

Final Evaluation Report

Your Details	
Full Name	Ika Yuni Agustin
Project Title	Education Strategies for Javan Lutung conservation in the Bromo-Tengger-Semeru National Park, Indonesia
Application ID	28118-1
Date of this Report	23/01/2023

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Update Javan Lutung's distribution information in the Bromo-Tengger-Semeru National Park (BTSNP) and estimate Javan Lutung's population in the National Park				We have surveyed 13 transects in total. Each transect was 1 – 2.5 km long. Totally there were 28 groups of Javan Lutung recorded during the survey, inside and outside BTSNP forest area. In some areas we were unable to make vegetation plots because the topography was extreme, and some areas also have burned because of forest fire. We have recorded 13 vegetation species as Javan langur diets and three vegetation species that are used as cover (sleeping tree) by Javan langur. However, we have not finalised the distribution map and restoration map which will show the areas for conservation education, due to major explosions of Mount Semeru in December 2021 and December 2022. We are still consulting relevant agencies to finalise the map.
Explore various stakeholders' perception and knowledge on ecosystem services and Javan Lutung ecological functions,				We have interviewed 160 respondents in eight villages and five local teachers
Develop conservation education strategy focusing on ecosystem services of the forest and Javan Lutung's ecological functions.				Bromo Tengger Semeru National Park has agreed to join in local primary school to share about forest and Javan Lutung conservation in Primary School 1 Poncokusumo. We had planned to visit the primary school on February 2020 but because of the COVID 19 outbreak, we were unable to implement the plan. As uncertainty prevails during the pandemic, I and my team initiated to give education

				<p>awareness toward Javan Lutung conservation to local children in one of the buffer villages (instead of in school, because schools were online). We made some outreach materials i.e., poster and keychains about Javan langur conservation. We also bring children to have outdoor activities and show them Javan langur in their natural habitat in the nearest forest in BTSNP. Some university students from Biology Department of Brawijaya University were interested in this awareness activities. They taught the local children about bird, butterflies, dragonflies and getting to know about plants as well.</p>
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2. Describe the three most important outcomes of your project.

a). A strategy for conservation education has been developed. A local school (Primary School I Poncokusumo) agreed about environmental education curricula to be implemented in their school for additional education activities. One of the BTSNP rangers also has agreed to deliver forest conservation education to the local school.

b). Our local guides were poachers from the nearby village. We involved them because they were familiar with the forest and the terrain. We were also interested to know their motives. Many poachers hunt for fun. Very few hunts for subsistence. In the case of Javan Lutung, it was merely for fun. Their involvement in this project has improved their understanding about Javan Lutung (being endemic, VU, and ecological functions). This led to them reducing their hunting activities in the forest. They expect that other research and project activities could be run continually in their area so that they can participate. We see this as a great opportunity for the next phase of this project to train poachers to be research and environmental education guides.

c). Data on Javan Lutung distribution is available (but we are still analysing the data and finalising a journal article). This is important as Mount Semeru is an active volcano.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

In the beginning of this project, we planned to conduct survey only inside the BTSNP area. But because we found potential habitat and high threat for the Javan lutung and other wildlife species there, so we decided to survey outside the TNBTS area too, especially in the western part of Mount Semeru. On the other hand, the area also lacks research and conservation initiatives and has high rate of poaching activities.

In the beginning of our survey, local people were not welcome. They thought that we were part of the Bromo Tengger Semeru National Park rangers. Some of them refused to be interviewed or hid when they met us in the forest. We have done several approaches, such as by live in with the local communities and join with their activities in the farm.

4. Describe the involvement of local communities and how they have benefited from the project.

One of the education strategies for the conservation of Javan Lutung is visualisation of Javan Lutung to children / community. For this reason, an educational video was made to introduce Javan Lutung to the community and especially children. Making this educational video by involving a local community, Gubug Embun (a local NGO), elementary school students and local guides. The dialogue in this video was deliberately made using local language so that the local community and children understood the messages contained in the educational video, get know of Javan Lutung and its functions in the forest ecosystem. In addition to this educational video, we are planning to make an educational video about forest / other wildlife conservation in the future.

We involved local people to be our guides during the Javan Lutung surveys. During the surveys we also taught them how to use binoculars, cameras and other equipment while we also discuss and sharing knowledge about Javan Lutung, other wildlife and forest. Now they are aware of Javan Lutung' functions in the ecosystem. Other research activities in one of the study sites using our previous local guide to guidance the activity in the area. It will at least reduce the poacher activities in our study site area.

5. Are there any plans to continue this work?

From the interview with BTSNP staff, it is revealed that one of the challenges in conducting environment education in local school is lack of human resources. Therefore, we plan to continue the strategy that has developed, by facilitating the education program in local school.

We will work with local schoolteachers and BTSNP staff to create educational material about forest and wildlife conservation. We will make MOU with other schools around TNBTS to make education programme related with forest and wildlife conservation.

We will write material book that could be used to place based pedagogy and conduct conservation education workshop training for local schoolteacher and selected poachers.

6. How do you plan to share the results of your work with others?

We joined national conference about primate conservation" Simposium dan Kongress Primata Indonesia 2019 in Yogyakarta 18-20 September 2019. We presented our planning project and the result of the project. We also joined

International Conference on Biodiversity in Mataram west Nusa Tenggara on 14-15 2019. We presented a presentation entitled Education strategies for Javan lutung Conservation in the Bromo Tengger Semeru National Park Indonesia.

An article titled "Place-Based Pedagogy and Indonesian National Curriculum: A Strategy Analysis for Forest and Javan Lutung Conservation in the Bromo-Tengger Semeru National Park has been published on Proceedings of the Proceedings of Conference on Education and Social Science (ACCESS 2020): <https://www.atlantispress.com/proceedings/access-20/125956968>. We are currently in the process of writing other articles pertaining to this project particularly the Javan Lutung population data.

7. Looking ahead, what do you feel are the important next steps?

- Finalising the distribution map and restoration map (for educational purposes) considering the safety measures due to the location being an active volcano.
- Making forest and Javan langur conservation education book for elementary and junior high school.
- Conduct training workshop related to forest and Javan langur conservation for local teacher.
- Facilitating university students especially from Biology Department to deliver their knowledge about wildlife conservation to school children.
- Conduct further research about hunter/poacher motivation and what can reduce those activities in BTSNP.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

We used the Rufford Foundation logo on the education video, poster, keychains and also PPT that we presented in seminar and conference. I attended the Rufford Conference in Malaysia on January 2020 (just before the COVID-19 restriction).

9. Provide a full list of all the members of your team and their role in the project.

Ika Yuni Agustin. Team Leader. I was responsible for the overall project implementation. Furthermore, I responsible on distribution and population data collection, also liaison with stakeholders and development of material education.

Yanuar Andi Kharisma. He was responsible to collect data on local communities and stakeholder perception and vegetation data collection.

Nirmala Aijinyu Ariyanti. She was responsible in data analysis and map making. She was also involved in local people data collection and engage local community.

10. Any other comments?

We would like to thank:

- The Rufford Foundation for the support.
- Eni Hidayati (Penjaga Pulau Community) for sharing ideas about this project.
- Bromo Tengger Semeru National Park for the permission and support.
- Gubug Embun for collaborating in making the education video.
- All the local guide and their family, all respondents in our surveys in several villages.
- Brawijaya university students (Retno Ayu, Agus Nurrofik and Syahroni) for their time to give conservation education to local children.