

Policy Advice for Environment and Climate Change (PAKLIM)

Climate Education and Awareness

Recent droughts, forest fires, floods and landslides have stimulated greater concern for the environment in Indonesia. However, environmental values are not yet deeply embedded in Indonesian society. It is therefore essential to improve public awareness and understating of the different aspects and impacts of climate change, especially among young Indonesians. This is crucial to achieving a favorable political and social environment to combat climate change in Indonesia.

The importance of climate education, for transforming the public mindset to tackle climate change, has never had more significance or credibility.

PAKLIM, an Indonesian – German Cooperation Programme, supports the Green School Program (Adiwiyata) in cooperation with the Ministry of Environment and Forestry and the Ministry of Education and Culture. The program aims to raise climate literacy among Indonesian youths. It also seeks to turn schools into environmentally friendly places that contribute to energy conservation and emissions reductions. Climate change issues are integrated into school subjects as well as in out-of-class activities. School environmental audits are also conducted. This overall eco-mapping process involves:

- developing practical modules,
- focusing on teacher training, and

- focusing on capacity building for schools and local authorities as potential regional coordinators, beyond their school communities.

PAKLIM aims to create a safe and healthy environment in which to grow and learn; one that encourages children and juveniles to become creative, critical and reflective thinkers. The main education methods in green schools, seen as a reform in teaching and learning, are out-of-school environment instruction, project work and team-teaching, including working with communities. A major objective is to link and involve local communities to establish environmental education beyond the school system.

Students, teachers and local communities from 20 schools in Java have improved their awareness of climate change impacts by implementing the eco-mapping methodology.

The eco-mapping-process was piloted in 2013 in 50 high schools across Java. Twenty had finalized the first cycle of the process in early 2015 and are now ready to move forward. Over 25 more schools started the process in 2015 in cooperation with the initial participating schools and the regional focal centers. The approach aims to raise students' awareness of sustainable development issues through classroom studies, as well as school and community action.



The focus is on preserving natural resources and reducing greenhouse gas emissions. School grounds are an integral part of the learning process. Greening the school grounds, conserving water and energy, working with local community groups and institutions, developing new teaching and training methods to involve all school members, especially students – these are main pillars of our concepts.

Starting with themes of Water, Waste/Litter and Energy, students will go on to develop knowledge of other thematic areas, such as Nature and Biodiversity, School Grounds, Transport/Sustainable Mobility, Healthy Living, Noise, Sustainable Consumption and Production, and Climate Change.

We use simple methods of measuring and reducing the human carbon footprint by looking at flows of electrical power and heat, use of private and public transport for commuting, and the supply chain of goods and services used in schools and surrounding communities. The ‘whole-school’ approach to carbon reduction emphasizes good housekeeping, low-, no-, or marginal-cost efficiency measures and involves pupils, teachers, administrators, site-management staff and parents. Members of the Indonesian Scouts Movement and community groups are also involved.

The eco-mapping process is designed around the Ecomapping© toolbox, based on a curriculum mapping approach. It helps teachers to deliver a student-centered experimental learning approach within a first cycle timeline of approximately 9 – 12 months. The eco-mapping process comprises five steps: Socialization, Initial Audit, Follow Up and Action Plan, Performance Check, and Final Audit.

Twenty schools have completed the first cycle and are developing their action plans for next year for continuous improvement.

It has become clear that even though we are working with the whole-school community, teachers are the main facilitators. The Ministry of Education and Culture wants the participating teachers to transfer their knowledge by training their peers to develop green schools. Teachers are being encouraged to share their best practices in form of scientific articles, which are to be circulated within their schools and among teacher support groups. Teachers who write these beneficial articles can obtain extra credit points in improving their career paths.

The eco-mapping process is an effort by the schools to help Indonesia achieve its goal of reducing greenhouse gas emissions by 26% in 2020 and by 41% with international support. The impact of each individual school’s effort may not seem significant, but collectively it could be huge, considering there are more than 250,000 schools across Indonesia.

Over time and through commitment to the eco-mapping process, improvements are expected in students’ learning outcomes, as well as in attitudes and behavior of students and local communities, ultimately bringing improvements to the Indonesian environment.

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