

THREAT ASSESSMENT of RED-and-BLUE LORY in the KEPULAUAN TALAUD: A Case Study on Illegal Hunting and Habitat Destruction in the Vicinity of Red-And-Blue Lory Conservation Area at PT Pertamina Patra Niaga IT Bitung



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ABSTRACT: Threat Assessment of Red-and-blue lory, particularly a case study on illegal hunting and habitat destruction using direct observation methods in the natural habitat of red-and-blue lory, specifically within the red-and-blue lory Conservation Area at PT Pertamina Patra Niaga Integrated Terminal Bitung in Beo District, Kepulauan Talaud Regency, Indonesia. This research aims to determine the factors that influence illegal hunting and habitat destruction, which have an impact on the population size of red-and-blue lorries. Observations were conducted for 15 days (2 weeks). The results of this study indicate that red-and-blue lory are targeted for illegal hunting due to the beauty of their feathers and the high demand in the illegal wildlife trade, particularly in the Philippines. This illegal hunting poses a threat to the population of red-and-blue lorries and has led to a decline in their numbers in the wild. Additionally, there are local communities involved in illegal hunting activities. Regarding habitat destruction, there were findings of rampant illegal mining that poses a serious threat to the survival of red-and-blue lory. The widespread illegal mining in the Kepulauan Talaud has resulted in the loss of their natural habitat and disrupted their life cycle. Habitat disturbance also threatens the sustainability of the ecosystem and has negative impacts on the water and air quality consumed by red-and-blue Lorries.

KEYWORDS: red-and-blue lory, conservation, pertamina, eos histrio, habitat destruction, illegal hunting

INTRODUCTION

The Red-and-blue lory is one of the endemic bird species found in the Kepulauan Talaud regency, Indonesia. According to Coates dan Bishop (2000), this bird consists of three subspecies: *E.h. histrio* found in Kepulauan Sangihe, *E.h talautensis* found in Kepulauan Talaud, and *E.h callengeri* in Kepulauan Miangas and Kepulauan Nanusa. The uniqueness and beauty of this bird make it a target for illegal hunting and trading, which directly threatens the survival of red-and-blue lory populations. According to bella (2017), in addition to their attractive and beautiful feathers, the red-and-blue lory has a unique vocalization, making it a popular choice as a pet bird. However, on the other hand, habitat destruction poses a serious threat to this species. Therefore, the purpose of this research is to assess the threats faced by the red-and-blue lory, with a specific focus on illegal hunting and habitat destruction as a case study.

Illegal hunting of the red-and-blue lory poses a significant threat to its population. According to Rustiati (1997), the population of this wildlife species has experienced a drastic decline, and the risk of extinction is quite high. The red-and-blue lory is targeted for hunting due to its beautiful feathers and high market value in the illegal wildlife trade. The high demand for this bird in the illegal trade has led to excessive capture and hunting, resulting in a drastic decline in the population over the past few decades.

In addition, habitat destruction poses a serious threat to the survival of the red-and-blue lory. Deforestation, land clearing for agriculture, and land use conversion have led to the loss of its natural habitat. Habitat change and fragmentation result in the loss of crucial shelter and food sources for the red-and-blue lory, thereby increasing the risk of population extinction.

In this context, this research will deeply examine illegal hunting and habitat destruction as the primary threats to the survival of red-and-blue lory. The aim of this threat assessment is to identify the factors influencing illegal hunting and habitat destruction, as well as to provide crucial information that can be used to design effective conservation strategies.

The results of this research are expected to provide a better understanding of the threats faced by red-and-blue lory and

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establish a foundation for effective conservation efforts. By understanding the factors that influence illegal hunting and habitat destruction, targeted protection and rehabilitation measures can be implemented, involving active participation from local communities and relevant stakeholders. These efforts aim to ensure the survival of red-and-blue lory for future generations.

METHODS

The threat assessment of red-and-blue lory, particularly the case study on illegal hunting and habitat destruction, utilized the method of direct observation in the birds' natural habitat, specifically in the Kepulauan Talaud. This research involved observing red-and-blue lory within their natural habitat and documenting signs of illegal hunting and habitat destruction occurring in the vicinity of their habitat.

In addition, interviews were conducted with the local community to determine whether there were any activities of illegal hunting and habitat destruction taking place around the red-and-blue lory habitat. This research method can provide accurate information about the threats to red-and-blue lorries and serve as a basis for appropriate conservation policymaking.

The research focused on the Kepulauan Talaud, specifically in the conservation area of red-and-blue lorries at PT Pertamina Patra Niaga Integrated Terminal Bitung, located in Beo sub-district, Kepulauan Talaud regency, North Sulawesi province, from June 19, 2023, to July 3, 2023.

The aim of this research is to determine the factors that influence illegal hunting and habitat destruction, which have an impact on the population size of red-and-blue lorries.

RESEARCH RESULT

1. Illegal hunting

The Red-and-blue lory is targeted for hunting due to its beautiful feathers and high demand in the illegal wildlife trade, especially from the Philippines. Illegal hunting is not only carried out by individuals but also by organized groups that capture red-and-blue lorries illegally from their natural habitat. Some of these birds are smuggled into the Philippines through well-organized illegal trading routes. This trading network involves local and international intermediaries who are responsible for the transportation and sale of these birds on the black market.

Illegal hunting has significantly harmed the population of red-and-blue lorries. Due to excessive capture, the number of red-and-blue lorries in the Talaud Islands has decreased. The population of these birds is increasingly threatened with extinction due to uncontrolled hunting activities.

Research findings have also revealed that, in some cases, local communities are involved in the illegal hunting of red-and-blue lorries. Some individuals in the Talaud Islands view the bird trade as a promising source of income. They capture red-and-blue lorries for sale in the Philippines, where these birds are kept as pets by individuals. According to Primack et al. (1998), the low income levels of communities can lead them to engage in hunting.

The participation of local communities in the illegal hunting of red-and-blue lorries is considered one of the contributing factors to the decline in the bird's population.

1. a Hunt motivation

Interviews with local residents reveal that the red-and-blue lory is targeted for hunting for the following reasons:

- **Aesthetic Value:** The Red-and-blue Lory possesses beautiful feathers that capture attention. Its bright color combinations and unique feather patterns make it highly sought-after by collectors and bird enthusiasts. This aesthetic value becomes the primary allure for the illegal hunting of red-and-blue lorries.
- **Demand in the illegal wildlife market:** The illegal wildlife market, particularly in countries like the Philippines, has a high demand for red-and-blue lorries. These birds are often sought-after as exotic and prestigious pets. It is this high demand that drives the illegal hunting of red-and-blue lorries to meet the market's needs.
- **Economic Value:** The illegal hunting of red-and-blue lorries is also driven by the associated economic values. In certain areas, particularly those with limited access to other economic resources, the illegal hunting of red-and-blue lorries becomes a promising alternative source of income for local residents. This tempts some individuals to engage in illegal hunting activities to generate additional income.

This is similar to what Nugroho (2003) stated, where the high market demand for bird species is based on their exotic value, rarity, and difficulty in capturing them.

Through this research, it was also found that the reasons behind illegal hunting activities are directly related to the lack of knowledge among the community regarding the environmental impacts that can occur due to the decline in red-and-blue lory populations. According to Soemarwoto (1992), the low level of education among the community leads to a high dependency on

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nature or natural areas. Illegal hunting of red-and-blue lorries not only harms the population of the species but also endangers the overall balance of the ecosystem. Excessive capture can disrupt the food chain within the ecosystem where they reside.

1. b Trade Network

Literature reviews and interviews indicate the existence of a complex trading network involved in the illegal hunting of red-and-blue lorries. This network involves local and international intermediaries who facilitate the circulation of these birds on the black market. The illegal trade network of Talaud Parrots from Indonesia to the Philippines is a well-organized operation, involving various parties engaged in the capture, transportation, and sale of these birds on the black market. The following is a narrative of the illegal trade network of Talaud Parrots from Indonesia to the Philippines.

In Kepulauan Talaud, Indonesia, there exists a hidden network engaged in the illegal hunting and trading of red-and-blue lorries. These activities often take place in remote and inaccessible areas, making their operations elusive to the public and law enforcement.

The network begins with the capture of red-and-blue lorries by individuals or groups operating in the Talaud Islands. They use traps or snares to illegally capture these birds from their natural habitat. It is not uncommon for local residents to be involved in this illegal hunting, tempted by the profit opportunities generated from the trade of red-and-blue lorries.

Once captured, the birds are then smuggled through secretive routes connected to neighboring countries, particularly the Philippines. The illegal trade network has well-organized transportation routes and methods to evade detection by authorities. This often involves the use of unofficial sea routes or remote paths to clandestinely move these birds.

Upon reaching the Philippines, the red-and-blue lorries are channeled into the existing illegal wildlife markets in the country. The illegal trade network has contacts and relationships with local wildlife traders in the Philippines, who then sell these birds to collectors or bird enthusiasts. The wildlife market in the Philippines is a primary destination for Red-and-blue lorries due to the high demand for their beauty and uniqueness.

Throughout this process, the red-and-blue lorries endure significant suffering and high levels of stress. They are captured from their natural habitat, confined in unsuitable conditions, and undergo long and exhausting journeys. These conditions contribute to high mortality rates among the captured and smuggled birds.

The illegal trade network of Talaud Parrots from Indonesia to the Philippines poses a serious threat to the sustainability of this bird species. Excessive capture and the illegal circulation of these birds have resulted in a significant decline in the population, endangering their survival in the wild.

2. Habitat Destruction

In the Talaud Islands, habitat destruction poses a threat to the survival of Red-and-blue lorries due to rampant illegal mining activities. This illegal mining has caused significant damage to the natural environment where the Red-and-blue lorries live.

Illegal mining activities often disregard regulations and necessary permits. The natural habitats of Red-and-blue lorries are frequently targeted for these illegal mining activities. Centuries-old trees are indiscriminately felled, disrupting diverse natural habitats and endangering fragile ecosystems.

As a result of habitat destruction, Red-and-blue lorries lose their homes and sources of food. The forests that should serve as their sanctuaries and breeding grounds have transformed into barren open lands. Disruptions to their habitat also affect the continuity of the Red-and-blue lorries' life cycles, such as breeding processes and migration. Furthermore, illegal mining activities also have negative impacts on the quality of water and air around mining sites. Mining waste and chemicals used in the extraction process flow into the waterways, polluting the environment, including rivers and seas where Red-and-blue lorries seek their food. This disrupts the balance of the ecosystem and threatens the survival of various species, including Red-and-blue lorries.

Apart from illegal mining activities, habitat fragmentation occurring in the Talaud Islands also contributes to habitat destruction. Habitat loss and fragmentation reduce the available habitat area and affect the Talaud Parrots' ability to find food, seek shelter, and reproduce.

CONCLUSIONS

This case study provides a deep understanding of illegal hunting and habitat destruction of the red-and-blue lory populations scattered across the Kepulauan Talaud, particularly around the red-and-blue lory Conservation Area at PT Pertamina Patra Niaga Integrated Terminal Bitung.

In the context of illegal hunting, it was found that the red-and-blue lory has become a target due to the beauty of its feathers and high demand in the illegal wildlife market, particularly in the Philippines. This illegal hunting poses a threat to the red-and-blue lory populations and has resulted in a decline in their numbers in the wild. Additionally, the involvement of local

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communities in illegal hunting is a serious issue that requires efforts to raise awareness among the community about the importance of conserving the red-and-blue lory.

Meanwhile, habitat destruction caused by illegal mining activities is also a serious threat to the survival of the red-and-blue lory. Rampant illegal mining in the Talaud Islands has resulted in the loss of their natural habitat and disruption of their life cycle. Habitat disturbance also jeopardizes the sustainability of the ecosystem and has a negative impact on the quality of water and air in the surrounding areas.

RESEARCH ADVICE

Further research on the threats to the red-and-blue lory can be conducted by examining the effectiveness of existing regulations and laws in protecting the species from illegal hunting. This research can involve policy reviews, analysis of legal case data, and interviews with law enforcement and policy enforcement agencies to evaluate the extent to which current laws and enforcement measures are capable of addressing illegal hunting.

Furthermore, in the future, a study can be conducted to explore potential alternative economic opportunities around the red-and-blue lory conservation area. This research aims to identify potential alternative sources of income for local communities currently involved in the illegal hunting of red-and-blue lorries. The study may involve identifying ecotourism opportunities, developing local industries, and/or other sustainable livelihood programs that can reduce dependence on illegal hunting.

REFERENCES

- 1) Alikodra, A. H. S. 2002. Pengelolaan Satwa Liar, Jilid 1. Buku. Departemen Pendidikan dan Kebudayaan. Direktorat Jendral Pendidikan Tinggi Pusat Antara Universitas Ilmu Hayati. IPB. Bogor. 185 p.
- 2) Bella, Anna M., Nangoy Meis J., Kawatu Marha M.H., Keintjem James R. M. (2017). Tingkat Kesukaan Beberapa Bahan Pakan Burung Nuri Talaud (*Eos histrio*) dan Performans Yang Dipelihara Secara Ex-Situ. *Jurnal Zooteh. Vol. 37 No. 2.*
- 3) Coates, B.J. dan K.D. Bishop. 2000. Panduan Lapangan Burung-Burung di Kawasan Wallacea. Brisbane, Australia: Birdlife International Indonesia Programme & Dove Publication Pty. ISBN 979-95794-2-2.
- 4) IUCN. 2016. International Union for Conservation of Nature and Natural Reserves. The Redlist of Threatened Species. <https://www.iucnredlist.org/species/22684502/93032979>. diakses 2 Juli 2023.
- 5) Nugroho, D. 2003. Perdagangan Satwa Liar di Indonesia. Makalah pada Diskusi Terbuka Dalam Rangka Pekan Konservasi Sumber Daya Alam Ke 7. Wildlife Conservation Society-Indonesia Prgrame. Tanjung Karang.
- 6) Primack, B.R., Supriatna, J., Indrawan, M., Kramadibrata, P. 1998. Biologi Konservasi. Yayasan Obor Indonesia. Jakarta.
- 7) Rustiati, E.L. 1997. Upaya pemahaman dan pelaksanaan konservasi sumber daya alam melalui konservasi tradisional. Prosiding Pekan Konservasi Sumber Daya Alam II. Himbio. Universitas Lampung. Bandar Lampung.
- 8) Soemarwoto, O., Soerjani, M., Yatim, W., Sagala, APS., Skepti. Pramono. 1992. Melestarikan Hutan Tropika, Permasalahan, Manfaat, dan Kebijakannya. Yayasan Obor Indonesia. Jakarta



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