

### **Final Evaluation Report**

Your Details	
Full Name	Novita Permata Putri
Project Title	Linking Ecological Knowledge and Local Hearts to Save the Sea Turtles of Anambas Islands
Application ID	42388-1
Date of this Report	15 May 2025



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

Objective	Not ach ieve d	Part ially ach iev ed	Fully achi eve d	Comments
Improve community capacity to implement a community-based sea turtle conservation research and sustainable tourism			Y	We have successfully engaged seven former illegal traders, who now serve as partners in implementing patrol activities in the Teluk Dalam Island area. These individuals were assigned the role of Turtle Conservation Rangers, primarily responsible for assisting with data collection and recording. Additionally, community outreach activities and focus group discussions were conducted during the initial phases of the program and end of 2024. These activities involved the participation of 30 residents and local stakeholders from each of the three villages surrounding West Jemaja.
Generate local ecological knowledge information on sea turtles		Y		We interviewed 100 fishers and in West Jemaja to learn about sea turtles in the Anambas Islands and how much the community understands about saving these turtles. We also asked about turtle nesting in other places by giving them a map, and they marked the spots where turtles nest in the Anambas Islands. These conversations showed what the community hopes for and needs, especially about how conservation efforts might affect their lives and economy. This process helps involve local people and gives



		important information to create good, lasting conservation plans. By combining this field data with ongoing turtle tracking research, we hope the final report will give a clear picture of both the environment and the community. This information can then help policymakers make better decisions for conservation programs that meet the needs and wishes of local people.
Generate baseline information on population and ecology of sea turtle	Y	We have received additional funding from donors, allowing the Turtle Patrol to continue for the next 13 months. Patrols are conducted by seven Conservation Rangers every Monday to Thursday, from 6am to 12pm, followed by spend the night at the beach from 6am on Friday to 5pm on Sunday. In addition, we have managed to collect data related to sea turtle population trends at three nesting beach locations, as well as information on sea turtle habitat and reproductive behavior. Currently, the remaining task is to finish compiling and organizing all the data that has been obtained. We have also provided training on sighting identification and reporting procedures to at least 50 fishermen. As a token of appreciation, we distributed t-shirt merchandise to local residents who are willing to actively provide information and make behavioral changes for the sustainability of sea turtle conservation.



Increase public	Υ	School visits were conducted
·		involving more than 80 students
awareness amongst		from the West Jemaja area, who
local communities		actively participated in classroom
through citizen		
science scheme and		learning sessions as well as field trips
education and		to nesting beaches. At each of
provide a science-		these activities, we provided
backed		notebooks as merchandise for
		participants. The citizen science
management		project is still ongoing, although
recommendation		reporting of observations is
		currently mostly done through
		WhatsApp messages and informal
		meetings. As a supporting effort,
		we are in the process of making
		posters equipped with QR
		barcodes, with adjustments to the
		unstable signal network conditions
		in the Anambas Islands. Regular
		data updates and reports to
		stakeholders and the Ministry of
		Marine Affairs are conducted
		every four months to ensure
		transparency and accountability.
		A conservation-themed movie
		screening activity only done with
		the Conservation Rangers but it
		went smoothly and succeeded in
		increasing their interest and
		G
		conservation efforts.

#### 2. Describe the three most important outcomes of your project.

**a).** We are happy to report that our sea turtle conservation efforts since April 2024 to date have achieved significant results. We have successfully rescued more than 113,349 turtle eggs from 1,164 nests secured in semi-natural enclosures. In addition, we have also released more than 50,000 hatchlings into their natural habitat, and this number continues to increase. This success cannot be separated from the dedication and patience of the Conservation Rangers who consistently patrol and transfer eggs into semi-natural cages to ensure the safety and survival of the turtles. Hatchlings are released as soon as possible once nests hatch, often at night or early morning, to reduce predation risk. Releasing them during these periods can mimic natural



conditions. Sometimes turtle release done with community members, schoolchildren, and visitors also participating in the release events. We are able to maintain a hatchling survival rate of over 85%. It is essential that egg transfers continue to be conducted at our site, as illegal egg trading still poses a threat.

- **b).** We have tagged more than 172 individual turtles using metal tags during beach lodging activities from Friday to Sunday. Of these, 30 turtles have been observed returning to the same beach repeatedly in the 2024 and 2025 nesting seasons. Local residents in the West Jemaja area have actively reported finding tagged turtles on several occasions at different locations in the area. This information is valuable to us in our efforts to map turtle movement patterns and better understand behavior between nesting periods.
- **c).** Conservation efforts in Jemaja sub-district have effectively deterred egg collectors and encouraged positive conservation attitudes in the community. Interviews with 100 local fishers and 50 local community members in West Jemaja indicated that a 80% reduction in the consumption, collection and sale of turtle eggs, with some community members not consuming turtle eggs for over a year.

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

Based on our initial surveys, we identified nine nesting beaches in Teluk Dalam Island. However, due to land ownership permits, we secured access to only three beaches. These three sites are priority areas, as they host the highest number of nesting turtles compared to other beaches. Previously, these beaches were rented out to illegal traders, but we negotiated with the landowner to designate them for conservation efforts. To date, the owner has not requested any rent and continues to fully support our program.

We purchased only 400 metal tags, primarily due to budget limitations for shipping, along with one additional applicator. We have successfully tagged 150 Green Turtle and 22 Hawksbill Turtle, aligning with our planned targets. However, due to budget constraints, the rangers are only able to conduct overnight patrols twice to three times a week. This limitation may hinder the tagging of Hawksbill turtles, which are more rarely found on Teluk Dalam Island. Despite these challenges, the tagging program remains ongoing.

Initially, we faced significant challenges, particularly from some illegal traders who chose not to join our program and felt threatened by our efforts. Additionally, since our team resides in the same village as these traders, tensions arose. Although no violent incidents occurred, we responded by increasing our community meetings, both formal and informal. Fortunately, the village head, law enforcement, and most community members supported our program. After six months, we built relationships with the illegal traders, listened to their concerns, and gradually gained their trust. Some of them discontinued their activities and offered their assistance for turtle



conservation efforts, explaining that they required technical support and funding to establish semi-natural hatcheries. These hatcheries would help protect eggs from other illegal traders on beaches that we are unable to monitor due to limited resources. During our informal meeting with the illegal traders, we also identified individuals still secretly harvesting turtle eggs from other areas of nesting beaches for distant markets, highlighting the need for stronger strategies to combat these illegal activities and further protect our conservation efforts.

Although we have undertaken multiple conservation initiatives such as conflict mitigation, education, and community development that have enhanced awareness and fostered more positive attitudes toward our goals, these efforts demonstrate that increased awareness does not necessarily translate into behavior change. Our experiences highlight the need for patience and empathy when discussing sensitive issues like turtle conservation. Building trust is crucial as we work within local customs and traditions. These experiences have also informed our future strategies, emphasizing the importance of collaboration with government agencies and active community involvement. Additionally, our conservation efforts, especially in sustainable tourism, encounter challenges due to language barriers faced by our rangers when communicating with international visitors.

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

The turtle conservation project actively engages local communities in various roles, fostering a sense of ownership and shared responsibility. By training seven ex-illegal traders to become turtle protectors, the project has turned potential threats into conservation partners, providing them with alternative livelihoods and raising awareness about turtle protection. As tourists gradually visit the site, some fishers rent out their boats for day trips or overnight stays, benefiting from eco-tourism including the rangers themselves from nest adoption. This creates a sustainable income source and promotes environmentally friendly tourism practices. Women involved in catering for guests, tourists, and team members gain economic empowerment through food and hospitality services, enhancing their livelihoods and supporting gender inclusion. Additionally, villagers constructed some of the beach infrastructure and transported materials using their boats. The Anambas Foundation has also established a waste bank, enabling community members and rangers to collect waste from villages and beaches and transport it to nearby facilities. This initiative allows communities to earn by selling collected waste and marine debris. To date, rangers have collected approximately 1,000 kilograms of plastic bottles and other plastics washed ashore on nesting beaches. The project also conducts educational outreach programs in schools around Jemaja, engaging around 80 students in West Jemaja. These visits include trips to nesting beaches, where students observe conservation activities and participate in turtle releases, fostering greater community involvement in conservation efforts.



Overall, Increased income and employment contribute to improved health, education, and overall well-being of residents that leverages community participation not only to safeguard sea turtles but also to promote sustainable development and socio-economic growth in the region.

#### 5. Are there any plans to continue this work?

Our long-term vision is to build upon the initial community-based conservation efforts by expanding our activities to multiple beaches across Teluk Dalam Island, the primary nesting hotspot in the region. We aim to enhance local community involvement by providing training to local rangers and residents in basic English skills, enabling better communication and engagement with foreign tourists and researchers in the future. Additionally, we plan to empower local women by involving them in making ecofriendly souvenirs, which can generate sustainable income and foster community support for conservation efforts.

To ensure the sustainability of this initiative, we are actively seeking additional funding to develop a long-term conservation program that benefits both the local communities economically and the turtle populations' survival. Part of our strategy includes increasing research activities on Teluk Dalam Island by inviting visiting researchers. We intend to develop an expression of interest document targeted at researchers within Indonesia and internationally, to facilitate collaborations and provide logistical support for various research projects. Research topics will encompass behavioral studies, reproductive behaviour, genetic diversity, and satellite tagging to monitor migration patterns. These efforts will not only deepen our understanding of turtle ecology but also inform more effective conservation strategies. Furthermore, we plan to incorporate citizen science components, encouraging local communities and tourists to participate in data collection and monitoring, thereby fostering a sense of stewardship and ensuring the long-term success of conservation initiatives.

In summary, our plans include expanding geographic coverage, strengthening community involvement, securing sustained funding, fostering research collaborations, and integrating education and citizen science to create a holistic, sustainable approach to sea turtle conservation in the Anambas Islands.

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

Anambas Foundation regularly submits reports to the Ministry of Marine and Fisheries every 4 months. LKKPN Pekanbaru is the Technical Implementation Unit for the National Marine Conservation Area in the Anambas Islands. Additionally, we often hold informal meetings with them to discuss challenges and suggestions related to this activity. For the Department of Tourism, we have conducted socialization at the beginning of the activities and also provided the results of our activities through face-to-face meetings, which were well received by them. Furthermore, during the Padang Melang Festival, an annual regional festival, they held a hatchling release event in Teluk Dalam and invited several tourists, government officials, and law



enforcement officers to assist Yayasan Anambas in developing turtle conservation programs. Not only that, but we also had direct meetings with the Indonesian Navy (TNI AL) and the Water Police of the Anambas Islands to gain support in preventing illegal egg trading.

We also provide the results of this activity in a report to the village head in the nearby area to be disseminated to the community. Additionally, we contacted the National Research and Innovation Agency (BRIN) and sea turtle researchers in Indonesia to reach out to researchers and encourage their interest in conducting studies in the Anambas Islands.

We plan to share the results of our work through multiple channels to maximize awareness and foster ongoing conservation efforts. These include:

- 1. Community Engagement and Education:
- a. Conducting community workshops and presentations to inform local residents, fishermen, and stakeholders about the findings and the importance of sea turtle conservation.
- b. Developing informational materials such as visual aids in local languages to raise awareness about the status of Green and Hawksbill Turtles and the benefits of protecting their nests.
- 2. Reporting to Local Authorities and Conservation Bodies:
- a. Preparing detailed reports and policy briefs for the Anambas MPA management, local government agencies, and conservation organizations
- 3. Academic and Scientific Dissemination:
- a. Publishing research findings and presenting at national and international conferences to contribute to the broader scientific understanding of sea turtle conservation.
- b. Collaborating with universities and research institutions for further study and validation.
- 4. Citizen Science and Participatory Outreach:
- a. Involving local community members in data collection and monitoring activities, empowering them as stewards of their natural resources.
- b. Using social media platforms and community radio to share updates, success stories, and educational content to foster a sense of ownership and ongoing participation.

We shared our project via our website (anambasfoundation.org) and Instagram (@anambasorg), where we also listed Conservation Nation as our partner and tagged in our posts. Throughout 2024, our team was quite busy working with the community and addressing issues related to illegal traders, which has resulted in the project video being temporarily on hold.



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

We believe the next crucial steps involve strengthening our community engagement, securing additional resources, strengthening institutional partnerships, enhancing ranger capabilities, and promoting inclusive research and education.

Firstly, building on the trust and relationships we have established with local communities and illegal traders. To achieve this, we should focus on developing alternative livelihood programs and we plan to organize focused discussions, such as Focus Group Discussions (FGDs), with landowners to negotiate formal agreements that ensure sustained access and protection of these vital sites. Identifying mutually beneficial solutions will be essential in fostering genuine cooperation and reducing conflicts over land use.

Secondly, addressing our current limitations in patrol frequency and resource availability is essential. We need to seek additional funding or partnerships possibly through grants, NGOs, or corporate social responsibility programs to purchase more equipment or incentive until ecotourism is already established. Increasing patrol frequency will enhance our ability to monitor nesting beaches effectively, especially for elusive species like Hawksbill turtles, and to respond swiftly to illegal activities.

Thirdly, Enhancing collaboration with government agencies, law enforcement, and conservation groups is essential. Formal partnerships will strengthen regulation enforcement and legal support. Implementing structured research and data collection helps assess our efforts, identify threats, and adapt strategies. Citizen science can involve communities and visitors in monitoring, expanding conservation efforts. Our goal is to establish a Turtle Research Center in Anambas by 2029, serving as a hub for research, conservation innovation, and community engagement.

Finally, we should invest in capacity-building for our rangers, including language and communication skills, to better engage with international visitors and promote ecotourism. Developing multilingual educational materials and training programs can foster more meaningful interactions with tourists, raising awareness and support for turtle conservation.

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? Yes, we used The Rufford Foundation logo on various materials related to the project, including merchandise distributed to community members and school children to recognize the Foundation's support. Additionally, during community outreach activities and presentations to the Ministry of Marine Affairs and Fisheries, we prominently displayed the Rufford Foundation logo to acknowledge their contribution. Throughout the project, we also ensured that the Foundation received



appropriate publicity by mentioning their support in reports, social media updates, and during public events, thereby highlighting Foundation's vital role in enabling our work.

### 9. Provide a full list of all the members of your team and their role in the project. The Anambas Foundation team:

- 1. <u>Novita Permata Putri-</u> Marine Conservation Program Manager Supervise and assess project results, oversee program budgets, resources, and schedules. Collaborate with government agencies, NGOs, academic institutions, potential private sector partners, community organizations, and local communities.
- 2. Rachmat Caesar Hidayat Marine Conservation Program Coordinator Lead turtle rangers to conduct field surveys and serve as a liaison between the project team and local communities, addressing concerns and gathering feedback.
- 3. <u>Fauzan Maulana</u> Marine Conservation Program Staff Assist Caesar to conduct field surveys and data collection on sea turtle nesting site surveys, population monitoring, and habitat assessments.
- 4. <u>Rahman Ritonga</u> Marine Conservation Program Coordinator GIS Analyst Collect and analyze spatial data on turtle nesting sites, nesting beaches, and migration routes.
- 5. Afifa Nafisa Windiyana Marine Conservation Program Staff Media and Project administration

Develop and implement media strategies to raise awareness about turtle conservation efforts and manage project documentation, reports, and correspondence.

#### **Local Rangers**

- 1. Burhanuddin Turtle Rangers
- 2. Yudi Turtle Rangers
- 3. Rian Turtle Rangers
- 4. Roy Ramayoda Turtle Rangers
- 5. Zailon Turtle Rangers
- 6. Kiran Turtle Rangers
- 7. Idris Turtle Rangers
- 8. Zuriat Hakim Boat Captain

#### 10. Any other comments?

As we begin our work in Teluk Dalam, we acknowledge that this is just the beginning of our journey. We sincerely thank the Rufford Foundation for their support in helping us build a brighter future for sea turtles and enhance the well-being of local communities. With ongoing community involvement, we are confident we can make a meaningful difference in preserving our natural heritage for future generations.