

Sekolah Sampah: The Role of Students in Creating Sustainable Community through Environmental Education

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SUIJI – *Service Learning Program* (SLP) is a program organized under SUIJI consortium of six universities in Japan and Indonesia: Ehime University, Kagawa University, Kochi University, Bogor Agricultural University (IPB), Universitas Gadjah Mada, and Universitas Hasanuddin. In 2014, SLP in IPB was held through the program of International IPB Goes to Field (IIGTF). A problem identified during field observation was related to the low awareness of the society who throw the garbage in its proper place. Thus, in April 2014, I initiated the formation of *Trashsure Foundation* (TF) as the real initiative to support the sustainability of the community. TF was created as the respond towards the main issue emerges in the region of IPB concerning the low awareness of people about the garbage and environment. TF serves as a community for students in IPB who shares the same interest in doing garbage and environmental education particularly for elementary school children. Environmental education is suggested to be conducted as early as possible for children since the children should develop the sense of respect and care towards their environment during their development phases. Failing to do so will result in failed development of such attitudes of respecting and caring until adulthood. TF launched its first project named *Sekolah Sampah* (SS) in May 2014 for educating elementary school children about garbage sorting management. It is targeted to increase children awareness about the importance

to respect and to care about the environment. Publication has made to recruit volunteers and there have been 32 students volunteering. Most of the students volunteered because they catch the interest in conducting such environmental education activities for children. The self-experience spread by word-of-mouth attracts others to join. The volunteers are assigned with specific job description to run the project such as developing curriculum and method for teaching elementary school children, finding key partners to collaborate with, and creating social media accounts to publish activity regularly. The teaching method developed combines class teaching and education through games, animations, and field practices. SS partners with *SD Negeri 04 Babakan-Dramaga*, Bogor. For this time being, SS has been going to the step where the student orientation and pre-assessment test were conducted. SS gets the support from Institute for Research and Community Services (LPPM-IPB). Future plan of SS will be the implementation of the whole curriculum of two months in *SD Negeri 04 Babakan-Dramaga*, Bogor in the beginning of new academic year 2014/2015.

Keywords: children, education, environment, garbage, *Sekolah Sampah*

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Introduction: Education for Sustainable Development through SUIJI Service Learning Program

SUIJI – *Service Learning Program* (SLP) is a program organized under SUIJI consortium of six universities in Japan and Indonesia: Ehime University, Kagawa University, Kochi University, Bogor Agricultural University (IPB), Universitas Gadjah Mada, and Universitas Hasanuddin. SLP was developed based on the concept of Education for Sustainable Development (ESD) by Ehime University. SLP participants are the undergraduate students from each university that will live together in rural areas in Shikoku, Japan and in Indonesia for approximately three weeks during each SLP. Students directly observe the real issue faced by the rural communities and try to propose an alternative solution by collaborating with various people in the society. The exposure and experience during SLP will shape the students to be an international servant leader: a leader with international insight that devoted to the community. Thus, the students can contribute to the sustainable development of future society.

In August – September 2013 I got a chance to be one of the SUIJI participants in rural area of Shodoshima under the supervision of Kagawa University, Japan where I learnt about safe food production in local community. The problem encountered was about lack of young people who wanted to work in rice field and agricultural related area. The resources were available widely as we observed many abandoned rice fields and agriculture lands. Solution proposed from us was to establish university student volunteer community that had willingness to help the villagers. The dean of the Faculty

of Agriculture from Kagawa University showed his strong intention to support. The connection with the local mayor was established. Student volunteers from Kagawa University have been starting the regular visit to Shodoshima area since April 2014 to help local community sustain their agricultural related area.

The Challenge of Our Community: Environmental Sector

In the following year (2014), the SLP in Bogor Agricultural University (IPB) was held through the program of International IPB Goes to Field (IIGTF) supported by Institute for Research and Community Service (LPPM-IPB). *Desa Situgede* and *desa Cikarawang* (*desa* means village, *Situgede* and *Cikarawang* are the proper name of the villages) located around IPB main campus were chosen as the sites to conduct the service learning program. There were 35 students, both Japanese and Indonesian, who lived with local people through host family scheme. The challenge identified during field observation was related to the low awareness of the society, from children to adult who throw the garbage to its proper place. Thus results in a horrible condition where the garbage lies on every place and everywhere around the villages like near the river and the public cemetery. The same problem was also found in *desa Babakan* which directly adjacent with the campus of IPB. The Japanese and Indonesian students took an action to collaborate in making the board signs containing the persuasive words not to throw the garbage carelessly. The signs were placed on some strategic spots in the village that can be seen by many people.

Solution: *Trashure Foundation*, where the Students Take an Action

The signs are not enough to prevent the people from throwing garbage haphazardly for the long term. Based on these facts, in April 2014, I initiated the formation of

Trashsure Foundation with one SUIJI-SLP 2014 alumni named Jeffry Setiawan that have the same interest, as the real initiative to support the environmental sustainability of our community around campus. The name *Trashsure* itself was a grandiose aspiration to see ‘trash’ as ‘treasure’ that should be well-managed in order to save the environment. Mandel (2012) stated that the sustainable development goal is to increase human well-being, but at the same time decreasing the negative impact that human may bring to the environment. *Trashsure Foundation* was created as a respond towards the main issue emerges in the region of IPB concerning the low awareness of people about the garbage and environment. *Trashsure Foundation* serves as a community for students in Bogor Agricultural University who shares the same interest in doing garbage sorting management and environmental education particularly for elementary school children. As many as 32 students were recruited to be the part of *Trashsure Foundation* and took a role in it in which we were all volunteering ourselves. The volunteers came from very diverse background and interdisciplinary from the agricultural major, veterinary medicine major, communication major to human nutrition major. Having such range of people in fact helps us to see problem from wide perspective results in very comprehensive analysis. The process to be the volunteer itself is very simple. The one who wish to join the *Trashsure Foundation* should contact one of the members, then the Human Resource department will conduct the quick interview with the candidate to see whether the candidate is match with the foundation or not. The foundation welcome all students from Bogor Agricultural University. I am taking a role as the Vice President of *Trashsure Foundation* who is currently led by Jeffry Setiawan as the President. The details of organizational structure can be seen in **Appendix A**.

Most of the students are volunteers because they catch the interest in doing such environmental education activity for children. The self-experience spread by word-of-mouth attracts others to join. Most of the volunteers have previously experienced in doing community development, children teaching, and environmental project. However, for those who have no experience in doing such activities, but show the strong commitment and intention to learn, it will be count into consideration. As for the SUIJI alumni ourselves, we have the great responsibility to promote the sustainable development to our closest community nowadays for the good sake of future generation.

First Project: *Sekolah Sampah*

Trashsure Foundation launched its first project in May 2014 for educating elementary school children around campus about garbage sorting management named *Sekolah Sampah* (*Sekolah* means school, *sampah* means garbage, school to learn about garbage sorting management). There are reasons in choosing children as the main target to be educated. One study from Green (2013) showed that children from an early age have developed strong connection toward their environment as they begin to distinguish places based on their feelings and experiences with the places associated. As environmental education is the solution for environmental problem according to Mandel (2012), Wilson (1996) suggested that environmental education should be done as early as possible for children since the children should develop the sense of respect and care towards their natural environment during their development phases. Wilson (1996) further said that failing to do so will result in failed development of such attitudes of respecting and caring to the environment until adulthood. Accordingly, we see the children as asset that should be well-educated about the environment particularly about

the garbage throwing and garbage sorting: two main problems found in community around campus. Environmental education will be an investment to nurture future generation who has the respect and awareness to protect their environment.

The volunteers of *Sekolah Sampah* are assigned with the specific job description based on the role taken in the foundation to run the project such as developing curriculum and method for teaching elementary school children, finding key partners to collaborate with, conducting internal team building, and creating social media accounts to publish our activity regularly. The teaching method developed by *Sekolah Sampah* combines the class teaching and experience through games, videos and animations, and field practices. Wilson (1996) suggested that the environmental education for young children should be based on sense of wonder and joy of discovery. Furthermore, Wilson (1996) said that the framework of environmental education should be emphasized on five pillars: (1) Education through simple experiences (2) Education through frequent positive experience outdoor (3) Education balance between teaching and experiencing (4) Education that demonstrate a personal interest in and enjoyment of natural world, and (5) Teacher should be able becoming a role model of caring and respecting to the environment.

Sekolah Sampah has partner with *SD Negeri 04 Babakan-Dramaga*, Bogor as the first school implemented the project in educating the children. The agreement has been established between the headmaster and the foundation to carry on the project since May 2014. For this time being, the project has been going to the step where the student orientation and pre-assessment test were conducted to introduce *Sekolah Sampah* to the children.

Ongoing and Future Activities

The student orientation day was conducted on Friday, May 16th, 2014 at *SD Negeri 04 Babakan-Dramaga*, Bogor. The aim for the orientation was to introduce *Sekolah Sampah*, its volunteer and its program to the children that would be included in the part of the program so that the children would understand why we were there. As the introduction, the volunteers came to three classes of 3rd grader where we conducted various activities i.e. introduction from each of us, fun games, pre-test assessment, and the profile video remarks from us. The children were full with energy and enthusiasm from the very beginning we came to the class as it can be seen in **Appendix B**. The pre-test assessment was conducted to give us the insight about the children's knowledge in garbage and environmental related area. This will help us to design the right curriculum to be delivered to them.

The pre-test was conducted in the form of written test with 8 questions both open and closed type of question. The result showed that the children had good basic knowledge about the garbage including its classification into organic and inorganic also the 'recycle' term. Hence, the practical skill to do the garbage throwing and sorting were observed still low. Thus, the future plan of *Sekolah Sampah* will be the implementation of the whole curriculum about garbage sorting management of two months in three classes of *SD Negeri 04 Babakan-Dramaga*, Bogor as the pilot project in the beginning of new academic year 2014/2015.

One example of our activities to be implemented is that the children will be asked to collect the garbage that they have at home or the garbage that they find at school and we will teach them how to throw them in proper way by sorting those into different categories. The way of teaching them as mentioned above can be achieved through in

hand experience (fun learning, watching video, animation and games). Besides, the children will be carried on the weekly walking field trip to campus area to observe their surroundings whether they find something inappropriate or everything seems good. We want to sharpen their respect toward the environment. By doing so, we strongly believe that the children can be the agent of change and motivating the environmental awareness starting from their family circle. The implementation of the activities then be evaluated and reviewed to see what should be improved to ensure its sustainability. In addition, in the upcoming month of September, one of Japanese SUIJI SLP 2013/2014 participants name Naoko Ban will be coming to IPB under the program of SUIJI Advanced Learning Program (ALP) to see the progress of *Sekolah Sampah* in doing garbage sorting education for children. As the garbage management system in Japan has been running well for a long time, she will join the activity and will be asked to provide us with some helpful feedbacks.

External Relations and Challenges

Trashsure Foundation has established a good connection with two key partners recently: Institute for Research and Community Service (LPPM-IPB) and Forum for Indonesia (FFI). LPPM-IPB has been very supportive in term of assisting us with administrative matter i.e. providing official letter for the school, giving suggestion and advice about the program, and plunging us to their environmental project. The members of *Trashsure Foundation* lately (mid of June 2014) were asked to be the group leader of one environmental event called 'Bina Cinta Lingkungan' where IPB sent approximately 3,800 freshmen to 17 villages around campus to help the villagers cleaned stuffs in their area so that the hygienic environment can be enjoyed. The event was a big success.

Another organization, FFI, showed its interest to collaborate with our *Sekolah Sampah* project in giving environmental education to the children and would like to send some of its member to teach the children. Not only these two key partners, but the foundation have been promoting its activities to several others environmental movement organization in hope that the collaboration can be made to expand the opportunity.

Challenges were and are coming as the *Sekolah Sampah* project begun. There were some key challenges in different areas: (1) Matching and synchronizing the program time with the school time (2) Getting the funding support (3) Complex bureaucracy, and (4) Developing curriculum that suits with the children characteristic. The first challenge could be tackled by moving the time of implementation to this new academic year. Collaboration to the key partner was established to get the support, including funding support. However, for the long term, the foundation is planning to collaborate with local women group in *desa Situgede* who can create handicraft product from the waste i.e. purse, handbag, and pencil case. The product can be marketed to generate some money that can empower the local women group and our foundation. The third challenge about bureaucracy was a little bit difficult to be approach since it is related to the procedural provision. The foundation tries to meet the key person directly to make the communication more effective. While for the fourth challenge about developing curriculum, we tried to ask for the suggestion from some friends that are expert in developing such thing. Yet, we will keep evaluating the implemented activities to make some adjustments with the real condition of the children characteristic. The current challenge is that we are still trying to find key partners to distribute some kinds of garbage that we cannot recycle.

Impacts

Environmental education is an integral part to solve the environmental problem as mentioned before, in this case the problem about garbage around our community. Therefore, *Sekolah Sampah* is hoped to form the children behavior from their young ages to become aware of the importance of caring and respecting their environment by managing the garbage properly. The foundation philosophy to see the 'trash' as 'treasure' carries broad impacts. Garbage collected classified as plastic (instant food wraps and water bottle) will be given to local women group in Situgede motored by Mrs. Salikan (opinion leader) to be processed into value-added goods i.e. purse and bag that can be sold to improve the household economic of the society. The foundation will later help to look for the marketing channel of such goods. The water bottles can be used as the verticulture media for cultivating the leafy vegetables: the common practice that has been done in Situgede. LPPM-IPB also taught the villagers to produce organic fertilizer from the organic waste. Accordingly, this provides an ample opportunity for organic waste to be processed into organic fertilizer that can be utilized for their own usages.

Conclusion

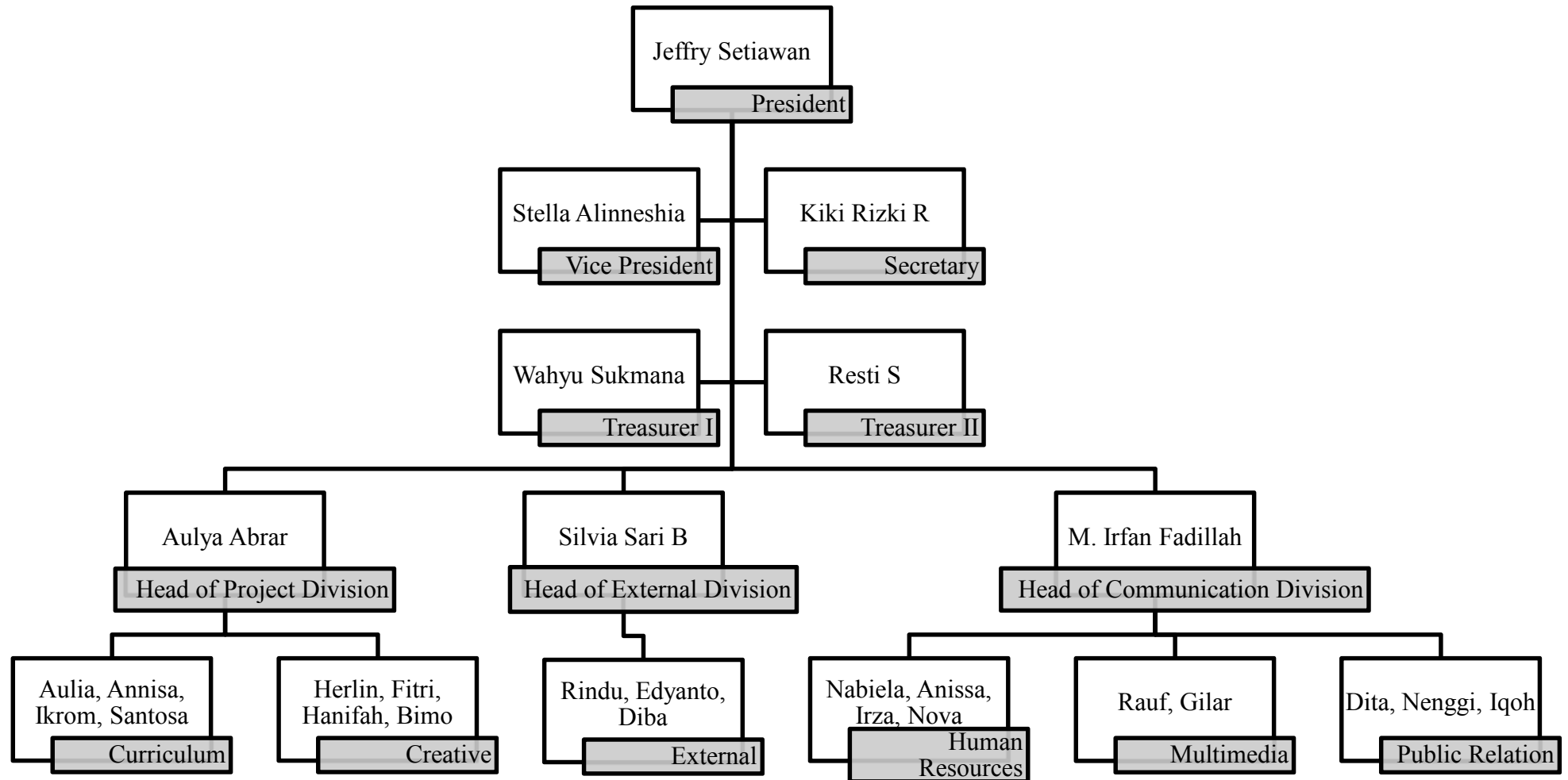
Trashsure Foundation is one of the real example taken by the students in promoting the sustainable development of the community through environmental education for the children in elementary school around campus. By educating elementary school children through the project of *Sekolah Sampah*, it is targeted to raise their awareness about the importance to respect and care about their natural environment with the hope that our environment can be preserved for the future generation also. The trash collected is no

longer perceived as just a trash, but a treasure that actually give many benefits to the community.

References

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APPENDIX A. Organizational Structure of *Trashsure Foundation*



APPENDIX B. Documentation of Student Orientation Day

