

# 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](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

- Name of your school: SMA N 1 Pakis Aji Jepara, Indonesia
- Full address: Jl. Mambak – Pakis Adhi KM. 4, Suwawal Timur, Pakis Aji, Rw. 02, Suwawal Tim., Pakis Aji, Kabupaten Jepara, Jawa Tengah 59452
- Postcode: 59452
- Country: Indonesia
- School's telephone number (country code+city code+telephone number): (+62291) 7519100
- School's fax number (country code+city code+fax number): -
- School's email Address: [admin@smknpakisaji.sch.id](mailto:admin@smknpakisaji.sch.id)
- Name of the Head Master/Principal/School Director: Drs. Sunarya
- Name of the Teacher Coordinator: Dr. Achmad Solikhin, S.Hut and Hesti Tri Cendrawati, SSi, MSi
- Email address of the Coordinator: [achmad.solikhin1993@gmail.com](mailto:achmad.solikhin1993@gmail.com) / [cendrawatihesty@gmail.com](mailto:cendrawatihesty@gmail.com)
- School website (if available): <http://smknpakisaji.sch.id/> or <http://smk.smknpakisaji.sch.id/>  
<http://smk.smknpakisaji.sch.id/nespajirawebv2fiq/>
- Educational level (Such as Kindergarten 1 to Grade/Year 9): Senior High School, Class of X to XII
- Total number of teachers in your school: 70 members
- Approximately number of teachers participated in this programme: 70 members
- Total number of students in your school: 990 members
- Approximate number of students participated in this programme: 990 members

### 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.

- Title of the school's programme

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| Climate Smart Ecopreneurship Programme : No Leave Local Wisdom Behind for Environmental Preservation |
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## 2. Summary of the programme (one half to 1 page of A4 sheet size)

The Climate Smart Ecopreneurship is one of sustainable ecological entrepreneurship education and projects that integrates local wisdom, sciences, and technologies. This program helps to achieve Sustainable Development Goals, especially Goal 13 (Climate Action) and 15 (Life on Land) by giving intensive education, learning, and practices about Climate Change Education for Sustainable Development and Pro Ecology Local Wisdoms across the curriculum and inside and outside the classroom.. This program also has the potential as an catalyst for the acceleration of ESD (Education for Sustainable Development). This program consists of several indispensable projects that have been undertaken since 2012, such as: [Carbon Farming School](#), [Go Tropical Agroforest Foods](#), and Organic Fertilizers Production project. Carbon Farming Schools are the informal education set up for educating young people about organic farming and agroforestry system that are “pro” to the environment with envisaging the importance of low carbon process. The education is tailored with the presence of local wisdom existed in the local communities, such as: traditional agricultural cultures, the introduction of *tumpang sari* system (agro-silvofishery), and planting more local tree species. Another project is Go Tropical Agroforest Foods in which the project concerns on the implementation of agroforestry for improving local farmers’ livelihood and the production of local foods with traditional knowledges over conventional methods that are not eco-friendly. The students of [SMK N 1 Pakis Aji](#) are trained to benefit local wisdom to process and produce local food products, including the utilization of natural ingredients, the production of traditional local products (Jamu/traditional drink from Java culture), and the uses of traditional tools for food production. Another project focusing on the implementation of local wisdom is Organic Fertilizers Production. The project is the field education given to the students regarding the production of organic fertilizers from animal husbandry’s dungs and biomass products. The production utilizes very traditional process and knowledge, such as: the utilization of organic wastes derived from animal’s dung and biomass, and some traditional receipt used to produce organic fertilizers.

As we know, the Climate Smart Ecopreneurship has engaged more than 990 students with the guidance of 70 sophisticated teachers. In collaboration with [the Indonesian Green Action Forum \(IGAF\)](#), those projects does not only concern in agriculture and forestry but also global environment crises (plastic pollution, biodiversity, climate change, and so forth) in which those crisis are addressed with innovative ecopreneurship programs, integrating the existence of local wisdom, sciences, and technologies. The integration of the three is verily difficult but this project has attempted to put forward the importance of local wisdom for safeguarding environment, especially agriculture and forestry. With pro-environment - based local wisdom, agriculture and forestry farming (agroforestry) is sustained to be applied in this project with engaging local farmers and marginalized people (women). This program has been reported nationally and internationally, such as: [UNFAO](#), [UN-HABITAT](#), [UN Environment EPLC](#), [Tunza Eco-generation](#), [Our Positive Planet](#), [Sandwatch Foundation](#), and [Barilla Center for Food and Nutrition](#). In addition, due to excellent contribution for safeguarding Indonesia environment, this program has been awarded by UN Environment Eco-Peace Leadership Center (EPLC) and Ministry of Korea Republic.

Within an excellent mission to create Indonesia young entrepreneurs, this school has developed some activities to support the acceleration of the program, including: entrepreneurship course, agribusiness education, climate smart agroforest education, leadership training, agroforest-innovations courses, field observatory, scientific discussion, students’ skills improvement, organic fertilizers, plastic waste management, and so forth. To support the sustainability of the project, we create clear value propositions for those projects that will be beneficial to be assessed by our partners. In addition, we continue to create sustainable partnership with local to international platforms that will be versatile to give financial and non-financial support to those projects. Lastly, we ensure that local wisdom acquired by generations can drive the sustainability of this programme and can sustain the preservation of the environment in Indonesia.

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

As we know, Indonesia is one of tropical countries having the world’s second largest rainforest of about 94,432,000 ha and the highest level of biodiversity after Brasil. However, Indonesia is recognized as one of the largest contributors to global GHG emissions because of deforestation and peat fires. In addition, Indonesia is well-recognized as the second largest emitter of plastic wastes dumped into

ocean.

Besides the above issues, Jepara Regency has very complex environmental burdens, such as: flooding, mangrove forest destruction, plastic wastes pollution, biodiversity loss, and water crisis. However, the city has been endowed by God with several natural resources that should be preserved. The city is also very rich with edible plants presence, having high economical values, such as: maize, soybean, peanut, beans, cassava, and sweet potatoes.

Most of Jepara communities and farmers have still benefited local wisdom to manage its natural resources, especially, especially those living in rural, remote, and mountainous areas. They still use local wisdom to preserve the environment, such as: the belief to holy spirits who live in big trees, big stone, river, mountain, forest, and sea. In addition, some Jepara urban communities are still no doubt with traditional cultures, such as: Pranoto Mangsa, Sesajen, and traditional celebrations in the name of a gift from God for the blessings given to nature. However, due to the rapid urbanization and non eco-friendly anthropogenic activities, local wisdom and cultural values used for natural resources preservation in Indonesia has been gradually eroded and lost.

As a solution, the infiltration of local wisdom and cultures to students is verily pivotal because it helps students to be more aware of the importance of natural resources for future generations. To help achieve the program, SMK N 1 Pakis Aji, a famous vocational school in Jepara Regency, has started to create some activities that help introduce the importance of local wisdom in preserving ecology with integrating students entrepreneurship programs. There are three most eminent projects, which focus on the regard, such as: Carbon Farming School, Go Tropical Agroforest Foods, and Organic Fertilizers Production.

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

The objectives of the Climate Smart Ecopreneurship Programme are:

1. to create young eco-preneurs who have caring toward the importance of local wisdom in preserving environment in Indonesia, most notably, Jepara regency;
2. to help sustain environment in Jepara regency through concrete actions based eco-preneurship that will help improve social, economic, and ecological conditions of Jepara citizens.

#### 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 Climate Smart Ecopreneurship Program has applied some local wisdom integrated with science and technology. We have educated SMK N 1 Pakis Aji students as a young ecopreneur about the importance of local wisdom for their green low carbon business. The business should be “pro” to climate and local wisdom without releasing carbon footprints that will induce climate change. There are some local knowledge/wisdom used in the Program, such as:

1. “Nguri-Nguri Budaya Jawa”: This subject is educated to all SMK N 1 Pakis Aji about the importance of Javanese languages and cultures for students. The students will also understand some local wisdom studied in this course, and the students can link the wisdom with natural resources and environment management.
2. “Pranata Mangsa” at Carbon Farming Schools: Some students are taught about Javanese traditional manners to cultivate agricultural plants in the field and other lands. The education engages local farmers who understand what kinds of special seasons to plant paddy or agricultural plants.
3. “Selamatan” after Harvesting of Agricultural Plants: Students also understand of how to translate their gratefulness to God because of high yield of agricultural plants harvested. This event is annually also undertaken by students when they face national examinations.
4. “Tumpang Sari” / Agroforestry at Carbon Farming Schools: The students of SMK N 1 Pakis Aji are taught about agroforestry and tumpang sari so that they can benefit agricultural lands for multiple purposes. When it is applied in field, some fishes can be harvested and processed further to produce nutritious fishery products.
5. “Jamu” Drink at Go Tropical Agroforest Foods: Some of students have started to produce traditional drinks, such as: Jamu, Adon-adon Coro, and traditional drinks. They are real entrepreneurs who benefit some rhizomes or herbal plants to produce those products. Finished products have been already marketed nationally.
6. “Traditional Cooking System” for producing Agroforest Foods: Students are taught to use

traditional ingredients or “no dangerous or chemical substances” to produce some foods. In addition, traditional stoves are also used to produce delicious food over modern stoves. All process are almost made traditionally, like air drying, hand-made process, stove fuel derived from woods, and so forth.

7. “Certain Traditional Receipt” for Producing Organic Fertilizers: We benefit certain receipts given by our local farmers to produce organic fertilizers. We also study it based on sciences and technologies. In addition, most of the fertilizers are from dungs and biomass.

5.2 From 5.1, please explain its values for environmental conservation

Most of local knowledge used in the Climate Smart Ecopreneurship Program is “pro” to environment without producing much carbon footprints (low carbon release/carbon neutral). We also benefits local wisdom integrated with science and technology, such as: free-chemical products, Jamu drinks, organic fertilizers, and some agroforest foods, that are not toxic for human health and environmentally friendly for environment. Lastly, this program has assisted to tackle forest, agriculture, and other ecological burdens that have been long time confronted by Indonesia environment. Although this action is locally carried out, the impacts are verily great and useful for achieving sustainable environmental preservation.

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

This programme has been started since 2012 in collaboration with the Indonesian Green Action Forum, local communities, local farmers, and Jepara governmental bodies. From 2012 through 2018, about 6 years this programme has been carried out sustainably.

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.

In Climate Smart Ecopreneurship Program, there are several activities that have been undertaken since 2012. The activities are pretty eco-friendly with considering low carbon footprints and no destruction of environment. Below are several activities carried out by SMK N 1 Pakis Aji Students in collaboration with the Indonesian Green Action Forum (IGAF):

1. Eco-education: This education is about ecological issues and solutions ensuing in Indonesia. Some ecological courses are given to SMK N 1 Pakis Aji students, such as: agroforestry, forestry, environment, agriculture, animal husbandry, organic farming, waste management, and so forth. Students are also educated with the facts of local communities or indigenous people in using local wisdom for preserving environment in Indonesia. Besides environmental crises, the students are encouraged to give innovative solutions to tackle the burdens.
2. Agribusiness Education & Practices: Agribusiness is one of the major studies developed by SMK N 1 Pakis Aji. This study is about the role of businessmen to benefit agriculture products more commercial and eco-friendly. Besides education, the students are also encouraged to conduct actions or practices to implement agribusiness theories.
3. Ecopreneurship Education: This education encourages SMK N 1 Pakis Aji students about ecopreneurship. Not only production of foods but also the marketing of foods are also given so that the students have an opportunity to market their hand-made products.
4. Carbon Farming Practices: Carbon Farming Practices are given to SMK N 1 Pakis Aji students in form of theories, practices, and soft skill development. We conduct field observatory to famous agricultural universities in Indonesia, and engage agricultural experts to share their knowledge and experiences about low carbon farming. In the farming we utilize local wisdoms, such as: Pranata Mangsa and Tumpang Sari combined with tubers and or rhizomes.
5. Agroforest Foods Production: This activity focuses on the manufacture of local foods derived from agroforestry crops. The students are trained to understand of how to process the crops into commercial products. The products are then marketed by students at local to national market level. We benefits traditional and cultural manners of food processing and production.
6. Organic Fertilizers Production: This activity concerns on the utilization of animal husbandry dungs and biomass into organic fertilizers. The productions emphasizes on environmentally friendly processes in which certain traditional receipts are used to optimize the production of the fertilizers.

In addition, there are lots of local wisdom actions that have been integrated to the above activities,

including Nguri-nguri Budaya Jawa, Pranata Mangsa, Selamatan, Tumpang Sari/Agroforestry, Jamu Production, Traditional Cooking System, and Traditional Receipts for Food Production. These wisdoms are integrated based on science and technology that will be beneficial for environmental preservation.

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

Due to the integration of local wisdoms to the Climate Smart Ecopreneurship Program, the teaching and learning approach are very distinct and unique not like other common schools in Indonesia. Some of local wisdoms are integrated to formal and informal curriculum. Besides the regard, the wisdoms used to this program must be tailored with the students' knowledge and cultural so that the students can understand science, technology, and knowledge delivered. For formal curriculum, we infiltrate the wisdoms, which have been scientifically proven with research, into specific subjects related environmental preservation, such as: ecological education (eco-education), agribusiness, and animal husbandry courses. Another integration is by infiltrating the wisdoms into informal curriculum, the curriculum is usually carried out in determined times, such as: Saturday, Sunday, and holidays. Some practices, which have been integrated into the curriculum, are organic farming, organic fertilizer production, tree planting, field observatory, seminar and training, and scientific meeting and greeting. Every single activity that has been undertaken in the program; such as: eco-education, agribusiness education and practices, ecopreneurship education, carbon farming practices, agroforest food production, and organic fertilizers production; consider the imparting process of local wisdoms. For instance, Carbon Farming Practices benefit "Pranata Mangsa" and Agroforestry/Tumpang Sari system to both optimize agricultural yield and preserve environment (agriculture lands and ecosystem).

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

The Climate Smart Ecopreneurship Program has engaged local communities and local farmers to achieve the major objectives of the program. Besides the communities and farmers, this program engages a young environmental platform, namely Indonesian Green Action Forum (IGAF). Due to this active collaboration with IGAF, our school has gained great concerns by national and international institutions. IGAF helps educate the students, execute the program, and publish the results to be well-known. Besides the regard, SMK N 1 Pakis Aji students learn lots of knowledge about environmental preservation and its local wisdom from local communities and local farmers. Both the students and communities are mutually partnered, and each gains benefits from the program. For instance, local farmers have implemented agroforestry system in the field after gaining knowledge from SMK N 1 Pakis Aji or agroforestry experts. On the other hand, the students can obtain some agricultural crops from the farmers, and the crops will be harnessed to be processed into commercial products. Another example is mutual learning between the communities and the students. Local communities and farmers have taught a lot of local wisdoms to the students, such as Pranata Mangsa (Javanese agricultural manner and cultural system used to cultivate paddy or agricultural plants in fields with considering certain season). After getting the knowledge, the students will attempt to implement the wisdoms into Carbon Farming activities.

- 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   |
|--------------------------------------|---|
| IGAF – Indonesian Green Action Forum | This platform helps educate SMK N 1 Pakis Aji students about environmental preservation program. In addition, this platform assists to execute the program and ensure its sustainability of the program. Lastly, this platform helps publish the program results, and interlink SMK N1 Pakis Aji with national and international organizations. |
| Local communities                    | Local communities help support the Climate Smart Ecopreneurship Program by means of giving non-financial regard. We collaborate with local communities to teach the students about local wisdoms' implementation to field. In addition, local communities can support some activities that engage them.   |

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| Local farmers                                       | Local farmers help provide new knowledge based practices to SMK N 1 Pakis Aji students about local wisdoms used for agricultural benefits. In addition, local farmers collaborates with SMK N 1 Pakis Aji students to educate of how to cultivate until to harvest agricultural plants by using local wisdoms, such as; Pranata Mangsa, Tumpang Sari, etc. |
| Department of Forestry and Industry, Jepara Regency | This department is very helpful to provide free forestry and agriculture plants to the implementation of agroforestry. In addition, some of plants are used for the implementation of Carbon Farming activities. The plants, which are used, are commonly multi-purpose species and fast-growing species.  |
| United Nations agencies                             | The United Nations agencies give support to this program by publishing the program results, and by giving certain environmental books to the students. The students gain also a lot of opportunities to exchange and know the best environmental actions to tackle environmental problems in the world.  |

(Please add more row if it is necessary)

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

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| <p>SMK N 1 Pakis Aji has committed to preserve ecology and ecosystem sustainably since 2012 by creating Climate Smart Ecopreneurship Program. This program consists of three indispensable projects, such as: <a href="#">Carbon Farming School</a>, <a href="#">Go Tropical Agroforest Foods</a>, and Organic Fertilizers Production. In those projects there are several community - based activities undertaken related the use of local wisdoms for preserving the environment. The activities are carried out every week, depending on the schedule of the relevant subjects taught to the students. For collaboration with this school's partners, some of the following projects are conducted based on the schedule determined by them (it is perhaps monthly or annually).</p> <ol style="list-style-type: none"> <li>1. Agroforestry Practices: The local farmers obtain some assistance from SMK N 1 Pakis Aji in form of education and practices of how to implement agroforestry/Tumpang Sari well. In collaboration with the Indonesian Green Action Forum (IGAF), the school also provides some free multi-purpose and fast growing tree species for agroforestry/Tumpang sari implementation. In addition, IGAF gives consultation about relevant sciences and technologies for supporting the implementation of agroforestry/Tumpang Sari. The consultation is from some agricultural experts or university lecturers.</li> <li>2. Organic Farming: This activity is run by both students and local farmers, and is a part of Carbon Farming Schools' activities. This farming considers all very eco-friendly and low carbon techniques, such as: no harmful pesticide and fertilizer, low electricity and water consumption, and no destruction of agricultural soils. Those considerations are based on local wisdoms used by them in daily activities.</li> <li>3. Organic Fertilizer Production: The production of organic fertilizer is carried out by local communities and SMK N 1 Pakis Aji students. The obtained fertilizers will be marketed to local farmers to be used for organic farming.</li> <li>4. Animal Husbandry Collaborative Management: SMK N 1 Pakis aji students are extracted new knowledge about animal husbandry management, especially cows and goats. We also benefited the dungs of those animals to be used for organic fertilizers with certain receipts obtained from local knowledge.</li> <li>5. Local Food Campaign for Indonesia Community: This campaign is conducted by the students of SMK N 1 Pakis in collaboration with Indonesian Green Action Forum and local communities. The campaign is very useful for Indonesia communities to consider local foods derived from agroforestry products over instant foods. We benefit local knowledge to produce local foods with the assistance of Jepara's communities, and most of the receipts of the foods are from local communities.</li> </ol> |  |
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#### 11. Monitoring and evaluation mechanisms and summary of results

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| Monitoring and evaluation mechanisms:  |
| Monitoring and evaluation (M&E) are carried out after the execution of the program in which we use |



scientific method to measure the successful of the program. The M&E evaluate some key performances of the program with focusing on certain aspects, such as: ecology, culture, economy, society, education, and its sustainability. We measure the aspects by giving evaluation and test (interview, dialogue, examination, and field observatory) to students, teachers, local communities, and local farmers as well as the partners. The M&E activity is committed by teachers with the assistance of the Indonesian Green Action Forum (IGAF). Sustainability aspect is one of the most important M&E activities because it will help understand the success of the program and its possibility to be continued. This aspect will be M&E summary, which is surmised from other aspects (ecology, culture, economy, society, and education). All of the M&E results are then translated into scientific data that will be beneficial to be published and reported to the program's partners and public. For instance, we measure how much carbon footprints that can be sequestered in our green products and our activities (planting, organic farming, and agroforestry implementation). We use a scientific method cited from UNFAO and UNFCCC to measure the carbon footprints. In addition, to measure the understanding and knowledge of SMK N 1 Pakis Aji students about local wisdom and environmental preservation, we give the students tests or assignment that are related with those issues. The results of the tests will be used for M&E of this program.

#### Summary of results:

The Climate Smart Ecopreneurship Program is a very successful program undertaken by SMK N 1 Pakis Aji in collaboration with the Indonesian Green Actio Forum (IGAF) since 2012. There are three key projects executed, such as: [Carbon Farming School](#), [Go Tropical Agroforest Foods](#), and Organic Fertilizers Production. From the M&E, we can obtain many scientific results in form of data that will be described here. This program has been run since 2012, and its sustainability was ensured to be achieved. In this year, we engage all students (990 students) at SMK N 1 Pakis Aji to be actively engaged in the program, and they are very contributive to take solutions and actions for tackling environmental problems by integrating local wisdoms into green entrepreneurship activities. This program does not only engage the students but also local communities and farmers living around the school. We extract some local wisdom, and integrate the wisdoms into formal and informal curriculum. Such of local wisdoms used are Nguri-nguri Budaya Jawa, Pranata Mangsa, Selamatan, Tumpang Sari/Agroforestry, Jamu Production, Traditional Cooking System, and Traditional Receipts for Food Production (already described at Question 5). Those wisdoms are integrated to [Carbon Farming School](#), [Go Tropical Agroforest Foods](#), and Organic Fertilizers Production Project with the following activities: Eco-education, Agribusiness Education & Practices, Ecopreneurship Education, Carbon Farming Practices (Organic Farming), Agroforest Foods Production, Organic Fertilizers Production, and Local Food Campaign for Indonesia Community. Besides the above activities, we also conduct relevant ecological activities to connect with environmental experts, such as: field observatory, scientific discussion, student exchange program, and study tours. In this program, we have succeed to produce some green products that are commercially marketed, such as: Adon-Adon Coro (Jamu), Abon Ayam, Local Dried Cakes, Organic Fertilizers, Sweet Potato and Cassava Chips, and Other Processed Meatballs. Those products are low carbon, eco-friendly, and based on local wisdoms produced by SMK N 1 Pakis Aji students in collaboration with local communities and farmers. Besides the above regard, some scientific data obtained are carbon footprints stored in products, income acquired by the schools from products selling, knowledge level of the students, organic fertilizers produced, organic foods products, and so forth. This program has been supported financially and non-financially by local, national, and international institutions with the help of the Indonesian Green Action Forum (IGAF). This program is very sustainable after evaluated its social, economic, educational, cultural, and environmental aspects. This program has contributed to local wisdom and environmental preservation in Jepara Regency. Furthermore, all stakeholders who get involved in this program has gained tremendous benefits in the term of ecology, social, economy, education, and culture.

#### 12. Resources used for programme implementation

There are some resources used to support the sustainability of the program. Resources used of the programme include natural resources, human resources, financial support, promotional goods, partners/networks and technologies.

- a. Natural resources: we benefit natural resources to implement this program, such as: agricultural crops, multipurpose tree species, fast growing tree species, animal husbandry dungs, biomass, and herbal plants. Those resources are extracted from nature without exploitation according to local wisdoms used for environmental preservation.

- b. Human resources: This includes all school stakeholders and its partners, local communities, local farmers. They are very fruitful and like interrelated circles that help succeed and ensure the sustainability of the program.
- c. Financial support: To implement the program, financial support is one of the major resources needed. This support can be from Indonesian Green Action Forum, UN Environment EPLC, Jepara governmental bodies and Ministry of Environment and Forestry Republic of Indonesia.
- d. Promotional goods: Some goods are obtained from Indonesian Green Action Forum (IGAF), YUNGA UNFAO, Barilla Center for Food and Nutrition YES, and Tunza Eco-generation. The goods are used for promoting ecological actions to participants and the goods are beneficial for us to educate the students about ecological practices.
- e. Partners: We do not only collaborate with Indonesian Green Action Forum but also collaborate with YUNGA UNFAO, Barilla Center for Food and Nutrition, Tunza Eco-generation, and Ministry of Environment and Forestry. Those institutions provide us financial and non-financial support to the implementation of the program.

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

There are four points of view to understand the impacts or benefits of the program, such as: the benefits for students, school, local communities, and partners. Below are the explanations:

1. Students: Students of SMK N 1 Pakis Aji can obtain up-to-date knowledge and innovative actions, which are based on local wisdoms, sciences, and technologies, to apply climate smart ecopreneurship program to their school. In addition, they can gain new knowledge about green and low carbon business to shape their understanding and skills as a young future entrepreneurs.
2. School: SMK N 1 Pakis Aji can get new links or networks with national and international organizations to help promote the schools' ecological activities based traditional knowledge. In addition, the schools can obtain sustainable support (financial and non-financial support), trustworthiness, and commitment to achieve its mission and vision to the program.
3. Local communities and farmers: Local communities can obtain new knowledge, sciences, and technologies based on their local wisdoms. Through the implementation of those regards, they receive social, ecological, cultural, and economical benefits that will be able to increase their livelihood. In addition, local wisdoms owned by local communities and farmers can be maintained sustainably through this program.
4. Partners: Partners of this program can help achieve their mission and vision, most notably, specific ecological programs. In addition, the partners will gain great attention from national and international institutions due to their contributions to environmental preservation.

### 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 Climate Smart Ecopreneurship Program is suitable to Sustainable Development Goals, especially Goals 13 (Climate Action) and Goal 15 (Life on Land). This program has also the potential to be an catalyst for the acceleration of Education for Sustainable Development (ESD) by giving intensive climate change/climate smart education and pro-environment education across the curriculum and inside and outside the classroom. By involving local communities and farmers who have local wisdoms to preserve environment, this program is very beneficial to help achieve SDG 13 and SDG 15. This program is to build young entrepreneurs who benefit local wisdoms, sciences, and technologies to create green and low carbon business. This program helps tackle climate change problem by means of providing low carbon products in which the products will be suitable for climate change mitigation. Besides climate change, this program helps to address other ecological problems, such as: forestry and agricultural issues. Agroforestry implementation can solve the burdens of deforestation and agriculture lands. In addition, the utilization of organic farming and fertilizers contribute to the decrease of environmental pollutions. From the above, we do believe this program will be beneficial to achieve SDG 13 and SDG 15.

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

Plan for sustainability:

For achieving the sustainability of this program, we will make some strategies, including partnership and management of resources. This program must be sustained for creating young ecopreneurs who care to local wisdoms and environmental conservation in Indonesia. For achieving it, we will create



mutual and sustainable partnership with local to international networks. We will attempt with governmental bodies that have strong power to influence rules so that this program will get more attentions by them. We engage the bodies because we want this program to be applied globally so that the local wisdoms that are pro to environment can be nurtured. Besides the partnership, we will create good management of human resources because this program needs more young volunteers and professionals to be engaged to ensure its sustainable benefits for altruistic/future generations. Another plan for its sustainability is the establishment of local business or green entrepreneurship program that is able to market the products of this program to be nationally or internationally recognized. National and international certifications of this program's products are really needed to ensure its eco-friendly nature and low carbon.

Plan for scaling-up/expansion:

The sustainability of this program should be ensured to achieve SDG 13, SDG 15, and its objectives. Prior expansion, our planning to this program is to ensure the program's benefits to students, partners, local farmers and communities, and future generations with considering ecology, social, culture, economy, and education aspects. In addition, we do expect this program can be applied throughout Indonesia schools because it is very pivotal to nurture local wisdoms in Indonesia that are very beneficial for Indonesia environment and culture. However, this program needs to be applied locally, especially to schools at Jepara Regency. The schools might be benefited our curriculum and adopt the curriculum to their own curriculum. We do hope with the adoption of the curriculum the environmental burdens can be solved gradually due to the increase of environmental awareness of the students. Another planning is to engage more students in urban area because this program is mostly adaptable to rural schools over urban schools with benefiting local wisdoms. With ensuring no one leaving behind and gender balance, engaging local communities, farmers, and women is really indispensable also to be applied in this program.

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

This program has collaborated with the Indonesia Green Action Forum (IGAF) and other schools in Jepara Regency. From the excellent collaboration and works, this program won some national and international recognition, such as:

1. Winner of UN Environment Eco-Peace Leadership Center Award 2017 with the project of Carbon Farming Schools;
2. Presented to attend UN Environment Southeast Asia Youth Environment Network (SEAYEN) Meeting held in Singapore on 8-15 July 2018;
3. Presented to attend three international forums at Clean Enviro Summit, Singapore International Water Week, and World Cities Summit in Singapore on 8-15 July 2018;
4. Presented to address urban ecology issues at the 9<sup>th</sup> World Urban Forum, in Malaysia on 7-13 February 2018;
5. Presented to address urban ecology issue at the HABITAT III PrepCom3 in Surabaya Indonesia on 25-27 July 2016.

#### 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) Carbon Farming Schools Book Supported by UNFAO
- Document 2) Carbon Farming School Pamphlets
- Document 3) Carbon Farming School Report SMK N 1 Pakis Aji and its partners
- Document 4) Carbon Farming Schools Video
- Document 5) Profile SMK N 1 Pakis Aji 2016

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



Figure 1. Training for young eco-preneurs about carbon farming



Figure 2. Scientific discussion and field observatory for climate smart agri-forest program







Figure 3. Local agriculture food production by using traditional receipts based local wisdoms



Figure 4. Agroforest products marketed to local communities in Jepara Regency





Figure 5. Organic fertilizers production based local wisdom receipts