



Supporting Partner:



## Submission Form of 2020 SEAMEO-Japan ESD Award Theme: Addressing Plastic Problems for Transforming Communities

The last day for submission of entries: 14 August 2020  
[www.seameo.org](http://www.seameo.org)

- To participate in the 2020 SEAMEO-Japan ESD Award, please submit the information of your school's project/programme on "Addressing Plastic Problems for Transforming Communities" by using this template of Submission Form before 14 August 2020.
- The **digital format of this Submission Form** can be downloaded from the following link or requested by sending an email to: [seameojapan.award@seameo.org](mailto:seameojapan.award@seameo.org).

[link.seameo.org/2020SubmissionFormESDAward](http://link.seameo.org/2020SubmissionFormESDAward)

- The **guidelines for submission of entries** and the **judging criteria** are detailed in page 9-12 of this document.
- **How to Submit the Entry:** Schools can submit the completed "Submission Form of 2020 SEAMEO-Japan ESD Award" and maximum of 5 supporting documents/materials to the following SEAMEO Secretariat's email address:

Email: [seameojapan.award@seameo.org](mailto:seameojapan.award@seameo.org)

- Important Note: To align with the ESD practices and to save the environment and energy, the Committee will not accept the entry in hard copies.
- More information, please visit:

[www.seameo.org](http://www.seameo.org)  
[link.seameo.org/2020SEAMEOJapanESDAward](http://link.seameo.org/2020SEAMEOJapanESDAward)

or contact the SEAMEO Secretariat, Bangkok: Email: [seameojapan.award@seameo.org](mailto:seameojapan.award@seameo.org) or Tel. +66-2391-0144.

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### **PART I: Details of Your School**

1. Name of your school: SMK KUNAK JAYA, KUNAK, SABAH.
2. Full address: P. O. BOX 124, 91207, KUNAK, SABAH, MALAYSIA.
3. Postcode: 91207
4. Country: MALAYSIA
5. School's telephone number (country code+city code+telephone number): 6089851667

6. School's fax number (country code+city code+fax number): 6089851668
7. School's email Address: xea3201@moe.edu.my
8. Name of the Head Master/Principal/School Director: MALEK MOHD. SHAFDAR BIN GULAM HASSAN
9. Name of the Teacher Coordinator: CHIN KUI KYUN
10. Email address of the Coordinator: sirchin87@gmail.com
11. School website (if available): NOT AVAILABLE
12. Educational level (Such as Kindergarten 1 to Grade/Year 9): Year 7 – Year 12
13. Total number of teachers in your school: 67
14. Approximately number of teachers participated in this programme: 58
15. Total number of students in your school: 912
16. Approximate number of students participated in this programme: 700

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

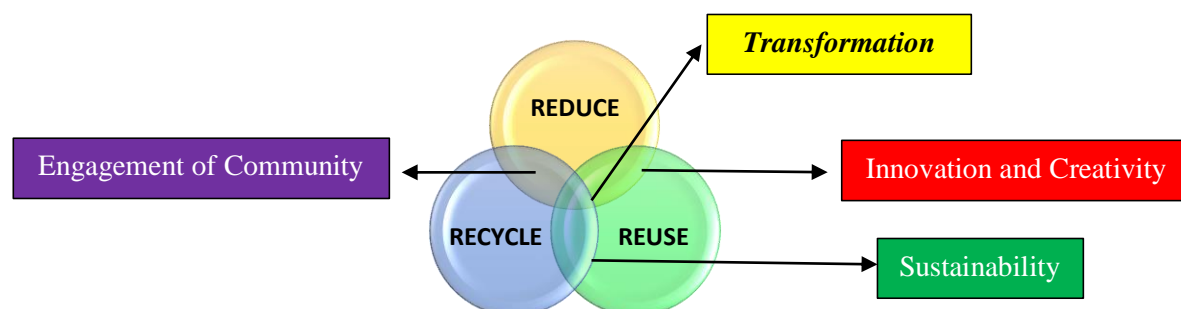
The information of part II from no.1 to 13 should be no longer than nine (9) pages long of A4 in total. The information should be written in Times New Roman font, 11-12 point size.

1. Title of the school's programme

<b>SMALL ACTS, BIG IMPACT</b>
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2. Summary of the programme (one half to 1 page of A4 sheet size)

**SMALL ACTS, BIG IMPACT** is a transformation school project that run by a club called 3R Club (Reduce, Reuse and Recycle) that organized at 2019 since the principal of the school found that the community of Kunak still haven't change their behavior and like to throw rubbish or most likely plastics bag either in the school or outside school mostly after any function or event held in Kunak. The program was implemented based on the 3R concept which is **Reduce**, **Reuse** and **Recycle** like as shown as Venn Diagram below:



The 3R concept is well known in all the developed countries and as a matter of fact the degree that the 3R initiative is implemented in a country is measured and included in the quality of life index in that country. So the 3R club was introduced based on the 3R concept that transforms into activities the actions resulting from the 3 words: **Reduce**, **Reuse**, **Recycle**.

**Reduce:** with this action we are called to reduce overconsumption and thus reduce the amount of waste we throw away in one or the other form. The waste has burdens our school, community thus environment. In order to reduce the waste in school and also the whole community, we had organized few

program to achieve this goal such as “**Say No to Plastic**” Day, **Plastics Awareness Campaign** and **Rebate Without Plastic Program**.

**Reuse:** means that we use again the unwanted by others, materials, tool or anything else a consumer would throw away and transform it to something useful. So we are trying to collect all the plastics mostly is plastic bottles that can be used to decorate the school, gives to the seaweed breeders to planting the seaweed and also the donate to the tourism beach owner for their own purposes. Three of the program to achieve the Reuse propose is called **Mosque and Useful Waste are not Separated, Applying Plastics bottle in Seaweed Farming** –applying Science concept (Concept of Buoyancy) to sells and donate to the seaweed farmer and **Bordering the Darvel Lagoon, Hampilan Beach 2020**.

**Recycle:** We all understand what we mean by recycle and recycling. Instead of throwing to the landfills certain types of material like, plastics, papers and tin cans, we recycle them so that they would be transformed into something useful and reusable. For an example, our school has started the recycle program since 2019 which we promoting to all students to take part of it. There a few program that related to the recycle: **Build Recycle Dustbin Competition, Let’s Collect Recycled Materials** program, **Addressing Plastic Problems for Transforming Communities Drawing Competition, Gotong-royong Kelab 3R SMK Kunak Jaya 2020** and **Plastic Bottles Collection Program in Residential Areas**.

From the Venn Diagram shown as above, the students had applying the concept of Reduce and Reuse in the same time, so they can trigger their creativity and critical thinking to master the level 6 of Taxonomy Bloom which is CREATE where they could produce a new or original work by themselves using the plastics waste and this crossover between Reduce and Reuse we called as **Innovation and Creativity**. After that, students also had applied the concept of Reuse and Recycle in the same time which means they had promoted and practiced the ESD (Education for Sustainable Development) by applying what had they learned in school especially STEM (Science, Technology, Engineering and Mathematics) knowledge into the society and transformed themselves become one part of it and we called this as **Sustainability**. Once the students could apply the concept of Reduce and Recycle in the same time, they had engaged the community-level partners such as community, experts, local governors, practitioners and even the parents in this huge project to achieve the goal of **Engagement of Community**. In the end, the main purpose of this **SMALL ACTS, BIG IMPACT** is to make a **transformation** to the society and community in the Kunak so that the problem of the waste can be solved in the future because Kunak was a rural place and far from the big city. So Kunak’s citizen and community were not alert with the pollution and environmental issues. Through this program, our school and all the students mostly the 3R Club members has taken this golden opportunity and serious participation (**SMALL ACTS**) in order to educate the Kunak community to transform them become an environmentalist which they could concern about protecting the environment meanwhile can boost up the economy of Kunak to become a tourism place (**BIG IMPACT**) other than concentrating in seafood production.

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

Before go through the reason why the school created this program, we need to share a little bit about the place called Kunak. Kunak is the capital of Kunak district in the Tawau Divison of Sabah, Malaysia and its population was estimated to be around 15,000 right now because of here do not have many opportunity job. The population was mainly consists of Bajau, Suluk and Bugis ethnic and then the two main ethnic which is Bajau and Suluk have sometimes been called as “Sea Gypsies” or “Sea Nomads” which most of them are living in the sea or build the house on top of the sea. So they are more likely to throw the rubbish or waste directly to the ocean. Because of their culture, they would prefer to go fishing and depend on fishery industry rather than send their children to the schools. Some of unlucky family will ask their children to sell the seafood home to home and some of them would prefer to become beggar that trying to ask money for those came out from the bank or market. So what I want to point out is the education level or the student’s awareness about the environmental issues is very low.

For the last few years after the new principal came to Kunak, he found that Kunak district has a big problem in handling the rubbish and waste. Each time after any event or function held in Kunak, it was sure that the rubbish mostly the plastics bag and food polystyrenes must be on the street or any places even had providing them the dustbin during any festival or events. Then the principal trying to educate the community of Kunak started from the students themselves so that the students himself or herself could educate their own parents or neighbors at home. So the principal assigned a Science and also Mathematics background

teacher as the coordinator for the school in order to overcome the problem of waste and rubbish in the school.

In order to do that, 3R Club was introduced to all the students and also the teachers in the beginning of 2019. And in the early year of 2020, it was promoted to all community of Kunak but this year we met the huge difficulties when Covid-19 attacked Malaysia in the early year of 2020. We have to lockdown the whole country to prevent the Pandemic Covid-19 attacking and spreading the citizen of Malaysia and this what we called as MCO (Movement Control Order) where whole Malaysia's school from kindergarten until Universities have to close and stay at home started from 18 March 2020 until 22 July 2020, all of them was fully reopen after announced by the Malaysia Minister of Education.

However, the **SMALL ACTS, BIG IMPACT** Project was aim to transform the whole Kunak society especially the sea nomad community to protect the sea and make good use of the plastics waste either in Reduce, Reuse and Recycle field.

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

**SMALL ACTS, BIG IMPACT** project primarily aims to **transform** the community especially the local people to solve and address the plastic problems with the help of the school students even look like taking small actions but the programs that run based on the concept of Reduce, Reuse and Recycle could give a big and effective impact to the community and also the environment. Through the subprogram based on the concept of 3R (Reduce, Reuse and Recycle), the program specifically aims to:

1. **Reduce** the usage of plastics among the community to creating less waste in the first place, then there's less mess to clean up.
2. **Reuse** the plastics to finding a new way to make good use of it so that we don't have to throw it away but to contribute it to the environment, agriculture, tourism and boost up the economy of community.
3. **Recycle** the plastics to remake a new goods that can be sold again where community were aware the important of recycle by collecting the plastics rather than throw it away into environment.
4. Demonstrate the **innovative and creative practice** and ideas in reducing the plastics usage and wastage by utilizing the available resources in the school, community and ecosystem.
5. **Engaged the community**-level partners such as community stakeholders, experts, local governors, practitioners and parents in the program by involving students in the local community.
6. **Sustain** or scale up the addressing the plastic problems through the school teaching and learning activities across subjects for a long-term action strategy.

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

The 3R Club was formed at January of 2019 generally aims to educate all the students in the school about on how to Reduce, Reuse and Recycle the waste that could be found in the school like papers, plastics and tin cans. So most of the activities or program have been implemented since 2019 prior to the consolidation of the project "**SMALL ACTS, BIG IMPACT**" in this year. Unlucky this year, we had faced the Pandemic Covid-19 during the January of 2020 and we have to hold on the project when the Pandemic Covid-19 become serious and spread the whole Malaysia included Kunak, Sabah. Our Prime Minister announced the MCO (Movement Control Order) effectively started from 18th March 2020 until 22th July 2020 which means we only can stay at home and reduce the movement to outside the house. all of them was fully reopen after announced by the Malaysia Minister of Education. However, the project was continuing again from 23th July 2020 after the MCO was loosen.

#### 6. Key knowledge, skills, attitudes/values and behaviors that the school expects to develop from this programme.

The KSAs and behaviors that students expect to develop is strongly related to our Malaysian Education Development Plan (2013-2025) that continue to support the six aspirations of the National Education Philosophy for balanced education as the basis of each student's aspirations of 21<sup>th</sup> century. The plan also refers to other high-performing education systems to build details of specific skills and attributes

that can be applied to students to enable them to lead future economic and global economic development. The following expected to be develop from this project:

1. **Knowledge.** It is important for every student to master core subjects such as Mathematics and Science so they can apply what had they learned in order to solving the plastics problem.
2. **Thinking skills.** Each student will learn how to acquire knowledge throughout their lives (apply curiosity and practice lifelong learning). They can create new knowledge in order to solving the plastics problem.
3. **Leadership skills.** It will help every student reach their full potential by creating formal and informal opportunities, working in teams and practicing leadership qualities.
4. **Bilingual skills.** With this plastics problem project, students should be able to use Bahasa Malaysia as national language and English as international communication language in the working environment.
5. **Ethics and spirituality.** The project will cultivate ethics and spirituality in each student to face the challenges that will be faced in adult life, so that they can resolve conflicts harmoniously.
6. **National Identity.** In order to create a true national identity as Malaysian, a strong spirit of patriotism is needed. National identity will be achieved not only through learning to understand but also accepting.

#### 7. Activities (Strategies/activities of implementation)

This part is important – please clearly explain all related strategies and activities that the school has implemented and brief information of each activity). Details of each activity can be attached as a part of supporting documents.

The strategy that been used to implement this project is the Scientific Method, well-known method among the students themselves since from primary school and they are able to apply it to run this whole project. The following steps and activities were implemented as below:

##### 1<sup>st</sup> Step: Observation

Observation lead to a question. So teachers and students had observed the main problem of plastics in the school and also to the community. Teachers with the help of students from 3R Club (Reduce, Reuse and Recycle) making observation, what is the main problem and ways on how to help the students and also their family even the whole Kunak community to solve the plastics problem.

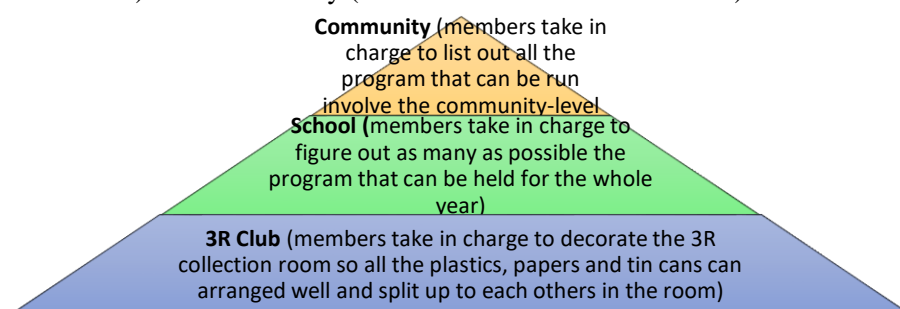
##### 2<sup>nd</sup> Step: Question

Teachers and students of 3R Club were discuss the questions and identify the main problem of addressing plastics problem for transforming the communities of Kunak. We are discussing the main problem included the students background, their knowledge about the 3R concept and also the ways to handling the waste in the school.

##### 3<sup>rd</sup> Step: Hypothesis

Teachers and the students from 3R Club formulate the hypothesis by writing down what is going on and happen in the school and the environment. So students themselves thinking the theory and method that can explain their observation. So students of 3R Club trying to use the concept of 3R (Reduce, Reuse and Recycle) to undergo this project (SMALL ACTS, BIG IMPACT).

At the beginning, teachers divided all the 15 person of students that volunteer to become the members of 3R Club into 3 big group so that all of them can play important role and fully participate in this project. And then teacher divided them into three categories: 3R Club (collection room), School (involvement of all students and teachers) and Community (transformation of Kunak citizen).



After that, all the members of the 3R Club focusing in the 3R concept that could transforms into activities that take actions resulting from the 3 words: **Reduce, Reuse, Recycle.**

##### 4<sup>th</sup> Step: Experiment

From the objectives of this project, teachers and the members of 3R Club test the hypothesis by designing and running the project of “SMALL ACTS, BIG IMPACT” to see whether the small acts by organizing few program for each concept of Reduce, Reuse and Recycle to measure the impact of addressing the plastics problems for transforming the communities.

The program for each of the concept that have implemented:

**1. Reduce:**

- a. **“Say No to Plastic” Day** - where students need to bring their own food container and bottle to buy and fill in the foods and drinks for every Wednesday in the school canteen.
- b. **Plastics Awareness Campaign** – the students from 3R Club distribute the flyers and doing the campaign to all the students and also the community of Kunak citizen.
- c. **Rebate Without Plastic Program** was held in the school canteen where the canteen rebate RM0.10 for each use of plastic bags, polystyrene box or plastic cups.

**2. Reuse:**

- a. **Mosque and Useful Waste are not Separated**– the students from the 3R Club decorating the school’s mosque with the old car tires and small plastic bottles to attract the Muslim students to do their praying in the mosque.
- b. **Applying Plastics bottle in Seaweed Farming** – where members of 3R Club collecting all the plastics bottle from each houses in Kunak district and then applying Science concept (Concept of Buoyancy) to sells and donate to the seaweed farmer through the government agency called Kunak District Fisheries Department.
- c. **Bordering the Darvel Lagoon, Hampilan Beach 2020** – the 3R club donate the big plastics bottle to the owner of the Darvel Lagoon, Hampilan Beach in Kunak to make the border and float up the nets to prevent the floating waste or rubbish into the beach and also prevent dangerous species attacking the tourist while swimming at the beach.

**3. Recycle:**

- a. **Build Recycle Dustbin Competition** – 3R club had organized the competition for each class from Year 7 until Year 12 to build a recycle dustbin by using recycle waste such as empty bottle, boxes, unused wood and boards.
- b. **Let’s Collect Recycled Materials** – was held once the “Build Recycle Dustbin Competition” has done because all the classes need to collect the waste into three categories dustbin: plastics, papers and tin cans so that school helping each of the classes to sell their recycled waste.
- c. **Addressing Plastic Problems for Transforming Communities Drawing Competition** – it was a drawing poster competition that held into two categories: Morning Session (Year 10 – 12) and Afternoon Session (Year 7 – 9).
- d. **Gotong-royong Kelab 3R SMK Kunak Jaya 2020** – it was a community service whereby students and the teachers went to the beaches and also the kampong (village) to collect the plastics waste to reduce the water pollution and also to clean up the environment.
- e. **Plastic Bottles Collection Program in Residential Areas** - it was a community program whereby teachers and the 3R Club members went to a few residential areas to collect their plastics bottles so that we can sell it to the Recycle Collector, Darvel Lagoon, Hampilan Beach owner and also seaweed farmers.

**5<sup>th</sup> step: Analyse**

Teachers and students review the data collected from the project that had been done to draw a logical conclusion. So the feedback from the students, teachers and community of Kunak is very important to analyses this project whether can transform the community of Kunak. So a set of questionnaire was given to the students and teachers to determine the effectiveness of this project and the impact to the community and environment.

**6<sup>th</sup> step: Conclusion**

Teachers discuss with the students to conclude how much the impact of each program that had been done in the SMALL ACTS, BIG IMPACT project by communicating and analyses the data collected. In the end, this project is to aims to **transform** the community especially the local people to solve and address the plastic problems with the help of the school students even look like taking small actions but the programs that run based on the concept of Reduce, Reuse and Recycle could give a big and effective impact to the community and also the environment. Meanwhile, we can see the students could master the six aspirations of the National Education Philosophy for balanced education as the basis of each student's aspirations of 21<sup>th</sup> century either in knowledge, thinking skills, leadership skills, bilingual skills, ethics and spirituality and national identity.

8. Teaching and learning approaches/strategies that the school has integrated for this school programme.

There are few teaching and learning approaches and strategies that have been implemented during the SMALL ACTS, BIG IMPACT project:

**1. STEM (Science, Technology, Engineering and Mathematics) Approach**

STEM approach is the teaching and learning method which applies integrated knowledge, skills and values of STEM through inquiry, problem solving or project in the context of daily life, environmental local as well as global community.

STEM approach which is contextual and authentic was able to encourage in depth learning among the students. The students can work in groups or individually according to their ability to cultivate the STEM practices as follows: 1. Questioning and identifying problems, 2. Developing and using models, 3. Planning and carrying out investigations, 4. Analyzing and interpreting data, 5. Using mathematical and computational thinking, 6. Developing explanation and designing solutions, 7. Engaging in argument and discussion based on evidence, 8. Acquiring information, evaluating and communicating about the information. So the Pure Science teachers have applied the STEM approach to the students that took Psychics, Chemistry, Biology, Additional Mathematics, Science and also Mathematics that related to the addressing plastics problems in community during the classroom.

**2. Project Based Learning (PBL)**

**PBL** is a learning method that can break tradition from sessions simple, isolated and teacher-centered learning to a learning continuous, cross-curricular, student-centered and able to integrate issues and practice in the real world. Through PBL, teachers can dig out and develop potential students through activities implemented such as exploring, making assessments, interpret and synthesize information in a more meaningful way. PBL was introduced by Sabah Education Department to all district of Sabah during the MCO (Movement Control Order) started from 18 March 2020 until 23th July 2020 when the Pandemic Covid-19 strikes to our country.

The characteristic of PBL is a project that needs collaboration and guidance from teachers, emphasize the process of producing product and end result, students oriented, students determine the final result and product, products are presented to the real audience or students themselves, based on world experience or real issues, student learning takes place through project completion experience. So science teachers are using PBL as strategy to guide students in learning about the environmental problems in our daily life.

\*All the above-mentioned teaching and learning strategy are attached in the Appendix (Supporting Document).

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

In order to achieve the main goal of this project, the collaboration between the school and the community is very needed and compulsory to ensure the full implementation of SMALL ACTS, BIG IMPACT in big community. So communication and harmony relationship is very important to ensure the objective of the program could be achieved. Through this project, teachers and students were able to exchange their ideas with the community mostly is the NGO (Non-Governmental Organization), our government officer, tourism, others organization and also the citizen of Kunak with the following institutions:

**1. Reduce:**

a. **"Say No to Plastic" Day** - where members of the 3R Club trying to promoting among the students and also the school teachers.

b. **Plastics Awareness Campaign** – the students from 3R Club distribute the flyers and doing the campaign to all students at school and then they walk houses to houses in few Kunak area (community).

c. **Rebate Without Plastic Program** – the canteen owner rebate Rm0.10 to the students that bring their own food container when they buy and fill in the foods or drinks.

**2. Reuse:**

- a. **Mosque and Useful Waste are not Separated** – members from the 3R Club co-operate with the Muslim teachers (ustaz and ustazah that taught them Islamic Education) to decorate the environment of the school mosque.
- b. **Applying Plastics bottle in Seaweed Farming** – members of 3R Club collaborate with Kunak District Fisheries Department to collect information about the seaweed farming and then they gave us few contact of the farmers so we can distribute to them the plastics bottle for farming usage.
- c. **Bordering the Darvel Lagoon, Hampilan Beach 2020** – the 3R collaborate with the owner of the Darvel Lagoon, Hampilan Beach in Kunak, Mr. Maksut Abdullah and his brother, Mr. Makasi Abdullah.

### 3. Recycle:

- a. **Build Recycle Dustbin Competition** – 3R club had organized the competition for students each class from Year 7 until Year 12.
- b. **Let's Collect Recycled Materials** – effort of students from each classes send their waste to 3R members.
- c. **Addressing Plastic Problems for Transforming Communities Drawing Competition** –students from Morning Session (Year 10 – 12) and Afternoon Session (Year 7 – 9).
- d. **Gotong-royong Kelab 3R SMK Kunak Jaya 2020** – it was a community service with students teachers and also kampong (village) Kampung Pangi Hujung, Kampung Pangi Hampilan, Kampung Jaya Baru, Pekan Kunak, Kampung Sungai Atas and others small residential areas.
- e. **Plastic Bottles Collection Program in Residential Areas** - all the village in Kunak included Kampung Pangkalan, kampung Kemabong, Kampung Getah, kampung Kunak Jaya, Kampung Kunak tiga, Kampung Simpang Empat Taman Sri Idaman, Kampung Simpang Empat PPRT, Kampung Pangi Hujung, Kampung Pangi Hampilan, Kampung Jaya Baru, Pekan Kunak, Kampung Sungai Atas and others residential areas.

#### Others:

1. Collaboration of University Malaysia Sabah, Faculty of Psychology and Education. Dr. Siew Nyet Moi @ Sopiah Abdullah to giving few ideas and comment about in Education for Sustainable Development.
2. Kunak Regional Education Official, Kunak, Sabah to ask for permission to run the Gotong-royong Kelab 3R SMK Kunak Jaya 2020.
3. Kunak District Fisheries Department under the Sabah State Legislative Assembly to giving financial support and assistance to the fisherman, seaweed farmers and others related to fisheries.

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

Name of Partners	Roles and Contributions
University Malaysia Sabah (UMS), Dr Siew Nyet Moi @ Sopiah Abdullah	One of the lecturer was expertise in ESD field and giving guidance for teacher and students to take full participation and comment our work.
Kunak Regional Education Official	Gives us permission as a school to run the "Gotong-royong Kelab 3R SMK Kunak Jaya 2020 in all residential area.
Kunak District Fisheries Department	Support our program by giving us the information about the seaweed farming and accept our ideas to plant the seaweed by using plastics bottle that could save the farmers cost meanwhile can reuse the bottle for seaweed plantation on sea.
Mr. Nurmaksud Bin Hamsah and Mr. Arnaib Bin Hamsah, owner of the Darvel Lagoon, Hampilan Beach	Both of the owner was supportive and amazed of students work and ideas to sustain the environment by applying their knowledge, students helping them in saving the cost in preparing the floating nets by using the plastics bottle.
Mr. Semporna, the owner of seaweed farming at Semporna Island	The owner shares his information and experience about the seaweed farming and the profit he can gain from the seaweed plantation on the sea. Important is he had shared the cost that he can saved by using the bottle plastics replacing the "polyfloat" that the price is twice or triple of bottle plastics.

### 10. Transformation to the community and ecosystem (Brief information of activities that the school, students, and teachers have contributed for the improvement of community/ecosystem.)

#### "SMALL ACTS, BIG IMPACT" Project:

##### 1. Reduce:

- a. **"Say No to Plastic" Day** - most of the students used to bring their own food container not only Wednesday but also the rest of the day during the teaching and learning lessons.



- b. **Plastics Awareness Campaign** – Some of the citizen that staying in the land is more aware about the pollution and plastics waste compared to those staying near to the sea.
- c. **Rebate Without Plastic Program** – the canteen owner had saved her cost on buying the plastics container, plastic bag and plastics cup to fill in the foods and drinks during student's recess.

## 2. Reuse:

- a. **Mosque and Useful Waste are not Separated** – the Muslim students was satisfied and attracted them to come frequently to the mosque and also visit the mosque when they need to pray, rest and feel peaceful.
- b. **Applying Plastics bottle in Seaweed Farming** – the seaweed owner had save their cost of using the plastics bottle by replacing the Polyfloating that cost Rm 4.50 per each. So students donate to those small seaweed farmers and total donation is about 500 big bottles (1.5 liter) and helps them save Rm 2,250.
- c. **Bordering the Darvel Lagoon, Hampilan Beach 2020** – the owner of the tourism company had save their cost by collecting about 120 big bottles (1.5 liter) from the 3R Club and helps them save Rm540 if they using the Polyfloating.

## 3. Recycle:

- a. **Build Recycle Dustbin Competition** – all the students develop their creativity and innovation to build a dustbin using the waste like boxes, bottles or woods.
- b. **Let's Collect Recycled Materials** – Each month the school sold about Rm100 for the papers, plastics and tin cans to the Recycle Collector Company.
- c. **Addressing Plastic Problems for Transforming Communities Drawing Competition** –through this drawing, some of the students could appreciate the natural and environment.
- d. **Gotong-royong Kelab 3R SMK Kunak Jaya 2020** – the community of each residential area were very committed and appreciate the co-operation with the students to undergo the cleaning service.
- e. **Plastic Bottles Collection Program in Residential Areas** - all the villagers in Kunak were support this program by donating the plastics waste to the 3R Club for each Saturday in each different residential area.

## 11. Programme for monitoring and evaluation mechanisms and summary of results

Monitoring and evaluation mechanisms:

In term of monitoring and evaluation of the whole project, the best way to measure each of the objective achievable or not is by using **descriptive statistic** that quantitatively describe the best software that using for descriptive analyses is **SPSS (Statistical Package for Social Sciences)**. So the teacher helps to analyses the feedback of all the students by using sets of **questionnaire** that suitable for descriptive statistic and also the SPSS software. The data shown as below in form of frequency, percentage and mean:

No.	Item	SD	D	N	A	SA	Mean	Perception
<b>A. Reduce</b>		Frequency/ %						
1.	I can reduce the usage of plastics among the community to creating less waste in the first place, then there's less mess to clean up.	-	-	148	99	453	4.44	Positive
<b>B. Reuse</b>		Frequency/ %						
1.	I can reuse the plastics to finding a new way to make good use of it so that we don't have to throw it away but to contribute it to the environment, agriculture, tourism and boost up the economy of community.	-	-	100	113	487	4.55	Positive
<b>C. Recycle</b>		Frequency/ %						
1.	I can recycle the plastics to remake a new goods that can be sold again where community were aware the important of recycle by collecting the plastics rather than throw it away into environment.	-	-	71	198	431	4.51	Positive
<b>D. Innovation and creativity</b>		Frequency/ %						
1.	I can demonstrate the innovative and creative practice and ideas in reducing the plastics usage and wastage by utilizing the available resources in the school, community and ecosystem.	-	4	249	114	333	4.11	Positive
<b>E. Engagement of community</b>		Frequency/ %						
1.	I can engaged the community-level partners such as community stakeholders, experts, local governors, practitioners and parents in the program by involving students in the local community.	2	11	98	212	377	4.36	Positive
<b>F. Sustainability</b>		Frequency/ %						

1.	I can sustain or scale up the addressing the plastic problems through the school teaching and learning activities across subjects for a long-term action strategy.	2	14	37	266	381	4.44	Positive
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Summary of results:

From the table shown above, the sample of the students answer the questionnaire is 700 person of students in the SMK Kunak Jaya from the population of 912. In conclusion, All the students are showing **positive perception** in reducing, reusing, recycling, innovation and creativity, engagement of community and sustainability. So we can conclude that the main objective and goal to transform the communities in addressing the plastic problems is achieved successfully.

## 12. Resources used for programme implementation

Behind of the successful project, we are lack of funding and technology to undergo this project. It was because Kunak is a rural area and very far from the big city like Kota Kinabalu and Sandakan. In addition, the Pandemic Covid-19 strikes to our country start from March until end of July. So we met many obstacles and most of the activities have to postponed from the actual date that we had set up.

However, we are trying our best mostly the members of 3R Club take full responsibility and participation to proceed this project. There are two resources that contribute the most:

1. Human Resources – The students, teachers, principal, parents, NGO (Non-governmental Organization) such as seaweed farmers, the owner of the Darvel Lagoon, Hampilan Beach, Head of village, government officer such as Kunak District Officer, lecturer of University Malaysia Sabah (UMS). Kunak Regional Education Officer and Kunak District Fisheries Department and the thousand people in Kunak district that take part in the community service and collection of plastics bottle.

2. Funding Resources – most of the funding and financial resources is from schools, teachers and student's own money because of rural place like Kunak is occupied most by community that work as fisherman, farmers and groceris. However, the 3R Club was able to collect money from selling the plastics waste, papers and tin cans that collect in the school and residential areas to the Recycle Collector, we also sell some of the bottle to the seaweed farmers through the Kunak District Fisheries Department.

## 13. Benefits/Impacts/ positive outcomes of the programme to **students, teachers, parents and school.**

The benefit and impact of this project as shown as below:

1. Students got the huge impact and positive perception in this project because most of the activities was done in the school where teachers not only teach them the knowledge from the subjects, but also undergo the teaching and learning process in the classroom related to the addressing plastics problem for transforming communities.

2. Students involvement and relationship with the NGOs, government, tourism (the owner of Hampilan Beach), fisheries (farmers of seaweed) become closer and they can see how the agency work to each other to help the growth of economy of our county.

3. Intention of students is very important in education field because they could apply the knowledge they learned in the classroom into more practical way through this project. I saw the members of the 3R Club trigger their mathematical and scientific knowledge to propose many activities to achieve the goal of this project.

## 14. Benefits/Impacts/ positive outcomes of the programme to people in community, and ecosystem.

1. Community of Kunak become more aware of the environmental problems and the plastics waste especially the residents that staying on the sea or around the beach.

2. The stakeholders also beneficial from this project like the farmers of seaweed had saved their cost to buy polyfloating and we help them to replace with plastics bottle for those small and poor seaweed famers. We had donated 500 big bottles and saved RM 2,250 if they were using the polyfloating.

3. The resident of the village that staying near to the sea and beach also beneficial from this project where we gather with some of the resident to do community service to clean up the beach and also outside of the house. So, the resident become more aware of the pollution through the sharing and communication between the students and the communities because it was very important for students to educate those less educated mostly the eldest peoples.

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

### Plan for sustainability:

For sustainability, the students of SMK Kunak Jaya and the members of 3R Club had played important role and take shared responsibility with the communities especially the residents that staying near to the beach and sea, the fisheries department and also the NGOs to ensure this project success and need to do improvement because it still got many things can be improve. The management plan with the strategic plan and tactical plan is needed in the future to ensure this project can be run for long term in a year to ensure no more plastics issues in Kunak district

### Plan for scaling-up/expansion:

We are trying to sustain the environment not only in Kunak district but also we are trying to expand this project to other nearby district like Tawau, Lahad Datu and Semporna that also face the same problem in solving the plastics problem in communities. However, these three district is much better than us in handling the plastics problem because Kunak is the rural place if compared to them. However, we are trying to become the bench-marking for others school in Sabah, Malaysia that consists of 24 district once the Pandemic Covid-19 is over. We face the problems to getting here and there because the Prime Minister and Minister of Education warned us to stay at home, keep physical distance 1 meter to each other.

We also gain many information and ideas from the NGOs and also the government officers because the communities also alert and aware of the environmental problems. So they also propose to our school in the future can work together to decorate and beautify the Kunak with intervention of plastics waste. Hence, many preparation and the funding from outsider is needed to ensure the project can expand more effectively and spread the positive value and energy to around the world.

## 16. 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 **SMALL ACTS, BIG IMPACT** project is trying to promoting a culture in loving and protecting the environment in school and also the communities. So the activities that had implemented are interrelated with the other Sustainable Development Goals (SDGs). One of the SD goal is **SD Goal 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all)**, because Kunak is a rural area and some of the kids mostly the ethics of Bajau and Suluk that staying on the sea and beach were not able to went to the school, so they don't have any information and awareness in protecting the environment even the education. So through this project, we may educate the small kids and the native people about the environmental issues.

On the SD Goal 6 (**Ensure availability and sustainable management of water and sanitation for all**), the benefit of this project could telling the communities to sustain the plastics problem so the plastics waste wont pollute the sea and water. Then, the communities could enjoy clean water to drink and cook. Students and communities could relate the plastics with the water pollution.

On SD Goal 13 (**take urgent action to combat climate change and its impacts**), the benefit of this project is to share the knowledge and take an action of community to reverse the climate crisis. Through the teaching and learning activities related to environmental issues, teachers are trying to reduce the investment in fossil fuels that used to be produce plastics material and vehicle fuel.

Lastly, the SD Goal 14 (**Conserve and sustainably use the oceans, sea and marine resources for sustainable development**), the benefit of this project to the seaweed famers, fisherman, tourism is telling and educating them the important of preserve and clean up the oceans and seas as their responsibility. So the ocean acidification could be reduced and saving the marine environment and ecosystem services.

## 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.

Document 1) Management Plans

Document 2) Project Based Learning (PBL) Approach Plan

Document 3) Daily Lesson Plans

Document 4) Students Worksheets, Student's Reflections

Document 5) Activities of SMALL ACTS, BIG IMPACT

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



**“Say No to Plastic” Day and Rebate Without Plastic Program.** – Students are advised to bring their own food container for every Wednesday and got rebate RM 0.10 for each foods or drink they bought.



**Plastic Bottles Collection Program in Residential Areas** - Teachers and the 3R Club members went to a few residential areas to collect their plastics bottles so that they can sell or donate to the Recycle Collector, Darvel Lagoon, Hampilan Beach owner and also seaweed farmers.



**Bordering the Darvel Lagoon, Hampilan Beach 2020 Program** – the 3R club donate the big plastics bottles to the owner of the Darvel Lagoon, Hampilan Beach in Kunak to make the border and float up the nets





**Applying Plastics bottle in Seaweed Farming Program** – members of 3R Club collaborate with Kunak District Fisheries Department to distribute the plastics bottle to one of the seaweed farmers.



**Mosque and Useful Waste are not Separated** – members from the 3R Club co-operate with the Muslim teachers (ustaz and ustazah that taught them Islamic Education) and also the committee of Islamic Education Association to decorate the environment of the school mosque.