

SEAMEO-Japan ESD Award

Supporting Partner:



Submission Form of 2018 SEAMEO-Japan ESD Award Theme: Applying Local Wisdom for Environmental Conservation

The last day for submission of entries: 3 September 2018

- To participate in the 2018 SEAMEO-Japan ESD Award, please submit the information of your school's project/programme on "Applying Local Wisdom for Environmental Conservation" by using this Submission Form.
- The **digital format of this Submission Form** can be downloaded from the SEAMEO website: www.seameo.org or requested by sending an email to: seameojapan.award@seameo.org.
- The **guidelines for submission of entries** and the **judging criteria** are detailed in page 11-13 of this document.
- Schools must ensure that the SEAMEO Secretariat receives their entries by **Monday, 3 September 2018**.
- More information, please contact the SEAMEO Secretariat, Bangkok (telephone number: +66-2391-0144, fax number: +66-2381-2587 and email address: seameojapan.award@seameo.org)

PART I: Details of Your School

1. Name of your school: SEKOLAH JENIS KEBANGSAAN TAMIL SUNGAI ARA
2. Full address: SJKT SUNGAI ARA, Lorong Kenari 1, Taman Desaria, Bayan Lepas, Pulau Pinang, Malaysia
3. Postcode: 11900
4. Country: Malaysia
5. School's telephone number (country code+city code+telephone number): +6046461326
6. School's fax number (country code+city code+fax number): +6046461326
7. School's email Address: pbd3032@jpnpp.edu.my
8. Name of the Head Master/Principal/School Director: Mr Sangga Sinanyah
9. Name of the Teacher Coordinator: Mr Sangga Sinanyah
10. Email address of the Coordinator: sangga_sinnayah@yahoo.com
11. School website (if available): NIL
12. Educational level : GRADE1-6 (LOWER AND UPPER PRIMARY)

13. Total number of teachers in your school: 11 Teachers
14. Total number of students in your school: 126 Students
15. Approximately number of teachers participated in planning and implementing this school's programme: **10** Teachers
16. Approximate number of students participated in planning and implementing this school's programme: **126** Students

PART II: Information about the School's Programme

The information of part II from no.1 to 13 should be no longer than nine (9) pages long of A4 in total. The information should be written in Times New Roman font, 11-12 point size.

1. Title of the school's programme

Embrace Our Culture for Environment Conservation

2. Summary of the programme (one half to 1 page of A4 sheet size)

Malaysia is the country blended with plenty of custom and culture. Although our country has three Malaysia is the country blended with plenty of custom and culture. Although our country has three main ethnics Malay, Chinese and Indian, all our practices and local culture similar and unique in our own wisdom. Moreover, practicing all cultures is one of the important elements in Malaysian Education curriculum main ethnics Malay, Chinese and Indian, but all our practices and local culture similar and unique in our own wisdom. Moreover, practicing all cultures is one of the important elements in the Malaysian Education curriculum plan. Hence, embracing our culture playing the major role in various school activities. Most of our local wisdom's basic practice is to preserve and conserve nature for our future generation. With this thought, we have integrated local wisdom to practice environmental conservation.

This project was a continuation of our green project where after many findings, we believe traditional knowledge can have a positive impact on environmental sustainability. So, in the year 2018, we planned to search best and applicable local wisdom to be practiced in school culture. We have divided into five major Malaysian Traditional knowledge and local wisdom to introduce to our school children and community.

Our first practicing is organic farming with chemical-free fertilizer. This chemical-free fertilizer 'Panchagavya' traditionally used in Indian farming to preserve soil fertility. This fertilizer consists of five main raw material from natural substances which are, cow dung, cow urine, milk, well-ripened banana and tender coconut, then added to water, curd, ghee and jaggery (sweet) with given proportion to be used in farming. This 'Panchagavya' prevent pest and enhance vegetable and plant growth positively without any chemical residue in the soil. Next, planting the banana tree in our school garden to harvest banana leaf as our daily plate in the school canteen. We have planted more than 30 banana trees in our school garden and use every part of it for various practice. In Malaysia, all ethnics use the banana leaf to wrap some of our traditional dessert and food especially 'Nasi Lemak'. This can enhance the flavor because banana leaf contains large amounts of polyphenols (a type of natural antioxidant) and food thermal stable. In our school, minimum three times a week we serve food in the banana leaf to decrease plastic usage and cultivate green living. Besides that, stem and flower of the banana tree well known for its nutritional value used to cook the meal for school children and the fruit always sells to the school neighborhood community.

Third, using a clay pot as our water dispenser in the school compound. We have placed few clay pot water dispensers around the school compound for students to teach our long lost local wisdom. Keeping water in a clay pot can give balance pH for healthy consume. Despite this, water inside a clay pot gaining more minerals compared with normal waters. We also create awareness among our school community and neighborhood to practice this in their home. Number four is planting neem tree around the school compound and the nearby area to sustain the clean air flow. This is one of important Indian culture where plant minimum one neem tree at home ground to cultivate chemical and microorganism free environment. So, we brought back this culture to the

school community and to preserve our environment. Lastly, harvesting organic vegetables from our own garden and bring to our meal plate.

Currently we only able to practice this once a week due to the vegetable limitation. We have planted a few vegetables which are hardly available in local markets. Those are Moringa leaves, *Alternanthera sessilis*, Indian broad beans etc. These vegetables are rich in various nutrition and no longer cultivate in Malaysia perhaps we tried to introduce to our school community as our first step to conserve endangered plant species. Indeed, our organic farm becomes the most wanted spot for few rare bird species as their shelter and food supplier.

Lastly, we realized, all these practices make us believe environment conservation is possible when traditional knowledge, practice, local wisdom and culture practice precisely. On top of that, we should embrace our local wisdom more often to sustain balance environment.

3. Background information or reasons why the school created this programme

The ultimate goal of our school for creating this program to enlighten the important practice of our local wisdom and its uses for sustainable environmental conservation. Although we have practice green living lifestyle for some time, but still our school community lack of understanding on how to practice it daily at home. With the effort taken by school management, NGO and surrounded community, our research about our local wisdom and picked the most efficient practice to be introduced to our school community in a maximum environment conservation. Perhaps our initial plan to introduce all our long-lost traditional knowledge and local wisdom which were started 100 years ago. Unfortunately, much traditional knowledge derived from our ancestors has been forgotten by the current generation which leads environment destruction in the world. On top of that, we did forget to teach the importance of local wisdom for overall mankind benefit after lost ourselves in the technology world. This causes the connection between the natural and human to become unattached, and we ignore important having natural and balance the environment around us. Hence, starting to teach this knowledge at the younger age can play the major role in a future generation. So, this is our secondary reason to integrate and cultivate little important local wisdom in school teaching and learning process to preserve our local culture and conserve the environment from grass root.

4. Objectives/goals of the programme

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| <ul style="list-style-type: none">I. To cultivate organic farming practice.II. To integrate culture and environment sustainability.III. To create awareness on local culture practice for green conservation. |
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5. Brief details about the local wisdom the school aims for within the programme and its values for environmental conservation

5.1 Brief information about the local wisdom that the school has applied in the programme

- I. Planting neem seedling around school compound and public park area 'Taman Jajar' for natural air filter / sanitizer
- II. Using Clay pot as water dispenser in school campus to enhance pH level and minerals
- III. Making chemical free fertilizer for organic farming to avoid chemical contamination in vegetables.
- IV. Using banana leaf as substitute for plate in school canteen to enhance natural anti-oxidant in food and cultivate traditional culture
- V. Plating endangered plant/vegetable species as conservation and enlighten people in our community the important of preserving those species plants.

5.2 From 5.1, please explain its values for environmental conservation

- a. Students and community able to recall about their custom and tradition
- b. Create an awareness how to live healthy with things around us.
- c. Engagement with natural.
- d. School community able to understand the joy and deep meaning of tradition left by our ancestors for environment conservation.
- e. It's a stepping stone to realize wonder of natural and human responsible on conserve and preserve it.

6. Period of the time when the programme was/has been started

January 2018-December 2018

7. Activities (Actions and strategies of implementation). This part is important – please clearly explain all related strategies and activities that the school has implemented. Details of each activity can be attached as a part of attachments.

- I. Discussion with school teachers. (planning for lesson plan integration, sustainable activities, teacher's strength and knowledge, parents' attraction force etc.)
 - please refer our **ACTION PLAN 2018**
 - Strategies of Implementation chart
- II. Seeking for support and collaboration from school stakeholder, NGOs' and government institution.
 - We meet NGO specially Penang Green Council and Consumer association of Penang to get resources and ideas of local wisdom implementation precisely for school community.
 - We survey at University Science Malaysia, School of Biological Science members to get perfect neem seedlings and some limited herbs plant for this project.
- III. Meeting with parents to give brief explanation about the project.
 - Please refer our **Operational plan**
 - We seek support from parents and teachers' association(**PTA**) to execute activities.
- IV. Drafting detailed action plan to perform this project precisely.
 - Action Plan 2018
 - Long discussion with school community and non- school community and select practical local wisdom to be executed.

- V. Identifying any local culture to be practiced in school.
- We narrow down most practical, ideal, low cost local wisdom practice to be introduced in this project.
- Besides that, we only choose local wisdom with easily available resources around us so that easily attract many people to practice it at their home as well

- VI. Developing activities to be integrated in daily lesson plan.
- Sample Lesson plan for making organic fertilizer with year 4 pupils.
- Experiments worksheets for science lesson
- Touring and evaluation sheets for natural studies

- VII. Evaluate the implementation.
- Evaluation chart

- VIII. Collecting resources.
- Consumer association of Penang(CAP)
- Penang Green Council
- School of Biological Science, USM

- IX. Develop task force group according to sub projects.
- Weekly meeting with main committee members of this project
- Monthly discussion forum with school, volunteers and neighborhood community.

- X. Action plan development.
- Committee members list 2018

- XI. Meeting with sponsor and school teacher's council as a support.

8. Teaching and learning approaches that the school has integrated the local wisdom (as identified in point 5) for environmental conservation.

We have organized few activities and integrate Applying Local Wisdom for Environmental Conservation concept in daily teaching and learning approaches.

- i. Presentation about culture diversity in Malaysia.
- ii. Encourage student to collect local culture and wisdom for environmental conservation and preservation.
- iii. Briefing on banana leaf's nutritional value as their daily meal plate.
- iv. Plastic wrapper or polystyrene food wrappers strictly not allowed to bring inside school campus.
- v. pH experiment on water that kept in clay pot for upper primary kids.
- vi. Planting Neem seedlings around school campus.
- vii. Developing vegetable and herbal garden in school compound as extra co-curricular activities.
- viii. Integrated lesson plan to understand and practice local culture and wisdom on daily activities.
- ix. Preparation chemical free fertilizer for organic farming.

9. A) Participation with the community (How the school and community work together in planning and implementing the school programme)

- i. Planting neem seedlings around school campus and neighborhood to give awareness on air pollution.
- ii. Thought school community on small scale organic fertilizer making process using cow dung.
- iii. Joining hand with next door public park community (Taman Jajar) to clean the park and plant some trees.
- iv. Organized healthy eating and living campaign for school community.
- v. Supplying banana leaf for gathering function with school community.
- vi. Supplying drinking water which kept in clay pot for a small event at neighborhood community

B) Engagement of partners in community and their roles/contribution (Please provide the name of your partners in this programme and their roles/contributions)

Name of Partners	Roles and Contributions
MPPP(Penang Government Council)	Organize practical classes on organic farming
Penang Green Council	Contribute plant's seedlings and animal dung
INTEL	Community project – planting fruit tree
Sungai Ara Environment Council	Clean the school compound to reduce pollution
University Science Malaysia (Biology Department)	Neem tree seedlings source.

10. Activities that the school has contributed to the community related to the school programme and when

- Contributed water supply for running event organized by ‘Taman Jajar’ park community
- Organic fertilizer making workshop for school community on March at community hall
- Distribute neem seedlings and plant together in “A day for nature event on April
- Plant trees around public park area with community people on May
- Supply banana leaf to special temple prayers on January-May.

11. Monitoring and evaluation mechanisms and summary of results

Monitoring and evaluation mechanisms:

I. Work routine schedule for maintaining organic garden.

Teacher in charge always check and instruct students to carry out their task according to given schedule.

II. School canteen meal menu approval

Teacher in charge must get written approval weekly from principal before proceeding with canteen in charge person for daily meal preparation. Daily meal chart pasted in school notice board for students and parent's attention.

III. Neem tree watering schedule.

A teacher and 5 students were in-charge of this activity. They need to water and supply enough fertilizer for all neem trees around school compound as well as nearby park, according to their routine schedule.

IV. Organic fertilizer production department "Panchagavya".

Two teachers and few parents in-charge of this section. They will instruct students to collect cow and goat dung separately from the sponsor and kept in designated tank for further use. The mixing of milk, curd, banana and other raw material will be done by co-workers at school. The concentrated fertilizer will keep in special tank to release excess oxygen later transfer into small bottle for further use.

V. Cleaning and refill water into each clay pot around school campus.

A teacher and 5 students always carryout this task according to their planned schedule. They ensure every clay pot always fill with for students need. On top of that they need to wash the clay pot to avoid bacteria contamination.

Summary of results:

- I. Neem tree become natural air filter for our surrounding area.
- II. Students enjoy healthy meal and practice it daily.
- III. All waste material used more wisely, and efficient segregation done on every collected waste.
- IV. Able to produce organic fertilizer and reduce chemical waste in school environment and neighborhood.
- V. The school become environment friendly compound.
- VI. Engagement of many people from school community and neighborhood.

12. Resources used for programme implementation

- I.Plants seeds from Penang green council for mini garden development.
- II.Customised daily teaching lesson plan for teachers.
- III.Cow and goat dung sponsor from school neighborhood community
- IV.Custom made clay pot water dispenser.

13. Benefits/Impacts/ positive outcomes of the programme to students, school and the wider community

1. An eye opener to school community and neighborhood people the benefit of neem tree.
2. Making chemical free fertilizer with natural raw ingredients.
3. Use of banana leaf more often among all races around our school compound.
4. We've created plastic free compound in our school niche area.
5. Awareness created to plant organic vegetable to lead healthy lifestyle.
6. Preserving waste free environment become a goal among school community.
7. Sustainability of green living is a must for every individual in this earth.
8. Providing tree for birds and small insects.

**14. Interrelationship of the school programme with other Sustainable Development Goals (SDGs)
(Please refer to page 2 in the Information Note or <https://sustainabledevelopment.un.org/sdgs>)**

The interrelationship of the school programme with other sustainable Development Goals as below(SDGs).

1. Planting Neem seedlings around school compound – Goal 7 Affordable Clean Energy & Goal 11 Sustainable Cities and Communities
2. Making Organic fertilizer – Goal 12 Responsible Consumption and Production
3. Using Clay pot as water dispenser – Goal 6 Clean water and Sanitation
4. Banana leaf as daily disposable plate – Goal 3 Good Health and Well Being
5. Cooking food uses self -harvest and pesticide free vegetable – Goal 3 Good Health and Well Being.
6. Conserving endangered species herbal plant – Goal 12 Responsible Consumption and Production & Goal 3 Good health and Well Being

15. Plan for sustainability and plan for scaling-up/expansion

Plan for sustainability:

1. Chemical free fertilizer for organic farming
2. Healthy meal preparation become a norm in school.
3. Students has awareness on every food item they eat.
4. Parents get involve and practice to prepare nutrition rich food for their kids.
5. A teacher a tree planting project.
6. Reduce, reuse and recycle practice cultivation.

Plan for scaling-up/expansion:

1. Increase in planting more number of herbal trees around school area.
2. Teach more people to use clay pot as their water dispenser instead of plastic container.
3. Give awareness to eat chemical free vegetable in their daily meal.
4. Understand the benefit of using banana leaf as their plate.
5. Increase supply of banana plant for wider use.

16. Achievements from the school's programme "Applying Local Wisdom for Environmental Conservation"

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| <ol style="list-style-type: none">a. Neem leaf use as natural air filter and sanitizer in school compound.b. Practice to use banana leaf as food wrapper more often.c. Healthy parties and function with natural food.d. Zero processed food meal for students during school hours and continue at home.e. No junk food and eat more fruits and vegetables.f. Self- plant vegetable harvesting.g. Awareness on organic plant harvesting.h. Green environment enhancement inside and outside school campus.i. Importance of green environment preservation awareness among school community and neighborhood.j. Awareness on keeping boiled water inside clay pot to enhance it pH level. |
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17. List of supporting documents such as a copy of the school operational plan or school management plan, action plan, learning/ teaching materials, lesson plans, samples of student worksheet, manuals, etc.

If the supporting documents are in the local language, please provide a brief description in English language.

Document 1) Action plan 2018: Embrace Our Culture for Environment Conservation

Document 2) Integrated Lesson plan

Document 3) Operational Plan 2018

Document 4) Strategies of Implementation 2018

Document 5) Project Committee Members list 2018

18. Photos related to the activity/programme (Maximum of 5 photos with captions in English)

Photo 1



Healthy and nutritional food served on banana leaf (Biodegradable food wrapper)
minimum 3 times a week

Photo 2



Planting Neem tree around school compound as a natural air filter

Photo 3



Practicing organic farming with NGO members

Photo 4



Preparation chemical free fertilizer from natural material (PANCHAGAVYA)

Photo 5



Boiled water kept inside clay pot to enhance balance pH value and minerals. We are using clay pot as our water dispenser