

# The Heart of the Matter: Infusing Sustainability Values in Education

## Experiences of ESD with the Earth Charter



Celebrating the UN Decade of Education for Sustainable Development



United Nations  
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UNESCO Chair on Education  
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# Implementing the Whole School Approach Using the Earth Charter: A story from the Heart of Borneo Island

Stien Johanna Matakupan

## Introduction

Over the last four years, there has been a significant change in Mekartani, a small village in the Katingan District, Central Kalimantan province, Indonesia. The behavior of the children has improved. Very rarely do villagers find them fighting and the children also show that they really care for their environment.

One of the residents of the village said, "As a leader in this village, I noticed that the child delinquency rate in my village decreased over the last four years. I rarely find them fighting. In the playground, they tend to play only safe games. I am also impressed with the change in their attitudes. Mekartani produces lots of local fruits, pineapple, jackfruits, and rambutans are some of them. When those fruits are in season, the kids make rujak (Indonesian fruit salads) together. I witnessed that they always wash their hands before eating. They also have the good habit to collect the garbage and clean up their play ground before they leave the area. This didn't happen in the past."

Another parent added that, "After school hours, my son loves to swim and play in the river with his classmates. I observed that the kids know exactly the time to stop swimming and go to mosque to study the Koran. They have good time management."

Those are comments from Mekartani villagers that describe the attitude of students of the Mekartani Elementary School. The villagers believe that this attitude has come about because of the improvement in the school programme and they feel very positive towards the school programme and are committed to supporting all school activities. Mulyono, the Mekartani Elementary school principal said that he did it because he wants to make a difference. "We have to take care of the Kalimantan environment. We can do something. We live in a very remote area, but we are not left behind," he said.

On the eastern side of Kalimantan, far away from the city buzz, Jambuk Makmur 10 Elementary School in the West Kutai District, made a significant change in their school system. They changed the way they were teaching, using the school garden and composting area as learning resources and developing a school entrepreneurship programme. Over the last four years, they succeeded in forming partnerships with various stakeholders and they established a community learning center called "Rumah Belajar" or "House of Learning" for all farmers who live in Jambuk Makmur village.

To get to Kalimantan villages, one could fly from Jakarta to Palangkaraya, drive about eight hours from Palangkaraya to Mendawai, then continue to Mekartani by boat for about five hour. To reach Jambuk Makmur, the option is driving 465 kilometers (about 7-8 hours) from the nearest airport in Balikpapan city. The road is damaged in some areas but safe. The alternate ways are by water taxi for about 15 hours or by small airplane which is expensive. Both villages are located deep within Kalimantan, in the heart of Borneo.

The questions are what factors drive the behavioral change in children of Mekartani village? What factors influenced Mekartani and Jambuk Makmur elementary schools to reorient their school system based on ethical principles for human beings as well as educating their students to respect life? Using data collected through focus group discussion, interview and observation, this story is intended to answer those questions.



Students in East Kalimantan

## The Context

With a landmass of about 748,168 square kilometers, Borneo is widely recognized as the third-largest island in the world after Greenland and New Guinea (Largest islands of the world, 2014). The island is in the equatorial region of the Pacific Ocean. Mario Rautner, in his report on the status of the forest, wildlife, and related threats on the island of Borneo, named Borneo as a land of plenty. The flora and fauna on Borneo are extremely varied.

The island is famous as a habitat for the orangutan (*Pongo Pygmaeus*), sun bear (*Helarctos malayanos*), and Proboscis monkey (Mario Rautner, 2005). Borneo is home to three nations: Brunei Darussalam in the north-west; Malaysia on the northwest coast and north-eastern tip of Borneo; and the largest part of Borneo belongs to Indonesia and is called Kalimantan. Indonesia divides its part into four provinces, which are Central Kalimantan, West Kalimantan, East Kalimantan, and South Kalimantan.

Despite the richness of biodiversity on Borneo, it is widely known that the island is slowly losing its biodiversity year by year. For example, the World Wide Fund for Nature (WWF) reported that 56%, or approximately 29,000 square kilometers, of protected rainforest in Kalimantan were cut down between 1985 and 2001 for oil palm plantations and land conversion (Mario Rautner, 2005). In 2007, the government of Indonesia, Brunei Darussalam, and Malaysia committed to working together to protect biodiversity loss, ensure the effective management of forest resources, implement conservation of a network of protected areas and productive forests, and foster other sustainable land-uses within an area that the three respective countries designate as the "Heart of Borneo (HoB)". The programme is implemented in partnership with governments and all local key stakeholders.



Heart of Borneo area. Ref. [http://assets.panda.org/img/original/borneo\\_administrative\\_map\\_wiki.png](http://assets.panda.org/img/original/borneo_administrative_map_wiki.png)

## Implementation

As part of its commitment and vision for a sustainable future, WWF has been directly working on the HoB since 2005. One of the programme is Education for Sustainable Development (ESD) in formal education, particularly in elementary schools. The ESD programme ran from 2009-2014, and there were 10 districts in the four Kalimantan provinces involved. Within those provinces, the ten districts included were Katingan, Murung Raya, Gunung Mas, Kutai Barat, Sintang, Melawi, Barito Utara, Kapuas Hulu, and Nunukan dan Malinau. 32 schools participated in the programme. The programme was implemented in partnership with local government and stakeholders in the four provinces. The objective was to reorient schools and turn them towards education for sustainable development, to develop knowledge, skills, values, and attitudes for a sustainable future. WWF believes that ESD should be regarded as an overall perspective and an ongoing process in a changing world. The long-term goal is that we can live as good a life as possible without harming other people, nature, or society in both time and space (Germund Sellgren, 2010).

Six important cornerstones have been used as creative bases for the programme. They are: (1) lifelong learning; (2) learners in focus; (3) a holistic approach; (4) democratic work methods; (5) reflection; and (6) different perspectives (Germund Sellgren, 2010). With the principles of togetherness and active participation, these schools were guided to integrate ESD in their development plans and work methods. The programme provided workshops and mentorship to the schools.

For programme sustainability, in each district, WWF also selected one school and worked with them to develop them into a model school for ESD implementation in the area. It is hoped that this school will later disseminate all knowledge and skills they have to other schools in their particular area. Mekartani and Jambuk Makmur 10 Elementary schools are examples of these model schools. Mekartani Elementary school is a model for the Katingan District in Central Kalimantan, while Jambuk Makmur 10 Elementary School is a model for Kutai Barat District in East Kalimantan.

## Teacher Training

The quality of education is closely related to the quality of teachers. In Indonesia, the quality of teachers has been a great concern for decades. Statistics from the National Ministry of Education indicate that academic qualifications of Indonesian teachers are relatively low compared to teachers from neighboring countries. Most Indonesian teachers have a D2 (two year diploma), and more than 60 percent of the total 2.78 million teachers have not completed a bachelor degree. By early 2006, more than 80 percent of the primary school teachers did not have a college education. At present, the Ministry of Education and Culture is working with many stakeholders to improve teacher capacity. A teacher certification has also been established (Fasli Jallal et al, 2006). ESD in the HoB directly supports the efforts made by the government to improve teacher quality. Data from the field proved that the quality of teachers who participated in the programme has improved over the past four years. Here are some good examples:

### a. Holistic approach

Besides environmental issues, there have been inter-ethnic conflicts in Kalimantan. During the programme, teachers learned how to infuse social, economic, and environmental issues into their subjects. This brought positive impacts to the students as 67% students in West Kalimantan, for instance, said that they learn tolerance and respect for other cultures from their teacher. "Inter-ethnic conflict should not happen in Kalimantan anymore," said a fifth-grade student. "There are differences everywhere, and we should respect each other" added a sixth-grade student. Various local issues have been introduced to the classroom like deforestation, local culture in changing agriculture, indigenous cultures, and endangered species like the orangutan. Teachers also spent time discussing their teaching methodologies with their colleagues. One fourth-grade teacher from Mekartani Elementary school said that, "Maybe we haven't managed to produce good quality lesson plans because in the past we rarely revised our lesson plans. But now we often sit together and discuss our lessons in terms of economy, society, and the environment. We even had a heated discussion and debate on it". They eventually wrote and published their learning experiences on the Pustaka Borneo website: <http://www.pustakaborneo.com>

### b. Learners in focus and democratic work methods

60% of students in Central Kalimantan, and 58% of students in East Kalimantan said that they always had a group discussion and did various group work in their lessons. 58% of students in West Kalimantan shared that they frequently got the chance to work in groups. From the interview, one teacher said that group work gave them the chance to teach students about democracy and for the students to learn about rights and responsibilities. It also helps students to give their opinions, respect others, and make conclusions. The places of learning also varied as classes went to rivers, lakes, or other ecosystems for study, practice gardening, composting, and enjoying the yields. In school, students also learned about global issues and linked them to the issues in their local area.

### c. School Culture and partnership

All teachers who participated in the programme claimed that the programme shifted their paradigm on school systems and learning processes. Teachers in Mekartani and Jambuk Makmur 10 Elementary schools now spend time to reflect and brainstorm when designing the annual school plan. It had never happened in the past. Since the programme is planned together, it built a sense of ownership among the faculty and gave them the impetus to monitor the programme and gradually improve its quality. The schools also partnered with many stakeholders in their local area. Jambuk Makmur Elementary school even became a hub for various stakeholders to collaborate.

When the school was setting up their gardening programme, parents and other villagers came and taught children how to prepare planting beds, as well as how to plant the garden. The school celebrated its harvests and learning experience by cooking together and inviting all the people who helped build the garden. The school library also serves as a community learning center. There are 10 community learning centers established in 10 districts. Rumah Belajar (Learning Center) Lentera Hayati located in the Jambuk Makmur 10 Elementary school is one of them. Here, farmers in Jambuk Makmur regularly gathered to learn about eco-farming. Moreover, the community learning center drives villagers in Mekartani to make their village an eco-village.

Since 2013, most teachers from the model schools have been chosen by their local district level education offices to teach teachers from other schools or become school supervisors. It's a golden opportunity for teachers' professional development. "In 2006, I couldn't imagine that my school would transform into a good school like this" said one teacher.



Students presentation

It can be said that Earth Charter Principle 1 - Respect earth and life in all its diversity, Principle 2 - Care for the community of life with understanding, compassion and love, and Principle 4 - Secure Earth's bounty and beauty for present and future generations, were focused on heavily during the programme. The school entrepreneurship programme also lead school communities to eradicate poverty and promote human development in an equitable and sustainable manner, and these are related to Principles 9 and 10 of the Earth Charter.

The Earth Charter principle number 3, which is "Build democratic societies that are just, participatory, sustainable, and peaceful" has already clearly been shown in Mekartani and Jambuk Makmur villages as well. The culture of democracy they have built has helped to motivate the community to protect and restore the integrity of Earth's ecological systems, to live their lives respecting the environment, and to make their village into an eco-village. The culture of tolerance, non- violence and peace in principle 16 has also been promoted. The rate of youth delinquency over the last four years, which was mentioned by the head of Mekartani village above, proved that the school succeeded in making a difference.

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## Lessons Learned

After four years of implementing the whole school approach in the HoB, it can be concluded that Earth Charter values were internalized during the course of the programme. The impact was not only felt within the school itself, but also in the wider community. The change in students' attitude, the atmosphere of democracy, the concern to local and global issues, the effort to take local action, and the commitment for future development are improvements that are important to highlight. After the programme, school communities are better equipped to create new opportunities to build a democratic and humane world. However, for the next steps, it will be crucial to maintain these achievements and improve key teachers' capacities, as well as empower village leaders with the strategies and methods to disseminate the programme and assist other schools.

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## References:

Jalal, Fasri et al. 2010. Teacher Certification in Indonesia: A Strategy for Teacher Quality Improvement. Jakarta: Ministry of National Education

Largest islands of the world. (n.d.). Largest islands of the world. Retrieved July 31, 2014, from <http://www.worldatlas.com/aatlas/infopage/islands.htm>

Rautner, Mario. 2005. Borneo: Treasure Island at Risk. Status of Forest, Wildlife and Related Threats on the Island of Borneo. Frankfurt: WWF Germany

Sellgren, Germund. 2010. Learning Sustainable Way. WWF Sweden.

Note: World Wide Fund for Nature (WWF) started working in Indonesia as a Programme Office of WWF International in the early 1960's, under the auspices of the Ministry of Forestry. In April 1998, the Indonesian Programme office of WWF-International in Indonesia was transformed into WWF-Indonesia and legalized as an Indonesian organization with foundation status. With this change, WWF-Indonesia became a National Organization within the [WWF Global Network](#). Today, WWF-Indonesia works in 25 sites, spread throughout 17 provinces in Indonesia.

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