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"...As reflected in Brunei Darussalam's Vision 2035 Development Plan, our priority is to safeguard the welfare of our people. A key part of this plan includes ensuring a clean, green and healthy environment for every citizen. In this regard, various efforts have been undertaken to achieve environmentally sustainable development....."

"...Our commitment to preserving our environment is further reflected through the allocation of 58 per cent of our land area to the "Heart of Borneo" forest conservation initiative....."

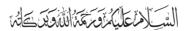
"...Our next step to enhance conservation efforts is through the Coral Triangle Initiative which will endeavor to protect our marine resources and thereby protect our environment as a whole in a more comprehensive manner....."

Excerpt from an address by His Majesty Sultan Haji Hassanal Bolkiah, the Sultan and Yang Di - Pertuan of Brunei Darussalam at the United Nations Climate Summit, New York, 23 September 2014. ".....In the field of the Sciences, environmental protection is an area of concern for the Government of Brunei Darussalam. Some of the key environmental challenges have already been the focus of the Vision Brunei 2035 and ongoing efforts and initiatives are being carried out so new policies on waste recycling and management, urban and rural planning, water resources conservation, prevention of soil erosion, rehabilitation of waste land and communal natural resource management can be developed...."

Excerpts from the Honourable Pehin Orang Kaya Seri Kerna Dato Seri Setia Haji Awang Abu Bakar bin Haji Apong, Minister of Education, Brunei Darussalam during the 37<sup>th</sup> Session of the UNESCO General Conference

### MESSAGE

### From The Deputy Minister of Education, Ministry of Education



Alhamdulillah, all praise be to Allah Subhanahu Wata'ala, with Whose blessings, the Ministry of Education is able to publish the Guidebook for Initiating Green-Schools in Brunei Darussalam. This accomplishment affirms Brunei Darussalam's commitments to the agenda of international organisations such as Association of Southeast Asian Nation (ASEAN) and United Nations Education, Scientific and Cultural Organisation (UNESCO) in educating the young generation towards curbing global sustainable development issues like climate change and the depletion of natural resources.

I am pleased to see that Science, Technology and Environment Partnership Centre (STEP), Ministry of Education has taken the lead in developing the guidebook which no doubt will provide a good benchmark for schools to implement best green practices with respect to Education for Sustainable Development.

Teachers and school leaders can become role models for promoting positive attitudes towards a healthy environment and sustainability of resources from our planet Earth. They must not be seen to just preach but must be seen to practise it. However, the best practices in conserving and protecting our environment for a sustainable future should be extended to the wider community starting with the homes and including private or public organisations.

I sincerely hope that the Guidebook for Initiating Green-Schools in Brunei Darussalam will assist teachers in embarking on their long and fruitful journey in educating our young generations to make wise decisions and thus save our earth from destruction.

On a final note, I would like to thank and congratulate everyone for their contributions in successfully publishing this guidebook.

Wassalam.

Wabilahittaufik Walhidayah Wassalamualaikum Warahmatullahi Wabarakatuh.

#### Dato Seri Setia Haji Awang Yusoff bin Haji Awang Ismail Deputy Minister of Education Ministry of Education

### FOREWORD

From The Acting Head of Science, Technology and Environment Partnership Centre (STEP Centre), Ministry of Education

التي المرع كم ويرجم الأولا العائم

Alhamdullilah with kind blessing of Allah Subhanahu Wa Taála, that the Guidebook for Initiating Green-Schools in Brunei Darussalam has been prepared and published by Science, Technology and Environment Partnership (STEP) Centre, Ministry of Education, with the support of various stakeholders.

The Guidebook for Initiating Green-Schools in Brunei Darussalam, hopefully can help our schools' leaders and educators to embark on any green initiatives that will educate our young generation on sustainable development involving the whole-school community. This kind of approach is in-line with one of the Global Action Plan on Education for Sustainable Development (GAP-ESD), that is to promote whole-institution approaches to ESD at all levels and in all settings.

Green initiatives will enhance awareness and knowledge of the school community on the global sustainable development issues such as energy security, scarce water resources, sustainable food production and consumption, disaster risks, poverty, climate change and pandemic diseases. Expectedly, the awareness and knowledge gained, will also contribute towards the preparedness of everyone to cope with those pressing issues. It is the wish of STEP Centre that initiatives conducted can also trigger the young minds to be creative and innovative to develop anything which may ensure their future sustainable life.

Finally, on behalf of STEP Centre, Ministry of Education, we wish to express our appreciation to various stakeholders who have rendered their supports.

Wassalam.

Wabillahitaufik Walhidayah, Wassalamualaikum Warahmatullahi Wabarakatuh.

### Dayang Sarimah binti Abu Bakar Acting Head, STEP Centre, Ministry of Education

### "And We send down water from the sky in due measure and We cause it to soak in soil and We are certainly able to drain it off with ease." [Surah Al-Mu'minun the (The Believers)], Chapter 23, Verse 18

**Translation:** Human beings must handle the Earth's resources wisely and that no matter how rich and immense the resources are, nevertheless they are limited and exhaustible.

### 1.0 OVERVIEW OF GUIDEBOOK FOR INITIATING GREEN-SCHOOLS IN BRUNEI DARUSSALAM

### 1.1 Introduction

The Guidebook for Initiating Green-Schools in Brunei Darussalam is a benchmark for all government and non-government schools ranging from primary to pre university levels in Brunei Darussalam. It is recognised that schools in Brunei Darussalam are at various stages in implementing their green initiatives, spanning from some schools are at the beginner stage and some are at their high level of commitment to sustainability.

The Green-Schools Initiatives will inevitably assist in reducing climate change which is related to disaster management risks by teaching and modelling to students how to live sustainably and make responsible choices in their own lives. Today's students are tomorrow's decision makers.

The Guidebook for Initiating Green-Schools in Brunei Darussalam has similar criteria to the ASEAN Guidelines on Eco-Schools which was endorsed by the ASEAN Environment Ministers on 18 October 2011 in Phnom Penh, Cambodia. The ASEAN Guidelines on Eco-Schools serves as a reference and as a regional standard for environmentally friendly model schools in the region. The Guidelines are also used as a reference in the nomination of eco-schools in ASEAN Member States (AMS) for the ASEAN Eco-Schools Award, which aims to recognise exemplary efforts of eco-schools in AMS in inculcating environmental awareness in every aspect of education to their students and surrounding communities.

### 1.2 WHAT ARE "GREEN-SCHOOLS"?

"Going green" is a complex, inter-related and long term process that engages the whole school and thus should involve students, teachers, administrators, parents and the immediate community. We can start by defining what we mean by "Green-Schools". **Green-schools** are schools that actively implement sustainability programmes in order to safeguard the future of the young generations and saving our planet Earth.

### 1.3 Objectives

The objectives of the Guidebook for Initiating Green-Schools in Brunei Darussalam are as follows:

- Provides systematic guides in inculcating good practices and attitudes among the community of academic institutions to cope with challenges on issues pertaining to sustainable development; and
- ii) Serves as a standard national benchmark for identifying and recognising outstanding academic institutions in conducting sustainable development activities and programmes in Brunei Darussalam.

"And it is He who produces gardens trellised and untrellised and date palms and crops of shape and tastes and pomegranates similar in kind but different in taste. Eat of their fruit when they ripen but pay the due thereof (zakat) according to Allah's orders on the day of its harvest and waste not by extravagance. Verily, He likes not those who waste by extravagance." [Surah Al-An'am (The Cattle)]; Chapter 6, Verse 141

**Translation:** Allah orders human being to avoid doing mischief on Earth and prevent wastage of resources which will lead to destruction of the environment and hence the Earth.

### 2.0 IMPLEMENTING THE GREEN-SCHOOLS INITIATIVE

### 2.1 The Four Criteria

The green-schools programme in Brunei Darussalam focuses on four (4) criteria. In order to implement the green-schools programme effectively and successfully, all schools must adhere to the 4 criteria. They are:

- Criteria 1: School Policy and Administration of Programme
- Criteria 2: Linkages to the Curriculum
- Criteria 3: Resources and Green Practices
- Criteria 4: Partnership and Outreach Programmes

The model in Figure 1 shows the relationship of the 4 criteria.

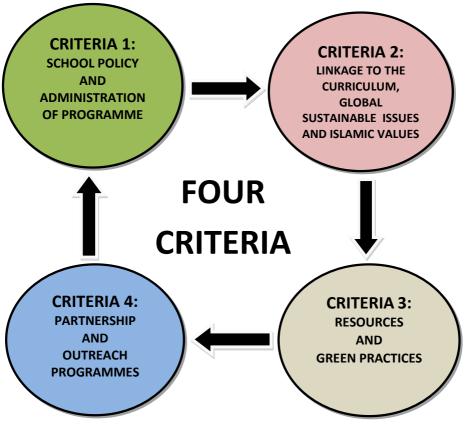


Figure 1: The Four Criteria

### 2.2 Description of the Four Criteria

Criteria 1	School Policy and Administration of programme			
Vision and Mission	• The school should have statements of vision and mission that reflects environment thrusts or sustainable development.			
Policy	The school should adopt an environmental or sustainable development policy (procedure/guiding principle/course of action)			
Working Committee	<ul> <li>A working committee should be formed. This committee will be responsible for running, evaluating, monitoring and reporting progress or implementation of the programme.</li> <li>An organisational structure should be developed comprising members of staff and students.</li> <li>A whole school involvement is the key to running Green-Schools Initiatives.</li> </ul>			
Environmental Review	<ul> <li>The school should carry out a review which is an audit of the school's status-quo on environment and sustainable development performance.</li> <li>The results of the environmental review will be able to tell each individual school what are</li> </ul>			
Action Plan	<ul> <li>the strengths and weaknesses, hence what needs to be improved on.</li> <li>The results of the environmental review will also inform the school what to do for the action plan.</li> </ul>			
Budget	<ul> <li>Budget proposals and financial reports should be prepared and compiled (if budget is incurred).</li> </ul>			
Monitoring, Evaluating and Reporting	<ul> <li>Monitoring should be done in order to find out whether the schools have successfully achieved their targets as indicated in their action plans; hence this will help schools to evaluate their progress. A report should be compiled after completion of the project.</li> </ul>			
Criteria 2	Linkage to the Curriculum, Global Sustainable Issues And Islamic Values			
Environmental Education	<ul> <li>Provide evidence to show that issues related to environment and sustainable development are integrated into the teaching and learning of the already existing subjects, i.e. science, social studies, geography, mathematics, arts, MIB and others.</li> <li>Indicate that awareness on global sustainable issues are included in teaching and learning process or inculcated through activities and projects.</li> <li>Indicate the Islamic values that could enhance awareness and strengthen green</li> </ul>			
Criteria 3	practices. Resources and Green Practices			
Eco-friendly facilities	<ul> <li>Eco-friendly facilities and green spaces such as an eco-garden, organic gardening, recycling bins etc. should be present in the schools.</li> </ul>			
Green Innovations	<ul> <li>Green innovations or innovative eco-friendly facilities such as harvesting rainwater, solar power etc. should also be present in the schools.</li> </ul>			
Environmental- friendly / green practices	• Environmental-friendly or green practices should be evident (visible) in the schools e.g. documents, leaflet as promotional and awareness efforts, etc.			
Criteria 4	Partnership and Outreach Programmes			
Partnerships	• Schools should seek collaborations with local businesses, local experts and resource persons for advice, information, practical and financial assistance.			
Outreach         • Parents, neighbours and the wider community should be involved in the schools' environmental activities since schools are the focal point of the whole community such, can inspire and demonstrate how sustainability be practiced in homes.				

Table 1: The Four Criteria in Detail.

### 2.3 Themes for the Green-Schools Initiatives

To help schools in achieving target impacts, it is advisable that activities and programmes to be conducted are based on themes and focus topics that are related to sustainable development such as the following :

i) Theme : Energy

E.g. of topic : Reducing Energy Consumption

ii) Theme : Waste management

E.g. of topic : Reduce, Reuse and Recycle to Reduce Waste (3Rs)

iii) Theme : Green school spaces

E.g. of topic : Eco-Garden in My School

iv) Theme : Water

E.g. of topic : Reducing Water Consumption

v) Theme : Health and Hygiene
 E.g. of topic : Healthy and Clean School

However, schools are not required to work on many or all the themes at once but in stages.

### "And the Heaven: He has raised it high and He has set up balance, in order that you may not transgress balance. And observe the weight with equity and do not make the balance deficient."[Surah Ar Rahman **(The Most Gracious)]; Chapter 55, Verses 7-9**

**Translation:** The Qur'an advises us to maintain the balance as the world was created in balance.

### 3.0 RESOURCES

The following resources and information will provide guidance and references in the initiation stage of creating a green-school, monitoring and evaluation of the implementation progress; and finally reporting the achievements and outcomes of the initiatives. The resources and information include :

- Frequently asked questions;
- Template for Environmental Review
- Template for Action Plan
- Template for Report
- Existing ECO-School Activities in ASEAN Member States (AMS)

The resources are developed and made readily available for schools to use. The softcopy can be obtained from STEP Centre's office or downloaded from STEP Centre's blogspot, <u>www.stepcentrebrunei.blogspot.com</u>

### 3.1 Frequently Asked Questions (FAQs)

This section serves to clarify some of the common questions that normally arise when executing Green-Schools programmes in schools. However, if further assistance is required, please do not hesitate to contact:

The Science, Technology and Environment Partnership Centre (STEP Centre), Ministry of Education, C7, C8 & C9, Simpang 125, Jalan Muara BB 2313, Negara Brunei Darussalam. Telephone / Facsimile number : +673 2335963

 Email
 : step@moe.gov.bn

 BlogSpot
 : www.stepcentrebrunei.blogspot.com

### Q1: Is there a standard format for the organisational structure of the working Committee?

A1: There should be a clear layout in the structure and should include members of staff and students. Administration staff and non-teaching staff can also be included. The **teachers** should be the **coordinator or facilitator** to provide guidance and advice but not lead the committee. **Students** should lead the **committee.** The working committee should include the following members:

Advisors: 1 or 2 teachers (can be more than 2)

### Co-Chairpersons: students

### Secretary: students

Members: administrative staff, teachers and non-teachings staff

### Q2: How do we involve the whole school to participate in environmental activities?

- A2: For students to benefit from environmental activities and feel proud of their achievements, the working committee needs to ensure that the whole school is involved. Here are some ideas:
  - Organise a regular Day of Action explaining the objectives and reason for the project. This provides an opportunity for everyone; students, teachers and non-teaching staff in your school to get together and work towards achieving some of the targets stipulated in your Action Plan;
  - ii) Organise a celebration event and invite local community leaders, business personnel and parents;
  - iii) Provide regular feedback on the progress of the Environment Club / Project during assemblies;
  - iv) Display information (Action Plan, results, etc) on the bulletin board, website or newsletter;
  - v) Inform the local media;
  - vi) Invite local speakers from business sectors, relevant government departments and non-government organisations; and
  - vii) Extend the project for pupils to do and practise at home.

### Q3: How often and where should members of the working committee meet?

A3: How often and where members of the working committee meet is decided by each school. However, we suggest you meet regularly in order to get the programme started. But once the ball is rolling, you may choose to meet less frequently, maybe once in 3 to 4 weeks. You can meet in school during co-curricular periods or after school hours.

### Q4: Should there be a minute recorded for each meeting?

A4: Yes, a minute should be recorded for each meeting and a copy of the minute should be submitted to the principal for reference.

### Q5: Is it compulsory to carry out the environmental review?

A5: Yes, is important to carry out the environmental review for your school because you need to find out what is the main priority and needs of your school that has to be improved. For e.g. if you found out that students are using a lot of plastic and styrofoam in your school, then you should do a project to reduce, reuse and recycle plastics in your school first rather than do an eco-garden. Hence, this will help you to carry out sustainable development in your school.

### Q6: If the environment review suggests a large number of issues to address, does the school have to tackle all the problems at once?

A6: No, don't feel that you have to tackle all the issues at once. Prioritise them. It is better to go forward in small steps and celebrate success rather than being over-ambitious and not achieving your targets, which can be demotivating.

### Q7: Tell us more about the action plan.

A7: The action plan is intended to be a working document and should therefore be reviewed, revised and amended from time to time. The action that you take should be measurable. The timeframe for each activity should be indicated in the action plan.

### Q8: Who should do the monitoring and evaluating?

A8: Students should be encouraged to undertake the monitoring and evaluating wherever possible in order to help foster a greater sense of ownership towards the programme. Teachers should guide and show students how to carry out the monitoring and evaluating. The whole school should be kept up to date with the progress of the Green Schools programme.

### Q9: Who should write the report, the teachers or the students?

A9: The teachers should guide and advise the students on the format of the report, how to display the results, etc. The report can be written by a group of students. Each student in the group can be delegated to write a section of the whole report.

### Q10: Is there any standard format for writing the report?

A10: We have included a template for the report in the "Resources" section of this guidebook.

### Q11: Tell us more about linkage to the curriculum.

A11: Teaching and learning resources using the local learning context should be developed in order to facilitate the understanding of students. Professional development courses or capacity building programmes on environmental education (EE) and issues related to sustainable development should be conducted for members of staff(administrators, teachers and supporting staff). The presence of the working committee running the Green-Schools Initiatives or issues related to sustainable development should be made vibrant and evident.

For example, if you are teaching about graphs and numbers in your mathematics and science lessons, you can use the data obtained from the monitoring and evaluation of the Green Schools programme and this will help students to learn from a real situation.

### Q12: What are the criteria for determining whether a garden is green and sustainable?

- A12: The features for a green and sustainable garden are:
  - i) Recycled products;
  - ii) Peat free products;
  - iii) Concrete (cement) alternatives e.g. wood, etc;
  - iv) Water resource management techniques;
  - v) A variety of plants that encourages wildlife e.g. ladybirds, bumblebees which can help combat pests;
  - vi) Bird tables with feeders;
  - vii) Composters and any other relevant sustainable principles.

### Q13: What is the duration for carrying out the Green-Schools Initiatives?

A13: Conducting Green-Schools initiatives should be a continuous efforts but for each project topic, preferably it should be completed within 1 academic year, so that achievement and outcomes can be seen and recorded.

# **ENVIRONMENTAL REVIEW**

(This is only an example. Teachers may select their own topic according to the relevant themes stipulated in the guidebook)

## Name of school:

## Date of review: \_\_\_\_

### **Topic: Reducing Energy Consumption**

No.	Statements		Yes or No
1.	Is the monthly electricity bill high for your school?	Yes	No
	If <b>Yes</b> , please state the amount:		
2.	Is the electricity bill increasing from time to time in your school?	Yes	No
3.	Is there someone in-charge of monitoring the consumption of energy in your school?	Yes	No
4.	Has your school taken any steps to reduce the electricity bill?	Yes	No
5.	Are lights and electrical appliances switched off when not in use?	Yes	No
6.	Are air-conditioners switched off when not in use?	Yes	No
7.	Does the school have any sources of renewable energy e.g. solar power, wind generator, etc.	Yes	No
8.	Do you have contacts or partnerships with any local experts in energy conservation?	Yes	No
9.	If <b>Yes</b> to question (8), have you invited any local experts to conduct courses on energy conservation, etc.	Yes	No
Any	further comments and list possible actions that can be taken to remedy	the situat	ion.

### Topic: Reduce, Reuse and Recycle to Reduce Waste (3Rs)

No.	Statements		Yes or No
1.	How serious is the problem of littering and rubbish in your school compo	ound?	
	• Very serious, rubbish is seen everywhere in the school compound.		
	Not too bad, rubbish accumulates after break time.		
	Not much problem since the school is clear of litter and rubbish		
2.	Has your school taken any steps to reduce littering and rubbish in your school grounds?	Yes	No
	If Yes, please what has been done and has it been successful.		
3.	Are there enough dustbins in the school grounds?	Yes	No
	If No, think of how many more to add and where to put the dustbins.		
4.	Are there enough dustbins in each classroom?	Yes	No
	If No, think of how many more you need to add.		
5.	Do you separate the bins for papers, plastics, aluminium and general wastes?	Yes	No
6.	Do you encourage the school canteen to use less plastic?	Yes	No
7.	Do you have contacts with recycling companies?	Yes	No
8.	Do you have contacts or partnerships with any local experts in 3Rs?	Yes	No
9.	If <b>Yes</b> to question (8), have you invited any local experts to conduct courses on 3Rs, etc.	Yes	No
Any	further comments and list possible actions that can be taken to remedy	the situat	ion.

### Topic: Eco-Garden in My School

No.	Statements	Tick (v)	Yes or No		
1.	Does your school have an eco-garden (conservation area for plants and animals)?		No		
2.	If <b>Yes</b> , do teachers in your schools use the eco-garden as teaching resources?	Yes	No		
3.	Does your garden have any of the followings to attract plants and animals?		No		
	If <b>Yes</b> , tick the ones that you have.				
	Bird Feeder Pond Log Piles for invertebrates Butterfly Fr	iendly plar	nts		
	Local herbs Others Please specify:	-			
4.	Do you use organic fertilisers?	Yes	No		
5.	Do you have compost in your garden?	Yes	No		
6.	If <b>Yes</b> to question (5), does the food waste in your school added to the compost?	Yes	No		
7.	Do you have contacts or partnerships with any local experts in gardening and composting?	Yes	No		
8.	If <b>Yes</b> to question (7), have you invited any local experts to conduct courses on composting, etc.	Yes	No		
9.	Does the school have any sources of renewable energy around the school e.g. solar power, wind generator, etc.	Yes	No		
Any	further comments and list possible actions that can be taken to remedy	the situat	ion.		

### **Topic: Reducing Water Consumption**

No.	Statements		es or No		
1.	Is the monthly water bill high for your school?	Yes	No		
	If <b>Yes,</b> please state the amount:				
2.	Is the water bill increasing from time to time in your school?	Yes	No		
3.	Is there someone in-charge of monitoring the consumption of water in your school?	Yes	No		
4.	Has your school taken any steps to reduce the water bill?	Yes I	No		
5.	Are taps turned off when not in use?	Yes I	No		
6.	Has your school carried out water-saving campaigns?	Yes I	No		
7.	Does the school recycle rain water for watering the garden, etc.	Yes	No		
8.	Do you have contacts or partnerships with any local experts in water conservation?	Yes	No		
9.	If Yes to question (8), have you invited any local experts to conduct	Yes	No		
	courses on water conservation, etc.				
Any	further comments and list possible actions that can be taken to remedy	the situatio	n.		

### **Topic: Healthy and Clean School**

No.	Statements	Tick (√) Yes or No	
1.	Does the school canteen provide clean and healthy food?	Yes No	
2.	Is the school canteen kept clean all the time?	Yes No	
3.	Are the toilets in the school kept clean throughout the day?	Yes No	
4.	Do the school toilet have the followings:		
	Toilet Paper Hand Soap Paper Towels Dustbin		
5.	Are taps turned off when not in use?	Yes No	
6.	Do students have the habit of washing their hands before eating?	Yes No	
7.	Are administrators, teaching staff and supporting staff prohibited from smoking within the school compound?	Yes No	
8.	Is smoking a problem amongst students in the school?	Yes No	
9.	If Yes, what is the percentage of students who smoke?		
10.	Do you have contacts or partnerships with any local experts in healthcare?	Yes No	
11.	If Yes to question (10), have you invited any local experts to conduct courses on healthcare, etc?	Yes No	
Any	further comments and list possible actions that can be taken to remedy	the situation.	

### Conclusion

After considering all the various issues and discussing with the committee members, please rank the topics in order of importance in descending order.

Topics	Ranking
Reducing Energy Conservation	
Reduce, Reuse and Recycle to Reduce Waste	
Eco-Garden in My School	
Reducing Water Consumption	
Healthy and Clean Students	

This will help you to decide which topic is of priority and hence, should be carried out as your Green-School Initiative.

### 3.3 Template for Action Plan

Date / Timeframe	Actions to be Taken	Student in-charge / Supervising Teacher	Remarks / Done, tick (/) or (×)
	Forming a working committee		
	Developing school vision and mission		
	Developing school policy		-
	Developing objectives for Green-School Project		
	Conducting environmental review		
	Allocating budget		
	Monitoring and evaluating		
	Linking to the curriculum		
	Making resources and green practices available		
	Developing partnerships and outreach activities		
	Writing a report		

### 3.4 Template for Report

Title	Title of Project :			
1.0 Introduction (Explain briefly what the project is abou		Introduction (Explain briefly what the project is about)		
	1.1	Objectives (your reasons for doing this project)		
	1.2	Administration of programme		
		Indicate here the followings:		
		<ul> <li>School Mission and vision;</li> </ul>		
		- School Policy; and		
		- Structure of organisation for working committee		
2.0		<b>Environmental Review</b> (Cut and paste the soft copy of your environmental review in this section)		
3.0		Action Plan (Cut and paste the soft copy of your Action Plan in this section)		
4.0		Budget Allocation (This is your financial summary)		
5.0		<b>Monitoring and Evaluation</b> (Explain how you monitor the progress of your project. Display the results or what you have found out clearly in a table to show your <b>indicator of success</b> . Include also graphs, photographs taken before and after, etc. Your indicator of success is a measure of whether your students have translated what they have learnt into actions)		
		An example of a table to summarise your <b>indicator of success</b> is as follows:		

No.	Indicators of Success	% Before	% After
Α.	Behaviour Changes/Attitudes/Awareness		
1.			
2.			
В.	Knowledge Content/Lessons Learnt		
1.			
2.			

6.0 **Appendices** (You can include any other relevant documents that you think may help to provide evidence of your project e.g. photographs, etc)

### 3.5 Existing ECO-School Activities in ASEAN Member States (AMS)

Based on the ASEAN Guidelines on Eco-Schools, the environmental activities carried out by AMS can be divided into 8 categories. They are Greening, Energy, Water Conservation, Resource Conservation, Cleanliness and Health, Rehabilitation, Environmental Learning/Outreach/Awareness and Innovation, Entrepreneurship and Incentives.

Table 2 shows examples of environmental activities carried out by AMS to promote educations for sustainable development but schools in Brunei Darussalam are not limited to these examples.

1.0	GREENING
	Fruit tree planting
	Greening and keeping learning gardens
	Planting native plants
	Organic farming
	Mangrove planting
2.0	ENERGY
	• Create good circulation and natural lighting in schools to reduce electricity use.
	• Building retrofits such as motion detectors, energy efficient light bulbs.
3.0	WATER CONSERVATION
	Campaign for school community to save water.
	• Students bring one bottle of used water for plant watering in school.
	Rain harvesting.
	Plastic bottles in toilet cistern to reduce water use.
4.0	RESOURCE CONSERVATION
	<ul> <li>Waste management including composting, making biogas, pesticide and other agricultural products.</li> </ul>
	<ul> <li>Reduce, Reuse, Recycle, Repair, Rethink (5Rs) all materials such as recycled used furniture.</li> </ul>

5.0	CLEANLINESS AND HEALTH
	<ul> <li>Banning snacks/food with artificial flavour/colour e.g. monosodium glutamate (MSG) and plastic packaging.</li> </ul>
	<ul> <li>Encouraging/asking students to bring their own water bottle and food container to reduce waste.</li> </ul>
	Mosquito eradication programmes.
	Banning of polystyrene on school grounds.
	Community biking initiatives to reduce pollution.
	<ul> <li>Sanitation including monitoring cleanliness of school bathrooms and use of restroom slippers made from reusable materials.</li> </ul>
6.0	REHABILITATION
	<ul> <li>Community and service learning such as Mudballs to filter and clean up rivers, community trash pickup, bake sales using school grown products and anti-litter campaigns.</li> </ul>
	<ul> <li>Presence of partners and partnerships with stakeholders in the community.</li> </ul>
7.0	ENVIRONMENTAL LEARNING/OUTREACH/AWARENESS
	• EE learning stations throughout school campus.
	• Celebrating global events such as Earth Day, Earth Hour and Environmental Hour.
	<ul> <li>Seminars and workshops for teacher and student training in EE.</li> </ul>
	<ul> <li>Presence of a vibrant eco-organisation on school grounds such as associations, squads, clubs, youth clubs and other organisations.</li> </ul>
	<ul> <li>Mass media and public outreach campaigns on EE such as radio programming, magazines, brochures, etc.</li> </ul>
	Manuals for teachers and students on EE such as environmental textbooks.
	<ul> <li>Televised environmental youth debate programme.</li> </ul>
	• Training curricula developers in EE.
	Environmental friendly games.
	<ul> <li>School sponsored outdoor activities such as nature walks, hikes, camping, etc.</li> </ul>
	Marine education such as sustainable practices in fisheries and coral management
	Establishment of school hubs that excel and coordinate EE networks.
8.0	INNOVATION, ENTREPRENEURSHIP AND INCENTIVES
	<ul> <li>Student awards and badges for good performance.</li> </ul>
	Establishing and managing school fishery activities and gardening.
	Environment art contests such as fashion show using recycled materials, photo     competition, pactor contests, etc.
	competition, poster contests, etc. <ul> <li>School rating system on performance on EE indicators.</li> </ul>
1	- School rating system on performance on LE Indicators.

### Table 2: Examples of Environmental Activities Carried out by ASEAN Member States

### 4.0 References

- ASEAN Guidelines on ECO-Schools, Interim Copy.
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