Project Update: December 2020

Flying foxes have been hunted intensely throughout Sulawesi to satiate the demand for bushmeat coming from the north. Protecting a flying fox colony locally is the best way to prevent hunters from taking the bats, but more importantly, an open opportunity for the village to integrate conservation into their local development programme. This project has continued the previous programs to protect neglected yet threatened mixed colonies of flying foxes on Mantawalu Daka Island, Longkoga Barat Village, Central Sulawesi, by conducting 1) flying fox monitoring (first long-term population data in Indonesia), 2) hunting patrol, 3) capacity building of youth community and local fisherman, 4) ecotourism including waste management and greening programme.

Progress and key accomplishment per activities up to November 2020:

Research and conservation of flying foxes
Monitoring of flying fox populations has been conducted twice a month since 2018 using the emergence count method, providing the first long-term data of flying fox populations in Indonesia (Fig. 1). We successfully increased the maximum number of bats roosting on the island (from 8,376 to 35,705 individuals) and maintained the consistent fluctuation (natural) of bat population in 2019 and 2020. No hunting patrol was recorded this year, highlighting the success of the programmes to have the community on board to protect the bats together.

Figure 1. Fluctuation of flying fox population on Mantawalu Daka Island. This colony consists of three species, the endemic Sulawesi Flying fox (Vulnerable, Acerodon celebensis), the Lesser Sunda-Sulawesi endemic of Gray Flying fox (Data Deficient,
Pteropus griseus), and more widespread but subspecies to Sulawesi, the Black Flying fox (Least concern, Pteropus alecto alecto).

Through capacity building activities under this programme for the local youth in the village, they are now empowered and trained to undertake the flying fox population monitoring and hunting patrol.

![Figure 2. Heading to the island where the flying fox roosts (left), patrolling the island to check any hunting activity (right).](image1)

![Figure 3. With Om Ambi, one of the local fishermen, waiting for the bats to emerge for the counting (left), flying foxes emerged from the island to their foraging sites (right).](image2)

Local development initiative

Capacity-building activities
Since August 2020 until now, we managed to conduct training including: a) project planning and management with PETA (a local youth community in Bualemo sub-district), one of our collaborators beside GERSAL (a local youth community in Longkoga Barat village) to conduct greening and waste management in the area; b) different types of waste; c) and flying fox monitoring. Team was tested for COVID-19 prior to the activity.

![Figure 4. Training with PETA for project planning and management to conduct greening and operate waste management.](image)

![Figure 5. Training of waste separation (left), training for flying fox monitoring (right).](image)

Greening programs
We just started our greening programmes by building a simple nursery for native plants. Once the seedlings are grown at the beginning of next year, we are able to start the greening programmes in the area.
Waste management programmes
Together with our local youth partners, PETA and GERSAL, we surveyed and determined prioritised areas for the waste management programmes. There were two crucial locations where people dumped their waste there or washed away by the rains, one was near a creek and another was along the beach. This year, we cleaned the areas and currently devising the plan to work together with the wider community in the village to manage each of household waste to prevent more garbage dumped recklessly in the village.

Figure 6. Building nursery for native plants for the greening programs.

Figure 7. Beach and creek cleaning in the village together with PETA and GERSAL.
To allow the integration of conservation with the local development initiative, we encouraged collaboration between local youth community (PETA and GERSAL), as well as met with village and sub-district government to discuss about the plan that will be followed up next year.

Figure 8. Conservation program was welcomed by the head of the village and sub-district and they looked forward to working together to have it in the local development initiative.