The Legislative Council of the Hong Kong Special Administrative Region

Panel on Environmental Affairs

Invitation for submissions

1. Background of the Jane Goodall Institute of Hong Kong

We at the Jane Goodall Institute Hong Kong would like to raise our concerns with the government on the correlation between increase in marine litter affecting the endangered wildlife of Hong Kong, specifically the Green Turtle population.

In one of our education programs "The Big CleanUP" (海洋大塑除一社區為本海灘清潔計劃) sponsored by the Environment and Conservation Fund (ECF) and launched in January 2018, we aim at raising awareness of primary, secondary and tertiary students in both international and local schools on ocean pollution crisis, plastic reduction challenges and marine species conservation. Our education programs focus on the consequences of Hong Kong's outlook on waste and aim to develop students that are proactive in being the actors of change. We work with community engagement as our primary focus of enacting change.

2. Micro-plastics: Overwhelming Ocean Pollutants in Hong Kong

Hong Kong is one of the last remaining nesting populations of the endangered green turtle (Chelonia Mydas) in southern China (Ng et al 2014).

We would like to commend the Hong Kong government, through the legislative council, for inviting interested parties to contribute to the efforts on the protection of endangered species. We thank you for opening up submissions to the public to assist in the legislative process to further improve the conservation efforts the Hong Kong government are already taking to prevent the disappearance of endangered marine life. This is an enormous step towards the path to bringing back the Green Turtle population to our waters.

We applaud the current efforts the Hong Kong government is making to protect the nesting grounds of Green Turtles, the effects of which has greatly improved the conditions. The restriction of public access to the Sham Wan nesting site under the Wild Animals Protection Ordinance (Cap. 170) and the conservation management of the nesting sites have gone a long way to assist in the population rebound of the Green Turtle.

Our concerns lie in the dangerous relationship that has arisen between the Green Turtles and our waste output as a city. The volume of domestic waste output generated by the city is generating a negative effect on the marine ecosystem that the Green Turtles are a part of.

According to an article by the Hong Kong Free Press, the body of a sea turtle was found washed up on Oak Lap Wan beach in Sai Kung. The stomach contents of the turtle contained plastic bags

and packaging waste in the form of broken down micro-plastics. It appears the Green Turtles are consuming these plastics which they believe to food.

Sea turtles are extremely important in regulating the marine ecosystem, their primary role is to graze and control the population size of sea grass. Sea grass if left unchecked can end up growing to a point where it gathers sediment, obscuring light and promoting disease. The sea turtles maintain these beds of seagrass and additionally the seagrass consumed by the sea turtles are digested and become available recycled nutrients to many other plants and animals that live in the marine ecosystem.

Our main concern lies with the ingestion of plastics by the remaining Green Turtle population. Additionally to starvation as a result of consuming plastic the Green Turtles are also subject to the chemical exchange that occurs when their bodies attempt to digest the plastics. It was noted in the documentary "A Plastic Ocean" that not only does plastic not provide any nutritional value, but microplastics act as magnets for chemicals from industrial waste that end up in our oceans. This means that the microplastics that our Green Turtles are consuming are covered in toxic substances that will be absorbed into their living tissue and organs. In 2006 it was found that the Green Turtle eggs in Hong Kong had higher concentrations of nickel and lead when compared to other studies (Lam et al. 2006).

We urge the HK Government to consider the following suggestions:

- 1. To review the plastic bag levy and the cost for the consumer to obtain a plastic bag for their shopping. This is to encourage the general public to use reusable bags in their daily lives;
- 2. To include the levy on shipping and delivery services, the use of plastic wrapping in the shipping and delivery of items ordered online should be included as we enter the age of digital consumerism. Online shop owners should work with the HK Government to reduce the need for large quantities of plastic packaging;
- 3. To invest more resources for local community organizations to create sustainable green campaigns and educational programs, while strengthening the local community network for achieving the Sustainable Development Goals (SDGs).

Founded by renowned primatologist Dr. Jane Goodall, the Jane Goodall Institute is a global nonprofit dedicated to wildlife research, education and conservation. The primary focus of the Jane Goodall Institute Hong Kong office is "Jane Goodall' s Roots & Shoots", an education program which empowers young people to care for the environment, the community and animals through action.