



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

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: **Widya Mukti Vocational School**
2. Full address: **Jalan Perkebunan Gunung Satria, RT 01 RW 02, Sirnagalih Village,
Subdistrict of Cigalontang, Tasikmalaya Regency, West Java**
3. Postcode: **46463**
4. Country: **INDONESIA**
5. School's telephone number (country code+city code+telephone number): **+62-85-2222-87900**
6. School's fax number (country code+city code+fax number): **+62-262-238417**
7. School's email Address: **smkwidyamukti@gmail.com**
8. Name of the Head Master/Principal/School Director: **Dadan Erawan, S.Pd., M.Pd.**
9. Name of the Teacher Coordinator: **Ginanjar M. Sukamdani, S.Pd.**
10. Email address of the Coordinator: **ginanjar.muhamadsukamdani@gmail.com**
11. School website (if available): **<http://setiabhakti.id/index.php/id/pendidikan/smk-widya-mukti>**
12. Educational level (Such as Kindergarten 1 to Grade/Year 9): **Junior High School Grade 7-9**
13. Total number of teachers in your school: **21 teachers**
14. Approximately number of teachers participated in this programme: **6 teachers**
15. Total number of students in your school: **342 students**
16. Approximate number of students participated in this programme: **156 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

PLANTATION!

Participative-Active Learning through the Adoption of "Tritangtu" Philosophy to save the Environment!

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

The Widya Mukti Vocational Senior High School (*SMK Widya Mukti*) is a private school in Tasikmalaya regency and located in the border of Tasikmalaya and Garut Regency in West Java Province, Indonesia. Our student's family backgrounds are mostly coming from local farmers family, therefore, there are very demanding on the agriculture goods productivity.

In the last decade, however, the brick industry is booming in our region, since, our location is close to the province capital and some other urban areas. Brick industry dragged up the top soil of the agricultural land and this soil will be used as the raw material in making the bricks. Therefore, agricultural land fertility degradation is becoming serious issue in our region. The concern from several entities, however, are lacking related to this problem.

Our school initiate a programme called PLANTATION: Participative-Active Learning through the Adoption of "Tritangtu" Philosophy to save the Environment! We adopt the philosophy of Tritangtu as our Sundanese local wisdom in protecting the environment. Tri Tangtu is the life philosophy of the Sundanese community in West Java, Indonesia, in treating their environment. There are three important division of the world that are connected interdependently with each other: sky, human, and earth/land. The environmental balances of those three components are reliant on the behavior of the middle world (human) as the center of the activities. We adopt the Tri Tangtu on our customized school curriculum, teaching and learning material, including out of the school learning activities with local communities. There are three subjects that involved on this "Plantation" programme, which are Biology, English, and Sundanese Language & Art. The main goal of the "Plantation" programme is to create awareness of our student related to our local environmental issue, especially related to agricultural land degradation caused by brick industry. Further, through our breakthrough initiative in teaching and learning approaches, we want to encourage our students and its family as the active "actor" in promoting simple and applicative solution in tackling environmental issue in their small community.

In addition to the classroom and school activities, we also reached out the local farmers community through our "Plantation" programme. The activities that are conducted are the knowledge sharing and a public discussion with local farmers about agricultural land fertility degradation caused by brick industry. Further, we also established a compost center to utilize unused agriculture waste from local farmers. In addition, our teacher established community gathering for farmers housewife and gather once a week on every Wednesday. During gathering, the environmental messages is delivered, including other material such as family healthiness and family financial plan. Those activities are performed since we want to share our spirit in tackle the environmental degradation issue in our community.

The "Plantation" initiative has led our school to receive recognitions from several local entities, including several awards from several institution. Our students received first national winner on scientific essay competition and district winner on student creativity contest. One of the teacher received the best influential teacher from University of Jakarta. Further, we received several awards from the Yasebha foundation for our teacher and the students. Those awards encourage us to enhance and continue the "Plantation" programme with further additional initiatives. The most important thing, however, is to spread our message and spirit in adopting the Tri Tangtu philosophy in addressing environmental degradation in any community, locally and globally.

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

West Java Province in the past consisted of beautiful villages characterized with fertile terrains of paddy fields and dry farms. Our province has been renowned for its high-quality agriculture products such as rice, corns, bananas, and varying vegetables. Based statistical data of BPS, nearly 90% of local population in West Java make their living on agriculture/livestock sectors and the associated sub-sectors.

For the last few years, as the consequence of housing booming in Java and Jakarta, the brick making industries are rampant in West Java, including in our district. Brick making process needs relatively soft upper soil to produce bricks according to the standards for housing industries. Brick producers eye the owners of agriculture lands to “rent” or sell the upper soil layer of their lands. Their economic conditions forced these agriculture land owners lease or sell the upper layer of their lands. The farmers received compensation of cash money according to the areas of land they leased/sold, which is very unproportionable with the risk of lost fertile layers for long time.

The brick making industries rake the upper soils until one and half meter depth. Only the remaining hard and unfertile soils left to the farmers. Owing to the absence of such fertile upper soil, their agriculture production is then decreasing significantly. In addition, potential soil erosion due to high rainfall and slope terrain and hilly contours is mounting. These farmers have no idea of how to restore the fertility of their lands. What they know is to replant their lands.

As an indigenous resident of West Java, along with our several local institution partner, we are very anxious to look for the solution of these severely degraded soils. After reviewing several references and making experiments in demonstration plots, as from 2013 we carried out a social program named “PLANTATION” (Participative-Active Learning through the Adoption of “Tri Tangtu” Philosophy to save the Environment). We adopt the philosophy of Tri Tangtu as our Sundanese local wisdom in protecting the environment. The adoptions are reflected on our customized school curriculum, teaching and learning material, including out of the school learning activities with local communities.

4. Objectives/goals of the programme

As explained above on the background session, our main action is intended to address our local environmental degradation, which is damaged agricultural land caused by brick industry. Since we are an educational entity, therefore our objectives of this program are larger because we are preparing our students as the future resident in this region. The objectives of the “Plantation” program are as follows:

- To create awareness of our student related to our local environmental issue, especially related to agricultural degradation land in Garut, West Java, caused by brick industry.
- To establish a breakthrough initiative in teaching and learning approaches, which disseminate our local philosophy heritage (Tri Tangtu). The initiative is reflected in our lesson plan, teaching material, teaching techniques and student activities in and outside classroom. The subjects that involved on this “PLANTATION” programme are Biology, English, and Local Language & Art.
- Most of the families of our students are directly impacted by this issue; therefore, this “PLANTATION” program is designed to make our students and its family as an active “actor” in promoting simple and applicative solution in tackling environmental issue in their community.
- To establish a conducive environment for our student in increasing their leadership skills, not only within the classroom and the school, but also in their local community. Further, we assist our student through our program activities, such as community town-hall meeting, “my tree is my saving for education” project, as well as student presentation to parents.
- To attract parents and local community in our school activities and programmes.

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

The concept of the Tri Tangtu philosophy is the life philosophy of the Sundanese community in West Java, Indonesia, in treating their environment. On Tri Tangtu philosophy, there are three important division of the world that are connected interdependently with each other: *Buana Nyungcung* (Upper world: Sky), *Buana Larang* (Underworld; Earth, Land), and *Buana Pancatengah* (Middle world: Man and Woman). The environmental balances of those three components are reliant on the behavior of the middle world (human) as the center of the activities; therefore, we have to preserve and conserve both of the earth and the sky for our better life. The concept of the Tri Tangtu philosophy influences the art, ethic, and customs in the daily lives of Sundanese people, especially in West Java.

5.2 From 5.1, please explain its values for environmental conservation

The Tri Tangtu philosophy is a great foundation for the environmental preservation, especially for the Sundanese people in West Java, Indonesia. If we follow the Tri Tangtu, our world is divided into three components: Sky, Earth, and Human. The sky mostly described as the air and the rain. The earth (land) as the place for living of the human is very reliant on the rain and the air from the sky as well as the activity of the human. Therefore, human basically are very dependent on the sky and the earth, but the condition of those two components are determined by the behavior of the human itself. The sky and the earth must be respected, preserved and utilized wisely. If we destroy the earth (land), the air quality and the rain will be decreased, then it can be a catastrophe for the human being.

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

January 2017 to current (on-going process)

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.

We cluster our activities of “Plantation” program through several categories as follows:

1. Teacher and School Management Workshop

The critical actors of the “PLANTATION” Programme is our teacher and school management. Therefore, our first activity was a workshop to disseminate the Tri Tangtu philosophy as well as to discuss current local environmental degradation caused by brick industry. This workshop established our school commitment, especially our teachers, to adopt the Tri Tangtu philosophy and environmental preservation messages on the teaching material and classroom activities.

2. Awareness

On this stage, we encourage our student to explore two activities. On one hand, we promote the Tri Tangtu philosophy related to the environmental conservation. On the other hand, we persuade our student to investigate current environmental degradation, especially on their local community, which is damaged agriculture land caused by brick industry and lead them to find solutions.

3. Discovery Learning

There are two activities on this stage, which are in-classroom and out-of-classroom activities. In the classroom, the teacher present theoretical and explanation of environmental preservation based on our teaching textbook. On the out-of-classroom activities, we invite local experts to explain the applied environmental preservation activities related to the current issues. We have a very good relation with several local universities as our experts. Further, we also invite local farmer community in our school activities for the sharing sessions.

4. Simple Solution Exploration

Based on theory and expert explanation, we encourage our student to explore and discuss applicative solution.

5. Problem and Solution Communication

One of the “PLANTATION” programme activity is the student presentation during the Earth Day. We encourage our student to present their ideas through poster and other presentation methods. Selected solutions then presented to the parents and local farmers community.

6. Solution Implementation of the Field

We have three best selected solutions from our students. Those three ideas then implemented on the selected farm land in our community. The implementation is assisted not only by our teacher, but also the experts from local university as well as local farmers community.

7. Evaluation

We evaluate the project achievement on every stage. The evaluation has two main goals. First, we want to evaluate student achievement as part of their academic learning process. Second, we want to have a thorough evaluation of our “PLANTATION” programme, therefore, the assessment are not only from the students’ side, but also include feedback from expert and farmers community. Those two evaluation results then are used for the next phase of the “PLANTATION” programme.

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

We have three main subjects that are committed as well as act as the front-line in adopting the Tri Tangtu philosophy and environmental preservation messages on the teaching material and classroom activities, which are: Biology, Sundanese Language & Art, and English (*the lesson plan and related material of these subjects are attached*).

- The Sundanese Language & Art course disseminate the Tri Tangtu philosophy through traditional song lesson, traditional poetry, and Sundanese literature, which are consisted the environmental conservation messages.
- The English subject lead the student to present their ideas through poster presentation as well as classroom discussion.
- The Biology subject guide the student to identify the local environmental degradation problem as well as promote active learning activities in finding simple solutions from school textbook, library activities, and visiting teacher from local university. In addition, the practicum of the Biology class is also conducted to implement student’s solution findings in the selected agriculture farm lands (under assistance from the experts from local university as well as local farmers community). Lastly, the student creates a paper and presentation to portray their analytical results.

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

The community targeted group on this “PLANTATION” programme are local farmers who have damaged agricultural land caused by the brick industry in Cilawu District and Salawu District in West Java Province, Indonesia. Based on our preliminary data in December 2016, there were 136 farmers in these locations that have been affected by the brick industry. We clustered those farmers in small groups, mostly based on their location. This arrangement then become our foundation in establishing the meeting and workshop, as well as our student land rehabilitation implementation project.

In addition, there are more than 1000 farmers in these areas, which can be involved in our school compost initiative. Their engagement will be as the sources of organic waste (especially rice straw and cattle waste), as well as compost users. Further, most of our students are coming from this area (including the farmers who affected by brick industries); therefore, it makes our “PLANTATION” programme easier to engage with local community.

Our teacher and students established several ways to work together with local community. We communicate with them mostly through public meetings and organized religious gathering activities. The public meeting is involving local leaders that have already been contacted by our teacher. In addition, to accelerate the communication process, especially to convince the local farmers related our land rehabilitation initiatives, we collaborate with religious leaders in the local community. The locally scheduled religious gatherings mostly engage all village residents, making it easier to deliver the project vision, mission, and action plan to the local community. After the initiation of public meetings and involvement of religious gatherings, we conduct the workshop with local farmers to deliver our technical land rehabilitation process, as well as composting process.

Together with local farmers, we established school composting center. We encouraged the farmers to bring their agricultural waste to our compost center. For the return we provide them with free organic fertilizer at certain proportion, including using this compost production as school tuition discount for the parents. Untiring effort is necessary to change the thinking pattern of these farmers. For them, collecting waste is unnecessary additional work. However, they are now voluntarily collecting their organic waste. They have perceived the positive effect of free organic fertilizers from us.

In early stage, we conducted this project at demonstration plots because of our limited resources. The produced compost is then used to support our land reclamation project. This natural fertilizer will be mixed to the soils when the farmers plough their paddy fields or injected until half meter deep when planting Albisiah and bananas trees.

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
Local University in West Java and its Alumni Experts: College of Agriculture of Garut University; Bogor University of Agriculture, Indonesia Education University and Siliwangi University	As a local university, they have interacted with local farming communities for many years. We collaborate with them in strengthening our modified curriculum, including assisting our teacher and student in conducting workshop with local farmers and community engagement program. In addition, we also optimize their research and data on the local farmers' community in West Java.
Sindang Sari Youth Movement	They are a youth organization which focuses on environmental protection initiatives. They provide a network of local community leaders. In addition, they provide technical support and physical installation for early stage meetings of our project with local communities.
Genteng Traditional Market	This is a local traditional market with the social enterprise concept; therefore, they have good community relationship, especially with the local farmers and agricultural product traders in Garut. Further, they also produce organic waste and some of the shopper are selling compost. We collaborate with them in getting organic waste and selling our school compost product.
Tasikmalaya Municipal Government	As the governmental agency, they facilitate our school project articulating with other public departments, as well as, providing our student project permits.

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

Following are several activities that has been conducted through our “PLANTATION” Programme:

- We conducted a knowledge sharing and public discussion with local farmers about agricultural land fertility degradation caused by brick industry and its mitigation and applicative solution. The event was held on October 28, 2017 and December 29, 2017 (*photos of the events are attached*);
- We established a community compost center to accommodate agriculture waste, such as rice straw to be processed for compost. The compost center was established on August 2017 and continue in producing the compost until now;
- Our teacher established community gathering for farmers housewife and gather once a week on every Wednesday. During gathering, the environmental messages is delivered, including other material such as family healthiness and family financial plan. The housewife is selected because their roles in the farmers family is very important. The housewife said that this weekly gathering is very beneficial for them, since they can learn many new knowledges to be applied in their daily life (*photos of the events are attached*).
- We also reached some of brick industry actor and in our public forum, they mentioned that they will support to help the restoration process of the degraded agriculture land on their site.

11. Monitoring and evaluation mechanisms and summary of results

Monitoring and evaluation mechanisms:
 Within the educational teaching activities, we conducted formal evaluation to our students based on teachers' lesson plan. The sample student evaluation result on Biology class is attached on this form. In addition to our students, we are conducting our evaluation on our activities on the “PLANTATION” programme through several approaches as follows:

- **Quarterly Focus Group Discussion:** Our Teacher Group, the local farmer representatives, the expert in agriculture from local government are meeting with us quarterly (once in four months) to discuss our school project achievements as well as issues and challenges. All meeting notes are

recorded as our evaluation record, which will be used as our baseline for the next action in the following months (*photos of the events are attached*).

- **Land Rehabilitation Implementation Evaluation:** We set the target as many of 136 local farmers will join with us in our “PLANTATION” program. Therefore, we are expecting to rehabilitate 136 farmlands in Cilawu and Salawu districts during project period. The components of evaluation are number of farmlands, amount of compost injected, and number of tree seeds planted. In addition, we are arranging the expert technical evaluation through “pre and post” project comparison.
- **Workshop evaluation:** We conducted evaluation through “pre and posttest” survey through workshop participation and mentoring program. Interestingly, we incorporate our evaluation during our students-parents’ meeting, since most of those farmers are also our students’ parents.
- **Composting Implementation Evaluation:** The composting initiative is evaluated through calculation of number organic waste collected, amount of compost produced, and number of local farmers that joined the composting initiative.

12. Resources used for programme implementation

There are three group of resources that are involved on the “Plantation” programme. First, the human resources, which are consisted of teacher, school management, parent association, expert from local university and Local Farmers Community (which are mostly our students’ parents). Second are school facilities and related infrastructure, such as library (for literature activities), school backyard for compost center, and Multimedia Room for student discussion and presentation material preparation. Lastly, we need tools and supporting material, especially for our field activities in the selected agriculture land. We utilize not only schools’ equipment, but also devises that are supported by Local Farmers Community. Further, we also use school main hall and village hall for our students and community meeting.

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

Following are the benefits and impact of the “Plantation” programme:

- Increasing awareness of our teachers, students, and local community. Our teacher and our students are now become the active actors in spreading out the Tri Tangtu messages related to the environmental conservation. They are eager to speak-up about agricultural land degradation and their solution ideas through their social media account and other medias. Our local farmers community now become knowledgeable related to the impact of brick industry to their farmland, since we connected them with experts from local university through several events.
- Reducing waste! We succeeded in establishing our compost center in our school and utilize the agricultural waste from our local community. we started to produce compost from such hays and cow and sheep droppings. In that time, we managed to produce 120 (one hundred and twenty) bags of compost. We used them for our land recovery plots. In addition, our students are also created several products from recycled un-organic waste through their extracurricular activities.
- Land Recovery! Along with compost production, we ploughed the plots. The plots were in damaged condition because of brick making activities. The soils have hard texture and not soft. Several plowings are therefore necessary with relatively intensive watering. At the end of plowing stage, we mixed compost and the plots were ready for planting of groundnuts. As of early July 2018 we saw some changes in soil texture, i.e. from originally dry and hard texture to a little bit soft texture. The groundnuts had been haversted two times. In such period, the land owners had harvested the bananas as additional incomes.

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 “PLANTATION” Programme adopted the Tri Tangtu philosophy, which has message that the earth must be respected, preserved and utilized wisely by the human being. Further, our programme was triggered by the local environment problem: agricultural land degradation caused by the brick industry. Therefore, it is noticeable that our initiative is very related and strongly in line with the SDGs Goal 15, which is to protect, restore and promote sustainable use of terrestrial ecosystems and reserve land degradation. Additionally, our school and student activities through the “PLANTATION” programme disseminate the SDGs goal 15 messages, not only within our school but also with our local community.

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

Plan for sustainability:

- *Profit initiation:* Our current main funding source for the “PLANTATION” project is only from our school budget. Therefore, we believe that our compost center and tree seeds center can generate profit from its operation. We can cooperate our compost center with some company such as local hotel and resort in maintaining their gardening. We believe that the profit from this initiative can secure the programme basic expenses.
- We will try to gain support and endorsement from Department of Education of West Java Province, since the issue of agricultural degradation caused by brick industry are widely spread-out in West Java; therefore, our programme can be replicated in other schools in other areas. Their endorsement will secure the sustainability and continuation of this programme.

Plan for scaling-up/expansion:

The sustainability of this project will be arranged through several methods as follows:

- *Local youth organization engagement:* Our project will appoint local youth member in all its initiatives. Therefore, those youth members are expected to be able to comprehend our project mission, goals, as well as initiatives in addressing local environmental issue. In addition, our collaboration with local community leaders and experts from local university will make them easier in running and expanding this project in the near future.
- *Local community engagement:* In all of our project programs, we will engage the involvement of local businesses, governmental institutions, as well as local mass media. Our collaboration will heighten awareness of current local environmental degradation issue caused by brick industry. We believe that they will support greatly the project initiative, both on current project and future project continuation. In addition, we will also try to collaborate with Chamber of Commerce and Industry (KADIN) of Tasikmalaya, which will make our project easier to reach donor, sponsor and investors for scaling-up this initiative.

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

Following are the achievement of our “Plantation” programme:

1. Student national science essay competition on environmental protection theme at Bogor Agriculture University;
2. National Award for The Best Influential Teacher from State University of Jakarta;
3. The invitation from the national television news features;
4. The Best School Headmaster 2017 from the Yasebha Foundation;
5. The Best Creative Class Initiative 2017 from the Yasebha Foundation;
6. Second Winner of Tasikmalaya Regency for Student Creativity 2018;
7. First Winner of Student News Reportage on Natural Damage Investigation in Tasikmalaya and Garut

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) **Folder Lesson Plan** (containing 4 samples of lesson plan on Biology, English & Sundanese)
Document 2) **Folder Teaching Material** (containing 2 samples of student manual and class presentation)
Document 3) **Folder Student Paper Samples** (containing 3 samples of student paper and essay)
Document 4) **Folder Student Presentation** (containing 3 samples of student presentation in the class)
Document 5) **Folder Student Evaluation Result** (containing 3 samples of student evaluations)

Note: all attachments are sent on a zip file format

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

Photo1



A site of brick industry which dredge up the fertile soil from this agriculture land for about two meters deep. This site is very close to our school: just about five minutes walking distance.

Photo 2



Our student explored damaged agricultural land and interviewed directly the workers on the site of brick industry to identify the process as well as its impact to the environment.

Photo 3



Student are practicing the process in making compost utilizing organic agriculture waste.

Photo 4



Student discussion and poster presentation about brick industry and its impact to the environment

Photo 5



- 1. Awards and recognitions for the best student presenters and the best teacher initiative program*
- 2. Community seminar in our school about environmental degradation and how we tackle it*
- 3. Farmers housewife weekly gathering in our school*
- 4. "PLANTATION" programme evaluation with expert, farmers community, teacher and students.*