

**The Status of Environmental Education in the ASEAN Region:
Survey Results and Analysis**

Ko Nomura and Osamu Abe
Rikkyo University

ESDRC/Working Paper E-1
2008

WORKING PAPER
Series

E
S
D
R
C



ESD  R C

Education for Sustainable Development Research Center
Rikkyo University



Note: This paper was prepared by Dr Ko Nomura, Research Fellow of the Education for Sustainable Development Research Center (ESDRC), Rikkyo University. The views and opinions expressed in this paper do not necessarily reflect those of the host, organisers and participants of the ASEAN Environmental Education Action Plan 2008 – 2012 Implementation Workshop.

Working papers describe research in progress by the author(s) and are published to elicit comments and to further debate.

For more information, please contact Ko Nomura (konomura@rikkyo.ac.jp).

© Education for Sustainable Development Research Center, Rikkyo University, 2008

The Education for Sustainable Development Research Center (ESDRC) was founded based at Rikkyo University in March 2007, with the aim of helping to consolidate ESD (Education for Sustainable Development) in our society. It was chosen as part of the ‘Open Research Center’ Project of the Japanese Ministry of Education, Culture, Sports, Science and Technology in 2007, concerning ‘Developing Research and Educational Programs on ESD’.

Education for Sustainable Development Research Center, Rikkyo University
3-34-1 Nishi Ikebukuro, Toshima-ku
Tokyo 171-8501 Japan
TEL/FAX: + 81- 3-3985-2686
Email: esdrc@grp.rikkyo.ne.jp

CONTENTS

SUMMARY	4
ACKNOWLEDGEMENT and ACRONYMS	5
INTRODUCTION	6
PART 1: AEEAP 2008-2012 OUTCOMES	7
PART 2: PROGRESS IN THE FOUR TARGET AREAS	9
2.1 Target Area 1: Formal Sector	9
2.2 Target Area 2: Non-formal Sector	10
2.3 Target Area 3: Human Resource Capacity Building	13
2.4 Target Area 4: Networking, Collaboration and Communication	15
PART 3: IMPACT OF AEEAP & UNDESD	17
PART 4: RECOMMENDATIONS FOR ASEAN-WIDE COLLABORATION WITHIN THE NEXT TWO YEARS	18
CONCLUSION	19

SUMMARY

This paper is about the status of environmental education (EE) in Southeast Asia, particularly in terms of the progress in the implementation of the regional action plan: ASEAN EE Action Plan (AEEAP). The analysis in this paper is based on the questionnaire survey conducted before and during the ‘ASEAN Environmental Education Action Plan 2008-2012 Implementation Workshop’(15-17 July, 2008). The respondents were the representatives from the ten ASEAN member countries (AMCs), who were in charge of EE policies in each country.

PART 1 presents and analyses the survey results concerning the progress in the achievement of the twelve (expected) outcomes of the AEEAP. Notable results include that the progress in ‘monitoring, evaluation and reporting’ and ‘the use of Information and Communication Technology (ICT)’ is slow. Besides, few AMCs give future priority to ‘monitoring, evaluation and reporting’.

PART 2 examines the survey results concerning the progress in AEEAP’s four target areas. In the formal sector (Target Area 1), few countries are making efforts to include EE/education for sustainable development (ESD) in Quality Assurance systems (national standards). In the non-formal sector (Target Area 2), sustainable (green/eco) school concept and practice are widely promoted in many AMCs. In terms of human resource capacity building (Target Area 3), there are many countries which engage themselves in training sessions (or their preparations), although few of them conduct the needs assessment. Many AMCs are making efforts in Target Area 4 (Networking, Collaboration and Communication), while the effective use of ICT seems to be a challenge for many of them.

The impact of two international initiatives, AEEAP and the UN Decade of ESD (UNDESD) is surveyed and the results of which are presented in PART 3. In short, these two initiatives are regarded to have had positive impacts on the policy and the project levels in AMCs in such ways as raising awareness and motivating policy-makers and educators towards further cooperation in EE/ESD. However, the impact on the quantitative increase in the EE/ESD practices may be limited, as is evidence by only a few countries answering that there have been budget increases for these two initiatives.

PART 4 introduced recommendations made by the respondents for ASEAN-wide collaborations. They include the effective use of ICT and the introduction of funding mechanisms, region-wide awarding schemes, and a standing independent body for EE at the regional level.

In conclusion, the authors suggest four areas of international/regional cooperation to promote EE/ESD in the ASEAN region based on the survey results. First is to cope with ‘weak assessment/monitoring’ by supporting of research/facilitation in this regard. Second is to facilitate further efforts on ‘sustainable schools’ via information sharing and awarding at the regional level. Third is to support countries that especially lack resources for EE/ESD practices. Fourth is the use of ICT in a more effective manner, including the revitalisation of ASEAN EE Inventory Database.

ACKNOWLEDGEMENT

The information included in this paper could not have been collected without the kind cooperation from the questionnaire respondents and the host/organisers of the workshop, particularly the Department of Environmental Quality Promotion (Thailand) and the ASEAN Secretariat. Also, Robert Steele (Sustainability Asia) and Narumol Aphinives played important roles in coordinating the survey. The authors are grateful for their contribution and cooperation, although any errors in this volume remain the responsibility of the authors.

ACRONYMS

AMCs	ASEAN Member Countries
AEEAP	ASEAN Environmental Education Action Plan
AEEID	ASEAN Environmental Education Inventory Database
ASEAN	Association of South-East Asian Nations
DEQP	Department of Environmental Quality Promotion (Thailand)
EMB-DENR	Environmental Management Bureau, Department of Environment and Natural Resources (Philippines)
ESDRC	Education for Sustainable Development Research Center, Rikkyo University
EE	Environmental Education
EESD	Environmental Education for Sustainable Development
ESD	Education for Sustainable Development
ICT	Information and Communication Technology
QA	Quality Assurance
UNDESD	United Nations Decade of Education for Sustainable Development

INTRODUCTION

The analysis in this paper is based on the questionnaire survey conducted before and during the ‘ASEAN Environmental Education Action Plan 2008 – 2012 Implementation Workshop’, which was held 15-17 July, 2008 at Sirindhorn International Environmental Park, Phetchaburi Province, Thailand. The respondents were the representatives from the ten ASEAN member countries (AMCs: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam), who were at the helm of environmental education policies in each country and participated in the workshop¹.

ASEAN Environmental Education Action Plan (AEEAP) 2008 – 2012 succeeds the AEEAP 2000 – 2005, and aims to serve as the regional collaborative framework for the development and implementation of environmental education initiatives in ASEAN. It consists of *four target areas*: the formal sector; the non-formal sector; human resource capacity building; and networking, collaboration and communication. Each target area accompanies one or a few goals and several strategic actions/priorities. When AEEAP is successfully implemented, it expects to have *twelve outcomes*.

This paper has four components apart from its Introduction and Conclusion. First, the survey results of the progress made in terms of the twelve AEEAP *outcomes* are examined. Second, the results of the self-evaluation concerning the progress according to the *four target areas* are presented together with the current national EE development priorities. Third, the results concerning the impact of the AEEAP and UNDESD is reported. Fourth, the recommendations made by the AMC representatives for ASEAN-wide Collaboration on EE for SD within the next two years are presented.

Structure of This Paper

- (1) Progress in terms of the Twelve Outcomes (PART 1)
- (2) Progress in the Four Target Areas (PART 2)
- (3) Impact of AEEAP & UNDESD (PART 3)
- (4) Recommendations for ASEAN-Wide Collaboration (PART 4)

As is the case for most (open-ended) questionnaire surveys, collected information is often insufficient to understand the details. However, it is used in this paper in several places without additional complementing information as far as the authors regard it suggestive, considering the significance of the voices of EE policy makers in AMCs.

¹ In addition to conducting the survey, the ESDRC supported and participated in the workshop. For more information about the workshop, please see the website of the ESDRC, on which the workshop proceedings are to be uploaded.

PART 1: AEEAP 2008-2012 OUTCOMES

The respondents are asked to indicate the progress in achieving the twelve stated outcomes of the AEEAP 2008-2012, which are expected to follow if the plan is successfully implemented, on a 5-point scale (the bigger the figure is, the more progress was made). In addition, they are asked to indicate the country's priority in making future progress so as to achieve these outcomes.

The results are shown in Figure 1 (p.8). The phrases in the parentheses '()' are omitted from the questionnaire and those in '[]' show the original expressions in the AEEAP 2008-2012. The square dots indicate the average score of the responses according to the outcomes.

As only one year has passed since the plan was endorsed, it goes too far to expect significant achievement in these 12 outcomes. What matters is whether AMCs can produce these outcomes 5 years from now. That said, it is meaningful to understand the areas AMCs are currently struggling to make progress in order to consider plans for improvement and support, particularly at the regional level.

There are four points which AMCs seem to be struggling with (i.e. those in which the average is less than the 3).

First, the average of (xi) 'monitoring, evaluation and reporting' was only 2.5, which made it the lowest among the twelve outcomes. What is noteworthy here is that more than half of AMCs (six countries) marked a score of 2. Also, only three countries gave 'future priority' to this, while on average, 5.7 countries gave priority to these outcomes. This may be an indication for the need of support and encouragement in the field of 'monitoring, evaluation and reporting' in each country.

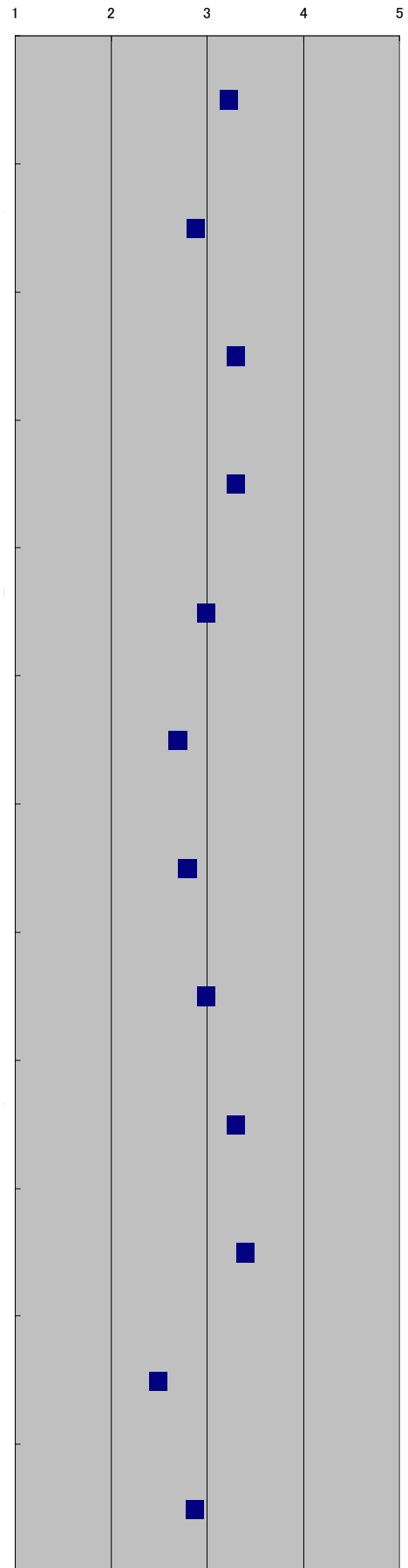
Second, the average of (vi) 'the civil society (in AMCs) engagement in EE' was only 2.7. Again, almost half of the AMCs marked 2 here. On the other hand, AMCs are rightly making efforts to improve the situation. Seven countries answered to prioritise this point in the future. In fact, there are various on-going efforts in terms of networking (please refer to PART 2, Section 2.4 of this paper).

Third, the average of (vii) 'the use of ICT' was also low: 2.8 points. It should be noted that the result was quite variable. While four countries marked 4, there are two countries marked 1. This may suggest that the use of technology for EE depends on the socio-economic conditions within each country.

Fourth, the average of the progress in '(ii) research' was 2.9 points. However, seven countries answered to prioritise this area in the future, which will hopefully bring about good outcomes in future evaluations.

Figure 1: Progress according to the 12 Expected Outcomes of AEEAP

- (i) Advancement in the infusion and integration of EE in the formal education sectors in each of the AMCs
- (ii) Increased innovative and diverse research related to EE and ESD (in AMCs) via strong involvement of (ASEAN) universities, research institutions and organisations.
- (iii) Schools as important models of sustainable environmental management for their respective communities.
- (iv) Increased private sector support and involvement in national and regional EE initiatives and programmes in realising overall sustainable development of the region.
- (v) EE practitioners and other stakeholders in ASEAN professionally enhanced through capacity building and leadership opportunities.
- (vi) Civil society (in AMCs) effectively engaged in the development of EE nationally.
- (vii) Effective and continuous regional exchange of knowledge, skills, experience, expertise and best practice via information and communication technology (ICT) platforms; and through the building and strengthening of national and regional networks.
- (viii) Increased capacity and opportunities for youth (from all AMCs) to take leadership roles in the sustainable development of their respective communities.
- (ix) Increased understanding of the importance of EE for achieving sustainable development by the country's policy - and decision-makers, and therefore stronger support of EE initiatives and programmes throughout the country [throughout the region at local/national and regional levels].
- (x) Increased networking and collaborative partnerships supporting and utilising EE for advancing sustainable development in the country [in the ASEAN region], between all sectors and at various levels.
- (xi) Effective monitoring, evaluation and reporting mechanisms in place for EE and ESD at the national level [in each AMC and at the regional level].
- (xii) Country [AEEAP 2008-2012] playing an effective role in the UN DESD Asia-Pacific strategy and other relevant regional and international initiatives.



PART 2: PROGRESS IN THE FOUR TARGET AREAS

This part reviews the result of the survey concerning ‘Baseline Progress Towards Target Area’s Strategic Actions’. Respondents were asked to describe the activities, programmes and projects that have been or are currently being implemented in relation to each of the Target Area’s Strategic Action Priorities. They are also asked to include Performance Indicators (with data) that they were using to track the effectiveness of activities towards achieving the Target Area Goals.

In addition, this part incorporates here the survey result concerning ‘Current National EE Development Priorities’². By doing so, this part shows the progress in the four target areas together with the areas that AMCs currently prioritise, which would help us expect the future achievement and needs of assistance in each target area.

2.1 Target Area 1: Formal Sector

Strategic Action/Priority 1

Establish a baseline assessment on the extent to which national curricula in the basic education system includes EE and ESD content.

There are five countries conducting a ‘baseline assessment’ on this topic. However, the quality/scale of the assessment in each country seem to vary. For example, Myanmar admitted that its assessment was rather ‘weak’, while Thailand conducted large-scale quantitative research in 2005³, which collected various data including the number of schools that integrated EE/ESD and the process they employed.

Strategic Action/Priority 2

Establish a baseline assessment on the extent to which teacher education programmes and in-service and pre-service training address EE/ESD theory and practice.

Five countries were engaged in the assessment on teacher education programmes. Like the assessment on curricula above, the scale/quality may vary. However, the authors had an impression that the assessment on teacher education appears to be only a little more advanced than that on curriculum⁴.

In fact, five countries answered that they prioritised teacher training when respondents were asked

² Respondents were asked to describe the current national EE development priorities in each country for the next 5 years in each of the four target areas.

³ Around 15,000 schools returned the questionnaire.

⁴ For example, in Laos, the government interviewed secondary school managers to conduct baseline survey of the teacher on EE at the national and provincial levels.

their ‘Current National EE Development Priorities’. This places teacher training the second among the prioritised topics related to formal education.

Strategic Action/Priority 3

Ensure that Quality Assurance (QA) systems (that is, national standards) require the inclusion of EE/ESD issues in the relevant disciplines.

Only a few countries have made efforts on this point. They include Thailand, which integrated the concept of EE/ESD in educational standards. Thailand evaluates the performance by the number of schools that meet the nationally standardised QA mark.

Although it is not ‘assessment’ (Strategic Action/ Priority 1) and QA, there are six countries that mentioned ‘curriculum’ as one of their ‘Current National EE Development Priorities’. This may show that the ‘assessment’ and ‘QA’ are not regarded as important even in the fields that AMCs prioritise (such as curriculum development). It is not clear if this is because of the lack of resources or awareness, but this suggests the need to encourage AMCs for further efforts on ‘assessment’ and ‘QA’, given their importance. Conducting research on the obstacles and possible assistance on this point may help improve the situation.

Strategic Action/Priority 4

Promote research on EE/ESD issues to ensure continuing development in these areas

Only a few countries have made progress on this point. Besides, only Myanmar clearly indicated this point as one of their ‘Current National EE Development Priorities’ (although Thailand mentioned their network with higher education institutes, which may be related to research on EE/ESD).

This may show the needs of external assistance on the EE/ESD research in the region.

2.2 Target Area 2: Non-formal Sector

Strategic Action/Priority 1:

Promote sustainable schools (for example, eco-schools/green schools) concept and practice.

Sustainable schools (eco-schools/green schools; hereafter referred to as ‘sustainable schools’) are the most popular effort in the non-formal sector. Besides, four countries mentioned ‘sustainable schools’ as one of their ‘Current National EE Development Priorities’.

The examples of initiatives in each AMC are introduced below (responses edited by author):

- Brunei: Setting up a national working group to develop sustainable schools policy; having workshops for target group; learning from Singapore's 'Adopt-A-School' programme⁵; sustainable school competition; developing award schemes.
- Cambodia: Establishing schools in this regard (in rural areas).
- Indonesia: Starting sustainable schools (green schools) programme in 2005 (there have been an increase of participants in the programme every year).
- Malaysia: Setting a sustainable school environment award in 2005 (72 schools participated in the award competition in the 2007/2008 session)
- Philippines: Conducting the Search for Eco-waste friendly schools in Metro Manila in 2006 (top schools were awarded); drawing up the guidelines and rating criteria for the Green Schools Recognition Awards in 2007; the EE Network of the Philippines starting the process for a Dark Green Schools accreditation scheme for selected higher education institutions in the country in 2007.
- Singapore: Giving Schools' Green Audit Award (165 schools or 48% of the schools were recognised under the audit programme in 2007); implementing the 'Corporate And School Partnership' (CASP) programmes.
- Thailand: Introducing forty pilot eco-schools in 2008; developing eco-school indicator framework (by DEQP, Songklanakarin Univ and EE partners)⁶
- Vietnam: Promoting the idea of private sector involvement drawing on Singapore's 'adopt a school programme'

There are several countries that mentioned Singapore's 'Adopt-A-School' programme (now it is the 'Corporate And School Partnership' (CASP) programme), suggesting the initiative is a best practice in the region and information is shared among the neighbouring countries⁷.

Strategic Action/Priority 2

Develop EE curricula, materials and resources that are locally relevant and complement ESD at the local/community level.

It is not very clear to the authors how/why AEEAP include the curriculum issues in the non-formal sector. Many responses also seem to be related to formal education rather than non-formal education. However, this section introduces examples of them below (responses edited by author).

⁵ The project is now called 'Corporate and School Partnership' in Singapore.

⁶ Thailand also assessed the impact of this programme.

⁷ Singapore recently enlarged the target of this programme to involve international and special schools.

Cambodia:	Publishing teaching manuals and textbooks for secondary schools.
Indonesia:	Coordinating workshops for implementing green curriculum.
Malaysia:	Providing ‘environmental awareness camp’ (seven modules on various topics); conducting the Wira Alam (environmental hero) Project ⁸ .
Myanmar:	Forest Department in collaboration with NGOs providing community-based EE programmes.
Philippines:	EMB-DENR developing a number of support instructional materials on EE.
Singapore:	Developing various modules under the Environment Champion programme.
Thailand:	DEQP and others developing eco-school training modules including EESD and local sustainability in 2008 with many supporting materials.
Vietnam:	Developing EE curriculum, materials and resources locally relevant within the provinces.

Only Thailand mentioned ‘material development’ as one of their ‘Current National EE Development Priorities’.

Strategic Action/Priority 3

Promote EE as a key integrating tool for the development of ‘environmentally sustainable cities’ in each AMC.

According to the result, there were six countries promoting EE as a key integrating tool for the development of ‘environmentally sustainable cities’, although only four of them seem to be making substantial efforts.

For example, Malaysia provides ‘Sustainable Cities - Environment Award’ to local authorities. The Brunei government collaborates with Town and Country planning, Municipal Board and District offices to promote EE as a key for environmentally sustainable cities. In Thailand, EE is being integrated into life skills activities with support from provincial officers of non-formal education. The initiatives taken by the city-state Singapore are based on ‘Singapore Green Plan 2012’, which has six action programmes with ‘community partnership’ and ‘innovation’ as the two cross-cutting areas.

Strategic Action/Priority 4

Use appropriately designed and targeted EE for promotion of environmentally sustainable business practices.

⁸ There have been 443 Environmental Awareness camps held. In the Wira Alam Project, 13,000 children participated. Wira Alam (Environmental Hero) Project was launched by the government in 1998 to provide opportunities for students to be involved in conservation activities.

The most popular effort for this *Strategic Action/Priority 4* seems to be giving awards to businesses to encourage environmentally sustainable practices (e.g. Malaysia, Singapore, Thailand)⁹, followed by identifying and networking champions among them (e.g. Brunei, Singapore)¹⁰. Examples are as below (responses edited by author).

Brunei:	Collaborating with private sectors (including national business association) on EE for environmentally sustainable business practices; networking environmental champions via workshops.
Laos:	Having campaigns on different topics.
Malaysia:	Giving Prime Minister's Hibiscus Award, National Annual Corporate Report Award, ACCA Malaysia Environment and Social Reporting Awards.
Singapore:	Enhancing 'Corporate Environment Champions programme'; Giving President's Award for the Environment (PAE), EcoFriend Award and Singapore Environmental Achievement Award (SEAA). ¹¹
Thailand:	Giving Environmental Award for businesses annually on the Thai Environmental Day (4 December).

There are two countries (the Philippines and Malaysia) which included EE for the promotion of environmentally sustainable business practices in their 'Current National EE Development Priorities'.

2.3 Target Area 3: Human Resource Capacity Building

Strategic Action/Priority 1

Establish a baseline of EE for sustainable development training needs for stakeholders in both the formal and non-formal sectors.

There are many countries which engage themselves in training¹² (or preparation for training), but few of them mention the needs assessment for it. In fact, only two countries included training needs assessment as one of their 'Current National EE Development Priorities'.

Brunei developed a plan and timetable for conducting a national level EE/ESD training needs assessment (national workshop is to be held for future planning based on the assessment report). Thailand conducted EE research with stakeholders in formal and non-formal sectors for having

⁹ Award-giving for EE purposes does not only target businesses. For example, Malaysia gives 'Langkawi Award' for the general public and sustainable school awards are given in countries such as Indonesia.

¹⁰ Two countries (Vietnam and Malaysia) mentioned collaboration with the media (TV, Radio) here.

¹¹ There are currently around 360 Corporate Environment Champions from 150 private organisations.

¹² Malaysia provides 46-78 training programmes annually each year (at the Malaysian Institute of Environment).

baseline information to formulate EESD master plan.

Strategic Action/Priority 2

Provide EE and ESD training opportunities for key stakeholders.

There are many AMCs providing/planning to provide key stakeholders with EE and ESD training opportunities. Four countries indicated it as one of their ‘Current National EE Development Priorities’, which would result in a further increase in EE/ESD training opportunities.

The examples of the initiatives taken by AMCs according to this *Strategic Action/Priority 2* include the followings (responses edited by author).

- | | |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Brunei: | Developing national EESD training plan for key stakeholders; identifying partners for implementation |
| Cambodia: | Selecting an NGO to conduct EE awareness projects in the provinces. |
| Indonesia: | Providing trainings for teachers, local government officials, students and others. |
| Laos: | Organising workshops/training courses. |
| Malaysia: | Having workshops for the promotion of Project Wira Alam (Environmental Hero) and workshops for facilitators of Environmental Awareness Camp. ¹³ |
| Myanmar: | Furthering collaboration with NGOs in terms of training. |
| Philippines: | Providing EE and ESD trainings to key stakeholders. |
| Thailand: | Conducting ‘Lab Schools Project’ to make schools ‘Clean, Green and Safe’ to develop all aspects of school management such as human resources, website, teaching and learning ¹⁴ . |
| Vietnam: | Providing regular basic trainings. |

Strategic Action/Priority 3

Conduct EE/ESD Leadership Training Programmes (short courses) for key target groups (for example, government officials, members of parliament and other elected officials, media and communication professionals, youth, women, etc.).

The targets and the means of leadership trainings vary. For example, the Philippines made short EE/ESD training programmes available to elected officials of the government, the country’s youth,

¹³ For the former, four workshops have been conducted in 2008, in which 178 teachers participated in total. For the latter, 86 workshops have been conducted since 2001, in which 346 teachers participated in total.

¹⁴ 1788 lab schools become ‘clean and green safe schools’. It was mentioned in the response that ‘clean technology helps the stakeholders to realise the importance and value of energy’.

the media and the like. Malaysia holds the 'Women and Environment' conference biannually¹⁵. Laos suggested that it is trying to include EE components in various training programmes. Myanmar provides training in collaboration with international organisations and NGOs.

Four countries included leadership training programmes in their 'Current National EE Development Priorities' (two countries for training for government officials).

2.4 Target Area 4: Networking, Collaboration and Communication¹⁶

Strategic Action/Priority 5

Build and strengthen existing networks of NGOs, universities and media throughout the region to be effective practitioners, promoters, communicators and agents of change for EE and ESD.

AMCs seem to be engaging themselves in networking in various ways. Examples are as below (responses edited by author).

- Cambodia : Improving communication between universities, NGOs, the media and government line agencies (about 30 agencies are in the communication list).
- Indonesia : Having media programmes and enhancing partnership with NGOs for developing EE/ ESD projects.
- Laos : Keeping good communication with coordinators for evaluation and reporting of EE practices; inviting various actors to join EE activities.
- Malaysia : Having workshops on environmental awareness; publishing free environmental magazines; organising 'inter-varsity environmental debates'; collaborating with the media; producing audio-visual promotional items; providing 'Enviro Library Services'¹⁷.
- Philippines: Strengthening networks among NGOs, the media, and other EE partners.
- Thailand: Making an EESD professional network of universities and DEQP for the eco-school programme.

¹⁵ There were 300 participants in 2003, and there were 500 participants in 2005.

¹⁶ Strategic Actions/Priorities 1 to 4 in this 'Target Area 4' are omitted from the questionnaire because they are ASEAN-level activities.

¹⁷ Around 60 people from educational institutions, industries, the media and NGOs participated in 2007. One of the magazines is published in English and distributed to Malaysian Embassies overseas, universities and private companies; another magazine is provided to all primary and secondary schools. In the inter-varsity debates, 22 universities participated in 2007. Environmental programmes were aired several times on the national TV station and a series of environmental awareness quizzes and other programmes were aired on the radio. In 2007, 2372 people used the Enviro Library Services.

Vietnam: Making Databases of EE/ESD in Vietnam (teachers, experts, textbooks,...).

Singapore is also making efforts on networking as a part of its 3P Partnership Strategy ('People', 'Private' and 'Public') of the Singapore Green Plan 2012 (although they were not mentioned in this part of the questionnaire). It has various initiatives such as 'Eco Camps', 'Community Involvement Programmes', 'Student Environment Champions', 'Corporate Environment Champions', 'Community Environment Champions'¹⁸.

As the lead country of AEEAP this year, Brunei is engaged in ASEAN-wide networking. Its efforts include: developing an ASEAN-wide as well as national level 'Youth for Sustainable Environment Network'; establishing an ASEAN sustainable (green/eco-) school network.

Among the 'Current National EE Development Priorities', three countries mentioned more use of ICT (e.g. website and database). As the Philippine representative mentions, it also seems very important to promote AEEID in this context.

¹⁸ These efforts are evaluated via the 'Knowledge, Attitudes, Beliefs and Practices (KABP) Survey' and the 3P Partnership Index Survey.

PART 3: IMPACT OF AEEAP & UNDES

The questionnaire survey included a question on the impact of two international initiatives, namely AEEAP and UNDES, on domestic EE efforts. As is seen from its subtitle ‘Environmental Education for Sustainable Development’, AEEAP 2008 – 2012 is linked to the UN Decade of Education for Sustainable Development¹⁹. The respondents were asked to summarise how these two international EE/ESD initiatives impacted (a) policies, (b) projects, and (c) budget allocation in each AMC.

At the policy level, the responses are generally positive for the impact of the two international initiatives. They mentioned that these international initiatives motivated EE/ESD policy making and/or facilitated the implementation of the existing policies, particularly through raising the awareness of related agencies. For example, in Thailand, the composition process of the AEEAP contributed to strengthening inter-ministerial cooperation, resulting in the preparation of the Thai EESD master plan. The countries which did not recognise the positive impact of these initiatives at the policy level included Brunei and Indonesia; however, they mentioned that it was because EE/ESD was already well incorporated in their policies.

The responses regarding the impact of AEEAP and that of UNDES were primarily the same. However, there was a country which mentioned that UNDES can have a bigger impact as it can be used to prioritise education in general among other policy areas.

Like the impact at the policy level, the impact of AEEAP and UNDES at the project level was regarded in general positively by the respondents. Among other responses, there are countries (e.g. Indonesia, Myanmar, Thailand) that mentioned their impact on sustainable/green/eco school projects. There also were several comments that the impact was on the improvements in the existing projects (e.g. more cooperation and more EE components) rather than on the increase in the new projects.

On the other hand, the countries which answered that there was only a limited impact, mentioned it was because of the lack of human capacity at the domestic level (e.g. Cambodia), and suggested the needs of more support from abroad such as international agencies (e.g. Laos).

There were only two countries which replied on the positive impacts of these two international initiatives at the budget level (Malaysia and Myanmar).

¹⁹ In the ‘Forword’ of AEEAP, the then Secretary-General of ASEAN Ong Keng Yong states that the AEEAP 2008-2012 serves as ASEAN’s contribution to the implementation of the UNDES.

PART 4: RECOMMENDATIONS FOR ASEAN-WIDE COLLABORATION WITHIN THE NEXT TWO YEARS

The respondents were asked to describe recommendations with regards to ASEAN-wide collaboration on EESD in the next two or three years, if they did not already mention them in each country's report prepared for the workshop²⁰. Here, recommendations made by more than three countries are introduced.

The funding issue is, perhaps unsurprisingly, the point raised by more countries than the other points, with six having mentioned it. There are countries which stated particular use of the fund (e.g. Brunei for networking and Vietnam for expanding equipment and projects), while others mentioned the needs of a funding mechanism in general (e.g. Cambodia, Malaysia, Laos, Indonesia).

Four countries mentioned region-wide award schemes, such as those for sustainable (green/eco) schools (Indonesia and the Philippines), for good EE programmes (Malaysia) and for other initiatives such as educational films (Thailand).

Awarding schemes have been, as mentioned earlier, already introduced in several AMCs. Based on the experiences, region-wide schemes with the name of ASEAN can be introduced to further promote EE/ESD. As sustainable (green/eco) schools are one of the most popular initiatives in AMCs, an ASEAN sustainable school award may be a good start.

There are four countries which recommended having (or continuing to have) regional workshops for sharing experiences and other purposes. (One country recommended having them in various countries rather than in specific countries).

Also, more effective use of ICT is recommended by three countries (Malaysia, Thailand, Vietnam). Together with the results presented in Part 1 and Part 2, the efforts on this point are important. Particularly, revitalisation of AEEID can be a good first step for effective ICT use.

Three countries recommended to establish a standing independent body for EE at the regional level. The lead country of AEEAP this year, Brunei pointed out the importance of this to overlook the EE portfolio and to act as a medium to bring about changes in action, policies and implementation as well as take accountability of actions.

²⁰ Each AMC representative prepared a report and presented it at the workshop.

CONCLUSION

The author would like to conclude by making four suggestions concerning the areas of possible international/regional cooperation to promote EE/ESD in the ASEAN region in a rather subjective manner, based on salient points in the survey results above.

- *Weak Assessment/ Monitoring*

In general, the efforts on assessment/monitoring seem weak, which can result in weak evaluation at the end and ineffective implementation of policies/projects in the future. There needs to be some international/regional support in terms of research/facilitation in this regard in many of the AMCs.

- *Sustainable Schools*

The efforts on sustainable (green/eco) schools are very popular among AMCs (see PART 2, 'Target Area 2'), which shows the local needs. Information sharing (e.g. information concerning good practices of this kind such as Singapore's 'Corporate and School Partnership') and research in this area is suggested to be facilitated more, in order to further these efforts. As is mentioned in PART 4, an ASEAN Award for sustainable schools is worth considering.

- *Disparity in resources available*

Some countries have resources and some do not (see PART 3). This disparity in resources can widen the gap in terms of the scale/level of EE/ESD provided in each country. With the trans-national nature of environmental problems in mind, it seems necessary to increase international assistance to countries which particularly lack resources for effective EE/ESD practices.

- *ICT*

As is shown in PART 1, ICT was not effectively used. This is partly because, in some countries, there are insufficient resources for it. In addition to the needs of assistance for the domestic efforts in each country, the revitalisation of AEEID needs to be considered as is suggested by the Philippine representative (see PART 2), given the significance of ICT in information sharing for promoting EE/ESD.

This paper is based on rather limited information based on a single questionnaire survey, which focussed on the issues related to the AEEAP. Accordingly, these concluding remarks here must be complemented with further research to discuss the comprehensive status of EE/ESD in Southeast Asia. However, the author hopes that this working paper can contribute to the policy research and discussion on EE/ESD in Southeast Asia.