

Cross-Border Education Summary

Plastic pollution of ocean and coastal areas: situation and solution trends in Japan, Philippines and Taiwan

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The environmental pollution by the plastic waste presents a worldwide problem. In open ocean and coastal waters, plastics originating from fishing nets, as well as household products, such as pet bottles, plastic bags, etc., presents a huge threat to the marine wild life. Plastic parts are consumed by marine animals, which can lead to their disease and death. Often animals are also entangled in plastic nets or bags, which prevent them from moving and feeding. Microplastic particles are accumulated in fishes and later are consumed by humans. In this Cross-Border Education session, young and senior researchers from Japan, Philippines and Taiwan compared and discussed this problem in two sections: 1. the current situation in plastic pollution and 2. solution trends in three countries.

In the first part, the main discussion was focused on the plastic waste management situation. The participants briefly introduced regulations for plastic disposal and recycle in their country, and whether these regulations are supported by government and implemented globally or only in distinct locations. Next, the discussion turned to the problem of plastic management knowledge by the public in each country - the

necessity of education not only on the elementary school level, but also the importance of regular educational programs for adults.

In the second part, the participants discussed how we can solve the problem of plastic pollution from the user's point of view. Everyone agreed that as users we should try to reduce the production of plastic waste by using re-usable products, such as bottles, bags, etc. In addition, as most participants were from academia, we discussed the support of plastic waste recycle education and implementation in the universities. At the end, we discussed what we can do as researchers to reduce plastic waste. With a significant input of senior researcher participants, the latest trends in the development of biodegradable plastics were introduced and discussed.

During this Cross-Border Education, the participants had a chance to discuss the plastic pollution situation in their home country and cross-compare it with a situation in countries of other participants. Many points of view were shared in all countries. In addition, participants were able to get the new information and insights which hopefully will help them to improve the plastic waste situation in marine environment of their countries.