminars



**By the SEAMEO Regional Language Centre
(SEAMEO RELC), Singapore**

www.relc.org.sg

Established in 1968, SEAMEO RELC is a leading language teacher education centre based in Singapore. Besides providing training for language teachers, the centre also provides customized training for language proficiency, including specialist areas such as aviation, the diplomatic and government sectors. The centre also provides specialized services for the assessment of proficiency in languages other than English.

Email: admin@relc.org.sg



1.3 RELC International Annual Seminars

I. Abstract

The RELC International Seminar, held annually since 1968, is an important event in the annual calendar of SEAMEO Regional Language Centre (SEAMEO RELC)'s activities. The seminar is a flagship project of SEAMEO RELC, and to date, there have been forty-five seminars.

II. Project Description

Language use and its related issues are matters of concern and great interest, particularly in the Asia-Pacific region which is coming to grips with the realities of communicating effectively in a much smaller, borderless world. The dimensions of modernization for Southeast Asia include globalization, communications technology and inevitably, trade, finance and business. There is, as a result, a realization that there is a need to make sense of communications that govern the success of all business transactions and negotiations.

With the push towards “modernizing economies”, there is a natural concomitant quest to be conversant in a language or languages that will facilitate trade and business. Whilst the region is still attached to nationalist ideologies which legitimize specific language policies, it is also noteworthy that the region is propelled towards an acceptance of the use of a lingua franca that is mutually intelligible in the business world.

The RELC International Seminar provides a neutral platform for discussion and debate and is crucial to dialogue between nationalities that helps in understanding the use of language. The seminar brings together researchers, academics and practitioners, theorists and also policy makers who have a very broad range of experiences in language teaching and learning from different parts of the world. Their experiences and perspectives, as well as the work they

have done in the area of language teaching and learning, provide a “one-stop” discussion of key issues and findings that can be shared with seminar participants in the region.

SEAMEO RELC has been privileged to offer this as the centre’s contribution to the region as part of its mission to support language teacher development. Education is where the heart of the learning and teaching process is. Language teacher education is SEAMEO RELC’s core mission in the region. The RELC International Seminar series has kept its focus on language practitioners and the platform provides practitioners and specialists with opportunities to share and articulate their own findings and action research outcomes. The project plays a part in sensitizing seminar participants to concerns and issues at the practitioners’ level and addresses the sort of challenges that individual countries and classrooms have to confront and resolve.

Whilst seminar themes are planned in advance, SEAMEO RELC will, and has changed seminar themes to be in tandem with the ever evolving needs of language planning and practice. The intent to remain responsive has been a hallmark of the RELC International Seminar series.

The table below lists the seminar themes for the past three years:

Year	Theme
2010	A Seminar jointly organized by APEC and SEAMEO RELC on Language Education: An Essential for a Global Economy.
2009	The Impact of Technology on Language Learning and Teaching: What, How and Why?
2008	Language Teaching in a Multilingual World: Challenges and Opportunities.

III. Significant Impacts

The attendance of speakers and participants from within and outside of the region provides a rich platform that brings together discussions, interactions and better understanding across countries and borders which are keys to globalization.

The responses culled from the evaluation and feedback of participants to the question: What did you like most about the seminar and why? highlights the benefits of the seminar. These responses include the following comments:

2010 Seminar

- Intellectually stimulating, sharing of ideas from different schools and countries.
- The opportunity to be involved in an international forum. Issues associated with education in my country are at times similar and at other times very different to all of us.
- The international context – great to get a broader perspective, meeting people in similar fields and talking/sharing with each other. A great model of effective intercultural communication.

2009 Seminar

- The diversity of the speakers.
- The opportunity to network with colleagues in the region and to hear the challenges they may face and how they are dealing with these.
- The theme of the seminar this year is very current/relevant.

2008 Seminar

- It provides a global view on how English emerges and is going beyond to a micro view on effective strategies of teaching English in a classroom context.
- Very enriching and it “opened” my eyes to what is happening in the teaching and learning of English in other parts of the world.
- To learn from all different experts in their expected areas. It exposed me to updated research and work being done with English as well as teaching around the world.

The annual post-RELC Seminar held at the Chulalongkorn University Language Institute, Bangkok, following the yearly RELC International Seminar in Singapore is an example of the extension of the impact of the seminar on the region, and in this case, specifically Thailand. Through connections and links facilitated by SEAMEO RELC, a few identified keynote speakers who presented their papers at the RELC International Seminar are then invited by CULI to give presentations and conduct workshops at the post-RELC Seminar.

IV. Success Factors

The RELC International Seminar has always been held in the centre itself and to some extent, this has restricted registration numbers. However, the centre will continue to internationalize the event; to draw in not only the experts in areas of language teaching, but also participants from the region and beyond. The seminar will always be a work in progress and SEAMEO RELC will continue to explore ways to improve and upscale its efforts and outreach.

Some factors that have helped to contribute to the success of the seminar are:

1. The strong endorsement of the seminar by the Ministry of Education (Singapore) as shown in its yearly sponsorship of teachers to attend the event;
2. The unstinting support from key partners, including the Embassy of France in Singapore, the British Council and the Goethe-Institut; and
3. The international character of the seminar in terms of the breadth of participating countries (see table below) and, most recently, the collaboration with the Asia-Pacific Economic Cooperation (APEC) to jointly organize the 2010 seminar.



Photo: SEAMEO RELC

Mr S Iswaran, Senior Minister of State meeting APEC representatives at the 2010 Seminar

Year	SEAMEO Member Countries	Associate Member Countries*	Non-SEAMEO Countries*	Total No. of Participants
2010	469	21	50	540
2009	396	16	30	442
2008	412	14	38	464
2007	508	11	27	546
2006	455	19	43	517
2005	517	10	41	568

*Annex A gives the number of seminar registrants from the different countries for the periods 2005 to 2007 and 2008 to 2010.

V. Lessons Learned and Potential for Project Expansion

Seminar planning and execution comprises a myriad of activities from planning the logistics, coordination of technical aspects, to implementing the modalities of the event. Time, effort and resources invested in organizing a seminar can be very intensive.

But the international seminar is one of the centre's strategic events. The numbers of international participants and attendees outside of SEAMEO are still modest, and there is much more which can be done to draw interest. Slowly but surely, the RELC International Seminar has gained recognition and respect amongst language experts and specialists. It has some success as an outreach event to draw interest to the region and make its mark in the world. It gives Southeast Asia a significant voice and presence in drawing together researchers, experts and practitioners.

Being at the centre of Southeast Asia, the RELC International Seminar has also provided researchers, practitioners and different interest groups an affordable and accessible gateway to demonstrate the abundance of research potential in the region.

SEAMEO RELC will continue to see how it might evolve to make its seminar even more appealing and attractive not only to the region, but also to the international community. It will continue to be open to agencies keen to leverage on the potential that the centre can provide in making its foray into Southeast Asia.

Other agencies and SEAMEO centres can continue to tap into the easy accessibility of world-class speakers from Singapore to countries in the region by inviting them to conduct workshops or symposia that draw on their expertise and knowledge.

**Number of Participants from the Different SEAMEO Associate Member Countries
and Non-SEAMEO Countries for the Periods 2005 to 2007 and 2008 to 2010**

Country	2005 - 2007	2008 - 2010
Associate Member Countries		
Australia	16	34
Canada	8	2
France	2	3
Germany	2	3
New Zealand	11	7
Spain	1	2
Non-SEAMEO Countries		
Afghanistan	-	16
China	1	9
Hong Kong	26	15
India	12	1
Japan	25	20
Korea	2	3
Oman	-	2
Peru	-	2
Russia	-	2
Sri Lanka	-	3
Taiwan	10	19
United Arab Emirates	5	-
United Kingdom	13	6
United States of America	15	14



Photo: SEAMEO INNOTECH



1.4 text2teach: A Technology Solution for Better Teaching and Learning in Southeast Asia



By the SEAMEO Regional Centre for Educational Innovation and Technology (SEAMEO INNOTECH), Philippines

www.seameo-innotech.org

Established in 1970, SEAMEO INNOTECH delivers innovative and technology-oriented training programmes, research and development, information and other services that address both the unique and common education development needs of Member Countries. The centre's services focus on instructional leadership and supervision, curriculum and learning materials development, alternative education delivery systems, literacy and community development, and teaching-learning strategies.

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1.4 text2teach: A Technology Solution for Better Teaching and Learning in Southeast Asia

I. Abstract

text2teach is a technology-based initiative that provides expanded access to educational resources via a technology and content platform for a sustainable and comprehensive education delivery solution that positively impacts learning.

The easy-to-use multimedia solution delivers educational content by providing teachers with high quality training, curriculum-based lesson plans, teaching guides and video and audio resources. The project aims to help improve the quality of teaching in science, mathematics and English in grades five and six in elementary schools. It also empowers teachers with the new teaching tools for delivering digitized content in ways that add value to the learning experience.

text2teach contributes significantly toward bridging the digital divide in the Philippines by creating a sustainable, scalable and replicable platform for the delivery of high quality supplemental education content.

II. Project Description

1. How does the project link to the needs of the region?

Although there is widespread diversity in the levels of development across Southeast Asia, one of the collective growth areas for education is the use of mobile telephones and other commercially available mobile information and communication technologies.

The project builds on the well-known practice among teachers and learners, such as communicating through mobile phone short messaging systems, and the practical use of these technologies to improve teaching and learning.

While the text2teach technology alone would not answer all educational needs, the use of a familiar device and service could lead to more creative and learner-centred use of ICTs.

With the diversity of levels of development and geographical differences, txt2teach is one solution that can reach even those areas that are very difficult to access and provide learning improvement solutions that can be scaled up for widespread use.

2. How does SEAMEO INNOTECH address this need?

SEAMEO Regional Centre for Educational Innovation and Technology (SEAMEO INNOTECH) had long been championing the creative and innovative use of technologies, even intermediate technologies, to improve teaching, learning and the governance of education. The text2teach technology serves as an entry point for various other interventions for improved school management.

By building on a familiar technology, teachers, education managers and administrators can gain entry into other technology applications with confidence gained from adopting the text-2teach technology.

3. Project Goals

- 3.1 Provide enhanced supplemental basic education learning to school children in marginalized classrooms in the Philippines;
- 3.2 Utilize the latest digital communication technologies to deliver content cost-effectively to schools and offer access to the Internet;
- 3.3 Introduce advanced digital educational technology to teachers as a powerful medium of instructional learning in the classroom;
- 3.4 Empower teachers through training to effectively deliver online learning modules to their students;
- 3.5 Improve the capability of teachers through training to improve mastery of subject matter;
- 3.6 Establish local programme ownership within the Philippines and thereby help host strategies of sustainability and scale, and nurture local digital content development within the Philippines; and

3.7 Establish pilot projects that can be expanded within the Philippines and around the world in ways that are replicable and scalable.

4. Project Components

- 4.1 Content planning and lesson development.
- 4.2 Learning materials development.
- 4.3 Capability building for teachers, school heads and other education officials.
- 4.4 Field operations.
- 4.5 Monitoring and evaluation.
- 4.6 Advocacy and community mobilization.

5. Project Inputs

- 5.1 Video and audio clips accessed through a television set and a Nokia cellular phone.
- 5.2 Lesson plans/teacher's guides.
- 5.3 Training for teachers.
- 5.4 Linkages/networks.

6. Public-Private Partnership as a Major Project Strength

The text2teach Alliance has been a critical factor for the achievement of project goals which involves several major organizations.

The Ayala Foundation is the social and cultural development institution of the Ayala group of companies. Providing project leadership, the Ayala Foundation oversees the long-term sustainable implementation of the text2teach project, project management and resource mobilization.

Nokia Philippines Inc. is the project's resource provider, technology enhancer and developer. Nokia provides schools with cellular phones with video and audio content for grades five and six English, science and mathematics courses.

Globe Telecom, as the exclusive telecom provider, assumes leadership in the development and exploration of new technologies for content delivery whenever and wherever technically and commercially viable.

SEAMEO INNOTECH, in coordination with the Department of Education, undertakes school validation and coordination, materials development, training design and development, conduct

of teacher training and project monitoring and evaluation.

The Department of Education is the source of information, curriculum planning and development, school-based re-training and the implementation of the text2teach project in participating schools. Furthermore, the Department of Education is responsible for formulating policies as well as mobilizing resources to sustain project implementation.

7. Learner Impacts

An external evaluator assessed the effect of text2teach as an intervention to improve learning gains, using a paired T-test to compare each child's score pre- and post-test. The major findings of the comparison of pre- and post test performance of pupils in the study, either as exposed to the text2teach intervention, or as controls, are:

- 7.1 Exposure to text2teach as an intervention leads to significantly higher learning gains in English, mathematics and science at both grade levels. The gains were very impressive for English and science but less in mathematics, but these were still highly significant.
- 7.2 Although exposure to the intervention leads to learning gains in general, the magnitude of the gain is affected by the province in which the school is situated. Students in Cotabato experienced predicted learning gains in all subjects at both grade levels, whereas students in Maguindanao experienced the negative effect of subtracting from predicted learning gains.
- 7.3 The regression results produced one unanticipated finding; being male had a negative effect on learning gains in grade five English, mathematics and science, and on grade six English and science. In the past, it has been customary to focus on female children as the most disadvantaged gender, especially in Muslim-dominated regions. Therefore, the finding in this study of a male disadvantage in learning outcomes highlights the need to use more empirical bases to decide on what action is needed to target gender-based disparities, instead of relying on popular notions. The negative effect on learning of being male needs further study as it has many possible implications.



Photo: SEAMEO INNOTECH

text2teach enhances science lessons.

III. Significant Impacts

The text2teach technology focuses on science and mathematics, which are priority learning areas across the region. The technology, however, can focus on various learning areas. The priority placed on science, mathematics and English reflects the priority of the Philippines in terms of improving teaching and learning practices. The critical element in the project is the introduction of a practical technology which is familiar to all classes of users.

By introducing the use of mobile phones in improving instruction, the project challenges the creativity and innovativeness of education workers who are in search of better ways of improving teaching and learning. Aside from the instructional videos, other material can be shared and improved on, such as assessment tools, laboratory exercises, student and faculty records, etc. and help improve efficiency of data collection, management and evidence-based information for more efficient planning and policy formulation.

IV. Success Factors

The nature of the technology, which is easily learned by teachers, is one major factor that contributed to its success. More sophisticated and higher level technologies tend to intimidate users and potentially discourage innovation and further development.

The manner in which the project was rolled out – which underscored partnerships among the SEAMEO regional centre, the private sector and service providers, ownership by the local communities and the schools, as well as the awareness and support of the Department of Education – provided valuable models for effective and sustainable introduction of technology for improved learning.

V. Lessons Learned

The implementation offered many opportunities for learning. The multiple dimensions of the technology – whether used mainly as an agent of reinforcement rather than simply a tool for delivering instruction – offered many lessons. One major finding is the need for closer involvement of the users and the material they are supposed to use. The lesson exemplars and the videos themselves are just starting points. How the teacher uses the technology to the best advantage in the classroom is an important part of the process.

Ownership by the various stakeholders is an important element, especially in ensuring sustainability. Among other lessons, the need for efficient monitoring and constant review, in order to learn from feedback and fine-tune interventions, should be underlined.

The increased achievement levels alone are not a definitive gauge on how effective the intervention is. Equally important is the general perception that technology is helpful and offers further development for improving teaching and learning remains an important plus factor.

VI. Potential for Project Expansion

The limitations to the use of the technology are defined only by the reach of the mobile phone services, the willingness of stakeholders to try the technology, and the user's commitment. Beyond the basic technology, the opportunities for further innovation are limited only by the creativity of the implementers.




Photo: SEAMEO INNOTECH

A technical approach pays off in the classroom.



Photo: SEMEO VOTTECH



1.5 Establishing Southeast Asian Vocational Education Research Network (SEAVERN)




By the SEAMEO Regional Centre for Vocational and Technical Education (SEAMEO VOCTECH), Brunei Darussalam

www.voctech.org

Established in 1990, the centre is mandated to strengthen and improve the quality of Vocational and Technical Education and Training (VTET) in Southeast Asia through human resources development. SEAMEO VOCTECH is committed to strengthening the VTET systems of SEAMEO Member Countries by enhancing their capacities through networks and partnerships in the areas of training, research and development, and information services.

Email: voctech@brunet.bn



1.5 Establishing Southeast Asian Vocational Education Research Network (SEAVERN)

I. Abstract

This project is aimed at creating a research network, or association called SEAVERN (Southeast Asian Vocational Education Research Network). This research network is the avenue for collaboration among researchers in the area of vocational and technical education and training (VTET) in the 11 SEAMEO Member Countries. The research group, representing researchers from universities, colleges and polytechnics in Southeast Asia offering VTET-related programmes has worked collaboratively to generate, manage, and share or disseminate research findings. In the end, this initiative has made the information easily accessible to policymakers, educational practitioners, and other researchers as their basis for their policy decision, to improve current practices, and to generate ideas for further research.

The specific objectives of this project are: a) to establish a research network in Southeast Asia, especially in the area of VTET; b) to stimulate the research network to generate information through compiling existing research and conducting collaborative research activities; c) to build the capacity of the research network to manage research-related information by creating online database or other forms suitable for the member countries; d) to facilitate the research network in sharing information through online communication (email, online discussion board, teleconferences) and seminars or conferences; e) to provide technical assistance to the research network in disseminating research results from collaborative efforts among university researchers from SEAMEO Member Countries; and f) to produce publications and policy briefs based on the research conducted.

II. Project Description

1. How does the project link to the needs of the region?

Research-related initiative and information sharing are essential for continuous improvement and educational programme development. For this reason, research initiatives should be integrated into short-and long-term plans. Unfortunately, this type of initiative is still lacking in Southeast Asia, especially in the area of vocational and technical education and training (VTET).

There are many universities and colleges that offer VTET programmes in Southeast Asia, but when it comes to research initiatives much can be done to improve these programmes. In terms of research frequencies, the number is small due partly from the low interest and capacity to conduct research, plus a lack of funding support. In terms of quality, there was no coherence among research conducted in different institutions, or not much progression. Many research activities are fragmented or disjointed; each institution works on its own, therefore many unnecessary repetitions occur due to a lack of sharing findings, and no networking among researchers in different institutions. There was no research continuity to build up a theory or policy.

The research findings were kept on a book shelf or in the researchers' files that other people could not easily access. In searching research abstracts or reports on-line, the results were mostly from Europe, North America, and Australia. So far, there was no systematic and comprehensive way of compiling research findings conducted in each country in Southeast Asia, let alone at the regional level.

Coordinating and synchronizing research efforts and developing easy access through online database are needed to address the above issues. Therefore, it is the right time to create a network and online journal system (OJS).

2. How does SEAMEO VOCKETH address this need?



The logo of SEAVERN

To stimulate and synchronize research-related activities in the area of VTET in the 11 SEAMEO Member Countries, the SEAMEO Regional Centre for Vocational and Technical Education and Training (SEAMEO VOCKETH) formed a research network called “SEAVERN” (Southeast Asian Vocational Education Research Network) in 2007. The network consists of research coordinators and members representing researchers from universities,

colleges and polytechnics in Southeast Asia offering VTET-related programmes. The initiation and implementation of SEAVERN can be summarized in the following framework (Figure 1).

This network is lead by SEAMEO VOCTECH and works collaboratively to generate, manage, and share, or disseminate research findings. To initiate the network, the centre trained key researchers who lead the research activities in their respective countries. To enrich the collections of the online journal systems, each member is encouraged to gather research abstracts and full papers from his/her institution and beyond. This information is easily accessible to all, including policymakers, educational practitioners, and other researchers.

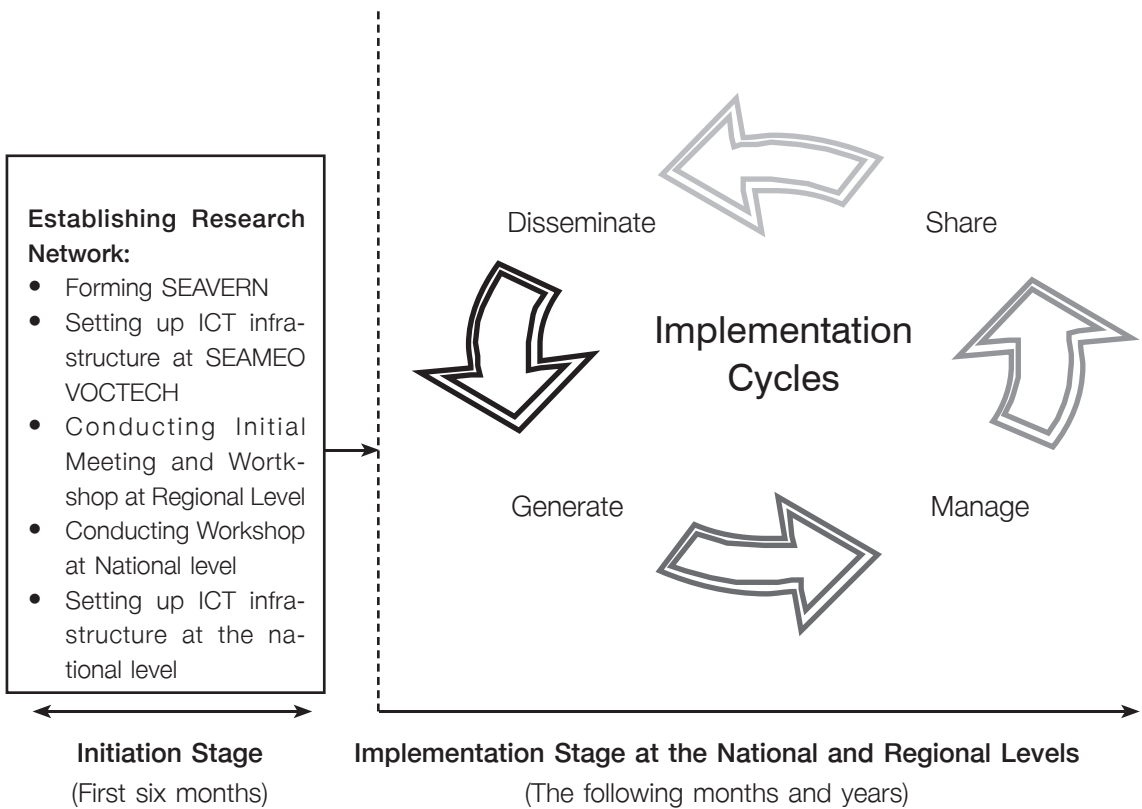


Figure 1: Diagram of Initiation and Implementation of SEAVERN

For the information sharing, the centre created online journal systems (OJS) publishing abstracts and full papers of research papers accessible to all. The OJS can be accessed at <http://ojs.voctech.org>



Online Journal System

III. Significant Impacts

Having a strong network with active participation from members to conduct and produce quality research papers has strengthened and minimized duplications of research initiatives in the region. This network has been expanding and it is hoped that the number of papers published in the online journal systems will continuously increase.

This OJS is, and will be a useful source for educational practitioners, policymakers, and researchers as a clearing house for VTET information in Southeast Asia.

IV. Success Factors

Active participation and contribution from SEAVERN members is crucial to the long-term sustainability of the project. Funding is also necessary to maintain the network and the online journal systems.

V. Lessons Learned and Potential for Project Expansion

Selecting the key personnel as research coordinators in each country is crucial. Their roles are very important in coordination with the members and expanding the networks. The research activities and articles' compilation rely on their active participation.

Expanding the collection in OJS is necessary to include the most recent research activities. Having key representatives in every relevant institution is necessary.

To increase the number of OJS collection and to optimize the use of the information in it, the members should be expanded and promotion is also needed.



Representatives from Southeast Asian countries participating in SEVERN Workshop in Thailand



Photo: SEAMEO VOCTECH



Photo: SEAMEO RIHED



1.6 M-I-T (Malaysia-Indonesia-Thailand) Student Mobility Pilot Programme – Towards the Harmonisation of Higher Education



By the SEAMEO Regional Centre for Higher Education and Development (SEAMEO RIHED), Thailand

www.rihed.seameo.org

Established in 1993, SEAMEO RIHED is the SEAMEO Centre that specializes in regional cooperation on higher education development. The key objective is to foster the efficiency, effectiveness, and harmonization of higher education in SEAMEO Member Countries through research, capacity building activities, and the development of mechanisms to facilitate knowledge sharing and collaboration in higher education. SEAMEO RIHED also serves as a regional centre that promotes the exchange of information and research on higher education policy and management.

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1.6 M-I-T (Malaysia-Indonesia-Thailand) Student Mobility Pilot Programme - Towards the Harmonisation of Higher Education

I. Abstract

Initiated as part of the Framework for Regional Integration in Higher Education in Southeast Asia and endorsed by the SEAMEO Council at the 43rd SEAMEO Council Conference in March 2008 in Kuala Lumpur, the Regional Centre for Higher Education Development (SEAMEO RIHED) facilitated the launch in 2010 of a successful pilot Southeast Asian student mobility project. The Malaysia-Indonesia-Thailand (M-I-T) student mobility programme was conducted in collaboration with the Department of Higher Education, Ministry of Higher Education, Malaysia; the Directorate General of Higher Education, Ministry of National Education, Indonesia; the Office of the Higher Education Commission, Thailand; and SEAMEO RIHED.

Rapid changes to higher education under the conditions of globalization have seen a shift from autonomous inward facing Higher Education Institutions (HEI), to regionalized, commercialised entities. At the same time, governments regionally are acknowledging the importance of a highly skilled work force to meet their countries growing human resource needs, as well as the role of education in ongoing productivity and economic growth. Governments are also considering the place of international education in providing the quantity, quality and diversity of education services required (The Centre for International Economics 2008). These trends mean that the higher education landscape must become “more internationalised, cross-cultural, cross-bordered and further engaged with job markets and economic growth”.

In order to meet these needs, countries in various regions such as Europe, Africa and Central America are promoting common policies in higher education. In line with this tendency, SEAMEO RIHED has been working in cooperation with member nations to promote a higher education common space in Southeast Asia, through the development and implementation of the harmonisation process. This process began in earnest with the Exploration of a Common Space conference in 2008 and the recommendations from the third Director General/

Secretary General/Commissioner for Higher Education in Southeast Asia Region meeting (22-23 January 2009 Bangkok).

SEAMEO RIHED has identified areas requiring enhancement in order to advance harmonisation of higher education systems in Southeast Asia. SEAMEO RIHED has focused on projects that strengthen the following key areas:

- University governance and leadership development;
- ASEAN Quality Assurance Framework and Core Curriculum Development;
- Credit transfer system and diploma supplement;
- Student and Staff Mobility;
- E-Learning and mobile learning; and
- Research clusters.

Mobility of students, academics and administrative staff is one of the key pillars of establishing a Southeast Asian Higher Education area. Mobility has a positive impact on academic and cultural development as well as political, social and economic spheres. However, as many obstacles stand in the way of a functional Southeast Asian mobility programme, this pilot project was designed to build the path to sustainable student mobility programmes. The project worked with three countries to conduct a pilot mobility programme which would identify potential obstacles to developing further successful mobility programmes.

II. Project Description

This pilot project addresses the need to develop the infrastructure to support and encourage higher education student mobility in the Southeast Asian region.

1. How does the project link to the needs of the region?

In Southeast Asia, past efforts to promote higher education cooperation have been concentrated on collaboration at the institutional level, between higher education institutes in the region. The benefits from these networks and cooperation are therefore only limited to selected institutions participating in the programmes. The M-I-T Pilot Project has overcome the limitations of previous mobility projects by working with governments and higher education institutes at a regional level.

The project provided a platform for regional engagement through a series of Student Mobility meetings. These meetings have been essential in the development of a Southeast Asian model for higher education student mobility.

The first meeting (28 August 2009, Bangkok, Thailand) was attended by key policy-makers from the three countries. It identified five disciplines suitable for pilot undergraduate student exchange, namely agriculture, language and culture, hospitality and tourism, international business and food science and technology. The University Mobility in the Asia Pacific Credit Transfer System (UMAP) was chosen as a recognition platform, pending the development of a regional credit transfer system. Furthermore, the meeting reached decisions about budget allocation, level of support provided by host and sending governments, language used in the programme, numbers of participating universities and targeted numbers of students.



Photo: SEAMEO RIHED

**Follow-Up Second Meeting held in Bangkok Thailand,
15-16 October 2009**

The follow-up meeting was held 15-16 October 2009, with the purpose of reaching a decision on the programme and identifying and comparing the course syllabus. The meeting came to the agreement that the programme would commence in 2010. One hundred and fifty students would participate in the programme; 25 outgoing students from each of the three participating countries.

	Indonesia	Malaysia	Thailand	Total	
Indonesia		25	25	50	Sending / Outgoing
Malaysia	25		25	50	
Thailand	25	25		50	
Total	50	50	50	150	
Hosting / Incoming					

**Table 1: Projected numbers agreed at the First M-I-T Mobility Programme
(28 August 2009)**

The respective Offices of Higher Education selected a number of universities to participate in the pilot. The next stage involved the participating universities, focusing on a comparison of the course syllabus to identify relevant subjects for mobility students to undertake. Additionally, most participating universities came to a preliminary agreement on the number of outgoing and incoming students and the duration of the programme.

Malaysia	Indonesia	Thailand
Universiti Kebangsaan Malaysia	Ahmad Dahlan University	Kasetsart University
University Malaya	Binus University	Thammasat University
University Putra Malaysia	Bogor Agricultural University	Prince of Songkla University
Universiti Sains Malaysia	Christian Matanatha University	Mahidol University
Universiti Teknologi Malaysia	Gajah Mada University	Mae Fah Luang University
Universiti Teknologi MARA	Indonesia University	Chulalongkorn University
	Indonesian Institute of the Arts Surakarta	
	ISI Denpasar	
	Sevelas Maret University	
	Sriwijaya University	
	University Pendidikan Indonesia	

Table 2: Participating universities in 2011

The third and most recent meeting (7-9 December 2009, Jakarta Indonesia) involved the International Relations Officers (IRO) from each country and covered specifics on the number of participating students, orientation programmes, preferred subjects in each area and also shared best practices.

Recent Progress

Six universities from Malaysia, 11 universities from Indonesia and six universities from Thailand are participating in the programme. There has been significant progress due to the close collaboration and great effort among the M-I-T countries. Actual figures, as of September 2010, indicate that 90 students have completed, are undertaking, or are scheduled to undertake an exchange in 2010.

Malaysia (M)				Indonesia (I)				Thailand (T)			
Inbound		Outbound		Inbound		Outbound		Inbound		Outbound	
I	T	I	T	M	T	M	T	M	I	M	I
44	17	-	-	-	14	44	32	-	32	17	14

Table 3: Actual numbers of students participating in the programme in September 2010

2. How does SEAMEO RIHED address this need?

The M-I-T Pilot Project works with the Malaysian, Indonesian and Thai governments and higher education institutes to augment the systems that support successful and sustainable mobility programmes. As a result, 90 students have commenced or will undertake a mobility programme this year, with many further students scheduled for 2011.

Additionally, the project identified a number of common challenges to mobility, lessons that will be useful to other governments when developing their own student mobility programmes. The project will formally identify these lessons when the evaluation process concludes in the coming months, with results made publicly available. Moreover, SEAMEO RIHED, in cooperation with the Japanese government will facilitate the expansion of the project by initiating J-M-I-T in 2011/2012.

III. Significant Impacts

The student mobility programme not only provides a mechanism for regional nations to develop a skilled ASEAN workforce, but it also provides the opportunity to cultivate a workforce with cross-cultural experience and tran-system competency.

Graduates with such qualifications will help meet businesses' needs for human resource professionals who possess a broader knowledge of the regional environment which in turn, will promote greater competitiveness of the region in the era of globalization.

In addition, regional exchanges of students will result in the development of a "multicultural space" in which people respect differences in culture, language and religion while remaining aware of the common values and unity of ASEAN nations.

SEAMEO RIHED strongly believes that the student mobility programme will be a driving force in the cultivation of future generations, with a regional outlook which will play a key role in the development of the ASEAN community and contribute to regional and global prosperity and peace.

IV. Success Factors

The main objective of the programme is to promote student mobility in the region. In order to do so, Malaysia, Indonesia and Thailand participated in a pilot mobility project. The programme objective was to send 150 students, selected from five disciplines, to 21 universities. Success factors in progress towards achieving the objectives include the following:

- Strong need of the governments to work cooperatively to harmonise education systems in Southeast Asia;
- Education ministries are serious and determined, and have been working closely with higher education institutions;
- Individual higher education institutions very keen to push forward; and
- Financial assistance extended by participating governments and higher education institutions in supporting mobility students.

V. Lessons Learned and Potential for Project Expansion

The project results imply that the timing is right to develop a common Southeast Asian higher education space, including a broad student mobility programme. The pending evaluation will provide a detailed analysis of lessons learned, but key challenges identified by the pilot programme are:

- Difficulties recruiting students and promoting overseas study to the students themselves;
- Lack of communication with some universities;
- Differing academic calendars and difficulties matching clashing semesters;
- Language issues; programmes are conducted in English but working knowledge of the host country language would be beneficial for students;
- Logistics and staff management at receiving institutions;
- Lack of clarity and flexibility around the credit transfer system;
- A lack of information and miscommunication on courses and curriculum; and
- The need for a regional quality assurance framework to ensure consistent harmonization across programmes.

The future student mobility programme will be scaled-up to include other ASEAN countries

as well as the “plus-three” countries: China, Japan and Korea. SEAMEO RIHED is currently in discussions with the Ministry of Education, Culture, Sports, Sciences and Technology, Japan to commence the process of workshops leading to the set up of the J-M-I-T Mobility Programme. The programme was instigated in 2011 through the first J-M-I-T Workshop for policy makers, the second J-M-I-T Workshop for participating higher education institutions and an IRO meeting. The first students will go on exchange under the J-M-I-T programme in 2012.

Lastly, a proposal detailing key principles of a Southeast Asian Credit Transfer System (SEA-CTS) emerged from the Southeast Asian Policy Forum: Regional Credit Transfer System: Lessons Learned from UCTS held in Bangkok in June 2010. When developed, the new SEA-CTS will act as further fundamental infrastructure, which will promote and facilitate mobility programmes across the sub-region.

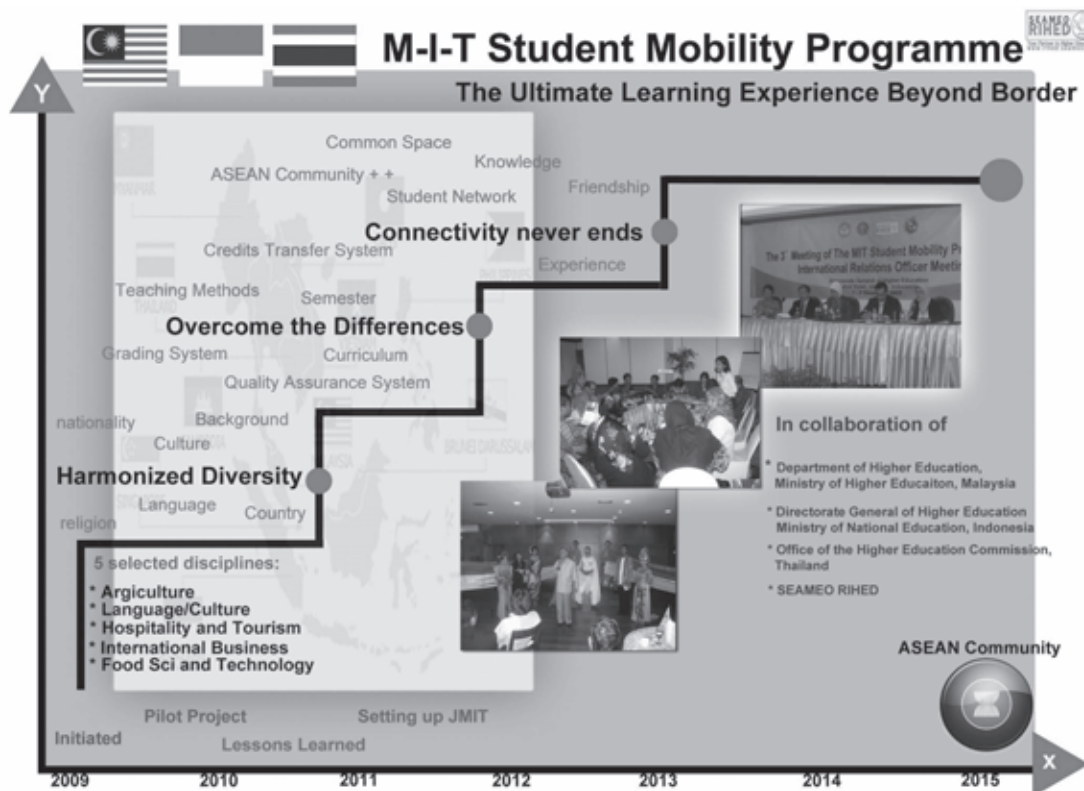


Figure 1: M-I-T Student Mobility Programme



INDONESIA

Photo: SEAMEO RIHED



Photo: SEAMEO RETRAC



1.7 Interactive Teaching and Learning with Low-cost Interactive Smart Boards



By the SEAMEO Regional Training Centre (SEAMEO RETRAC), Vietnam

www.vnseameo.org

Established in 1996, SEAMEO RETRAC assists SEAMEO Member Countries, especially Cambodia, Lao PDR and Vietnam, to identify and tackle problems of leadership and management in education. SEAMEO RETRAC directs its efforts on educational leadership and management issues by undertaking innovative and relevant programmes through research, training, consultancy, and staff exchange. In addition, SEAMEO RETRAC offers language training, ICT training, teacher training and development, as well as other training schemes appropriate to and needed by all levels of education.

Email: contact@vnseameo.org



1.7 Interactive Teaching and Learning with Low-cost Interactive Smart Boards

I. Abstract

The Interactive Smart Board (ISB) was first launched in 1991 in order to enhance teaching and learning in schools. However, not many schools can afford to buy such expensive equipment that can cost between USD\$3,000 to USD\$6,000. This is especially more of a barrier for those in disadvantaged areas. The concept was initiated by Dr. Johnny Chung Lee, researcher, Microsoft - Applied Sciences (<http://johnnylee.net/academic/>), and from a presentation at the TESOL Convention in Denver in 2009 by Ivan Stefano (Stefano.4@osu.edu) and Chris Hill (<http://esltech.wordpress.com>).

The SEAMEO Regional Training Centre (SEAMEO RETRAC) has successfully developed the modified ISB at less than USD\$50 per device. It is very user friendly and possesses all functions offered by a commercial ISB. Serving the purpose of popularizing the ISB to schools in Vietnam, a series of training workshops on “Building low-cost ISBs” and “How to teach and study with ISBs” were carried out for more than 300 administrators, teachers and technicians from higher education and local departments of education and high schools. This low-cost ISB will be soon introduced to remote and underprivileged areas in Vietnam, as well as in Southeast Asia.

II. Project Description

ISB is a large interactive display that connects to a computer and projector. A projector projects the computer’s desktop onto the board’s surface, where users control the computer using a pen, finger or other devices. The board is typically mounted to a wall or on a floor stand, etc.

Researchers of the Interactive Whiteboards and Learning: A Review of Classroom Case Studies and Research Literature (SMART Technologies Inc., 2004, p.4) indicated that ISBs are used in lecture or classroom environments and the activities may include the following:

- Manipulating text and images;
- Taking notes in digital ink;
- Saving notes for review via e-mail, the Web or print;
- Viewing websites as a group;
- Demonstrating, or the use of software at the front of a room without being locked behind a computer;
- Creating electronic lesson activities with templates and images;
- Showing and writing notes over educational video clips;
- Using presentation tools built into ISB's software to enhance learning materials; and
- Showcasing student presentations.

Due to the high cost, in Vietnam, only high schools in big cities such as Ho Chi Minh City and Hanoi can purchase one or two ISBs, mostly used for special classes. For those in remote and disadvantaged areas, owning an ISB is only a "hard-to-reach wish". In addition, how to teach with ISBs effectively is another issue.

At SEAMEO RETRAC, 100 per cent of its classrooms are equipped with computers and LCDs. However, these kinds of equipment were formerly only used for showing teaching materials for students. In other words, they were mainly used to replace textbooks. White boards were still needed for most of the classroom activities. The idea of transforming standard classrooms into state-of-the-arts ones with the available equipment has motivated SEAMEO RETRAC technicians to study more and finally the wish of "having an ISB in every classroom" has come true.

From his experiment, Johnny Chung Lee initiated a simple way to create an interactive board at an affordable cost with the Wii-Remote (Wiimote) used to play Nintendo games. SEAMEO RETRAC technicians conducted several experiments with different simple devices available on the market to figure out appropriate solutions for implementing this technology in the classroom, especially in developing countries.





The objectives of the research included:

- Building ISBs at an affordable cost;
- Introducing an account of programmes which could support teaching with low-cost ISBs; and
- Verifying applicability of low-cost ISBs with Wiimote in the context of teaching and learning in Vietnam and other SEA countries.

After six months of repeated experiments, the technicians finally “invented” an ISB at a low cost. Utilizing free software programmes from the Internet, and simple commercial tools at a cost of less than USD\$50, the traditional whiteboard was successfully converted into an ISB in the classroom to help exploit the many functions supporting teaching and learning.

The first version of low-cost ISBs with Wiimote was implemented in a pilot project, and feedback from teachers about the effectiveness of the ISB were constantly gathered and discussed. Modifications were added many times, and the current low-cost ISB finally possesses almost the same functions as a commercial ISB.

Concerning the experiments, the low-cost ISBs were applied in ten English classrooms with the participation of over thirty teachers over the course of two months. The teachers were trained to use ISBs in the classroom. These teachers taught one class with an ISB and another without it. Data was gathered from the teachers through observations, real teaching and interviews, throughout their entire periods of teaching. In addition, students in classes taught with ISBs participated in a questionnaire and some were selected for in-depth interviews. The major outcomes suggest: (1) the low-cost ISBs greatly improve teaching and learning in various contexts; (2) both teachers and students support the use of ISBs; and (3) its implementation is achievable in developing countries like Vietnam and most of Southeast Asia.

No.	Device	Picture	Main Function
1	Wii remote (Wiimote)		Track sources of infrared (IR) light (required)
2	Infrared pen		Work as a pen to interact on the screen (required)
3	Bluetooth Adapter		Connect Wiimote with computer (optional). Required for computer with no Bluetooth)
4	Wiimote Bracket		Place Wiimote in class (optional)

III. Significant Impacts

The significant impacts of this initiative are: innovation in teaching and learning through the application of a simple technological device; high motivation and excitement among teachers and students when utilizing this technology, and; increased efficiency and effectiveness in teaching and learning.

Due to its versatility, the ISB can be used to teach all ages at different levels across the curriculum. The benefits of using the ISB for teachers are as follows:

- Increased interaction between teachers and students;
- Ability to access web-based materials and other outside resources that are conducive to learning and teaching effectiveness;
- Greater interest in the learning process through more varied and dynamic use of resources, with associated gains in motivation;
- Greater use of technology and ICT in the classroom which increases student motivation;
- Increased spontaneity and flexibility as teachers can draw on and take advantage of a wide range of web-based resources;
- Reduced duplication of effort and easier revision;
- Easier note taking during lectures for more effective reviews;
- Increased opportunities to share and re-use materials, thereby reducing workloads;
- Easy to use, particularly in comparison to using a computer in a full-class situation; and
- Enhanced professional development through ICT integration and teaching methodology.

The benefits for learners are as follows:

- Increased motivation as students can enjoy dynamic presentations with stimulating visual and audio effects;
- Increased enjoyment and motivation;
- Greater opportunities for participation and collaboration;
- Development of students' personal and social skills such as greater self-confidence and improved presentation and IT skills;
- Reduced note taking and greater efficiency so that more time can be set aside for more complex concepts;
- Enhanced knowledge acquisition through more dynamic and visual lectures; and
- Greater motivation of students resulting in improved performances and creativity.

Practical Implications

Between 2009-2010, SEAMEO RETRAC conducted training sessions for representatives from 60 colleges and universities in Ho Chi Minh and the Mekong Delta areas. The major objective

of the training sessions was to develop a core pool of teachers to act as trainers for further use of the ISB application in schools in these regions.

Specifically, in collaboration with the local Department of Education, ISB technology has been utilized to teach English and physics in schools and universities in Hau Giang province.

Furthermore, ISB technology has also been integrated with other software such as Sketchpad and GEOSPACE in teaching mathematics in Tay Ninh Province. The device is also highly effective in the teaching of geometry.

In combination with GEOSPACE, teachers can easily draw accurate illustrations. Meanwhile, teachers can also take notes during their lectures and then save them in the form of a PDF file. The whole teaching process can then be captured and sent back to learners.



ISB teacher training class at SEAMEO RETRAC

Photo: SEAMEO RETRAC

IV. Success Factors

- Meeting the demands of integrating technology into enhancing teaching and learning quality;
- Low cost for implementation;
- High capability to implement; and
- Environmental protection.

V. Lessons Learned

The integration of ISBs encourages teachers to manipulate the technology in order to encourage and promote active learning. Effective use of an ISB encompasses and extends a range of teaching styles. It also supports and extends a wider range of learning styles - but, as with any ICT tool, its success depends on effective use.

The key feature of this technological application is that it emphasizes on the whole class teaching and learning strategies. These include teacher modelling and demonstration, prompting, probing and promoting questioning, managing whole-class discussions, reviewing work in progress to reinforce key points that emerged from individual and group work, and whole-class evaluation in plenary sessions.



Photo: SEAMEO RETRAC

A teacher uses ISB at a RETRAC English class

VI. Potential for Project Expansion

Implementation of ISBs in Vietnam and other Southeast Asian countries

In 2009, this technology with low-cost ISBs was introduced and installed at no cost in several schools in Vietnam. In 2010, SEAMEO RETRAC came up with plans for installation in several localities in Vietnam and the introduction of the technology to a larger audience in Southeast Asia with the support and assistance from the SEAMEO Secretariat and sister centres. One type of training is intended to be available on-line.



Photo: SEAMEO SEAMOLEC



1.8 Southeast Asia Education Network (SEA EduNet)



By the SEAMEO Regional Open Learning Centre (SEAMEO SEAMOLEC), Indonesia

www.seamolec.org

Established in 1997, SEAMEO SEAMOLEC assists SEAMEO Member Countries to find alternative solutions to sustainable human resource development through the dissemination and effective use of open learning and distance education. SEAMEO SEAMOLEC is also engaged in research and development, training, information and technology exchange, the sharing of expertise and resources, both within and outside of the region, with the aim to open up opportunities and improve access to quality education for all in Southeast Asia.

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1.8 Southeast Asia Education Network (SEA EduNet)

I. Abstract

Southeast Asia has very strategic Asian-wide roles in the political, economic, social and cultural sectors. It is assumed that these strategic roles can be best supported through the improvement of a quality education system. Therefore, countries in the region should more actively collaborate in the development of their respective education sectors.

Southeast Asia's vast geographical area means the spread of a quality education through the dissemination of science, technology and information faces a number of constraints. Therefore a dissemination medium is needed that is reliable and is able to cover all areas of the region. In response to this demand, the Southeast Asia Education Network (SEA EduNet) was created.

SEA EduNet is a system that links educational institutions in Southeast Asia, as well as providing a repository of learning materials for Southeast Asian people to share knowledge, ideas and best practices that have been enriched with concepts and programmes developed between SEAMEO Member Countries. SEAMEO Regional Open Learning Centre (SEAMEO SEAMOLEC) started the development of the SEA EduNet delivery system in 2008 and to date, 367 delivery points - that receive data from a satellite - have been installed in Cambodia, Indonesia, Lao PDR, Myanmar, the Philippines, Thailand and Vietnam.

The development of SEA EduNet is still in progress and the next stage is to enrich content development to provide learning materials for all levels, from elementary to university, in the region. In 2010, SEA EduNet was enriched with various learning materials, mostly centred on high and vocational schools. However, this intervention has not reached all educational levels - hence the need to push ahead with the programme region-wide.

SEA EduNet was established in order to align education and the sharing of content among Southeast Asian countries, especially for Indonesian students in borderland areas who have limited access to facilities such as the Internet, electricity and learning resources.

II. Project Description

EduNET sends data via satellite through a multicast system to provide distant learning education opportunities. Multicast technology makes it possible to deliver a huge amount of data at high speeds regardless of the number of clients using the service.

The speed of traditional Internet provision depends on the number of clients on the line; hence the speed is equal to the speed of sources, divided by the number of clients. This delivery can be hampered when a heavy volume of data is sent to a number of delivery points. Multicast technology can overcome this problem by reducing traffic by simultaneously delivering a single stream of information to thousands of recipients.

The name SEA EduNet was chosen because it reflects the ideals/goals of the programme, i.e., to share educational materials among Southeast Asia countries. The aim is to ensure the quality of education delivered in Indonesia is comparative to other regional countries.

In general, the concept of SEA EduNet is to link all regional countries through satellite provision. To implement this system, SEAMOLEC collaborated with the Indonesian state telecommunication company, P.T. Telekomunikasi Indonesia/Telkom, to utilize the Telkom 1 satellite, whose coverage area is the same as SEAMOLEC's target area; Southeast Asia.

SEA EduNet, as a network, provides a repository of learning materials for people in the region to share knowledge, ideas and best practices, enriched with ideas and programmes from Indonesia and other SEAMEO Member Countries.

There are two major steps in SEA EduNet's development: the installation of infrastructure; and the development of content.

1. Installation of Infrastructure

1.1 Number of Clients

Currently, SEA EduNet has a total 367 clients. In Indonesia, the network has 339 clients. These include 33 educational institutions; 13 elementary schools; 53 high schools; 54 vocational

high schools, middle schools, and universities. Furthermore, six out of 11 Southeast Asian countries have installed the SEA EduNet system (Cambodia 12, Lao PDR 1, Myanmar 1, Philippines 9, Thailand 1, and Vietnam 4).

1.2 Utilization of Technology

In the beginning, SEA EduNet used the Telkom 2 satellite through the utilization of the Hughes DW7000 modem receiver with the network operating system of Centos 5. Currently SEA EduNet is using the Telkom 1 satellite with the Digibox modem receiver and Centos 5 re-mastered to Digiserver.

a. Interface Modem Technology

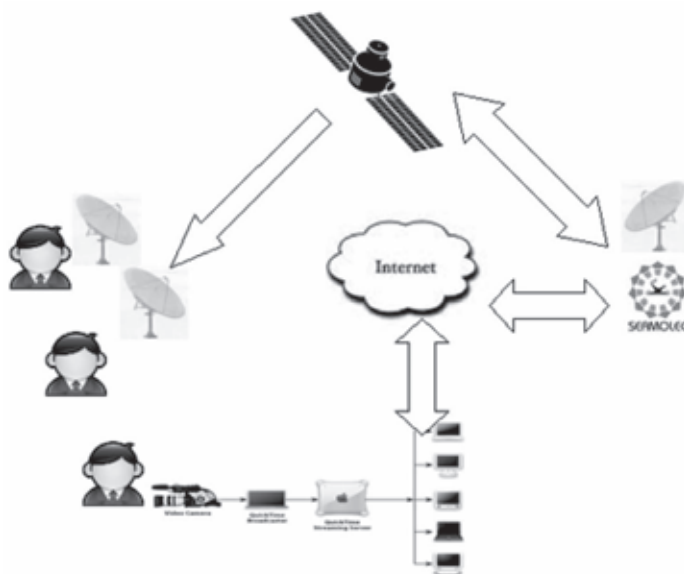
SEA EduNet utilizes the Hughes DW7000 modem equipped with a Digibox interface as the remote terminal, such as the HyperTerminal, that can be accessed by viewers via television and the web.

b. A computer as a client server

1.3 Future Development of Required Technology

In the future, SEA EduNet may need:

- Downstream and Upstream Modems;
- Single Sign On (SSO) implementation;
- Digiserver;
- Additional transponder; and
- Distributed Streaming Server.



Transmission data system in SEA EduNet

2. Development of Content and Utilisation

To provide content for SEA EduNet, the following activities have been developed in Indonesia that will be disseminated to other SEAMEO Member Countries.

2.1 SMS (SEAMOLEC Multi Studio)

SMS is a new strategy developed by SEAMOLEC to develop learning materials using wirecast. This is a live production tool that allows users to easily broadcast live events and create professional webcasts from any location. Once the learning material is packaged, it is delivered by satellite multicast (SEA EduNet) as this is compatible with the SEA EduNet system. Alternatively, it is delivered by video streaming via portal/website, and delivered integrated in a learning management system, such as MOODLE.

2.2 School Partnership Programme

Teachers from participating schools are trained to develop learning materials in a learning management system to be exchanged and delivered through the SEA EduNet system. Countries such as Australia, Germany, Philippines, Thailand and Vietnam have already participated in this school partnership programme.

2.3 SEA Cyber Class

SEA Cyber Class is another way of interaction between students and teachers to share knowledge, ideas, cultures and values. Interaction in cyber space is open to students in SEAMEO Member Countries, hence the term “SEA Cyber Class”. Students and teachers interact through the cyber class, and exchange learning materials through SEA EduNet, which facilitates the delivery of large files.

2.4 SEA Train

SEA Train is a programme that provides opportunities for students to participate in higher education using the distance learning method. In collaboration with polytechnics and universities as the main campus, schools as the sub-campuses, and local governments in Indonesia, SEAMOLEC facilitates diploma programmes for high school graduates in which open and distance learning is provided. Students learn at various sub-campuses through the use of SEA EduNet. The learning materials are developed both in LMS (MOODLE) and SMS formats. They are then delivered from the main campuses to students at the sub-campuses, via SEA EduNet’s multicast system.

III. Significant Impacts

The significant of the project is that SEAMEO Member Countries can share their respective countries' knowledge, culture and values through the AEA EduNet Sytem. At the 32nd SEAMEO High Official Meeting, Indonesian delegates proposed a motion that mutual recognition for the vocational graduate qualification be recognised in order to prepare graduates for the job market. Now as a SEAMEO Member Country, Indonesia is ready to accept vocational graduates from other SEAMEO Member Countries.

The Ministry of the National Education of Indonesia, facilitated by SEAMEO SEAMOLEC, is developing the Seamless Education for Southeast Asia Countries programme on vocational training by utilizing the SEA EduNet and the open and distance learning system.

Brunei Darussalam, Cambodia, Lao PDR, Thailand and Vietnam plan to join the programme in order to improve the quality and quantity of this learning sector. With mutual recognition for vocational graduate qualification, the seamless education programme will make it possible for graduates to have similar competencies throughout the Southeast Asian region. Seamless Education programmes can close the gaps between the most developed and the less developed Southeast Asian countries. This will enhance peace and harmony and reduce the potential for conflict in the region.



Photo: SEAMEO SEAMOLEC

Students in border regions learn by utilizing the SEA EduNet system.

The project also has implications on the distribution of educational opportunities, especially for schools located in border regions. For example, in the year 2010 the Government of the Republic of Indonesia, through the Ministry of National Education, launched an education programme for the border regions. This initiative is one of the few remaining regional development programmes for poverty reduction through education. The programme will utilize the SEA EduNet system. The benefits of this programme for Indonesians are:

1. To speed up the distribution of information, especially education
2. To eliminate impartiality in education
3. To develop patriotism and nationalism in the young generation
4. To improve educational quality in the border regions

5. To increase access to national television broadcast services, as well as integrating educational broadcast services
6. To provide a repository and delivery of resources for the teaching and learning process

IV. Lessons Learned and Potential for Project Expansion

Currently, the SEA EduNet programme is focused on Southeast Asian countries, but the SEA EduNet system can be developed for a broader worldwide scope. Obviously, this work is not easy; therefore, the support of all parties is needed, such as the Ministry of National Education of Indonesia for education regulation in Indonesia; the SEAMEO Secretariat, SEAMEO Centres, and SEAMEO Member Countries for education regulation in Southeast Asia; and educational institutions/universities worldwide to spread the benefits of the programmes globally.



Photo: SEAMEO SEAMOLEC

Training on installation of SEA EduNet equipment



Photo: SEAMEO QITEP in Language



1.9 Capacity Building Programmes for Language Teachers (Arabic, Chinese, German, Indonesian, Japanese)



**By SEAMEO Regional Centre for Quality Improvement of
Teachers and Education Personnel in Language (SEAMEO
QITEP in Language), Indonesia**

www.qiteplanguage.org

Established in 2009, SEAMEO QITEP in Language focuses on the quality improvement of language teachers and education personnel in Southeast Asia, with a particular emphasis on teachers of the Arabic, Chinese, German, Indonesian, Malay and Japanese languages by conducting research and development, providing training and information services, sharing resources, as well as engaging in other capacity-building activities in language instruction.

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1.9 Capacity Building Programmes for Language Teachers (Arabic, Chinese, German, Indonesian and Japanese)

I. Abstract

The SEAMEO Regional Centre for Quality Improvement of Teachers and Education Personnel (QITEP) in Language has achieved great success in implementing extensive training programmes to improve the standard of Arabic, Chinese, German, Indonesian and Japanese language teachers. Since 2009, the centre has also conducted various other training programmes for nationals of SEAMEO Member Countries across Southeast Asia. Besides these training events, the centre has also conducted Training Needs Analysis (TNA) for member countries, with the exception of Myanmar and Singapore. Based on the results of TNA, it became apparent that the majority of language teachers and education personnel needed some extra training to enhance their competence and professionalism. The centre also carried out evaluations on training events to get valuable feedback on how to implement more effective training activities in the future. Regarding teacher training, the centre has networked with universities abroad and in Indonesia to gain specialist input from experts in teaching and learning. The centre is still improving its overall quality by developing more training programmes in language skills and customized programmes.

II. Project Description

The TNA programme was conducted in Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand, Timor Leste and Vietnam and involved input from language teachers, school principals and school supervisors.

However, the level of participation barely represented the number of language teachers and education personnel active in SEAMEO Member Countries. The aim of the TNA was to provide information on the knowledge and skills needed to enhance the competencies of language teachers and education personnel.

Regarding language teachers, the assessment identified the need to gain mastery of the major and micro skills of languages in order to improve the teaching and learning processes. Regarding school principals, this group needed to become proficient in the areas of personnel management, other managerial competencies, entrepreneurship, supervisory roles and social competency. Regarding school supervisors, this group needed to become proficient in personnel management, managerial supervision, academic supervision, educational evaluation and developmental research. The centre used the findings of the TNA as a basis to devise programmes that provide the very best professional development activities.

The findings proved to be hugely rewarding and provided centre staff with information on how best to enhance the professionalism of Arabic, Chinese, German, Indonesian and Japanese language teachers. By and large, respondents placed high importance to sub-competencies that could be included in the centre's programmes to make the overall delivery more effective.

SEAMEO QITEP in Language conducted training programmes for Arabic, Chinese, Indonesian and Japanese language teachers. The training attracted varying numbers including 233 participants from Indonesia and abroad for the Indonesian language course, of which 109 came from Malaysia, Thailand, Cambodia, and the Philippines. For the Chinese language training, 79 participants came from Indonesia and 31 from Malaysia, Singapore, Thailand, Cambodia, Lao PDR, and Vietnam. For the Arabic language training, 53 language teachers came from Indonesia and 24 and from Brunei Darussalam, Malaysia, and Thailand. For the German language training course, 13 participants came from Indonesia and abroad, including nine participants from Malaysia, Thailand, and Vietnam. For the Japanese language training course, there were 22 language teachers, with 14 from Malaysia, Thailand, the Philippines, Cambodia, Lao PDR, and Vietnam.



Photo: SEAMEO QITEP in Language

Arabic Language Training at SEAMEO QITEP in Language

The predominant training format was “face to face”, spread over a time period of two weeks. The resource personnel came from universities in Indonesia and overseas such as Northeast Normal University, the University of Hong Kong, the University of Indonesia, Indonesia University of Education, Jakarta State University, Jakarta Islamic University, Malang State University, Medan State University, Darma Persada University, the Centre for Development and Empowerment for Language Teachers and Education Personnel (CDELTEP), the Ministry of Education and Culture, LIPIA (Center of Arabic and Islamic Sciences) Jakarta and other institutions.

III. Significant Impacts

A detailed evaluation of the programme revealed that teachers were very enthusiastic as they were able to enhance their knowledge of languages and the methodology for teaching them more effectively. In addition, the programme enabled them to share ideas and best practices, as well as to create valuable networking opportunities for further discourse and interaction.

IV. Success Factors

The factors that enabled the initiative to achieve its objectives included networking opportunities with ministries of education in Southeast Asia that identified suitable participants for upcoming training events. Besides links with ministries of education, the centre has also built associations with universities in both Indonesia and abroad, such as Northeast Normal University, the University of Hong Kong, the University of Indonesia, Indonesia University of Education, Jakarta State University, Jakarta Islamic University, Malang State University, Medan State University and Darma Persada University. The centre has also created networks with language institutions in Jakarta and representatives of foreign language institutions such as the National Language Centre, the Japan Foundation, the Goethe Institut, LIPIA (Centre for Arabic and Islamic Sciences Saudi Arabia in Indonesia) and the Board of the Chinese Language Association. Moreover, the results of the TNA yielded great results in terms of providing an information of competency that language teachers and education personnel can gain from. The TNA also gave the centre a profound insight into the training and workshops that need to be conducted in the future to achieve the aim of building the capacities of foreign language teachers.

V. Lessons Learned and Potential for Project Expansion

Lessons were learned about individual training programmes, the quality of the trainers, the quality of the participants, the mode of training, evaluation techniques, feedback from participants about training programmes and facilities, and TNA programmes. The mode of future training programmes will not only be face-to-face but also distance training to enable greater penetration of the programme. Moreover, e-learning systems and programmes will be developed for language teachers and education personnel in order to reach a larger number of language teachers and education personnel across the region. Regarding future training events, projects can be scaled-up by implementing strategies in the preparation stage, such as involving more trainers from representative language institutions in Jakarta such as the Goethe Institut, the Japan Foundation and also universities from abroad.



German Language Training at SEAMEO QITEP in Language

Photo: SEAMEO QITEP in Language



Photo: SEAMEO QITEP in Mathematics



1.10 Capacity Building Programmes for Mathematics Teachers



**By the SEAMEO Regional Centre for Quality Improvement of
Teachers and Education Personnel in Mathematics
(SEAMEO QITEP in Mathematics), Indonesia**

www.qitepinmath.org

Established in 2009, SEAMEO QITEP in Mathematics is mandated to assist SEAMEO Member Countries to improve the quality of mathematics teachers and education personnel in the region, conduct research and development, provide training and information services, establish networks for the purpose of resource sharing, information exchanges, research and development in the area of mathematics teaching, and provide access for decision makers to up-to-date, accurate, and consistent data and information in mathematics for the overall benefit of the region.

Email: qitepinmath@yahoo.com



1.10 Capacity Building Programmes for Mathematics Teachers

I. Abstract

The SEAMEO Regional Centre for Quality Improvement for Teachers and Education Personnel (QITEP) in Mathematics, hereafter known as the SEAMEO QITEP in Mathematics, has a core directive to enhance the quality of mathematics teachers and education personnel which covers the following areas: (1) Southeast Asia Realistic Mathematics Education; (2) Lesson Study in Mathematics Education; (3) Teacher-made Teaching Aid; (4) Differentiated Instruction; (5) Clinical Supervision in Mathematics Education; (6) ICT-Based Mathematics Learning; and (7) Joyful Learning in Mathematics Education. Up to July 2010, five programmes have been executed, while the sixth and seventh programmes were implemented at the year-end of 2010. Participants of the five previous programmes were mathematics teachers and education personnel from SEAMEO Member Countries. The programme implementation focuses on sharing best practices; understanding concepts and applications in school systems; and follow-up action in respective countries. The cooperation built up among participants, facilitators, experts and centres can improve understanding and quality improvement in managing mathematics education in schools.

II. Project Description

Mathematics is very important in developing science and technology. The rapid development of Information Technology in the 21st century requires teachers and students who are highly qualified and competent in mathematics and vice versa. Therefore, schools must ensure that their students achieve a high competence in mathematics education. To achieve this objective, the quality of mathematics teachers needs to be improved. Regarding this aim, SEAMEO QITEP in Mathematics has the strategic function to improve the quality of mathematics teachers and education personnel in the Southeast Asian region.

Some problems have been encountered in the area of mathematics education in Southeast Asia in which students' achievements, the mathematical approach, and the quality of teaching in mathematics classrooms across Southeast Asian countries, with the exception of Singapore, are not competitive with developed countries at present. This assumption is based on the results of TIMSS in mathematics (1995, 1999, 2003, and 2007). In addition, some students' attitude toward the subject needs to be enhanced to master the "fun element" of learning mathematics. Some students expressed the view that mathematics is difficult and not an interesting discipline.

The challenge is for Southeast Asian countries to compete with developed countries. Therefore, there is a serious need for a cooperative effort among SEAMEO Member Countries to solve educational problems in mathematics education and to plan future programmes to improve the quality of mathematics teaching and learning through in-service teacher professional development.

Considering the aforementioned challenges, SEAMEO QITEP in Mathematics is involved in intensive efforts to develop programmes that meet the needs of the region in the form of training programmes, research and development, and sharing best practices in order to improve the quality of mathematics education across Southeast Asia.

1. QITEP in Mathematics Programmes 2009

In the year 2009, SEAMEO QITEP in Mathematics conducted the following activities:

1.1 Training Need Assessment (TNA)

This programme aimed to collect information on the training needs of teachers and education personnel on Realistic Mathematics Education; Lesson Study in Mathematics Education; Teacher-made Teaching Aids; Differentiated Instruction; ICT-Based Mathematics Learning; Joyful Learning in Mathematics Education; and Clinical Supervision. The data was collected from teachers and education personnel in Cambodia, Lao PDR, Philippines, Thailand, Timor Leste and Vietnam.

1.2 Courses:

a. Southeast Asia Realistic Mathematics Education (SEA-RME)

This course was held on 13 July-7 August 2009, and was attended by 24 participants from Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand and Timor Leste.

The content of the course was: concept of RME; application; problems; lesson plan on

development of RME models; learning materials; follow-up action plans; and research proposals. The goal was to enhance the professionalism of mathematics elementary school teachers to teach mathematics based on SEA-RME.

b. Course on Developing Lesson Study in Mathematics Education

The main goal of this course was to improve the competence of junior high school mathematics teachers to teach mathematics applying lesson study. The course was held 5-30 October 2009 and attended by 24 mathematics junior high school teachers from Cambodia, Indonesia, Lao PDR, and Thailand. The course content covered concept, application, problems, teaching practice, and action plan design of lesson study in the school system.

2. QITEP in Mathematics Programmes 2010

In 2010, SEAMEO QITEP in Mathematics conducted the following activities:

2.1 Courses:

a. Realistic Mathematics Education (RME) in Primary School

This was conducted on 28 February-27 March 2010. The participants were key teaching personnel from Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Timor Leste and Vietnam. This course was aimed at improving mathematics teachers' competence in realistic mathematics education based on the Southeast Asian condition. The contents of the course were: concept; application; problems; lesson plan development of RME models; learning materials; follow up action plans; and research proposals.

b. Lesson Study in Mathematics Education

This course was conducted on 4-30 April 2010. Twenty four mathematics teachers participated in this course from Cambodia, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste and Vietnam took part. The goal of the course was to promote collaboration among teachers, schools, and universities in a conducted lesson study through:

- Plan: mathematics teachers and university lecturers work collaboratively to arrange lesson plans;
- Do: a teacher becomes a model while other teachers, the headmaster, lecturers and supervisors are observers; and
- See: the teacher and observers conduct lesson evaluation and reflection.

The course covered concept, application, problems, teaching practice, and action plan design of lesson study in the school system.

c. Teacher-Made Teaching Aid (TMTA)

This course was conducted on 3-30 May 2010. The participants were mathematics teachers from Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Timor Leste and Vietnam. The course aimed to help teachers develop mathematics teaching aids using simple, inexpensive, and available materials. The course content included sharing best practices in preparing and using teaching aids in mathematics teaching and learning in the school system.



Photo: SEAMEO QITEP in Mathematics

Prof Dr Masami Isoda of the University of Tsukuba, Japan acts as a resource person for SEAMEO QITEP in Mathematics

d. Differentiated Instruction/Heterogeneous Mathematics Class Instruction

This course was conducted on 31 May-27 June 2010, and attended by mathematics teachers from Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Timor Leste and Vietnam. This course was aimed at enhancing the competence of secondary mathematics teachers in designing heterogeneous mathematics class instruction and promoting students' mathematics thinking skills. The course contents were concept; application; a learning model for a heterogeneous mathematics class; lesson plan; teaching practice; and follow-up action on implementing models in respective member countries.

e. Clinical Supervision in Mathematics Education

This course was executed on 1-28 July 2010. The participants were from Cambodia, Lao PDR, Malaysia, Thailand and Timor Leste. The aim of the course was to enhance the competence of supervisors in improving the quality of supervision and supportive action to improve the quality of teaching and learning in the mathematics class room. The content of the course was philosophy; concept, application of clinical supervision; sharing best practices on clinical supervision; supportive and interactive supervisor's role through instructional feedbacks; diagnosis and problem solving, developing strategies to promote learning; motivation of students and management of the classroom; and follow-up action.

III. Significant Impacts

The benefits of the 2009 and 2010 SEAMEO QITEP in Mathematics programmes are:

1. The project has developed cooperation between teachers and education personnel which has led to an improvement in the standard of mathematics education across the region;
2. The competence of both mathematics teachers and education personnel in understanding the application of new trends and paradigms in mathematics education has been greatly enhanced;
3. Improved communication and the sharing of best practices among teachers and education personnel has led to better implementation of learning strategies which has improved the overall effectiveness of mathematics education;
4. Knowledge sharing among regional countries has led to a greater awareness of cultural similarities and differences among Southeast Asian countries and has identified the best practices in the implementation of mathematics education;
5. Improved regional cooperation, communication, and knowledge sharing has led to a greater awareness of global trends in the mathematics sector which has improved the implementation of mathematics learning strategies across Southeast Asian countries; and
6. The professional working culture in school systems across the region has been enhanced.

IV. Success Factors

The key successes of the SEAMEO QITEP in Mathematics 2009 and 2010 programmes are as follows:

1. Highly supported by SEAMEO Secretariat and the Ministry of National Education of Indonesia in terms of policy, programmes, and budget;
2. Highly supported by SEAMEO Council towards the establishment of SEAMEO QITEP in Mathematics in line with the effort of the quality improvement of mathematics education in the region;
3. Having sufficient facilities available for SEAMEO QITEP in Mathematics supported by the Centre for Development and Empowerment of Mathematics Teachers and Education Personnel (PPPPTK Matematika) in Yogyakarta, Indonesia;
4. Having highly motivated teachers and education personnel in the region to improve the quality of mathematics education; and
5. Having highly collaborative mathematics education experts in executing programmes.

V. Lessons Learned and Potential for Project Expansion

Implementation of the SEAMEO QITEP in Mathematics 2009 and 2010 programmes aspire to give motivation and new experiences in building cooperation among mathematics teachers and education personnel in the region. In addition, it has had an impact on teachers and education personnel to share best practices in the effort to improve the quality of mathematics education in the region. A lot of lessons have been learnt from the programme's implementation including:

1. The importance of the lesson study applied in teaching and learning at school as a vehicle to perform continuous improvement in the teaching and learning process. This will be very beneficial for students and teachers to identify the weaknesses and strengths in mathematics teaching and learning so that the improvement will be performed immediately to achieve the significant quality improvement.
2. The differentiated instruction programme is an important tool that should be utilised by mathematics teachers in teaching and learning so that students can learn in accordance with their competence, capacity and speed, as well as the student's learning mode. Teachers should build a class environment and learning culture so students enjoy learning mathematics.
3. Southeast Asian countries need to have a mathematics curriculum and an assessment standard applied in each member country to compete with global standards.
4. The supervisor's role is very important in improving the quality of mathematics education. Therefore, sharing best practices and experiences in implementing professional duties among supervisors is very significant.



Photo: SEAMEO QITEP in Mathematics

Colourful cultural background of the trainees



Photo: SEAMEO QITEP in Science



1.11 Increasing Citizen's Environmental Awareness and Activism through the Eco-School Project



By the SEAMEO Regional Centre for Quality Improvement of Teachers and Education Personnel in Science (SEAMEO QITEP in Science), Indonesia

www.qitepscience.org

Established in 2009, SEAMEO QITEP in Science is mandated to conduct training programmes and relevant activities to improve the quality of teachers and education personnel in the science sector in Southeast Asia. The major training and research activities include environmental education, earth and space science and laboratory management, science classroom supervision, and curriculum and materials development. Email: secretariat@qitepscience.org



1.11 Increasing Citizen's Environmental Awareness and Activism through the Eco-School Project

I. Abstract

Eco-School is an environmental education programme that helps students develop ecological literacy while engaged in practices to become environmentally responsible citizens. Developed and run by school boards, Eco-School also helps improve school building operations to reduce environmental impacts.

II. Project Description

The Eco-School programme is aligned with, and supports all the goals and strategies of the framework for environmental education in Southeast Asia. This framework echoes the recommendations in shaping the region's future: environmental education in schools, in which the SEAMEO Regional Centre for Quality Improvement of Teachers and Education Personnel in Science, or SEAMEO QITEP in Science, has an obligation to develop environmental education.

Schools and school boards which implement the Eco-Schools programme reflect the goals, strategies and respond to the increasingly urgent issue of climate change. The goals and strategies are:

1. To promote ecological literacy for all students, with teaching resources linked to the respective countries curriculum;
2. To provide leadership opportunities for students by establishing an Eco-Team;
3. To establish environmentally sound operational practices by adapting Eco-Schools templates for use throughout the country;
4. To develop a process for continual improvement in environmental education and operational practices within each school through initial and follow-up Eco-reviews;

5. To incorporate an environmental education component into the school planning process through the creation of a board-level environmental committee;
6. To provide an opportunity for the whole school community in the region to work together to develop environmentally-responsible practices at schools through the “Action Plan” templates; and
7. To benchmark environmental practices, assess progress and be recognized for achievements through an annual certification process.

During the implementation stage, there were twenty one primary schools in Bandung, Indonesia involved in the programme:

- | | |
|-------------------------------|-------------------------------|
| 1. SDN Cigondewah I | 12. SDN Griya Bumi Antarapani |
| 2. SDN Caringin | 13. SDN Guruminda |
| 3. SDN Garuda | 14. SDN Lokajaya 2 |
| 4. SDN Clbeureum II | 15. SDN Karang Pawulang |
| 5. SDN Pajajaran | 16. SDN Cirateun |
| 6. SDN Angkasa I | 17. SDN Cikutra I |
| 7. SDN ASMI II | 18. SDN Komara Budi |
| 8. SDN Rancaloea | 19. SDN Pertiwi |
| 9. SDN Rancaloea | 20. SDN Gegerkalong KPAD 1-2 |
| 10. SDN Cempaka Arum | 21. SDN Sukarasa 3 |
| 11. SDN Margahayu Raya Blok i | |

The programme consisted of several components which mainly focused on developing school administrators and teachers’ environmental education awareness. The key elements that led to the success of the programme are as follows:

1. Instructors gave lectures in schools on the importance of environmental education.
2. School teachers devised action plans with a focus on the environmental education programme.
3. The centre identified the key environmental education issues raised at each school.
4. School teachers identified support services needed based on their respective proposals.
5. The centre assisted school teachers with all their needs in order to implement the programme.
6. Instructors from the centre visited schools to assist with implementation.
7. Instructors from the centre evaluated input and the overall success of the programme.

III. Significant Impacts

The programme brought significant benefits to schools, teachers and students. The benefits for the selected schools are as follows:

1. School environments became greener and cleaner.
2. Schools became better organized.

The benefits for teachers are as follows:

1. Teacher's awareness of and competence in teaching environmental education was markedly improved.
2. The school environment became the easiest and most convenient resource for teachers.

The benefits for students are as follows:

1. The student's knowledge about the importance of maintaining and protecting their environment was improved.
2. The students were better equipped to organize and maintain their environment.

Overall, the implementation of the project had the following significant contributions:

1. Increased student knowledge and development of skills and perspectives that foster environmental stewardship;
2. The development of models and environmental education through an integrated approach that promotes collaboration in the development of resources and activities;
3. Increased student engagement by fostering active participation in environmental projects and building links between schools and communities;
4. The provision of leadership support to enhance student engagement and community involvement;
5. An increase in the extent to which environmental education is integrated into school board policies, procedures, and strategic plans; and
6. Enhancement in the integration of environmentally responsible practices in the management of resources, operations and facilities.

IV. Success Factors

Measuring success is an important part of the Eco-School programme. Indicators of success are measured through the following:

1. Through using the Eco-School project, school boards have created and implemented board-wide waste minimization and energy conservation standards. The boards have begun to put systems in place to support students and staff as they follow the standards;
2. It is anticipated that more schools will become Certified Eco-Schools every year. Participation in the certification programme is expected to increase as schools work towards recognition of their environmental initiatives;

3. Certified Eco-Schools use less energy than non-Certified Eco-Schools. An independent analysis of energy use at the Certified Eco-Schools revealed that they use 12 per cent less electricity and seven per cent less natural gas than comparable non-Certified Eco-Schools; and
4. The Eco-School programme is supported totally by the Ministry of National Education, Indonesia. The SEAMEO QITEP in Science also expects the support from the Ministry of Education of other SEAMEO Member Countries.



Photo: SEAMEO QITEP in Science



Photo: SEAMEO BIOTROP



2. Science





Photo: Brian Enriquez - the 2nd prize winning photo of SEAMEO SEARCA's Photo Contest 2010



2.1 Strategy for Integrating Biofuels and Rural Renewable Energy Production in Agriculture for Poverty Reduction in the Greater Mekong Sub-region

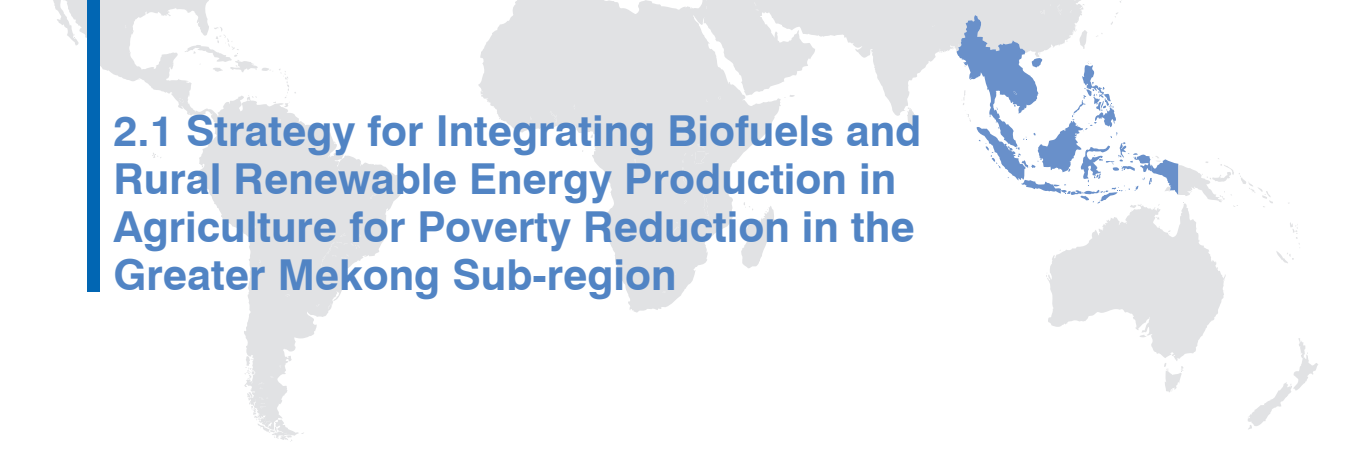


By the SEAMEO Regional Centre for Graduate Study and Research in Agriculture (SEAMEO SEARCA), Philippines

www.searca.org

Established in 1966, SEAMEO SEARCA is mandated to assist in producing high-quality human personnel in agriculture and rural development across Southeast Asia to strengthen institutions and propel regional economic growth. Its priority themes are agricultural competitiveness and natural resource management. SEAMEO SEARCA provides to participating Member Countries high-quality graduate study programmes in agriculture and promotes, undertakes, and coordinates applied research programmes related specifically to the needs and problems of the region.

Email: post@agri.searca.org



2.1 Strategy for Integrating Biofuels and Rural Renewable Energy Production in Agriculture for Poverty Reduction in the Greater Mekong Sub-region

I. Abstract

Commissioned by the Asian Development Bank (ADB) in 2007, the Southeast Asian Regional Centre for Graduate Study and Research in Agriculture (SEARCA) and the Centre for Chinese Agricultural Policy (CCAP) conducted country studies on biofuels covering the Greater Mekong Sub-region (GMS: Cambodia, China, Lao PDR, Myanmar, Thailand and Vietnam).

These GMS countries went into biofuels production at a time when oil prices were on the rise and prices of agricultural commodities were at low levels. The enthusiasm to rapidly develop the sub-sector was held back by the ensuing food crisis. The latter was blamed on the diversion of crops to biofuels production, thus driving up food prices around the world. Such an allegation is partly correct, pointing to some pitfalls resulting from the introduction of biofuels policies without duly assessing their overall implications, including on the agricultural sector (UNCTAD 2008). For this reason, this study was undertaken in the GMS to provide some benchmark information to help access the economic and market potential of alternative renewable sources of energy, including biofuels, and to formulate a framework on the strategies and options for the development of alternative sources of energy.

This comprehensive assessment study supports the development of biofuels in the GMS not only as part of a portfolio of solutions to high energy prices, particularly as an alternative to gasoline and diesel extensively used in the transportation sector, but more as a potential tool for poverty reduction. If planned well, biofuels development can: promote energy security, especially in the more remote rural areas; diversify agriculture; create livelihood opportunities; raise incomes; and improve the welfare condition of rural households.

Considering the recent trends in the energy market and diverse level of biofuels development in the sub-region, the strategy for developing renewable energy and biofuels is geared

toward helping small farmers have access to energy and be integrated in the biofuels market. This Strategic Framework calls for the administration of the following six activities to further advance biofuels (especially biodiesel) development activities in the GMS:

1. Develop and manage a resource database to facilitate the monitoring of biofuels production, use, and trade, especially in the GMS, and to build the capacity to manage such a database;
2. Conduct a more rigid/detailed assessment of feedstock production and the biofuels market in the sub-region, especially toward the promotion of cross-border trade;
3. Have a more rigid research and technology development in non-grain energy crops (e.g. *Jathropa curcas* and sweet sorghum) such as varietal improvements, potentials of yield increases from improved farm management including the application of irrigation facilities, and the development of appropriate alternative processing technologies;
4. Facilitate technology/knowledge exchange on biofuels processing among GMS countries;
5. Establish pilot demonstration plants for community/village-level biodiesel production based on *Jathropa curcas* and/or bioethanol production based on sweet sorghum;
6. Establish biogas production, especially in areas where the use of feedstock for biofuels production poses a threat to food security.

II. Project Description

The study addressed the energy requirement and food security of the GMS.

1. Energy Supply and Demand in GMS

Table 1 shows the impressive economic performance of the GMS countries; their gross domestic product (GDP) averaged more than six per cent per annum in 1993-2005, except for Thailand. Such a rapid growth has fuelled the significant rise in energy demand. The overall energy consumption growth in the GMS region averaged eight per cent over the same period. Some countries (e.g., Vietnam, Myanmar, and Lao PDR) surpassed this growth rate but others (e.g., Cambodia) lagged way behind.

Table 1: Growth in GDP and Energy Consumption, 1993-2005

Countries	GDP	Energy Consumption
China	7.5	6.6
- Yunna	9.4	9.2
- Guangxi	10.2	8.8
Vietnam	7.6	10.2
Thailand	3.8	6.6
Myanmar	9.9	8.5
Lao PDR	6.6	8.2
Cambodia	8	1.1

Source: ADB 2007 for GDP; Energy Data from IEA and China Data Online

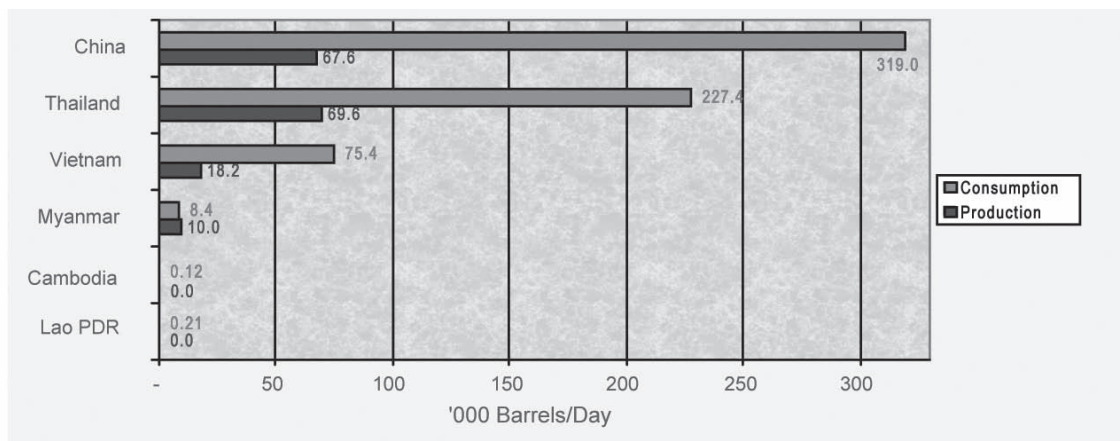
The transport sector posted the most rapid growth in energy consumption in the GMS (and elsewhere). Table 2 shows the growth in the demand for transport fuel in the GMS for the period 1990-2005. Overall consumption of gasoline and diesel rose by 149 per cent and 177 per cent, respectively. The rates of increase in fuel oil demand greatly outstripped production, leading most countries to heavily depend on imports whose supply has become increasingly volatile (Figure 1).

Table 2: Transport Fuel Demand Growth

countries	1990-2005	1990-2005
	Gasoline	Diesel
GMS	149	177
Yunnan	129	720
Guangxi	341	492
Vietnam	328	365
Thailand	97	101
Myanmar	155	311
Cambodia	3	230

Notes: Cambodia is for 1995

Source: OECD 2007, China Data Online



Source: <http://eia.doe.gov/> and China Country report

Figure1: Percentage Increase in Oil Consumption and Production in the GMS, 2001 and 2005

Like many other developing countries, GMS countries are now confronted with the challenge of meeting the rapid growth in their energy demand to sustain economic development. The broader use of alternative energy resources, both renewable and non-renewable, is seen as an important option to allay concerns about rising oil prices that affect access to increased oil imports. There are vast resources for energy production in the sub-region but the extent of their exploitation and development have differed primarily because of the countries' varying levels of development, as well as their varying needs and uses of energy.

2. Status of Biofuels Production and Development Plans in GMS

The development of alternative renewable energy resources such as wind, solar, biomass including biogas, and hydropower is needed to increase local energy supply and enhance energy security. But these forms of energy still do not cater to the needs of the fast expanding transportation sector for liquid fuel. Hence, the efforts to further develop the biofuels sub-sector in China and Thailand, and to embark on biofuels development in the other GMS countries. The biofuels production plans and targets shown in Table 3 indicate the development stage of the sub-sector across the GMS.

Table 3: Biofuel Development Plans and Targets of GMS Countries

Country/Year	2008	2009	2010	2011	2012	2013	2014	2015	2020
Thailand	Bioethanol based on molasses (Sugarcane) and Cassava									
	<i>E10 & E20: 0.39 to 0.74 million tons per year</i>					<i>E20: 1.09 to 2.48 million tons per year</i>				
	Biodiesel based on Palm Oil									
	<i>B2 & B5: 0.36 to 0.43 million tons per year</i>			<i>B5: 0.94 to 1.03 million tons per year</i>			<i>B5: 1.06 to 1.29 million tons per year</i>			
China	Biodiesel based on <i>Jathropa Curcas</i>									
	Bioethanol based on maize and cassava (most recent): <i>1.7 million tons per year</i>					Bioethanol based on non-grain feedstocks: cassava, sweet sorghum, sweet potato				
	<i>5 million tons per year</i>					<i>10 to 12 million tons per year</i>				
	Biodiesel based on: Waste vegetable oil at 0.2 million tons per year; Rapeseed to reach 4.5 million tons per year by 2020									
Vietnam	Biodiesel based on <i>Jathropa Curcas</i> from 2008 onwards to reach 6 million tons per year									
	Bioethanol based on Sugarcane and Sweet sorghum									
	<i>5 tons per year</i>			<i>100 tons per year</i>				<i>540 tons per year</i>		
	Biodiesel based on Fish fat and <i>Jathropa Curcas</i>									
Myanmar	<i>3 tons per year</i>			<i>150 tons per year</i>				<i>1,090 tons/year</i>		
	Small to medium scale bioethanol plants in rural areas to be established			Long-term plans for bioethanol production to be developed.				1,090 tons/year		
Lao PDR	Jathropa Curcas cultivated in about 3 million has.									
	No clear plans on biodiesel production. Long-term development plans to be formulated.									
Cambodia	Bioethanol based on sugarcane : <i>E10</i>								Bioethanol based on sugarcane : <i>E20</i>	
	Biodiesel based on <i>Jathropa Curcas</i>									
Cambodia	<i>B2</i>			<i>B5</i>			<i>B10</i>			<i>B15</i>
	Formal declaration of support by the gov't	Biofuel production based on Jathropa / Cassava for export. Blended fuel to be imported.							Domestic biofuel production and blending for local consumption	

Sources: Country reports; Production targets for Thailand from 2012 to 2020 come from the Ministry of Energy

The current and potential supply of feedstock in the GMS is indicated in Figure 2. Figure 2 clearly indicates that five crops are currently used, or proposed to be used in biofuels production in most of the GMS. These are: sugarcane; cassava; sweet sorghum; oil palm; and *Jathropa curcas*.

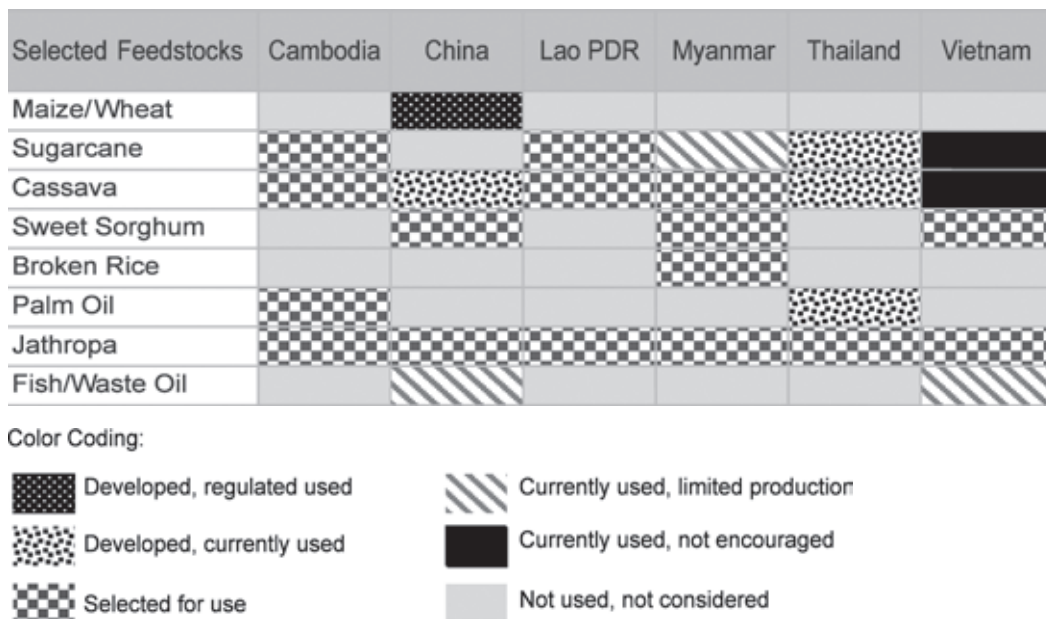


Figure 2: Potential Feedstock for Biofuel Production

The SEAMEO SEARCA-CCAP-ADB study engaged GMS governments to seriously look into the rationale of developing biofuels. As a result, various government agencies in the GMS have made a commitment to support the strategic framework with due regard to food security and poverty reduction. Moreover, SEAMEO SEARCA, in cooperation with the International Fund for Agricultural Development (IFAD), is currently pursuing research on the effects of biofuels on agricultural development, food security, and the environment in the Philippines. Similar studies are being undertaken by other research institutions in Indonesia and China.

III. Significant Impacts

If properly pursued by the governments of the GMS countries, the Strategic Framework resulting from the biofuels development study is expected to spur investment in agribusiness development via selected biofuel feedstock across GMS countries, improve trade and commerce, generate income, create livelihoods, and reduce poverty.

IV. Success Factors

The main objective of the study was to provide benchmark information to help assess the economic and market potential of alternative renewable sources of energy, including biofuels, and subsequently to formulate a framework on strategies and options for the development of alternative sources of energy. Success factors in achieving the objectives include the following:

1. Strong desire of the GMS governments to look for alternative sources of fuels;
2. Participation and commitment of GMS governments in the process of formulating the strategic framework; and
3. Technical and financial assistance extended by the Asian Development Bank and other development partners.

VI. Lessons Learned and Potential for Project Expansion

The projection results imply that biofuels production can be good or bad, depending on the comparative advantage of countries in the global market of these commodities. In the case of farmers, those who own their lands and who are net sellers of their crops in the market are likely to benefit from rising agricultural prices, thus enhancing the food security of their respective households. The case is not the same for farmers who are net consumers of food crops. For the latter, there is a need to put up (or enhance if one already exists) a social safety net to support the most vulnerable.

It can also be the case that ambitious biofuel production targets are automatically cushioned by market forces and adjusted, depending on the capacity of the agricultural sector to supply the required feedstock so that the market of other commodities, especially those of food, are not affected. Nonetheless, if developing economies are to participate beneficially in the growth of biofuels production and still maintain adequate levels of food security, then a complementary set of policy measures and investments would need to be introduced to produce benefits for consumers of both food and energy; while also contributing to the broader growth of their economies and human well-being (Rosegrant et al 2006). One of these policy measures would be a strategy that ensures small producers of feedstock are integrated into the biofuel supply chain.

As an instrument of rural development, the small farmers group needs to be greatly integrated into the biofuel supply chain. The challenges for pro-small and pro-poor biofuels development are two-pronged (ICRISAT 2007):

1. To find ways so that the poor who are connected (or readily connectable) to market economies can contribute and prosper within a large-scale, industrial biofuels paradigm, and;
2. For more isolated villages dependent on self-sufficiency rather than connection to the cash economy, to find ways to help them achieve greater energy self-sufficiency through biofuels as a first step along a development pathway that leads them toward the market economy to escape from poverty.

The Strategic Framework calls for the administration of the following activities to further advance biofuels (especially biodiesel) development activities in the GMS:

1. Develop and manage a resource database to facilitate the monitoring of biofuels production, use, and trade, especially in the GMS, and to build capacity to manage such a database;
2. Conduct a more rigid/detailed assessment of feedstock production and the biofuels market in the sub-region, especially toward the promotion of cross-border trade;
3. Have more rigid research and technology development in non-grain energy crops (e.g., *Jathropa curcas* and sweet sorghum) such as: varietal improvements; potential of yield increases from improved farm management, including the application of irrigation facilities; and the development of appropriate alternative processing technologies;
4. Facilitate technology/knowledge exchange on biofuels processing among GMS countries;
5. Establish pilot demonstration plants for community/village-level biodiesel production based on *Jathropa curcas* and/or bioethanol production based on sweet sorghum; and
6. Establish biogas production, especially in areas where the use of feedstock for biofuels production poses a threat to food security.



Photo: SEAMEO SEARCA

A bioethanol plant in Jilin, China



Photo: SEAMEO TROPMED Network



2.2 ICT and HIV/AIDS Preventive Education in the Cross-borders Areas of the Greater Mekong Sub-region



By the SEAMEO Regional Tropical Medicine and Public Health Network (SEAMEO TROPMED Network), Thailand

www.seameotropmednetwork.org

Established in 1966, the SEAMEO TROPMED Network operates as a regional cooperation network for education, training and research in tropical medicine and public health through three regional centres in Malaysia, the Philippines and Thailand. The network's overall role is to promote health and to prevent and control tropical diseases and public health problems. It also serves to facilitate the strengthening of national and institutional capabilities in research and training through postgraduate programmes, workshops, and information dissemination.

Email: secretariat@seameotropmednetwork.org



2.2 ICT and HIV/AIDS Preventive Education in the Cross-borders Areas of the Greater Mekong Sub-region

I. Abstract

The use of ICT in HIV/AIDS preventive education can promote fundamental improvements in teaching and learning. At present, the use of ICT for HIV/AIDS preventive education is not fully maximized in Greater Mekong Sub-region (GMS) countries. Realizing the potential of ICT, the project was conceived to address the two most pressing issues in the implementation of preventive education.

This technical assistance had two development goals: to reduce the incidence of HIV/AIDS infection among vulnerable age groups, poor and marginalized population groups; and to expand the use of ICT and other multimedia technologies in HIV/AIDS preventive education.

The objectives were to develop ICT learning materials for HIV/AIDS preventive education in local languages; to build the capacities of teachers, health workers, multimedia providers, and other stakeholders in HIV/AIDS preventive education; and to expand the use of ICT in HIV/AIDS preventive education.

The project focused primarily on teachers and in-school youth, and addressed indirectly the communities where selected schools were located. It was implemented in nine border areas between five participating countries: Cambodia; Lao PDR; Thailand; Vietnam; and Yunnan province in China.

A total of 36 lower secondary schools, two schools each side of the border, were included. The endeavour incorporated: (i) a situational analysis of the sites and schools; (ii) the training of national trainers in a regional centre for the enhancement of their skills on instructional design development, use of ICT tools (word processing, presentations, spread sheets, video) and hands-on production of prototype ICT-based materials; (iii) the provision of basic ICT

equipment to five national teams and 36 schools; (iv) the training of classroom teachers implementing preventive education on the use of ICT and development of learner-generated materials at the school level; (v) materials development; (vi) the delivery of ICT enhanced preventive education in the school setting; (vii) community preventive education; (viii) the development of a database for the SEAMEO component; and (ix) monitoring.

The output and outcomes were:

- The creation of one regional and five national training curricula and a manual on the local language for use in ICT in preventive education;
- 10 national trainers' ICT capabilities were strengthened;
- 614 classroom teachers were trained in the use of ICT (which is much higher than the targeted number of 200), 57.82 per cent of whom are females;
- ICT-based materials developed by trainers and teachers included about 650 computer generated print materials - such as flyers, brochures, newsletters, posters and pop-up materials, 207 PowerPoint presentations, 15 videos in the local language, 79 interactive games, eight VCDs of folk songs, and six radio scripts for local communities;
- 26,679 students were reached by ICT enhanced preventive education, of whom 46.79 per cent were females;
- an estimated 100,000 community members were reached by community preventive education activities in the border areas;
- the ICT capabilities of 36 schools and five national teams were strengthened; and
- A web-based project database was developed.

II. Project Description

1. How does the project link to the needs of the region?

The GMS region is home to more than two million reported cases of HIV. New infection cases are increasingly found among women who also bear the responsibility of caring for those living with HIV/AIDS. A UNAIDS/UNICEF/WHO 2004 report revealed that a total of 10 million young adults, aged 15-24 years, were living with HIV at the year-end of 2003 - 20 per cent of whom were in Asia. Several factors that increase youth vulnerability to HIV infection include a lack of HIV information, a lack of education and services, adolescent experimentation and curiosity, and coerced sexual relationships and gender inequalities. One of the conditions that facilitates the spread of infection in GMS countries is porous and active borders. These borders provide easy access to non-traditional drug use, including intravenous drug use, and engagement in the sex industry. There is still no cure for AIDS and vaccines are still

being developed. Thus, the success in reducing the spread of the virus depends on changing behaviour and addressing the environmental and socio-economic factors that increase vulnerability to the disease.

The school-based preventive education programme plays a major role in prevention activities, especially for the youth. It can reach large numbers of young people long before they become sexually active. The use of the skills-based approach in preventive education enhances the development of life skills that enable the youth to make healthy decisions to protect them from HIV/AIDS and also improve their educational and economic opportunities. In all of the participating countries, policies/enabling statements of the respective ministries of education are in place to support the implementation of preventive education for HIV/AIDS



Photo: SEAMEO TROPMED/Network

A Vietnamese teacher uses the teaching material developed from the workshop with Vietnamese students

in the school setting. The implementation of preventive education in the school setting is undertaken through curricular and co-curricular activities. However, the coverage, and scope of implementation varies from country to country. Moreover, there are several issues and concerns that affect effectiveness and efficiency. Two of these concerns underscored during the fact-finding workshop were the appropriateness of teaching/learning materials and teaching methodologies.

2. How does SEAMEO TROPMED Network address this need?

In consideration of the epidemiological scenario of HIV/AIDS in the region, as well as the status of preventive education in most member countries, the SEAMEO Regional Tropical Medicine and Public Health Network (SEAMEO TROPMED Network) spearheaded the development of a regional proposal which was submitted to, and approved by the Asian Development Bank for funding.

A Project Management Unit (PMU) was based at the SEAMEO Secretariat Office. A Technical Coordinating Unit to support the PMU and to provide a leadership role was based at the SEAMEO TROPMED Network under leadership of the secretary-general of the network. SEAMEO Regional Centre for Educational Innovation and Technology (SEAMEO INNOTECH) and SEAMEO Regional Open Learning Centre (SEAMEO SEAMOLEC) were also involved.

At the country level, national teams/steering committees composed of representatives from ministries of education and health, and multi-sectoral AIDS committees were organized. The national teams were led by high ranking officials of ministries of education, health and other relevant organizations, such as national AIDS authorities.

Members of national teams included the Permanent Secretary of Thailand, the Secretary-General from Cambodia, the Director-General from Lao PDR, and Directors from Vietnam and China's Yunnan province. The functions of these national bodies were: (i) policy and decision-making; (ii) coordination of country activities; (iii) provision of technical support; and (iv) monitoring and evaluation.



A web-based project database

The actual delivery of ICT-enhanced preventive education was the responsibility of classroom teachers at the selected schools involved in preventive education, with school officials providing support. These classroom teachers were the ones currently implementing preventive education through curricular and/or co-curricular activities.

Regular sharing of experiences and project progress reports were provided, both at national and regional levels.

III. Significant Impacts

In essence the project was able to show how the use of ICT could enhance preventive education in schools, thereby allowing the objectives of preventive education to be met. The output and outcomes enumerated above all contributed to a more effective implementation of preventive education in schools. These schools' experiences provided valuable input to the strengthening of the national preventive education programme.

The specific benefits gained were:

- establishment of a culture of ICT among the 36 schools, thereby contributing to the reduction of the ICT divide;
- higher morale and satisfaction of teachers delivering the preventive education programme;
- increased interest and participation of students;

- the sharing of materials, distributed to neighbouring schools in the project area;
- strengthened partnerships between health and education sectors at different levels;
- upgraded local capacity for decentralized responses to emerging issues in communities;
- increased acceptance of preventive education by parents, community leaders and members;
- new cross-border activities and bilateral cooperation between countries;
- reaching poor marginalized populations along border areas; and
- reaching girls and women in schools and communities, and addressing their needs to reduce their vulnerability to HIV.

IV. Success Factors

There were several factors present in all stages of the project - from planning to evaluation - that helped achieve the objectives. These success factors included:

- The project's relevance to the region. The project's objectives were consistent with the five governments' development strategies and national health and education policies. It addressed a key constraint to the region's development, i.e. the HIV/AIDS problem that affects the poor sector of the population, especially women and children, and youth in rural/border areas.
- Involvement of countries starting from the planning phase, situational analysis, selection of sites and other activities of the project contributed to a higher level of acceptance, ownership of the projects by the countries, as well as provision of support by the implementers.
- Involvement of the education and health ministries. The project served as a platform for a better working relationship between these two ministries at the country level.
- Involvement of the local administrators at the implementation sites allowed for the establishment of an enabling political environment.
- Creation of steering committees who made country level decisions based on actual conditions in the respective countries. There were several aspects and activities in the project implementation that were country specific which contributed to a more efficient and effective implementation.
- The regular regional sharing activities that served to monitor the progress and implementation of the projects. These served as opportunities to provide timely solutions to barriers and problems encountered during the implementation.

V. Lessons Learned and Potential for Project Expansion

The lessons learned proved that the strategy/approaches utilized can be applied at the national level. Below are some prominent lessons.

- The inclusion of human resource development in any project is always relevant and beneficial. The benefits of improved human resources are seen to extend beyond the life of the project.
- Securing the higher commitment of school officials and community leaders and members, within the project and the school programme, through their involvement in all aspects and decision-making will result to a higher level of support, administrative, technical and material support to a certain extent.
- The use of ICT as a tool in the delivery of HIV/AIDS preventive education has significantly improved delivery of the programme, increased morale, and the satisfaction of teachers, as well as the improved participation of students. The use of the technology can be maximized if the approach can be institutionalized in the delivery of other preventive education programmes, as well as the other courses/subjects in the curriculum when appropriate. The technology can also be utilized in enriching non-formal and community education for adult literacy. Non-formal and adult literacy programmes require a more learner centred vis-a-vis teacher centred approach, which can be provided through the use of ICT and ICT-based teaching/learning materials.
- The importance of the sharing of experiences among the partner countries in the regional forum cannot be overemphasized. This becomes more relevant because of the cross-border dynamics that occur in the project sites. The sharing should not only be done among national teams, but equally important is the sharing and collaborative activities of classroom teachers across borders who are directly responsible for the delivery of preventive education. The joint training of teachers from schools along the Thai and Laos' borders was finalized after discussions with classroom teachers. The joint training resulted in the validation of related HIV/AIDS issues and concerns that were incorporated as topics for the development of additional materials.
- Students serve as important resources in the development of materials. The project was able to prove that students once motivated can participate actively in the development of more appropriate and acceptable materials for HIV/AIDS.
- Experience in developmental initiatives points to the importance of providing assistance and policy guidance over the long term.



Photo: SEAMEO TROPMED/Malaysia



2.3 Short Research Projects in Tropical Diseases Conducted by DAP&E Students 2010



By the SEAMEO TROPED Regional Centre for Microbiology, Parasitology and Entomology (SEAMEO TROPED/Malaysia), Malaysia

www.imr.gov.my

Established in 1967, SEAMEO TROPED/Malaysia is located at the Institute for Medical Research in Kuala Lumpur, Malaysia and conducts research for the prevention and control of diseases. The centre provides specialized training, diagnostic, consultative and advisory services. It also promotes health management as a collective responsibility of government, the private sector, non-governmental organizations, the community and individuals.

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2.3 Short Research Projects in Tropical Diseases Conducted by DAP&E Students 2010

I. Abstract

SEAMEO TROPMED/Malaysia serves as the SEAMEO TROPMED Regional Centre for Microbiology, Parasitology and Entomology. The centre's main responsibilities are to research, identify, elucidate, control and prevent disease and investigate other health related issues in the country.

To achieve these objectives, two postgraduate academic programmes conducted by the Regional Centre place critical emphasis on health promotion to prevent the spread of disease, through training and research into tropical diseases prevalent within Malaysia.

Student assessments for both courses: the Diploma in Applied Parasitology and Entomology (DAP&E); and the Diploma in Medical Microbiology (DMM), include short research projects and written assignments respectively. This report presents summaries of research projects conducted by DAP&E students in 2010.

II. Project Description

Tropical diseases are infectious diseases found predominantly in the tropics, where ecological and socioeconomic conditions facilitate their propagation. Climatic, social, and economic factors create environmental conditions that facilitate the transmission of these medical conditions.

Mosquitoes, flies and other organisms are the most common disease carriers, or vectors. These can either be mechanical or biological vectors. A mechanical vector, such as a housefly, picks up an infectious agent on the outside of its body and transmits it in a passive manner such as landing on food meant for human consumption. In contrast, biological vectors, such

as mosquitoes, harbor pathogens within their bodies and deliver pathogens to new hosts in an active manner, usually in the form of a bite.

The most prevalent tropical diseases in Malaysia include malaria, dengue fever, chikungunya, filariasis, and other vector-borne diseases of great medical importance. Every student on their respective courses were given specific research tasks linked to tropical diseases in order to partially complete the Diploma in Applied Parasitology and Entomology.

1. Project Objectives

- 1.1 To strengthen the skills of biomedical researchers in tropical diseases in the areas of laboratory and field techniques
- 1.2 To strengthen capabilities in project planning, management and evaluation in order to achieve successful implementation of the project and usage of funding
- 1.3 To strengthen human resources and to be able to apply research skills to everyday work in the students' respective countries

2. Methodology

Research projects were designed by faculty members and since they were only for a short period of time, they usually formed a section of the overall programme conducted by lecturers at the institute.

The students were taught research methodology, literature search, construction and design of research proposals and effective communication skills to fully prepare them for the successful completion of their respective projects. Programme support services, such as materials, assistance and guidelines for the successful completion of the overall project, were provided.



Photo: SEAMEO TROPMED/ Malaysia

Vectrol control field trip of the DAP&E Students in 2010

3. Project Output

The total output was 14 diploma theses. An example is provided here for reference:

Anti-Plasmodia Activity and Cytotoxicity of *Ocimum Basilicum* (Selasih) Extract in Vitro.

Student: Ms. Om Sovandara

Department: Haematology Unit

Country of Origin: National Institute of Public Health, Phnom Penh, Cambodia

Medicinal plants from tropical regions are considered to have many inherent properties for the treatment of a wide variety of ailments. *Ocimum basilicum* is from the Lamiaceae family (mint family) and is one of more than 60 *Ocimum* species used for the treatment of fever in traditional folk medicine, a form of healing practice and health preservation known to a limited segment of the population in a particular culture, especially in Africa and Asia.

Properties from the Lamiaceae family are often used as flavouring in various food products (Sacchetti et al., 2004, Jirovetz et al., 2003). The common name for *O. basilicum* is basil or sweet basil. *O. basilicum* L. is an important herbaceous plant species, which contains aromatic essential oils: eugenol; methyl eugenol; and caryophyllin (Anon 1988). Since this species has properties that can be used in the treatment of fever, it was selected for in vitro screening of malaria parasites to determine the plant's potential as an antiplasmodial activity.

The malaria parasite, *P. falciparum*, continues to develop resistance to common anti-malarial drugs. This is one of the greatest challenges facing malaria control today. Therefore, there is an urgent need to conduct a screening of medicinal plants available to assess their potential antiplasmodial activity. The aim of the present study was to determine the antiplasmodial activity of *O. basilicum* extract and the cytotoxicity activity of the extracts in vitro for their selectivity for further study.

Objectives:

1. To determine the antiplasmodia activity of *O. basilicum* extract in vitro using SYBR Green assay
2. To determine the cytotoxicity activity of *O. basilicum* extract in vitro using MTT assay
3. To determine the Selectivity Index of the extract

Methodology:

The antiplasmodial activity of *O. basilicum* extract in vitro was carried out using SYBR Green assay (Bacon et al., 2007). Briefly, the malaria parasites were cultured according to the standard procedure of Trager and Jensen, 1996. When the parasitemia of the culture was high, they were quantified and the parasitemia was adjusted to 0.5 per cent. They were then exposed to a series of extract concentrations starting from 16-to-0.30 µg/ml (final concentration).

The exposure lasted for 72 hours and the end point was measured by the SYBR Green assay (Bacon et al., 2007). The cytotoxicity assay was performed using the MTT assay (Mossman, 1983). The selectivity index was calculated at the ratio of IC₅₀ of cytotoxicity assay: to IC₅₀ of the biological activity, that is the SYBR green assay.

Results:

The data was analyzed by HN-LONLIN (Harald et al., 2002). Briefly, the OD values were plotted in a pre-programmed curve-fitting spreadsheet called HN-NonLin. The software performed non-linear regression analysis with a polynomial model. Raw data from both types of drug sensitivity assay were plotted in a 96-well plate format, and the twofold drug concentrations used in the assays were entered manually.

The inhibitory concentration and does-response curves for individual isolates or strains were obtained directly. The IC₅₀ value of *O. basilicum* against *P. falciparum* K1 and D10 were 16 µg/ml and 0.25 µg/ml respectively. The MTT assay showed that *O. basilicum* did not inhibit the growth of the MDBK cell in vitro. The SI calculated was 0.25µg/ml. This showed that the *O. basilicum* extract has good to moderate anti Plasmodia activity in vitro. The *O. basilicum* has IC₅₀ 0.25 µg/ml, according to the malaria work flow it provides a good extract for antiplasmodial activity (Fidock et al., 2004). The selectivity index value was more than 10 for extracts, therefore it did not exhibit a harmful effect or toxicity to the cells. The data revealed the need to study the plant extracts more intensively.

Conclusion:

The *O. basilicum* extract has good antiplasmodial activity in vitro with an IC₅₀ value of 16 µg/ml and 0.25 µg/ml to *P. falciparum* K1 and D10 respectively.

III. Significant Impacts

The Southeast Asia region is home to some of the most significant tropical diseases on the planet today. The research project has played a major role in capacity building of human resources in laboratory and field techniques which can be applied in the region. The use of the evidence-based approach in solving problems has contributed in many ways to the control and management of diseases. The research project has further enhanced the development of skilled human resources in techniques and capabilities in project planning, management and evaluation for application in different countries.

The project has made an important contribution to strengthening the Institute as the regional centre for Microbiology, Parasitology and Entomology.

IV. Success Factors

1. The importance of the project to the country and region

This project has opened the door to establishing linkages between institutions and promoting research capacity strengthening in regional countries.

2. International R&D network in the region

The implementation of the project has created a closer working relationship between students and faculty members. It has also provided a wealth of opportunities for further collaborations internationally for research into life-threatening tropical diseases.



Photo: SEAMEO TROPAMED/Malaysia

DAP&E students in 2010





Photo: SEAMEO TROPMED/ Philippines



2.4 Training Partnership with the National Institute of Public Health, Japan



By the SEAMEO TROPMED Regional Centre for Public Health (SEAMEO TROPMED/Philippines), Philippines

www.upcph.info

Established in 1967, SEAMEO TROPMED Philippines, which is based at the College of Public Health at the University of the Philippines in Manila, conducts research and training in the fields of public health, rural medicine, hospital administration, environmental and occupational health, and health policy and management.

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2.4 Training Partnership with the National Institute of Public Health, Japan

I. Abstract

SEAMEO-TROPED Philippines, the SEAMEO-TROPED Regional Centre for Public Health, Hospital Administration, Environmental and Occupational Health, based in the College of Public Health, at the University of the Philippines, Manila, has enjoyed for the last six years an ongoing partnership with the National Institute of Public Health in Japan to provide training for the Master of Public Health (MPH) qualification.

Graduate students enrolled in the National Institute of Public Health (NIPH) Japan MPH Programme come to CPH-SEAMEO TROPED Philippines for two weeks of field/community survey training and another two weeks of lectures on the control of infectious diseases. They also embark on public health agency visits.

Every year, five-to-seven students attend the field training course and another five-to-seven students attend the infectious disease control course. All overseas students from different countries in the Asia-Pacific region and Oceania are supported by official fellowships: the JICA long-term fellowship; the WHO fellowship; or scholarships. Many course participants are medical doctors, or programme directors from ministries of health. Others are nurses and medical personnel from various medical schools in Japan.

All field survey participants go through a rigorous training programme, at the end of which they present their findings to a panel of faculty members for evaluation of their academic performance. At the end of these two courses, graduate students receive a certificate of training.

II. Project Description

The project involves graduate education/training/development of human resources in the field of public health and has two components:

1. The Field Training Course

The National Institute of Public Health, Japan, under the Ministry of Health, Labour and Welfare requires the field training course as part of the Master of Public Health degree programme. This is offered as part of the international health course, in cooperation with CPH, which houses SEAMEO TROPMED Philippines.

Students from special fields of public health organize a team to conduct a survey to find ways of solving problems in a practical field of public health.



4th CPH-NIPH Training Course Field Interview in Sta. Cruz, Laguna, the Philippines

The trainees learn all, or part of processes, through setting a goal and finding out problems and solutions while developing teamwork, facilitation skills and leadership. Some field survey projects conducted include:

- An assessment of human resource development focusing on training, motivation and the work environment in the Rural Health Units (RHUs), and the City Health Offices (CHOs) in the Philippines.
- An assessment of the effectiveness of training and training needs of midwives in two city health offices.

2. Infectious Disease Control Course

The objective of this course is to provide basic knowledge to both overseas and Japanese students on infectious diseases and control measures. The world of infectious diseases still continues to present a challenge to public health. The programme in the Philippines introduces

the more realistic and practical aspects of infectious disease control that is relevant to the students. This includes understanding infectious diseases and their epidemiology, principles and approaches to surveillance and various control measures, plus understanding health promotion and education in relation to infectious diseases. The course consists of classroom lectures and field visits to observe related medical and research facilities in operation.

III. Significant Impacts

Participants of the last six courses were graduate students of NIPH from Afghanistan, Cambodia, China, Ghana, Iraq, Jamaica, Japan, Lao PDR, Mongolia, Papua New Guinea, Philippines, Samoa, Solomon Islands, Tanzania, Vietnam, Zambia.

Once the students had completed the final report of their respective field surveys, this document was sent to agencies where an intensive survey was conducted. The agencies then used the results of the field survey to produce plans and interventions that focus on the findings of the respective studies.

The success of the programme was immeasurable as the graduates gained employment in senior positions in ministries of health across the Asia-Pacific region and further afield, as well as public health positions in other high profile institutions.

Their recruitment is a tribute to the rigorous practical and theoretical nature of the course that has equipped graduates with the skills to make a positive contribution to public health provision in their respective countries.

IV. Success Factors

Both parties, the NIPH Japan and SEAMEO TROPED Philippines-CPH, the organizations official title, were enthusiastic in providing the trainees with the competence they need in order to perform to their maximum effectiveness in public health practice. The coordination of the training programme starts a few months before the trainees are deployed to Manila. This is especially helpful in the development of the project proposal for the community survey. Faculty coordinators are assigned on both sides: from NIPH Japan; and from SEAMEO TROPED Philippines-CPH. This assures adequate guidance to trainees and good outcomes for their chosen projects.

The training also provides expert input from local public health practitioners where surveys are conducted. Support staff that help in translating local dialects during field interviews are especially helpful.

Expectations are clarified before the actual courses start, and trainees are evaluated for their work output. Other faculty members from the college/centre also interact with the participants and help enhance the trainees' perspectives this way. Intercultural activities and sightseeing are also held during these courses to make learning even more interesting.

IV. Lessons Learned and Potential for Project Expansion

Advance preparation for community surveys is crucially important for a successful outcome. This groundwork is necessary and helps to avoid errors and negative experiences, especially in the field. The training course programme is also evaluated periodically and adjustments made in the way the course is run. Focus on lecture content is also adjusted to suit the needs of the trainees, especially in the control and prevention of infectious diseases.

There is still room for the NIPH-CPH/SEAMEO TROPMED Philippines partnership to expand. We can also use it as a model for similar offerings to other Southeast Asian countries and others who may be interested in this type of training for their graduate students. It is also possible to add other specialties, such as environmental and occupational health as part of public health, and also hospital administration.



Photo: SEAMEO TROPMED/Philippines

Participants to the 6th International Health Field Training Course in 2010



Photo: SEAMEO TROPMED/ Thailand



2.5 Groundbreaking Research into the Treatment of Severe Malaria that Lead to Changes in the World Health Organization's Official Guidelines



By the SEAMEO TROPMED Regional Centre for Tropical Medicine (SEAMEO TROPMED/Thailand), Thailand

www.tm.mahidol.ac.th

Established in 1967, SEAMEO TROPMED/Thailand, which is based at the Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, offers training in endemic tropical diseases, parasitology, community and preventive medicine. It also conducts research into alternative control measures of diseases and the promotion of healthy lifestyles, including trials of new chemotherapeutic compounds and new vaccines. It also provides clinical care to patients suffering from tropical diseases.

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2.5 Groundbreaking Research into the Treatment of Severe Malaria that Lead to Changes in the World Health Organization's Official Guidelines

I. Abstract

Malaria remains a critical global health challenge in tropical countries worldwide, particularly in the Southeast Asian region. Severe malaria infection is a major cause of childhood mortality and a leading cause of paediatric hospital admissions in both sub-Saharan Africa and Asia. Consequently, the disease has been a major focus of intensive clinical research conducted at the SEAMEO TROPMED Regional Centre of Tropical Medicine (SEAMEO TROPMED/ Thailand), at Thailand's Mahidol University's Faculty of Tropical Medicine, since 1950.

Over the past decade, efforts to reduce malaria fatalities have focused on two large multi-centre clinical trials that compare parenteral treatment with either artesunate, or quinine treatments in patients with severe malaria. The first research study, conducted in four Southeast Asian countries, focused on adult test patients. The second study was conducted in nine African countries on children under 15 years old.

The two studies revealed that artesunate medical treatment substantially reduces both adult and child malaria infection mortality rates. This data, together with a meta-analysis of all trials comparing artesunate and quinine treatments, strongly suggests that parenteral artesunate should replace quinine as the treatment of choice for severe falciparum malaria infection worldwide.

II. Project Description

1. How does the project link to the needs of the region?

Severe malaria is a life-threatening disease. Patients suffer high fever, coma, acidosis (excessive acid in the blood), severe anaemia, renal failure and/or failure of other organs. Once the disease has passed this critical stage, the patient can die within 24 hours. Immediate medical intervention, with an injectable antimalarial drug, is essential to save the patient's life. For centuries, the drug of choice was quinine. In the early twentieth century, a group of Chinese scientists developed a new class of antimalarial drugs called artemisinins containing a more potent action against the malaria parasite *Plasmodium falciparum*.

This drug also kills the parasites at an earlier stage than quinine, preventing young ring forms developing into the much more dangerous advanced trophozoite and schizont stages. However, trials in the 1990s that compared quinine with an oil-based derivative of artemisinin called artemether for the treatment of severe malaria did not show any advantage of artemether in preventing death. It became clear this was because the oily substance was not absorbed well at the intramuscular injection point. This ineffectiveness was especially noticeable in very sick patients who needed the drug the most.

Subsequent trials were therefore performed with a water-soluble derivative of the drug called artesunate, which can be absorbed directly into the blood stream. This solution is better absorbed into the patient's circulation when given via intramuscular injection. Recent figures indicate that half of the world's population is at risk of malaria infection, with 109 malarious countries identified in four continents. This accounts for an estimated 200-300 million cases of malaria infection per year, which claims an average one million fatalities per year. An estimated 85-90 percent of global malaria cases were identified in Africa and Asia respectively.

2. How does the SEAMEO TROPMED/ Thailand address this urgent need?

SEAQUAMAT Study

The Faculty of Tropical Medicine and the Mahidol-Oxford Tropical Medicine Research Unit collectively coordinated a major trial in four Southeast Asian countries to compare artesunate with quinine in the treatment of severe malaria. The patients in this trial, with the acronym SEAQUAMAT, came from Bangladesh, India, Myanmar and Papua Indonesia, and were mainly young adults.

The data safety committee who monitored the trial stopped the study after 1,461 patients had been selected because the number of deaths was 35 per cent lower in patients treated with artesunate, compared to those treated with quinine. The study was published in the world's leading general medical journal *The Lancet* in 2005 and as a result of the trial, the WHO changed their guidelines regarding the treatment of severe malaria in adults to recommend the use of artesunate.

However, the results were not sufficient to modify the treatment of severe malaria in African children, who account for up to 90 per cent of all global malaria fatalities. It was argued that the disease has more rapid detrimental effects in children compared to adults, so the more effective antimalarial drug might not have as much time to exert its life-saving properties. Also, in comparison to Asia, Africa has less quinine resistance. An additional issue is that many children diagnosed with severe malaria in Africa also have an additional severe bacterial infection which an antimalarial drug is ineffective in treating.

SEQUAMAT study sites: Artesunate versus quinine for the treatment of severe falciparum malaria: A random trial in:

- Bangladesh: Chittagong;
- India: Rourkela;
- Myanmar: several sites;
- Papua Indonesia: Timika.



SEQUAMAT study sites

Photo: SEAMEO TROPMED/ Thailand

III. Significant Impacts

SEAQUMAT Study

The Faculty of Tropical Medicine and the Mahidol-Oxford Tropical Medicine Research Unit, in collaboration with a large group of investigators, also organized a large trial centered on 11 sites in nine African countries. This intensive research compared the effectiveness of artesunate to quinine in preventing death from severe malaria.

This open-label randomized trial, with the acronym AQUAMAT, took five years to complete and tested 5,425 children below the age of 15 infected with a confirmed diagnosis of severe malaria. Death occurred in 10.9 per cent of children given quinine treatment, compared to 8.5 per cent of children given artesunate – a 22.5 per cent reduction in mortality. Since there are an estimated 800,000 deaths from severe malaria in African children every year, a change of treatment from quinine to artesunate can potentially save hundreds of thousands of lives.

The trial showed that the higher survival rate was not at the expense of an increase in neurological sequelae in children treated with artesunate; severe neurological sequelae were observed in only between two to three per cent of children in both treatment groups. Adverse symptoms, such as convulsions or low blood sugar levels occurred less frequently in children treated with artesunate, compared to children treated with quinine. Overall, artesunate appeared to be greater tolerated in patients and with no serious adverse drug-related effects. The results were published in *The Lancet* on 13 November 2010.

Regarding emergency treatment administered to severely ill malaria patients admitted to clinics in Africa or Southeast Asia, in which injections could be given, six studies were recorded in which it was decided essentially on the toss of a coin, for each new patient, whether quinine or artesunate would be the main drug administered over the initial days of treatment.

Each of the studies revealed that there were fewer deaths in the section of patients who were allocated artesunate. The results of all six studies revealed that there were 488 deaths

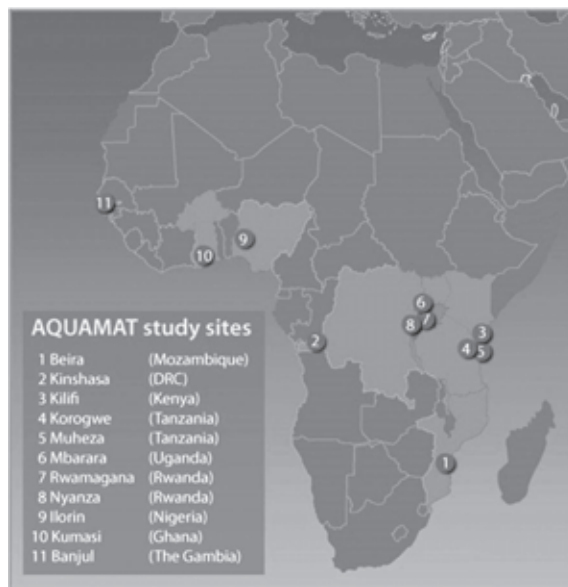


Photo: SEAMEO TROP/MED/ Thailand

(13.6 per cent) among the total of 3,596 patients administered quinine, but only 354 deaths (9.8 percent) among the total of 3,602 patients allocated artesunate. Also, among the group who survived the infection, their recovery from the disease was markedly faster with artesunate than with quinine. This difference (354 deaths compared to 488 deaths) is far too significant to be attributed to a play of chance. This indicates that clinics who switch from routinely using quinine to routinely using artesunate for severe malaria patients will safely prevent about 25 per cent of malaria deaths on average.



Photo: SEAMEO TROPMED/ Thailand

A press conference held at the Faculty of Tropical Medicine, Bangkok, in November 2010, to announce the results of the AQUAMAT study.

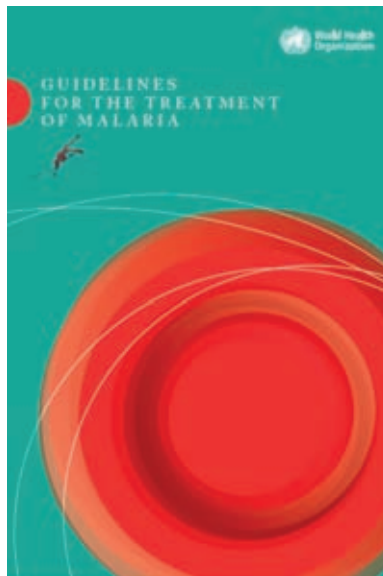
IV. Success Factors

The success of the initial research project in Southeast Asia was used as a model to conduct the same study in Africa. Through strong collaboration between interested parties and local hospitals, backed by a budget allocation and potential human recourse as the key factors, the project successfully achieved its objectives.

V. Lessons Learned and Potential for Project Expansion

At the time this report was published, there was a quality supply of artesunate for injection, available from Guilin Pharmaceuticals. This drug could be registered in all malaria endemic countries, and where applicable, be purchased with financial support from the Global Fund to Fight AIDS, Tuberculosis and Malaria.

It is expected that WHO guidelines for the treatment of severe malaria in children will be adapted according to the AQUAMAT results, yielded through the intensive research carried out by the Mahidol-Oxford collaboration and the SEAMEO TROPMED Regional Centre for Tropical Medicine, Faculty of Tropical Medicine, at Mahidol University, Bangkok, Thailand.



Report “Guidelines for the Treatment of Malaria”

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<http://www.rbm.who.int/worldmaliaday/>



Photo: SEAMEO BIOTROP



2.6 Establishment of the Joint Community Empowerment Centre for Poverty Alleviation and Biodiversity Conservation at the Karawang International Industrial City, Indonesia



**By the SEAMEO Regional Centre for Tropical Biology
(SEAMEO BIOTROP), Indonesia**

www.biotrop.org

Established in 1968, SEAMEO BIOTROP's main role is to raise the profile of tropical biology as a vital component in achieving economic and environmental development in the Southeast Asian region through relevant and appropriate research, training, and information exchange activities. SEAMEO BIOTROP assists SEAMEO Member Countries in developing the expertise to identify, prioritize, analyze and recommend solutions or alternative approaches to critical biological problems in the region, especially those related to the sustainable eco-development of tropical ecosystems.

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2.6 Establishment of the Joint Community Empowerment Centre for Poverty Alleviation and Biodiversity Conservation at the Karawang International Industrial City, Indonesia

I. Abstract

Many industrial parks have been established in Indonesia, especially in Java, to accommodate and enable manufacturers to operate more effectively. Thousands of hectares of agricultural land have been converted into industrial parks in order to achieve this aim. However, a big skills gap exists between workers involved in traditional agricultural pursuits and those involved in industry. Industrial activities that use high technology require a higher skills base and academic qualifications. These are attributes local villagers do not have.

This skills gap often triggers social tension between villagers and the industrial sector staff, causing instances of disruption to some industrial activities. Empowering the villagers by strengthening their skills in agriculture, introducing improved agricultural technology, product handling, and marketing will increase the welfare of the villagers. “One-Point Training” seems less effective for farmers compared to free observation and consultation time processes. Therefore, it was decided that a community empowerment centre was needed to achieve the overall aim of building the capacity skills of the agriculture sector workers.

The SEAMEO Regional Centre for Tropical Biology (SEAMEO BIOTROP)’s technical expertise has enabled it to play an important role in the establishment and operation of such a centre, based on biological resources utilization. SEAMEO BIOTROP, in collaboration with management of the Karawang International Industrial City (KIIC) and Bogor Agricultural University, have established a Community Empowerment Centre called the Desa Telaga Agro-Enviro Education Park. This is situated on the site of the KIIC Industrial Park.

The SEAMEO Regional Centre for Food and Nutrition (SEAMEO RECFON) and the SEAMEO Regional Open Learning Centre (SEAMEO SEAMOLEC) have since joined the community empowerment collaboration. The centre features effectively managed demonstration plots of

best agricultural practices, such as organic vegetable and rice production, fruit tree cultivation, fisheries and forest tree seedlings production and planting. The centre includes an office and training facility. The complex provides free training courses, consultation and extension programmes for villagers living near the industrial park, as well as employees of companies operating in the industrial park who are interested in establishing family businesses and life-skills preparation for retirement.

The centre has also become an experimental site to develop best agricultural practices suitable for the area and to select the best commodities to be introduced to the villagers. The commodities should be technically easy to produce; to market; and profitable for the villagers. The community empowerment centre is funded jointly by companies operating in the industrial park and is organised by the KIIC management. The participation of some companies that fund the centre has been marked by planting endangered and threatened tropical forest tree species native to Indonesia in a special location in the centre, called the “Garden of Friendships” as part of biodiversity conservation efforts.

The centre has now become an important community empowerment showcase and is visited by local, national, regional, and even international communities for training, observation, or comparative studies.

II. Project Description

KIIC is an industrial park located in the district of Karawang, West Java, Indonesia. The park occupies an area of 1100 Ha to accommodate 95 industries, mostly Japanese-owned companies, producing various products from natural colouring and electronics (SHARP and Panasonic) to motorcycles (Yamaha) and cars (Toyota and Daihatsu).

Economic and education gap differences between industrial park workers and villagers resident in five villages close to the park means only a small number of villagers work at the industrial site. These people mainly work in cleaning services or as gardeners and most educated workers come from outside of the villages. This situation has promoted jealousy among the villagers and social unrest regularly hampers activities at the industrial park, such as instances of villagers blocking access roads and intimidating workers. Most of the villagers are farmers and land bought and used for the industrial park was previously used for rice and crops production. Therefore, an agribusiness (cultivation; post harvest handling and processing; and product marketing) approach is expected to improve the welfare and alleviate

the poverty of the villagers. This system will eventually reduce the gap between the industrial workers and the villagers.

SEAMEO BIOTROP, in collaboration with the management of the KIIC Industrial Park and Bogor Agricultural University (IPB), have established a Community Empowerment Centre for

Photo: SEAMEO BIOTROP



The Community Empowerment Centre Desa Telaga Agro-Enviro Education Park at the KIIC Industrial Park, Karawang District-Indonesia, which is jointly run by SEAMEO BIOTROP, KIIC Management, IPB, SEAMEO RECFON and SEAMEO SEAMOLEC.

Poverty Alleviation and Biodiversity Conservation at the KIIC Industrial Park. Three ha of land at the site has been converted into agricultural demonstration plots to show best practices, using simple and affordable technologies for organic farming to produce various species of vegetable crops, the cultivation of fruit trees, catfish farming and oyster mushroom production. A nursery has also been created to produce seedlings of forest trees, fruit trees, and vegetable crops to be planted in the area at the community empowerment centre; at the industrial park; as well as to be distributed to those living around the industrial park. More recently, compost production facilities were integrated to process organic waste. This composts mainly of decaying leaves and cut grasses collected from the centre, as well as from the industrial park. This compost is used to support the production of organic farming. Therefore, an integrated farming system has been implemented at the Community Empowerment Centre.

Sharing responsibility among participating groups, the KIIC management is the coordinator for all companies operating at the KIIC Industrial Park. Currently, 24 out of 95 companies have joined the project, but the number of companies getting involved is increasing. KIIC management also organises the funding of the centre (for maintenance and to run programmes) and supervises the daily operations. The roles of SEAMEO BIOTROP and IPB are planning, monitoring and evaluating the yearly programmes, and providing experts and relevant applied technologies to support the programme. The daily operation of the centre is run by a team of skilled and highly qualified staff, assisted

by permanent and contracted workers. The field staff were selected and trained to master various knowledge and applied technologies to be implemented at the centre, as well as to be transferred to the community and visitors. To be able to perform to their maximum efficiency, field staff are closely supervised, and receive advice from SEAMEO BIOTROP and IPB specialists.

The new partners, namely, the SEAMEO Regional Centre for Food and Nutrition (SEAMEO RECFON), have conducted activities on evaluating the current status of the health and nutrition of villagers living around the industrial park. Meanwhile, the SEAMEO Regional Open Learning Centre (SEAMEO SEAMOLEC) has conducted a survey to observe the possibility of providing facilities for distance learning for villagers on various aspects of agriculture and other information.

Programme and activities conducted from July 2009 to June 2010 were categorized into a “Demonstration Plots Management” system (agriculture crops production, fishery, forestry/nursery, and compost production); Training Programmes; and Extension Programmes to target villages (Margakaya, Puseurjaya, Sirnabaya, Sukaluyu, and Wadas). A list of these activities was as follows.

1. Demonstration Plots Management

1.1 Agricultural Crops

Various crops, such as vegetables (water cress, cucumber, lobak, snake beans, spinach, etc.) and rice are grown at the centre as a routine practice. Vegetable blocks have been turned gradually into organic vegetable blocks, in which no inorganic fertilizers or pesticides are used. Organic fertilizer in the form of compost is supplied from the compost production facility.

1.2 Fishery

Catfish farming was originally a trial project undertaken by centre workers. To date, an estimated 10,050 baby catfish have been produced and sold to catfish farming groups at nearby villages at a subsidized price. To ensure the genetic quality of baby catfish, the centre bought a set of mother catfish from a certified source. The scope of the 2010 baby catfish production was increased significantly to support catfish production by catfish farming groups in the village, as well as for commercial purposes.

1.3 Forestry/Nursery

The number of seedlings produced in the nursery include: 1,493; 11,941; and 5,375 seedlings for fruit trees, forest trees, and ornamental plants, respectively. During the year 2009,

seedlings were planted within and outside the area of the centre. As many as 12,111 tree seedlings have been sown on notable commemorative days such as Environment Day, Earth Day, National Tree Planting Day, etc. Nursery staff have enjoyed outstanding success in the production of around 60 plant species, including rare forest tree species such as merbau (*Intsia bijuga*) from seeds collected from the planted trees at the centre, and biti (*Vitex cofassus*) vegetatively through cutting.



Photo: SEAMEO BIOTROP

Working on agricultural plots at the centre.

1.4 Compost Production

During the period January-December 2009, 20,940-kg, or 1,745-kg of compost per month was produced. Since compost is approximately only half the weight of the original fresh material, the amount of compost produced required almost 42,000-kg of waste. Almost all of the compost produced has been used to fertilize parks and gardens which have been gradually turned over to organic farming. In terms of quality, materials used for the production of the compost are mainly from natural waste (grasses and leaves), which has a relatively low nitrogen content. However, with additional cow dung, the nitrogen content and the quality of the compost has improved. To check the actual nutrient content of the compost, as one of the quality indicators, samples of compost are routinely analyzed at SEAMEO BIOTROP's soil laboratory.

2. Training Programmes

Various kinds of training courses have been conducted at the centre, as well as at the villages, delivered by instructors from SEAMEO BIOTROP, IPB, field staff, participating companies' personnel and the extension programme officer of the local government. Training courses that have been conducted include techniques



Photo: SEAMEO BIOTROP

Centre staff show best agricultural practices.

for forest tree planting, optimization of garden yield by planting medicinal plants, duck hatchery techniques, catfish farming, oyster mushroom production, and achievement motivation training. The number of participants in each training course ranges from 30-50 people, from villages around the industrial park, as well as employees of companies operating at the KIIC industrial park.

3. Extension Programmes

3.1 Catfish Farming at Five Villages

Catfish farming is still the main extension programme in the village due to a promising market and the simplicity to produce the fish. Financial support and facilities have been given to catfish farming groups at five villages (one group, per village consisting of five members per group). With intensive supervision and consultation, the groups are surviving and continuing to produce catfish. The result varies among groups, with average production ranging from 20-kg to 150-kg per batch. The centre recently donated 15 more sets of catfish farming facilities and financial support to new members. The funding came from a newly joined company, with an additional contribution from current participating companies.



An example of catfish farming production using knocked down ponds at Wadas village.

Various problems have been identified by groups in the village. For example, the price of the standard feed pellet is expensive, and it is difficult to ascertain the quality of baby catfish. The solution for future years is to incorporate more intensive baby catfish production techniques at the centre so that group and community members can buy these baby fish for further catfish rearing. Another alternative is to train the group more intensively to produce baby catfish. From previous training exercises, some group members have been able to produce their own baby catfish; however, support to get high quality mother catfish is needed. Innovation of more economical feed production techniques is also an urgent requirement.

3.2 Visitors and Activities

There were 79 visits by various groups of people, with a total number of 1,315 people who visited the site. They were mainly employees of companies operating at the KIIC industrial park (both personally or institutionally), community members, school pupils, students from national and international universities, and visitors from companies and organizations from outside KIIC (both national and international organization). The purpose of visits varied, such as training, consultation, comparative study, friendly visits, leisure, and also to gain an insight into activities conducted at the centre.

III. Significant Impacts

The Community Empowerment Centre, originally established as a training facility to introduce bio-resources-based income generating technology to the villagers and employees of the companies operating in the KIIC Industrial Park, has now expanded to become an important centre for benchmarking by other communities and companies. It is also an important learning and experimental site for students at various levels to observe and consult many aspects of agricultural practices. In the local villages, catfish farming, duck hatchery operations and cabbage farming are progressing and giving financial benefits to the target group. The multiplier effect of the extension programme in the village is that villagers not included in the target group have also copied and utilized the introduced technology, knowing the profits that they will get. The centre's field staff provides free consultation and supervision for villagers outside the target group.

IV. Success Factors

Success factors include: the commitment of the whole management of KIIC (from frontline staff to the board of directors); trust, ideas and financial support from the participating companies; careful selection of programmes and activities, and innovation by experts (SEAMEO Centres and IPB); and also the high personal qualifications (knowledge, technical experience) and communication skills of the field staff who connect with the villagers and experts. Above all, the willingness of the villagers to make progress and accept new technology is crucially important, although this could be developed in time by the extension/field staff who will communicate with them. The time scale of the project is practically unlimited, as long as the KIIC Industrial Park is still operational in the area.

V. Lessons Learned and Potential for Project Expansion

This long-term project, probably the first ever scheme of its kind in Indonesia, involves more than 20 companies and is technically supported by one university, and three SEAMEO Regional Centres, of various competences, and involves five villages. The willingness and spirit of all collaborators, who have different backgrounds and competences, to join the programme is interesting in itself. The same vision and mission in empowering the community may be the strong glue that binds the parties together. The activities have also built trust among participating companies and the funding they donated has been used correctly to benefit all parties.

Using the current funding scheme, the progress seems very slow because it needs a significant amount of money to generate a significant impact on five villages; with 2,000 households per village, and at least four family members per household (40,000 people). However, through time and looking at the multiplier effects, the target figure will somehow be reached. Exploring funding from national and international sources through wider collaborations may hasten the scale-up of the programme. Exchanging agricultural technologies with other relevant institutions in other countries, especially SEAMEO Member Countries, could also improve some programmes.



Photo: SEAMEO BIOTROP

Training Course on Oyster Mushroom conducted by SEAMEO BIOTROP



Photo: SEAMEO RECFON



2.7 Shaping Nutrition Leaders in Southeast Asia: The Southeast Asian Nutrition Leadership Programme (SEANLP)



By the SEAMEO Regional Centre for Food and Nutrition (SEAMEO RECFON), Indonesia

www.seameo-recfon.org

SEAMEO RECFON, formerly known as the SEAMEO TROPED Regional Centre for Community Nutrition, was established in 2010 to address the rapid development of nutrition science, including the need for comprehensive and multidisciplinary approaches in order to overcome current complex nutritional problems in Southeast Asia. The main activities include developing professionals through academic training, providing technical assistance, conducting research and development, information services, and providing access for decision makers to up-to-date, accurate, and consistent data.

Email: information@seameo-recfon.org



2.7 Shaping Nutrition Leaders in Southeast Asia: The Southeast Asian Nutrition Leadership Programme (SEANLP)

I. Abstract

The Southeast Asian Nutrition Leadership Programme (SEANLP) aims to empower nutritionists at the post-graduate level by providing competencies in effective leadership, team building and communication skills. The SEANLP also aims to provide a forum of networking for nutritionists in the region. From 2002-2009, seven SEANLPs were held, yielding 168 alumni from 11 countries. The SEANLP programme has been recognized as an important and integral part of the worldwide effort in capacity development in nutrition and has been used as a model for capacity building in different countries and regions. There is a need to energize the SEANLP alumni towards greater interaction and collaborations in their activities in nutrition, including continuous training, coaching and mentoring.

II. Project Description

Malnutrition problems remain high in the Southeast Asia region which has a profound impact on population health and productivity. It is internationally accepted that six out of eight Millennium Development Goals will not be reached unless malnutrition is tackled.

Current science and technology developments create greater understanding and wider opportunities to prevent and tackle malnutrition problems. It is too narrow for nutritionists if they rely only on their nutrition knowledge and skill to face the ongoing nutritional challenges. Leadership skills will help nutritionists to identify their own capacities and capabilities and help them to aspire to be the best in their role in nutrition challenges.

The SEANLP programme objectives are to empower nutritionists with post-graduate level capacities, for those working in government bodies, research institutes, and academia by



Togetherness moment at the Closing Ceremony of the 7th SEANLP (2009)

providing competencies in effective leadership, team building and communication skills. The SEANLP will also provide a forum of networking for nutritionists in the region.

The programme is comprised of five intensive days working at individual and group levels, directed towards developing skills in leadership, communication, team building and networking. The activities of the programme are arranged in a such a way that participants will gain working experience in different leadership styles and will learn to prioritize tasks within given time limits.

III. Significant Impacts

The SEANLP programme has been recognized as an important and integral part of the worldwide effort in capacity development in nutrition and has been used as a model for capacity building in different countries and regions, such as in Iran. It provides a good platform for building and enhancing the capacity of middle-management level nutritionists towards attaining better health for all.

SEAMEO Regional Centre for Food and Nutrition (SEAMEO RECFON) in Indonesia has been conducting the Southeast Asian Nutrition Leadership Programme (SEANLP) since 2002 annually. The first SEANLP was held in October 2002, with 28 participants from six countries. Up to 2009, seven SEANLPs had been held, yielding 168 alumni from 11 countries.

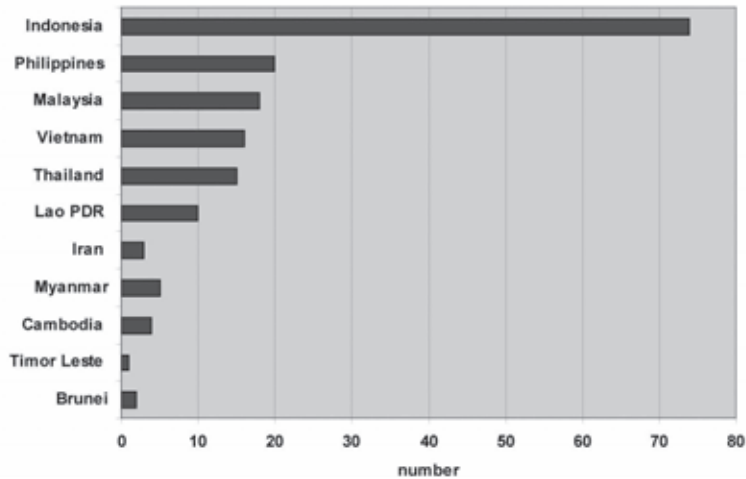


Figure 1: Country of origin of the SEANLP alumni.

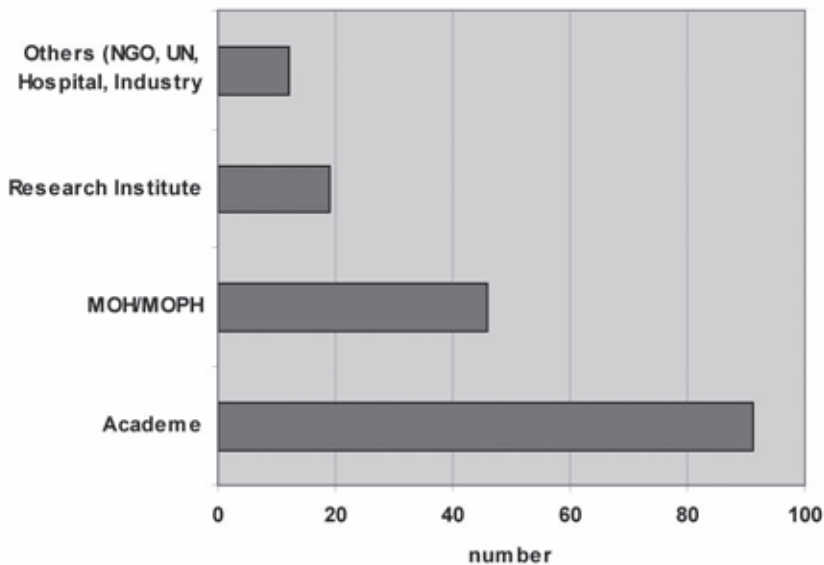


Figure 2: Institution of origin of the SEANLP alumni.

IV. Success Factors

Since its inception, the SEANLP has been affiliated to the European Nutrition Leadership Programme (ENLP), and each year an ENLP faculty member shares his/her experiences with the participants of the SEA-NLP. In addition to the SEANLP, the ENLP also supports the African Nutrition Leadership Programme (ANLP).

The SEANLP has also received support from various institutions in various forms which is essential for its sustainability. Such institutions include UNICEF, ILSI Southeast Asia, CA-SNA, Sight and Life, the Nestle Foundation and some industries. There are also prominent individuals with high dedication towards SEANLP, namely Professor JGAJ Hautvast from the Netherlands, Professor Corazon Barba from the Philippines and Professor Khor Geok Lin from Malaysia, as well as members of the ENLPAA (ENLP Alumni Association).

V. Lessons Learned and Potential for Project Expansion

The future challenges are to recruit participants from more diverse institutions and nutrition-related backgrounds to enrich cross experiences among participants. There is a need to energize the SEANLP alumni towards greater interaction and collaboration in their activities in nutrition, including continuous training, coaching and mentoring. Such attempts have been addressed by the ENLP/SEANLP/ANLP Joint Leadership Training held in Bangkok, on 4 October 2009. The 40 participants were graduates of 10 worldwide Nutrition Leadership Programmes; of which four SEANLP alumni joined.



Photo: SEAMEO RECFON

Ice breaker to open the session of the 7th SEANLP (2009)





3. Culture



Photo: SEAMEO SPAFA



3.1 Community Outreach Programme in Phrae, Thailand



By the SEAMEO Regional Centre for Archaeology and Fine Arts (SEAMEO SPAFA), Thailand

www.seameo-spafa.org

Established in 1978, SEAMEO SPAFA promotes awareness, professional competence and the conservation of cultural heritage across Southeast Asia. The centre specializes in the fields of archaeology, fine arts, performing arts and cultural studies, and conducts research, training, consultation services and information dissemination. SEAMEO SPAFA aims to advance mutual knowledge and the understanding of cultural/ethnic diversity among SEAMEO Member Countries.

Email: spafa@seameo-spafa.org



3.1 Community Outreach Programme in Phrae, Thailand

I. Abstract

For several years, the SEAMEO Regional Centre for Archaeology and Fine Arts (SEAMEO SPAFA) has been working with a group of people to raise awareness of the rich natural and cultural heritage of the northern province of Phrae, Thailand. Local efforts, coupled by partnerships with government agencies and private institutions, have gradually spread the message that heritage is best taken care of by the very people to whom the heritage is bequeathed. At the same time, local participation is made more effective because a sense of ownership, through dialogue and engagement, is firmly established right from the very start.

Outlined here is how SEAMEO SPAFA lent its support to activities local people initiated themselves, such as a book house for children, city tours, architectural preservation programmes, and community archaeology projects.

The over-riding theme is that “development programmes” have to be initiated by the community. In doing so, ownership of such programmes is more entrenched in the consciousness of the target beneficiaries, increasing the likelihood of the sustainability of such efforts.

II. Project Description

Phrae is a small province in northern Thailand which was established in the 11th Century A.D. Its capital is the town of Phrae, a walled city whose townscape reflects the traditional archaeology of the era, with the City Shrine in the middle of the city. The Phrae City Wall, about two kilometres in circumference, forms an important part of the life of traditional communities. They believe that the city wall is a sacred living entity. Among the nine temples located within the city wall area, three are listed monuments, and they are still used and

supported by their traditional communities.

Many heritage places relating to the former traditional rulers of Phrae have become present-day tourist attractions, such as the Khum Chao Luang Museum (the former residence of the last ruler) and the Wongburi House, a residence built by the first wife of Chao Luang, created in the European “gingerbread style” mixed with traditional architecture that now functions as a museum. There are a number of other historic houses still standing in Phrae, such as an estimated seventy to eighty unique wooden houses of architectural significance.

In terms of intangible heritage, some communities within the city wall still practice their traditional crafts such as the silversmiths. One of the traditional crafts of Phrae is the art of Mohom or indigo-dyed clothes.

However, as time has passed, Phrae is now encroached by modernism. Since it is not a famous tourism destination, the development in Phrae is going quite slowly and does not drastically impact the heritage. However, the effect of change is continuous; old houses are being demolished almost every day while young people are leaving town to find job opportunities elsewhere.

To address the need for more sensitive treatment of Phrae’s heritage, a volunteer group known in Thai as Luk Lan Muang Phrae¹ (LLMP), was organized in 2003. LLMP is composed of active members of the traditional community from all walks of life, including students, monks, and elders. At the time of its inception, the group was one of the very few community groups working on heritage preservation in Thailand.

The collaboration of LLMP and SPAFA can be divided into three stages as follows:

1. 1st Stage: Pilot Project (2004-2005)

While other known community-based heritage conservation efforts in Thailand at that period stemmed from the advice and leadership of people outside the community, the case of Phrae is an exception. SEAMEO SPAFA² and ICCROM³, under the Living Heritage Sites Programme⁴,

1 The term literally means “children and grandchildren of Phrae”.

2 Southeast Asian Ministers of Education Organization Regional Centre for Archaeology and Fine Arts.

3 International Centre for the Study of the Preservation and Restoration of Cultural Properties, Italy.

4 The programme aimed at five Mekong countries in Mainland Southeast Asia. See Section IV.

chose to work with LLMP on the programme's pilot project in 2004-2005. The pilot project was the first to take place among three projects of SPAFA-ICCROM's Living Heritage Sites Programme in mainland Southeast Asia from 2004-2009. It aimed to engage the traditional community in understanding their heritage and traditional conservation processes and to further develop methods for continuous care through a participatory approach. It also attempted to promote active collaboration between the traditional community and the heritage authority. Conservation architects from the Bangkok Office of the Fine Arts Department (FAD) formed part of the project team to work with LLMP and SEAMEO SPAFA.

It should be noted that this initial project did not address a specific site or monument, but rather focused on areas of the town where there seemed to be strong community members who were interested in preserving their traditional culture. Forums, dialogues, and cultural mapping were initiated in the early stages of LLMP's work. Another interesting aspect of LLMP's approach is its focus on the intangible aspect of heritage, not the physical heritage, because the awareness level among the public was still rather low.

The project ended with an international workshop on "Empowering Community" organized by SEAMEO SPAFA and ICCROM. This gathered a number of professionals working in the field of community engagement in conservation to study examples in Phrae. This workshop put an emphasis on the role of LLMP as a local driving force in heritage conservation while LLMP was also working with other partners on the subject.

The accomplishment at this stage is the acceptance from local government and local people that LLMP is an important steering factor at the provincial and community levels in terms of heritage preservation. A marked increased interest in heritage among the Phrae local government units and the public was noted. This was judged by the number of projects relevant to heritage conservation implemented in following years.

2. 2nd Stage: Awareness Raising Activities (2006-2007)

Following the initial project, LLMP modified its structure in 2006 to adapt to the changing environment. The group transformed into a network which connects like-minded people together, while still allowing members to pursue activities of their own interest. This stage saw the development of various awareness raising activities accomplished by LLMP with continuous support from SPAFA and local government units. The Local Architectural Heritage Preservation Club, part of the LLMP Network, was founded during this period.

2.1 Book House

In September 2006, SEAMEO SPAFA and representatives of the Bangkok FAD Office started to work with Ms. Sunantana Sanprasert, one of the founding members of the LLMP, on the Book House Project at the Hua Kuang Community, located in the city wall area.

The Book House Project was founded as an awareness-raising programme on heritage preservation for local school children. This was done in collaboration with members of LLMP, the Hua Kuang Municipality School, the Hua Kuang Community Committee, as well as with members of the village and other relevant organizations, such as the Municipality and the Provincial Cultural Office.

Activities in the Book House are supported by SEAMEO SPAFA under the project called “Community-based Awareness Raising Programme for Children on Local Heritage Preservation”.

Part of the Book House’s initiatives is to inspire children to learn more about their cultural and natural heritage including historic sites, archaeological sites, museums, temples, and natural sites. Children are also encouraged to know more about traditional practices, such as indigo dyeing, recycling, gardening, music, games and story-telling, through hands-on learning from local experts. The project has been operational for over two years now and has engaged about 70-80 children, with about 20 regular members.

2.2 Bicycle Tour and Cultural Exhibitions

In 2007, LLMP received funding from the Municipality to organize a series of monthly awareness-raising activities. The project is known as Poh Ban Ew Muang, a phrase from the northern dialect which means: “let’s see and tour our city”.

The bicycle tour around the city was held monthly. Those who joined the tour witnessed the rich history of Phrae as seen in different heritage buildings, old houses, and temples. Elders and wisdom leaders explained the significance and story of each place. The tours were always followed by Kad Laeng or an organized evening food market, which was a kind of local food revival project. This project has now finished, but local government units took over the idea and have organized similar tours for press and media people to showcase



Photo: SEAMEO SPAFA

Bicycle tour in Phrae

the heritage of the city. At present, bicycles are provided free of charge for tourists while a map of old Phrae is being made by LLMP and sponsored by the PAO.

The heritage tour took place, usually in conjunction with a cultural exhibition, at the monthly walking street fair, which was funded by the PAO. The cultural exhibition would show films and various exhibits related to local heritage and the preservation of the old quarter of Phrae. With assistance from SPAFA and FAD, the Local Architectural Heritage Preservation Club produced a map of old houses and historic buildings in the city wall area, which was shown at the exhibition.

3. 3rd Stage: Research and Conservation (2008-Present)

The present stage sees a number of research and conservation activities which are collaborative efforts between SPAFA and LLMP, along with local partners and communities that can lead to an actual site conservation and management.

3.1 Architectural Preservation

Phrae's unique wooden architectural heritage, which dates back over 100 years, is vanishing quickly as a result of urbanization. The Local Architectural Heritage Preservation Club has worked with support from SEAMEO SPAFA on a project called Tung Jai Ban Kao or Old House Conservation Award, which rewards house owners who take good care of their properties with a certificate and a banner. The banner can be hung outside these exemplary houses. An old house documentation project took place at the same time.

In the second half of 2009, SEAMEO SPAFA received a grant from the US Embassy in Thailand entitled the "US Ambassadors Fund for Cultural Preservation 2009" to support LLMP's effort in conducting a community-based architectural heritage preservation project in the old quarter of the town.

This project conducts architectural and historical research on traditional wooden architecture and techniques, which aims to document, through computerized drawings, the structures' styles, materials, techniques, and history. Activities to raise public awareness on the conservation of traditional architecture are regularly conducted as well.



The house owner receives an award of Old House Conservation Award by SEAMEO SPAFA

At the end of the project in September 2010, a book, in both Thai and English, on the traditional architecture of Phrae was published, together with a map of old houses. It is intended to create and maintain a network of traditional homeowners, acknowledged by local government units. This initiative, backed by a large scale conservation project hosted by the Phrae Provincial Administration and the Municipality, will focus on the adaptive reuse of old houses.

3.2 Community Archaeology Project

The prehistoric site in the village of Natong was discovered by the local community many years ago. In 2008, a formal survey of the site revealed that the burial site is dated between 2,000 to 4,000 years old. The Community Archaeology Project at Ban Natong commenced in January 2009 by the local community, in collaboration with SEAMEO SPAFA, LLMP, FAD, and Silpakorn University.

The excavation garnered participation from students enrolled at the Provincial Office of Non-formal Education. Villagers and students from Natong Village also took part in the excavation. The site received a lot of interest from the local public and the excavation was featured on local cable programmes, newspapers, radio, and a national TV programme.

At the end of the excavation, SPAFA submitted parts of a skeleton to be dated in the United States which revealed the site dated back to at least 4,500 years ago.

Eventually, the community decided to set up a small exhibition space in the village temple to keep the artefacts and the 4,500-year-old male skeleton that was found during the excavation. The exhibit has since been moved to an old school building near the site. The museum serves as a learning centre for villagers as well as the local public. Since the establishment of the museum, the village has received a large number of visitors who were interested to learn more about the past of Phrae. A long-term plan for heritage management and tourism at Ban Natong has also been drafted.

In 2010, following a request from the village committee, SEAMEO SPAFA and FAD have continued their collective training on heritage management for villagers as well as assisting them to find funding to set up a permanent museum. The Phrae Provincial Administration Organization has supported a new museum, while the villagers have acted as heritage

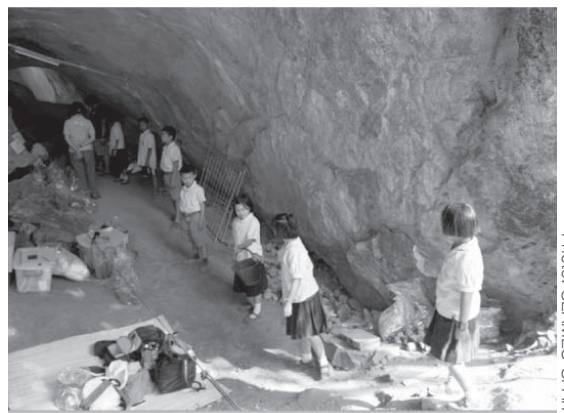


Photo: SEAMEO SPAFA

Local school children participates in the excavation at Ban Natong Prehistoric Site

custodians. The school compound was turned into a learning centre on matters such as heritage management, cultural and eco-tourism. Training activities on related subjects were organized on site for villagers and interested individuals.

SEAMEO SPAFA has continued to work with the Ban Natong community and local partners in order to assist them to establish and manage the museum and the learning centre.

III. Significant Impacts

As a SEAMEO SPAFA-supported initiative, the community outreach programme shows how other organizations can work with communities rather than for communities. This approach, if done correctly and sincerely, can help minimize concerns over sustainability, community acceptance, and local ownership.

The involvement of SEAMEO SPAFA in this initiative has been continuous rather than a one-off intervention programme. The partnership with LLMP was developed and has been sustained throughout the years and SEAMEO SPAFA has been sensitive to the needs of the community and has provided support according to what initiatives community leaders feel are the most important and relevant.

The approach that LLMP, along with SEAMEO SPAFA, believes in is to reawaken a sense of ownership and confidence among traditional communities so that they take responsibility to take care of their own heritage.

While the impact of the project is directly local, or at least the direct beneficiaries are the people of Phrae, the successful implementation of the partnership with the LLMP and other agencies can be a useful guide, if not inspiration, for other local, national, or regional initiatives.

Two books are to be published as an outcome of this project: one on working with children in heritage preservation, using the examples of the Book House project; and another on architectural heritage preservation. The books have been disseminated in the region to be used as guidelines for working with local communities in heritage conservation.

Besides, an international workshop on “Conservation, Communication, and Community”, another collaboration between SEAMEO SPAFA, ICCROM, and LLMP was instigated in August 2010 in Phrae in which participants learned from the experiences of SPAFA and LLMP.

As over 100 applicants expressed an interest in joining the course, this interest clearly shows how the case study of Phrae has inspired and interested professionals working in heritage conservation in Southeast Asia and beyond. Therefore, SEAMEO SPAFA has decided to organize another workshop on the same topic in Phrae to answer the needs of the region.

It is expected that the collaborative efforts of SEAMEO SPAFA and LLMP will be ongoing, while SEAMEO SPAFA is delighted to share experiences with other communities and professionals, both local and regional.

IV. Success Factors

The aim of LLMP is for Phrae to become a living heritage town where the traditional community enjoys and cherishes their tangible and intangible heritage. LLMP aims to instigate sensible and responsible heritage conservation, management and tourism, though it should be noted that none of the activities were initiated to promote tourism. The purpose is not to “freeze the city in time”, but to preserve valuable heritage through an approach based on traditional wisdom and the full awareness of the traditional community. The ultimate goal of LLMP is to be able to forge a sense of heritage ownership among the traditional community and to propose recommendations which can be included in national agendas regarding community participation in heritage conservation.

SEAMEO SPAFA’s role in the work of LLMP is to support the network and its work in the community. The collaboration stems from SEAMEO SPAFA and LLMP’s shared approach of community inclusion and participation in heritage management. It has to be noted as well that SEAMEO SPAFA collaborates with those who have a passion for their heritage and identity, rather than acting as experts and instructing people what to do. The very fact that SPAFA came on board after LLMP had established itself and while the founding members were deep into their work to raise awareness about the community’s heritage is a tribute to LLMP’s drive and determination to lead local heritage preservation efforts.

After seven years (2004-2010), the work of LLMP has now progressed towards historic conservation and archaeological research. However, dialogue and awareness-raising activities still count as the number one priority. One of the positive aspects of the working approach of LLMP is that the planning, directions, and decision-making all come from within the local community. The projects implemented aim first hand to benefit local people, not tourists and they are not for income-generating purposes.

The joint working approach of LLMP and SEAMEO SPAFA also taps into locally available resources which are to be used with respect, while recognizing local wisdom and people. This approach will undoubtedly promote a strong platform for long-term heritage conservation.

The collaboration with local government units is a way to recognize the roles of these offices in preserving cultural heritage, since they also have mandates to do so and most staff of the local government units are from the province and part of the larger Phrae community. Instead of duplicating work, LLMP thinks that it is possible to join forces with local government partners. As a result, most of the projects of LLMP are funded by local government on an ad-hoc basis.

At the same time, SEAMEO SPAFA utilised its network with national agencies and institutions, such as the Fine Arts Department and Silpakorn University, as well as international organizations such as ICCROM and the US Embassy in Thailand in order to make sure local efforts receive appropriate support.

With this on-going approach, LLMP has reawakened and reaffirmed a sense of ownership in local heritage in many traditional communities. It is hoped that each traditional community will be able to carry out work and make their own decisions, with support from the LLMP network and other partners such as SEAMEO SPAFA.

IV. Lessons Learned and Potential for Project Expansion

LLMP and SEAMEO SPAFA are fully aware that traditional communities need to have strong voices and an awakened sense of confidence which will allow them to deal with others as equal partners. The most important thing is that their voices need to be accounted for more than the needs of others, since traditional communities make the heritage come alive. All projects to be carried out should stem from the needs of the local communities, which will make the projects relevant, sustainable, and truly meaningful.

The most important aspect of working with the local communities is respect. There needs to be a mutual respect on both sides, which can be created through the process of dialogue. It is crucial to be respectful of local ideas, systems, and beliefs, and to always take into account the opinions of members of the local communities who are the custodians of the cultural heritage.

SEAMEO SPAFA is currently working with LLMP and other local partners on other heritage preservation projects including the restoration of the 118-year-old missionary house at the Phrae Christian hospital, and the establishment of the Natong Community Museum. In order to expand the impact of the Phrae project to other areas in region, SEAMEO SPAFA is exploring the possibility of working with partners in other SEAMEO Member Countries to carry out cultural heritage preservation projects with a focus on community involvement, which will provide a platform for an exchange of ideas and experiences between members of the Phrae communities and other communities in the region. It is expected that the Phrae model can be used as an example for other communities, which will enhance heritage preservation in the region.



Photo: SEAMEO SPAFA



Photo: SEAMEO CHAT



3.2 History Agenda 21



**By the SEAMEO Regional Centre for History and Tradition
(SEAMEO CHAT), Myanmar**

www.seameochat.org

Established in 2000, SEAMEO CHAT is a regional centre for the study and teaching of history and the traditions of Southeast Asia with the objective of developing greater regional identity and mobilizing resources to meet the challenges of the 21st Century. It aims to promote cooperation in the study and teaching of history and tradition among SEAMEO Member Countries through research, human resource development, education, networking and public awareness programmes.

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3.2 History Agenda 21

I. Abstract

The study of history has entered a new phase and is facing challenges in the 21st Century, necessitating a far-reaching reconsideration of the subject matter (the what?), the methodology (the how?), and the purpose (the why?) of history. Workshop History Agenda 21 involved contributions from Southeast Asian historians, researchers, teachers and education planners to find ways to let the present and the next generations of Southeast Asians know more about their neighbours and become more aware of the challenges they face in the age of globalization.

At present the awareness of a common regional history and traditional heritage is still in its infancy and confined to limited educational circles. The younger generation is still too preoccupied with their own personal interests in order to survive in the age of globalization to acquire knowledge about regional history and tradition on their own initiative. It is the responsibility of state education to provide knowledge of Southeast Asian history and tradition to future leaders and citizens of the region.

The workshop addressed some of the issues in historical studies, especially their relevance to contemporary problems; the role of the historian to forecast the direction of regional development; and the desirability of writing different kinds of history, particularly sub-regional history that transcends individual nations.

The centre strived to develop educational curricula, programmes and personnel to make history and tradition relevant to meeting the challenges of the contemporary situation.

II. Project Description

Workshop History Agenda 21 was the very first activity of SEAMEO Regional Centre for History and Tradition (SEAMEO CHAT) to consider collectively the question of studying history as Southeast Asia entered the 21st Century and faced increasing challenges. Prominent scholars from across Southeast Asia contributed to Workshop History Agenda 21, which was held from 14-15 December in 2000, to coincide with the official inauguration of the centre on 15th December 2000.

1. Objectives of the Workshop on History Agenda 21

- a. To consider new initiatives for study and research in Southeast Asian history; and
- b. To consider the needs to include regional history into secondary school curricula and the methods of implementation.

2. Workshop Structure and Contents

In this workshop, there were three Position Papers and eight papers were presented in five panels.

The Three Position Papers were as follows:

- a. “The Southeast Asian Historian and the Challenges of the 21st Century”, by M.R. Dr Rujaya Abhakorn;
- b. “History Our Survival and Geography Our Destiny”, by Shaharil Talib; and
- c. “On the Questions of History Seen from Within: The Case of Southeast Asia”, by Taufik Abdullah.

Eight papers presented in five panels were as follows:

- a. Panel I: “The Future of the Nation State and National History”
Milagros C Guerrero presented “Some Notes on the Future of the Nation State and National History”. Charnvit Kasetsiri’s presentation focused on “From Dynastic to ‘National History: A Siam/Thailand Case”.
- b. Panel II: “The New Global Economy and The Economic Historian”
This panel was presented by Djoko Suryo on “The Challenge to Southeast Asia in the 21st Century: Towards a Regional History from Within”.

c. Panel III: “Cultural History in the Multicultural Context”.

Aurora Roxas-Lim presented a paper on “Ancient Balanghal, a Story of Filipino Seamanship and Maritime Trade”. Ooi Keat Gin’s presentation was titled “Accommodating Indigenous History of Minority Ethnic Groups in Regional Historical Studies of Southeast Asia.”

d. Panel IV: “Morality and the Social Order”.

This panel was presented by Iik Arifin Mansurnoor on “Morality and the Social Order: The Malay World in Historical Perspective”. The second presentation on this panel was Myo Myint’s lecture on “Morality and the Social Order from the Buddhist Perspective”.

e. Panel V: “Information Technology and the Historical Method”.

This panel was presented by Chalong Soontavanich on “IT and the Study of History”.

The Curriculum Planners’ Discussions included the following topics:

- a. Topic 1: The Inclusion of Current Perspective in Southeast Asian History in Secondary School Curricula;
- b. Topic 2: Issues and Methodologies in the Development of National Curricula of Southeast Asian History for Secondary Education in all SEAMEO Member Countries; and
- c. Topic 3: The drawing up of a draft plan for the review of the curricula of Southeast Asian history, teaching staff, methods, texts and research at the secondary level of education in all SEAMEO Member Countries.

3. Participants

Workshop History Agenda 21 was attended by renowned historians and curriculum planners from Ministries of Education of the Southeast Asian region, including: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. While bringing scholars together to consider issues of the development of historical studies in the 21st century to facilitate the needs of the region, the centre also addressed the issue of developing some common perspectives on regional history in secondary schools in the context of creating a greater sense of regional consciousness.

4. Recommendations from the Curriculum Planners’ Discussions

For Topic 1: The Inclusion of Current Perspective in Southeast Asian History in Secondary School Curricula

- The curriculum planners considered the possibility of including the following components in history or social studies curricula:
 - **Traditions:** common citizens who made significant contributions to communities, arts and crafts, leisure and ways of life highlighting the well-knit societies of countries

in Southeast Asia in the past, as opposed to fractured society brought about by globalization;

- **Moral Values;**
 - **Political Developments:** including a balanced objective approach toward colonization that highlights the lessons that can be learned from the colonial experience;
 - **Globalization;** and
 - **Economy and Trade.**
- The SEA history curriculum should be geared toward preparing students and pupils for the future in the age of globalization while retaining the unique characteristics of each country.
 - Comparative historical studies of SEA countries may be included, such as the experience of colonization (with the exception of Thailand), its overwhelming adverse effects, and its few good effects.
 - The level or grade at which the current perspectives are to be introduced should be determined, taking into account the mental development of students and pupils, and the need to inculcate a spirit of regionalism since an early age. A gradual injection of simple to complex issues that will inspire thought should be the aim.

For Topic 2: Issues and Methodologies in the Development of National Curricula of Southeast Asian History for Secondary Education in all SEAMEO Member Countries

- The curriculum planners considered the following issues in the teaching and learning of history in SEAMEO Member Countries.
 - Relevance of the history curricula to current issues and concerns over the issues that students face;
 - Teacher training that produces history teachers proficient in the pedagogy and not just historians teaching history; and
 - Selection and grading of the content of the history curricula.
- The participants also discussed the essential skills that students need to acquire to be used as guidelines in the development of the history curricula, chronological knowledge, historical knowledge, analysis and interpretation, research skills, issue analysis and decision making skills.

For Topic 3: The drawing up of a draft plan for the review of the curricula of Southeast Asian history, teaching staff, methods, texts and research at the secondary level of education in all SEAMEO Member Countries.

- The curriculum planners recommended a draft plan for the review of the curricula of Southeast Asian history which was proposed to the Ministries/Departments of Education of SEAMEO Member Countries for approval. The draft plan included the following brief components.

Rationale

- To provide a regional perspective of Southeast Asian history;
- To promote a sense of Southeast Asian identity; and
- To prepare students for the challenges of the 21st century.

Objectives

- To identify and select concepts and topics to be incorporated into the curriculum review
- Activities/Steps in Reviewing Curricula
- Comparative study of existing history curricula in SEAMEO countries;
- Conduct a survey on perception of regionalism among students, teachers, administrators;
- Consultation of stakeholders; and
- Proposal and report writing.

Resources

- Historians, curriculum developers, practitioners, teacher trainers
- and examination specialists

Expected Outcomes

- To achieve a balance between national identity and regional identity

Outputs

- Instructional materials; and
- Website, multimedia teaching aids, etc.
- Workshop proceedings titled “History Agenda 21”

III. Significant Impacts

The workshop acted as a forum to address critical issues regarding the role and approach of Southeast Asian historians, history teachers, the history curriculum and methodology to make practitioners and the discipline more responsive to the needs of Southeast Asian students in this age of globalization, and at the same time contribute to efforts to promote regional identity and solidarity.

IV. Success Factors

The centre’s first workshop titled “Workshop History Agenda 21” was a major success and this can be attributed to three main factors: the objectives; the participants; and discussions and recommendations.

The objectives were to consider new initiatives for the study and research of Southeast Asian history; to consider the need to include regional history on the secondary school curricula and the methods of implementation. These effective objectives laid out the foundations of the study of Southeast Asian history and they also serve as a basis for the implementation of current and upcoming activities in not only research, but also teaching.

The workshop was attended by renowned historians as well as curriculum planners from the Ministry of Education of Southeast Asian countries who actively participated in discussions on studies of the development of a common perspective on regional history in secondary schools across the region. The participation of these historians and curriculum planners also contributed to the success of the workshop.

In addition to the strong and effective objectives and the participation of renowned scholars and curriculum planners, discourse and recommendations made at the meeting also contributed to the overall success of the event and the subsequent projects and activities the centre has undertaken.

The generous hospitality and excellent arrangements of the Ministry of Education, Union of Myanmar, and the SEAMEO Secretariat also jointly contributed to the success of the workshop.

V. Lessons Learned and Potential for Project Expansion

Historians are also involved by taking an active part in their communities. Making history relevant in this way should be a moral endeavour, not just an intellectual effort, because faced with the danger of losing the soul of the nation and the region in the face of threats and challenges brought about by globalization, history can serve as a means of preserving the national and regional soul.



Students of the Annual Training of Myanmar History project visit Nanpaya Temple in Bagan, Myanmar.

Photo: SEAMEO CHAT



Southeast Asian Ministers of Education Organization (SEAMEO)

www.seameo.org

The Southeast Asian Ministers of Education Organization (SEAMEO) is an intergovernmental organization established in 1965 among the governments of Southeast Asian countries to promote regional cooperation in education, science and culture.









The 11 Member Countries include Brunei Darussalam, Cambodia, Lao PDR, Indonesia, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste and Vietnam. The organization also embodies the seven Associate Member Countries of Australia, Canada, France, Germany, the Netherlands, New Zealand and Spain and the three Affiliate Members of the International Council for Open and Distance Education (ICDE), the University of Tsukuba, Japan, and the British Council.

As an organization that has continued to nurture and explore human capacity and potential, SEAMEO contributes to regional development and the improvement of individual lives by developing programmes and initiatives which contribute to the development of quality and equity in education, preventative health education, culture and tradition, information and communication technology, language education and development, poverty alleviation through agriculture and rural development, and natural resources and environmental management.



Over the past four decades, SEAMEO has established 19 regional centres that undertake training and research programmes in various fields of education, science, and culture. These centres play significant roles in the provision of training and human resources development, technical assistance and consultancy, forums for policy dialogue and regional cooperation, research and development, publication and information dissemination, as well as partnership and networking.

SEAMEO Regional Centres

SEAMEO Regional Centres for Education

-  **SEAMEO INNOTECH**
SEAMEO Regional Centre for Educational Innovation and Technology, Philippines
www.seameo-innotech.org
-  **SEAMEO QITEP in Language**
SEAMEO Regional Centre for Quality Improvement of Teachers and Education Personnel in Language, Indonesia
www.qiteplanguage.org
-  **SEAMEO QITEP in Mathematics**
SEAMEO Regional Centre for Quality Improvement of Teachers and Education Personnel in Mathematics, Indonesia
www.qitepinmath.org
-  **SEAMEO QITEP in Science**
SEAMEO Regional Centre for Quality Improvement of Teachers and Education Personnel in Science, Indonesia
www.qitepscience.org
-  **SEAMEO RECSAM**
SEAMEO Regional Centre for Education in Science and Mathematics, Malaysia
www.recsam.edu.my
-  **SEAMEO RELC**
SEAMEO Regional Language Centre, Singapore
www.relc.org.sg
-  **SEAMEO RETRAC**
SEAMEO Regional Training Centre, Vietnam
www.vnseameo.org
-  **SEAMEO RIHED**
SEAMEO Regional Centre for Higher Education and Development, Thailand
www.rihed.seameo.org
-  **SEAMEO SEAMOLEC**
SEAMEO Regional Open Learning Centre, Indonesia
www.seamolec.org
-  **SEAMEO VOCTECH**
SEAMEO Regional Centre for Vocational and Technical Education, Brunei Darussalam
www.voctech.org

SEAMEO Regional Centres for Culture

-  **SEAMEO CHAT**
SEAMEO Regional Centre for History and Tradition, Myanmar
www.seameochat.org
-  **SEAMEO SPAFA**
SEAMEO Regional Centre for Archaeology and Fine Arts, Thailand
www.seameo-spafa.org

SEAMEO Regional Centres for Science

-  **SEAMEO BIOTROP**
SEAMEO Regional Centre for Tropical Biology, Indonesia
www.biotrop.org
-  **SEAMEO RECFFON**
SEAMEO Regional Centre for Food and Nutrition, Indonesia
www.seameo-recffon.org
-  **SEAMEO SEARCA**
SEAMEO Regional Centre for Graduate Study and Research in Agriculture, Philippines
www.searca.org
-  **SEAMEO TROPMED Network**
SEAMEO Regional Tropical Medicine and Public Health Network, Thailand
www.seameotropmednetwork.org
-  **SEAMEO TROPMED/ Malaysia**
SEAMEO TROPMED Regional Centre for Microbiology, Parasitology and Entomology, Malaysia
www.imr.gov.my
-  **SEAMEO TROPMED/ Philippines**
SEAMEO TROPMED Regional Centre for Public Health, Philippines
www.upcph.info
-  **SEAMEO TROPMED/ Thailand**
SEAMEO TROPMED Regional Centre for General and Tropical Medicine, Thailand
www.tm.mahidol.ac.th

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