



MEXT

MINISTRY OF EDUCATION,  
CULTURE, SPORTS,  
SCIENCE AND TECHNOLOGY-JAPAN

## SEAMEO-Japan ESD Award

Supporting Partner:



Bangkok Office  
Asia and Pacific Regional  
Bureau for Education

United Nations  
Educational, Scientific and  
Cultural Organization

### 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](http://www.seameo.org) or requested by sending an email to: [seameojapan.award@seameo.org](mailto: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](mailto:seameojapan.award@seameo.org))

#### PART I: Details of Your School

1. Name of your school: CAMBITALA ELEMENTARY SCHOOL
2. Full address: PUROK 3, BARANGAY CAMBITALA, PANTABANGAN, NUEVA ECIJA
3. Postcode: 3124      4. Country: PHILIPPINES
4. School's telephone number (country code+city code+telephone number): NONE
5. School's fax number (country code+city code+fax number): NONE
6. School's email Address: [ssharryann@yahoo.com](mailto:ssharryann@yahoo.com)
7. Name of the Head Master/Principal/School Director: ANDREW C. TOLENTINO
8. Name of the Teacher Coordinator: SHARRY ANN SANTOS-GANAREAL
9. Email address of the Coordinator: [ssharryann@yahoo.com](mailto:ssharryann@yahoo.com)
10. School website (if available): NONE
11. Educational level (Such as Kindergarten 1 to Grade/Year 9): KINDER TO GRADE 6
12. Total number of teachers in your school: 8
13. Approximately number of teachers participated in this programme: 8
14. Total number of students in your school: 196
15. Approximate number of students participated in this programme: 196

## **PART II: Information about the School's Programme**

### 1. Title of the school's programme

"Bahay Kubo" (Nipa Hut) Filipino local wisdom for sustainable development...

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

Bahay Kubo was born out of this critical juncture and the need for innovative approaches to food systems transformation and health. The project's key objectives are:

1. To develop and implement a culturally-based food curriculum. Curriculum will include health-promoting Filipino recipes and reflect upon agricultural legacies. Furthermore, the projects were all about **"ECO SCHOOL FOR K12 YOUTH EMPOWERMENT TOWARDS ATTAINING NATIONAL ECONOMIC AND SUSTAINABLE DEVELOPMENT"**.

2. To catalyze young Filipinos as active leaders in the gardening and "good food movement." Sustainability is a movement that embraces all facets of human endeavor. "Sustainable" means to perpetuate existence as well as to provide sustenance and nourishment. Today, the word is attached to everything from forestry to ceiling tile. Sustainability is most often associated with the environment and specifically to our landscapes and gardens. What is a sustainable garden? It is an organic garden taken a step further. Organic gardening also points us towards other gardening practices that pursue the goal of sustainability by conserving resources.

3. Pupils will engage in food justice concepts and the experiential planting, growing, harvesting and sharing of food. Schools are also places where children have the potential to engage in the entire food cycle through growing, harvesting, preparing, cooking, eating and composting. The goal of school food system transformation is not to create wholly self-sufficient, food-producing schools, but rather to provide opportunities for students and staff at all levels to reconnect with the sources of their food and to learn to see food as the grand connector of all aspects of human life, including the relationships between humans and nature

4. To foster intergenerational and intercultural exchange around healthy choices in food. Encourage use of traditional foods. There is a frequent perception that advice to "eat healthfully" will mean giving up familiar or traditional foods and trying to conform to the eating patterns of the dominant culture. Nutrition professionals are charged with overcoming this barrier, which involves making nutrition communications culturally relevant while assisting individuals in adopting healthful food habits.

5. Activities will include a classroom harvest meal for feeding program. Hands-on activities help demonstrate identified concepts. Lessons include optional activities that can be included if time is available. A fresh fruit or vegetable preparation is an ideal inclusion if time is permissible. The goal of the program is to build and maintain an outside garden, but it can be easily adapted to container or greenhouse gardening if needed.

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

The seeds of Bahay Kubo started in 2016. Recognizing the challenges Filipino communities faced to access both culturally relevant food and environmental education. Andrew C. Tolentino piloted a sustainable and ecofriendly school among 32 municipalities in the Province of Nueva Ecija Region III Philippines. The concept was urged on by the rise of Republic Act 10533 otherwise known as Enhance Basic Education Curriculum that deals with the actual scenario to have a hands on experience of the school based reality of life. The challenges were joined by around five thousand elementary and secondary schools and the award was given to Cambitala Elementary school for the exemplary efforts and application of "bahay kubo" local wisdom of our organic patron Principal Sir Andrew Tolentino. His researches suggests that culturally-based models such as bahay kubo could hold key lessons and become part of lessons as integrated in each subject area in all grade levels, definitely it was visioned to raise economic, environment and socio cultural benefits in the future. Bahay Kubo's multi-pronged and innovative approach aims to explore that gap between modern era and the primitive times.

### 4. Observation / goals of the programme.

These three objectives will be fulfilled through following three components:

#### **1. Environment based curriculum**

The curriculum will explore relationships between food, personal history, and community through the lens of experiential education and service. Additionally, it will take the message of food justice and healthy food access among pupils, parents, teachers, school administrators and stakeholders.

Themes and activities in the curriculum will include:

**1.1. Food traditions interviews.** Students conducted and document an interview with a Principal Andrew Tolentino of his food practices, feeding techniques to malnourished children and memories of his bahay kubo experience in his younger days. Also about school projects related to bahay kubo such as Organic Agriculture, 5r's (reuse, reduce, recycle, rot, regenerate), and Climate Change and how these factors affected the food supply.

**1.2. Economically based curriculum.** Hands-on cooking workshops with essay writing contest, poster making and search for Mr. and Ms. Nutrition. Canteen and Cooking is the heart of the cultural foods program in our school. Workshops are intended to instill a confidence in basic culinary skills, familiarity and increased interest and demand for locally grown produce. Recipes and concepts encouraged through a once per week series, using produce adapted to seasonality. Recipes will include bahay kubo vegetables used in "Pork Sinigang," and "School Harvest Pinakbet."

## **2. Growing Food, Growing Leaders**

Gardens are an ideal learning environment for our pupils (environment based curriculum), they explore how we produce, understand, grow, harvest and prepare food and the other surplus for sale in market (economic based curriculum). They also cultivate ownership, cohesion and opportunities for leadership. Student leaders and parents participated in garden design focus groups and shape the design process that resulted in "making the school seemed to be like a big bahay kubo" .

**Garden skills training and practice of our school covered activities such as:**

- Basic composting
- Creating a garden map – what to plant and when
- Selecting and starting from seed and from starts
- How to grow produce in small spaces-small is beautiful
  - Hands-on planting and harvesting

**The crops selected for the site was focused on culturally relevant bahay kubo theme and climate change adapted foods. considered local wisdom of plants mentioned in the song "bahay kubo" as follows: singkamas (turnip), talong (eggplant) sigarilyas (wingbean) mani (peanut) sitaw (string beans) bataw (Hyacinth Bean) patani (kidney beans; lima beans kundol (winter melon) patola (sponge gourd or Chinese okra) upo (bottle gourd) kalabasa (squash) labanos (radish) mustasa (mustard) sibuyas (onion) kamatis (tomato) bawang (garlic) at luya (ginger) linga (sesame seeds).**

**3. Community Building**  
Community building events are complementary to Bahay Kubo's hands-on cooking, nutrition education, and food cultivation. Pupils participants will have the opportunity to deepen their knowledge and see success stories connected with adoption of local wisdom and food justice gardens, that grows those mentioned in bahay kubo song. They managed to send their children to college and universities, sustained their simple daily need and afford them to buy their own land to till and build their houses. In their farm they build bahay kubo due to its tropical climate ambiance

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 Ethical, cultural and legal considerations**

**Ethical.** kind of development that never compromise the need of the future generation. Bayanihan is a core essence of the Filipino culture. It is helping out one's neighbor as a community, and doing a task together, thus lessening the workload and making the job easier. It is also called the 'community spirit'. It is best exhibited when people wish to move locations in the rural area.

**Cultural.** *Bahay kubo* or nipa hut in English is a Filipino traditional dwelling place made of genuine green materials like nipa leaves for the roof and split bamboos for the wall and floor. There is even a popular song about it. Though lightweight, these materials are sturdy, flexible, and multifunctional.

**Legal.**

1. Republic Act No. 9512, also known as the National Environmental Awareness and Education Act of 2008.
2. It is also the Philippine initiative in support to the ASEAN Environmental Education Action Plan for Sustainable Development 2014-2018.
3. Dep Ed Memo No.195 series 2016 National Search for Sustainable and Eco Friendly School

4. Executive Order no. 26.s. 2011 specifically Section 5.2 “for efficient and effective implementation of the National Greening Program planting 10 million trees, and in this effect Dep Ed Order no. 5 s. 2014 also issued guidelines integrating Gulayaan sa Paaralan in all other activities.

**5.2 From 5.1, please explain its values for environmental conservation**

A Filipino children’s song that has been passed down through generations inspired us to use this local wisdom “*Bahay-kubo, kahit munti, ang halaman doon ay sari-sari.* “[There is a nipa hut, although very small, the plants that grow there are varied].” It goes on to enumerate the many vegetables that grow around the *bahay-kubo*.

The *bahay-kubo* has figured in folk songs, legends, short stories and children’s drawings. It was one of our great purpose for children to bring back in the Philippine countryside and for them to nurture and appreciate mountains and countryside, a setting of a new perspective for the next generation to feel happy and find contentment in a small *bahay-kubo as an inspiration for sustainable development*.

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

**May 2016 – Immersion Period of Principal Andrew C. Tolentino** as a new school head of this Cambitala Elementary School. Planning begins. Development of healthy food and gardens curriculum, student surveys, pilot a food workshop with youth group, convene leadership team and identify roles, conduct preliminary site assessment and garden design session with consultant. Ongoing identification and application for 2016 funding opportunities.

**May-June, 2016** – 3-week food workshop series. Off-site farm field trip. First public meeting for garden project collaborative to participate in the review of garden design. Consultation with parents and students gardeners for their design concept to secure materials, finalize ground designs , and organize the sources of planting materials. Parent teachers Association as well as supreme pupil government were helping a lot for funding opportunities and later they themselves donated to begin the greening based on bahay kubo (nipa hut)

**July 2016** –Second public meeting for garden project collaborative and approval of garden design. Weekend garden work party to prepare site, assemble raised beds, and plant starts.

**August 2016** – 3-week food workshop series. Garden program integrates into youth program activities. Host a free school gardening workshop and how it will be of help to school to won different competitions soon.

**September-October 2016** – Garden program continues. Pupils showcase, dishes prepared from the garden, and invited local government officials specially Committee on education chairman.

**November 2016** – Garden program continues. 3-week food workshop series with a focus on health-promoting, delicious holiday dishes. Prepare end of year evaluation with pupils, community members, and core leaders (stakeholders).

**December 2016-January 2017 and counting** – Assess lessons learned, funding opportunities and program sustainability. Program planning for School Year 2017-2018. Later we join the national Search for Sustainable and Eco Friendly School contests carry the concept of bahay kubo.

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.

**Objective: To improve knowledge and attitudes towards school harvest and/produced products**

1. Pupils will complete a pre- and post-survey
2. Pupils will engage in a minimum of 3 hours of mentored nutrition/food education a week during each of the 3week workshop period;
3. Pupils will complete full attendance during the 3-week workshop period
4. Pupils will be divided into 3 groups, each group will engage with at least 1 topic of sustainability such as Climate change, Organic farming, and 5R’s (reuse, reduce, recycle, rot and regenerate)
5. Teachers will assess the curriculum and incorporate the sustainability topics in each lessons

6. Teachers will complete a healthy pupil participant's foods curriculum and harvest time in garden for the 3-week workshop series program
7. Pupils will report increased recognition of local fruits and vegetables
8. Pupils report an understanding of terms and concepts including "seasonal," "organic," "local," and "food availability"
9. Pupils will create one deliverable of their choice on the topic of healthy local foods (photo essay, performance) and share with peers through Pandawangan Genre our official newsletter

**Objective: To marginally increase the volume and diversity of produce consumption**

1. Pupils who report knowing that in school there is a source of healthy, affordable, and culturally appropriate food and vegetable produce based and inspired by Bahay Kubo
2. Pupils who report greater confidence to prepare a healthy meal from scratch using locally produce from school garden like "pakbet"
3. Pupils reported that they want to replicate a recipe at home
4. Pupils report confidence and improved basic gardening skills

**Objective: To develop leadership and capacity towards a healthy food environment**

1. To engage parent's members (family, neighbors, local community leaders) with pupils in the garden's participatory design process
2. To convene at least 5 pupil's family volunteers and/or school interns to form a garden committee

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

1. **Creating Learning Station** Provide different types of content by setting up learning stations — divided sections of your classroom through which groups of students rotate. You can facilitate this with a [flexible seating plan](#).

Each station should use a unique method of teaching a skill or concept related to your lesson.

**For example, students can rotate between stations that involve:**

- Watching a video
- Creating artwork
- Reading an article
- Completing puzzles
- Listening to you teach

To help students process the content after they've been through the stations, you can hold a class discussion or assign questions to answer.

2. **Use Task Cards**

Like learning stations, task cards allow you to give students a range of content. **Answering task cards can also be a small-group activity**, adding variety to classes that normally focus on solo or large-group learning.

First, make or identify tasks and questions that you'd typically find on worksheets or in textbooks.

Second, print and laminate cards that each contain a single task or question. Or, use [Teachers Pay Teachers](#) to buy pre-made cards.

Finally, set up stations around your classroom and pair students together to rotate through them. **You can individualize instruction** by monitoring the pairs, addressing knowledge gaps when needed.

3. **Interview Students**

Asking questions about learning and studying styles can help you pinpoint the kinds of content that will meet your class's needs.

While running learning stations or a [large-group activity](#), pull each student aside for a few minutes. **Ask about:**

- Their favorite types of lessons
- Their favorite in-class activities
- Which projects they're most proud of

- Which kinds of exercises help them remember key lesson points

Track your results to identify themes and students with uncommon preferences, **helping you determine which methods of instruction suit their abilities.**

4. Target Different Senses Within Lessons

A lesson should resonate with more students if it targets visual, tactile, auditory and kinesthetic senses, instead of only one.

**When applicable, appeal to a range of learning styles by:**

- Playing videos
- Using infographics
- Providing audiobooks
- Getting students to act out a scene
- Incorporating charts and illustrations within texts
- Giving both spoken and written directions to tasks
- Using relevant physical objects, such as money when teaching math skills

Allotting time for students to create artistic reflections and interpretations of lessons

Not only will these tactics help more students grasp the core concepts of lessons, but **make class more engaging.**

5. Share Your Own Strengths and Weaknesses

To familiarize students with the idea of differentiated learning, you may find it beneficial to **explain that not everyone builds skills and processes information the same way.**

Talking about your own strengths and weaknesses is one way of doing this.

Explain — on a personal level — how you study and review lessons. Share tactics that do and don't work for you, encouraging students to try them.

**Not only should this help them understand that people naturally learn differently, but give them insight into improving how they process information.**

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

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
LGU	Financial, permits and approval in different project proposals
BARANGAY	Contributed covered pathways
DEPED	Agency
FTFC	Moral and spiritual
STAKEHOLDER	Labor
DA	Gave a shredder
DOST	Starbooks, technologies and pledged of solar drier
PHILMECH	Technology assistance in using the solar panel
FIRST GEN	Gift giving of School supplies
MOUNTAINEER	Giving School supplies and
DILG	Peace and order
CSC	Professional growth
PTA	Financial and manpower
YES-O	They lead the gardening in the school
SPG	Leads the students discipline
Pandawangan (School Publication)	Publicizing articles regarding the school activities

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

The barangay won the CLEAN & GREEN PROGRAM of Cambitala Elementary School inspired by bahay Kubo ideal helps in:

1. Barangay Cambitala won the clean and green program
2. Help Sitio Tuli minority area to have their community school and Mr. Tolentino as their volunteer principal apply also bahay kubo principles in gardening
3. Help Sitio Labrador the minority area of Mt. Pinatubo eruption victims to re start their livelihood program with Bahay Kubo inspiration.

## 11. Monitoring and evaluation mechanisms and summary of results

### **Monitoring and evaluation mechanisms:**

CRITERIA FOR DETERMINING THE LEVEL OF SUSTAINABILITY OF THE SCHOOLS ARE GIVEN BELOW:

1. Clear articulation and integration of social, ethical and environmental responsibility in the institution's vision, mission and governance (10 points)
2. Environmental Dimensions of School Operations (40 points for all categories)
3. Environment-related Features of the School Curriculum (20 points for all categories)
4. Presence of Vibrant Eco Organizations in Campus (10 points in all categories)
5. Presence of Environmental Partners and Linkages in Various Programs' Projects and Activities
6. Socio-Cultural Sustainability
7. Economic Sustainability

## 12. Resources used for programme implementation

DEPARTMENT OF EDUCATION-MOOE, Local Government Unit support, Department of science and Technology, PHILMECH (Post harvest Facilities), FIRST GEN Hydro Power, MOUNTAINEERS Club.

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

**Students-** broaden their knowledge about the importance of the cleanliness, sustainability and pollution-free of the environment. Students are engaged with sustainable school waste management, community gardening or energy efficiency, they will learn about sustainability practices, and increase their familiarity with the wide range of career opportunities in this field.

**School-** improves teaching and learning by providing a meaningful, real-world focus which students and citizen recognize as significant for their lives, thus enhancing school relevance, and supporting engagement and enjoyment. Students gain understanding and skills that enable the development of capabilities for living and working sustainably, now and in the future.

**Community-** Involve citizens in monitoring and improving the school and community's use of energy and resources. This enhances their learning about living more sustainably and efficiently, and about the connections between environmental quality and well-being. When planning programmes, taking their community knowledge and their desire for a better local quality of life into account enables students and citizens to see the value of school.

## 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 school Principal Andrew Tolentino is continuously moving on in the implementation Bahay Kubo local wisdom and so luckily the Eco Sustainable and Child Friendly School System (CFSS). Fortunately, the school was included in the list of schools in the District of Pantabangan and Division of Nueva Ecija to be evaluated in school year 2018-2019 as part of the areas appraised in National Search for Sustainable and Eco Friendly School. The Municipal Government of Pantabangan is aware of the last year's search where Principal Andrew C. Tolentino's school won first in the regional level and become finalist in the national level.

Also, joined the Trust for Sustainable Living Sustainability (TSL) Challenge an International competition on sustainability wherein Principal Andrew C. Tolentino's former Sampaloc Elementary School won and was chosen as 2016 International Sustainability Challenge awardee.

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

### **Plan for sustainability and scaling up/expansion:**

**All sustainable features below were scale up to 1000% due to Principal Andrew Tolentino's adoption of mountainous area in nearby municipality in Rizal Nueva Ecija, Region III Philippines**

1. Integrating ecological solid waste management **100%**
2. Tree growing and caring as key components to attain the goal of DepEd on Poverty reduction and food security biodiversity
3. water conservation
4. climate change mitigation and adaptation
5. The greening of the school ground and premises, as outside classroom laboratory that provides students an exciting opportunity and worthwhile experience to till, plant, nourish and harvest the fruit of their labor. The project successfully greened the school premises, produced crops that can supply vegetable needs of our canteen and in return provide foods for our feeding program and thereby improved their nutritional status.

6. We adapted the **permaculture** ways and designs so that ornamentals and other plants were joined with the vegetables, vines and root crops to grown harmoniously.
7. We practice the **zero waste management** inside the school and we produced our own organic fertilizers, vermi-compost, vermi liquid and applied zero tillage, a stress free gardening practices. We maximize the spaces available within the school ground and no use at all of any chemical in our garden.
8. Zero foul smell hog raising
9. Seedling production
10. Bamboo, Banana and oregano garden
11. Medicinal plants
12. Adoption of wild animals like monkey and owl

16. Achievements from the school’s programme “Applying Local Wisdom for Environmental Conservation”

1. Pantabangan District Gulayan sa Paaralan Winner;
2. Congressional District II (CD II) Finalist and awardee in Gulayan sa Paaralan;
3. Brigada Eskwela Winner Division of Nueva Ecija in Small School Category 3<sup>rd</sup> place;
4. Division of Nueva Ecija representative for National Search for Sustainable and Eco Friendly School
5. Champion Regional Winner in National Search for Sustainable and Eco Friendly School;
6. Regional Winner Nestle Water Leadership Award;
7. Regional Winner One Meralco Energy Award;
8. National Finalist to represent Region III in National Search for Sustainable and Eco Friendly School;
9. South Asian Ministers of Education Organization (SEAMEO) Japan Finalist for Water Conservation Features inside School Ground;
10. Trust for Sustainable Living International Video Sustainability Challenge includes video of Cambitala Elementary School as one of the most sustainable school in the world.

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.

School Improvement Plan(SIP) and Enhance School Improvement Plan (eSIP)-long term school plan of Cambitala ES

1. Pandawangan Genre 2018-2019- School Quarterly NewsPaper
2. Pandawangan Genre DOST- School Quarterly NewsPaper
3. Pandawangan Genre NSSEFS- School Quarterly NewsPaper
4. TSL 2018 Schools Sustainability Challenge - Cambitala Elementary School (<https://www.youtube.com/watch?v=rsjzRSjk31g>)-Trust for Sustainable Living International
5. Climate Change (short film of students) (<https://youtu.be/53rOLNspNao>)- **Video prepared by Grade 6 pupils about Climate Change**

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

Photo1



School Principal Andrew C. Tolentino, with the support of Department of Agriculture demonstrates how to use the shredder for easy facilitation of decomposition of all organic matters and to shred all bio degradable waste in the school

Photo 2



In Cambitala Elementary School back yard with one of our pupils Sofia, with the papaya and bahay kubo plants that surrounds...making it green, sustainable and helps a lot to make the temperature always cool and relaxing.

Photo 3



One of the adopted areas of Principal Andrew Tolentino located in Municipality of Rizal, Nueva Ecija, a reforestation area where "bahay kubo" are always present and all Cambitala Elementary School projects are always present and replicated.

Photo 4



Cook fest competition where Cambitala pupils joined and used the “bahay kubo” garden of vegetables harvested in the area. Their menu is “pakbet” one of the local dishes composed of garlic, onions, tomato, sweet potato, egg plant, okra, wing beans, hyacinth beans, string beans, kidney beans and squash.

Photo 5



Supreme Pupil President Zyrelle Ann Pantilon with her special pose in the school “trellis” wherein different kind of climbers are present such as passion fruit, sponge gourd, winter melon, string beans, and soon grapes will climb also surrounded by herbal plants called “oregano” and red hot chili, bamboo and seasoned corn.